

SAP MM PORTFOLIO

MATERIALS MANAGEMENT

SAP MM CONSULTANT PROGRAM

FOR THE CLIENT

RELIANCE INDUSTRIES

SAP IMPLEMENTATION PROJECT



PREPARED BY

GOKUL T

MM CONSULTANT

GUIDED BY

S.SUNDARAMAHALINGAM

MM & SD CONSULTANT

RELIANCE PETROLEUM INDUSTRIES LIMITED



REFINERY

RETAIL



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What is ERP?

ERP Stands for Enterprise Resource Planning.

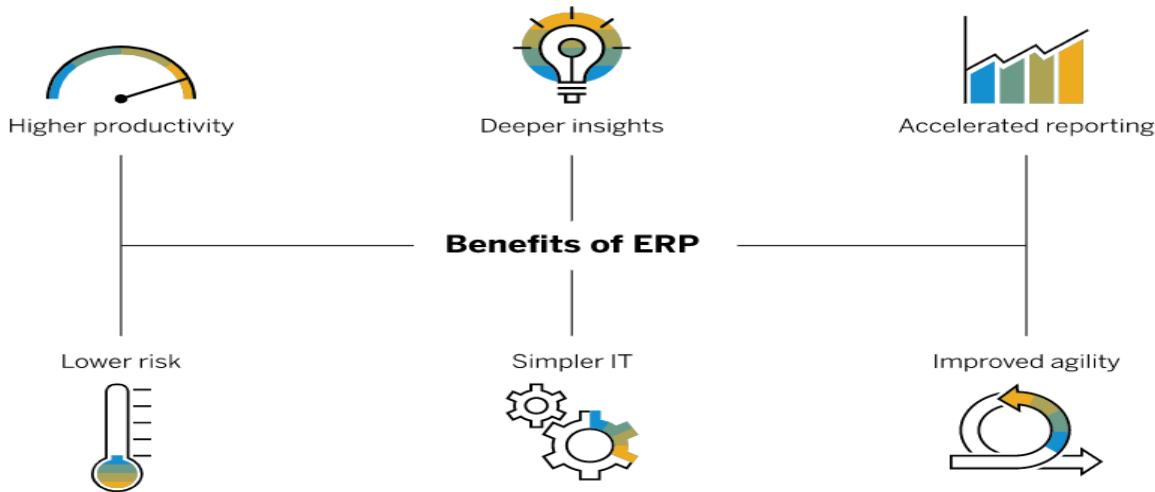
Enterprise resource planning (ERP) is a platform companies use to manage and integrate the essential parts of their businesses. Many ERP software applications are critical to companies because they help them implement resource planning by integrating all the processes needed to run their companies with a single system.

An ERP software system can also integrate planning, purchasing inventory, sales, marketing, finance, human resources, and more.

The simplest way to define ERP is to think about all the core business processes needed to run a company: finance, HR, manufacturing, supply chain, services, procurement, and others. At its most basic level, ERP helps to efficiently manage all these processes in an integrated system. It is often referred to as the system of record of the organisation.

“CENTRAL NERVOUS SYSTEM-ERP”

Finance requires an ERP to quickly close the books. Sales need ERP to manage all customer orders. Logistics relies on well-running ERP software to deliver the right products and services to customers on time. Accounts payable needs ERP to pay suppliers correctly and on time. Management needs instant visibility into the company's performance to make timely decisions. And banks and shareholders require accurate financial records, so they count on reliable data and analysis made possible by the ERP system.



Examples of ERP System

Businesses in every industry – from automotive to wholesale distribution – need accurate, real-time information and effective business processes to compete and thrive. Different industries rely on their ERP software for quite different reasons, however. Here are just a few examples:

Utilities need to constantly review their capital assets, not only to meet demand for future services but also for the replacement of aging assets. Without ERP, the effort to prioritize these major asset investments would be difficult and error prone. ERP also helps solve another critical utility company issue: forecasting of spare parts. Not having the right parts during an outage can create a significant customer service issue. On the other hand, having too many spare parts means excessive costs and out-of-date stock.

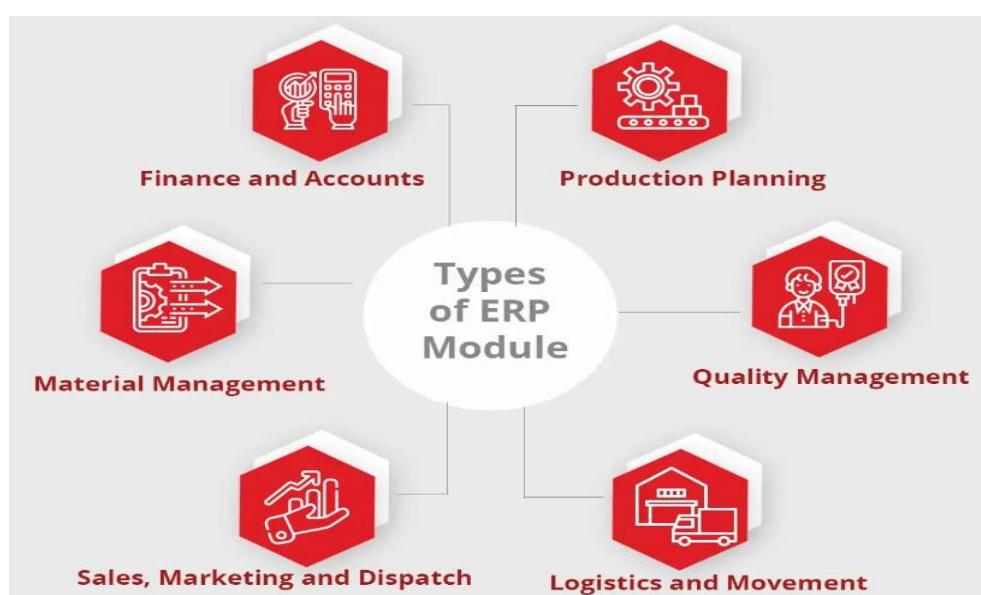
For wholesalers, importers, direct store delivery, and 3PL/4PL firms, on-time delivery is key. All of these organisations want to reduce distribution costs, increase inventory turns, and shorten order-to-cash time. To achieve these goals, they need integration of inventory management, purchasing, and logistics functionality, as well as automated processes that are customised to their needs.

Discrete, batch, and continuous process **manufacturers** all rely on ERP and supply chain systems to meet product quality goals, manage asset utilisation,

control overtime costs, handle customer returns and more. Manufacturers can also gain end-to-end inventory control by monitoring stock movements, pinpointing top and underperforming products, and managing procurement more efficiently.

Service companies – including accounting, tax, engineering, IT, legal, and other professional services firms – require powerful, real-time mobile ERP technology to balance service delivery commitments with financial health. Key to professional service success is the ability to stay on schedule while managing project profitability, resource utilisation, revenue recognition, recurring revenue objectives, and growth opportunities.

Retail has undergone a significant transformation now that e-commerce has merged with other sales channels as well as brick-and-mortar operations. The ability to provide self-service options for identifying, configuring, purchasing, and shipping products is dependent on integrated data. A modern ERP also helps retailers reduce cart abandonments, improve Web site conversions, boost average order value, and increase customer lifetime value.



Types of ERP deployment

Modern ERP systems can be deployed in a number of ways: in a public or private cloud, on premise, or in various hybrid scenarios that combine environments. Here are some of the high-level benefits of each to help you identify the erp deployment option that makes the most sense for your business.



Cloud ERP



On-premise ERP



Hybrid ERP

What Does ERP Do?

ERP applications also allow the different departments to communicate and share information more easily with the rest of the company. It collects information about the activity and state of different divisions, making this information available to other parts, where it can be used productively.

ERP applications can help a corporation become more self-aware by linking information about production, finance, distribution, and human resources together. Because it connects different technologies used by each part of a business, an ERP application can eliminate costly duplicates and incompatible technology. The process often integrates accounts payable, stock control systems, order-monitoring systems, and customer databases into one system.

How Does It Work?

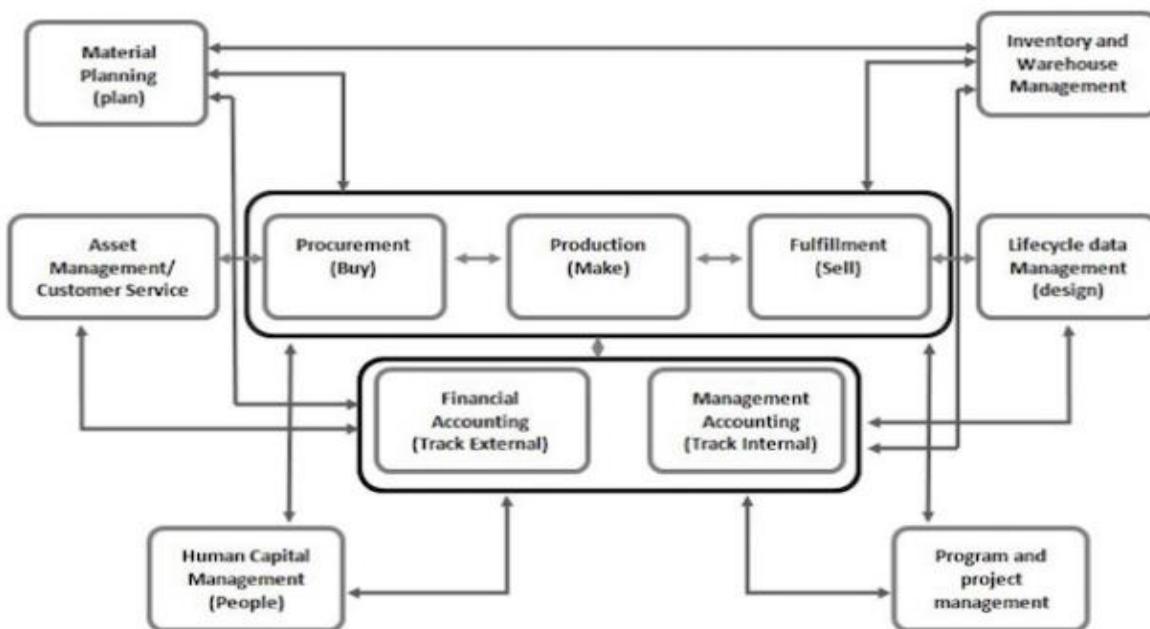
ERP has evolved over the years from traditional software models that made use of physical client servers and manual entry systems to cloud-based software with remote, web-based access. The platform is generally maintained by the company that created it, with client companies renting services provided by the platform.

Businesses select the applications they want to use. Then, the hosting company loads the applications onto the server the client is renting, and both parties begin working to integrate the client's processes and data into the platform.

Once all departments are tied into the system, all data is collected on the server and becomes instantly available to those with permission to use it. Reports can be generated with metrics, graphs, or other visuals and aids a client might need to determine how the business and its departments are performing.

ERP SOLUTION PROVIDERS

- SAP
- ORACLE
- MICROSOFT DYNAMICS
- TALLY
- ERPNEXT



What is Material Management?

Materials management is a core function of supply chain management, involving the planning and execution of supply chains to meet the material requirements of a company or organisation. These requirements include controlling and regulating the flow of material while simultaneously assessing variables like demand, price, availability, quality, and delivery schedules.

Material managers determine the amount of material required and held in stock, plan for the replenishment of these stocks, create inventory levels for each type of item (raw material, work in progress or finished goods), and communicate information and requirements to procurement operations and the extended supply chain. Materials management also involves assessing material quality to make sure it meets customer demands in line with a production schedule and at the lowest cost.

The objectives of material management are sometimes referred to as the ‘Five Rs of Materials Management:’

1. The **right** material
2. At the **right** time
3. In the **right** amount

And of the quality that is:

1. At the **right** price
2. From the **right** sources

MATERIALS MANAGEMENT PROCESS

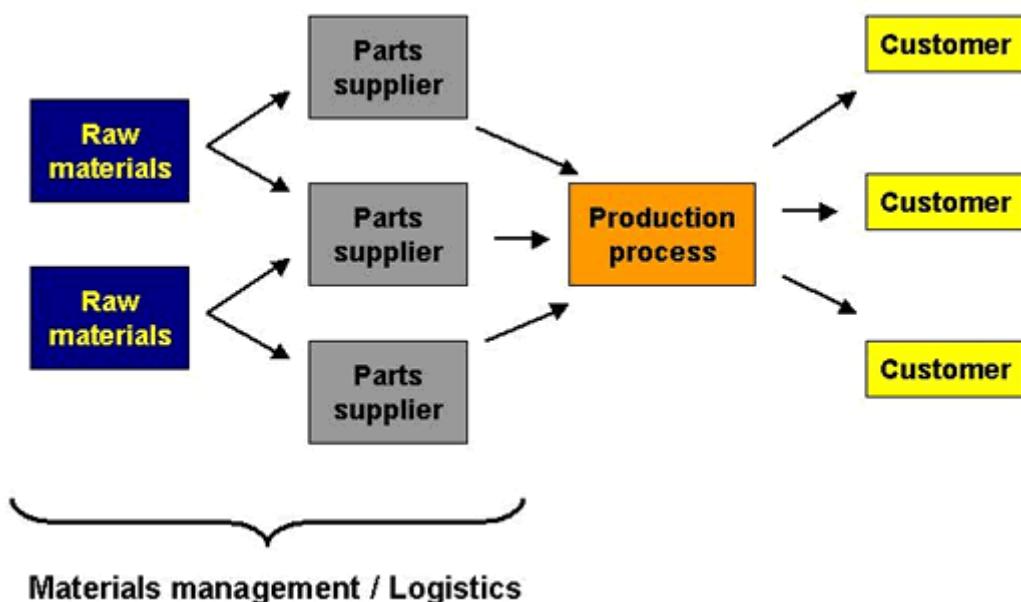
The process of materials management includes all steps from purchasing materials to receiving materials. This includes storage and warehousing, transport, and receiving. Each step has its own goals and process.

Purchasing: Purchasing the right amount of goods is important for two reasons. First, it ensures the end-user has everything they need to operate. Second, this process can minimize the amount invested in storage and stored inventory.

Storage: The goal of storage is to invest in the correct amount of warehousing space in the right places to facilitate the transport of goods in the next step. Storage can also act as a buffer between material production and materials used to mitigate the effect of shortages or material product mistakes.

Transport: Transporting the correct materials to manufacturers or others at the right time is such a large and involved process that some companies occasionally separate it into its own department.

Receiving: Receiving in materials management involves checking and distributing components to the correct customers.



SAP MM is known as SAP Material Management system. SAP MM role in business process is as follows:

A business process in SAP is termed as “Module”.

SAP Materials Management (MM) is a part of Logistics area and helps to manage the procurement activity of an organization from procurement.

It supports all aspects of material management (planning, control etc.).

It is the backbone of the Logistics area which incorporates modules like Sales and Distribution, Production Planning, Plant Maintenance, Project Systems, Warehouse Management which are extremely obsessed on Materials Management module.

The features of SAP MM system are as follows:

SAP MM is one of the modules of SAP that deals with material management and inventory management.

Material Management process ensures that there is never a shortage of materials or any gaps in the supply chain process of the organization. SAP MM speeds up the procurement and material management activities making the business run smoother with complete time and cost efficiency.

It deals with managing the materials (products and or services) resources of an organization with the aim of accelerating productivity, reducing costs and increase improvement and at a similar time be versatile to accommodate changes in day to day life. It deals with the Procurement Process, Master Data (Material & Vendor Master), Account Determination & Valuation of Material, Inventory Management, Invoice verification, Material Requirement Planning etc.

The SAP System consists of a number of components that are completely integrated with one another.

This integration allows the various departments and units of an enterprise to share and maintain the same information.

Purchasing is a component of Materials Management (MM). The Materials Management (MM) module is fully integrated with the other modules of the SAP System. It supports all the phases of materials management: materials planning and control, purchasing, goods receiving, inventory management, and invoice verification.



What is SAP?

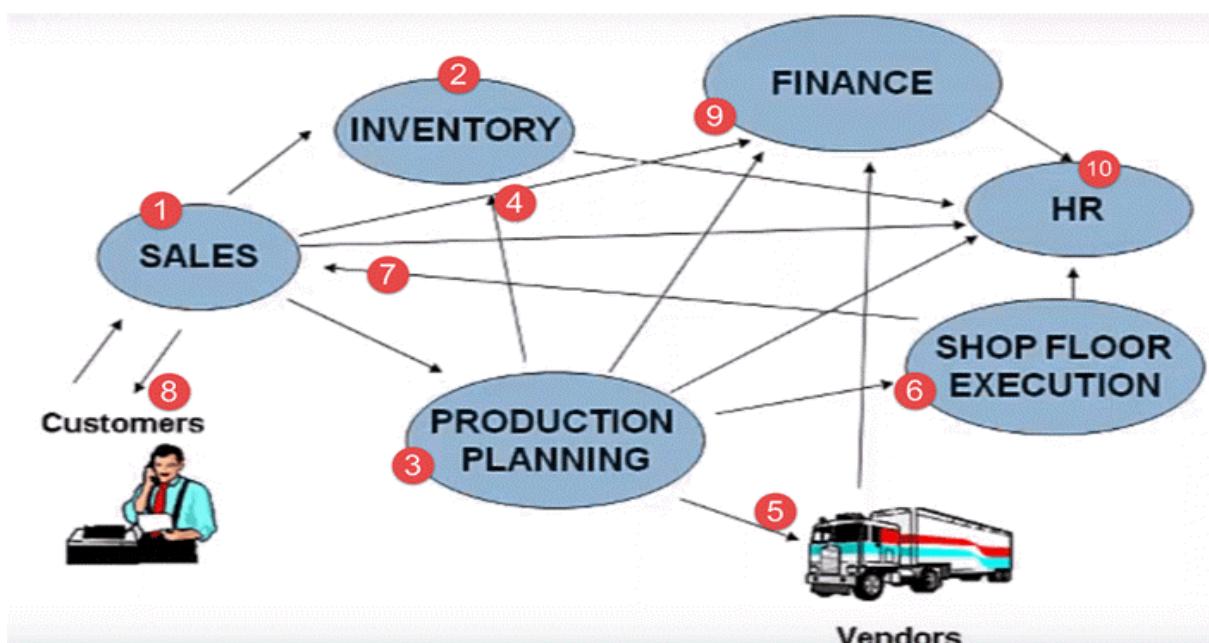
S A P Stands for – System Application Programming in Data Processing

SAP system consists of a number of fully integrated modules, which covers virtually every aspect of business management.

Before SAP/ERP Management Tool



After SAP/ERP Management Tool



Based on the manner in which communication and data exchanged is managed.

Enterprise systems can be broadly classified as

1) Decentralized System

2) Centralized System which is also called as ERP

Why SAP Tools besides other tools?

SAP R/3 is just one of the main items of SAP, where R stands for Real-Time as well as the number 3 connects to 3 tier application design(Information base, Application Web server, and Client). The majority of business in today's globe runs on the SAP R/3 system. About 80% of the companies applied this software.

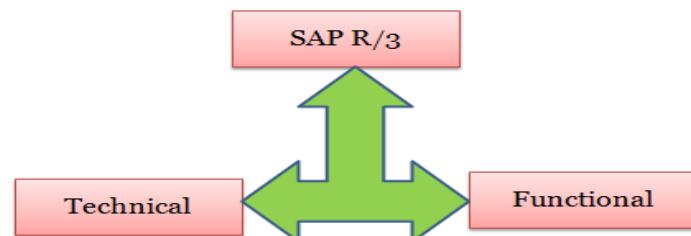
1. SAP is Suitable for any Size of Business
2. SAP is a Global Solution
3. SAP does not Provide Any Redundant Functionality
4. SAP is Perfect For any Business
5. SAP Provides Shorter Implementation Time and Fastest Financial Payback
6. As Compared to other ERP Systems SAP Needs Fewer Customization
7. Constant Development in SAP
8. Presence of Clearly Defined Roadmaps
9. Industry Specific

SAP R/3 – Modules & Integration



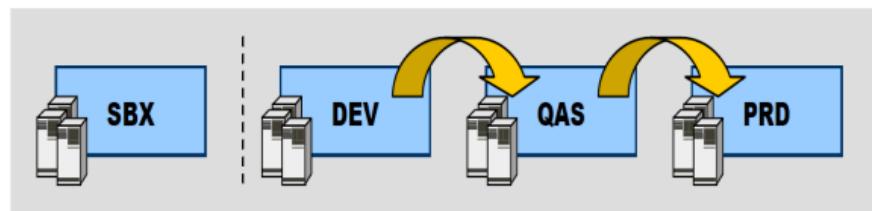
SAP Material Management

SAP MM (Material Management) is one of the important modules in SAP ERP software. The MM application module supports the procurement and inventory functions occurring in day-to-day business operations. This MM module contains many aspects such as purchasing, goods receiving, material storage, consumption-based planning, and inventory. SAP MM is integrated with other SAP modules such as Finance (FI), Controlling (CO), Sales and Distribution (SD), Quality Management (QM), Plant Maintenance (PM), Production Planning (PP), and Warehouse Management(WM).



SAP LANDSCAPE

SAP landscape is a system or a layout that helps in creating the composition for the server system like quality assurance server, development server, and production server. It allows creating a group of servers by installing all servers & linking them to various transport routes to maintain the entire system. Every company comes up with its own landscape. The standard serves as an SAP-based enterprise for development, quality assurance, and production server.



The development server is called a sandbox client where these servers the management team or the server admin handles the new customization and write a new set of instructions depending on the business requirement. It contains 200 sandbox clients and 100-development clients. The development servers have three clients. They are the sandbox; it is a section where all the system-related work takes place. Customize the client, once you configure the sandbox and everything is as per the procedure; recreate the identical configuration in the configuration client. Development Testing; This client uses unit testing. Some project integration and testing also demand this client.

Quality Assurance Server is where the corporate team members and other employees keep on testing the new customization, programs, etc. Such servers are used to perform testing on new development and customization of products. There are 300 quality testing server.

Production Server records live data of the enterprises once the project goes live. The permission for production clients is very limited. There are 700 pre-production clients and 800 production clients.

SAP R/3 Architecture

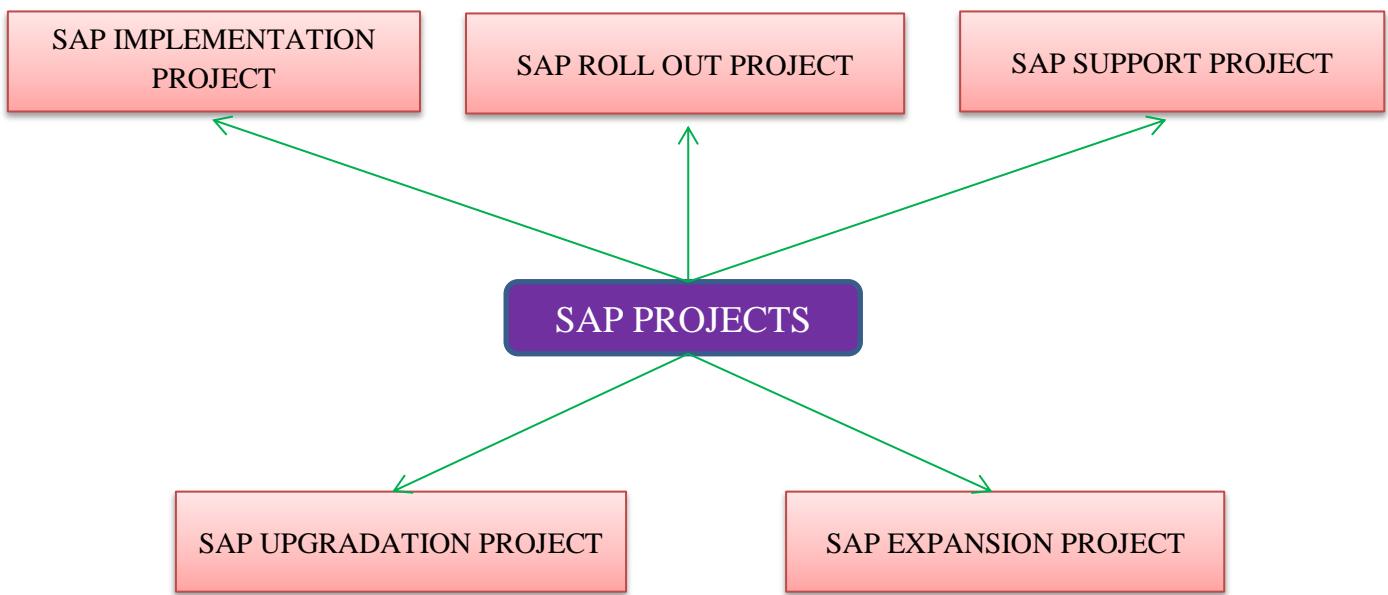
SAP Systems contains three layers such as Presentation Layer, Application Layer, and Database Layer.

Presentation: – It is a layer where the user works with SAP GUI. It interacts with the database layer via the Application layer.

Application: – It interacts between the presentation and database layer

Database: – It is a central database that stores all the data of ERP SAP Systems.

Types of SAP Projects



What is ASAP Methodology?

ASAP stands for Accelerated SAP. Its purpose is to help design SAP implementation in the most efficient manner possible. Its goal is to effectively optimize time, people, quality and other resources, using a proven methodology to implementation.

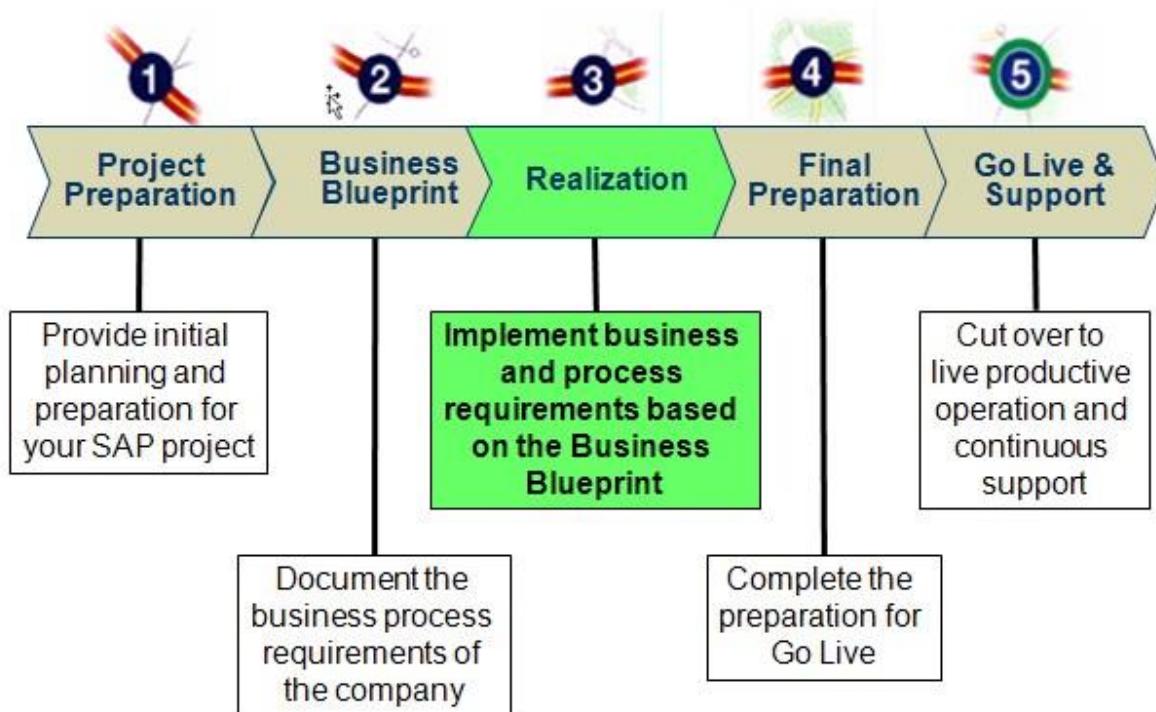
ASAP Methodology is the way SAP implementation happens.

SAP projects are long and intense. They require lots of effort and many resources from developers and managers. It can be tricky if SAP projects are not planned in a proper form. SAP itself gives a proper methodology to design the project so it will give reliable results.

The ASAP methodology provides the proper framework for an implementation roadmap. SAP Implementation consists of several phases. ASAP Methodology divides a project according to these vital phases. Each phase is considered a milestone.

Phases of ASAP Methodology

- Phase 1 Project Preparation
- Phase 2 Business Blueprint
- Phase 3 Realization
- Phase 4 Final Preparation
- Phase 5 Go-Live and support



Phase I: Project Preparation

- Decision-makers clearly identify the priorities of the project
- Define the structure of tasks /subtask and functions & scope of implementation needs to be completed
- Landscape system and technical specifications are finalized, such as Cloud or On-premise
- Infrastructure (Interfaces/Hardware)
- Any other external variables that need to be considered

Phase II: Blue Print Phase

In the Blueprinting Phase, it helps extract valuable information about the client business process that is important for implementation; It has described a business blueprint phase. These blueprints are in the form of questionnaires designed to test for data that uncovers how the client is doing business. As such, they also help to record the implementation of the client future business processes and business specifications are basically outlined in each business blueprint document.

- Scope of SAP implementation is described.
- Business Blueprint used for this is ASAP Implementation Assistant
- Brief Business process query and answer documented with the core business users
- SAP R/3 System Construction initiated
- Conducting Status Meeting for Project Task /sub-task completion
- Addresses the issues like Organizational Change Management

Phase III: Realization Phase

Together with the completion of Project Preparation & Blue Print Phase, Then Realization phase started in this phase consultant are now ready to start baseline configuring SAP.

Baseline Configuration Testing

With the help of the SAP consulting team, Client business processes transform into cycles of business flows, such as Order to cash, procure to pay etc. The cycles serve as independent units that enable the client to test specific parts of the business process. Consulting team use to configure the SAP implementation guide (IMG). A tool used to assist in configuring SAP system in a step by step manner.

Knowledge Transfer

- Configuring the SAP System as the client requirement
- Defining the Roles & authorizations in projects
- Defining the process flow.

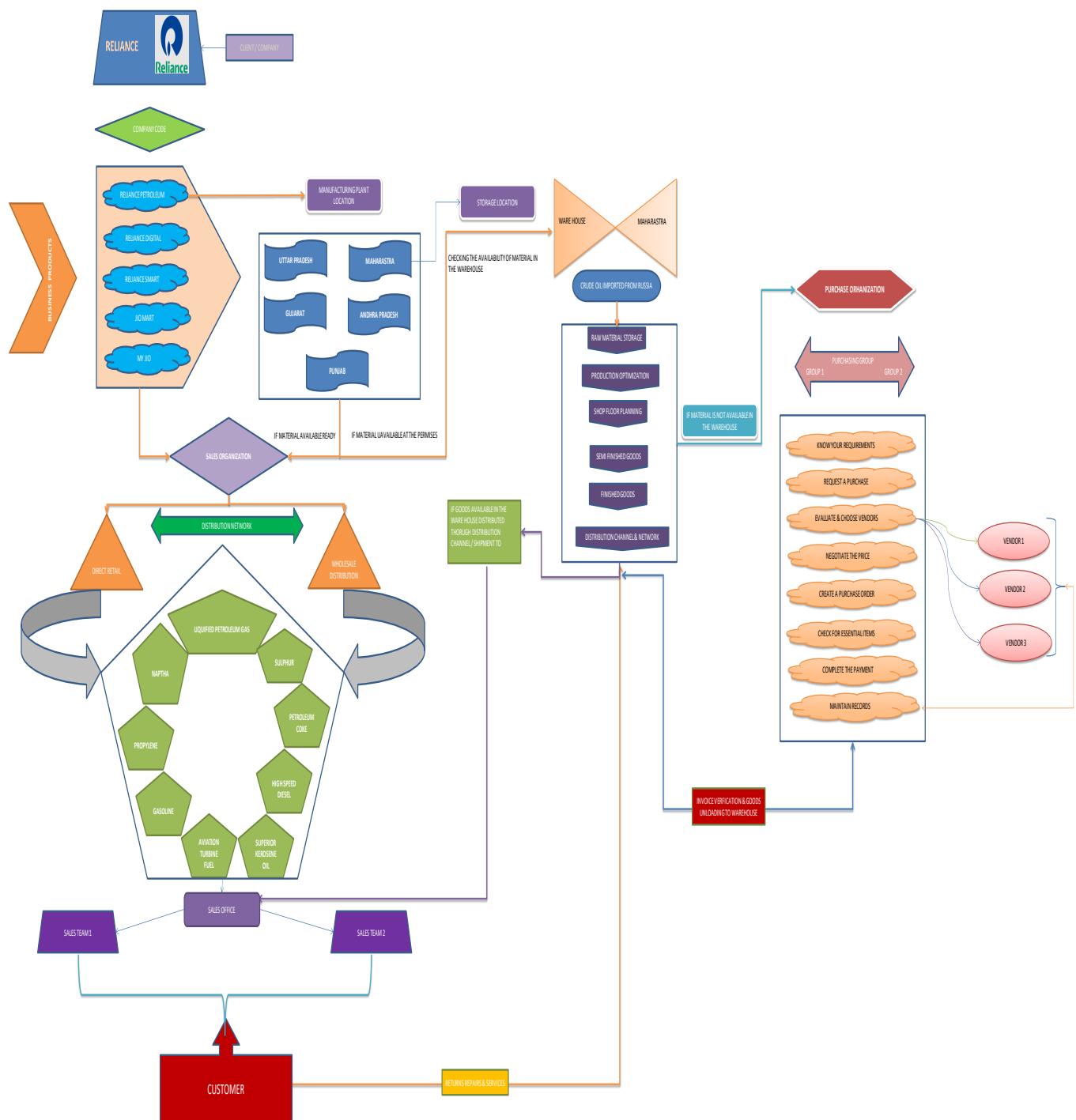
Phase IV: Testing and Final Preparation

The final preparation involves testing, system management, cut over activities, end-user training, and all other tasks that are required to go live. Successful completion of Final Preparation ensures that the organization is ready to begin using the new system.

Phase V: GO-Live Phase

This phase is the journey from a pre-production environment to a live project operation. The most critical elements in this phase are related to production support setup, monitoring system transactions, and optimizing system performance.

RELIANCE PETROLEUM INDUSTRIES ENTERPRISE STRUCTURE



Click on the below link to view the original document for enterprise structure.

<https://bit.ly/3Jv0ABA>

ABOUT THE CLIENT ENTERPRISE STRUCTURE

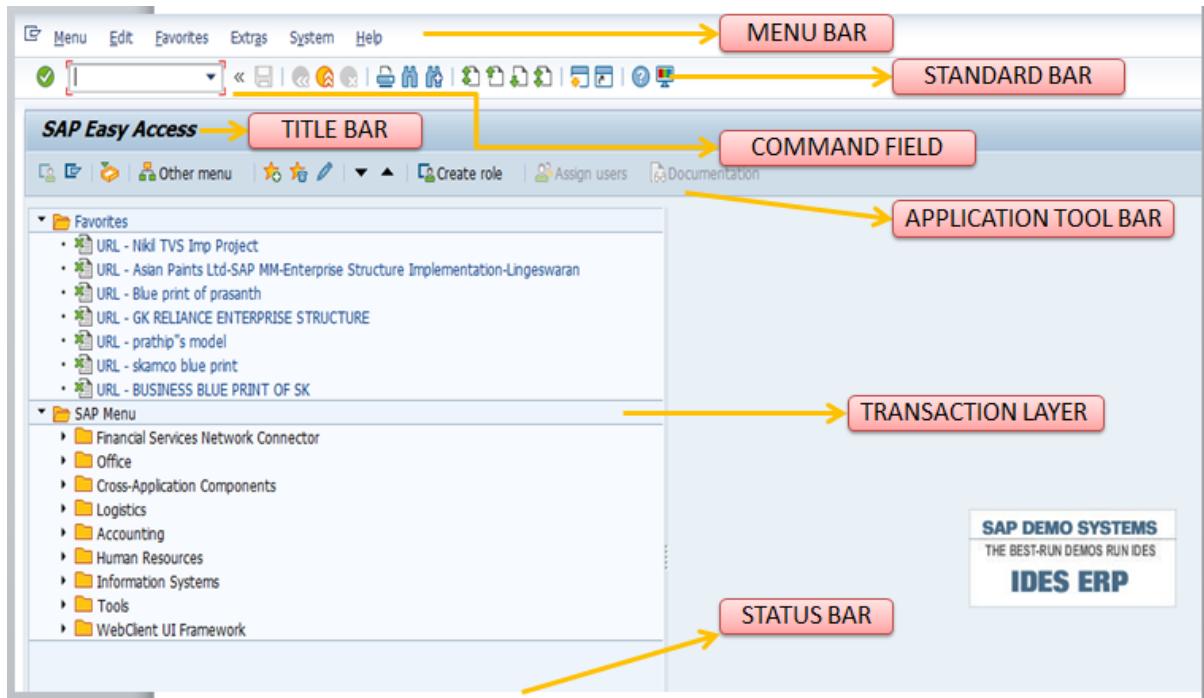
- ❖ Reliance Industries Limited is an Indian multinational conglomerate company, headquartered in Mumbai. It has diverse businesses including energy, petrochemicals, natural gas, retail, telecommunications, mass media, and textiles.
- ❖ In this Implementation project of Reliance petroleum industries which is producing over 9 divisions of products in five different plants on which this implementation is applied to the Maharashtra plant.
- ❖ Client/Customer Plays a wide role in the enterprise structure when the requirement or demand arises from the customer the sales office through the sales teams 1 & 2 should inform/report to the sales organization immediately for meeting the demand and planning the supply.
- ❖ Where the sales organization is linked with various distribution channels through which the products are reached to the required customers.
- ❖ Factory Manager / Plant manager is responsible for the all the activities involved in the individual plant which consists of activities like from procurement & sourcing to the delivery of product to the client / end user.
- ❖ The products are delivered to the client or customer by sales organization through available distribution channels & networks like retail sales, wholesale sales or distribution sales by depending upon requirement through the combined activity of all employees in warehouse and loading point.
- ❖ The shortage materials and all other necessary materials to produce the goods like raw material, accessories, are purchased as per inventory planning through purchase organization and the items will be then stored and maintained in the respected warehouse or storage location.
- ❖ Storage location is responsible for storing all raw materials and other inventories, finished & semi-finished goods are also stored in the storage. Whenever an demand or customer order received the goods then dispatched to client or customer through sales office.

PROJECT IMPLEMENTATION TO THE CLIENT END

1. Initially the client approaches the consultancy service provider for replacing their existing ERP with sap modules.
2. We need to discuss with the client about their requirements and conditions / terms of proceedings.
3. After analyzing the needs and requirements of client the teams are allocated accordingly as Developer team, Testing Team & consulting end teams.
4. Projects are scheduled and blueprints are framed to work accordingly as per the organizational/enterprise structure to finish the project at time.
5. Final establishment of sap module to the client.
6. After installation there should be some help & support with the work in progress module. Appropriate training & development sessions to be conducted as per requirements of the clients.

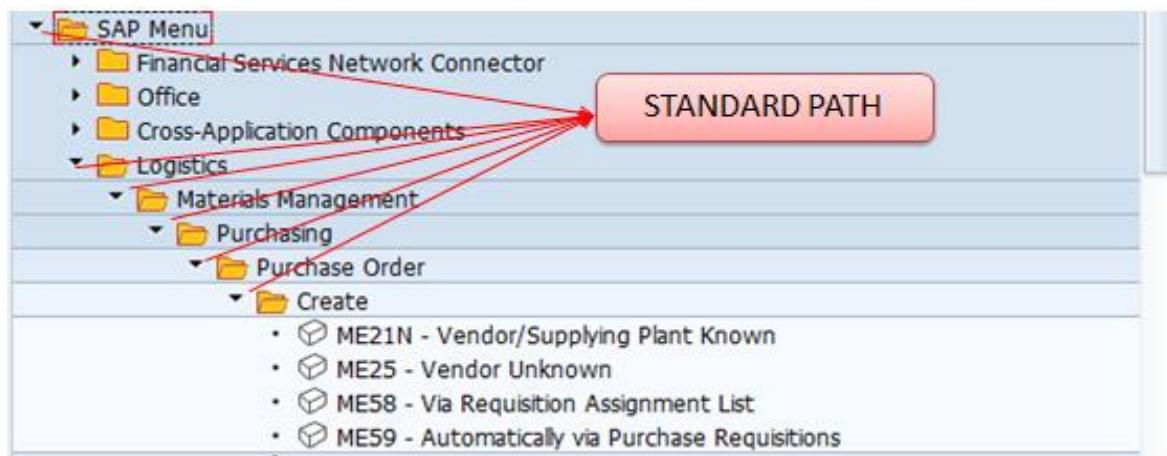
SAP PROJECT IMPLEMENTATION PROCESS

Main Interface Page



Various Paths to enter into Transactions

1. Standard Path



Accessing the required transaction field by step by step opening procedure.

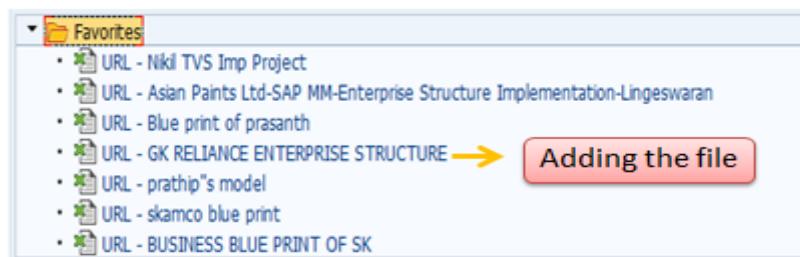
Sap menu → logistics → materials management → purchasing → purchase order → create → ME25—Vendor Unknown.

2. Using Transaction code

Entering the required Transaction/T-code in the command field we can able to access the transaction field.

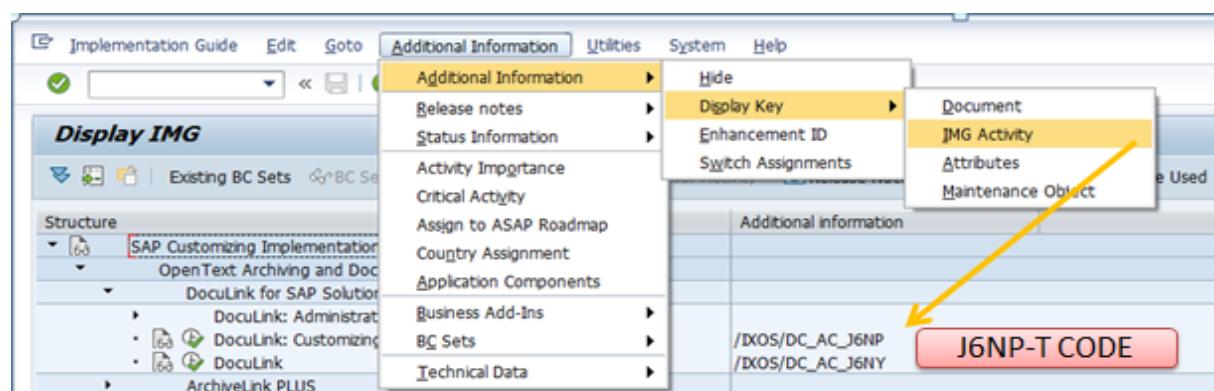


3. Adding the required field in Favourite List



Favourites → right click → dialogue box → click on add other objects → choose the required file from computer.

What is T code / Transaction code



Transaction code (T Code) in SAP is a 4 digit shortcut key to access the requested transaction. Transaction codes provide direct access to the desired transaction from anywhere within the SAP system. Instead of using the SAP R/3 menu path, you can start a function in a single step by using an SAP T-Code.

DEFINE ACTIVITES

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Definition.

FINANCIAL ACCOUNTING

1. DEFINE COMPANY

Company is the organizational unit for which individual financial statements can be drawn according to the relevant commercial law. A company can consist one or more company codes. A Company has local currencies in which its transactions are recorded. All company codes within a company must use the same transaction Chart of accounts and the same Fiscal Year. A company is equivalent to your legal business organization

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Definition → Financial Accounting → Define Company → New Entries.

T-Code – OX15

Change View "Internal trading partners": Details

New Entries							
Company	REI						
Company name	RELIANCE INDUSTRIES PVT LTD						
Name of company 2	RELIANCE PETROLEUM INDIA						
Detailed information							
Street	MAHARASTRA						
PO Box							
Postal code							
City	MUMBAI						
Country	IN						
Language Key	EN						
Currency	INR						

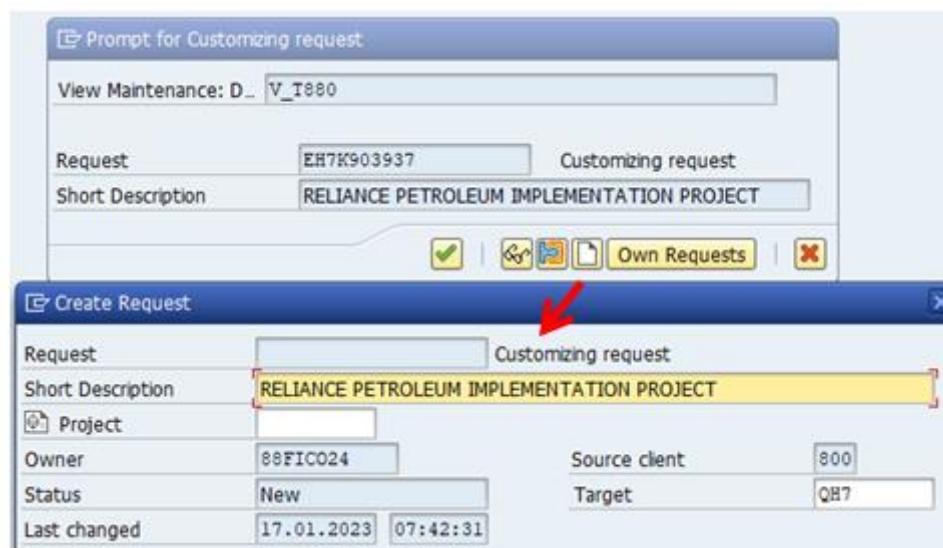
We need to enter details about the company name, Location & currency.

SAVING THE PROJECT

To save the project click on save icon and in customizing request click on create new request & enter the project name.

T-Code – SE01 – T code to view the transport request.

My Request No – EH7K903937



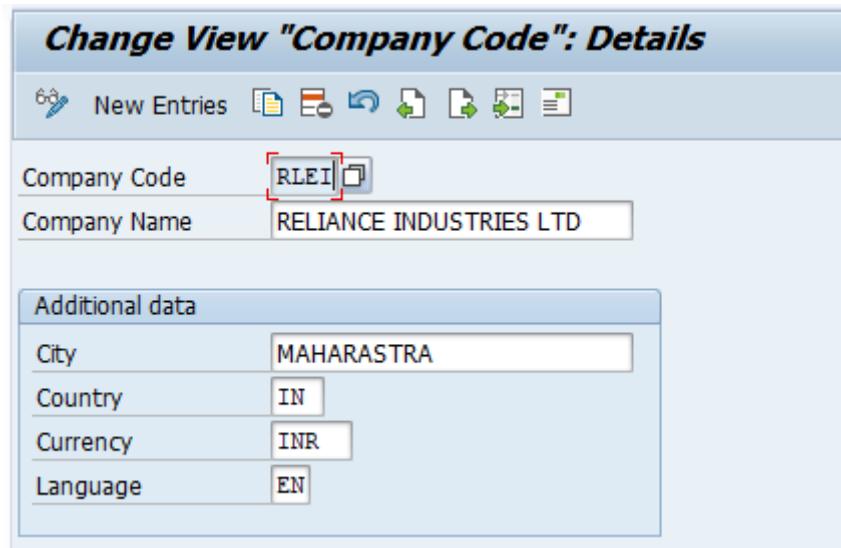
2. DEFINE COMPANY CODE

They are the smallest unit within your organizational structure and is used for internal and external reporting purposes. A company is parent company and the company code is subsidiaries. Company Code in SAP is the smallest Organizational unit of external accounting for which you can create a completely self-contained set of accounts for transaction posting, besides the statutory financial statements. There will be no of company codes under one company either national or international one.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise

Structure → Definition → Financial Accounting → Edit, copy, delete, check company code → Edit company code data → New Entries.

T code – OX02



3. DEFINE BUSINESS AREA

Business area is a separate area of operations or responsibilities of organizational units of financial accounting that is used for internal and external reporting. Different divisions of each business within a legal entity are created as Business areas for reporting of each operational area. So Financial statements can be created for each business area and these financial statements can be used for internal reporting purposes.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Enterprise Structure → Definition → Financial Accounting → Define Business Area → New entries.**

T code – OX03

New Entries: Overview of Added Entries	
Business Area	Description
RLEI	PETROLEUM PRODUCTS MANUFACTU

CONTROLLING

4. MAINTAIN CONTROLLING AREA

A controlling Area is an organizational unit that is used for cost accounting purposes. A controlling area can be used by more than one company code. All the companies using the same controlling area should use the same Chart of Account (COA) and Fiscal Year Variant (FSV).

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Definition → Controlling → Maintain Controlling Area → New Entries.

T code – OX06

Change View "Basic data": Details

New Entries

Controlling Area	Name
*	RLEI RELIANCE CONTROLLING AREA
Assignment Control	CoCd->CO Area
	Cross-company-code cost accounting
Currency Setting	Currency Type
	10 INR
	Company code currency
	Indian Rupee
	<input type="checkbox"/> Diff. CCode Currency
	<input type="checkbox"/> Active
Other Settings	Chart of Accts
	INT1 Chart of accounts - international
	Fiscal Year Variant
	K4 Calendar year, 4 spec. periods

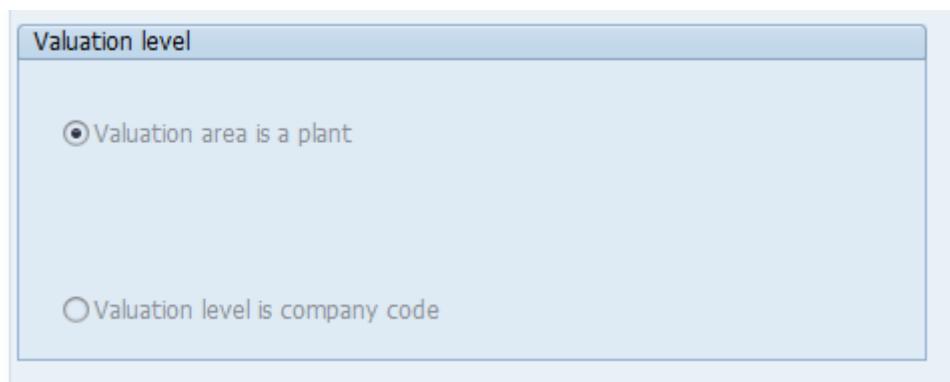
LOGISTICS GENERAL

DEFINE VALUATION LEVEL

Valuation level specifies the material stocks to be valued at plant level or company code level. If valuation area is plant, then the material price is unique at plant level i.e. material price may differ from plant to plant.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Enterprise Structure** → **Definition** → **Logistics General** → **Define Valuation Level** → **Predefined & fixed.**

T code – OX14



DEFINE PLANT

A plant is an operational facility within a company code (e.g. a production facility, regional or branch office). Plant is a manufacturing location where all the production of materials and products takes place and it is also the place where these products are temporarily stored before they are exported out to the warehouses.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Enterprise**

Structure → Definition → Logistics General → Define, copy, delete, check plant → Define plant → New entries

T code – OX10

Change View "Plants": Details

New Entries	Print	Copy	Cancel	Save	Cancel	Exit
Plant	RPL1					
Name 1	RELIANCE MANUFACTURING PL-1					
Name 2	RELIANCE MANUFACTURING PL-1_IND					
Detailed information						
Language Key	EN English					
House number/street						
PO Box						
Postal Code						
City						
Country Key	IN India					
Region	13 Maharashtra					
County code						
City code						
Tax Jurisdiction						
Factory calendar	IN India					

DEFINE LOCATION

Locations helps in identifying the area of each plants under one company code.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Enterprise Structure → Definition → Logistics General → Define Location → New entries**

T code – no code

New Entries: Overview of Added Entries

Plnt	Location	Name
RPL1	MHARASTRA	RELIANCE MANUFACTURING PL-1_MHR

DEFINE DIVISION

Division in SAP is a method of dividing products and services into different categories. In other words, the division is the method to group the same type of products on the basis of their similar characteristics. SAP divisions method is used to group different types of products and services.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Definition → Logistics General → Define, copy, delete, check Division → Define Division → New Entries

T code – OVXB

Division	Name
P1	LPG
P2	NAPTHA
P3	PROPYLENE
P4	AVIATION TURBINE FUE
P5	GASOLINE
P6	KEROSINE OIL
P7	HIGH SPEED DIESEL
P8	PETROLEUM COKE
P9	SULPHUR

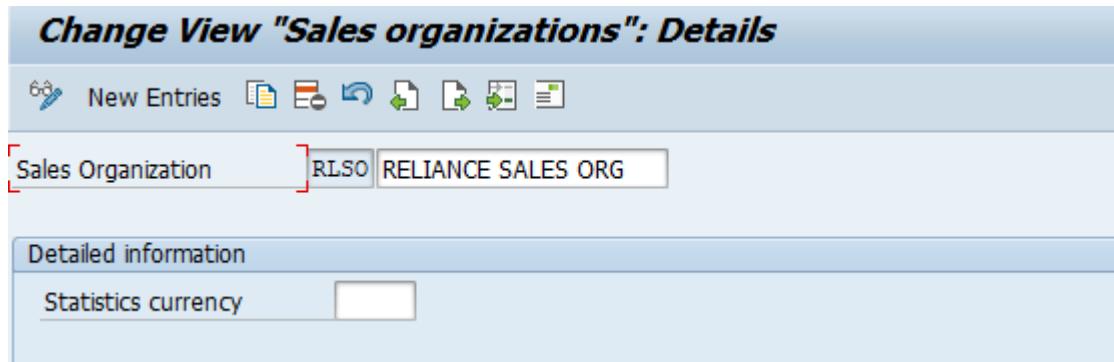
SALES & DISTRIBUTION

DEFINE SALES ORGANIZATION

Sales Organisation is the organisational unit which responsible for the selling of the product, movement of goods to the customer, customer right of course.

T Code – OVX5

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Definition → Sales & Distribution → Define, copy, delete, check Sales Organization → Define Sales Organization → New entries



DEFINE DISTRIBUTION CHANNEL

The distribution channel represents the channel through which saleable materials or services reach customers. Typical distribution channels include wholesale, retail and direct sales.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Definition → Sales & Distribution → Define, copy, delete, check Distribution Channel → Define Distribution channel → New entries

T Code – OVXI

New Entries: Overview of Added Entries		
	Distr. Channel	Name
	RR	DIRECT RETAIL SALES
	RW	WHOLESALE SALES

DEFINE SALES OFFICE

Sales Office is an organizational unit which can use as a branch. Sales Office contains group of sales persons working to perform the direct or indirect sales. Sales office can be assigned to sales area and multiple sales offices can assign to a Sales Area. The businesses often set up multiple sales offices apart from the head office or headquarters to get more exposure and reach in the market. These sales offices are often located in various different geographical areas according to the business requirements.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Enterprise Structure** → **Definition** → **Sales & Distribution** → **Maintain sales office** → **New entries**.

T Code – OVX1

New Entries: Overview of Added Entries		
Sales office	Description	
RSF	RELIANCE_SALES_OFF_1	

DEFINE SALES GROUP

Group of sales employees or organizational unit (branch wise) can be defines as a sales group. A sales office can have number of sales group, so sales group should be assigned to sales office.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Enterprise Structure** → **Definition** → **Sales & Distribution** → **Maintain sales Group** → **New entries**.

T Code – OVX4

New Entries: Overview of Added Entries		
		
Sales group	Description	
RS1	RELAINE SALES GRP 1	
RS2	RELIANCE SALES GRP 2	

MATERIALS MANAGEMENT

DEFINE STORAGE LOCATION

The storage location is the place where the materials are stored or it is the division of a plant into different areas so that the stock of materials can be kept there. It allows the differentiation of materials like raw material, semi-finished goods, and finished product within a plant.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Definition → Materials Management → Maintain Storage Location → New entries.

T Code – OX09

New Entries: Overview of Added Entries		
		
Dialog Structure	Plant	RPL1
<ul style="list-style-type: none"> -> Storage Locations <ul style="list-style-type: none"> -> Addresses of storage -> Business Systems for ME 		
SLoc	Description	
RRM	RAW MATERIAL STR	
RSFG	SEMI FINISH STR	
RFG	FINISH GOOD STR	

DEFINE PURCHASING ORGANIZATION

Purchase organisation is responsible for all purchase activities. From the Materials Management and Purchasing view, the purchasing organization is responsible for all purchasing activities including the processing of requests for quotations and purchase orders.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Enterprise Structure** → **Definition** → **Materials Management** → **Maintain Purchasing organization** → **New entries**.

T Code – OX08

New Entries: Overview of Added Entries		
Purch. Organization	Purch. Org. Descr.	
RLPO	RELIANCE PURCHASE ORG	

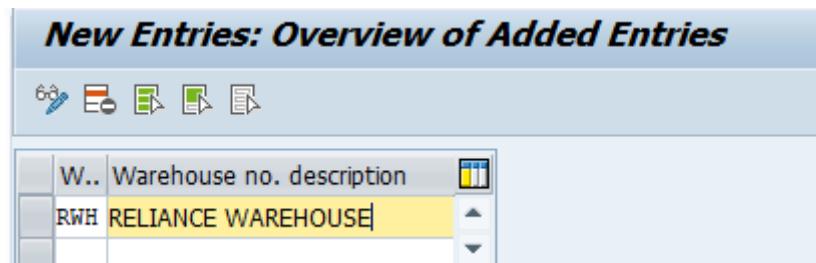
LOGISTICS EXECUTION

DEFINE WAREHOUSE NUMBER

A warehouse is a location that is used to store all kinds of material such as raw material, finished material, semi-finished material.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Enterprise Structure** → **Definition** → **Logistics Execution** → **Define, copy, delete, check Warehouse Number** → **Define Warehouse Number** → **New entries**.

T Code – No Code



DEFINE SHIPPING POINT

Shipping points are independent organizational entities within which processing and monitoring of the deliveries as well as goods issue is carried out. A delivery is processed by one shipping point only.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Definition → Logistics Execution → Define, copy, delete, check shipping point → Define shipping point → New entries.

T Code – OVXD

A screenshot of the SAP Fiori interface titled "New Entries: Details of Added Entries". The screen displays several input fields for defining a shipping point. The "Shipping Point" field is populated with "RSHP" and "RELIANCE SHIPPING POINT". The "Location" field is empty. The "Country" field has a dropdown menu open, with "IN" selected. The "Departure Zone" field is empty. In the "Times" section, the "Factory Calendar" field is populated with "IN" and the "Working Times" field is empty.

DEFINE LOADING POINT

Loading points are sub-divisions or parts of the Shipping point in the SAP system. It describes all the operators who are all involving in transit of goods in the shipping / loading area.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Definition → Logistics Execution → Maintain Loading Point → New entries.

T Code – OVX7

Change View "Loading points": Overview			
	New Entries	RSHP	RELIANCE SHIPPING POINT
Shipping Point		RSHP	RELIANCE SHIPPING POINT
R1	GOKUL	SUPERVISOR	
R2	GOWRI	INCHARGE	
R3	HARISH	LABOUR	

DEFINE TRANSPORT PLANNING POINT

Transportation planning point is a group of employees who are responsible for maintaining all transportation activities in the organization. Every shipment is assigned to a specific transportation planning point for transportation planning and shipment. Types of transporting vehicles involved in goods transiting.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Definition → Logistics Execution → Maintain Transportation Planning Point → New entries.

T Code – OVXT

New Entries: Overview of Added Entries			
	TPPt	Description	CoCd
	REI	RELIANCE EICHER	
	RTA	RELIANCE HP TANKER	
	RTR	RELIANCE 40 FEET CON	

DEFINE PLANT MAINTENANCE

Helps businesses support and maintain equipment and systems.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Definition → Plant Maintenance → Maintain Maintenance Plat Planning Point → New entries.

T Code – OIX0

Change View "Planning Plants": Overview		
Planning plant	Name 1	Name 2
RPL1	RELIANCE MANUFACTRING PL-1	RELIANCE MANUFACTRING PL-1_IND

MATERIAL MANAGEMENT (Outside of Define Field)

DEFINE PURCHASING GROUP

A purchasing group is a unit of a purchasing organization which is responsible for day-to-day certain buying activities and controls a particular type of procurement activity based on some classification.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Materials Management → Purchasing Group → Create Purchasing Group → New entries.

T Code – OME4

New Entries: Overview of Added Entries				
Purchasing Groups				
Purchasin...	Desc. Pur. Grp	Tel.No. Pur....	Fax number	
RPR	RELIANCE PUR GRP-1			
RPU	RELIANCE PUR GRP-2			

DEFINE CONTROLLING AREA

A controlling Area is an organizational unit that is used for cost accounting purposes. A controlling area can be used by more than one company code. All the companies using the same controlling area should use the same Chart of Account (COA) and Fiscal Year Variant (FSV).

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Definition → Controlling → Maintain Controlling Area → New entries.

T Code – OX06

Change View "Basic data": Details

The screenshot shows the SAP OX06 dialog box for maintaining a controlling area. The title bar says "Change View 'Basic data': Details". The left sidebar shows a tree structure with "Controlling Area" selected, and under it, "Basic data" is highlighted. The main area has several sections:

- Controlling Area**:
 - Controlling Area: RLEI
 - Name: RELIANCE CONTROLLING AREA
 - Person Responsible: (empty)
- Assignment Control**:
 - CoCd->CO Area: Cross-company-code cost accounting
- Currency Setting**:
 - Currency Type: 10 (Company code currency)
 - Currency: INR (Indian Rupee)
 - Curr/Val. Prof.: (empty)
 - Diff. CCode Currency
 - Active
- Other Settings**:
 - Chart of Accts: INT1 (Chart of accounts - international)
 - Fiscal Year Variant: K4 (Calendar year, 4 spec. periods)

ASSIGN ACTIVITES

After defining all the organizational entities related to the company we need to link those entities with the company / company code and the process / activity is known as Assigning activity under enterprise structure.

ACTIVATING GLOBAL PARAMETERS

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Financial Accounting (New) → Financial Accounting Global Settings (New) → Global Parameters for company code → Enter Global Parameters → Positions

T Code – OBY6

Change View "Company Code Global Data": Details

Company Code	RLEI	RELIANCE INDUSTRIES LTD	MAHARASTRA
Country key	IN	Currency	INR
Language Key EN			
Accounting organization			
Chart of Accts	INT1	Country Chart/Accts	
Company	REL	FM Area	
Credit control area	4300	Fiscal Year Variant	K4
Ext. co. code		Global CoCde	
Company code is productive		VAT Registration No.	
Processing parameters			
Document entry screen variant	<input type="checkbox"/>	<input checked="" type="checkbox"/> Business area fin. statements	
Field status variant	1000	<input type="checkbox"/> Propose fiscal year	
Pstng period variant	1000	<input checked="" type="checkbox"/> Define default value date	
Max. exchange rate deviation	10 %	<input checked="" type="checkbox"/> No forex rate diff. when clearing in LC	
Sample acct rules var.		<input type="checkbox"/> Tax base is net value	
Workflow variant		<input checked="" type="checkbox"/> Discount base is net value	
Inflation Method		<input checked="" type="checkbox"/> Financial Assets Mgmt active	
Crcy transl. for tax		<input type="checkbox"/> Purchase acct proc.	
CoCd -> CO Area	2	<input type="checkbox"/> JV Accounting Active	
Cost of sales accounting activ.	2	<input type="checkbox"/> Hedge request active	
<input checked="" type="checkbox"/> Negative Postings Permitted		<input type="checkbox"/> Enable amount split	
<input checked="" type="checkbox"/> Activate CM		<input type="checkbox"/> Tax Reporting Date Active	

FINANCIAL ACCOUNTING

ASSIGN COMPANY CODE TO COMPANY

The process of assigning company code to company creates a link between the company code and company.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Enterprise Structure** → **Assignment** → **Financial Accounting** → **Assign company code to company** → **Positions**

T Code – OX16

Change View "Assign Company Code -> Company": Overview			
CoCd	City	Company	
RLEI	MAHARASTRA	REL	

LOGISTICS GENERAL

ASSIGN PLANT TO COMPANY CODE

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Enterprise Structure** → **Assignment** → **Logistics – General** → **Assign Plant to Company Code**

T Code – OX18

Change View "Assignment Plant - Company Code": Overview					
Assignment Plant - Company Code					
CoCd	Plnt	Name of Plant	Company Name	Status	
RLEI	RPL1	RELIANCE MANUFACTRING PL-1	RELIANCE INDUSTRIES LTD		

ASSIGN BUSINESS AREA TO PLANT

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Assignment → Logistics – General → Assign Business Area to Plant/Valuation Area and Division → Plant Division

T Code – OMJ7

Change View "Org. Unit: Business Area Determination": Overview					
		New Entries			
Plnt	Dv	Name	BusA	Description	
RPL1	P1	LPG	RLBA	PETRROLEUM PRODUCTS MANUF.	
RPL1	P2	NAPTHA	RLBA	PETRROLEUM PRODUCTS MANUF.	
RPL1	P3	PROPYLENE	RLBA	PETRROLEUM PRODUCTS MANUF.	
RPL1	P4	AVIATIONTURBINE FUEL	RLBA	PETRROLEUM PRODUCTS MANUF.	
RPL1	P5	GASOLINE	RLBA	PETRROLEUM PRODUCTS MANUF.	
RPL1	P6	KEROSINE OIL	RLBA	PETRROLEUM PRODUCTS MANUF.	
RPL1	P7	HIGH SPEED DIESEL	RLBA	PETRROLEUM PRODUCTS MANUF.	
RPL1	P8	PETROLEUM COKE	RLBA	PETRROLEUM PRODUCTS MANUF.	
RPL1	P9	SULPHUR	RLBA	PETRROLEUM PRODUCTS MANUF.	

SALES & DISTRIBUTION

ASSIGN SALES ORGANIZATION TO COMPANY CODE

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Assignment → Sales & Distribution → Assign sales organization to company code → Position

T Code – OVX3

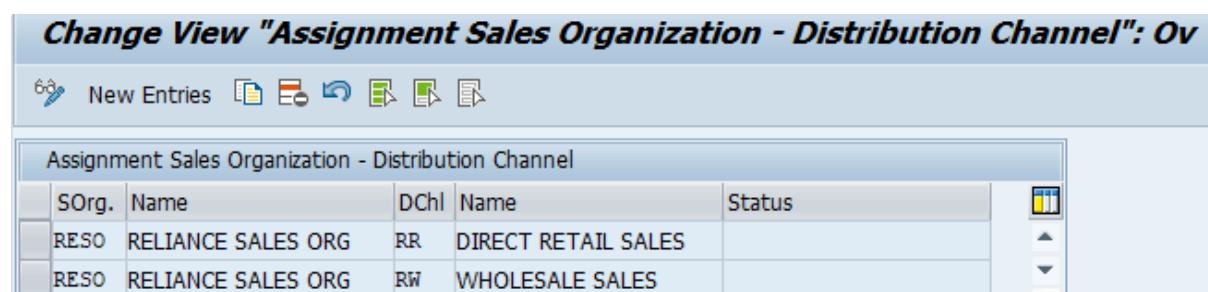
Assignment Sales Organization - Company Code				
SOrg.	Name	CoCd	Company Name	Status
RESO	RELIANCE SALES ORG	RLEI	RELIANCE INDUSTRIES LTD	

ASSIGN DISTRIBUTION CHANNEL TO SALES ORGANIZATION

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Assignment → Sales & Distribution → Assign distribution channel to sales organization → New Entries

T Code – OVXK

Change View "Assignment Sales Organization - Distribution Channel": Overview



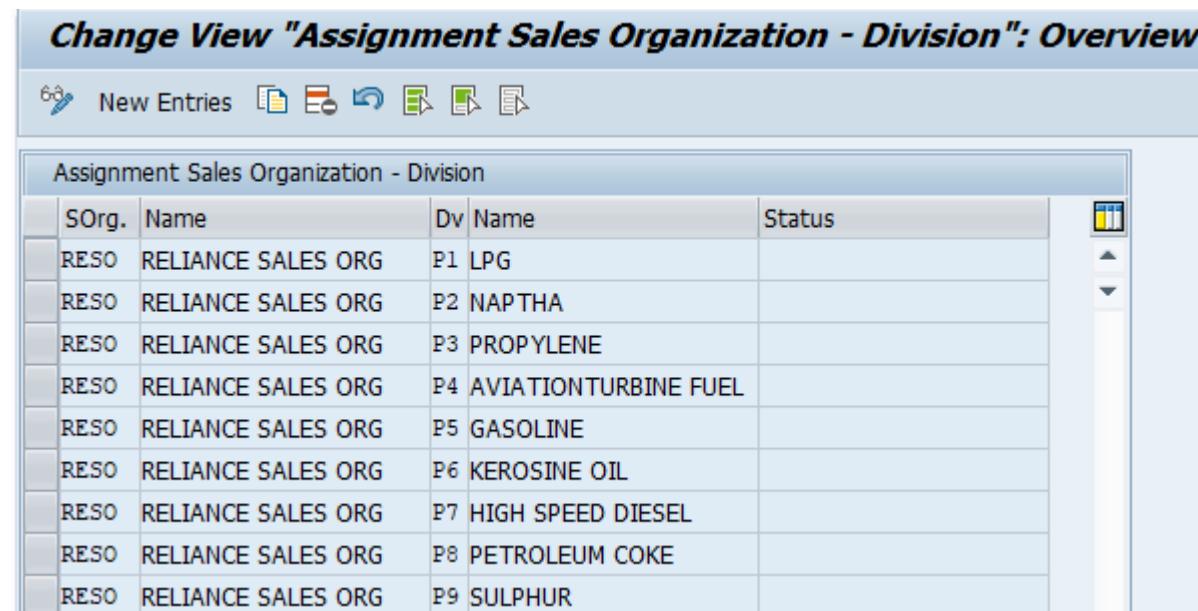
Assignment Sales Organization - Distribution Channel				
SOrg.	Name	DChl	Name	Status
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	

ASSIGN DIVISION TO SALES ORGANIZATION

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Assignment → Sales & Distribution → Assign division to sales organization → New Entries

T Code – OVXA

Change View "Assignment Sales Organization - Division": Overview



Assignment Sales Organization - Division				
SOrg.	Name	Dv	Name	Status
RESO	RELIANCE SALES ORG	P1	LPG	
RESO	RELIANCE SALES ORG	P2	NAPTHA	
RESO	RELIANCE SALES ORG	P3	PROPYLENE	
RESO	RELIANCE SALES ORG	P4	AVIATIONTURBINE FUEL	
RESO	RELIANCE SALES ORG	P5	GASOLINE	
RESO	RELIANCE SALES ORG	P6	KEROSINE OIL	
RESO	RELIANCE SALES ORG	P7	HIGH SPEED DIESEL	
RESO	RELIANCE SALES ORG	P8	PETROLEUM COKE	
RESO	RELIANCE SALES ORG	P9	SULPHUR	

SET UP SALES AREA

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Assignment → Sales & Distribution → Set up sales area → New Entries

T Code – OVXG

Assignment Sales Org. - Distribution Channel - Division						
SOrg.	Name	DChl	Name	Dv	Name	Status
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P1	LPG	
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P2	NAPTHA	
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P3	PROPYLENE	
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P4	AVIATIONTURBINE FUEL	
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P5	GASOLINE	
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P6	KEROSINE OIL	
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P7	HIGH SPEED DIESEL	
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P8	PETROLEUM COKE	
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P9	SULPHUR	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P1	LPG	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P2	NAPTHA	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P3	PROPYLENE	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P4	AVIATIONTURBINE FUEL	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P5	GASOLINE	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P6	KEROSINE OIL	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P7	HIGH SPEED DIESEL	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P8	PETROLEUM COKE	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P9	SULPHUR	

This describes that what are all the products will be bought in through the available distribution channel like partially retail and partially wholesale or only direct sale according to the organization.

ASSIGN SALES OFFICE TO SALES AREA

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Assignment → Sales & Distribution → Assign sales office to sales area → New Entries

T Code – OVXM

Assignment Sales Office - Sales Area								
SOrg.	Name	DChl	Name	Dv	Name	SOff.	Description	Status
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P1	LPG	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P2	NAPTHA	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P3	PROPYLENE	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P4	AVIATIONTURBINE FUEL	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P5	GASOLINE	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P6	KEROSINE OIL	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P7	HIGH SPEED DIESEL	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P8	PETROLEUM COKE	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	P9	SULPHUR	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P1	LPG	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P2	NAPTHA	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P3	PROPYLENE	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P4	AVIATIONTURBINE FUEL	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P5	GASOLINE	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P6	KEROSINE OIL	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P7	HIGH SPEED DIESEL	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P8	PETROLEUM COKE	RSF	RELIANCE_SALES_OFF_1	
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	P9	SULPHUR	RSF	RELIANCE_SALES_OFF_1	

In this we are specifying that the products divisions are available in the distribution channel through the respective sales office of the organization.

ASSIGN SALES GROUP TO SALES OFFICE

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Assignment → Sales & Distribution → Assign sales group to sales office → New Entries

T Code – OVXJ

Assignment Sales Office - Sales Groups					
SOff.	Description	SGrp	Description	Status	
RSF	RELIANCE_SALES_OFF_1	RS1	RELAINCE SALES GRP 1		
RSF	RELIANCE_SALES_OFF_1	RS2	RELIAENCE SALES GRP 2		

ASSIGN SALES ORGANIZATION - DISTRIBUTION CHANNEL – PLANT

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Assignment → Sales & Distribution → Assign sales organization - distribution channel – plant → New Entries

T Code – OVX6

Assignment Sales Organization/Distribution Channel - Plant					
SOrg.	Name	DChCust/Mt	Name	Plnt	Name 1
RESO	RELIANCE SALES ORG	RR	DIRECT RETAIL SALES	RPL1	RELIANCE MANUFACTRING PL-1
RESO	RELIANCE SALES ORG	RW	WHOLESALE SALES	RPL1	RELIANCE MANUFACTRING PL-1

MATERIALS MANAGEMENT

ASSIGN PURCHASING ORGANIZATION TO COMPANY CODE

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Assignment → Materials Management → Assign purchasing organization to company code → Positions

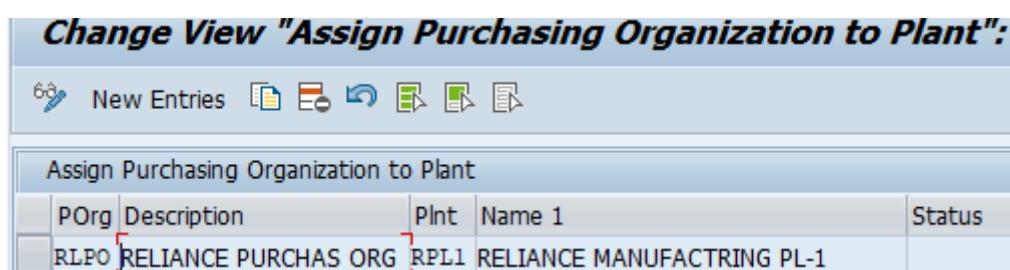
T Code – OX01



ASSIGN PURCHASING ORGANIZATION TO PLANT

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Assignment → Materials Management → Assign purchasing organization to plant → New Entries

T Code – OX17

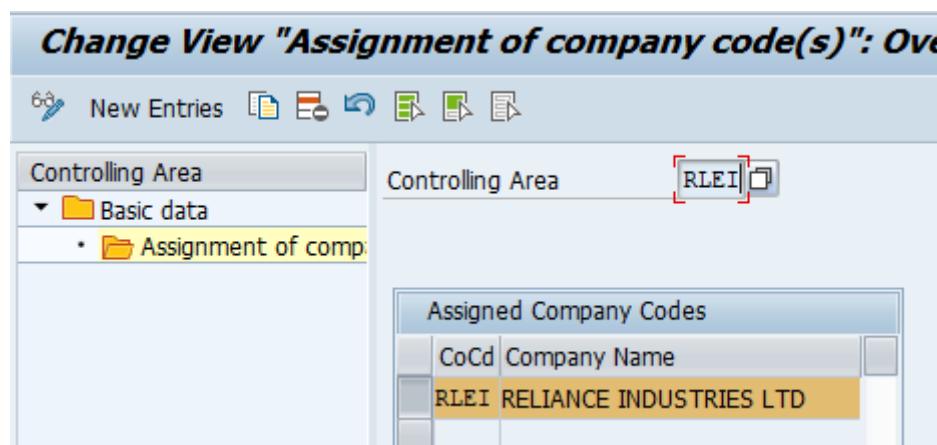


CONTROLLING

ASSIGN COMPANY CODE TO CONTROLLING AREA

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Assignment → Controlling → Assign company code to controlling area → Positions → Enter CO Area → Select Assignment of company code → New Entries

T Code – OX19



LOGISTICS EXECUTION

ASSIGN WAREHOUSE NUMBER TO PLANT/STORAGE LOCATION

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Assignment → Logistics Execution → Assign warehouse number to plant/storage location → New Entries

T Code – OML2

Change View "MM-IM Storage Location <-> LE-WM Warehouse Number": OML2		
Plnt	SLoc	Warehouse no. description
RPL1	RFG	RELIANCE WAREHOUSE
RPL1	RRM	RELIANCE WAREHOUSE
RPL1	RSFG	RELIANCE WAREHOUSE

ORGANIZATIONAL STRUCTURE OVERVIEW DESIGNED BY THE SYSTEM

After all define & assign activates the sap system will combine & link the individual company parameters as enterprise organizational structure.

T Code – EC01

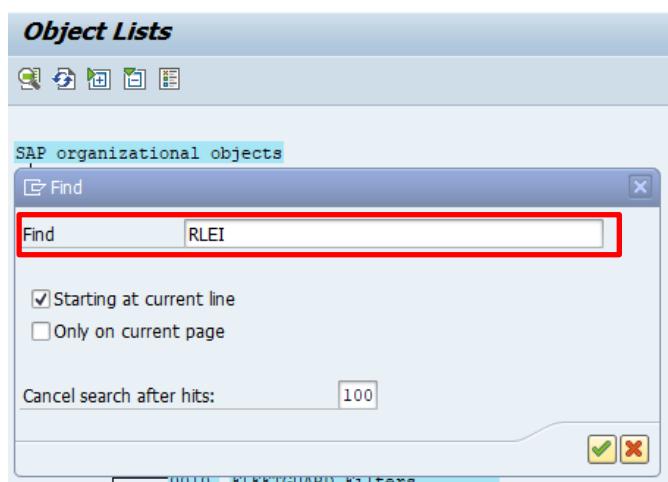
Step 1 → Click on “Structure”



Step 2 → Click on “Navigation”



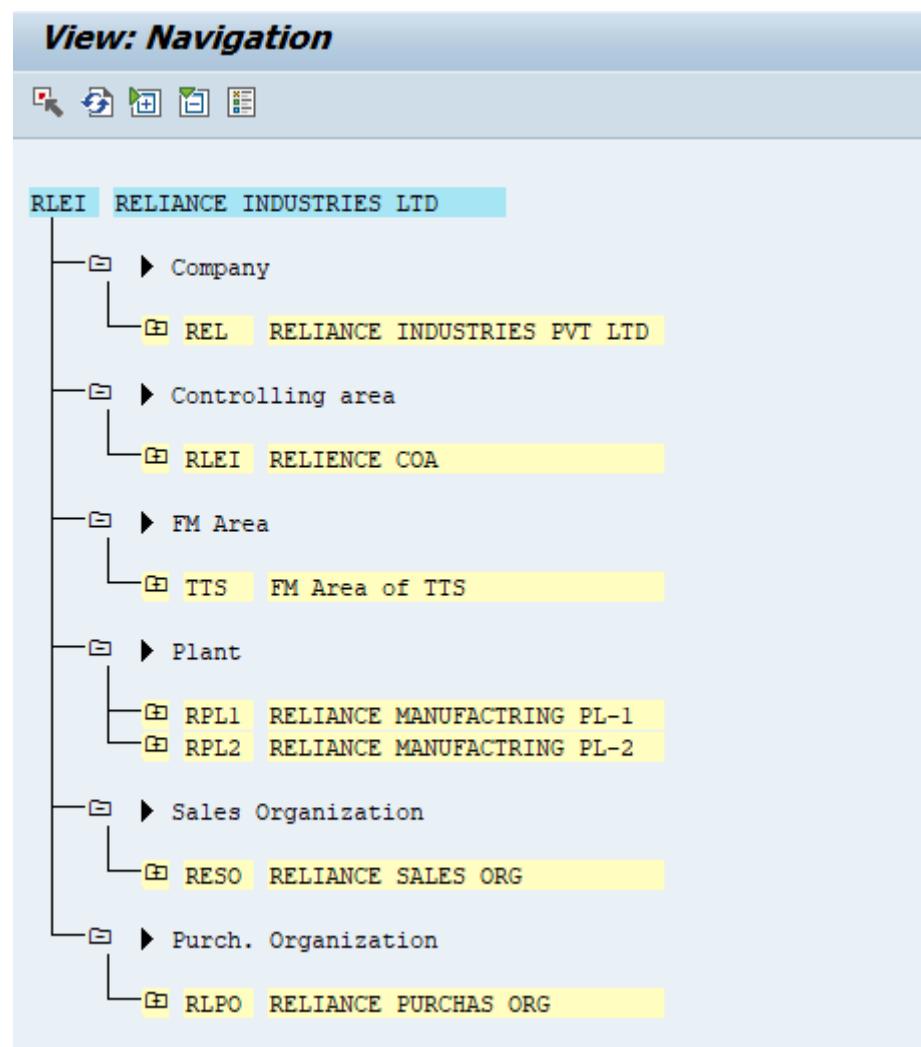
Step 3 → Find Company



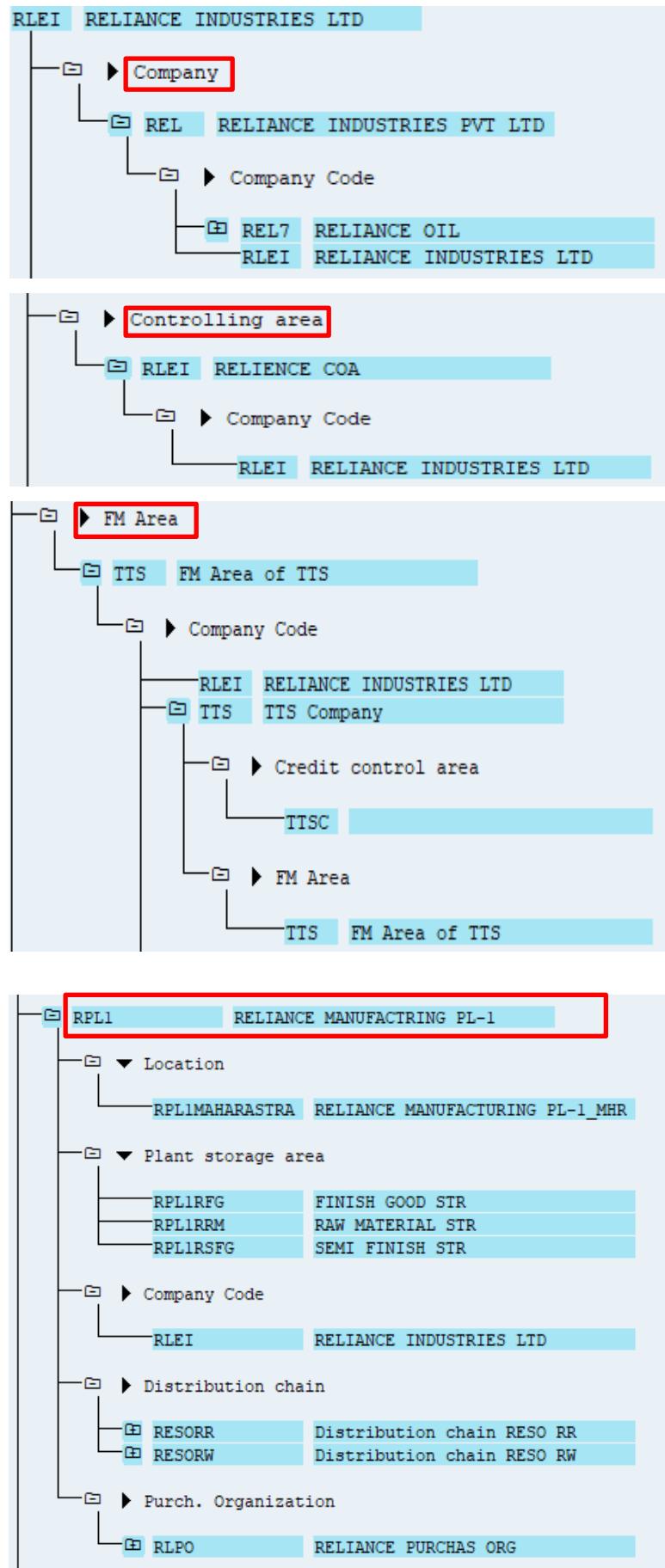
Step 3 → Double click on your company code

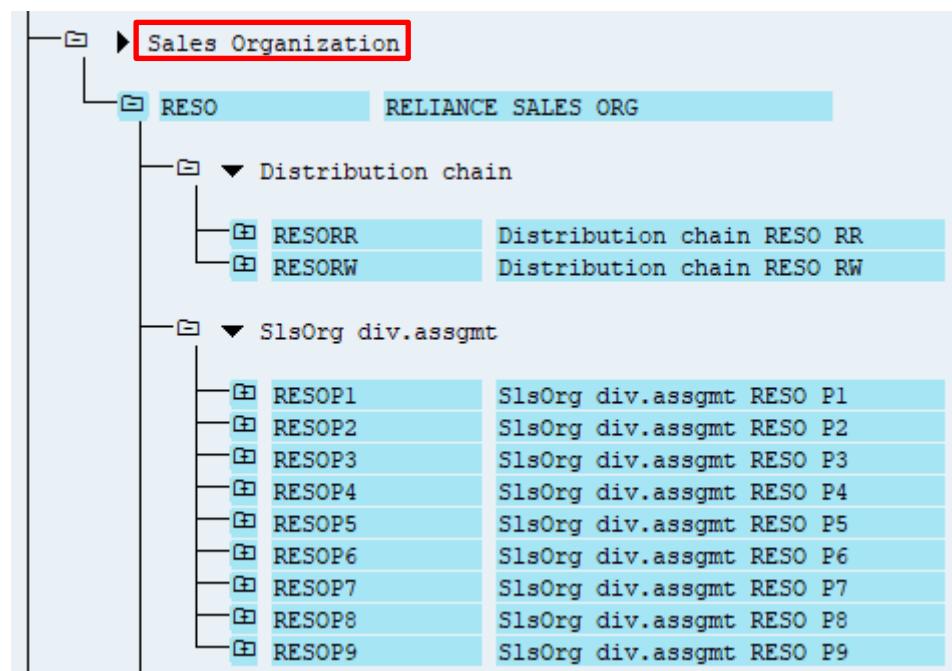
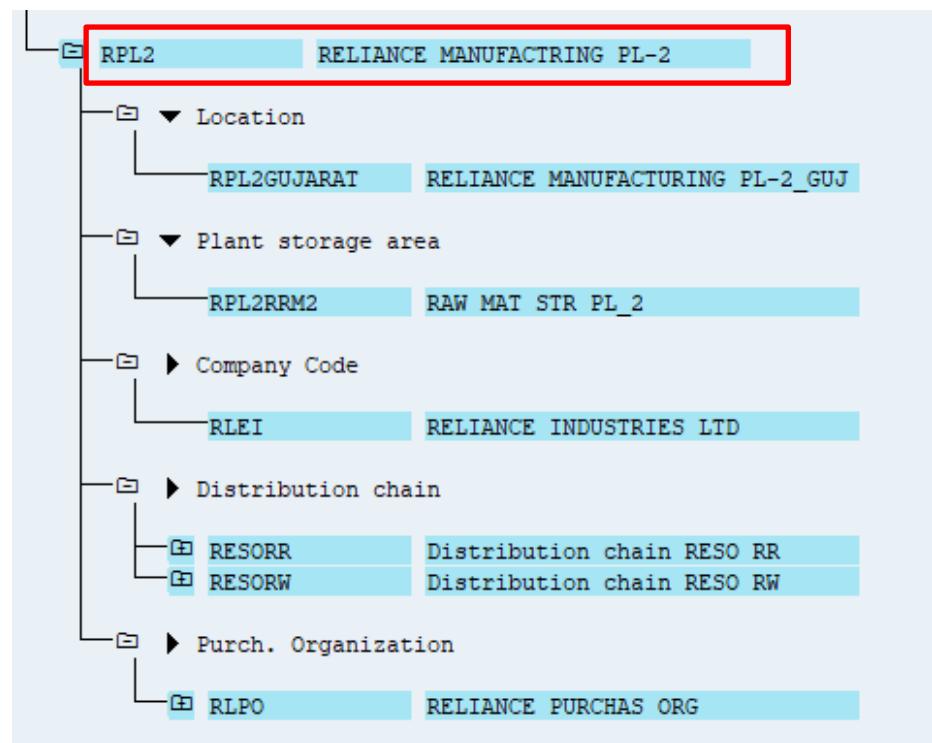
Object Lists	
RLEI RELIANCE INDUSTRIES LTD	
RLPL Reliance Power Ltd	
RM14 RELIANCE MART	
RMA raj marine	
RMGC renga private limited	
RMRM roji samir	
ROB1 Roseberry PVT Ltd	
RP01 RUPALI MOTORS	
RP02 rupali steels	
RP91 Rp consultant	
RPIN R P INFRA	

Step 4 → System will display whole structure as below.



VIEW NAVIGATION OF INDIVIDUAL FIELDS





MASTER DATA

Data that is created centrally and it is valid for all applications. It remains constant over the time but we need to update it on regular basis. For Example: Vendor is a type of master data that is used for creating purchase orders or contracts.

VENDOR MASTER DATA

Vendor Master Data is the enterprise main source of vendor-specific data. It includes information on vendors from which a company can procure or source.

It is a type of master data in SAP MM where we can maintain the information of vendor and this data is maintained by both the purchasing and accounting departments

Types of vendors

- Main Vendor
- Invoice Presented By
- Forwarding Agent
- One Time Vendor

Main Vendor

These suppliers are responsible for major procurement of goods i.e. is required for business activities. These materials or goods & services will be responsible for major procurement for the finished products.

Invoice Presented By

They are also called as Emergency Vendors. These suppliers are involved when there is an emergency or when immediate / current demand arises they will fulfil the need of the business.

Forwarding Agent

They just act as a Middle man / Intermediary. They will have all suppliers interlinked with them, instead of procuring from direct producer. Forwarding agent will buy and supply to the business.

One Time Vendor

One-time vendors are vendors that supply your company only once or very rarely.

CREATING VENDOR MASTER DATA

DEFINING ACCOUNT GROUPS

It helps in identifying the type of vendors for business activities.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Logistics – General → Business Partner → Vendors → Control → Define Account Groups and Field Selection (Vendor) → New Entries

T Code – OMSG

New Entries: Details of Added Entries

Expand Field Status	Delete	Previous Entry	Next Entry	Print Standard List
Account Group <input type="text" value="RLV1"/>				
General Data				
Name	<input type="text" value="RELIANCE_MAIN_VENDOR_RLEI"/>			
Number Range	<input type="checkbox"/>			
One-Time Account	<input type="checkbox"/>			

New Entries: Details of Added Entries

Expand Field Status	Delete	Previous Entry	Next Entry	Print Standard List
Account Group <input type="text" value="RLV2"/>				
General Data				
Name	<input type="text" value="RELIANCE_INVOICE_PRESN_BY_RLEI"/>			

New Entries: Details of Added Entries

Expand Field Status	Delete	Previous Entry	Next Entry	Print Standard List
Account Group <input type="text" value="RLV3"/>				
General Data				
Name	<input type="text" value="RELIANCE_FORWARDING_AGENT_RL..."/>			

New Entries: Details of Added Entries

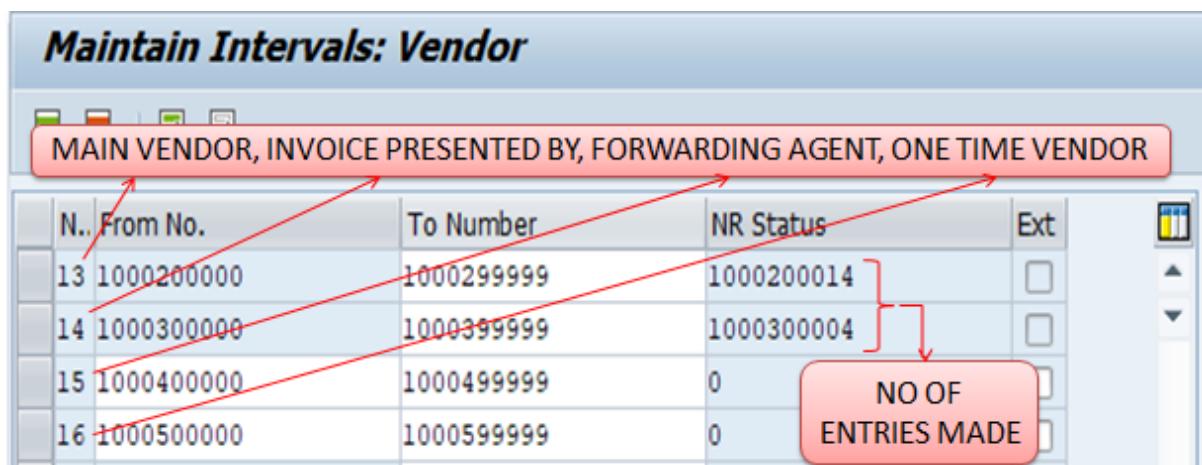
Expand Field Status	Delete	Previous Entry	Next Entry	Print Standard List
Account Group <input type="text" value="RLV4"/>				
General Data				
Name	<input type="text" value="RELIANCE_ONE_TIME_VENDOR_RLEI"/>			
Number Range	<input type="checkbox"/>			
One-Time Account	<input checked="" type="checkbox"/>			

ACCOUNT GROUP	TYPE OF VENDOR
RLV1	Main vendor
RLV2	Invoice presented by
RLV3	Forwarding agent
RLV4	One time vendor

DEFINING NUMBER RANGER FOR VENDOR

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Logistics – General → Business Partner → Vendors → Control → Define Number Ranges for Vendor Master Records → Intervals → Insert line

T Code – OMSJ



No is assigned to particular intervals. In which the each vendor categories are assigned to the respective interval range. The number is assigned to vendor accounts based on the number ranges that you have configured.

Example: 13 is a number assigned to main vendor, where the no entries will be depend on the intervals assigned i.e. from 1000200000 to 1000299999 & NR status shows no of entries done here 1000200014 here the difference is 14 so till 14 entries have made.

ASSIGN NUMBER RANGE TO ACCOUNT GROUP

You can assign one number ranges to one or more vendor account groups as per organization requirements. Based on the number range assignment, the unique number is assigned to a vendor account.

For example: For number 10 the number range is between from number 1000200000 to number 1000299999 is assigned to main vendor. So that you can create vendor account up to 299999.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Logistics – General** → **Business Partner** → **Vendors** → **Control** → **Define Number Ranges for Vendor Master Records** → **Number range** → **Positions** → **Account group** → **Enter the number range**

T Code – OMSJ

Group	Name	Number range
RIV1	RELIANCE_MAIN_VENDOR_RLEI	13
RIV2	RELIANCE_INVOICE_PRESN_BY_RLEI	14
RIV3	RELIANCE_FORWARDING_AGENT_RL...	15
RIV4	RELIANCE_ONE_TIME_VENDOR_RLEI	16

DEFINITION OF PARTNER ROLES

This helps in identifying the various functions of the Account groups usually sap has standard codes but if you need to create a new one you can create it by clicking on new entries otherwise use the same sap standard codes. Whether the vendor group is responsible for end to end supply activity or any some of the activities will be described in defining partner roles.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Materials Management** → **Purchasing** → **Vendor Master** → **Vendor Hierarchy** → **Define partner determination for hierarchy categories** → **Definition of Partner Roles** → **New Entries**.

T Code – 0112

New Entries: Overview of Added Entries		
Funct	Name	NoType
VN	VENDOR	LI
DP	DELIVERING PLANT	LI
IP	INVOICE PRESENTED BY	LI
FA	FORWARDING AGENT	LI
GS	GOOD SUPPLIER	LI
ZN	CARRIER	LI

SPECIFIES THE TYPE OF ACCOUNT GROUP IT BELONGS

Type of partner number (1) 13 Entries found	
Restrictions	
NoType	Description
A	Work center
AP	Contact Persons
KU	Customer
LI	Vendor
LS	Logical system
MA	Mail Address
MP	Mail Partner
O	Organizational Unit
PE	Personnel Number
S	Position
US	User
VS	Shipping Point
WK	Plant

VN – Vendor

Usually responsible for supplying goods & services to the business activities.

DP - Delivering plant

The delivering plant refers to the plant from which the goods are to be delivered to the customer, within a specific sales organization and distribution channel.

IP – Invoice Presented By

They will deliver the materials to the business activity when company is facing immediate demand and requirements.

FA – Forwarding Agent

The forwarding agent is responsible for arranging the movement of goods from a point to another.

GS – Good Supplier

They will only responsible for good supplying to the client

ZN - Carrier

The carrier is a vendor business partner who performs home delivery or distributes publications printed or distributed by your company.

ASSIGNING ROLES & RESPONSIBILITIES TO VENDORS

In this step we are going to assign the defined roles to the particular account groups.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Materials Management** → **Purchasing** → **Vendor Master** → **Vendor Hierarchy** → **Define partner determination for hierarchy categories** → **Permissible Partner Roles per Account Group** → **New Entries**.

T Code – 0112

Change View "Permissible Partner Roles per Account Group": Overview				
	Funct	Name	Group	Name
	VN	VENDOR	RLV1	RELIANCE_MAIN_VENDOR_RLEI
	VN	VENDOR	RLV2	RELIANCE_INVOICE_PRESN_BY_RLEI
	VN	VENDOR	RLV3	RELIANCE_FORWARDING_AGENT_RL...
	VN	VENDOR	RLV4	RELIANCE_ONE_TIME_VENDOR_RLEI

ACCOUNT GROUP	NUMBER	NUMBER RANGE	ROLES& RESPONSIBILITES
RLV1	13	1000200000 - 1000299999	VN,DP,IP,FA,GS,ZN
RLV2	14	1000300000 - 1000399999	VN,IP,ZN
RLV3	15	1000400000 - 1000499999	VN,FA,ZN
RLV4	16	1000500000 - 1000599999	VN,DP,IP,FA,GS,ZN

FIELD SELECTIONS FOR ACCOUNT GROUPS

Selection fields allow the user to select from a group of choices on an application panel. You can specify the fields as per the client requirements.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Logistics – General** → **Business Partner** → **Vendors** → **Control** → **Define Account Groups and Field Selection (Vendor)** → **Positions**

T Code – OMSG

Options in Field Selection

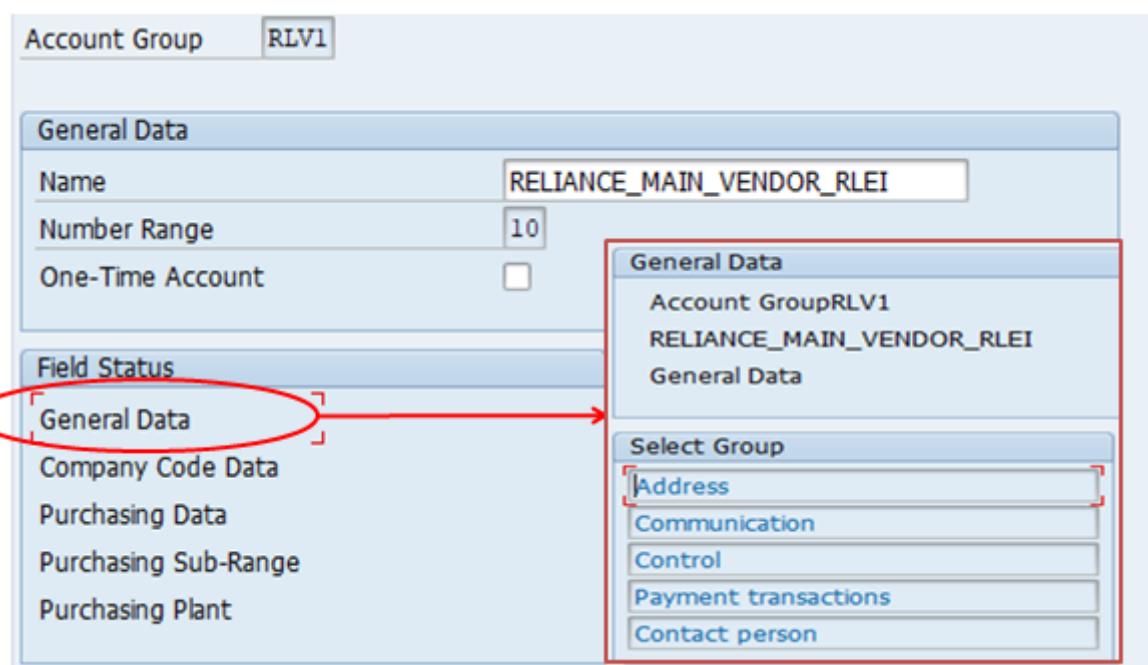
Suppress - means that the field will be hidden. You cannot see the field there.

Req. Entry - You will see the field and it's a mandatory entry and system will not allow you if you don't select any value to it.

Opt. entry - the field will be displayed and will have an option of optional entry; it's not required set a value to this field.

Display – This field will show the entries but you cannot modify or edit the entries.

FIELD SELECTION TO ACCOUNT GROUP RLV1/RLV2/RLV3/RLV4



Account Group RLV2

General Data	
Name	RELIANCE_INVOICE_PRESN_BY_RLEI
Number Range	11
One-Time Account	<input type="checkbox"/>
Field Status	
General Data	
Company Code Data	
Purchasing Data	
Purchasing Sub-Range	
Purchasing Plant	

General Data
 Account GroupRLV2
 RELIANCE_INVOICE_PRESN_BY_RLEI
 Company Code Data

 Select Group
 Account management
 Payment transactions
 Correspondence
 W/Holding tax data, w/h tax 2

Account Group RLV3

General Data	
Name	RELIANCE_FORWARDING_AGENT_RLEI
Number Range	12
One-Time Account	<input type="checkbox"/>
Field Status	
General Data	
Company Code Data	
Purchasing Data	
Purchasing Sub-Range	
Purchasing Plant	

General Data
 Account GroupRLV3
 RELIANCE_FORWARDING_AGENT_RLEI
 Purchasing Data

 Select Group
 Purchasing data
 Partner usage
 Add. Purchasing Data

Account Group RLV4

General Data	
Name	RELIANCE_ONE_TIME_VENDOR_RLEI
Number Range	13
One-Time Account	<input checked="" type="checkbox"/>
Field Status	
General Data	
Company Code Data	
Purchasing Data	
Purchasing Sub-Range	
Purchasing Plant	

General Data
 Account GroupRLV4
 RELIANCE_ONE_TIME_VENDOR_RLEI 9
 Purchasing Data: Sub-Range Level

 Select Group
 Partner usage: subrange
 Subrange purchasing data

Account Group	RLV4
General Data	
Name	RELIANCE_ONE_TIME_VENDOR_RLEI
Number Range	13
One-Time Account	<input checked="" type="checkbox"/>
Field Status	
General Data	Account Group RLV4
Company Code Data	RELIANCE_ONE_TIME_VENDOR_RLEI
Purchasing Data	Purchasing Data: Plant Level
Purchasing Sub-Range	Select Group
Purchasing Plant	<input type="button" value="Partner usage: plant level"/> <input type="button" value="Plant level purchasing data"/>
Address	
Name 1	<input type="radio"/> Suppress <input type="radio"/> Req. Entry <input checked="" type="radio"/> Opt. entry <input type="radio"/> Display

Still now we have defined all the parameters about enterprise structure and also mapped them with the respective company code by assigning the entities. And also vendor master configuration has been done.

Next stage we need to test the fields at end user level by entering the field parameter as per the information's.

There are two teams / departments which involves in creating vendor master data

1. Finance team
2. Material management team

Where Finance team deal with General data & company code data which is decentralized data, Material Management team deal with General data & Purchase data

Where the General data is said to be Centralized data which is needed by both the departments, so in order to enter the details as centralized one, a person who is said to be centralized person with having both MM & FI integrated knowledge will have access to create the centralized data. These data automatically reflect into both the Finance & MM accounts.

TESTING THE CONFIGURATION AT THE END USER LEVEL

VENDOR MASTER DATA CREATION BY FINANCE TEAM

SAP Menu → Accounting → Financial Accounting → Accounts Payable → Master Record → FK01 – Create

FK02 – Change (edit already created existing data)

FK03 – Display (Shows the Already created data)

T Codes – FK01, FK02, FK03.

VENDOR MASTER DATA CREATION BY MM TEAM

SAP Menu → Logistics → Materials Management → Purchasing → Master Data → Vendor → Purchasing → MK01 – Create

MK02 – Change (edit already created existing data)

MK03 – Display (Shows the Already created data)

T Codes – MK01, MK02, MK03.

VENDOR MASTER DATA CREATION BY FI & MM INTEGRATED CENTRALIZED TEAM

SAP Menu → Logistics → Materials Management → Purchasing → Master Data → Vendor → Central → XK01 – Create

XK02 – Change (edit already created existing data)

XK03 – Display (Shows the Already created data)

T Codes – XK01, XK02, XK03.

STEP 1 → CREATING VENDOR

Create Vendor: Initial Screen

Vendor	
Company Code	RLEI
PurchasingOrganization	RLPO
Account group	RLV1

STEP 2 → CREATING VENDOR ADDRESS

Change Vendor: Address

Vendor	1000200015
Name	
Title	Company
Name	ROSNEFT OIL COMPANY
RUSSIA	
Search Terms	
Search term 1/2	MAIN VENDOR
Street Address	
Street/House number	
Postal Code/City	
Country	RU Russian Fed.
Time zone	RUS03
PO Box Address	
PO Box	
Postal code	
Communication	
Language	English
Telephone	123456789
Other communication...	

STEP 3 → CREATING VENDOR PAYMENT TRANSACTIONS

Change Vendor: Payment transactions

Vendor	1000200015	ROSNEFT OIL COMPANY	
Bank Details			
C...	Bank Key	Bank Account	Acct Holder
RU	MFO 43214321	142800056781234567	ROSNEFT CURRENT ACCOUNT

STEP 4 → CREATING VENDOR CONTACT PERSONS

Change Vendor: Contact persons

			Partner details	Visiting Hours	Delete line	
Vendor	1000200015	ROSNEFT OIL COMPANY				
Contact Person						
Form of...	First name	Name	Telephone1	De...	Description	F.. Description
K	GOKUL			0003	Sales	03 Head of sales

STEP 5 → CREATING VENDOR ACCOUNTING INFORMATION

Change Vendor: Accounting information Accounting

Vendor	1000200015	ROSNEFT OIL COMPANY
Company Code	RLEI	RELIANCE INDUSTRIES LTD
Accounting information		
Recon. account	<input type="text"/>	Sort key <input type="text"/>
Head office	<input type="text"/>	Subsidiy indic. <input type="checkbox"/>
Authorization	<input type="text"/>	Cash mgmnt group A2 <input checked="" type="checkbox"/> Foreign <input type="checkbox"/>

STEP 6 → CREATING VENDOR PAYMENT TRANSACTION ACCN

Change Vendor: Payment transactions Accounting

Vendor	1000200015	ROSNEFT OIL COMPANY
Company Code	RLEI	RELIANCE INDUSTRIES LTD
Payment data		
Payt Terms	0001 <input checked="" type="checkbox"/>	Tolerance group <input type="text"/>
Cr memo terms	<input type="text"/>	Chk double inv. <input type="checkbox"/>
Chk cashng time	<input type="text"/>	

STEP 7 → CREATING VENDOR PURCHASING DATA

Change Vendor: Purchasing data

Vendor	1000200015	ROSNEFT OIL COMPANY
Purchasing Org.	RLPO	RELIANCE PURCHAS ORG
Conditions		
Order currency	RUB	Russian Rouble (old)
Terms of paymnt	0001	
Incoterms	COD	MAHARASTRA
Minimum order value	1.400.000,00	
Schema Group, Vendor	<input type="checkbox"/>	Standard procedure vendor
Pricing Date Control	<input type="checkbox"/>	No Control
Order optim.rest.		
Sales data		
Salesperson	K GOKUL	
Telephone	7373668599	

STEP 8 → CREATING VENDOR PARTNER FUNCTIONS

Change Vendor: Partner functions

					Delete line
Vendor	1000200015	ROSNEFT OIL COMPANY			
Purchasing Org.	RLPO	RELIANCE PURCHAS ORG			
Partner Functions					
P..	Name	Number	Name		
VN	VENDOR	1000200015	ROSNEFT OIL COMPANY		
DP	DELIVERY PLANT	1000200015	ROSNEFT OIL COMPANY		
IP	INVOICE PRESENTED BY	1000200015	ROSNEFT OIL COMPANY		
FA	FOWARDING AGENT	1000200015	ROSNEFT OIL COMPANY		
GS	GOODS SUPPLIER	1000200015	ROSNEFT OIL COMPANY		
ZN	CARRIER	1000200015	ROSNEFT OIL COMPANY		

STEP 9 → ASSIGNING CREATED NUMBER TO THE VENDOR FIELD

Change Vendor: Initial Screen

Vendor	1000200015	ROSNEFT OIL COMPANY
Company Code	RLEI	RELIANCE INDUSTRIES LTD
Purch. Organization	RLPO	RELIANCE PURCHAS ORG

VENDOR NO	VENDOR NAME	VENDOR TYPE	VENDOR ROLES
1000200015	ROSNEFT OIL COMPANY	MAIN VENDOR(a)	VN,DP,IP,FA,GS,ZN
1000200016	CHEVRON OIL COMPANY	MAIN VENDOR(b)	VN,DP,IP,FA,GS,ZN
1000300005	ADANI GAS COMPANY	INVOICE PRESENTED BY	VN,IP,ZN
1000400005	FULCRUM SHIPPING & LOGISTICS	FORWARDING AGENT	VN,FA,ZN
1000500005	ALL CARGO LOGISTICS	ONE TIME VENDOR	VN,DP,IP,FA,GS,ZN

SearchTerm	Cty	PostalCode	City	Name 1	Vendor	CoCd
FORWARDING	IN			FULCRUM SHIPPING & LOGIST	1000400005	RLEI
INVOICE PR	IN			ADANI GAS COMPANY	1000300005	RLEI
MAIN VENDO	RU			ROSNEFT OIL COMPANY	1000200015	RLEI
MAIN VENDO	US			CHEVRON OIL COMPANY	1000200016	RLEI
ONE TIME V	IN			ALL CARGO LOGISTICS	1000500005	RLEI

CUSTOMER MASTER DATA

The customer master data contains the information about business transaction and how transactions are recorded and executed by the system. A Customer Master contains the information about the customers that an organization uses to do business with them.

Types of Customers

- Domestic Customers
- International Customers
- One Time Customers

Domestic Customers

These are the customers or a buyer who buys the goods and services within the territory of the company / Business Area.

For example: Consider Reliance Petroleum Industries located in Maharashtra from which customers from various parts of the country (say from Tamilnadu) Buys Petrol & Diesel is said to be Domestic Customers.

International Customers

These are the buyers who located in outside the countries buys the product from the company / Business Area through exchanging of currencies ex INR → Dollar

For example: Consider Reliance Petroleum Industries Located in India From which a buyer from USA byes Petroleum for exchanging the currencies.

One Time Customer

A one-time customer is a customer who does not have a long-term relationship with the company.

The frequency of buying may be a long time i.e. once in a year or twice in a year. They may be both International Customer & Domestic Customers.

For this we won't in need of complete details about the customer like other type of customers.

CREATING CUSTOMER MASTER DATA

DEFINING ACCOUNT GROUPS

It helps in identifying the type of customers for business activities.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Logistics – General → Business Partner → Customers → Control → Define Account Groups and Field Selection (customer) → New Entries

T Code – OBD2

Change View "Customer Account Groups": Details

Expand field status New entries

Account group RLC1 RELIANCE DOMESTIC CUSTOMER RLEI

General data

Number range 11 One-time acct

Field status

General data Company code data Sales data

Change View "Customer Account Groups": Details

Expand field status New entries

Account group RLC2 RELIANCE INTERNAT CUSTOMER RLEI

General data

Number range 12 One-time acct

Field status

General data Company code data Sales data

Change View "Customer Account Groups": Details

Expand field status New entries

Account group RLC3 RELIANCE ONETIME CUSTOMER RLEI

General data

Number range 13 One-time acct

Field status

General data Company code data Sales data

ACCOUNT GROUP	TYPE OF CUSTOMER
RLC1	DOMESTIC CUSTOMER
RLC2	INTERNATIONAL CUSTOMER
RLC3	ONE TIME CUSTOMER

DEFINING NUMBER RANGER FOR CUSTOMERS

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Logistics – General → Business Partner → Customers → Control → Define Number Ranges for Customer Master → Intervals → Insert line

T Code – XDN1

Maintain Intervals: Customer

DOMESTIC CUSTOMER, INTERNATIONAL CUSTOMER, ONE TIME CUSTOMER

N.	From No.	To Number	NR Status	Ext
11	5000010000	5000019999	0	<input type="checkbox"/>
12	5000020000	5000029999	0	<input type="checkbox"/>
13	5000030000	5000039999	0	<input type="checkbox"/>

No is assigned to particular intervals. In which the each customer categories are assigned to the respective interval range. The number is assigned to customer accounts based on the number ranges that you have configured.

Example: 11 is a number assigned to Domestic Customer, where the no entries will be depend on the intervals assigned i.e. from 5000010000 to 5000019999 & NR status shows no of entries done here the difference is 0 so till 0 entries have made.

12 assigned to International Customer. 13 is assigned to one time customer.

ASSIGN NUMBER RANGE TO ACCOUNT GROUP

You can assign one number ranges to one or more customer account groups as per organization requirements. Based on the number range assignment, the unique number is assigned to a customer account.

For example: For number 11 the number range is between from number from 5000010000 to number 5000019999 is assigned to Domestic Customer. So that you can create vendor account up to 199999.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Logistics – General → Business Partner → Customers → Control → Define Number Ranges for Customer Master Records → Number range → Positions → Account group → Enter the number range

T Code – XDN1

Change View "Assign Customer Acct Groups->Number Range":			
Group	Name	Number range	
RLC1	RELIANCE DOMESTICCUSTOMER RLEI	11	
RLC2	RELIANCE INTERNATCUSTOMER RLEI	12	
RLC3	RELIANCE ONETIME CUSTOMER RLEI	13	

DEFINITION OF PARTNER ROLES

This helps in identifying the various functions of the Account groups usually sap has standard codes but if you need to create a new one you can create it by clicking on new entries otherwise use the same sap standard codes. Whether the vendor group is responsible for end to end supply activity or any some of the activities will be described in defining partner roles.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Sales & Distribution → Master Data → Customers → Customers Hierarchy → Set Partner Determination For Hierarchy Categories → Partner Functions → New Entries.

T Code – VOPA

New Entries: Overview of Added Entries

The screenshot shows the SAP Fiori interface for managing partner functions. On the left, there's a navigation tree under 'Dialog Structure' with items like 'Partner Determination P' and 'Partner Functions'. The main area displays a table titled 'Partner Functions' with columns: Partn.Funct., Name, and Part.. The rows show four entries: SP (SOLD TO PART), SH (SHIP TO PARTY), BP (BILL TO PARTY), and PY (PAYER). A red callout bubble points from the 'Part..' column to a separate table on the right, which lists partner types (NoTy.) and descriptions. The 'KU' entry in the main table corresponds to 'Customer' in the list.

Partner Functions		
Partn.Funct.	Name	Part..
SP	SOLD TO PART	KU
SH	SHIP TO PARTY	KU
BP	BILL TO PARTY	KU
PY	PAYER	KU

NoTy.	Description
A	Work center
AP	Contact Persons
KU	Customer
LI	Vendor
LS	Logical system
MA	Mail Address
MP	Mail Partner
O	Organizational Unit
PE	Personnel Number
S	Position
US	User
VS	Shipping Point
WK	Plant

SP – Sold to party

It means the customer who is going to place the order to the business.

BP – Bill to party

A partner function which receives an invoice for goods

SH – Ship to party

It means the party to whom the business is going to deliver the goods.

PY – Pay to party / payer

Payer is Responsible for paying money or settlement of money.

ASSIGNING ROLES & RESPONSIBILITIES TO CUSTOMERS

In this step we are going to assign the defined roles to the particular account groups.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Sales & Distribution → Master Data → Customers → Customers Hierarchy → Set Partner Determination For Hierarchy Categories → Account Groups – Function Assignment → New Entries.

T Code – VOPA

The screenshot shows the SAP VOPA dialog. On the left, there's a 'Dialog Structure' tree with nodes like 'Partner Determination P', 'Partner Functions in', 'Partner Determination P', 'Partner Functions', and 'Account Groups - Functi'. On the right, a grid titled 'Account Groups - Function Assignment' lists three entries: RLC1, RLC2, and RLC3, each associated with 'Sold to party' and 'RELIANCE DOMESTIC CUSTOMER RLEI', 'RELIANCE INTERNATIONAL CUSTOMER RLEI', and 'RELIANCE ONE TIME CUSTOMER RLEI' respectively.

ACCOUNT GROUP	NUMBER	NUMBER RANGE	ROLES& RESPONSIBILITES
RLC1(DC)	11	5000010000-5000019999	SP,BP,SH,PY
RLC2(IC)	12	5000020000-5000029999	SP,BP,SH,PY
RLC3(OTC)	13	5000030000-5000039999	SP,BP,SH,PY

DC – DOMESTIC CUSTOMER

IC – INTERNATIONAL CUSTOMER

OTC – ONE TIME CUSTOMER

FIELD SELECTIONS FOR ACCOUNT GROUPS

Selection fields allow the user to select from a group of choices on an application panel. You can specify the fields as per the client requirements.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Logistics – General → Business Partner → Customers → Control → Define Account Groups and Field Selection (Customers) → Positions

T Code – OBD2

Options in Field Selection

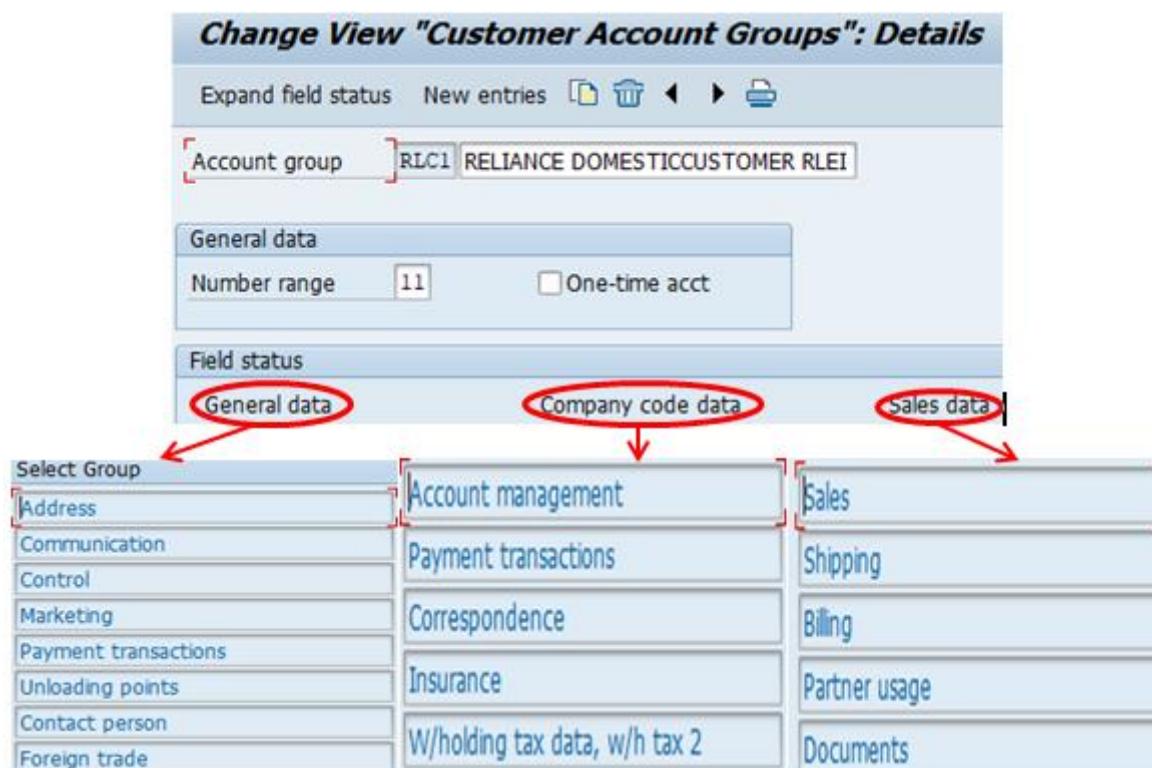
Suppress - means that the field will be hidden. You cannot see the field there.

Req. Entry - You will see the field and it's a mandatory entry and system will not allow you if you don't select any value to it.

Opt. entry - the field will be displayed and will have an option of optional entry; it's not required set a value to this field.

Display – This field will show the entries but you cannot modify or edit the entries.

FIELD SELECTION TO ACCOUNT GROUP RLC1/RLC2/RLC3



Next stage we need to test the fields at end user level by entering the field parameter as per the information's.

There are two teams / departments which involves in creating customer master data

1. Finance team
2. Sales & Distribution team

Where Finance team deal with General data & company code data which is decentralized data, Sales & Distribution team deal with General data & Sales data

Where the General data is said to be Centralized data which is needed by both the departments, so in order to enter the details as centralized one, a person who is said to be centralized person with having both MM & FI integrated knowledge will have access to create the centralized data. These data automatically reflect into both the Finance & SD accounts.

TESTING THE CONFIGURATION AT THE END USER LEVEL

CUSTOMER MASTER DATA CREATION BY FINANCE TEAM

SAP Menu → Accounting → Financial Accounting → Accounts Receivables → Master Record → FD01 – Create

FD02 – Change (edit already created existing data)

FD03 – Display (Shows the Already created data)

T Codes – FD01, FD02, FD03.

CUSTOMER MASTER DATA CREATION BY SD TEAM

SAP Menu → Logistics → Sales & Distribution → Master Data → Business Partner → Customer → Create → VD01- Creating

VD02 – Change (edit already created existing data)

VD03 – Display (Shows the Already created data)

T Codes – VD01, VD02, VD03.

VENDOR MASTER DATA CREATION BY FI & SD INTEGRATED CENTRALIZED TEAM

SAP Menu → Logistics → Sales & Distribution → Master Data → Business Partner → Customer → Create → XD01- Complete

XD02 – Change (edit already created existing data)

XD03 – Display (Shows the Already created data)

T Codes – XD01, XD02, XD03.

STEP 1 → CREATING CUSTOMER

In this step we need to select the customer account group regarding the domestic / international / one time customers, and should map them with respective sales organization and distribution channel to the product requested by the customer.

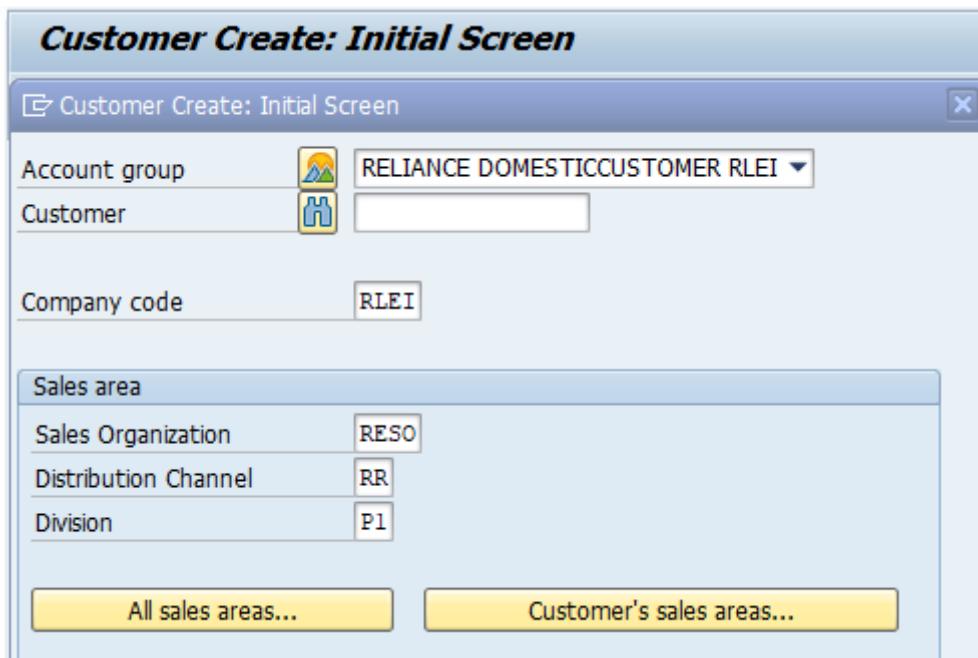
Because it helps them to identify the product availability.

Customer Create: Initial Screen

Customer Create: Initial Screen

Account group	 RELIANCE DOMESTIC CUSTOMER RLEI
Customer	
Company code	RLEI
Sales area	
Sales Organization	RESO
Distribution Channel	RR
Division	P1

All sales areas... Customer's sales areas...



STEP 2 → CREATING CUSTOMER GENERAL DATA – ADDRESS

We need to give the complete details about the customer like name and category, postal address, country & region.

The screenshot shows the SAP Change Customer: General Data interface. The top navigation bar includes links for Other Customer, Company Code Data, Additional Data, Empties, Additional Data, DSD, Sales Area Information, DSD, and Data for Invoice Summary. The customer number 5000010001 and name NAYARA ENERGY are displayed. The tabs at the top are Address, Control Data, Payment Transactions, Marketing, Unloading Points, Export Data, and Contact Person. The Address tab is selected. Below the tabs, there are sections for Name, Search Terms, Street Address, and a preview section. The Name section contains fields for Title (Company) and Name (NAYARA ENERGY). The Search Terms section has a field for Search term 1/2 (DOMESTIC CUSTOMER). The Street Address section includes fields for Street/House number, Postal Code/City, Country (IN), Region (22), and State (Tamil Nadu).

STEP 3 → CREATING PAYMENT DETAILS OF CUSTOMER

Contains the complete details about the Company bank details through which the customer needs to pay the sales amount to the company.

The screenshot shows the SAP Change Customer: General Data interface with the Payment Transactions tab selected. The top navigation bar and customer information are identical to the previous screenshot. The tabs at the top are now Address, Control Data, Payment Transactions, Marketing, Unloading Points, Export Data, and Contact Person. The Payment Transactions tab is selected. Below the tabs, there is a section titled 'Bank Details' containing a table with one row of data. The table columns are Ctry, Bank Key, Bank Account, Acct holder, C..., I..., IBANValue, Bk.t..., and Reference details. The data in the table is: IN, 123-456, 76583929277478, NAYARA CURRENT ACCOUNT, and several small icons.

STEP 4 → SPECIFYING MARKETING DETAILS

It helps in understanding the annual sales done by the customer, by total number of employees in the given fiscal year.

It also specifies the capacity of the customer i.e. quantity will be buys regularly.

Change Customer: General Data

Customer 5000010001 NAYARA ENERGY

Address Control Data Payment Transactions Marketing Unloading Points Export I

Classification

Nielsen ID	<input type="text"/>	Regional Market	<input type="text"/>
Customer class.	03	Btw. 1,5 - 2,0 mill.	Hierarchy assignment <input type="checkbox"/>
Industry	OILC	Petroleum & Coal	
Industry Code 1	<input type="text"/>	<input type="button" value=""/>	

Key Figures

Annual sales	100.000.000.000,0	INR	in	2022
Employees	10000	in	2022	
Fi.Year Variant	K4	Fiscal Year Variant of India		

STEP 5 → SPECIFYING THE UNLOADING POINTS

Unloading points specifies the place where the goods will be unloaded from the transporting vehicle to the customer place.

Change Customer: General Data

Customer 5000010001 NAYARA ENERGY

Address Control Data Payment Transactions Marketing Unloading Points Export Data

Unloading points

Unloading Point	De...	Cal...	Customer calendar	Goods receiving hrs
NAYARA WAREHOUSE	<input type="checkbox"/>	IN	India	

STEP 6 → ENTERING THE CONTACT PERSON

Specifying the representative name from the customer end.

The screenshot shows the SAP interface for changing customer data. The title bar says "Change Customer: General Data". The top menu has options like "Other Customer", "Additional Data, Empties", "Additional Data, DSD", "Sales Area Information, DSD", and "Data for Invoice Summary (Japan)". Below that, a "Customer" field is set to "5000010001" and "NAYARA ENERGY". A navigation bar at the bottom includes tabs for "Address", "Control Data", "Payment Transactions", "Marketing", "Unloading Points", "Export Data", and "Contact Person". The "Contact Person" tab is selected. A table below shows a single row of contact information:

Form of...	Name	First name	Telephone1	Description	F.. Description
	YOGESH	S		0002 Purchasing	02 Head of purchasing

STEP 7 → CREATING PAYMENT TRANSACTION IN COMPANY CODE

Specifying the payment transaction and terms of payment which helps in describing the payment method immediately, or after a certain credit period.

The screenshot shows the SAP interface for changing customer data, specifically focusing on company code data. The title bar says "Change Customer: Company Code Data". The top menu has options like "Other Customer", "General Data", "Additional Data, Empties", and "Additional Data, DS". Below that, a "Customer" field is set to "5000010001" and "NAYARA ENERGY", and a "Company Code" field is set to "RLEI" and "RELIANCE INDUSTRIES LTD". A navigation bar at the bottom includes tabs for "Account Management", "Payment Transactions", "Correspondence", and "Insurance". The "Payment Transactions" tab is selected. A table below shows payment data settings:

Terms of payment	0003	Tolerance group	
B/e charges payt term		Known/neg.leave	
Time until check paid		<input type="checkbox"/> Payment history record	

STEP 8 → ENTERING THE INSURANCE DETAILS IN COMPANY CODE FIELD

Change Customer: Company Code Data

Other Customer General Data Additional Data, Empties Additional Data, DSD S

Customer	5000010001	NAYARA ENERGY
Company Code	RLEI	RELIANCE INDUSTRIES LTD

Account Management Payment Transactions Correspondence Insurance

Export credit insurance

Policy number	123451
Institution number	
Amount insured	15.000.000.000,0 INR
Valid To	31.03.2023

Final Data

Customer Account Number (1) 4 Entries found

Customers (general) Customers (by company code) Customers by ...

SearchTerm	Cty	PostalCode	City	Name 1	Customer	CoCd
					5000030002	RLEI
DOMESTIC C	IN			NAYARA ENERGY	5000010001	RLEI
INTERNATIO	US			AMERICAN GAS	5000020000	RLEI
ONE TIME C	CA			PARK LAND FUEL CORPORATIO	5000030001	RLEI

MATERIAL MASTER DATA

Material master data refer to all the material master records. The material master is the central source of information for a material related to several application areas (Purchasing, storage, accounting, sales, etc.) based on material type. Material master data is maintained at plant level and accounting information is maintained at valuation area level.

This data will include information on the materials that a company can procure, produce, store, or sell.

Types of Materials

- Raw Materials
- Semi-Finished Goods
- Finished Goods
- Trading Goods
- Services
- Packaging

Raw Materials

Raw materials are materials or substances used in the primary production or manufacturing of goods.

Semi-Finished Goods

Semi-finished goods are goods that have already undergone some processing and are then used as inventory inputs in the manufacture of finished goods, which are products ready for sale to consumers.

Finished Goods

Finished goods are goods that have completed the manufacturing process, but have not yet been sold.

Trading Goods

Trading goods are movable goods intended for commercial exchange like Brands.

Services

It includes the test done for the product before reaching the customer and includes maintenance after sales.

Packaging

It is a Holding device which helps to store and transport the product to the customer without any damage to the product.

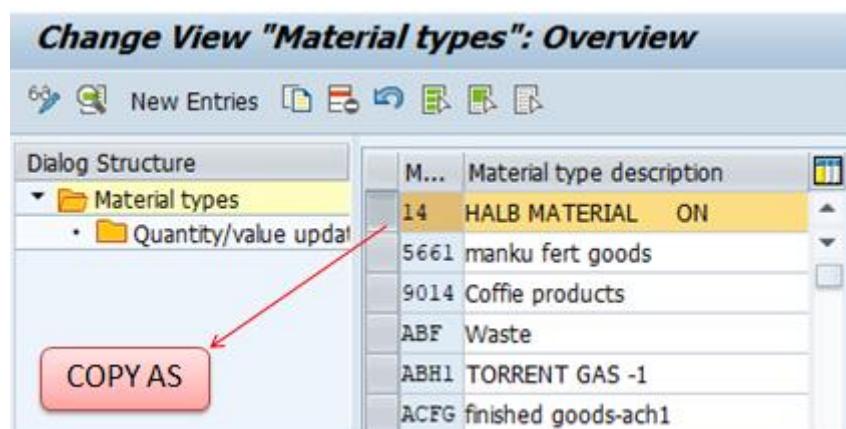
CREATING MATERIAL MASTER DATA

DEFINING MATERIAL TYPES

It helps in identifying the type of materials used in the project or business.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Logistics – General → Material Master → Basic Settings → Material Types → Define Attributes of Material Types → Select & copy as

T Code – OMS2



The screenshot shows the SAP Material Type configuration interface. A red box highlights the 'STD CODE FOR RAW MATERIALS' section. A red arrow points from the 'Field reference' field (containing 'ROH') to this section. Another red box labeled 'FIELD SELECTION' points to the 'User departments' list on the right, which includes options like Work scheduling, Accounting, Classification, MRP, Purchasing, Production resources/tools, Costing, Basic data, Storage, and Forecasting.

SELECTING VALUATION TYPE

The screenshot shows the SAP Valuation configuration interface. It includes sections for Price control (Standard price), Acct cat. reference (0001), and Price ctrl mandatory. Below this are sections for Quantity/value updating and Retail-specific fields. In the Quantity/value updating section, there are two groups of radio buttons: 'Quantity updating' (In all valuation areas, In no valuation area, By valuation area) and 'Value updating' (In all valuation areas, In no valuation area, By valuation area). In the Retail-specific fields section, there are fields for Material type ID (General material type), Time till deleted, Display material, and Print price.

It helps in defining the pricing type to the goods i.e. Standard price, Moving average price. Standard price specifies the price will be fixed at the time of

creation and cannot be changed afterwards. Where moving average price can be changed according the plant or valuation area.

VALUE UPDATING

Val. area	Matl type	Qty updating	Value Update
RPL1	ROHR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

In this we need to activate the value & quantity with respect to plant code.

STD CODE	COPY AS	MATERIAL TYPE CODE	MATERIAL TYPE DESCRIPTION
ROH	ROHH	ROHR	RLEI RAW MATERIALS
HALB	HALC	HALS	RLEI SEMI FINISHED GOODS
FERT	FETT	FETS	RLEI FINISHED GOODS
HAWA	HAWB	HAWL	RLEI TRADING GOODS
DIEN	DIAN	DIAR	RLEI SERVICES
VERP	LEHH	LEHS	RLEI PACKAGING

MAINTAIN COMPANY CODES FOR MATERIAL MANAGEMENT

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Logistics – General → Material Master → Basic Settings → Maintain company codes for material management → Positions → Company code

T Code – OMSY

Change View "Materials Management View on Company"								
CoCd	Company Name	Year	Pe	FYr	M.	FYr	L.. ABp	DBp
RLEI	RELIANCE INDUSTRIES LTD	2023	2	2023	1	2022	12	

We need to enter the particular year and month details to company code for validating the materials from this date

DEFINING NUMBER RANGE FOR MATERIAL GROUPS

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Logistics – General → Material Master → Basic Settings → Material Types → Define Number Ranges of Each Material → Groups → Create New

T Code - MMNR

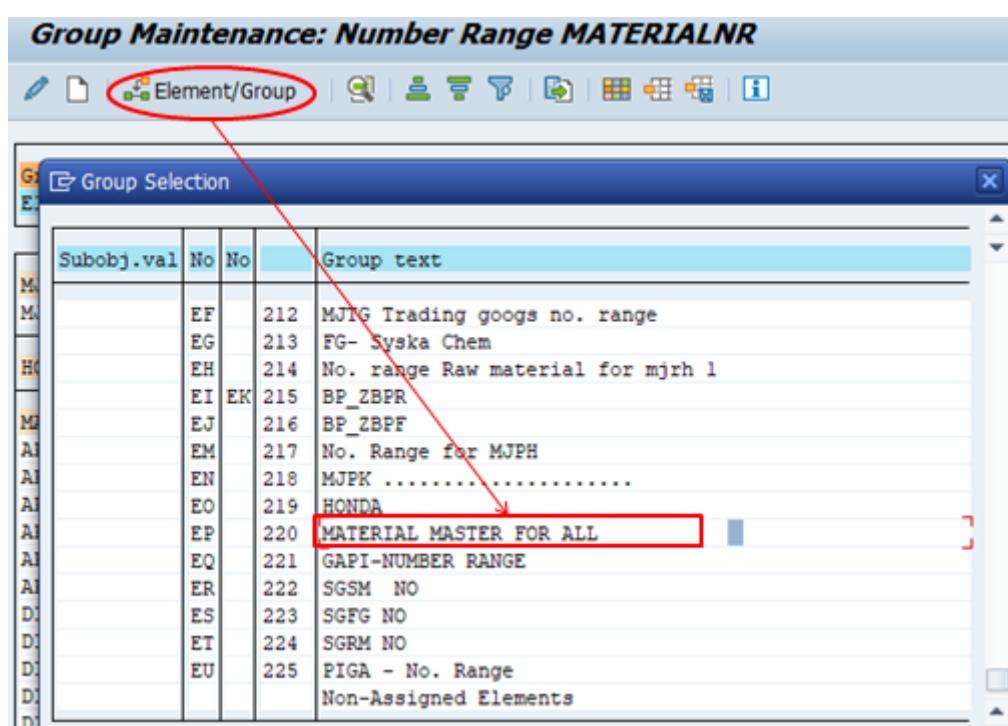
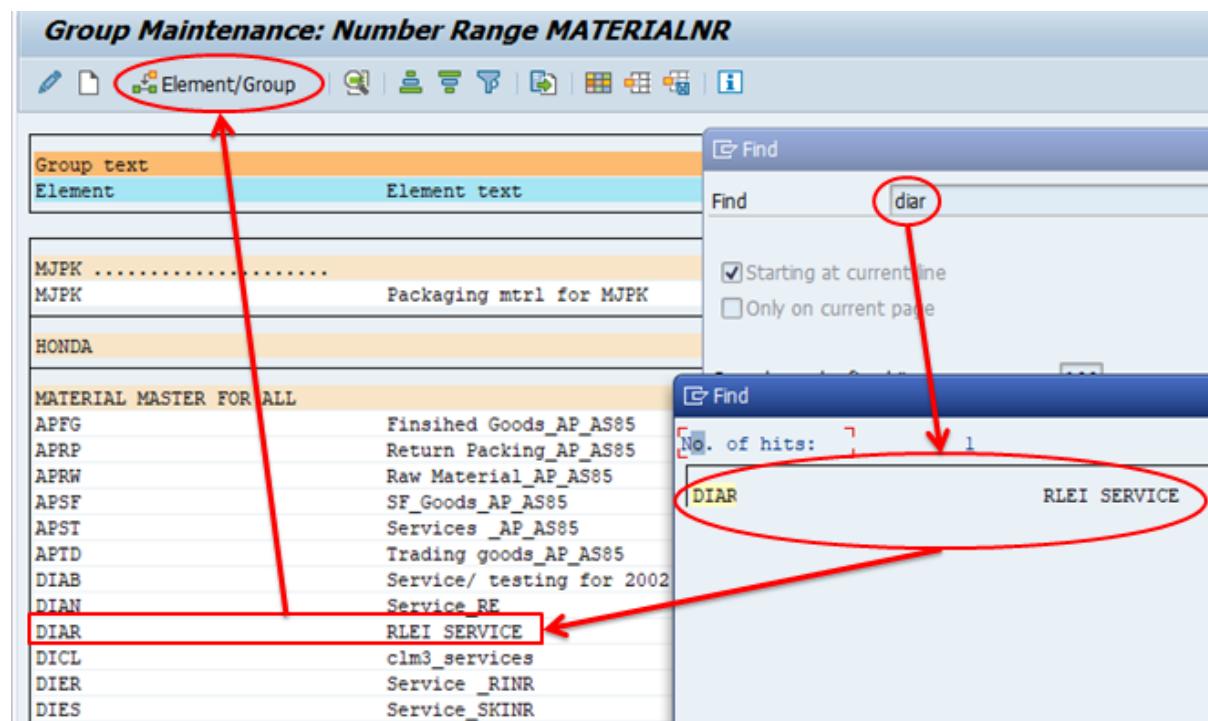
Maintain Intervals: Material master			
Group	MATERIAL MASTER FOR ALL		
Object	MATERIALNR		
Subobject			
Ranges	From No.	To Number	NR Status
	600000000000000000	600000099999999999	600000000000000129

Still now 129 entries have been made between this number series.

ASSIGNING NUMBER RANGE FOR MATERIAL GROUP / TYPES

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Logistics – General** → **Material Master** → **Basic Settings** → **Material Types** → **Define Number Ranges of Each Material** → **Groups**

T Code - MMNR



DEFINING INDUSTRIAL SECTORS FOR MATERIAL GROUPS

It helps in specifying the type of industry the good will related to.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Logistics – General → Material Master → Field Selection → Define Industry sector & Industry sector specific field selection → New Entries

T Code – OMS3

New Entries: Overview of Added Entries		
Industry sector	Industry description	Field reference
0	ALL INDUSTRIES SECTOR	ROH

Still now we have configured the fields at from functional consultant end.
Next we need to test this at end user level.

At the end user level we need to specify the field parameters to the individual material types.

TESTING THE CONFIGURATION AT THE END USER LEVEL

MATERIAL MASTER DATA CREATION BY END MM TEAM

SAP Menu → Logistics → Materials Management → Material Master → Material → Create (General) → MM01 – Immediately

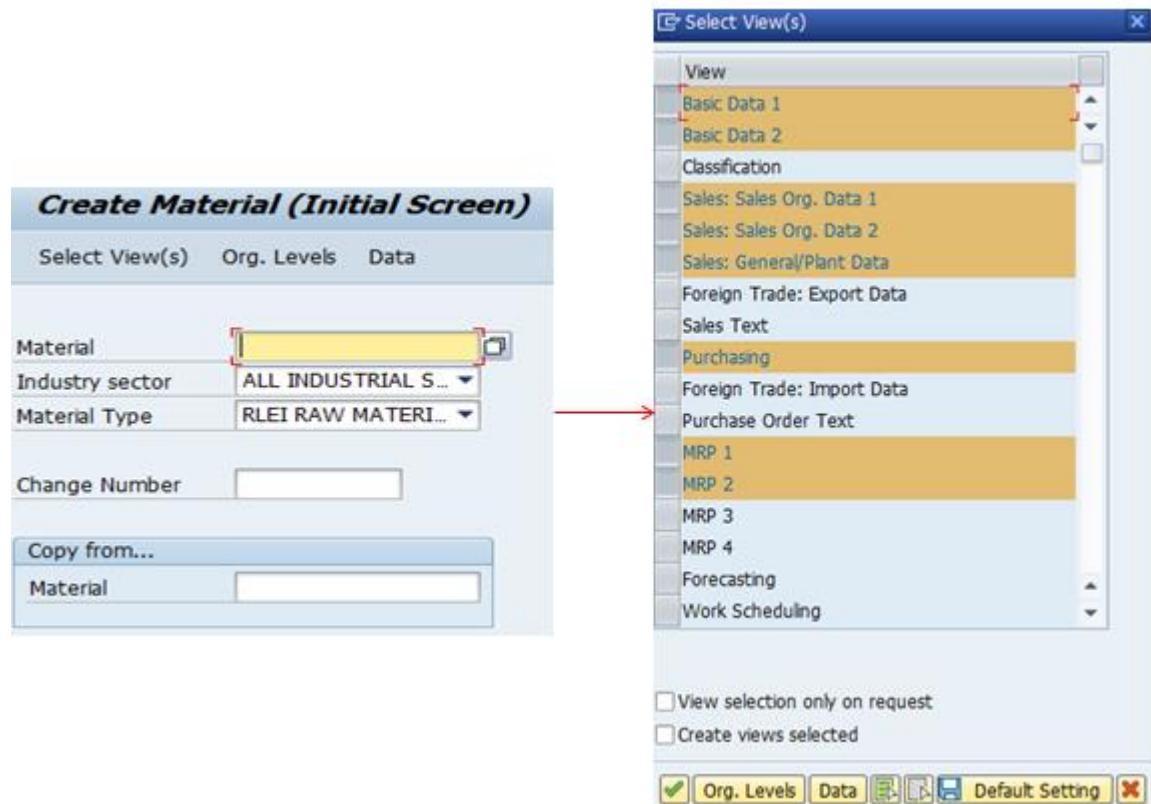
MM01 – Create Data

MM02 – Change or edit the data

MM03 – Display the data

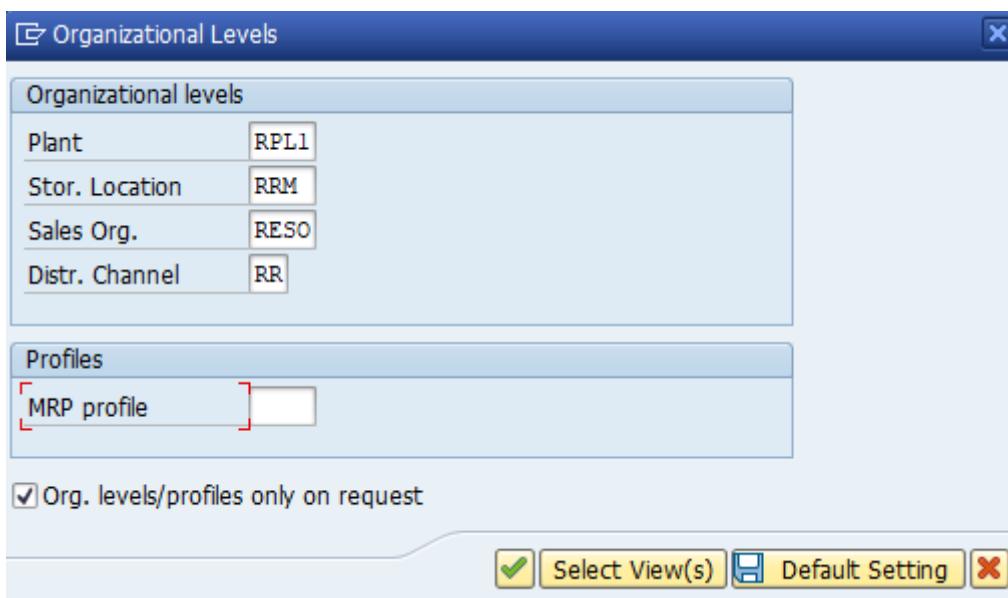
T Code – MM01, MM02, MM03.

STEP 1 → SPECIFYING THE INDUSTRIAL SECTOR & MATERIAL TYPE



Next step we need to specify the fields required for the particular material types. The required fields are Basic data 1, Basic data 2, Sales data 1, Sales data 2, and Sales General Plant data, purchasing data, MRP 1, MRP 2, Accounting Data 1, and Accounting Data 2.

STEP 2 → SPECIFYING THE ORGANIZATIONAL LEVEL FIELDS



It helps in identifying the particular material will be available in particular plant and storage location through respective sales organization and distribution channels.

STEP 3 → SPECIFYING THE BASIC DATA 1 & 2

Change Material 600000000000000024 (RLEI RAW MATERIALS)

Additional Data Org. Levels Check Screen Data Lock

Basic data 1 Basic data 2 Classification Sales: sales org. 1

Material: 600000000000000024 CRUDE OIL RAW MATERIALS

General Data

Base Unit of Measure	BBL	Barrel	Material Group	23000000
Old material number			Ext. Matl Group	
Division	P5		Lab/Office	
Product allocation				
X-plant matl status			Valid from	
<input type="checkbox"/> Assign effect. vals			GenItemCatGroup	

Dimensions/EANs

Gross Weight		Weight unit	KG
Net Weight			
Volume		Volume unit	
Size/dimensions			
EAN/UPC		EAN Category	

Packaging material data

Matl Grp Pack.Matls	
Ref. mat. for pckg	

In this we need to specify raw material type if we have more than one raw material, then we have to create a separate entry for the respective no of materials.

Here we need to enter the details of measurement of the raw material by which it can evaluate and priced upon.

Material Group represents the material category and division specifies the product category we have specified in Define Division in Logistics General.

STEP 4 → SPECIFYING THE FIELD DATA FOR SALES ORG 1, 2

Change Material 60000000000000024 (RLEI RAW MATERIALS)

Additional Data Org. Levels Check Screen Data

Sales: sales org. 1 Sales: sales org. 2 Sales: Gen...

Material	60000000000000024	CRUDE OIL RAW MATERIALS	<input type="button" value="i"/>
Sales Org.	RESO	RELIANCE SALES ORG	
Distr. Chl	RR	DIRECT RETAIL SALES	<input type="button" value="Go"/> <input type="button" value="New"/>

General data

Base Unit of Measure	BBL	Barrel	Division	P5	GASOLINE
Sales unit			<input type="checkbox"/> Sales unit not var.		
Unit of Measure Grp			Valid from	TaxCl Description	
X-distr.chain status			Valid from	0	No tax
DChain-spec. status			Valid from	1	Full Tax
Delivering Plant			Valid from	2	Half tax
Material Group	23000000	Industrial Manufactu	Valid from	3	Low tax rate
<input checked="" type="checkbox"/> Cash discount					

Tax data

Country	Country	Tax category	Tax category	Tax classification	Tax classification
IN	India	MWST	Output Tax	1	Full Tax

Change Material 60000000000000024 (RLEI RAW MATERIALS)

Additional Data Org. Levels Check Screen Data

Sales: sales org. 1 Sales: sales org. 2 Sales: General/Plant For...

Material	60000000000000024	CRUDE OIL RAW MATERIALS	<input type="button" value="i"/>
Sales Org.	RESO	RELIANCE SALES ORG	
Distr. Chl	RR	DIRECT RETAIL SALES	<input type="button" value="Go"/> <input type="button" value="New"/>

Grouping terms

Matl statistics grp	<input type="button"/>	Material pricing grp	<input type="button"/>
Volume rebate group	<input type="button"/>	Acct assignment grp	<input type="button"/>
Gen. item cat. grp	<input type="button"/>	Item category group	0001 Make-to-order
Pricing Ref. Matl	<input type="button"/>		
Product hierarchy	<input type="button"/>		
Commission group	<input type="button"/>		

In the Sales data 1 we have to specify details about the tax rate i.e. 0 for no tax, 1 for full tax, 2 for half tax, and 3 for low tax rate. Sales data 2 we need to specify the item category group which means that how the material is processed in sales order.

STEP 5 → MAINTAINING SALES GENERAL / PLANT DATA

Change Material 60000000000000024 (RLEI RAW MATERIALS)

Sales: sales org. 2 Sales: General/Plant Foreign trade export

Material	60000000000000024	CRUDE OIL RAW MATERIALS	i
Plant	RPL1	RELIANCE MANUFACTURING PL-1	

TGroup	Description
0001	On palettes
0002	In liquid form
0003	Container
0004	Train
0005	Lot for truck
0006	Lot for freight car

LGrp	Description
0001	Crane
0002	Forklift
0003	Manual

General data

Base Unit of Measure

Gross Weight

Net Weight

Availability check

Batch management

Shipping data (times in days)

Trans. Grp **0003** Container LoadingGrp **0001** Crane

Setup time Proc. time Base qty BBL

In this field we need to specify the details about transporting and loading instruction our raw material is being crude oil can be loaded in container for transportation by crane loading.

STEP 6 → SPECIFYING THE PURCHASING DATA

In the purchasing data we need to specify the purchasing group which is responsible for procuring the raw materials.

Next we need to activate source list which means list of sources (vendors) available for a particular material to procure. The purpose of source list is for a material how many source are there to supply.

A Quota Arrangement divides the total requirement of a Material among the certain Sources of Supply (Vendors) and then assigns the Quota to each Source.

If there is more than one vendor and cannot avoid them we can equally divide the required materials and give both of them.

Change Material 600000000000000024 (RLEI RAW MATERIALS)

Sales text Purchasing Foreign trade import Purchase order t...

General Data

Base Unit of Measure	BBL	Barrel	Order Unit		Var. OUn
Purchasing Group	RPU		Material Group	23000000	
Plant-sp.matl status			Valid from		
Tax ind. f. material			Qual.f.FreeGoodsDis.		
Material freight grp			<input type="checkbox"/> Autom. PO		
<input type="checkbox"/> Batch management			OB Management		
			OB ref. material		

Purchasing values

Purchasing value key		Shipping Instr.			
1st Reminder/Exped.	0	days	Underdel. Tolerance	0,0	percent
2nd Reminder/Exped.	0	days	Overdeliv. Tolerance	0,0	percent
3rd Reminder/Exped.	0	days	Min. Del. Qty in %	0,0	percent
StdValueDelivDateVar	0	days	<input type="checkbox"/> Unltd Overdelivery		<input type="checkbox"/> Acknowledgment Reqd

Other data / manufacturer data

GR Processing Time	2	days	<input type="checkbox"/> Post to insp. stock	<input type="checkbox"/> Critical Part
Quota arr. usage	1		<input checked="" type="checkbox"/> Source list	JIT Sched. Indicator
			Mfr Part Profile	

STEP 7 → SPECIFYING THE MATERIAL REQUIREMENT PLANNING (MRP1)

MRP type determines how and when the material is to be planned or to be available for the requirement.

Common ERP Types:

ND – No Planning.

PD – MRP.

R1 – Time-phased planning.

VB – Manual reorder point planning.

VM – Automatic reorder point planning.

VV – Forecast-based planning.

Change Material 600000000000000024 (RLEI RAW MATERIALS)

Additional Data Org. Levels Check Screen Data

Purchase order text MRP 1 MRP 2 MRP 3 MRP 4

Material	600000000000000024	CRUDE OIL RAW MATERIALS	
Plant	RPL1	RELIANCE MANUFACTURING PL-1	
<input type="button"/> <input type="button"/>			

General Data

Base Unit of Measure	BBL	Barrel	MRP group	<input type="text"/>
Purchasing Group	RPU		ABC Indicator	<input type="checkbox"/>
Plant-sp.matl status	<input type="checkbox"/>		Valid from	<input type="text"/>

MRP procedure

MRP Type	ND	No planning	Planning time fence	<input type="text"/>
Reorder Point	<input type="text"/>		MRP Controller	<input type="text"/>
Planning cycle	<input type="text"/>			

STEP 8 → SPECIFYING THE MRP 2

In this we need provide details about GR processing time & planned delivery time. The GR processing time is the number of business days required in which the person has to inspect and place the material in the storage, after obtaining the goods and materials. Planned delivery is the number of business days in which the person is expected to receive the materials and goods.

Change Material 600000000000000024 (RLEI RAW MATERIALS)

Additional Data Org. Levels Check Screen Data

MRP 1 MRP 2 MRP 3 MRP 4 Work scheduling

Material	600000000000000024	CRUDE OIL RAW MATERIALS	
Plant	RPL1	RELIANCE MANUFACTURING PL-1	
<input type="button"/> <input type="button"/>			

Procurement

Procurement type	<input type="text"/>	Batch entry	<input type="text"/>
Special procurement	<input type="text"/>	Prod. stor. location	<input type="text"/>
Quota arr. usage	<input type="text"/> 1	Default supply area	<input type="text"/>
Backflush	<input type="text"/>	Storage loc. for EP	<input type="text"/>
JIT delivery sched.	<input type="text"/>	Stock det. grp	<input type="text"/>
<input type="checkbox"/> Co-product		Joint production	
<input type="checkbox"/> Bulk Material			

Scheduling

In-house production	<input type="text"/> days	Planned Deliv. Time	<input type="text"/> 5 days
GR Processing Time	<input type="text"/> 2 days	Planning calendar	<input type="text"/>
SchedMargin key	<input type="text"/>		

STEP 9 → CREATING ACCOUNTING DATA

In the accounting data we need to specify the details about the valuation class, Price control and price of the unit quantity raw materials.

Valuation class categorizes the G/L account on the basis of material type. For raw material will have different G/L account than the finished material, as the costs will be different in both the cases.

The price control of a material determines whether the material is valued at the standard price or the moving average price.

For standard price the price will be fixed at the time of creation and cannot be change hence forth only an authorised person can do this after creation but in case of moving average price it can updated at each time of defining.

Change Material 600000000000000024 (RLEI RAW MATERIALS)

Additional Data Org. Levels Check Screen Data Lock

Plant data / stor. 2 Accounting 1 Accounting 2 Plant stock

Material	600000000000000024	CRUDE OIL RAW MATERIALS	
Plant	RPL1	RELIANCE MANUFACTURING PL-1	

General Data

Base Unit of Measure	BBL	Barrel	Valuation Category	<input type="checkbox"/>
Currency	INR		Current period	02 2023
Division	P5		Price determ.	<input type="checkbox"/> ML act.

Current valuation

Valuation Class	3000	Proj. stk val. class	<input type="checkbox"/>
VC: Sales order stk	<input type="checkbox"/>	Price Unit	1
Price control	S	Standard price	100.000,00
Moving price	<input type="checkbox"/>	Total Value	0,00
Total Stock	0,000	Price control Short Descript.	<input type="checkbox"/>
Future price	S	Standard price	<input type="checkbox"/>
	V	Moving average price/periodic unit price	<input type="checkbox"/>

Now finally our material is created with the number 600000000000000024 – RLEI RAW MATERIALS.

No	Material Type	Material No	Material Description
1	Raw material	600000000000000024	Crude oil raw materials
2	Semi-Finished goods	600000000000000050	Bitumen sfg rlei
3	Semi-Finished goods	600000000000000051	Lubricating oil
4	Semi-Finished goods	600000000000000052	Fuel oil sfg rlei
5	Semi-Finished goods	600000000000000053	Paraffin sfg rlei
6	Semi-Finished goods	600000000000000058	Naphtha sfg rlei
7	Semi-Finished goods	600000000000000025	Diesel sfg rlei
8	Finished goods	600000000000000031	Petrol finished good
9	Trading Goods	600000000000000032	Normal petrol
10	Trading Goods	600000000000000066	Premium petrol
11	Services	600000000000000033	Density test
12	Services	600000000000000077	Viscosity test rlei
13	Services	600000000000000078	Dropping test
14	Packaging	600000000000000034	Tankers
15	Packaging	600000000000000080	Pipelines
16	Packaging	600000000000000081	Container
17	Packaging	6000000000000000128	Barrel packing rlei

Material description	Language	Material	Plnt
CRUDE OIL RAW MATERIALS	EN	60000000000000000024	RPL1
DIESEL SFG OF RLEI	EN	60000000000000000025	RPL1
PETROL FINISHED GOOD	EN	60000000000000000031	RPL1
NORMAL PETROL	EN	60000000000000000032	RPL1
DENSITY TEST	EN	60000000000000000033	RPL1
TANKER	EN	60000000000000000034	RPL1
BITUMEN SFG RLEI	EN	60000000000000000050	RPL1
LUBRICATING OIL SFG RLEI	EN	60000000000000000051	RPL1
FUEL OIL SFG RLEI	EN	60000000000000000052	RPL1
PARAFFIN SFG RLEII	EN	60000000000000000053	RPL1
NAPTHA SFG RLEI	EN	60000000000000000058	RPL1
PETROL GASOLINE SFG RLEI	EN	60000000000000000059	RPL1
PREMIUM PETROL	EN	60000000000000000066	RPL1
VISCOSITY TEST SERVICES RLEI	EN	60000000000000000077	RPL1
DROPPING TEST	EN	60000000000000000078	RPL1
PIPELINES	EN	60000000000000000080	RPL1
BARRELS PACKAGING RLEI	EN	60000000000000000081	RPL1
CONTAINERS	EN	600000000000000000128	RPL1

CHANGING THE MATERIAL TYPE

SAP Menu → Logistics → Materials Management → Material Master → Material → MMAM – Change Material Type

T Code – MMAM

When Industry is going for automation / upgradation if the client needs to convert his semi finished goods material into finished goods directly.

Instead of doing new entries we can directly change the material type from semi finished goods into finished goods.

Here we are changing the semi fishied goods (Diesel) to Finished Goods.

Material Type cannot be changed if it has foloowing process are running.

1. If any Purchase Order has been executed by the material type.
2. When the material type is already used in the BOM.
3. If stock is already exist for the material in the Inventory or Warehouse.

Step 1 – We need to give the details of Material number and specify the new material type i.e to be changed.

Change Material Type: Initial Screen

	Execute Icon
New Material Type	
Material	6000000000000000025
New material type	RLEI FINISHED GO...
Old material type	

Step 2 – After that when we click on execute icon or F8 you will get an alert / warning for your new changes from one material type to another.

⚠ You are changing material type from RLEI SEMI FINISHED GOODS to RLEI FINISHED GOODS

Step 3 – Next step you will get confirmation for valuation class for new material type.

Change Material Type

Check whether, for the new material type FETS the valuation classes proposed are correct.

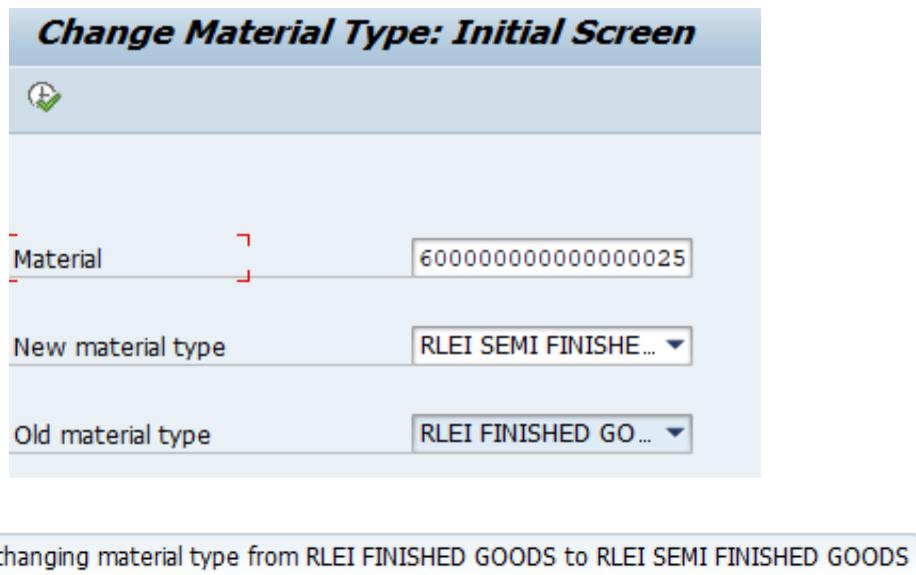
Plant	ValCl	VCL S	VCL P
RPL1	AR02	<input checked="" type="checkbox"/>	

Change Material Type

Change Material Type

Material type changed successfully.

To change the already changed material type into another type we need to provide the type of old material type and next procedures are same as above stated.



PRICE UPDATION (FOR STANDARD PRICE)

While creating Material Master Data at the time of specifying the accounting data we have given the pricing control as moving average price and standard price.

Moving average price can be altered after at any time after the creation of the pricing of the materials. But in case of Standard Price after creating the price once we will not able to alter the price at any cost. Usually for materials which are all procured at for fixed period of time due to contract or agreement. Only the specified or authorised person only can change this standard price.

SAP Menu → Logistics → Materials Management → **Valuation** → **Change in material price** → **MR21 – Change Material Prices**

T Code – MR21

Step 1 – Entering the required details in the screen. The posting date should be the current date.

Price Change - Overview Screen

Display Document

Posting Date	18.02.2023
Company Code	RLEI
Plant	RPL1
Reference	
Doc.Header Text	

Step 2 – While executing to the next step we have got an error in the status bar which specifies that posting period is not activated.

Price Change - Overview Screen

Display Document

Posting Date	18.02.2023
Company Code	RLEI
Plant	RPL1
Reference	
Doc.Header Text	

ERROR

Posting period 11 2022 is not open

Rectifying the Error

Step 4 – Checking in the Maintain company code for material type. But in this the period and years are running in the current end. If the error persists still go to the next step.

Change View "Materials Management View on Company Codes":

68

CoCd	Company Name	Year	Pe	FYr	M.	FYr	L..	ABp	DBp	
RLEI	RELIANCE INDUSTRIES LTD	2023	2	2023	1	2022	12	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Logistics – General → Material Master → Basic Settings → Maintain company codes for material management → Positions → Company code

T Code – OMSY

Step 5 – Checking with Global parameters fields. In this the posting period variant is not yet activated from the finance end. So we need to raise a ticket to the finance team regarding the problem after the activation of the posting period we can change the price of the material in MR21.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Financial Accounting (New) → Financial Accounting Global Settings (New) → Global Parameters for company code → Enter Global Parameters → Positions

T Code – OBY6

Change View "Company Code Global Data": Details

Company Code	RLEI	RELIANCE INDUSTRIES LTD	MAHARASTRA
Country key	IN	Currency	INR
Accounting organization		Language Key	
Chart of Accts	INT1	Country Chart/Accts	
Company	REL	FM Area	
Credit control area	4300	Fiscal Year Variant	K4
Ext. co. code	<input type="checkbox"/>	Global CoCde	
Company code is productive	<input type="checkbox"/>	VAT Registration No.	
Processing parameters			
Document entry screen variant	<input type="checkbox"/>	<input checked="" type="checkbox"/> Business area fin. statements	
Field status variant	1000	<input type="checkbox"/> Propose fiscal year	
Pstng period variant	1000	<input checked="" type="checkbox"/> Define default value date	
Max. exchange rate deviation	10 %	<input checked="" type="checkbox"/> No forex rate diff. when clearing in LC	
Sample acct rules var.		<input type="checkbox"/> Tax base is net value	
Workflow variant		<input checked="" type="checkbox"/> Discount base is net value	
Inflation Method		<input checked="" type="checkbox"/> Financial Assets Mgmt active	
Crcy transl. for tax		<input type="checkbox"/> Purchase acct proc.	
CoCd -> CO Area	2	<input type="checkbox"/> JV Accounting Active	
Cost of sales accounting activ.	2	<input type="checkbox"/> Hedge request active	
<input checked="" type="checkbox"/> Negative Postings Permitted		<input type="checkbox"/> Enable amount split	
<input checked="" type="checkbox"/> Activate CM		<input type="checkbox"/> Tax Reporting Date Active	

Step 5 – From Finance side we can check the posting period ledger for activation of the posting period variant.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Financial Accounting (New)** → **Financial Accounting Global Settings (New)** → **Ledgers** → **Fiscal Year & Posting Periods** → **Posting Periods** → **Open & close Posting Periods**.

T Code – OB52

Here we can see that 1000 is not yet activated. So we are selecting TTS as posting period variant. Or create a new posting period variant by clicking on New Entries.

Change View "Posting Periods: Specify Time Intervals": Overview												
	A	From acct	To account	From p...	Year	To per...	Year	From per.2	Year	To period	Year	
ITS				12	2022	12	2023					

Next changing in the global parameters to TTS from 1000

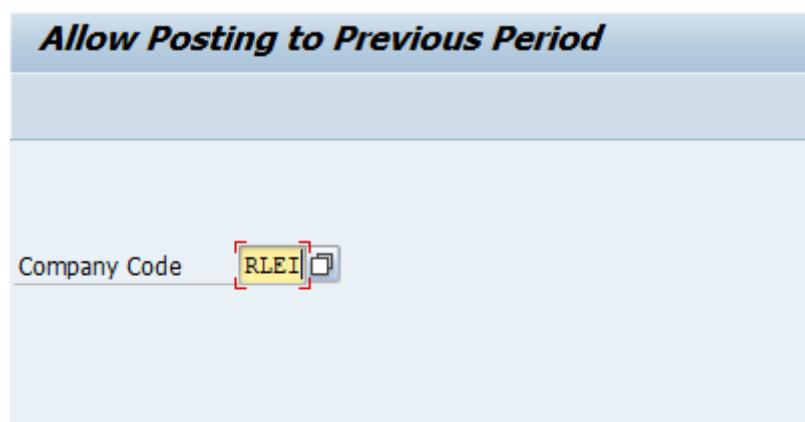
Change View "Company Code Global Data": Details												
<input type="checkbox"/> Additional Data <input type="button"/> <input type="button"/> <input type="button"/>												
Company Code	RLEI	RELIANCE INDUSTRIES LTD	MAHARASTRA									
Country key	IN	Currency	INR	Language Key	EN							
Accounting organization												
Chart of Accts	TTS	Country Chart/Accts										
Company	REL	FM Area	TTS									
Credit control area		Fiscal Year Variant	K4									
Ext. co. code	<input type="checkbox"/>	Global CoCde										
Company code is productive	<input type="checkbox"/>	VAT Registration No.										
Processing parameters												
Document entry screen variant	<input type="radio"/> TTS	<input checked="" type="checkbox"/> Business area fin. statements										
Field status variant	<input type="radio"/> TTS	<input type="checkbox"/> Propose fiscal year										
Pstng period variant	<input type="radio"/> TTS	<input type="checkbox"/> Define default value date										
Max. exchange rate deviation	10 %	<input type="checkbox"/> No forex rate diff. when clearing in LC										
Sample acct rules var.		<input type="checkbox"/> Tax base is net value										
Workflow variant		<input checked="" type="checkbox"/> Discount base is net value										
Inflation Method		<input checked="" type="checkbox"/> Financial Assets Mgmt active										
Crcy transl. for tax		<input type="checkbox"/> Purchase acct proc.										
CoCd -> CO Area	2	<input type="checkbox"/> JV Accounting Active										
Cost of sales accounting activ.	2	<input type="checkbox"/> Hedge request active										
<input checked="" type="checkbox"/> Negative Postings Permitted		<input type="checkbox"/> Enable amount split										

Step 6 – If the error still continues we can check the posting period from the mm side.

Checking the status of posting period

SAP Menu → Logistics → Material Management → **Material Master** → **Other** → **MMRV - Allow Posting to Previous Period**

T Code – MMRV



Here we can see that the posting period is running correct.



Step 7 – If the posting period is incorrect we can change in closing period field from mm side.

SAP Menu → Logistics → Material Management → **Material Master** → **Other** → **MMPV – Close Period**

T Code – MMPV

In this we need to give the required or current period and fiscal year.

Close Period for Material Master Records

From company code
To company code RLEI

Enter next period (including fiscal year) or a relevant date
(but not both)

Period 02
Fiscal year 2023

or

Date

Check and close period
 Check period only
 Close period only

Allow neg. qties in prev. per.
 Allow neg. vals in prev. per.

Close Period for Material Master Records

LOG .

Mode: Check and close period
Client:800
Period entered (month/year):022023

Step 8 – Finally you can now open the price changing field after the rectification of errors and alter price of the standard price.

The price has been changed from 1 cr to 1.5 cr.

SAP Menu → Logistics → Materials Management → **Valuation** → **Change in material price** → **MR21 – Change Material Prices**

T Code – MR21

Price Change - Overview Screen								
INR Co.Code		Variant						
		Stock material		Company code currency				
Material	Valuation type	Price control	Current valuat...	New price	Current ...	New pric...	Current stati...	New statistic...
600000000000000024	S		100.000,00	15.000.000,00	1	0,00		

Step 9 – Finally you can now cross check the changes made in Material Master Data Configuration from end user screen.

SAP Menu → Logistics → Materials Management → **Material Master** → **Material** → **Create (General)** → **MM03 – Display the data**.

T Code –MM03

In the accounting data field we can see that new prices are updated and also we can see the previous listed prices for the material and the date of changing the price in last price change field.

Display Material 60000000000000024 (RLEI RAW MATERIALS)

Additional Data Org. Levels

Plant data / stor. 2 Accounting 1 Accounting 2 Plant stock

Material: 60000000000000024 RUDE OIL RAW MATERIALS i
Plant: RPL1 RELIANCE MANUFACTURING PL-1

General Data

Base Unit of Measure	BBL	Barrel	Valuation Category	<input type="checkbox"/>
Currency	INR		Current period	02 2023
Division	P5		Price determ.	<input type="checkbox"/> ML act.

Current valuation

Valuation Class	3000	Proj. stk val. class	<input type="checkbox"/>
VC: Sales order stk		Price Unit	1
Price control	S	Standard price	15.000.000,00
Moving price	0,00	Total Value	0,00
Total Stock	0,000		
Future price	0,00	Valid from	
Previous price	100.000,00	Last price change	19.02.2023

PRODUCTION PLANNING MASTER RECORD

BILL OF MATERIAL (BOM)

A bill of material (BOM) is a list of materials, assemblies, components, and parts required to manufacture a product. Bill of Materials master data is related to material requirement planning and provides the list of components to produce the product. These can be used to describe how many materials or components required manufacturing of one finished goods. If required, we can define a maximum and a minimum quantity for each material and class in the BOM.

For example, if a bicycle manufacturer wants to build 1,000 bicycles, the bill of materials will consist of all the individual parts needed to build the bicycle.

SAP Menu → Logistics → Materials Management → Production → Master Data → Bills of Material → Bill of Material → Material BOM → CS01 - Create

T Code CS01 – CREATE

T Code CS02 – CHANGE

T code CS03 – DISPLAY

Step 1 – Here BOM usage means the department which is using this particular BOM. In this Production department using this BOM.

Create material BOM: Initial Screen							
 Create variant of...		BOM Usage (1) 14 Entries found					
Material	6000000000000000031	Restrictions					
Plant	RPL1						
BOM Usage	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Alternative BOM							
Validity							
Change Number							
Valid From	19.02.2023						
Revision Level							

Usage	Prod.	Eng./des.	PM	Spare	CostRel	Sales	Usage text
1	+	.	-	.	.	-	Production
2	.	+	-	.	.	-	Engineering/design
3	.	.	-	.	.	.	Universal
4	.	-	+	.	.	-	Plant maintenance
5	.	-	.	.	.	+	Sales and distribution
6	.	.	-	.	+	.	Costing
7	.	-	-	.	.	.	Returnable Packaging
8	-	.	-	-	-	.	Stability Study
9	+	+	.	-	+	.	PROD+ENG+COSTING
A	+	+	.	-	+	+	PROD+ENG+COSTING
B	+	+	.	-	+	.	PRO+ENGG+COSTING
C	+	+	-	.	+	+	prod+eng+cost
D	+	+	-	.	+	+	pro+engg+costin+sale
U	.	-	-	-	-	-	IUID Embedded Items

Here we need to give the Material type or category in the component field and required quantity level for creating the finished goods in quantity tab.

An alternate bill of material is another list of components for the same product with different specifications and requirements.

Change material BOM: General Item Overview

The screenshot shows the SAP interface for changing a material's Bill of Materials. At the top, there are tabs for Subitems, New Entries, Header, and Validity. Below these, the Material is set to '60000000000000031 PETROL FINISHED GOOD' and the Plant is 'RPL1 RELIANCE MANUFACTURING PL-1'. The 'Alternative BOM' field contains the value '1', which is circled in red and points to a callout bubble labeled 'NO OF BOM'. The main table lists seven components required for the finished good, each with its item ID, component ID, description, quantity, unit of measurement (BBL, KG, L), and validity dates. The table has columns for Item, ICt, Component, Component description, Quantity, Un, A..., SI, Valid From, Valid to, Change No., P..., SortString, Item ID, and C.

Item	ICt	Component	Component description	Quantity	Un	A...	SI	Valid From	Valid to	Change No.	P...	SortString	Item ID	C
0010	L	60000000000000024	CRUDE OIL RAW MATERI...	1.000,000	BBL	<input type="checkbox"/>	<input type="checkbox"/>	14.02.2023	31.12.9999		<input type="checkbox"/>		00000001	
0020	L	60000000000000050	BITUMEN SFG RLEI	20.000	KG	<input type="checkbox"/>	<input type="checkbox"/>	14.02.2023	31.12.9999		<input type="checkbox"/>		00000002	
0030	L	60000000000000051	LUBRICATING OIL SFG R...	18.000	L	<input type="checkbox"/>	<input type="checkbox"/>	14.02.2023	31.12.9999		<input type="checkbox"/>		00000003	
0040	L	60000000000000052	FUEL OIL SFG RLEI	1.000	L	<input type="checkbox"/>	<input type="checkbox"/>	14.02.2023	31.12.9999		<input type="checkbox"/>		00000004	
0050	L	60000000000000053	PARAFFIN SFG RLEII	20.000	L	<input type="checkbox"/>	<input type="checkbox"/>	14.02.2023	31.12.9999		<input type="checkbox"/>		00000005	
0060	L	60000000000000058	NAPTHA SFG RLEI	11.000	L	<input type="checkbox"/>	<input type="checkbox"/>	14.02.2023	31.12.9999		<input type="checkbox"/>		00000006	
0070	L	60000000000000025	DIESEL SFG OF RLEI	63.000	BBL	<input type="checkbox"/>	<input type="checkbox"/>	14.02.2023	31.12.9999		<input type="checkbox"/>		00000007	

Change material BOM: General Item Overview

This screenshot shows the same SAP interface as the previous one, but with a different alternative BOM selected. The 'Alternative BOM' field now contains the value '2', which is circled in red. The main table displays the same seven components as the first BOM, but with slightly different quantities: CRUDE OIL is 1.200,000, BITUMEN is 20.000, LUBRICATING OIL is 18.000, FUEL OIL is 1.000, PARAFFIN is 20.000, NAPTHA is 11.000, and DIESEL is 60,000. The rest of the table structure and header remain the same.

Item	ICt	Component	Component description	Quantity	Un	A...	SI	Valid From	Valid to	Change No.	P...	SortString	Item ID	C
0010	L	60000000000000024	CRUDE OIL RAW MATERI...	1.200,000	BBL	<input type="checkbox"/>	<input type="checkbox"/>	19.02.2023	31.12.9999		<input type="checkbox"/>		00000008	
0020	L	60000000000000050	BITUMEN SFG RLEI	20.000	KG	<input type="checkbox"/>	<input type="checkbox"/>	19.02.2023	31.12.9999		<input type="checkbox"/>		00000009	
0030	L	60000000000000051	LUBRICATING OIL SFG R...	18.000	L	<input type="checkbox"/>	<input type="checkbox"/>	19.02.2023	31.12.9999		<input type="checkbox"/>		00000010	
0040	L	60000000000000052	FUEL OIL SFG RLEI	1.000	L	<input type="checkbox"/>	<input type="checkbox"/>	19.02.2023	31.12.9999		<input type="checkbox"/>		00000011	
0050	L	60000000000000053	PARAFFIN SFG RLEII	20.000	L	<input type="checkbox"/>	<input type="checkbox"/>	19.02.2023	31.12.9999		<input type="checkbox"/>		00000012	
0060	L	60000000000000058	NAPTHA SFG RLEI	11.000	L	<input type="checkbox"/>	<input type="checkbox"/>	19.02.2023	31.12.9999		<input type="checkbox"/>		00000013	
0070	L	60000000000000025	DIESEL SFG OF RLEI	60,000	BBL	<input type="checkbox"/>	<input type="checkbox"/>	19.02.2023	31.12.9999		<input type="checkbox"/>		00000014	

We have two types of trading goods 1st BOM is for Normal petrol trading goods & 2nd BOM is for Premium petrol trading goods.

From the below picture we can able to see the no of BOM has been created for one same finished goods

Create Gross Price Condition (PB00) : Condition Supplements



Variable key

Vendor	Material	POrg	Plant	C	Description
10002000...	6000000000000000...	RLPO	RPL1	0	Standard

Validity

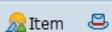
Valid From Valid to

Condition supplements

Zo...	CnTy	Name	Amount	Unit	per	U...	Deletio...	Scales	Text
	PB00	Gross Price	60.000,00	RUB	10	BBL		<input type="checkbox"/>	<input type="checkbox"/>
	RA01	Discount % on ...	3,000-	%				<input type="checkbox"/>	<input type="checkbox"/>
	FRA1	Freight %	10,000	%				<input type="checkbox"/>	<input type="checkbox"/>
	ZOA1	Customs Duty %	18,000	%				<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>



Change material BOM: Alternative Overview



BOM group Plant
 BOM text
 Material PETROL FINISHED GOOD

Alternative BOMs

AltBOM	BOM St	DID	Alternative Text	Base quantity	BUn	From Lot Size	To Lot Size	Valid From	Valid to
1	1	<input type="checkbox"/>		1	L	0	0	14.02.2023	31.12.9999
2	1	<input type="checkbox"/>		1	L	0	0	19.02.2023	31.12.9999

Next we should create a BOM for trading goods with finished materials as a component.

Create material BOM: General Item Overview

Subitems | New Entries | Header | Validity

Material	600000000000000032	NORMAL PETROL
Plant	RPL1	RELIANCE MANUFACTURING PL-1
Alternative BOM	1	

Material Document General

Item	ICt	Component	Component description	Quantity	Un	A...	SIs	Valid From	Valid to
0010	L	600000000000000031	PETROL FINISHED GOOD	9.000	L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19.02.2023	31.12.9999

The second column item category denotes that the material is in the stock or not available data's.

Create material BOM: General Item Overview

Subitems | New Entries | Header | Validity

Material	600000000000000032	NORMAL PETROL
Plant	RPL1	RELIANCE MANUFACTURING PL-1
Alternative BOM	2	

Material Document General

Item	ICt	Component	Component description	Quantity	Un	A...	SIs	Valid From	Valid to
0010	L	600000000000000066	PREMIUM PETROL	8.000	L	<input type="checkbox"/>	<input type="checkbox"/>	19.02.2023	31.12.9999

ICt Item category text

- C Compatible Unit
- D Document item
- I PM structure element
- K Class item
- L Stock item**
- M Phantom material
- N Non-stock item
- R Variable-size item
- T Text item

Next we need to create BOM for trading goods premium petrol with finished goods as a component.

Create material BOM: General Item Overview

Subitems | New Entries | Header | Validity

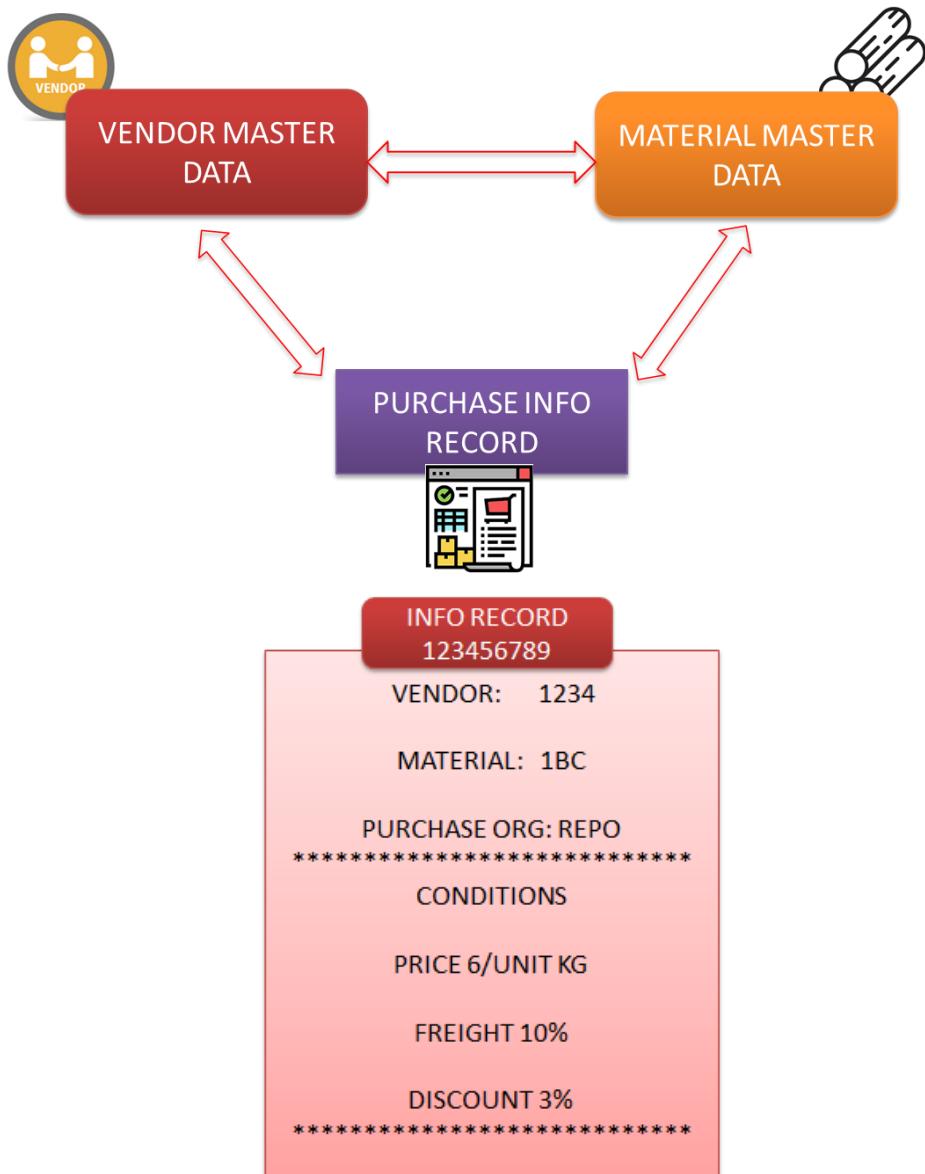
Material	600000000000000066	PREMIUM PETROL
Plant	RPL1	RELIANCE MANUFACTURING PL-1
Alternative BOM	1	

Material Document General

Item	ICt	Component	Component description	Quantity	Un	A...	SIs	Valid From	Valid to
0010	L	600000000000000031	PETROL FINISHED GOOD	8.000	L	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19.02.2023	31.12.9999

Still now we have created 4 BOM. Two for trading goods and another Two for finished goods.

PURCHASE INFO RECORD



Purchase info record is a source of information to the purchasing department. It contains data on a certain material and the supplier of that particular material.

It provides information about which vendors can supply which material at what price. At the time of creating Purchase Order, the system takes this information as a default.

A vendor's current price of a particular material is stored in info record. Purchase info record can be maintained at the plant level or at the purchasing organization level.

PROCUREMENT TYPES IN INFO RECORD

1. STANDARD

A standard info record contains information for standard purchase orders. The info records can be created for materials and services with and without master records.

2. SUB CONTRACT

A subcontractor info record contains ordering information for subcontract orders. For example, if you subcontract the assembly of a component, the subcontractor info record would include the vendor's (subcontractor's) price for assembling the component. Subcontracting is a process where the company provides raw material to the vendor for rework or assembly. After the required work, vendor return finished product.

3. PIPELINE

It contains information regarding the procurement via pipeline. For example, water or gas procures through the pipeline. Materials or resources we need continuously.

4. CONSIGNMENT

A consignment info record contains information on a material that vendors keep available at their own cost on the orderer's premises. The info record contains the vendor's price for withdrawals by the orderer from consignment stock.

PIR – General Data + Purchase Data + Conditions

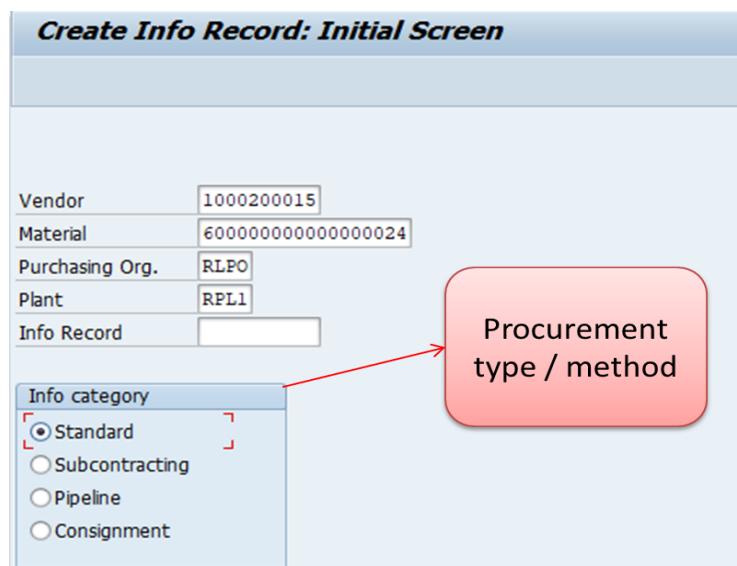
SAP Menu → Logistics → Materials Management → **Purchasing** → **Master Data** → **Info Record** → **ME11 – Create.**

T Code – ME11 – Create Data

T Code – ME12 – Change Data

T Code – ME13 – Display Data

Step 1 – Creating Info Record



Step 2 – Entering the details about vendor and related details in the General Data screen and select purchase organization data.

The general data details which we have given in the vendor & material master data are automatically linked in purchase info record general data.

Create Info Record: General Data

Purch. Org. Data 1 → **CLICK HERE**

Info Record	1000200015	ROSNEFT CRUDE OIL RAW MATERIALS PIR
Vendor	1000200015	ROSNEFT OIL COMPANY
Material	6000000000000000024	CRUDE OIL RAW MATERIALS
Material Group	23000000	Industrial Manufactu

Vendor Data

1st Rem./Exped.	Days
2nd Rem./Exped.	Days
3rd Rem./Exped.	Days
Vendor Mat. No.	
Vendor Subrange	
VSR Sort No.	
Vendor Mat. Grp	
Points	/ 1 BBL
Salesperson	K GOKUL
Telephone	7373668599
Return Agmt	
Prior Vendor	

Origin Data

Certif. Cat.	
Certificate	
Valid to	
Ctry of Origin	RU
Region	50
Number	
Manufacturer	

Purchase Order Unit of Measure

Order Unit	BBL
Conversion	1 BBL <-> 1 BBL
Var. Order Unit	Not active

Supply Option

Available from	
Available to	
<input type="checkbox"/> Regular Vendor	

Step 3 – Next is purchase organization details we need to provide the details about the ordering quantity like standard quantity, minimum quantity & maximum quantity. And click on conditions for entering price details.

Change Info Record: Purch. Organization Data 1

General Data → **Conditions** → Texts

Info Record	5700000398	ROSNEFT CRUDE OIL RAW MATERIALS PIR
Vendor	1000200015	ROSNEFT OIL COMPANY
Material	6000000000000000024	CRUDE OIL RAW MATERIALS
Material Group	23000000	Industrial Manufactu
Purchasing Org.	RPO	Plant RPLI Standard

Control

Pl. Delv. Time	5 Days	Tol. Underdl. %	<input type="checkbox"/> No MText
Purch. Group	RPU	Tol. Overdl. %	<input checked="" type="checkbox"/> Ackn. Rqd
Standard Qty	1.500,000 BBL	<input type="checkbox"/> Unlimited	Conf. Ctrl
Minimum Qty	1.000,000 BBL	<input checked="" type="checkbox"/> GR-Bsd IV	Tax Code
Rem. Shelf Life	D	<input type="checkbox"/> No ERS	
Differential Invoicing	Not Relev...	Procedure	UoM Group
Shippng Instr.		Rndg Prof.	RMA Req.
Max. Quantity	2.000,000 BBL		

Conditions

Net Price	85.500.000,00 RUB / 1.500 BBL	Valid to	31.12.9999
Effective Price	109.440.000,00 RUB / 1.500 BBL	<input type="checkbox"/> No Cash Disc.	
Qty Conv.	1 BBL <-> 1 BBL	Cond. Grp	
Pr. Date Cat.	No Control		
Incoterms			

Step 4 – In the conditions we need to provide the details about the discount rate, tax rate & freight % which will be adjusted to the gross price amount as net and effective price.

Create Gross Price Condition (PB00) : Condition Supplements

Zo...	CnTy	Name	Amount	Unit	per	U...	Deletio...	Scales	Text
PB00	Gross Price	90.000.000,00	RUB	1.500	BBL				
RA01	Discount % on ...	5,000-	%						
FRA1	Freight %	10,000	%						
ZOA1	Customs Duty %	18,000	%						

Purchasing info record 5700000398 RLPO RPL1 created

Finally we need to save the data. The system will show the PIR number.

Vendor No	Material no	P info record no	plant
1000200015	600000000000000024	5700000398	RPL1
1000200016	600000000000000024	5700000399	RPL1
1000300005	600000000000000024	5700000400	RPL1
1000400005	600000000000000024	5700000401	RPL1
1000400035	600000000000000024	5700000427	RPL1
1000400036	600000000000000024	5700000426	RPL1

Vendor	Info Rec.	Cat	Plnt
1000200015	5700000398	0	RPL1
1000200016	5700000399	0	RPL1
1000300005	5700000400	0	RPL1
1000400005	5700000401	0	RPL1

SOURCE LIST

The combined information of material and vendor is kept in a record that is known as purchase info record. But a particular material can be ordered from different vendors in different time intervals. This information can be maintained in a list that is called as the source list. The key points to note about a source list are Source list includes a list of possible sources of supply for a material over a given framework of time. Source list specifies the time period of ordering a particular material from a given vendor.

Maintaining the vendor based on validity and duration.

SAP Menu → Logistics → Materials Management → **Purchasing** → **Master Data** → **Source List** → **ME01 – Maintain**

T Code ME01 – Maintain

T Code ME04 – Change

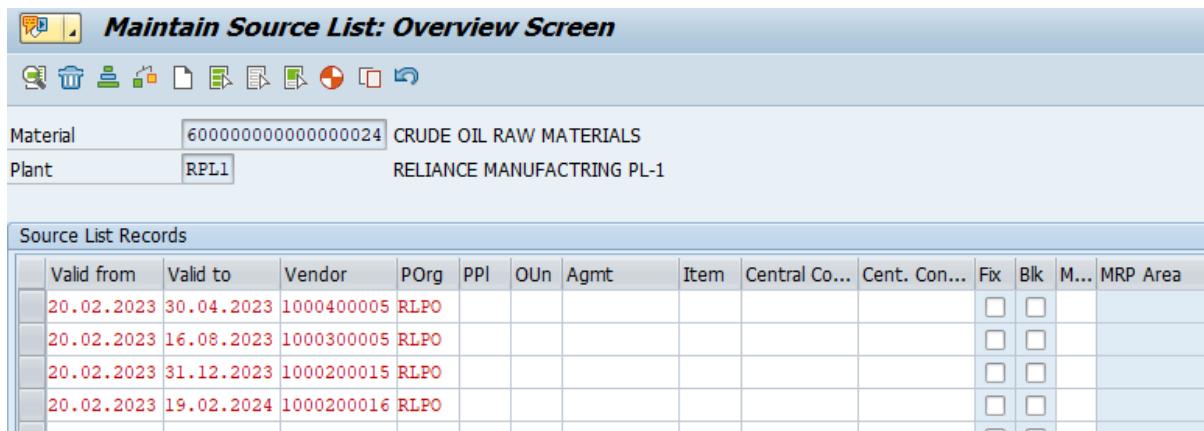
T Code ME03 – Display

Step 1 – Enter the required details in the initial screen.

Maintain Source List: Initial Screen

Material	6000000000000000024
Plant	RPL1

Step 2 – We need to give the details about validation period of each vendor. It specifies the vendor will be available till the specified period for delivering of goods to the plant.



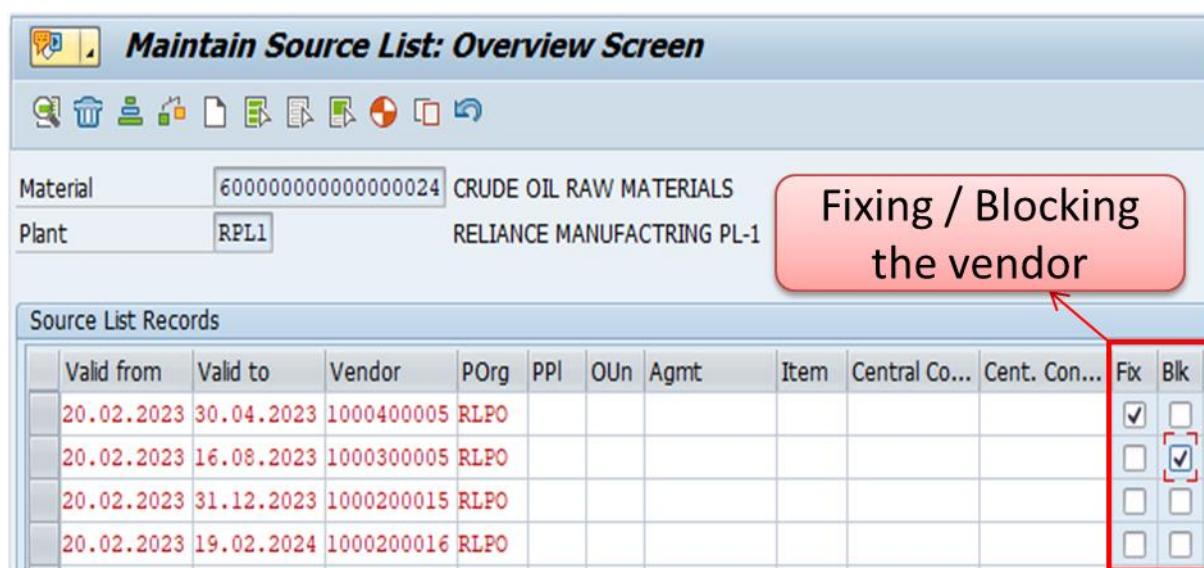
The screenshot shows the SAP interface for maintaining source lists. At the top, it displays the material number 600000000000000024 and its description 'CRUDE OIL RAW MATERIALS'. Below that, it shows the plant RPL1 and its description 'RELIANCE MANUFACTURING PL-1'. The main area is titled 'Source List Records' and contains a table with four rows of data. The columns are: Valid from, Valid to, Vendor, POrg, PPI, OUn, Agmt, Item, Central Co..., Cent. Con..., Fix, Blk, M..., and MRP Area. The data in the table is as follows:

Valid from	Valid to	Vendor	POrg	PPI	OUn	Agmt	Item	Central Co...	Cent. Con...	Fix	Blk	M...	MRP Area
20.02.2023	30.04.2023	1000400005	RLPO							<input type="checkbox"/>	<input type="checkbox"/>		
20.02.2023	16.08.2023	1000300005	RLPO							<input type="checkbox"/>	<input type="checkbox"/>		
20.02.2023	31.12.2023	1000200015	RLPO							<input type="checkbox"/>	<input type="checkbox"/>		
20.02.2023	19.02.2024	1000200016	RLPO							<input type="checkbox"/>	<input type="checkbox"/>		

Step 3 – We can fix the vendor type for particular material and block the vendor for future PO transactions, and also we can able to left uncheck the both the boxes for specifying all the vendors to be in option list.

FIX: This indicator is to be set if the vendor is the preferred source of supply for the material and plant combination.

BLK: If a particular vendor is to be blocked from supplying the material for a specified time, then this indicator is to be set. No purchase order or purchase requisition can be created with this vendor.



The screenshot shows the same SAP interface as before, but with a red callout box highlighting the 'Fix' and 'Blk' columns in the 'Source List Records' table. An arrow points from the text 'Fixing / Blocking the vendor' to this highlighted area. The data in the table remains the same as in the previous screenshot.

Valid from	Valid to	Vendor	POrg	PPI	OUn	Agmt	Item	Central Co...	Cent. Con...	Fix	Blk	M...	MRP Area
20.02.2023	30.04.2023	1000400005	RLPO							<input checked="" type="checkbox"/>	<input type="checkbox"/>		
20.02.2023	16.08.2023	1000300005	RLPO							<input type="checkbox"/>	<input checked="" type="checkbox"/>		
20.02.2023	31.12.2023	1000200015	RLPO							<input type="checkbox"/>	<input type="checkbox"/>		
20.02.2023	19.02.2024	1000200016	RLPO							<input type="checkbox"/>	<input type="checkbox"/>		

QUOTA ARRANGEMENT

SAP Menu → Logistics → Materials Management → Purchasing → Master Data → Quota Arrangement → MEQ1 – Maintain

T Code MEQ1 – Maintain

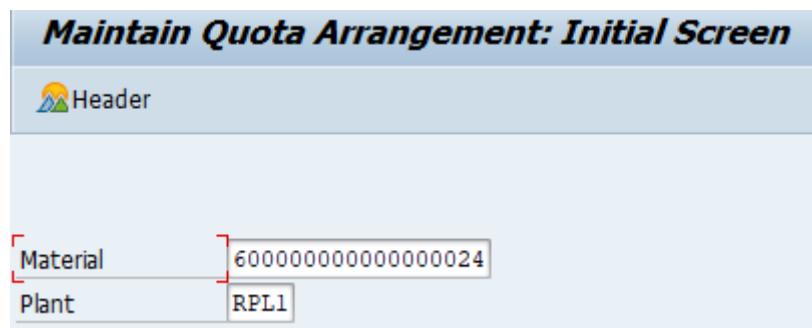
T Code MEQ4 – Change

T Code MEQ3 – Display

The quota arrangement is an instrument used in PO process. A quota arrangement divides the total requirement of a material over a period among certain sources of supply by assigning a quota to each source. The quota specifies which portion of the total requirement should be procured from a given source.

For example consider an organization having two main vendors one is existing vendor and another person is new vendor, the existing vendor is providing the material for over 20 years with good quality and new vendor is providing material at low price than the existing vendor. Due to unavoidable circumstance the business needs to provide order to both the vendors, so by using this quota arrangement the requirement are divided and given to vendors accordingly.

Step 1 – We need to provide Material & Plant details, then click on the Header icon in the Title bar.



Step 2 – Enter the validity period and provide minimum quantity split up by which the individual vendor will be given the minimum quantity for PO. Here we have given the minimum quantity split up as 500.

Next click on the Item icon in the Title bar.

Maintain Quota Arrangement: Overview of Quota Arr. Periods			
			New Period
Material	600000000000000024	CRUDE OIL RAW MATERIALS	
Plant			
Plant	RPL1	RELIANCE MANUFACTURING PL-1	
Quota arrangement periods			
	Valid from	Valid to	Minimum qty split
	20.02.2023	31.12.2023	500,000 250

Step 3 – Provide the details of procurement method and segregate the quota to the vendors according to the organization requirements. In this we have given 40% of order to first vendor and 60 % of order to second vendor

External procurement – It is the process of procuring goods or services from external vendors. Ex. PO orders or documents

Internal Procurement – Procurement of goods/services within the same organization, maybe producing internally, procures from other plants/other dept. for any internal uses. Ex. Production order process or documents.

If the business having more than 2 vendors also the quota arrangement can be given in a way to allocate the material purchase order to each category of the vendor group.

Maintain Quota Arrangement: Overview of Quota Arr. Items

New Entries Header ► Next Overview

Material	600000000000000024	CRUDE OIL RAW MATERIALS
Plant	RPL1	RELIANCE MANUFACTURING PL-1
		Base Unit BBL
Valid from	20.02.2023	Valid to 31.12.2023
		Minimum Qty 500,000

Quota Arr. Items

QA1	P	S	Vendor	PPI	PVer	Quota	in %	Allocated Qty	Maximum Quantity
1	F		1000200015			600	40,0	0,000	
2	F		1000200016			900	60,0	0,000	

Procurement Type Short Description:

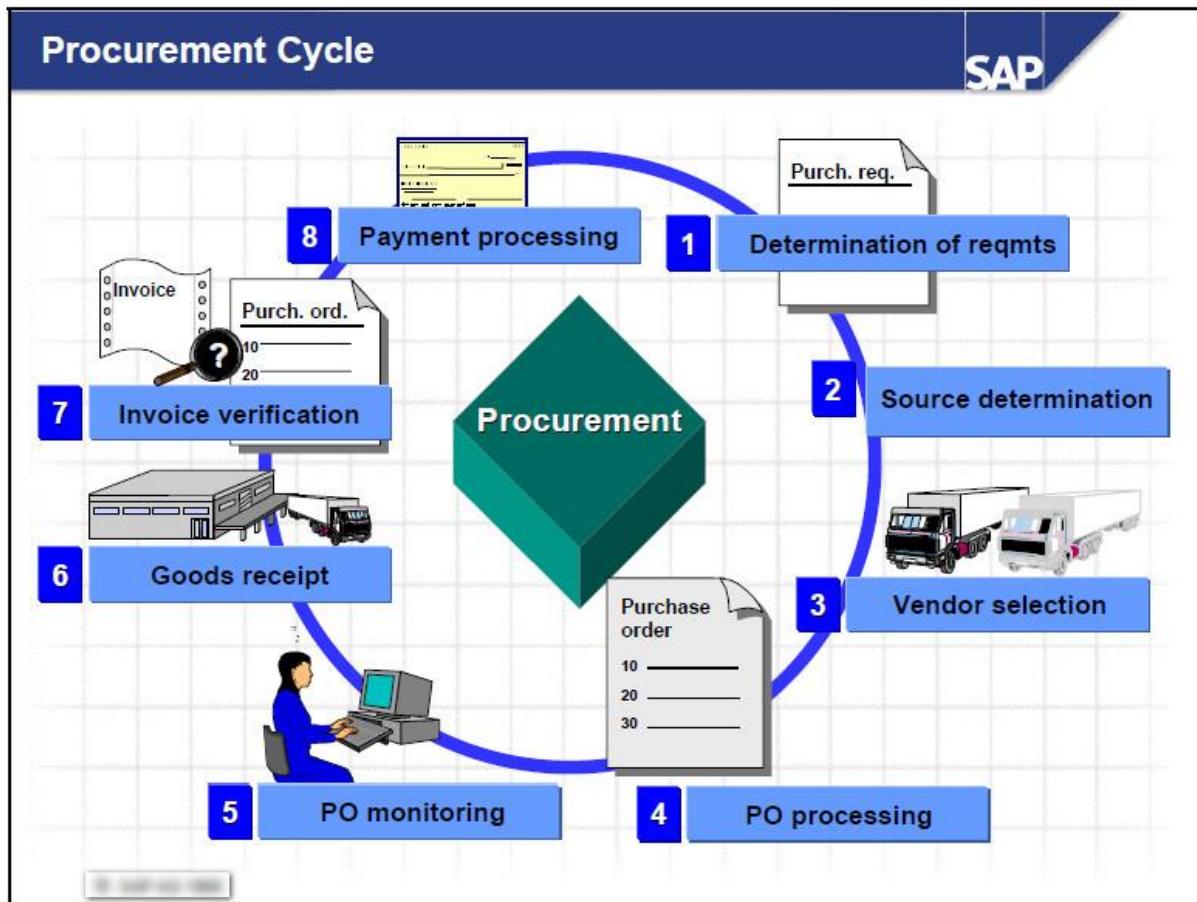
F	External procurement
E	Internal procurement

Step 4 – Save the changes.

PROCURE TO PAY CYCLE (P TO P PROCESS)

Every organisation that operates a business has to purchase materials such as raw materials, services etc. The procurement process has become part of today's efficient business operation. The Company can procure those materials as in-house production or external procurement.

P 2 P is the full cycle of actions and events that a business engages in when they require goods or services from an outside supplier.



1. Determination of requirements:

The process typically begins with the identification of material requirements. The user department responsible can manually pass a requirement for materials to the Purchasing department via a purchase requisition.

2. Determination of the source of supply:

The SAP System helps the buyer determine possible sources of supply. We can use determination of the source of supply to create requests for quotation (RFQs) and then enter the quotations. By access existing purchase orders and conditions in the system.

3. Vendor selection:

The system simplifies the selection of vendors by making price comparisons between the various quotations. It automatically sends rejection letters.

4. Purchase order processing:

The system facilitates data entry by providing entry aids when you are entering purchase orders. A purchase order is a formal request to a vendor to supply you with goods or services at the conditions stated in the purchase order. We specify in the purchase order whether the material is delivered for stock or for direct consumption. The goods receipt and invoice verification are usually carried out on the basis of the purchase order.

5. Purchase order monitoring:

The buyer can monitor the processing status of the purchase order online at any time and can determine whether goods or an invoice have been received for the relevant purchase order item. The system also supports reminder procedures.

6. Goods receipt:

The system compares the goods receipt quantity with the purchase order quantity.

When you enter incoming deliveries (by looking at the delivery order provided by vendor), you will be referring to the Purchase Order, therefore, entry work is

minimized. SAP is also able to check how much quantity is still open for receiving, and it is also possible to set tolerance levels.

For example,

If your Purchase Order quantity is 100, you can set a over delivery and/or under delivery tolerance. Therefore, system will check against the tolerance % that you have set, and if you enter a quantity that exceeds this, System will throw you an error message.

7. Invoice verification:

Vendor invoices are checked for accuracy of prices and contents.

This process of verifying invoice and paying to vendor is known as invoice verification.

When performing Invoice Verification in SAP, you will be referring to either the Purchase Order or Goods Receipt document. SAP will perform the necessary checks to ensure that you do not over or under pay the Vendor. Once this is completed, the MM Cycle is over. The next step "Payment Processing" is under the FI Module.

8. Payment processing:

Financial Accounting normally deals with vendor payments.

REQUEST FOR QUOTATION

SAP Menu → Logistics → Materials Management → **Purchasing Order** →
RFQ / Quotation → **Request for Quotation** → **ME41 – Create**

T Code ME41 – Create

T Code ME42 – Change

T Code ME43 – Display

Vendor selection is an important process in the procurement cycle. Once requirements are gathered, we start looking for possible bids (suppliers) who can fulfil the requirements at the best possible price. So, a request is made to the bids (vendors) to submit their quotations indicating the price of the material along with their terms and conditions. This request is known as the request for quotation (RFQ).

Request for quotation is a form of invitation that is sent to the bidders (vendors) to submit a quotation indicating their pricing and terms and conditions. It contains details about goods or services, quantity, date of delivery, and date of bid on which it is to be submitted.

Step 1 → In the RFQ type we need to provide the standard code AN. Next we need to provide the details about RFQ date (which date it is created).

Next is RFQ deadline is that the date within which the vendor must reply or submit a quote to the business.

In the default data items field the details like delivery date which means that if vendor can supply this material within the specified date only then they can reply or submit a quotation to the business. And also to which plant and which storage location the vendor needs to deliver the material details are provided in it. In delivery time T specifies the day format.

Create RFQ : Initial Screen

Reference to PReq Reference to Outline Agreement

RFQ Type	AN
Language Key	EN
RFQ Date	24.02.2023
Quotation Deadline	02.03.2023
RFQ	

Organizational Data	
Purch. Organization	RLPO
Purchasing Group	RPU

Default Data for Items

Item Category	
Delivery Date	T 09.03.2023
Plant	RPL1
Storage Location	RRM
Material Group	
Req. Tracking Number	

If the vendor reply or submit the quote for RFQ within the deadline then the vendor should need to deliver the product to the plant at particular storage location within the delivery deadline

Date	Date type descript.
D	Day format
T	Day format
W	Week format
M	Month format

Step 2 → Details to be given are. Coll.no is a very important field as you can later compare quotations based on this information, or find RFQs using this number.

After providing the collective number then click enter for the next screen.

Create RFQ : Header Data

RFQ Company Code RLEI Purchasing Group RPU

RFQ Type AN Purch. Organization RLPO

Vendor

Administrative Fields

RFQ Date	24.02.2023	Item Interval	10	Coll. No.	5
Language	EN	Subitem Interv.	1	QuotDdl	02.03.2023
Validity Start	<input type="text"/>	Validity End	<input type="text"/>	Apply By	<input type="text"/>
		Warranty	<input type="text"/>	Bindg Per.	<input type="text"/>

Terms of Delivery and Payment

Currency	<input type="text"/>
Targ. Val.	<input type="text"/>

Reference Data

Your Reference	<input type="text"/>	Salesperson	<input type="text"/>
Our Reference	<input type="text"/>	Telephone	<input type="text"/>

Step 3 → Details to be provided are material type and then RFQ quantity given to the particular vendor for the particular material.

Create RFQ : Item Overview

RFQ RFQ Type AN RFQ Date 24.02.2023
 Vendor QuotDdl 02.03.2023

RFQ Items

Item	I	Material	Short Text	RFQ Quantity	O...	C	Deliv. Date	Mat. Grp	Plnt	SLoc	D	T...
10		600000000000000024	CRUDE OIL RAW MATERI...	1.500,000	BBL	D	09.03.2023	23000000	RPL1	RRM		

Step 4 → After providing the details select the material and click on vendor address icon for providing the details about the vendor.

Create RFQ : Item Overview

RFQ	RFQ Type	AN	RFQ Date	24.02.2023
Vendor			QuotDdn	02.03.2023
RFQ Items				
Item	I Material	Short Text	RFQ Quantity	O... C Delv. Date Mat. Grp PInt SLoc D T...
10	6000000000000000024	CRUDE OIL RAW MATERI...	1.500,000 BBL	D 09.03.2023 23000000 RPL1 RRM

Step 5 → In the vendor address field provide the details about the vendor number to whom you need to raise RFQ. It will automatically fetch the details about the vendor and then click on save you will get an RFQ number for that vendor.

Create RFQ : Vendor Address

RFQ	Company Code	RLEI	Purch. Group	RPU
RFQ Date	RFQ Type	AN	Purchasing Org.	RLPO
Vendor	1000200036			
Name				
Title	Company			
Name	CHINA OIL COMPANY			
	CHINA			
Search Terms				
Search term 1/2	VENDOR FOR P2P RFQ			
Street Address				
Street/House number				
Postal Code/City				
Country	CN	China	Region	010 Beijing
Time zone	UTC+8			

Step 6 → After saving you will get another field for providing vendor details you can give the vendor details and raise RFQ. It will generate individual RFQ number for each vendor RFQ raised.

RFQ created under the number 6000000322

Vendor No	Material No	RFQ no	Coll. No
1000200015	6000000000000000024	6000000321	5
1000200016	6000000000000000024	6000000322	5
1000200035	6000000000000000024	6000000323	5
1000200036	6000000000000000024	6000000324	5

Material: 6000000000000000024
 Plant: RPL1
 Purch. Doc. Category: A
 Order Type: AN
Purch.Doc. | **Item**
 6000000321 00010
 6000000322 00010
 6000000323 00010
 6000000324 00010

MAINTAINING QUOTATION

SAP Menu → Logistics → Materials Management → Purchasing Order → RFQ / Quotation → Request for Quotation → ME47 – Maintain

T Code ME47 – Maintain

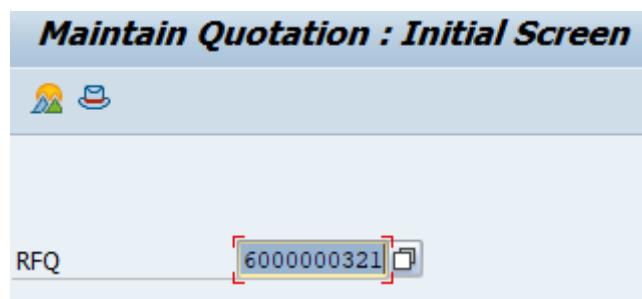
T Code ME48 – Display

After the communication to the Request for Quotation we can create a quotation to those vendors who replies to the RFQ which will be the final confirmation from the vendor for supplying the materials.

We can use the activities of this role to record and maintain the data submitted to you by a vendor in a quotation (e.g. prices, conditions, and terms of delivery) in your SAP System server.

In Quotation we need to specify the price quoted from the vendors through the RFQ.

Step 1 → Specifying the Request for quotation number for which vendor has been replied.



SETTING UP TOLERANCE LIMIT FOR PRICE VARIATION

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Materials Management → Purchasing → Purchase Order → Set Tolerance Limits for Price Variance.

T Code – OMEU

When we post a purchase order the system checks the price of PO items and the valuation price stored in the material master record. When price variance exceeds a tolerance limit, the system gives a warning message. So it is a mandatory configuration to maintain tolerance limits for price variance in Purchase Order items.

The price exceeding quotation will be automatically terminated.

Change View "Tolerance Limits": Details

New Entries		
Tolerance key	PE	Price variance: purchasing
Company Code	RLEI	RELIANCE INDUSTRIES LTD
Amounts in	INR	Indian Rupee

Lower Limit

Absolute	Percentage
<input checked="" type="radio"/> Do not check	<input type="radio"/> Do not check
<input type="radio"/> Check limit	<input checked="" type="radio"/> Check limit
Val. <input type="text"/>	Tolerance limit % <input type="text" value="20,00"/>

Upper Limit

Absolute	Percentage
<input checked="" type="radio"/> Do not check	<input type="radio"/> Do not check
<input type="radio"/> Check limit	<input checked="" type="radio"/> Check limit
Val. <input type="text"/>	Tolerance limit % <input type="text" value="10,00"/>

The screenshot displays the SAP Fiori interface for setting up tolerance limits. At the top, the title 'Change View "Tolerance Limits": Details' is visible. Below it, there's a toolbar with icons for new entries, search, and other functions. The main configuration area has three sections: 'Tolerance key' (set to PE), 'Company Code' (set to RLEI), and 'Amounts in' (set to INR). Under 'Lower Limit', there are two tabs: 'Absolute' (radio button for 'Do not check' is selected) and 'Percentage' (radio button for 'Check limit' is selected, with a tolerance limit of 20,00% entered). Under 'Upper Limit', there are also two tabs: 'Absolute' (radio button for 'Do not check' is selected) and 'Percentage' (radio button for 'Check limit' is selected, with a tolerance limit of 10,00% entered). Red circles highlight the 'Check limit' radio buttons and the tolerance values in both the lower and upper limit sections.

In the above picture the tolerance limit for price variation is fixed i.e. for the net price when it comes below than the lower limit or jumps above than the upper limit the system will show the warning message.

Change View "Tolerance Limits": Details

New Entries							
Tolerance key	SE	Max. cash disc. deduction (purchasing)					
Company Code	RLEI	RELIANCE INDUSTRIES LTD					
Amounts in	INR	Indian Rupee					

Lower Limit	
<input type="checkbox"/> Do not check <input checked="" type="checkbox"/> Check limit Tolerance limit % <input type="text"/>	

Upper Limit	
<input type="checkbox"/> Do not check <input checked="" type="checkbox"/> Check limit Tolerance limit % <input type="text" value="10,00"/>	

In the above picture the tolerance limit for allowed maximum discount level i.e. for the discount when it is above than the upper limit the system will show the warning message.

Change View "Tolerance Limits": Overview

New Entries							
CoCd	Company Name	TlKy	Description				
RLEI	RELIANCE INDUSTRIES LTD	PE	Price variance: purchasing				
RLEI	RELIANCE INDUSTRIES LTD	SE	Max. cash disc. deduction (purchasing)				

Tolerance Key PE for purchase Price & SE for Maximum Discount allowed.

When processing a purchase order, the system checks whether the effective price of a PO item shows variances compared with the valuation price stored in the material master record. In addition, it checks whether the specified cash discount value is admissible.

Variances are allowed within the framework of tolerance limits. If a variance exceeds a tolerance limit, the system issues a warning or error message.

In the SAP System, the types of variance are represented by the tolerance keys. For each tolerance key, we can define percentage and value-dependent upper and lower limits per company code.

Standard settings

The standard SAP System supplied contains the following tolerance keys:

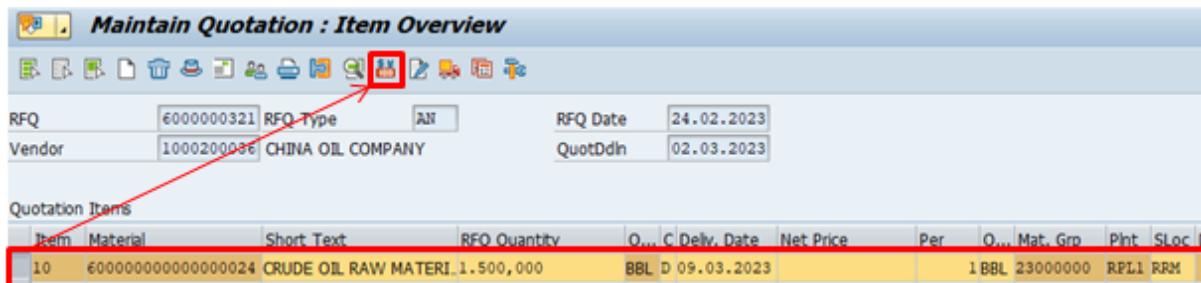
PE Price variance, Purchasing

Tolerance limit for system message no. 207. This message appears if the specified effective price exceeds the predefined tolerances when compared with the material price.

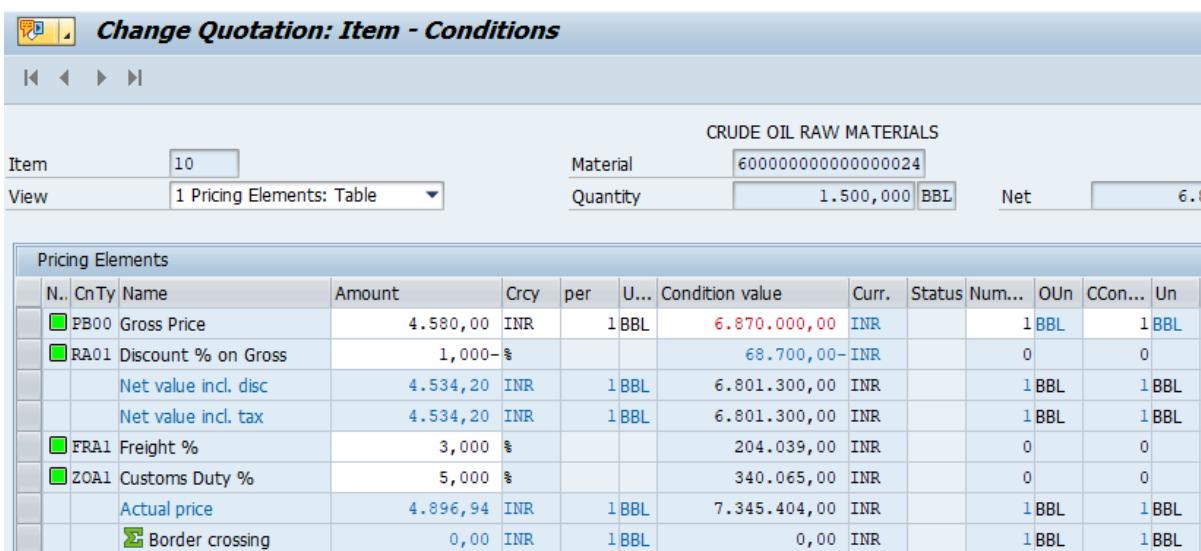
SE Maximum cash discount deduction, Purchasing

Tolerance limit for system message no. 231. This is a warning message, which appears when the specified cash discount percentage exceeds the predefined tolerances.

Step 2 → Select the item to which the price is need to be updated after vendor reply for RFQ and click on item condition icon from the application toolbar.



Step 3 → In the item condition field specify the conditions and prices given by the vendor like gross price, freight charges, duties payable & discount rate.



Step 4 → Finally save the quotation & you can see the Net price from the field section. Net price is the price after discount from the gross price & without freight charges & customs duty.



PRICE COMPARISON

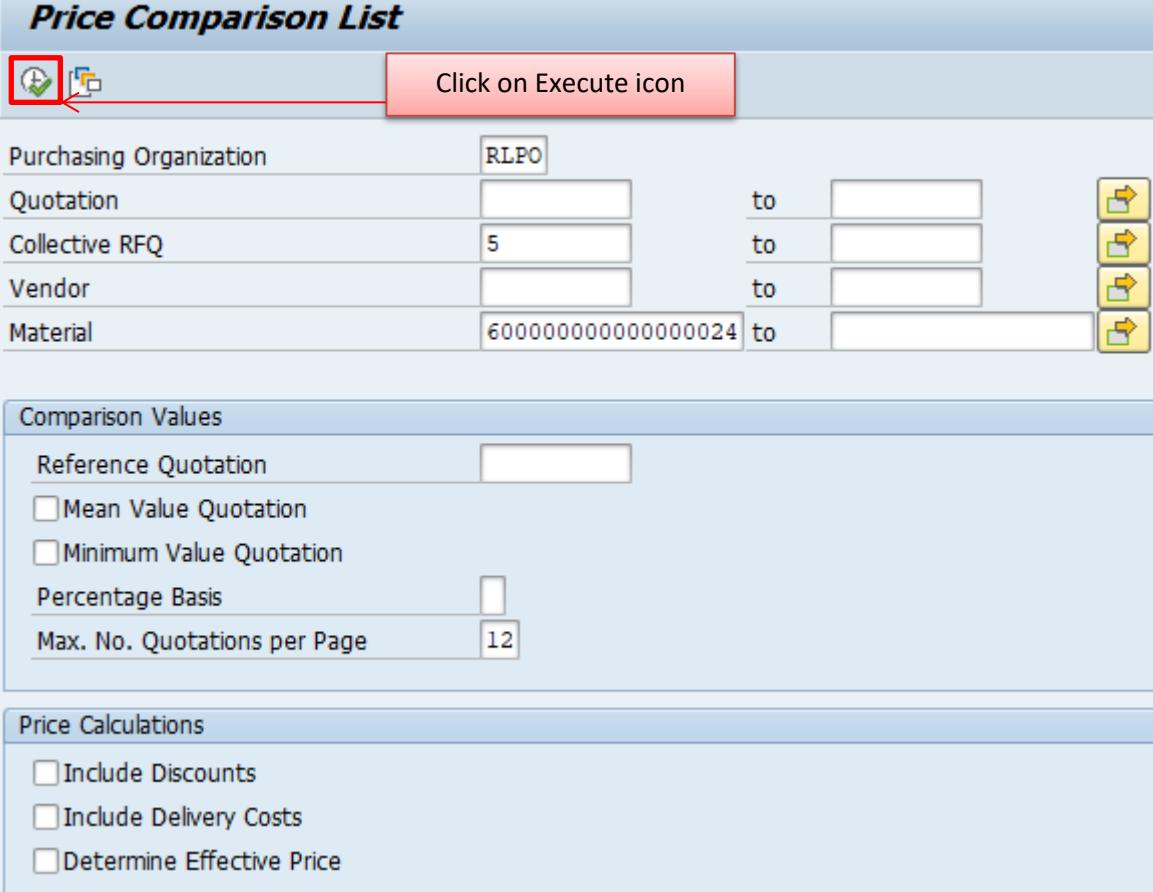
SAP Menu → Logistics → Materials Management → Purchasing Order → RFQ / Quotation → Request for Quotation → ME49 – Price Comparison

T Code ME49 – Price Comparison

After our quotations are entered, we can compare them to select the best available offer.

We can select which quotations will be compared by using the collective number we addressed before to be an important field that is maintained on RFQ. Each quotation should have pricing data for the same item.

Price Comparison List



Click on Execute icon

Purchasing Organization	RLPO
Quotation	[]
Collective RFQ	5
Vendor	[]
Material	600000000000000024

Comparison Values

Reference Quotation	[]
<input type="checkbox"/> Mean Value Quotation	
<input type="checkbox"/> Minimum Value Quotation	
Percentage Basis	[]
Max. No. Quotations per Page	12

Price Calculations

<input type="checkbox"/> Include Discounts
<input type="checkbox"/> Include Delivery Costs
<input type="checkbox"/> Determine Effective Price

It will show the details about the vendor name and material type and price of the materials.

Price Comparison List in Currency INR

◀ ▶ ⌂ Quotation ⌂ Material ⌂ Vendor Additional Info ⌂

Material Sh. Text Qty. in Base Unit	Quot.: Bidder: Coll. No. :	6000000322 1000200035 5	6000000321 1000200036 5	1	6000000323 1000200015 5	6000000324 1000200016 5
600000000000000024 CRUDE OIL RAW MATERIAL 1.500,000 BBL	Val.: Price: Rank:	7.272.000,00 4.848,00 1	7.395.300,00 4.930,20 69 %	2	13.095.000,00 8.730,00 70 %	14.478.750,00 9.652,50 137 %
Total Quot.	Val.: Rank:	7.272.000,00 1	7.395.300,00 2	13.095.000,00 70 %	14.478.750,00 124 %	14.478.750,00 137 %

From the list we can see that Vendor / Bidder 1 have proposed a better price other than three vendors. In this the price comparison is done with only with Net Price.

Next we are comparing the price with effective price i.e. including the freight cost, & other costs.

Price Comparison List

Purchasing Organization: RLPO

Quotation: [] to []

Collective RFQ: 5 to []

Vendor: [] to []

Material: 600000000000000024 to []

Comparison Values

Reference Quotation: []

Mean Value Quotation

Minimum Value Quotation

Percentage Basis: []

Max. No. Quotations per Page: 12

Price Calculations

Include Discounts

Include Delivery Costs

Determine Effective Price

Here we can see that now vendor 2 in the previous price comparison list has become 1st vendor because after adding up all the freight charges (effective price) due to higher freight charges vendor has been moved from 1st place to 2nd place.

Now we can conclude that vendor is best price & proceed with them.

Price Comparison List in Currency INR						
		Quotation	Material	Vendor	Additional Info	
Material	Quot.:	6000000321	1	6000000322	2	6000000323
Sh. Text	Bidder:	1000200036		1000200035		1000200015
Qty. in Base Unit	Coll. No. :	5		5		5
600000000000000024	Val.:	9.022.266,00		9.453.600,00		15.452.100,00
CRUDE OIL RAW MATERIAL	Price:	6.014,84		6.302,40		10.301,40
1.500,000 BBL	Rank:	1 69 %		2 72 %		3 118 %
Total Quot.	Val.:	9.022.266,00		9.453.600,00		15.452.100,00
	Rank:	1 69 %		2 72 %		3 118 %
						4 141 %

If you select Mean value quotation and Minimum value quotation on the previous screen (Net price comparision), you will get the result as they are shown below on the screen.

1. Average price on all the quotations.
2. Minimum price for all the quotations.

Price Comparison List						
Purchasing Organization	RLPO	to		to	to	to
Quotation						
Collective RFQ	5					
Vendor						
Material	600000000000000024	to				
Comparison Values						
Reference Quotation						
<input checked="" type="checkbox"/> Mean Value Quotation						
<input checked="" type="checkbox"/> Minimum Value Quotation						
Percentage Basis						
Max. No. Quotations per Page	12					
Price Calculations						
<input type="checkbox"/> Include Discounts						
<input type="checkbox"/> Include Delivery Costs						
<input type="checkbox"/> Determine Effective Price						

Price Comparison List in Currency INR									
		Quotation	Material	Vendor	Additional Info				
Material	Quot.:	6000000322	6000000321	6000000323	6000000324	MEAN	1	MINIMUM	2
Sh. Text	Bidder:	1000200035	1000200036	1000200015	1000200016				
Qty. in Base Unit	Coll. No. :	5	5	5	5				
60000000000000024	Val.:	7.272.000,00	7.395.300,00	13.095.000,00	14.478.750,00	10.560.262,50	7.272.000,00		
CRUDE OIL RAW MATERIAL	Price:	4.848,00	4.930,20	8.730,00	9.652,50	7.040,18	4.848,00		
1.500,000 BBL	Rank:	1 69 %	2 70 %	3 124 %	4 137 %				
Total Quot.	Val.:	7.272.000,00	7.395.300,00	13.095.000,00	14.478.750,00	10.560.262,50	7.272.000,00		
	Rank:	1 69 %	2 70 %	3 124 %	4 137 %				

Average & Minimum Price for Effective price list comparison

Price Comparison List

Purchasing Organization: RLPO

Quotation	to	<input type="button" value="Get"/>
Collective RFQ	to	<input type="button" value="Get"/>
Vendor	to	<input type="button" value="Get"/>
Material	600000000000000024	to <input type="button" value="Get"/>

Comparison Values

Reference Quotation

Mean Value Quotation

Minimum Value Quotation

Percentage Basis

Max. No. Quotations per Page

Price Calculations

Include Discounts

Include Delivery Costs

Determine Effective Price

Price Comparison List in Currency INR									
		Quotation	Material	Vendor	Additional Info				
Material	Quot.:	6000000321	6000000322	6000000323	6000000324	MEAN	1	MINIMUM	2
Sh. Text	Bidder:	1000200036	1000200035	1000200015	1000200016				
Qty. in Base Unit	Coll. No. :	5	5	5	5				
60000000000000024	Val.:	9.022.266,00	9.453.600,00	15.452.100,00	18.532.800,00	13.115.191,50	9.022.266,00		
CRUDE OIL RAW MATERIAL	Price:	6.014,84	6.302,40	10.301,40	12.355,20	8.743,46	6.014,84		
1.500,000 BBL	Rank:	1 69 %	2 72 %	3 118 %	4 141 %				
Total Quot.	Val.:	9.022.266,00	9.453.600,00	15.452.100,00	18.532.800,00	13.115.191,50	9.022.266,00		
	Rank:	1 69 %	2 72 %	3 118 %	4 141 %				

PURCHASE REQUISITION

SAP Purchase Requisition is a document that contains a list of required materials, services, or goods. Purchase requisition is a request that is made to the purchasing organization to procure a required list of materials.

SAP Purchase requisition number is an internal document number generated and remains within the organization. Purchase requisition needs approval from the purchase organization for further process.

Purchase requisition can be created for the following procurement types

Standard – Getting finished material from vendor.

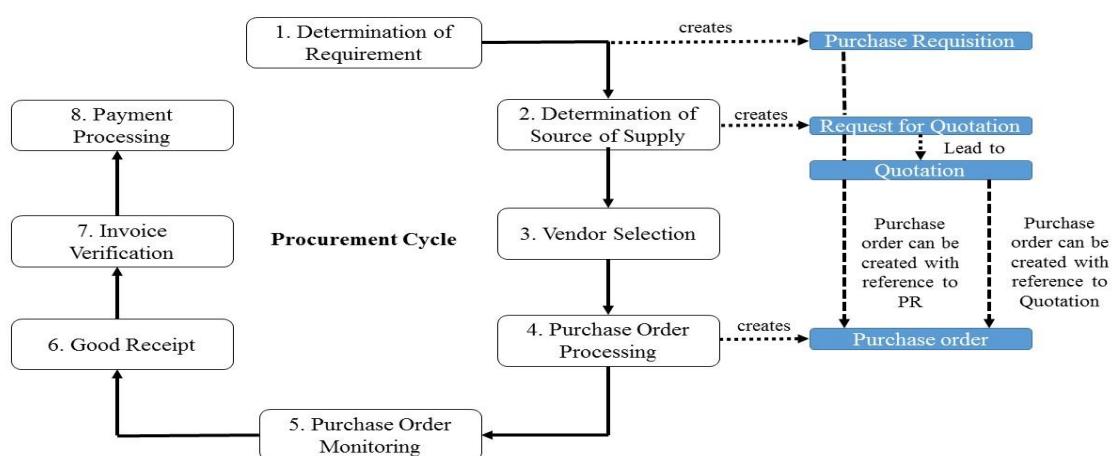
Subcontracting – providing raw material to vendor and getting finished material.

Consignment – Procuring material that is kept in company's premises and paying to vendor for that.

Stock transfer – Getting material from within the organization.

External service – Getting services like maintenance from third party vendor.

They can be converted in purchase orders but only upon release (approval of purchase requisition).



If the selected vendor did not accept the PR then we can move to the 2nd vendor, this will act as a Final confirmation from the vendor side. Whether the vendor delivers the quantity quoted within the deadline for the terms & conditions.

SAP Menu → Logistics → Materials Management → **Purchasing** → **Purchase Requisition** → **ME51N - Create**

T Code ME51N – CREATE

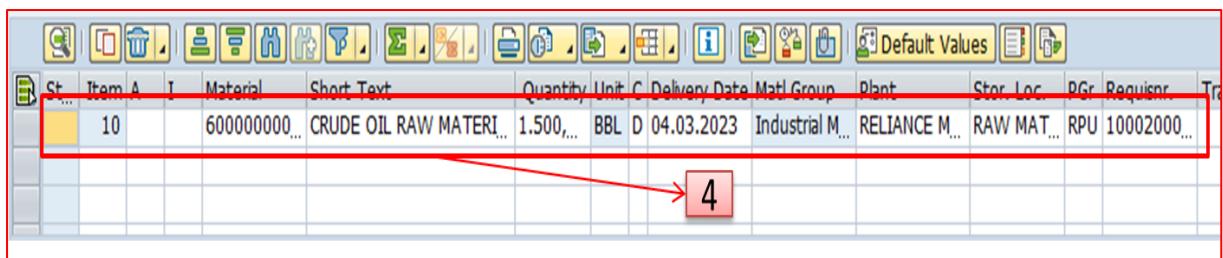
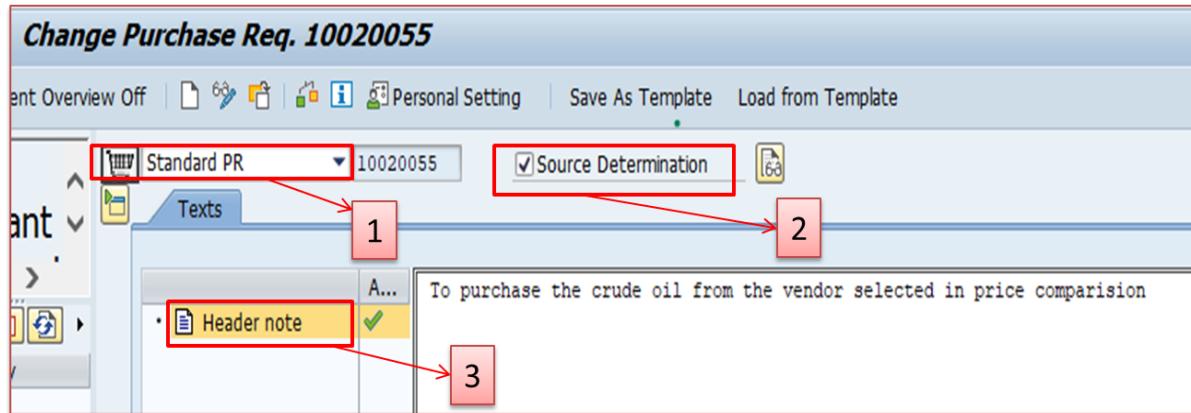
T Code ME52N – CHANGE

T Code ME53N – DISPLAY

Step 1 – Fill in all the required details such as name of the material, quantity, delivery date, material group, and plant. Click on Save. A new Purchase Requisition will be created.

After creating a purchase requisition, we need to send our requirements to the vendor. It is done through a document that is known as the purchase order. A purchase order can be directly created from a purchase requisition.

The screenshot shows the SAP ME51N - Create Purchase Requisition interface. The header bar includes 'Create Purchase Requisition', 'Document Overview Off', 'Hold', 'Park', 'Personal Setting', 'Save As Template', and 'Load from Template'. The main area has a 'Header' tab open, showing a table with columns: St..., Item, Acct Assgt Cat., I, Material, Short Text, Quantity, Unit, C, Delivery Date, Matl Group, Plant, Stor. Loc., PGr, Requested By, Tracking..., Des.Vi. An entry for item 10, material 600000000000000024, and quantity 1.500... is visible. Below the table is an 'Item' section with tabs for 'Material Data', 'Quantities/Dates', 'Valuation', 'Source of Supply', 'Status', 'Contact Person', 'Texts', and 'Delivery Address'. Under 'Material Data', fields include 'Material' (600000000000000024), 'Short Text' (CRUDE OIL RAW MATERIALS), 'Batch' (empty), 'Revision Level' (checkbox), 'Material Group' (23000000), 'Industrial Manufactu' (checkbox), and 'Vendor Mat.' (checkbox). A message at the bottom right says 'Purchase requisition number 0010020055 created' with a checkmark icon.



1. Document Type
2. Activating Source Determination
3. Specifying any header notes
4. Entering the details about purchase materials like Material no, Order quantity, Delivery date & vendor requested.

This screenshot provides a detailed view of the purchase requisition entry screen, specifically focusing on the material line item. A red box numbered 1 points to the "Material" column, which contains the value "600000000". A red box numbered 2 points to the "Quantity" column, which contains "1.500,...". A red box numbered 3 points to the "Unit" column, which contains "BBL D". A red box numbered 4 points to the "Requisnr." column, which contains "10002000...". Below the table, three callout boxes provide descriptions for these highlighted fields: "Material No" points to the "Material" field, "Order quantity & unit" points to the "Quantity" and "Unit" fields, and "Requested to which vendor (vendor no)" points to the "Requisnr." field.

Item A	I	Material	Short Text	Quantity	Unit	C	Delivery Date	Matl Group	Plant	Stor. Loc.	PGr	Requisnr.
10		600000000	CRUDE OIL RAW MATERI	1.500,...	BBL D	04.03.2023	Industrial M...	RELIANCE M...	RAW MAT...	RPU	10002000...	

Finally save the document and note the PR number.

PURCHASE ORDER

SAP Menu → Logistics → Materials Management → Purchasing → Purchase Order → Create → ME21N – Vendor / supplying plant known

T Code ME21N – Vendor / supplying plant known

Purchase order is a type of legal contract which binds the supplier to supply the described materials or services & purchaser to pay after receiving the described materials or services.

So purchase order should contain

- A Vendor/Supplier.
- Purchase Organization structure like -Who is the contact (Purchasing group/Purchasing organization etc).
- Material details.
- Delivery date.
- Quantity
- Price
- Delivery cost
- Taxes.
- Delivery address

There are different types of purchase orders in SAP

- Standard Purchase Order
- Stock Transport Order (STO)
- Consignment Purchase Order
- Subcontracting Purchase Order

A Purchase Order is a formal document sent by the purchasing organization. It is an outgoing & ultimate document.

To the vendor or supplier for the delivery of a predefined quantity of material or services at a predefined time.

Purchasing organization is an organizational unit that performs the work of procurement of goods and services with the vendors, they can do the negotiate for the terms and conditions for purchasing.

There are 4 ways to create the Purchase Order:

1.Vendor/Supplying Plant known (ME21N):

This procedure is used when we know who is the Vendor and we create the Purchase Order manually.

2.Vendor unknown(ME25):

This procedure is used when the vendor is not known and is selected by the system on the basis of a predefined source of supply.

3.Via Requisition Assignment List (ME58):

This procedure is used to list the purchase requisitions already assigned to a vendor and the Purchase Order is automatically generated from these requisitions.

4.Automatically by Purchase Requisition (ME59N):

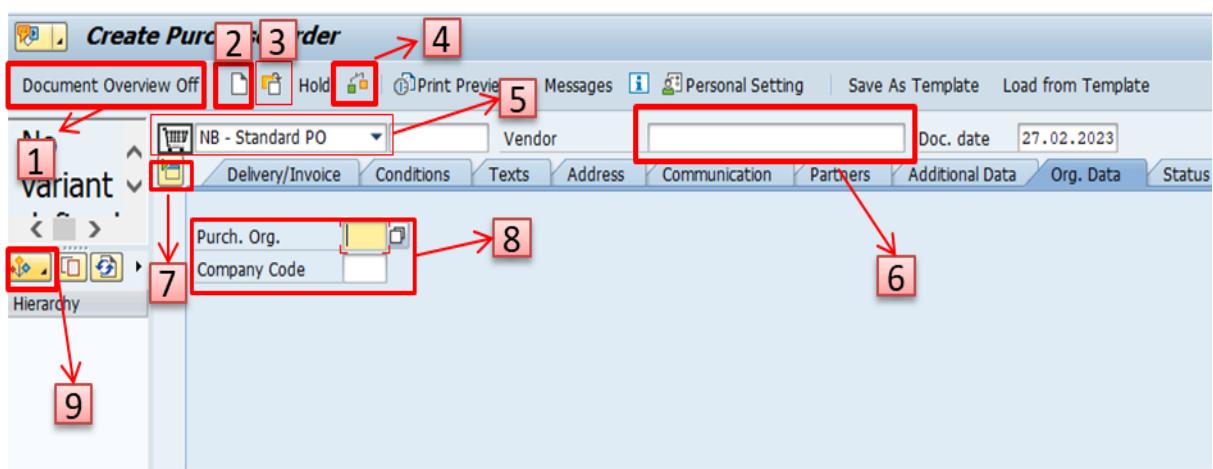
This procedure is used in case Purchase Order is created automatically by Purchase Requisition.

Purchasing-order

You can change the price and quantities here even though we agreed for earlier at the time of negotiations

The Standard Document Types for Purchase Order are:

- NB – Standard PO
- FO – Framework order (Blanket PO/Limit PO)
- DO – Dummy PO
- EC – Electronic Commerce (for SRM applications)



1 – Document Overview On / Off – It helps in view the related document for the current purchase order like its material and purchase requisitions, RFQ, Quotations & etc...

2 – Creating new Purchase Order

3 – Other Purchase order is used to retrieve the previous purchase orders.

4 – Check icon used to identify any errors or notification about while executing the purchase order.

5 - Shopping cart is very help to user to easily drag the PR into PO line item.

NB – Standard PO – It is the document type to which the PO has raised. It is SAP standard doc type.

6 – Vendor Number to be entered

7 – Header Icon – it contains the complete details about the organizational details, Vendor Details, Terms & conditions etc....

8 – Organizational Details

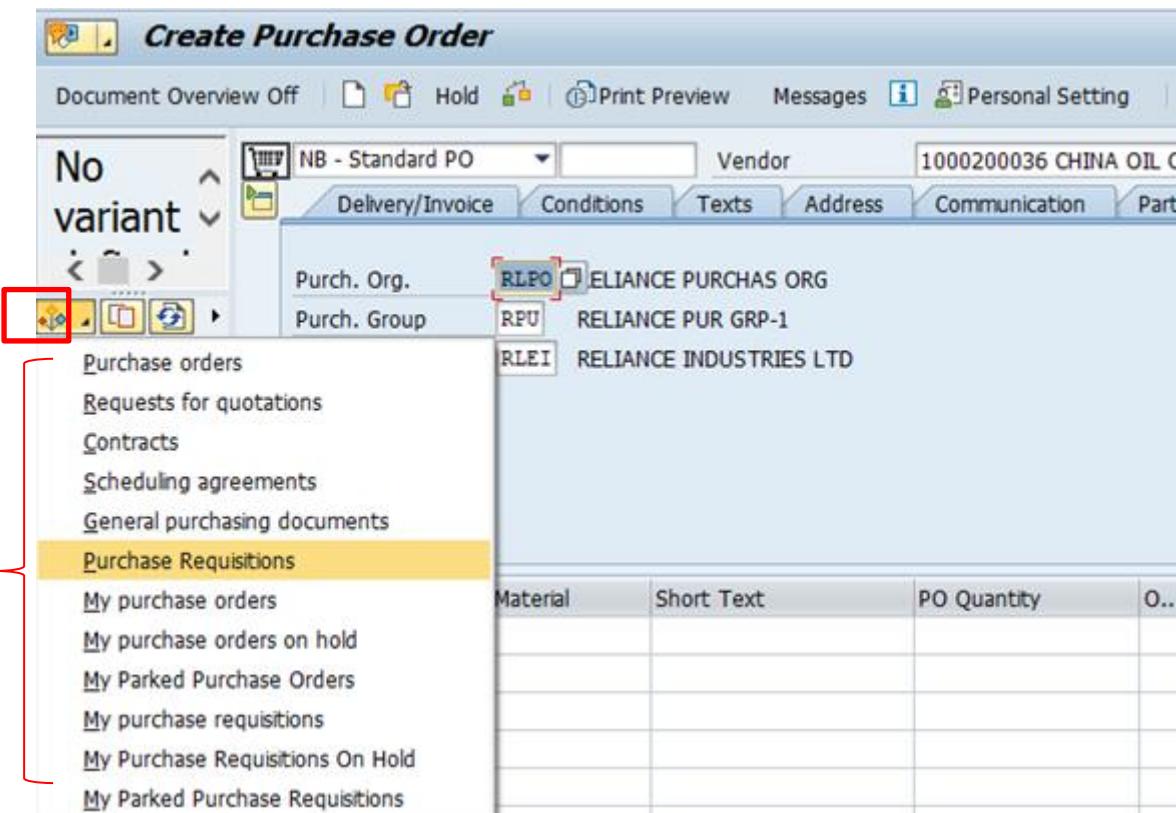
9 – Selection Variant Icon

Steps 1 → Details to be given are

Document type i.e. – NB Standard PO in the shopping cart after that Vendor Number is provided (to whom the PO is going to be sent) and finally organizational details like purchase org & group details, Company code details.

The screenshot shows a SAP Fiori application interface for creating a purchase requisition. The top navigation bar includes fields for 'Vendor' (1000200036 CHINA OIL COMPAN...) and 'Doc. date' (27.02.2023). Below the navigation bar, there are tabs for 'Delivery/Invoice', 'Conditions', 'Texts', 'Address', 'Communication', 'Partners', 'Additional Data', 'Org. Data', 'Status', and 'Payment Processing'. The 'Org. Data' tab is currently selected. A red box highlights the 'Purch. Org.' field (RLPO) and its value 'RELIANCE PURCHAS ORG'. Another red box highlights the 'Purch. Group' field (RPU) and its value 'RELIANCE PUR GRP-1'. A third red box highlights the 'Company Code' field (RLEI) and its value 'RELIANCE INDUSTRIES LTD'.

Step 2 → Now select the selection variant icon under the document overview tab & it will show list of options by which we can fetch the details for raising the purchase order. In the options select purchase requisition.



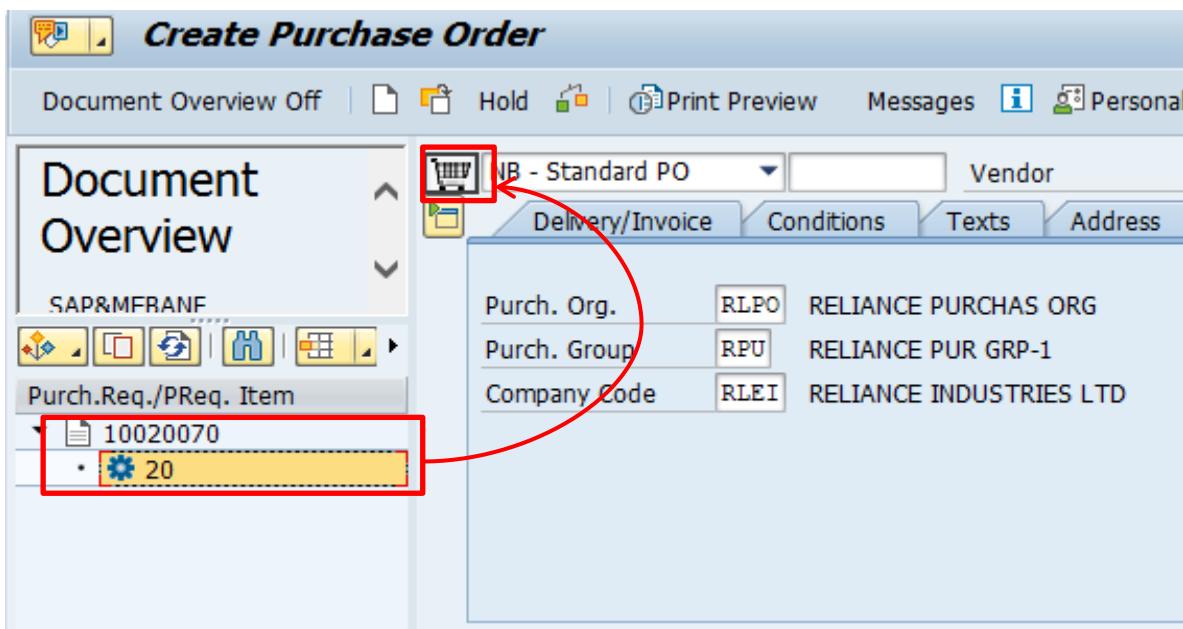
Step 3 → In the Purchase Requisitions tab we need to provide the details of the previously created PR number, Purchasing Org & group Details, Material number of PR, Plant name.

Then finally click on the icon on top left corner i.e. Execute icon to proceed further.

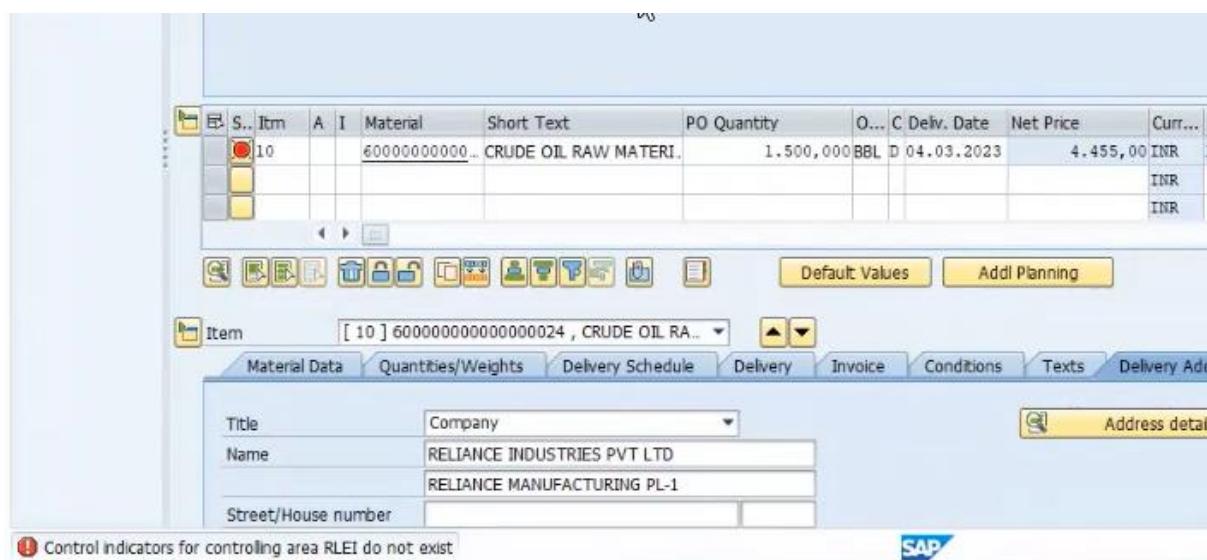
Purchase Requisitions

Field	Value
Name of Requisitioner/Requester	
Requisition (Request) Date	
Purchase Requisition Number	10020056
Requirement Tracking Number	
Item Number	
Document Type	
Purchasing Group	RPU
Purchasing Organization	RLPO
MPN Material	
Name of Processor	
Fixed Vendor	
Account Assignment Category	
Outline Agreement Number	
Outline Agreement Item	
Desired Vendor	
Material Group	
Material	600000000000000024
Document Incomplete	
Item Category	
Supplying Plant	
Plant	RPL1

Step 4 → Now the Purchase requisition document will be fetched and displayed in document overview field. We need to drag the PR file and put into the Shopping cart icon so that the data will be automatically fetched and loaded into the purchase order fields.



Step 5 → Now the data are copied from PR to PO. While executing the PO a ticket has been occurred i.e. in the Controlling area from Finance side.

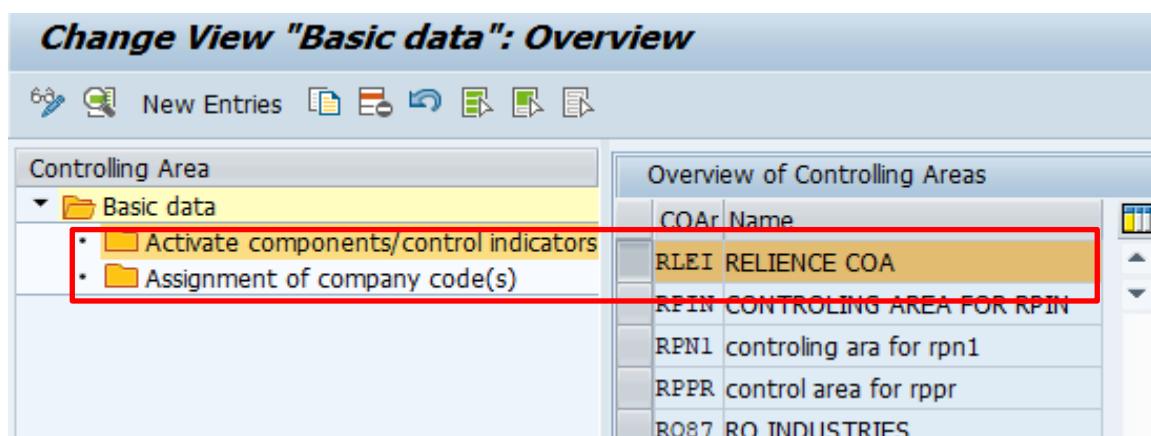


RESOLVING THE TICKET CONTROL INDICATORS FOR CO AREA

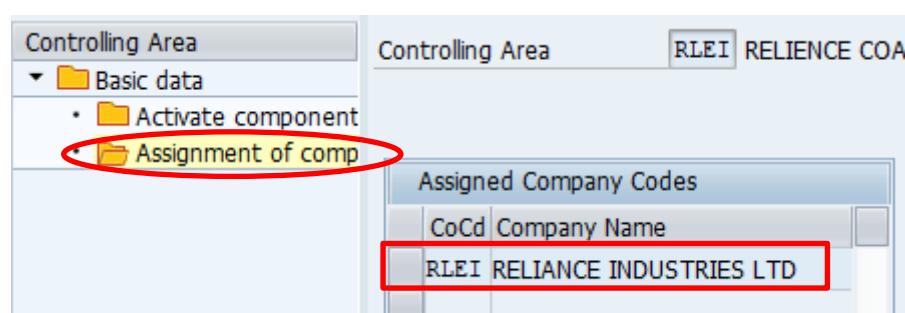
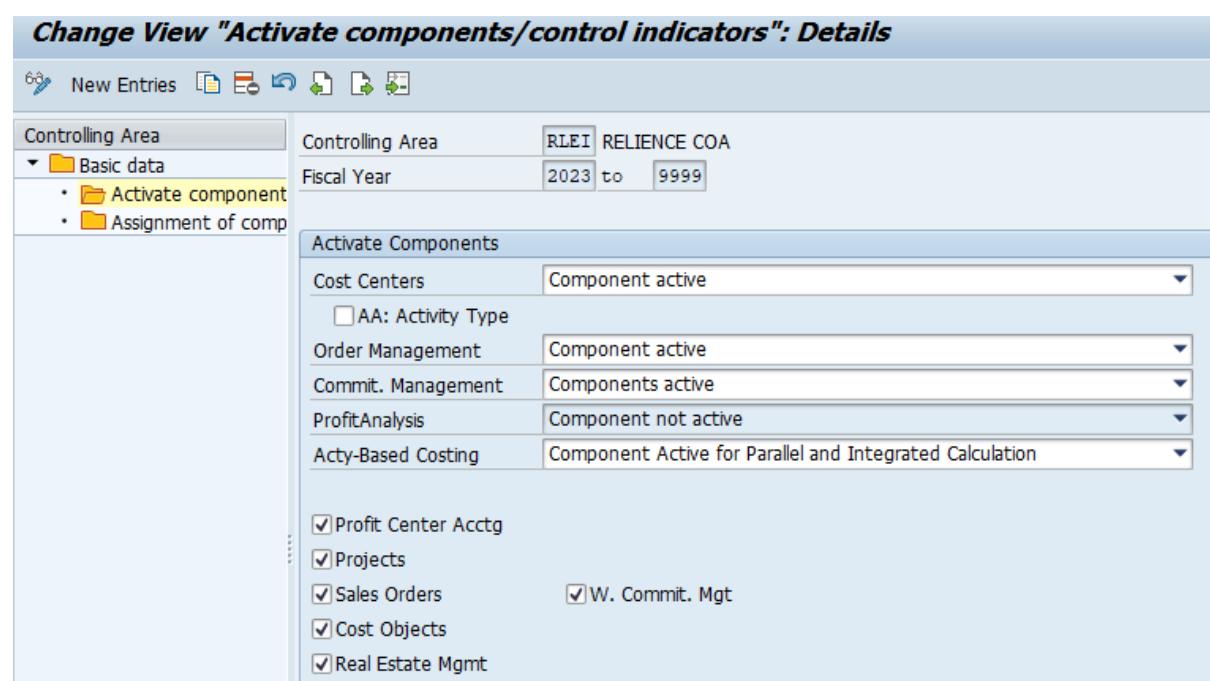
SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Controlling → General Controlling → Organization → Maintain Controlling Area → New Entries.

T CODE – OKKP

In this we need to activate the components & controlling indicators by selecting the company code & controlling area. Finally check whether the company code is assigned to controlling area and save.



After that click on new entries & provide the details of company code, Fiscal year, & activating the components.



Step 6 → Next ticket is material is not included in the source list

The screenshot shows the SAP ME01 - Maintain screen. At the top, there is a grid table with columns: S.., Itm, A, I, Material, and Short Text. One row is selected, showing Item 10 with Material number 600000000000000024 and description CRUDE OIL RAW MATERI... Below the grid is a toolbar with various icons. Below the toolbar, a detailed view for Item 10 is shown, with tabs for Material Data, Quantities/Weights, and Delivery Schedule. Under Delivery Schedule, there is one delivery line item with Delivery Date 06.03.2023, Sched. Qty 1.500,000, and Time 06.03.2023. A message bar at the bottom left says: "Material 600000000000000024 not included in source list despite source list requirement". At the bottom, a "Messages" panel lists three entries:

Typ	Message text	LTxt
<input type="checkbox"/>	Item 10 Sch. Line 1	
<input checked="" type="checkbox"/>	Material 600000000000000024 not included in source list despite source list requirement	
<input type="checkbox"/>	Can delivery date be met? (Realistic delivery date: 07.03.2023)	

RESOLVING THE TICKET MATERIAL IS NOT INCLUDED IN SOURCE LIST

SAP Menu → Logistics → Materials Management → Purchasing → Master Data → Source List → ME01 – Maintain

T Code ME01 – Maintain

T Code ME04 – Change

T Code ME03 – Display

Here we have not entered the vendor details. So, we need to provide it now.

Maintain Source List: Overview Screen

Material	6000000000000000000024	CRUDE OIL RAW MATERIALS					
Plant	RPL1	RELIANCE MANUFACTURING PL-1					
Source List Records							
Valid from	Valid to	Vendor	POrg	PPI	OUn	Agmt	Item
20.02.2023	30.04.2023	1000400005	RLPO				
20.02.2023	16.08.2023	1000300005	RLPO				
20.02.2023	31.12.2023	1000200015	RLPO				
20.02.2023	31.12.2023	1000200036	RLPO				
20.02.2023	19.02.2024	1000200016	RLPO				

A red oval highlights the last row of the table, which contains invalid vendor information. A red arrow points down to a red box at the bottom of the screen containing the text "VENDOR MISSING".

VENDOR MISSING

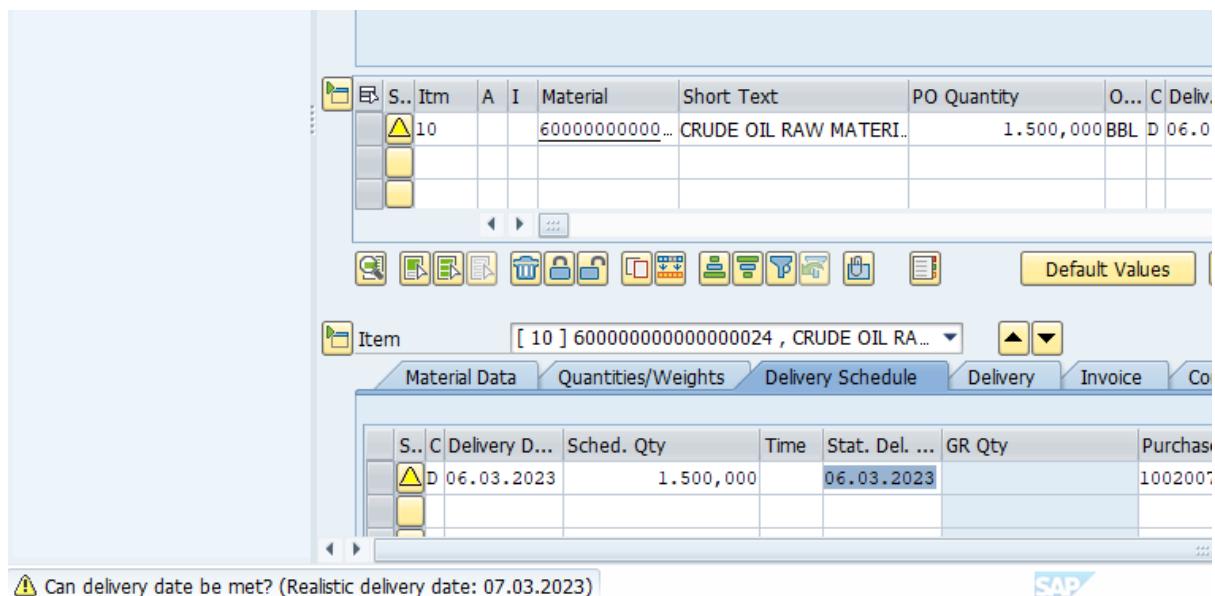
In the field we need to add the details about the vendor no, Purchase org details and period of validity of the vendor.

The screenshot shows the SAP interface for maintaining source lists. At the top, there's a toolbar with various icons. Below it, two fields are displayed: 'Material' with value '6000000000000000024' and description 'CRUDE OIL RAW MATERIALS', and 'Plant' with value 'RPL1' and description 'RELIANCE MANUFACTURING PL-1'. The main area is titled 'Source List Records' and contains a table with columns: Valid from, Valid to, Vendor, POrg, PPI, OUn, Agmt, and Item. There are eight rows of data. The last two rows are highlighted with a red box and a red arrow points from the text 'Vendor data' below them to the 'Vendor' column of the second highlighted row. The data is as follows:

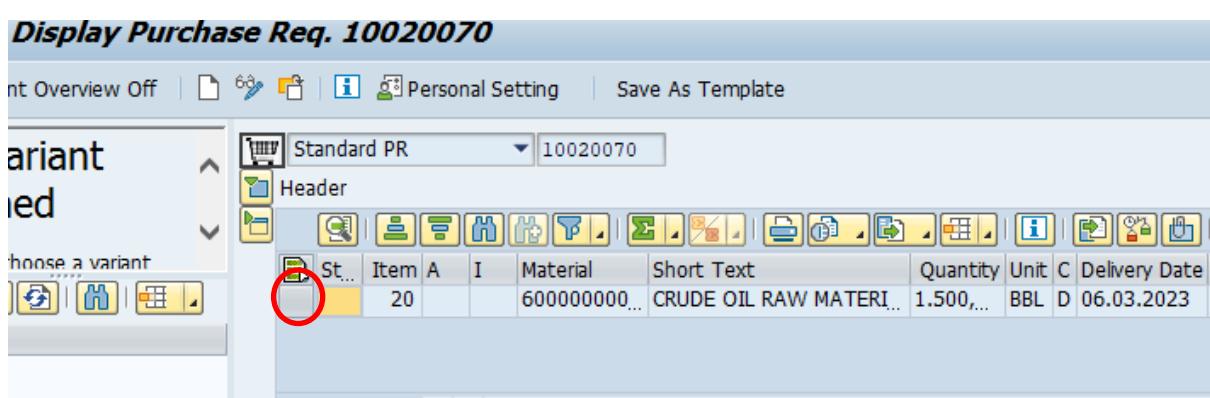
Valid from	Valid to	Vendor	POrg	PPI	OUn	Agmt	Item
20.02.2023	30.04.2023	1000400005	RLPO				
20.02.2023	16.08.2023	1000300005	RLPO				
20.02.2023	31.12.2023	1000200015	RLPO				
20.02.2023	31.12.2023	1000200036	RLPO				
20.02.2023	19.02.2024	1000200016	RLPO				
20.02.2023	01.01.2024	1000200035	RLPO				

Step 7 → Now we are getting an warning about delivery date because at the time of RFQ & Quotation we have given the date as 7/3 but at the Po we have given as 6/3 so the system asks to change the date to the realistic or keep it as it is.

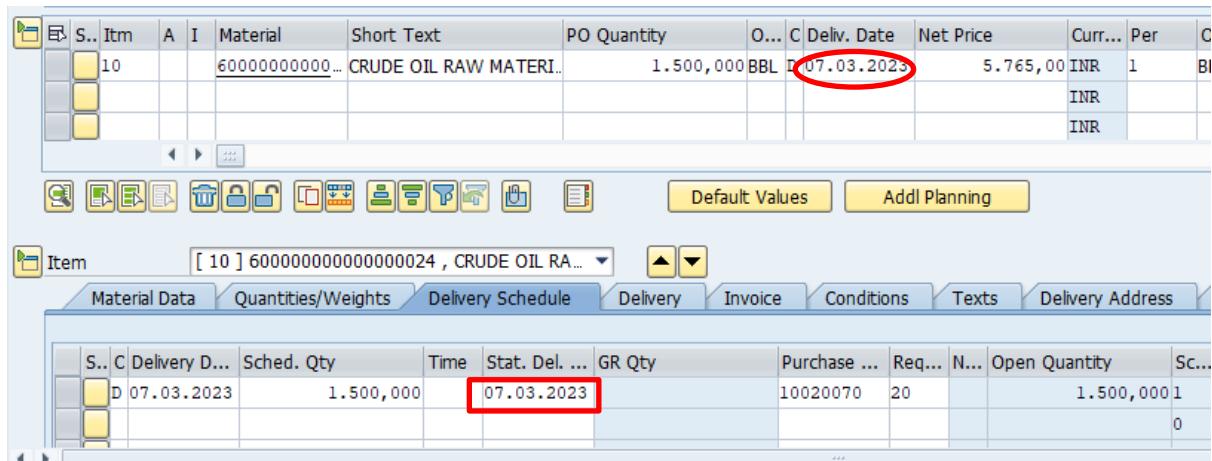
We can change the date in case the material is not needed immediately.



Now the tickets symbol has been vanished after resolving the errors arised.

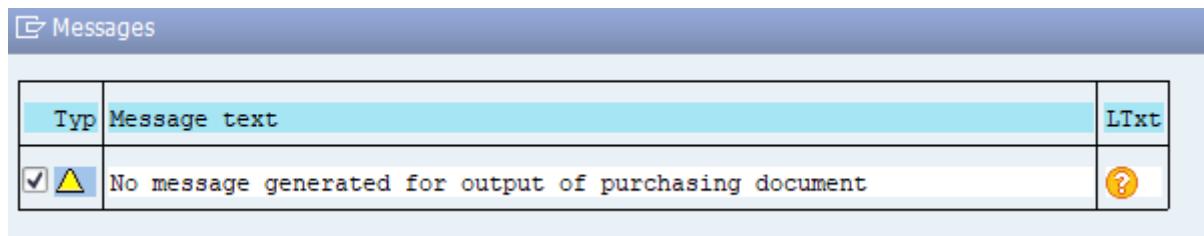


When we change the date in PO the changes will be automatically reflect in all the related documents like in Purchase requisition, Quotations & RFQ.



The screenshot shows the SAP Purchase Order creation interface. At the top, there is a table with columns: S.., Itm, A, I, Material, Short Text, PO Quantity, O..., C, Deliv. Date, Net Price, Curr..., Per, and C. One row is selected, showing material number 10 and description CRUDE OIL RAW MATERI... with a quantity of 1.500,000 BBL. The delivery date is circled in red as 07.03.2023. Below the table is a toolbar with various icons. The main window has tabs: Item, Material Data, Quantities/Weights, Delivery Schedule, Delivery, Invoice, Conditions, Texts, and Delivery Address. The Delivery tab is active, showing a detailed delivery schedule table. This table has columns: S.., C, Delivery D..., Sched. Qty, Time, Stat. Del. ..., GR Qty, Purchase ..., Req..., N..., Open Quantity, and Sc... . One row is selected, showing delivery date 07.03.2023 and quantity 1.500,000.

Step 8 → This is the finally click on check icon, It shows the warning of no message output included i.e. we are not yet added any media output for communicating the Purchase Order to the vendor.



The screenshot shows the SAP Messages screen. The title bar says 'Messages'. The table has two rows. The first row has columns 'Typ' and 'Message text', with 'Typ' being 'LTtxt'. The second row has columns 'Typ' (with a yellow warning icon) and 'Message text' (containing 'No message generated for output of purchasing document'), with 'Typ' being 'LTtxt'.

Step 9 → Again check for messages and save the PO.

ME29N FOR RELEASING THE PURCHASE ORDER FROM BLOCK.

GOODS RECEIPT NOTE (GRN)

A Goods receipt is defined as a physical inbound movement of goods or materials into the warehouse or it is the receipt of material in the store or the receipt of stock from the vendor or manufacturer. All good receipt results in an increase of stock in the warehouse. For e.g. receipt of the produced product into stores.

A document which is used to identify the material has been received and stored in the stock.

Goods are usually received with reference to a purchase order issued by the purchasing department. A purchase order is an important document for purchase monitoring and inventory management.

The following kinds of goods receipts are considered in the SAP System:

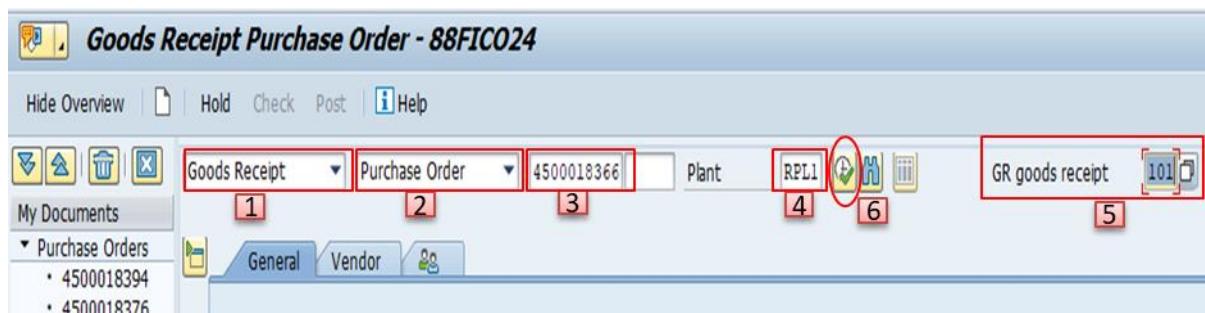
- Goods receipt with reference to a purchase order
- Goods receipt with reference to a production order
- Goods receipt with reference to a delivery
- Other goods receipts (without reference)

SAP Menu → Logistics → Materials Management → **Inventory Management**

→ **Goods Movement** → **MIGO – Goods Movement**

T Code – MIGO

The below shown picture is the screen of Goods Receipt Note.



1. Document type – Goods Receipt
2. Source document – Purchase order (GRN will be issued only against the Purchase order) by verifying the data in PO for material type, order date, delivery schedule, Quantity ordered, Plant & storage location details re checked.
3. PO document number
4. To which Plant location.
5. GR Movement Type i.e. whether the material is coming in or going out. It has many no of standards for respective material movement.
101 – Goods Receipt for PO into warehouse/stores i.e. it specifies that goods has been received from vendor to the particular plant warehouse & storage.
6. Click on execute icon to proceed further.

MvT	S	Text
101		Goods receipt for purchase order into warehouse/stores
102		Goods receipt for purchase order into warehouse - reversal
103		Goods receipt for purchase order into GR blocked stock
104		Goods receipt for purchase order -> GR blkd stock - reversal
105		Release GR blocked stock for warehouse

TICKET 1

Typ	Item	Message text	Table T169P: entry RLEI does not exist
●		Table T169P: entry RLEI does not exist	

Next while executing we will get the first ticket as Table T169P does not exist.

Solving the Ticket Maintenance Table:

Through this tool we can edit, add and delete the entries from the custom table.

This ticket is related to sap abap team.



SP00 → SAP MENU → TOOLS → TABLES → SM30 – TABLE MAINTENANCE

T Code – SM30

In that table provide the details of the table name in which the changes to be made. And click on Maintain icon.

Maintain Table Views: Initial Screen

Find Maintenance Dialog

Table/View

T169P

Restrict Data Range

- No Restrictions
- Enter conditions
- Variant

Display Maintain Transport Customizing

In the next screen we need to provide the details about the invoice verification.
Click on new entries or copy the standard then edit with our company code.

Change View "Parameters, Invoice Verification": Overview

Co...	PO text	Auto. MAIL	STOCK.DIK	Check amnt	Tax versn
0001	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	One tax amount and tax code
0005	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Four tax amounts and tax co...
0006	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	One tax amount and tax code
0007	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Four tax amounts and tax co...
0008	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	One tax amount and tax code
0010	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Four tax amounts and tax co...

In the field we need to provide the details related to the tax information and currency exchange rates details.

Change View "Parameters, Invoice Verification": Details of Selected Se

Company Code

RLEI

Parameters, Invoice Verification

PO text

Automatic MAIL

Stoch. block

Check amount

Threshold value 3.067,75

Stoch. block % 50,00

Tax version Four tax amounts and tax codes

Version itemlist

Price carr.over

CorrInvsCompletd

ID del. costs Distribute among invoice items

Activate ExchRtDiff Exchange rate differences between GR and IR

ExRateType

Display logo

URL

Check co. code

Check inv. date

Check reference

Tax: inv. reductn Tax reduction in complaint document

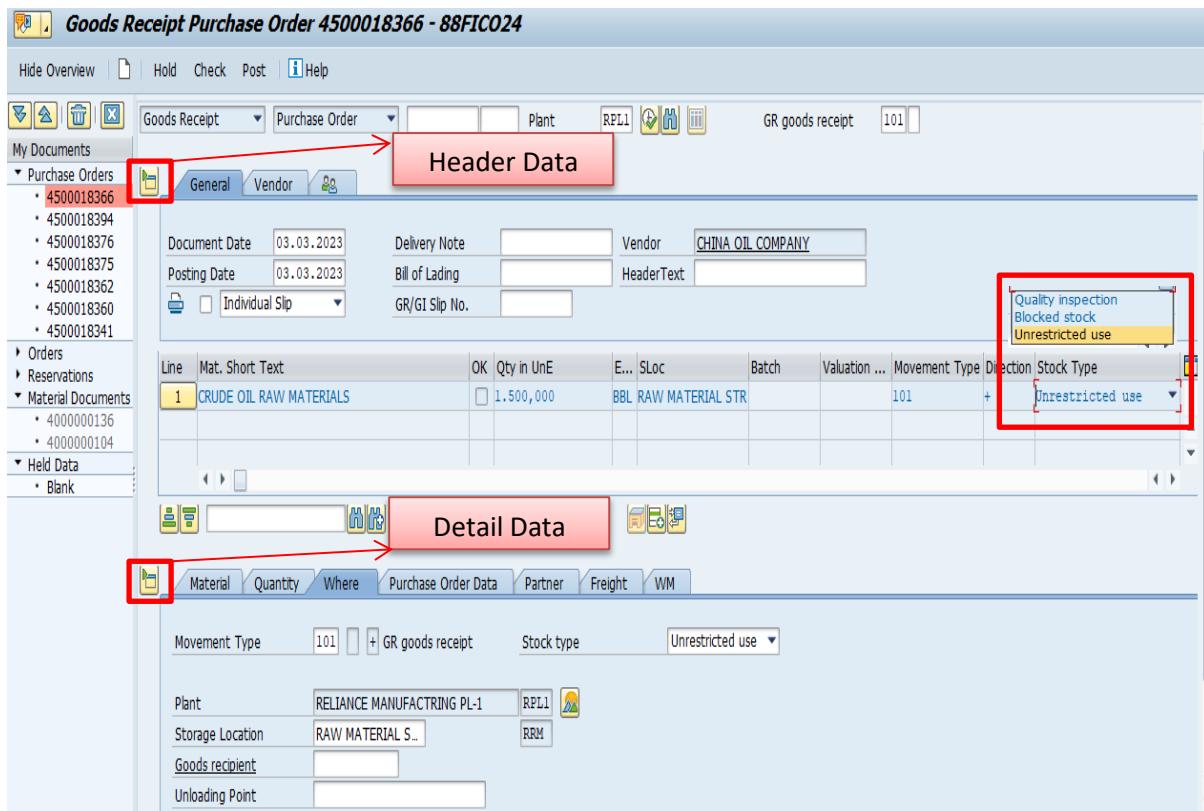
Finally save the changes

Change View "Parameters, Invoice Verification": Overview

New Entries

Co...	PO text	Auto. MAIL	Stoch.blk	Check amnt	Tax versn
RLEI	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Four tax amounts and tax co...

Next again we need to provide the details in GRN fields; Header Data shows the details about vendor and date of document & delivery. Item detail data shows the data about material & organizational data like storage locations, plant,Quantity ordered & received,Freight conditions etc....



Types of stocks

Unrestricted use stock is a stock type that can be used for everything has no restriction based on its condition.

Quality inspection stock is delivered material that is retained for quality inspection. It is not regarded as unrestricted and cannot be readily used.

Blocked Stock: If a material is rejected due to bad quality then it is moved to blocked stock in SAP. This can also happen during production when some irregularities are found with the stock and thus blocked for further use.

Line	Mat. Short Text	OK	Qty in UnE	E...	SLoc	Batch
1	CRUDE OIL RAW MATERIALS	<input type="checkbox"/>	1.400,000	BBL	RAW MATERIAL STR	

Navigation icons: back, forward, search.

Toolbar buttons: New, Open, Save, Delete, Contents, Print, etc.

Tab navigation: Material, Quantity, Where, Purchase Order Data, Partner, Freight, WM.

Quantity section:

- Qty in Unit of Entry: 1.400,000 BBL (highlighted with a red box)
- Qty in SKU: 1.400,000 BBL
- Qty in Delivery Note: (empty)

Quantity Ordered: 1.500,000 BBL (highlighted with a red box)

Action buttons at the bottom:

- New, Open, Save, Delete, Item OK (circled with a red oval)
- Line: 1

A red callout box labeled "Received Quantity" points to the "Qty in Unit of Entry" field.

The main purpose of GR is we need to check the quantity of materials received with the ordered quantity. And finally click Item ok for confirming the received quantity. Here our ordered quantity is 1500 Barrels but only received 1400 Barrels.

NB - Standard PO 4500018366 Created by 88FICO24

Document Overview On		Print Preview	Messages	Person																																														
	NB - Standard PO	4500018366	Vendor	1000200036 CHINA OIL CO																																														
Header <table border="1"> <thead> <tr> <th>El</th> <th>S..</th> <th>Itm</th> <th>A</th> <th>I</th> <th>Material</th> <th>Short Text</th> <th>PO Quantity</th> <th>O...</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>10</td> <td></td> <td></td> <td>600000000000</td> <td>CRUDE OIL RAW MATERI..</td> <td>1.500,000</td> <td>BBL I</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> 					El	S..	Itm	A	I	Material	Short Text	PO Quantity	O...			10			600000000000	CRUDE OIL RAW MATERI..	1.500,000	BBL I																												
El	S..	Itm	A	I	Material	Short Text	PO Quantity	O...																																										
		10			600000000000	CRUDE OIL RAW MATERI..	1.500,000	BBL I																																										
Item [10] 600000000000000024 , CRUDE OIL RA... <table border="1"> <thead> <tr> <th colspan="2">Material Data</th> <th>Quantities/Weights</th> <th>Delivery Schedule</th> <th>Delivery</th> <th>Invoice</th> </tr> </thead> <tbody> <tr> <td>Overdeliv. Tol.</td> <td><input type="text"/></td> <td><input type="checkbox"/> Unlimited</td> <td>1st Rem./Exped.</td> <td><input type="text"/></td> </tr> <tr> <td>Underdel. Tol.</td> <td><input type="text"/></td> <td><input type="checkbox"/> Origin Accept.</td> <td>2nd Rem./Exped.</td> <td><input type="text"/></td> </tr> <tr> <td>Shipping Instr.</td> <td colspan="4"><input type="button" value="▼"/></td> <td>3rd Rem./Exped.</td> </tr> <tr> <td>Stock Type</td> <td colspan="4"><input type="button" value="▼"/></td> <td>No. Exped. 0</td> </tr> <tr> <td>Rem. Shelf Life</td> <td><input type="text"/> D</td> <td colspan="4">Pl. Deliv. Time 5</td> </tr> <tr> <td>QA Control Key</td> <td colspan="4"><input type="button" value="▼"/></td> <td>GR Proc. Time 2</td> </tr> <tr> <td></td> <td colspan="4"></td> <td>Incoterms <input type="text"/></td> </tr> </tbody> </table>					Material Data		Quantities/Weights	Delivery Schedule	Delivery	Invoice	Overdeliv. Tol.	<input type="text"/>	<input type="checkbox"/> Unlimited	1st Rem./Exped.	<input type="text"/>	Underdel. Tol.	<input type="text"/>	<input type="checkbox"/> Origin Accept.	2nd Rem./Exped.	<input type="text"/>	Shipping Instr.	<input type="button" value="▼"/>				3rd Rem./Exped.	Stock Type	<input type="button" value="▼"/>				No. Exped. 0	Rem. Shelf Life	<input type="text"/> D	Pl. Deliv. Time 5				QA Control Key	<input type="button" value="▼"/>				GR Proc. Time 2						Incoterms <input type="text"/>
Material Data		Quantities/Weights	Delivery Schedule	Delivery	Invoice																																													
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Rem. Shelf Life	<input type="text"/> D	Pl. Deliv. Time 5																																																
QA Control Key	<input type="button" value="▼"/>				GR Proc. Time 2																																													
					Incoterms <input type="text"/>																																													

Here our material is defined as unrestricted use which means we can use directly for the production without any underlying conditions.

TICKET 2

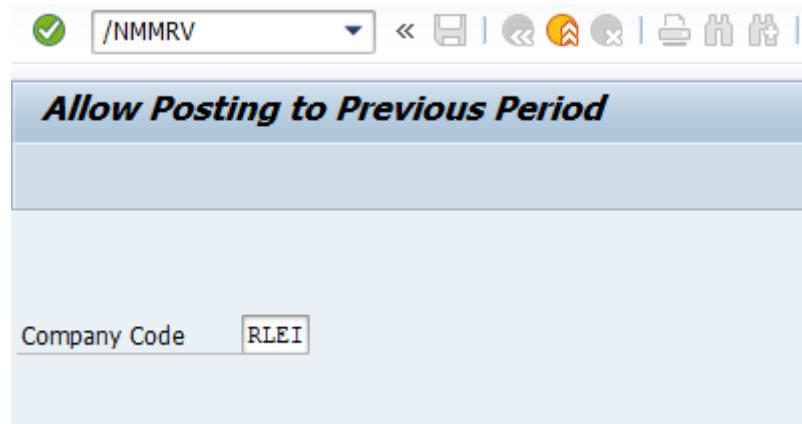
Typ	Item	Message text	Ltxt
		Posting only possible in periods 2023/02 and 2023/01 in company code ...	

This ticket is based on variation in posting period.

SAP Menu → Logistics → Material Management → **Material Master** → Other → **MMRV - Allow Posting to Previous Period**

T Code – MMRV

First we will check the posting period



Here the posting period is in previous month so we need to change that.

The screenshot shows the configuration screen for 'Allow Posting to Previous Period'. The Company Code is set to 'RLEI' (RELIANCE INDUSTRIES LTD). The 'Posting periods (month/year)' section shows:

Current period	02 2023
Previous period	01 2023
Last period in prev.year	12 2022

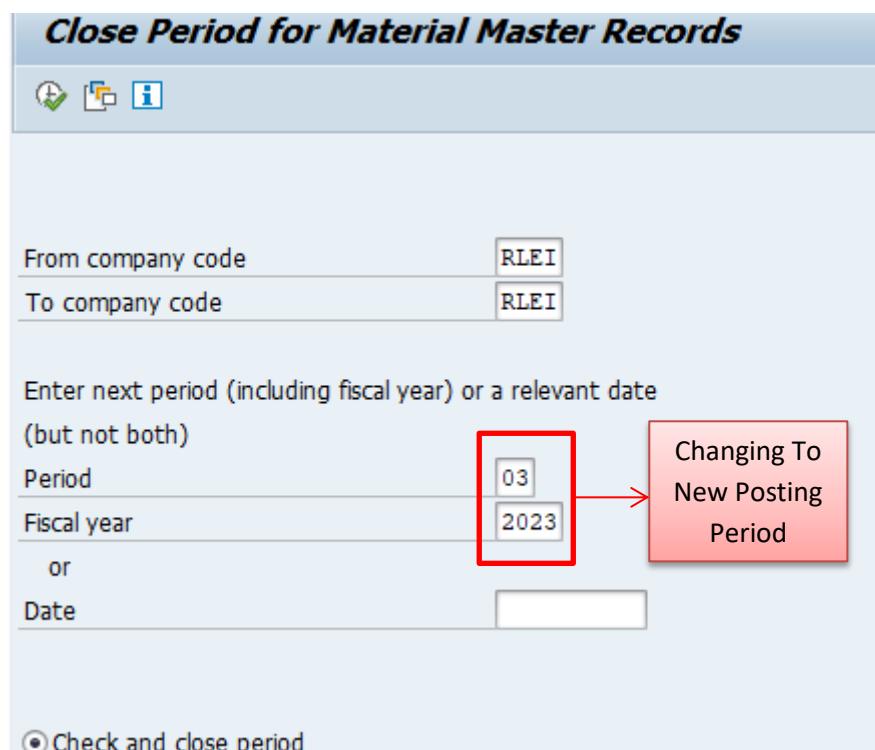
The 'Post to previous period' section contains two checkboxes:

- Allow posting to previous per.
- Disallow backposting generally

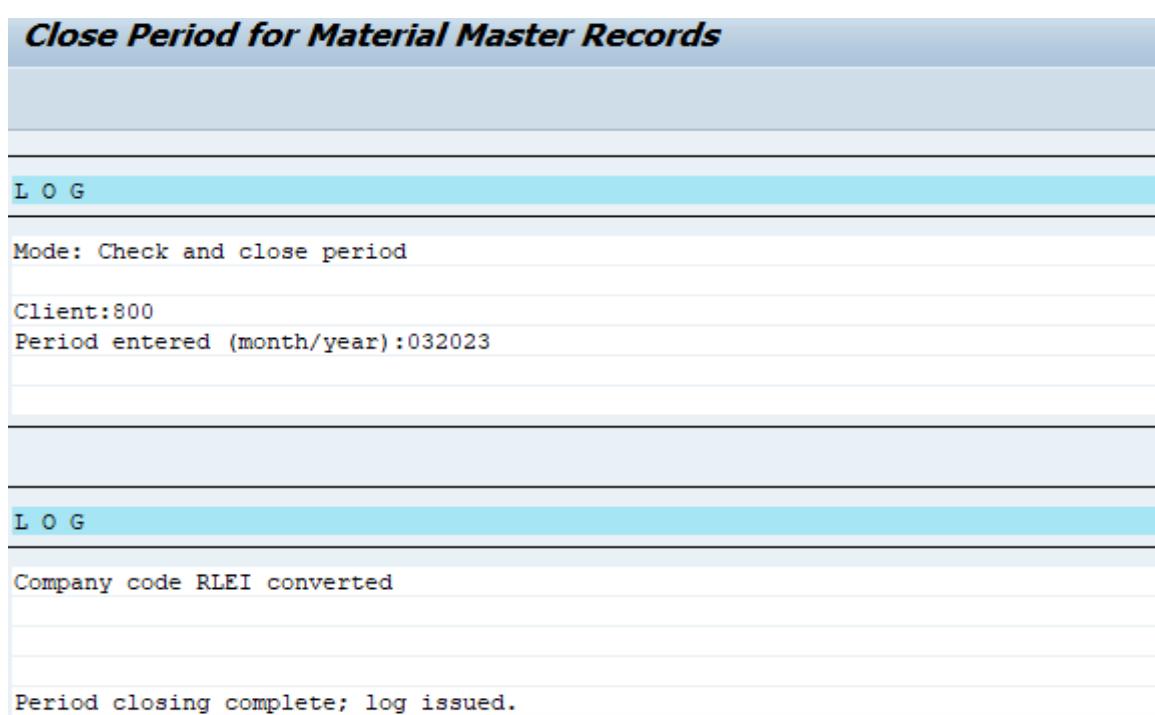
Next we need to change the posting period to 03rd month from 2nd month.

SAP Menu → Logistics → Material Management → **Material Master** → Other → **MMPV – Close Period**

T Code – MMPV



Now the current month is 3rd so in the period field specify as 3 and provide year as 2023. Below picture shows the posting period posted to 3/2023.



TICKET 3

Display logs		
Typ	Item	Message text
1	Business area RLBA does not exist	Business area RLBA does not exist

This ticket is raised due to missing entry of Business area in defining the enterprise structure. We have initially already created but somehow it has been deleted.

DEFINING BUSINESS AREA

Business area is a separate area of operations or responsibilities of organizational units of financial accounting that is used for internal and external reporting. Different divisions of each business within a legal entity are created as Business areas for reporting of each operational area. So Financial statements can be created for each business area and these financial statements can be used for internal reporting purposes.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Enterprise Structure** → **Definition** → **Financial Accounting** → **Define Business Area** → **New entries**.

T code – OX03

New Entries: Overview of Added Entries	
Business Area	Description
RLBA	PETROLEUM PRODUCTS MANUFACTU

Save the file.

TICKET 4

Here we getting warning about purchase order quantity due to insufficient quantity receive i.e. lesser than ordered. The system gives an warning about that.

Display logs			
Typ	Item	Message text	LTxt
!	1	Deficit of PU Ordered quantity 100,000 BBL : 600000000000000024 RPL1 ...	?
!	1	Material 600000000000000024 does not exist in warehouse RWH	?

This ticket is due to not assign the complete warehouse setup in Warehouse Management field.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Assignment → Logistics Execution → Assign warehouse number to plant/storage location → Position → Plant code

T Code – OML2

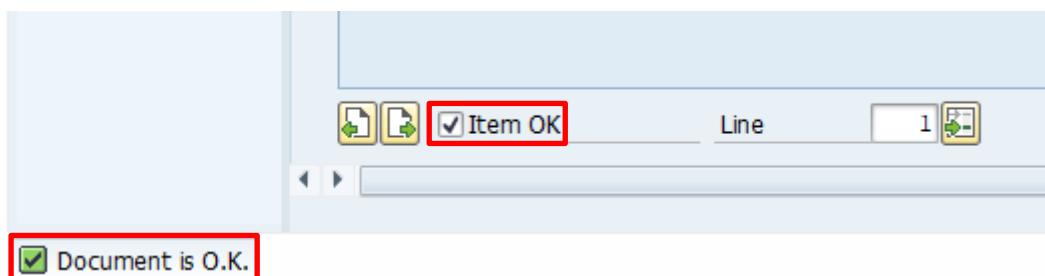
Change View "MM-IM Storage Location <-> LE-WM Warehouse Number":				
New Entries				DELETE
Plnt	SLoc	W..	Warehouse no. description	
RPL1	RFG	RWH	RELIANCE WAREHOUSE	
RPL1	RRM	RWH	RELIANCE WAREHOUSE	

In the field select the storage locations of the plant and delete the entries or we need to define and assign all the warehouse field.

This screenshot shows the SAP Goods Receipt (GR) screen. At the top, there are fields for 'Qty in Unit of Entry' (1.500,000 BBL) and 'Qty in SKU' (1.500,000 BBL). Below these are 'Ordered Quantity' and 'Received Quantity' fields, both currently empty. Further down is a 'Quantity Ordered' field containing '1.500,000 BBL'. In the bottom right corner of the main area, there is a message box with a red border containing the text 'You have not flagged any items as OK'. At the very bottom of the screen, there is a toolbar with several icons. One icon, labeled 'Item OK' with a checkbox, is highlighted with a red circle. Another message box at the bottom left also has a red border and contains the text 'Document is O.K.'.

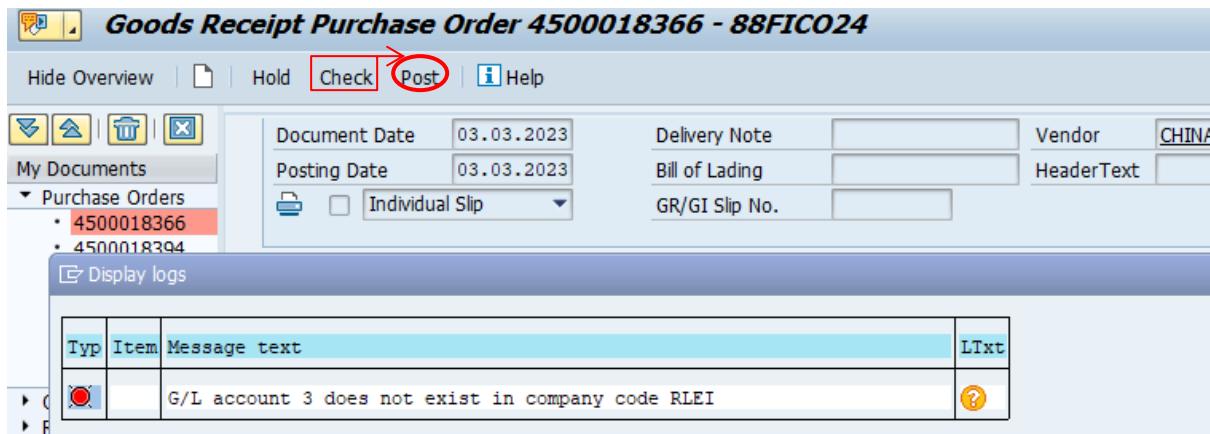
Next the system shows an entry missing message due to any unchecked fields in the Goods Receipt Screen.

We need check the item ok after specifying the quantity received click on the box to confirm the same.



Then finally click on check icon and the system shows document is ok which means that errors related to GR has been rectified and we can proceed for posting the Goods Receipt.

TICKET 5



When we click on post icon for posting the document the next ticket issued.

This ticket is based on FICO team for specifying the General Ledger account for our client company.

General Ledger (G/L) accounts are used to provide a picture of external accounting and accounts and to record all the business transactions in a SAP system. This is fully integrated with all the other operational areas of a company and ensures that the accounting data is always complete and accurate.

Most commonly used GLs are revenues, expenses and transfers. A “chart of accounts” is a complete listing of every account in an accounting system. It also specifies the account to be debited & credited.

CREATING & MAPPING THE G/L ACCOUNT WITH COCD

SAP Menu → Accounting → Financial Accounting → General ledger → Master Records → G/L Accounts → Individual Processing → FS00 – Centrally.

T Code – FS00

In the field G/L Account, enter the account number of G/L account and the company code key and click the Create icon as shown in the following screenshot.

1. G/L account type – Each account categories responsible for every individual transaction like gross price, freight, duties etc.... here the account type os purchase account.

2. Company code

3. Then click on create icon to proceed further

4. We need to enter the details of control data & Field status group in create bank / interest field.

Edit G/L Account Centrally

G/L Account: 3 Miscellaneous Purchase A/c (highlighted with red box)

Company Code: RLEI RELIANCE INDUSTRIES LTD (highlighted with red box)

Create icon (highlighted with red circle)

Tab navigation: Type/Description, Control Data, **Create/bank/interest**, Key word/translation (highlighted with red box)

Control in chart of accounts section:

- Account Group: (dropdown menu)
- P&L statement acct
- Detailed control for P&L statement accounts
- Functional Area: (dropdown menu)
- Balance sheet account

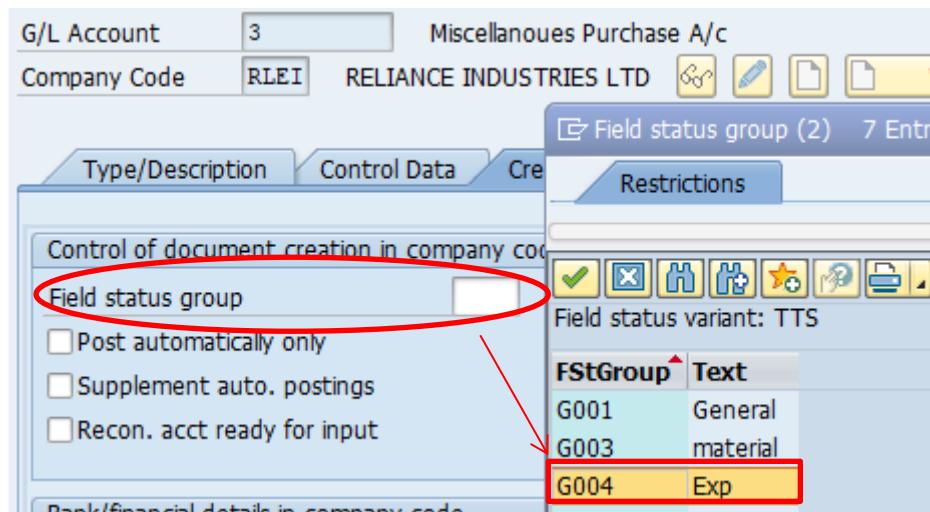
Control Data tab (highlighted with red box):

Account control in company code:

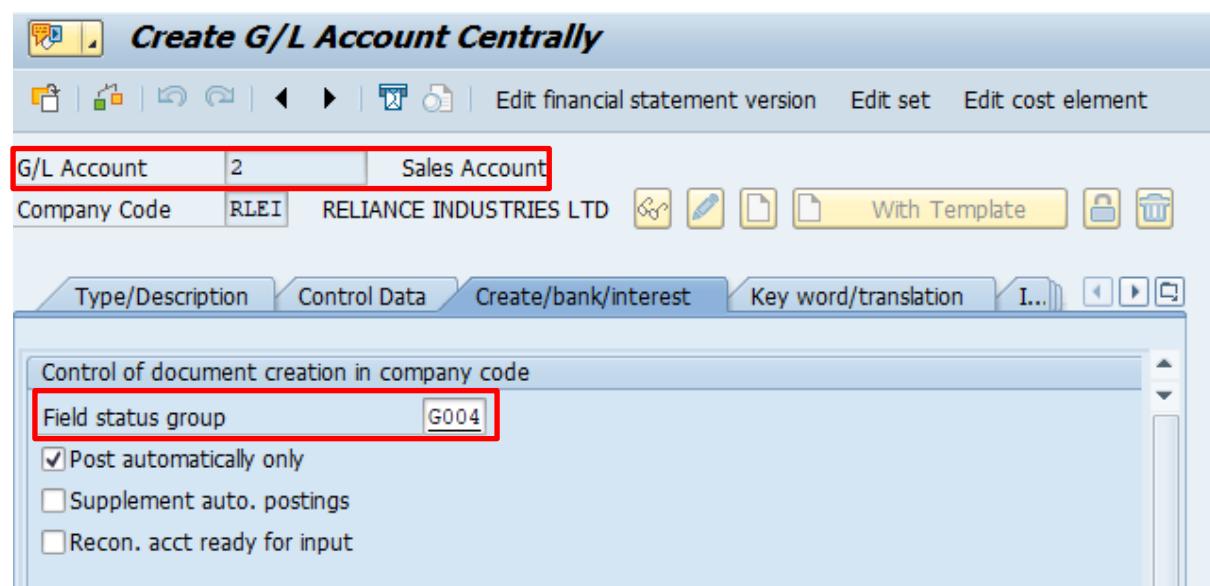
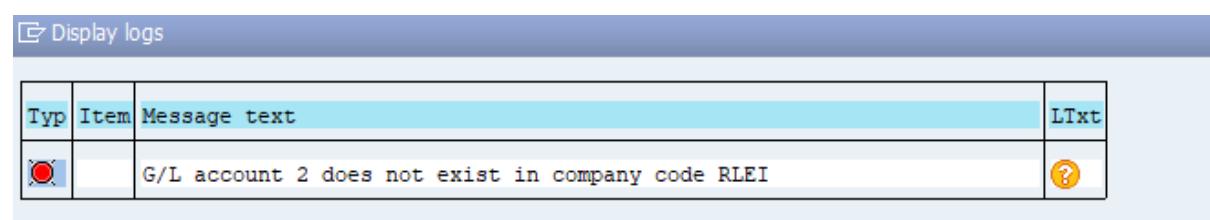
Account currency: INR Indian Rupee (highlighted with red box)

In the control data field we need to provide the currency to be handled with the accounting function.

Finally In the field status group we need to clarify the particular transaction as their nature of occurrence like if we purchase material I willl be debited from the company account so it is expenses. Hence we need to calrify as G004 – Expenses.



TICKET 6



Same procedure as for previous G/L account 3.

TICKET 7

Typ	Item	Message text	LTxt
●		For object RF_BELEG RLEI, number range interval 50 does not exist FBN1	?

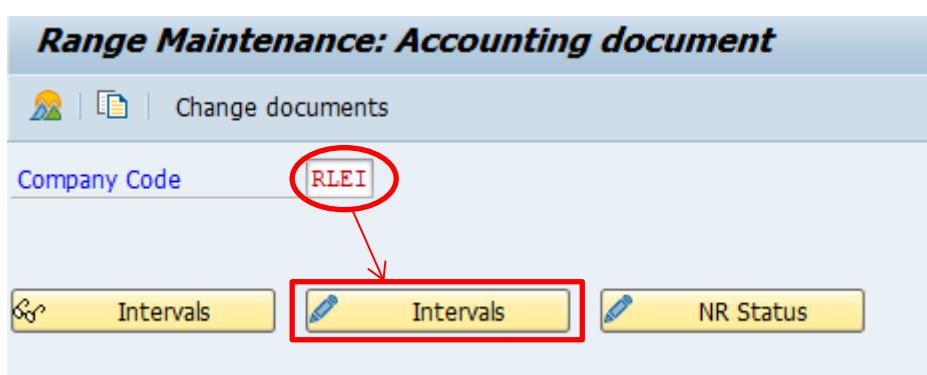
In FBN1, You have to maintain the entry for the combination of Number range 50 and the Current Fiscal Year (the Year in which you are trying to post the MIGO Document).

This indicates that the number range for yyyy in that company (RLEI) code is not yet available. In which the entries will be saved for the created accounting documents. FBN1 is used for setting up accounting document number range.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Financial Accounting → Financial Accounting Global Settings → Document → Document Number Ranges → Define Document Number Ranges → Edit – Intervals.

T Code – FBN1

Now Enter the company code and click on edit interval icon.



Next in the table enter the number range code as 50 & provide the current fiscal year as 2023 in the year field. Also specify the from & to number ranges for

posting the doc between then. NR status specifies the no of document being generated for the particular accounting range field.

Still now we have Posted one document & it has been shown in NR status field.

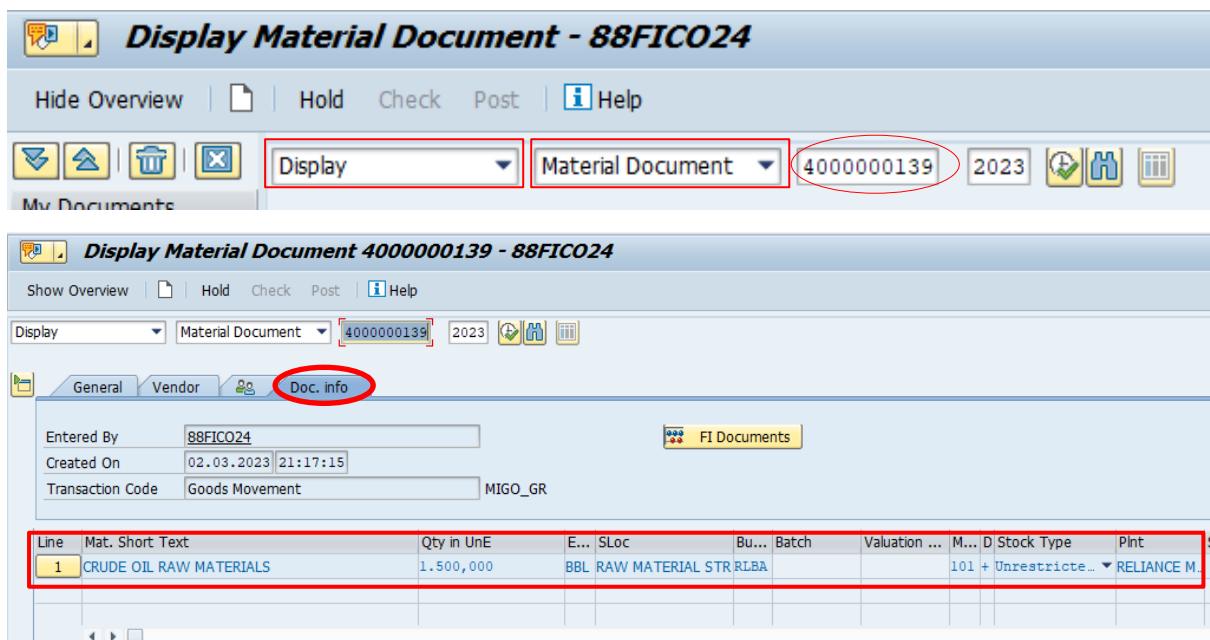
<i>Interval Maintenance: Number Range Object Accounting document,</i>			
Fiscal Year	Interval Range	No of doc posted still	
N. Year 50 2023	From No. 5000000000	To Number 5999999999	NR Status 5000000001

Now we can click on Post icon and it shows Material document is Posted. And we can able to see our posted material document under my documents in overview tab.

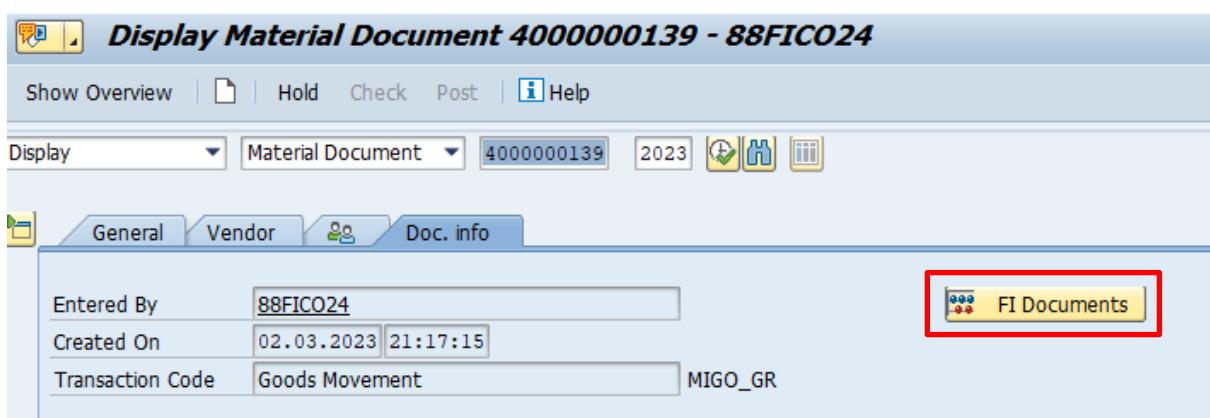
The screenshot shows the SAP Goods Receipt Purchase Order interface for purchase order 88FICO24. The top navigation bar includes 'Hide Overview', 'Hold', 'Check', and a circled 'Post' button. The main area displays general document information: Document Date (03.03.2023), Posting Date (03.03.2023), Delivery Note, Bill of Lading, HeaderText, and a dropdown for Individual Slip or GR/GI Slip No. Below this is a table for entering material details, with columns for Line, Mat. Short Text, OK, Qty in UnE, E..., SLoc, and Batch. At the bottom of the table are buttons for 'New', 'Delete', 'Contents', and 'Print'. A message bar at the bottom states 'Material document 4000000139 posted' with a checkmark icon.

To View the posted document proceed by changing the document type as Display & through source document by Material document. Here we need to give the generated material document number. & click on document info.

Material document consist of data about vendor, material & how much quantity received, plant, date of delivery, storage location, movement type & stock type.



Next we need to view the price details & accounting transaction related data by clicking on FI Documents field.



It consists of different transaction accounts where all the transactions are executed respectively one account debited and other account will be credited.

Display Document: Data Entry View

Display Currency General Ledger View

Data Entry View		Finance Document No	
Document Number	5000000000	Company Code	RLEI
Document Date	03.03.2023	Posting Date	03.03.2023
Reference		Cross-Comp.No.	
Currency	INR	Texts exist	<input type="checkbox"/>
		Ledger Group	

Co...	Itm	PK	G/L Account	Account	Description	Amount	Curr.	Tx	Acc...	D	Amount in LC
RLEI	1	89	3	3	Misc Purchase	22.500.000.000,00	INR	M	S		22.500.000.000,00
	2	96	2	2	Sales A/c	6.682.500,00-	INR	S	H		6.682.500,00-
	3	93	2	2	Sales A/c	22.493.117.025,00-	INR	S	H		22.493.117.025,00-
	4	50	2	2	Sales A/c	200.475,00-	INR	S	H		200.475,00-

INVOICE VERIFICATION

Every organization acquires goods or services to complete its business needs. Once goods are procured from a vendor and placed in company's premises through goods receipt, we need to pay to the vendor for the acquired goods and services.

From a Materials Management (MM) perspective, most of the procurement process ends with invoice verification, which concludes in payments being given to suppliers by the finance and accounting department in an organization. The amount to be paid along with the details of the material is provided by the vendor in the form of a document that is known as the invoice. Before paying to the vendor, we need to verify the invoice.

This process of verifying the invoice before making a payment is known as invoice verification. Invoice verification marks the end of procurement, after purchase order and goods receipt.

Posting of Invoice

Posting of invoice is done after having received the goods from the vendor and after having completed the goods receipt. The invoice received from a vendor is verified against cost, quantity, and quality by the ordering party, and then the invoice is posted against that purchase order.

This is the phase where the vendor (seller) is paid from the company and reconciliation of the invoice and PO is accomplished. An invoice is a most important and legal document that a supplier sends as a record of Materials supplied or external services performed. Invoice verification contains the item price, input taxes, freight charges, discounts, and terms of payment.

Purchasing departments are responsible for the verification of an invoice with reference to purchase order (PO) and goods receipt (GR) and then after successful verification they can post it and finally, the finance and accounting departments can process the payment to the vendor.

TYPES OF LOGISTICS INVOICE VERIFICATION

1. Purchase order (PO)-Based Invoice verification –

In this scenario the system allows invoice posting with reference to a PO, even though materials haven't yet been delivered. The line items of the PO must be copied into the invoice posting screen at the time of invoice verification in SAP system.

2. Goods receipt (GR) based Invoice verification

In goods receipt (GR) based Invoice verification, the SAP system allows us to post invoices only after the goods receipt (GR) has been posted in the system and invoices are exactly equal with the received quantity of a purchase order (PO). For multiple deliveries, the SAP system can supply each delivery on a separate line.

3. Subsequent debit

This scenario is used when the correction kind of payment vendor has sent to us an invoice to pay as additional charges after some few months of the payment due to different reasons like abrupt change in material price, freight charges, toll charges etc.

4. Subsequent credit

Whenever we want to charge or receive the correction kind of payment from the vendor then we will create subsequent credit. For example we want to charge the amount from the vendor about poor performance of materials or some devices which were brought from the vendor a few months back and also the payment was done then in this case we can create subsequent credit.

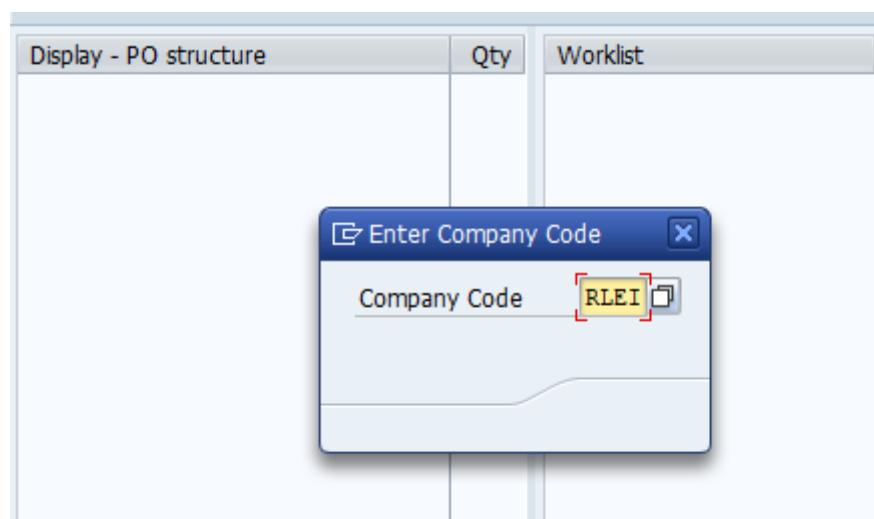
5. Credit memo

This scenario is used when we want or charge money from the vendor due to different reasons like not delivered on time, material being damaged. For example we have received the materials from the vendor and we identified all the materials or some of the materials are damaged due to some reason then we have decided to return the materials back to the vendor so in this case we will create a credit memo for the materials amount equal to the return materials.

Different account entries for invoice verification.

Invoice Verification	Invoice Verification	Credit memo	Subsequent debit
Vendor account – Credit	Vendor account – Debit	Vendor account – Credit	Vendor account – Debit
GR/IR clearing account – Debit	GR/IR clearing account – Credit	Stock or Inventory account – Debit	Stock or Inventory account – Credit
Input tax account – Debit	Input tax account – Credit	Input tax account – Debit	Input tax account – Credit

SAP Menu → Logistics → Materials Management → Logistics Invoice
Verification → Document Entry → MIRO - Enter Invoice
T Code – MIRO



Provide the company code and proceed further.

Enter Incoming Invoice: Company Code RLEI

Show PO structure Show worklist | Hold Simulate | Messages Help

Transaction	Invoice	Balance	0,00
Diff. Posting	Not Applicable		

Basic Data Payment Details Tax Contacts Note

Invoice date	08.03.2023	Reference	
Posting Date	08.03.2023		
Amount	<input type="text"/>	<input type="button"/>	<input checked="" type="checkbox"/> Calculate tax
Tax amount	0,00	<input type="button"/>	
Bus.place/sectn	<input type="text"/> / <input type="text"/>		
Text <input type="text"/>			
Baseline Date			
Company Code	RLEI RELIANCE INDUSTRIES LTD MAHARASTRA		

PO Reference G/L Account Material Contract Reference

Vendor	<input type="text"/>			All information									
Item	Amount	Quantity	O... Purchase ...	Item	PO Text	Outline A							
<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>													

Item Search Term 0 / 0 Items

Pay attention to the information on the top right side of the screen named Balance. It will play a very important role later. At this stage of our entry, the balance light as depicted in the following screen shot is red.

When you fetch the PO the corresponding amount will be shown in the balance if the value does not exceed the tolerance limit.

When you click on the vendor no tab you will get the following tab to execute the particular purchase order document for which you need to do Invoice Verification. Then provide the details & click on execute it will take you to vendor & material details of PO. Then finally choose the document and proceed.

Possible Entries for Purchasing Document

Invoicing Party	<input type="text"/>	<input type="button" value=""/>
Vendor	1000200015	to <input type="text"/> <input type="button" value=""/>
<input checked="" type="checkbox"/> Different Inv. Party Too		
Company Code	RLEI	<input type="button" value=""/>
Document Date	<input type="text"/>	to <input type="text"/> <input type="button" value=""/>
Document Number	<input type="text"/>	to <input type="text"/> <input type="button" value=""/>
<input checked="" type="checkbox"/> POs		
<input checked="" type="checkbox"/> Sched. agmts		
Plant	RPL1	to <input type="text"/> <input type="button" value=""/>
Material	<input type="text"/> to <input type="text"/> <input type="button" value=""/>	<input type="button" value=""/>
Vendor Material No.	<input type="text"/> to <input type="text"/> <input type="button" value=""/>	<input type="button" value=""/>

Possible Entries for Purchasing Document (1 selected)

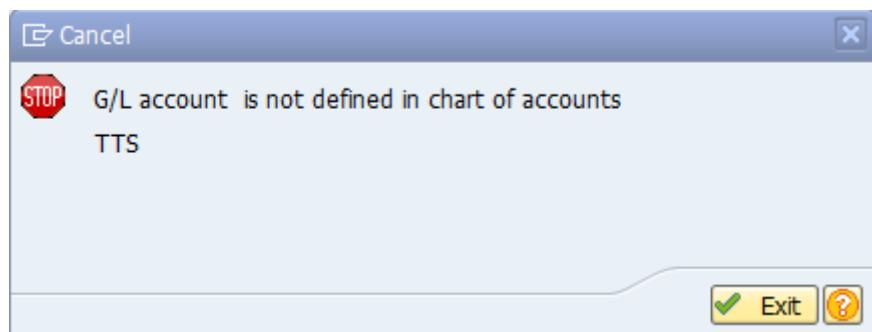
Box Purch. Doc.	Order Type	Description	PO Date	Plnt	Open Amount	Crcy	Vendor	Inv. Party
Purch. Doc.	Item	Material	Short Text		R	Open Quantity	BUn	
4500018421	NB	NB - Standard PO	09.03.2023	RPL1	4.800.000,00	INR	1000200015	1000200015
4500018421	00030	600000000000000024	CRUDE OIL RAW MATERIALS		100,000	BBL		

Detail: Display

Column	Contents
Purchasing Doc.	4500018421
Item	00030
Material	600000000000000000024
Short Text	CRUDE OIL RAW MATERIALS
Open Quantity	100,000
Base Unit of Measure	BBL

The above shown PO will be fetched for doing invoice verification. Hence we cannot do any posting in Invoice only finance team will have complete access.

TICKET 1



The general ledger (GL) is the bookkeeping system used to record the financial transactions an agency or organization conducts. It is on the GL that all accounting/financial entries are found, and that information is used to create financial statements.

Here we need to create reconciliation account for the vendor group.

CHECKING IN OBYC

In the configuration transaction check for assignment of G/L accounts to the chart of accounts.

Configuration Accounting Maintain : Automatic Posts - Accounts			
		Posting Key	Procedures
Chart of Accounts		TTS	Chart of Account of TTS for MM
Transaction		WRX	GR/IR clearing account

Account assignment

General m...	Valuation class	Debit	Credit	
	3000	1	2	
	7900	1	2	
	AR02	1	2	

CHECKING IN G/L ACCOUNT GROUPS

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Enterprise Structure → Definition.

T Code – OBD4

Here we can check for no of G/L account group created to the chart of accounts.

Change View "G/L Account Groups": Overview					
Field status		New entries	Print field status		
Chrt/Accnts	Acct Group	Name	From acct	To account	
TTS	MMAC	Material Management A/c of TTS	1	999	

CREATING A RECONCILIATION ACCOUNT

Reconciliation accounts are the vehicle that links sub ledger accounts, like accounts payable, accounts receivable, and fixed asset accounts back to the general ledger. Every sub ledger account has to link back to a reconciliation account.

SAP Menu → Accounting → Financial Accounting → General ledger → Master Records → G/L Accounts → Individual Processing → FS00 – Centrally.

T Code – FS00

Display G/L Account Centrally

G/L Acct	CoCd	Long Text
1	RLEI	Raw Material Purchase A/c
2	RLEI	Sales Account
3	RLEI	Gross Purchase

G/L Account Company Code RLEI RELIANCE INDUSTRIES LTD

Type/Description Control Data Create/bank/interest Key word/translation I... Edit set Edit cost element With Template Lock Delete

Control in chart of accounts

Account Group Material Management A/c of TTS

P&L statement acct
Detailed control for P&L statement accounts

Balance sheet account

Description

Short Text VENDOR RECONCILATI...
G/L Acct Long Text VENDOR RECONCILIATION ACCOUNT

Consolidation data in chart of accounts

Trading Partner

The screenshot shows the SAP FS00 - Centrally window. At the top, there's a table titled 'Display G/L Account Centrally' with columns 'G/L Acct', 'CoCd', and 'Long Text'. The table contains three rows with values 1, RLEI, Raw Material Purchase A/c; 2, RLEI, Sales Account; and 3, RLEI, Gross Purchase. Below the table, the 'G/L Account' field is highlighted with a red box and contains the value '4'. To the right of this field is a dropdown for 'Company Code' set to 'RLEI' and 'RELIANCE INDUSTRIES LTD'. Below these are several tabs: 'Type/Description', 'Control Data', 'Create/bank/interest', 'Key word/translation', and 'I...'. Under 'Control Data', there are sections for 'Control in chart of accounts' (with 'Account Group' set to 'Material Management A/c of TTS') and 'Description' (with 'Short Text' and 'G/L Acct Long Text' both containing 'VENDOR RECONCILIATION ACCOUNT'). At the bottom, there's a section for 'Consolidation data in chart of accounts' with a 'Trading Partner' field.

G/L Account 4 Company Code RLEI RELIANCE INDUSTRIES LTD With Template

Type/Description Control Data Create/bank/interest Key word/translation I...

Account control in company code

Account currency INR Indian Rupee
 Only balances in local curr.

Exchange rate difference key
 Valuation group
 Tax category
 Posting without tax allowed

Recon. account for acct type **Vendors** (highlighted with red box)

Alternative account no.
 Acct managed in ext. system
 Inflation key
 Tolerance group

Account Management in Company Code

Open item management
 Line item display
Sort key 001 Posting date
Authorization Group

G/L Account 4 Company Code RLEI RELIANCE INDUSTRIES LTD With Template

Type/Description Control Data Create/bank/interest Key word/translation I...

Control of document creation in company code

Field status group **G067 Recon** (highlighted with red box)

Post automatically only
 Supplement auto. postings
 Recon. acct ready for input

PROVIDE RECONCILIATION ACCOUNT FOR THE VENDOR

SAP Menu → Logistics → Materials Management → Purchasing → Master Data → Vendor → Central → XK02 – Change

T Codes – XK02

Change Vendor: Accounting information Accounting

Vendor 1000200015 ROSNEFT OIL COMPANY
 Company Code RLEI RELIANCE INDUSTRIES LTD

Accounting information

Recon. account	4	Sort key	
Head office		Subsidy indic.	
Authorization		Cash mgmnt group	A2 Foreign
Minority indic.		Release group	
		Certificatn date	

Reconciliation acct (5) 1 Entry found

Restrictions

G/L Acct Long Text

4 VENDOR RECONCILIATION ACCOUNT

Enter Incoming Invoice: Company Code RLEI

Show PO structure Show worklist Hold Simulate Messages Help

Transaction Invoice Balance 4.800.000,00- INR

Diff. Posting Not Applicable

Basic Data

Invoice date 22.03.2023 Reference
 Posting Date 22.03.2023
 Amount INR Calculate tax
 Tax amount /
 Bus.place/sectn /
 Text
 Paymt terms Due immediately
 Baseline Date 22.03.2023

Vendor 1000200015

Company ROSNEFT OIL COMPANY RUSSIA RUS-
 123456789 Bank acct 142800056781234567 AMBI-Bank OI

Purchase Order/Scheduling Agreement 4500018421 Layout Goods/service items All information

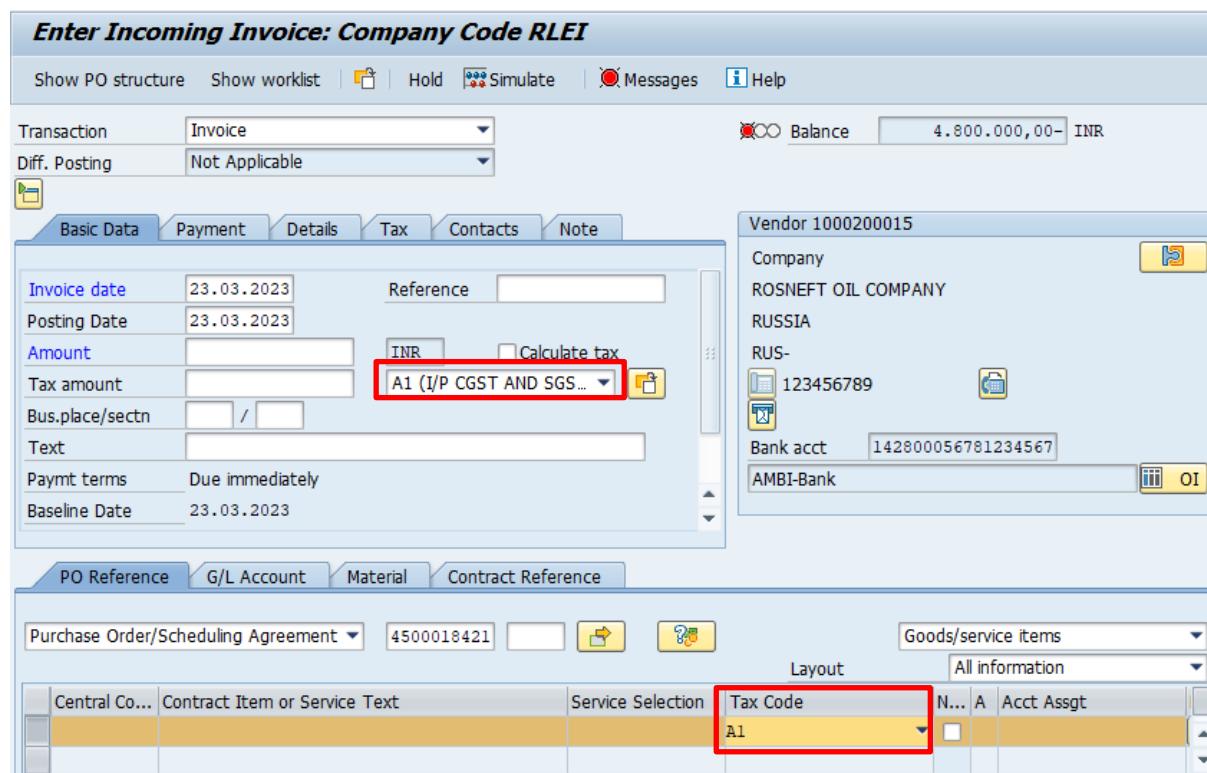
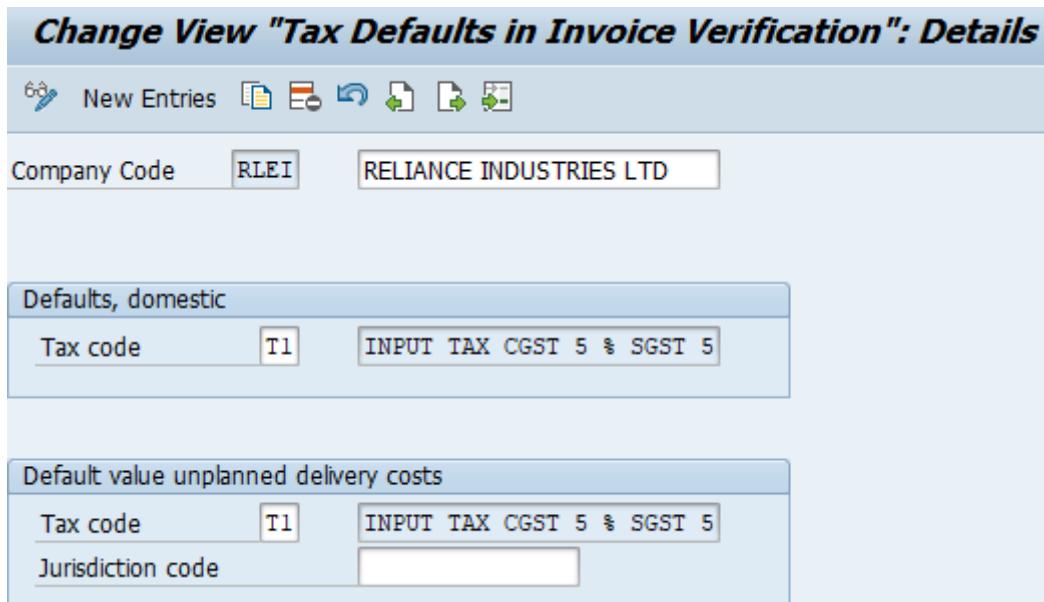
Item	Amount	Quantity	O...	Purchase ...	Item	PO Text	Outline A
1	4.800.000,00	100,000 BBL		4500018421	30	CRUDE OIL RAW MATERIALS	

Still the error proceeds.

CREATING TAX CODE

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Materials Management → Logistics Invoice Verification → Incoming Invoices → Maintain Default Values for tax codes.

T Code – OMR2



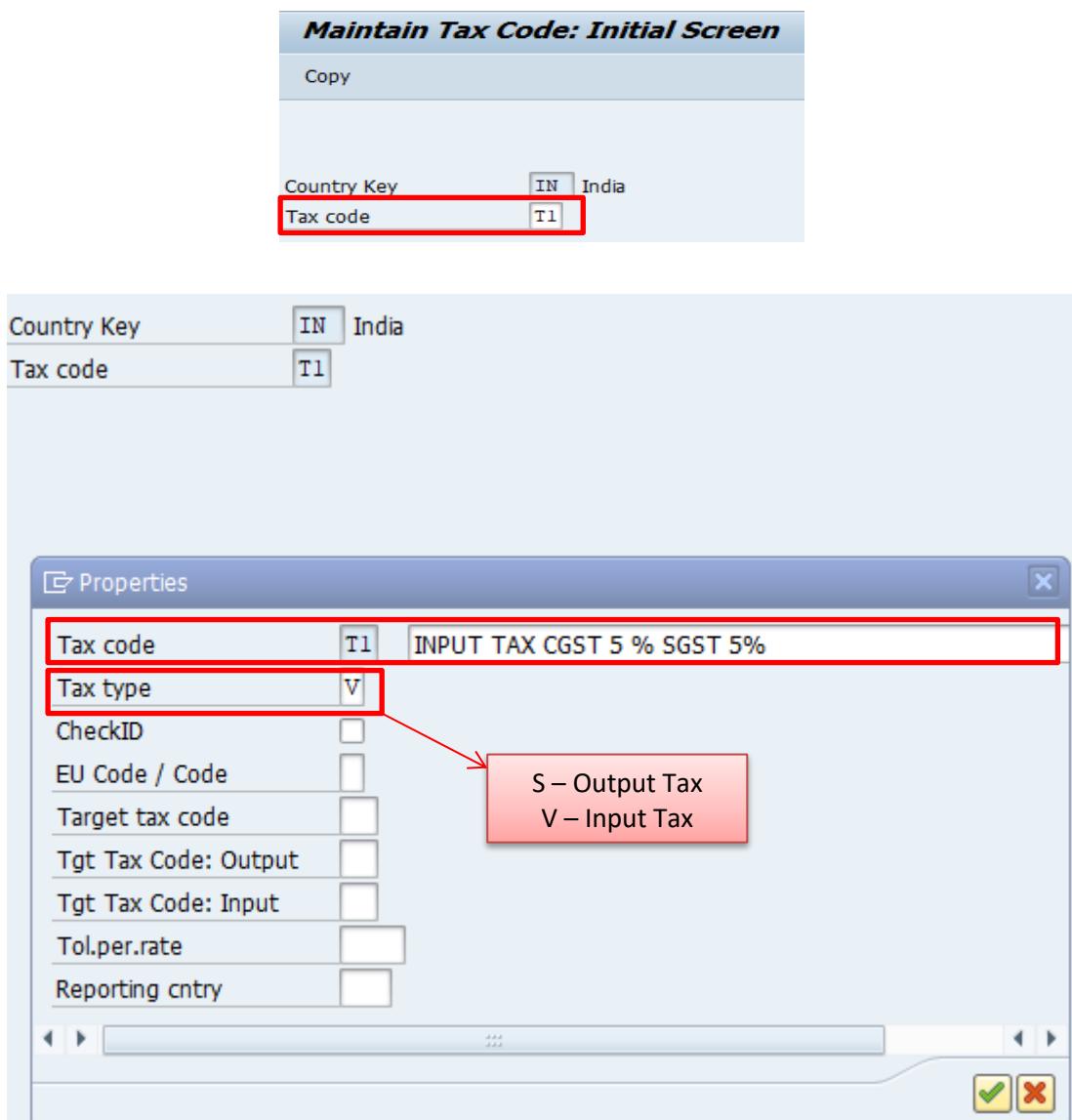
TICKET 2

Tax code A1 in procedure 67GST is invalid

Message no. FICORE704

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Logistics General → Tax on goods movement → India → Basic Settings → Determination of excise duty → Condition based excise determination → Define Tax code for Purchasing Documents.

T Code - FTXP



Maintain Tax Code: Tax Rates

Properties Tax accounts Deactivate line

Country Key	IN	India
Tax code	T1	INPUT TAX CGST 5 % SGST 5%
Procedure	67GST	
Tax type	V	Input tax

Percentage rates

Tax Type	Acct Key	Tax Percent. Rate	Level	From Lvl	Cond. Type
Base Amount			1	0	BASB
IP CGST CT of 67GB	601	5,000	2	1	67CI
IP SGST CT of 67GB	602	5,000	3	1	67SI
IP IGST CT of 67GB	603	1,000	4	1	67II
OP CGST CT of 67GB	604	10,000	5	1	67CO
OP SGST CT of 67GB	605	10,000	6	1	67SO
OP IGST CT of 67GB	606	1,000	7	1	67IO

Provide the tax rate for central, state & integrated level.

SPECIFYING TAX CODE IN PO

NB - Standard PO 4500018421 Created by 88FICO24

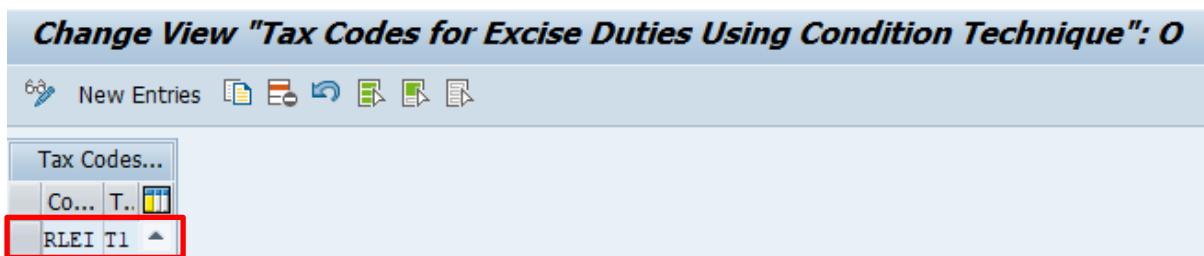
Document Overview	On	Print Preview	Messages	Personal Setting	Save As Template	Load from Template								
NB - Standard PO	4500018421	Vendor	1000200015 ROSNEFT OIL COM...	Doc. date	09.03.2023									
Header														
S..	Itm	A	I	Material	Short Text	PO Quantity	O...	C Deliv. Date	Net Price	Curr...	Per	O...	Matl Group	Plnt
	30			60000000000...	CRUDE OIL RAW MATERI...	100,000 BBL	D	14.03.2023	72.000.000,00	INR	1.500	BBL	Industrial Ma...	RELIANCE MANUF...
										INR				
										INR				
										INR				
										INR				
										INR				
										INR				
										INR				
										INR				
Item	[30] 60000000000000024 , CRUDE OIL RA...	Addl Planning												
<input checked="" type="checkbox"/> Inv. Receipt Tax code T1 Taxes														
<input type="checkbox"/> Final Invoice														
<input checked="" type="checkbox"/> GR-Bsd IV														
DP Category <input type="text"/>														
Differential Invoicing <input type="text"/> Not Relevant														

TICKET 3

Tax code T1 in procedure HHGST is invalid

We need to assign the tax code to company code is required in the following path.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Logistics General → Tax on goods movement → India → Basic Settings → Determination of excise duty → Condition based excise determination → Assign Tax code to company code.



TICKET 4

Verification log - invoice / 2023		
Typ	Message text	LTxt
	Error in determining posting key T030B account key 641	

This ticket is based on maintaining the accounting & posting key in the configuration account maintain.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Financial Accounting → Financial Accounting Global Settings (New) → Tax on Sales/Purchases → Posting → Define Tax Accounts

T Code - OB40

Configuration Accounting Maintain : Automatic Posts - Procedures

Procedures		
Description	Transaction	Account determ.
IP CGST A/c Key NA27	641	<input checked="" type="checkbox"/>

Configuration Accounting Maintain : Automatic Posts - Accounts

Chart of Accounts	TTS	Chart of Account of TTS for MM
Transaction	641	IP CGST A/c Key NA27
Account assignment		
Account	1	  

Configuration Accounting Maintain : Automatic Posts - Posting Keys

Accounts	Rules
Transaction	641 IP CGST A/c Key NA27
Posting Key	
Debit	40
Credit	50

Where 40 for G/L Debit & 50 is for G/L Credit.

TICKET 5

Verification log - invoice / 2023		
Typ	Message text	LTxt
	Error in determining posting key T030B account key 642	

Configuration Accounting Maintain : Automatic Posts - Procedures

Group	TX Taxes on sales/purchases	
Procedures		
Description	Transaction	Account determ.
IP SGST A/c Key NA27	642	<input checked="" type="checkbox"/>

Configuration Accounting Maintain : Automatic Posts - Posting Keys

◀ ▶ Accounts Rules	
Transaction 642 IP SGST A/c Key NA27	
Posting Key	
Debit	40
Credit	50

TICKET 6

Maintaining tolerance limit for the invoice price variation.

Verification log - invoice / 2023		
Typ	Message text	LTxt
	Maintain tolerance limits for tolerance key BD (CoCode RLEI)	

T Code OMR6

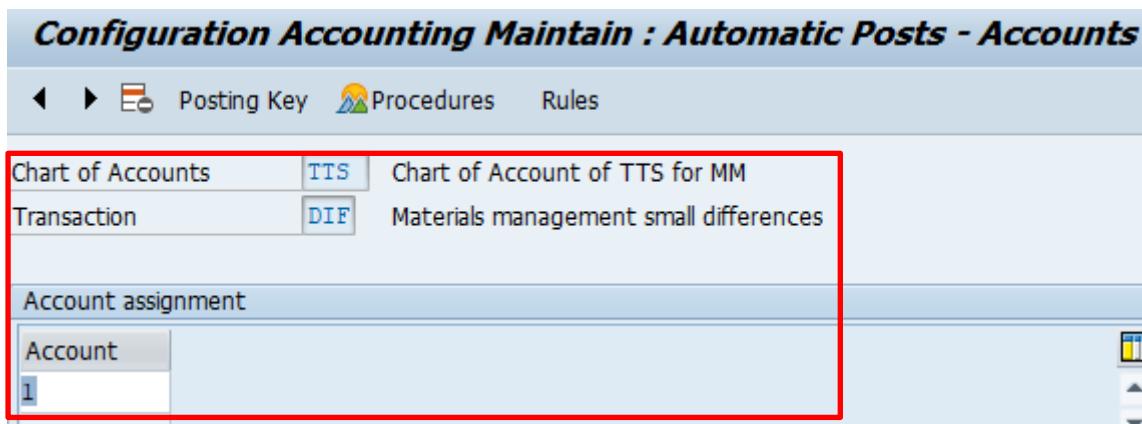
New Entries: Details of Added Entries	
Tolerance key	BD Form small differences automatically
Company Code	RLEI RELIANCE INDUSTRIES LTD
Amounts in	INR Indian Rupee
Upper Limit	
<input checked="" type="radio"/> Absolute <input checked="" type="radio"/> Do not check <input type="radio"/> Check limit Val. 100,00	

TICKET 7

Verification log - invoice / 2023		
Typ	Message text	LTxt
●	Account determination for entry TTS DIF not possible	?

T Code – OBYC

In the configuration account maintenance screen provide the transaction key as DIF and specify the account category.



The account entering here will be taken for account to be debited & G/L account to be credited in Invoice verification.

TICKET 8

There is no item category assigned to account 6/TTS

Message no. GLT2076

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Financial Accounting → Financial Accounting Global Settings (New) → General Ledger Account New → Business Transactions → Document Splitting → Classify G/L Accounts for Document Splitting

New Entries: Overview of Added Entries					
Chart of Accts		TTS		Vendor Group	
	Acct from	Account to	Overrd.	Cat.	Description
6	6	<input type="checkbox"/>	20000	Vendor	

Enter Incoming Invoice: Company Code RLEI

Show PO structure Show worklist | Hold **Simulate** | Messages Help

Transaction: Invoice | Balance: 4.800.000,00- INR

Diff. Posting: Not Applicable

Basic Data

Invoice date	25.03.2023	Reference	
Posting Date	25.03.2023		
Amount	INR	<input type="checkbox"/> Calculate tax	
Tax amount	A1 (INPUT TAX 3%)		
Bus.place/sectn	/		
Text:			
Paymt terms	Due immediately		
Baseline Date	25.03.2023		

Vendor 1000200015

Company: ROSNEFT OIL COMPANY
RUSSIA
RUS-
123456789
Bank acct: 142800056781234567
AMBI-Bank O1

G/L Account

Purchase Order/Scheduling Agreement	4500018421				Goods/service items		
				Layout	All information		
Item	Amount	Quantity	O...	Purchase ...	Item	PO Text	Outline A
1	4.800.000,00	100,000 BBL		4500018421	30	CRUDE OIL RAW MATERIALS	

Items

Finally we can see a green signal for posting the invoice in balance field, then click on stimulate. Here Raw material purchase account is credited & vendor account is debited.

Simulate Document in INR (Document currency)											
Position	A/G/L	Act/Mat/Ast/Vndr	Amount	Cu...	Purchasing...	Item	T...	Jurisd. Code	Tax date	Bu...	Co...
2 S 1	Raw Material Purchase...		4.800.000,00	INR	4500018421	30	A1			RLBA	
3 S 6	VENDOR ACCOUNT		4.800.000,00	-INR			A1			RLBA	

Document no. 5105609352 created

DISPLAY INVOICE DOC

SAP Menu → Logistics → Materials Management → Logistics Invoice Verification → Further Processing → MIR4 - Display Invoice Document

T Code - MIR4

Itm	PK	L.item	G/L Account	Account	Description	Amount	Curr.	Tx	Acc..	D	Amount in LC
1	86	000001	1	1	Raw Material Pur	4.800.000,00	INR	A1	S	S	4.800.000,00
2	50	000002	6	6	VENDOR ACCOUNT	4.800.000,00	INR	A1	S	H	4.800.000,00

VERIFYING THE POSTED INVOICE THROUGH PO HISTORY

T Code – ME23N DISPLAY PO

Sh. Text	MvT	Material Document	Item	Posting Date	Σ Quantity	Delivery cost quantity	OUn	Σ Amount in LC	L.cur	Qty in OPUn	DeCostQty (OPUn)	Order Price Unit	Σ Am
BzWE		4000000181		1 09.03.2023	0,000	100,000	BBL	480.000,00	INR	0,000	100,000	BBL	480.000
Tr./Ev. Delivery costs					0,000		BBL	480.000,00	INR	0,000		BBL	480.000
WE	101	4000000181		1 09.03.2023	100,000	0,000	BBL	4.800.000,00	INR	100,000	0,000	BBL	4.800.000
Tr./Ev. Goods receipt					100,000		BBL	4.800.000,00	INR	100,000		BBL	4.800.000
RE-L		5105609352		1 25.03.2023	100,000	0,000	BBL	4.800.000,00	INR	100,000	0,000	BBL	4.800.000
Tr./Ev. Invoice receipt					100,000		BBL	4.800.000,00	INR	100,000		BBL	4.800.000

FOR CANCELING INVOICE DOCUMENT → T Code- MIR8M

INVOICE OVERVIEW → T Code - MIR6

MRBR - Release Blocked Invoices

MIR5 - Display List of Invoice Documents

INVENTORY MANAGEMENT

Procurement process starts with gathering requirements and ends with procuring goods from vendors. Once the goods are procured from a vendor, they need to be placed in the company's premises in correct place so that they can be consumed when required. Inventory management deals with placing and handling the stock received from the vendors in correct place within the company's premises.

Listed below are the points to note about inventory management

Inventory management deals with the management of stock on quantity basis.

It includes planning, entry, and keeping records of all the movements of goods.

Goods movement creates a document that updates all the stock quantity and value in the inventory that is known as the material document.



STOCK CHECKS



Stock checking is the process of systematically checking the quantity of the inventory. It gives the ability to understand the quality of stocks that a company currently has on hand if a company will meet the required production number and the demand of the customers.

STOCK OVERVIEW

SAP Menu → Logistics → **Material Management** → **Inventory Management** → **Environment** → **Stock** → **MMBE – Stock overview**.

T Code – MMBE

SAP MMBE (Stock overview) transaction is a tool that can be considered as a display field at any given moment of information about the stock situation of an individual material.

This snapshot informing an inventory user of a material status in SAP is also called stock overview transaction. It provides the material stock balance on every organizational level (client, company code, plant, storage location).

In this we need to provide the details about material number for which we need to check the inventory and plant code.

Stock Overview: Company Code/Plant/Storage Location/Batch

Database selections

Material	600000000000000024
Plant	RPL1
Storage location	
Batch	

Stock Type Selection

- Also Select Special Stocks
- Also Select Stock Commitments

List Display

- Special Stock Indicator
- Display version 1
- Display Unit of Measure
- No Zero Stock Lines
- Decimal Place as per Unit

Selection of Display Levels

- Company Code
- Plant
- Storage Location
- Batch
- Special Stock

It will display the stock of the material in particular storage location of respective plant.

It will display the material name, material type & the unit of measurement.

Stock Overview: Basic List

Selection

Material	600000000000000024	CRUDE OIL RAW MATERIALS
Material Type	ROHR	RLEI RAW MATERIALS
Unit of Measure	BBL	Base Unit of Measure BBL

Stock Overview

Client/Company Code/Plant/Storage Location/Batch/Special Stock	Unrestricted use	Qual. inspection	Reserved	Rcpt reservation	On-Order Stock	Consgt ...
Full	3,000,000				1,500,000	
RLEI RELIANCE INDUSTRIES LTD	3,000,000				1,500,000	
RPL1 RELIANCE MANUFACTURING PL-1	3,000,000				1,500,000	
RRM RAW MATERIAL STR	3,000,000				1,500,000	

We have ordered 4500 barrels. Received over 3000 barrels and ready for use, 1500 is not yet received from the vendor (Purchase order is in process stage).

It provides detailed information on the current stock levels, movement of stocks, and stock values for material, including:

Quantity in stock, total stock, Storage location, Stock type (unrestricted, blocked, etc.), Quantity in transit, stock levels for a specific plant, storage location, or batch and to view the history of stock movements for a particular material.

WAREHOUSE STOCK

SAP Menu → Logistics → Material Management → Inventory Management → Environment → Stock → MB52 – Warehouse Stock

T Code – MB52

Details to be given are Material number for which the quantities need to check in the storage location from the respective plant.

Display Warehouse Stocks of Material

Database Selections	
Material	6000000000000000000024
Plant	RPL1
Storage Location	
Batch	
Scope of List	
Material Type	
Material Group	
Purchasing Group	

Display Warehouse Stocks of Material								
Material SLoc SL	Material Description Unrestricted Unit Total Value Ccy	Transit/Transf. Total Value	Plnt Name 1					
			In Quality Insp.	Restricted-Use Total Value	Blocked Total Value	Returns Total Value		
600000000000000024 CRUDE OIL RAW MATERIALS			RPL1 RELIANCE MANUFACTURING PL-1					
RRM	3.000,000 BBL	0,000	0,000	0,000	0,000	0,000	0,000	0,000
	45.000.000.000,00 INR	0,00	0,00	0,00	0,00	0,00	0,00	0,00
* Total			0,00	0,00	0,00	0,00	0,00	0,00
45.000.000.000,00 INR								

We have 3000 barrels of crude oil which is been stored in the crude oil storage RRM at the reliance manufacturing plant 1. It amounts / value for about 45000000000 rupees.

PLANT STOCK

SAP Menu → Logistics → Material Management → Inventory Management → Environment → Stock → MB53 – Plant Stock Availability

T Code – MB53

In this we can see the availability of stocks under all the plant in company code. Provide material number and plant to view the stock.

PLANT 1 STOCKS

Plant Availability: Initial Screen

Plant Stock Availability	
Material	600000000000000024
Plant	RPL1

Display Format

Layout

Automatic Column Selection

Zero stocks

Plant Availability: 600000000000000024										
Material Number 600000000000000024										
Short Text CRUDE OIL RAW MATERIALS										
Display Unit BBL (Barrel)										
<table border="1"> <thead> <tr> <th>Plnt Name 1</th> <th>SLoc</th> <th>Unrestricted use</th> <th>On-Order Stock</th> </tr> </thead> <tbody> <tr> <td>RPL1 RELIANCE MANUFACTRING PL-1</td> <td>RRM</td> <td>3.000,000</td> <td>1.500,000</td> </tr> </tbody> </table>			Plnt Name 1	SLoc	Unrestricted use	On-Order Stock	RPL1 RELIANCE MANUFACTRING PL-1	RRM	3.000,000	1.500,000
Plnt Name 1	SLoc	Unrestricted use	On-Order Stock							
RPL1 RELIANCE MANUFACTRING PL-1	RRM	3.000,000	1.500,000							

From the above image we can understand that RPL1 plant has 3000 quantities of Crude oil barrel, & also there is an 1500 quantities ordered for this particular plant is not yet received from the supplier.

PLANT 2 STOCKS

Plant Availability: Initial Screen

Plant Stock Availability

Material	600000000000000024	to	<input type="button" value=""/>
Plant	RPL2		

Display Format

Layout

Automatic Column Selection
 Zero stocks

Plant Availability: 600000000000000024																		
Material Number 600000000000000024																		
Short Text CRUDE OIL RAW MATERIALS																		
Display Unit BBL (Barrel)																		
<table border="1"> <thead> <tr> <th>Plnt Name 1</th> <th>SLoc</th> <th>Unrestricted use</th> <th>Stck trans. (plnt)</th> <th>On-Order Stock</th> </tr> </thead> <tbody> <tr> <td>RPL2 RELIANCE MANUFACTRING PL-2</td> <td>RRM2</td> <td>250,000</td> <td>48,743</td> <td>500,000</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>0,000</td> </tr> </tbody> </table>				Plnt Name 1	SLoc	Unrestricted use	Stck trans. (plnt)	On-Order Stock	RPL2 RELIANCE MANUFACTRING PL-2	RRM2	250,000	48,743	500,000					0,000
Plnt Name 1	SLoc	Unrestricted use	Stck trans. (plnt)	On-Order Stock														
RPL2 RELIANCE MANUFACTRING PL-2	RRM2	250,000	48,743	500,000														
				0,000														

From the above image we come to know that there are 250 barrels which is readily available for production process, 48 barrels has ordered form another plant but not received yet, 500 quantities has been ordered (PO) but not yet received.

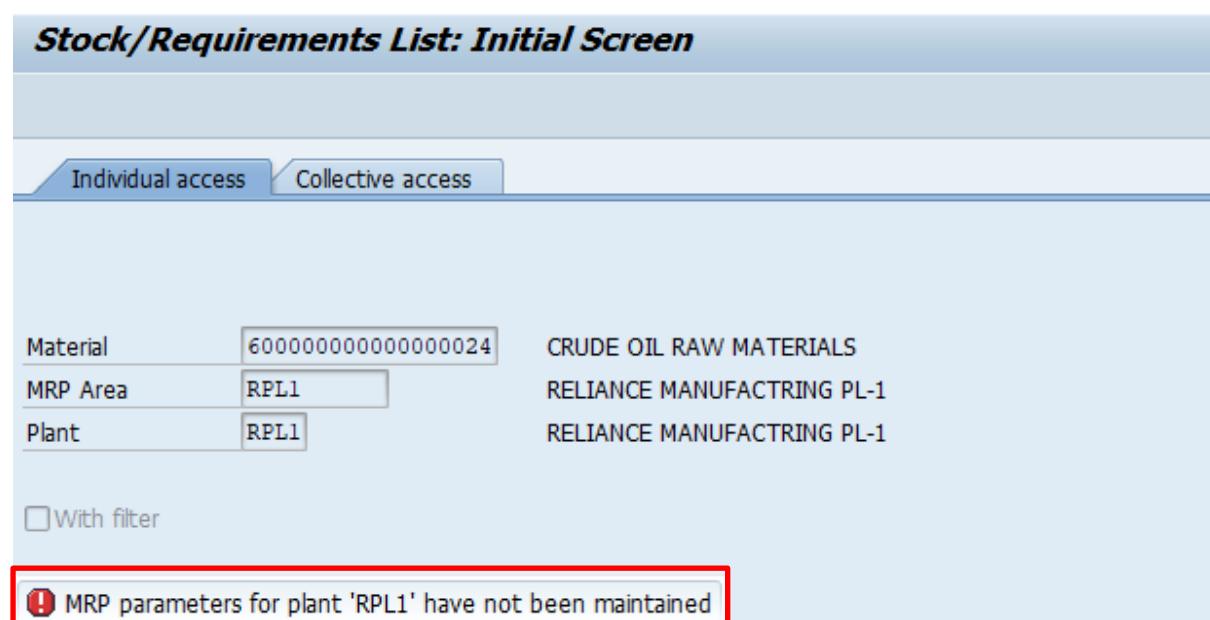
STOCK LIST / REQUIREMENT LIST

Stock Requirement List is a dynamic list, which shows the current status of requirements & sources for that material. So any changes in the procurements or needs will be shown in this list.

The stock requirement list displays various fields like Date, MRP Element, MRP Element data, Rescheduling date, exception message, Receipt/Requirement Quantity, Available quantity, storage location and production version. You can also display Vendor and customer.

SAP Menu → Logistics → Material Management → Inventory Management → Environment → Stock → MD04 – Stock / Requirements List

T Code – MD04



TICKET 1

 MRP parameters for plant 'RPL1' have not been maintained

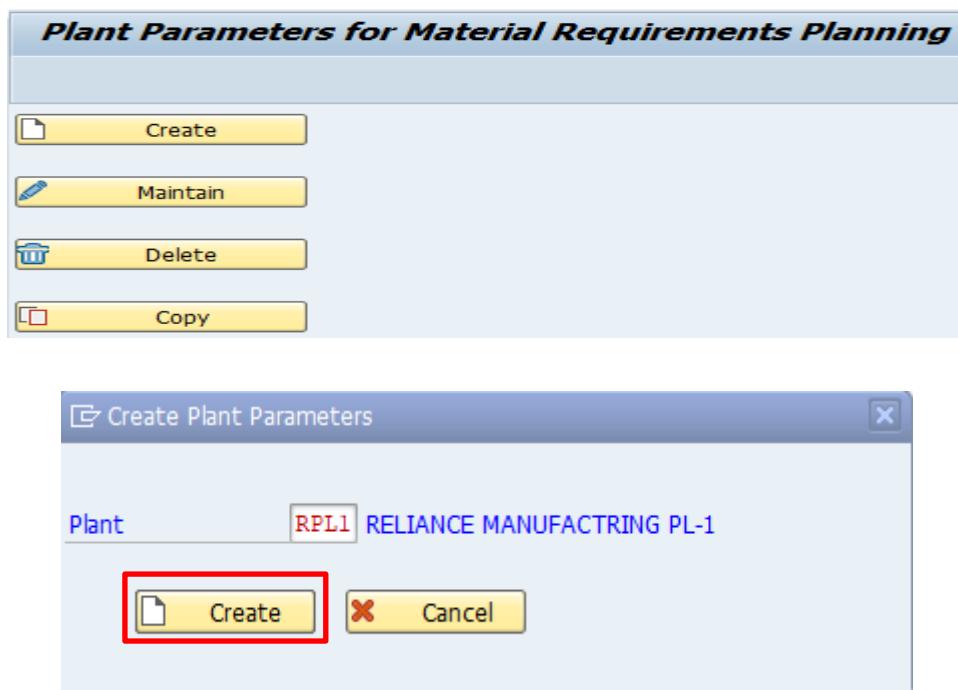
ACTIVATING MRP PARAMETERS

The MRP area represents an organizational unit for which material requirements planning is carried out independently. The plant MRP area initially contains the plant together with all its storage locations and stocks.

Basically linking the storage locations, plants with MRP area.

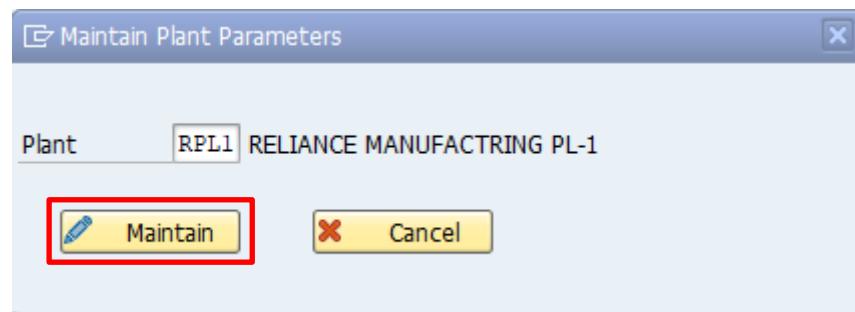
SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Production** → **Material Requirements Planning** → **Plant Parameters** → **Carry Out Overall Maintenance of Plant Parameters** → **Create**

T Code – OPPQ



After providing the company code click on create icon for creating MRP parameters and then click on maintain icon for assigning plant to MRP.

After creating MRP area you need to maintain the data for different parameters.



Maintain Plant Parameters

Plant RPL1 RELIANCE MANUFACTURING PL-1 Reference Plant Initial

Maintain Environment

- Number Ranges To maint.
- Check Rule: Backorders Initial
- Reporting Initial

Maintain Planning Run

- BOM/Routing Selection To maint.
- BOM Explosion Initial
- Parameters for DS Initial
- External Procurement To maint.
- Rescheduling Initial
- Planning Horizon To maint.
- Available Stocks Initial

Maintain Master Data

- MRP Controllers To maint.
- Special Procurement Initial
- Floats To maint.

Stock/Requirements List as of 19:19 hrs

Show Overview Tree |

Material	600000000000000024	CRUDE OIL RAW MATERIALS				
MRP area	RPL1	RELIANCE MANUFACTURING PL-1				
Plant	RPL1	MRP type	ND	Material Type	ROHR	Unit BBL
A.. Date	MRP ...	MRP element data	Rescheduli...	E.. Receipt/Reqmt	Available Qty	Storage Location
08.03.2023 Stock					3.000,000	
11.03.2023 PchOrd 4500018404/00010				1.500,000	4.500,000 RRM	
STOCK IN HAND		GOODS NOT RECEIVED		TOTAL STOCK AFTER RECEIVING THE GOODS IN TRANSIT		

We can able to see 3000 is the available quantity in the storage location as on 8th march. Additional 1500 quantities will be received on 11th march i.e. after 3 days. The final quantities with the in – order process quantity is 4500 barrels.

Stock Statistics		
Warehouse Stocks		
Unrestricted Use	Stk Avail.for Plg	Other stock
Unrestricted Use	3.000,000	
Blocked		0,000
Restricted-Use Stock		0,000
In Qual. Inspection	0,000	
Returns	0,000	0,000
In Transfer (Plant)		0,000
In Transfer (SLoc)	0,000	
Unrestr. Consignment	0,000	
Blocked Consignment		0,000
Restr. Consignment		0,000
Cnsgt in Inspection	0,000	
SC Stock Unrestr.	0,000	Val. GR Blocked Stck 0,000
Qty insp.stck-vendor	0,000	SC In Transf.(Plant) 0,000
Total plant stock	3.000,000	Stock in Transit 0,000
In/Outward Movements		
Fixed Receipts	1.500,000	Planned Receipts 0,000
Fixed Issues	0,000	Planned Issues 0,000

Stock/Requirements List as of 19:26 hrs										
Show Overview Tree										
Material	600000000000000024	CRUDE OIL RAW MATERIALS								
MRP area	RPL1	RELIANCE MANUFACTURING PL-1								
Plant	RPL1	MRP type	ND	Material Type	ROHR	Unit	BBL			
	A.. Date	MRP ...	MRP element data	Rescheduli...	E..	Receipt/Reqmt	Available Qty	S...	Vendor	Vendor name
	08.03.2023	Stock					3.000,000			
	11.03.2023	PchOrd	4500018404/00010			1.500,000	4.500,000	RRM	1000200015	ROSNEFT OIL COMPANY

↓

Additional Data for MRP Element

Purchasing Doc.	4500018404	10	1	Scheduled Qty	1.500,000	BBL
Delivery Date	09.03.2023			Delivered	0,000	BBL
Net Price	81.000.000,00	/	1.500	BBL	Target Quantity	0,000 BBL
Vendor	1000200015	ROSNEFT OIL COMPANY				

The above picture shows that the in order process quantity details like purchase document number, delivery date, quantities to be delivered, Price & vendor details.

Stock/Requirements List as of 21:40 hrs											
Show Overview Tree											
Material	600000000000000024	CRUDE OIL RAW MATERIALS									
MRP area	RPL1	RELIANCE MANUFACTURING PL-1									
Plant	RPL1	MRP type	ND	Material Type	ROHR	Unit	BBL				
	A.. Date	MRP ...	MRP element data	Rescheduli...	Exception	Receipt/Reqmt	Available Qty	Suppl./Re...	Storage...	Vendor	Vendor name
	14.03.2023	Stock					2.720,000				
	16.03.2023	PchOrd	4500018366/00010		07	30,000	2.750,000	RRM	1000200036	CHINA OIL COMPANY	
	16.03.2023	Retrns	4500018425/0010		07	1.500,000-	1.250,000	RRM	1000200036	CHINA OIL COMPANY	
	19.03.2023	PchOrd	4500018404/00010		07	1.500,000	2.750,000	RRM	1000200015	ROSNEFT OIL COMPANY	
	19.03.2023	ConRel	4500018432/00001			500,000-	2.250,000	RPL2			
	16.03.2023	Replen.	End of Replen. Lead...								
	20.03.2023	PchOrd	4500018430/00001			25.000,000	27.250,000		1000200035	SAUDI ARABIA OIL COMPANY	
	20.03.2023	PchOrd	66000000001/00001			25.000,000	52.250,000		1000200035	SAUDI ARABIA OIL COMPANY	
	20.03.2023	Schlne	5500000197/00010 *			2.000,000	54.250,000	RRM	1000200035	SAUDI ARABIA OIL COMPANY	
	15.05.2023	Schlne	5500000197/00010 *			2.000,000	56.250,000	RRM	1000200035	SAUDI ARABIA OIL COMPANY	
	12.06.2023	Schlne	5500000197/00010 *			4.000,000	60.250,000	RRM	1000200035	SAUDI ARABIA OIL COMPANY	
	02.10.2023	Schlne	5500000197/00010 *			3.000,000	63.250,000	RRM	1000200035	SAUDI ARABIA OIL COMPANY	
	25.12.2023	Schlne	5500000197/00010 *			1.000,000	64.250,000	RRM	1000200035	SAUDI ARABIA OIL COMPANY	

The replenishment lead time represents the total period of time which is required to procure or manufacture an item. The replenishment lead time is mainly used by the availability check to calculate the material availability date.

The above image shows the type of stock available at the premises for executing the production process.

STOCK POSTING

The report Stock for posting date lists a company's own stocks in a particular time period.

SAP Menu → Logistics → Material Management → Inventory Management → Environment → Stock → MB5B – Stock for Posting Date

T Code – MB5B

In the screen we need to give the details about material number and click on execute icon to proceed further.

Stock on Posting Date

Material Number	60000000000000000024	to		<input type="button" value="..."/>
Company Code		to		<input type="button" value="..."/>
Plant		to		<input type="button" value="..."/>
Storage Location		to		<input type="button" value="..."/>
Batch		to		<input type="button" value="..."/>
Valuation Type		to		<input type="button" value="..."/>
Movement Type		to		<input type="button" value="..."/>
Special Stock Indicator				<input type="button" value="..."/>

Selection Date to

Stock Type

Storage Loc./Batch Stock
 Valuated Stock
 Special Stock

Material Stocks Between 01.01.0000 and 31.12.9999



Plant	RPL1 RELIANCE MANUFACTURING PL-1							
Material	600000000000000024							
Description	CRUDE OIL RAW MATERIALS							
Stock on 01.01.0000	0,000 BBL							
Total Receipts	3.000,000 BBL	No of quantities received						
Total Issues	0,000 BBL	Goods taken out for production						
Stock on 31.12.9999	3.000,000 BBL							
SLoc	MvT	S	Mat. Doc.	Item	Pstng Date	Quantity	BUn	Goods Receipt Date & storage location
RRM	101		4000000139	1	03.03.2023	1.500,000	BBL	
RRM	101		4000000163	1	04.03.2023	1.500,000	BBL	

Material Stocks Between 01.01.0000 and 31.12.9999



Plant	RPL1 RELIANCE MANUFACTURING PL-1	
Material	600000000000000024	
Description	CRUDE OIL RAW MATERIALS	
Stock on 01.01.0000	0,000 BBL	
Total Receipts	3.350,000 BBL	
Total Issues	630,000- BBL	
Stock on 31.12.9999	2.720,000 BBL	

SLoc	MvT	S	Mat. Doc.	Item	Pstng Date	Quantity	BUn
RRM	101		4000000139	1	03.03.2023	1.500,000	BBL
RRM	101		4000000163	1	04.03.2023	1.500,000	BBL
RRM	301		100000126	1	09.03.2023	100,000-	BBL
RRM	303		100000134	1	09.03.2023	150,000-	BBL
RRM	305		100000144	1	09.03.2023	150,000	BBL
RRM	301		100000146	1	09.03.2023	100,000-	BBL
RRM	303		100000147	1	09.03.2023	150,000-	BBL
RRM	101		4000000181	1	09.03.2023	100,000	BBL
RRM	322		100000157	1	10.03.2023	50,000	BBL
RRM	322		100000157	2	10.03.2023	50,000-	BBL
RRM	321		100000158	1	10.03.2023	20,000-	BBL
RRM	321		100000158	2	10.03.2023	20,000	BBL
RRM	350		100000159	1	10.03.2023	30,000	BBL
RRM	350		100000159	2	10.03.2023	30,000-	BBL
RRM	122		4000000183	1	10.03.2023	30,000-	BBL

The green column shows the received quantities of a given material and the red column shows the closing balances of a given material.

In plant 1 there are 3350 total barrels are receipted, 630 barrels has been taken out & now the new balance is 2720 barrels.

Plant	RPL2 RELIANCE MANUFACTRING PL-2						
Material	600000000000000024						
Description	CRUDE OIL RAW MATERIALS						
Stock on 01.01.0000	0,000 BBL						
Total Receipts	451,257 BBL						
Total Issues	201,257- BBL						
Stock on 31.12.9999	250,000 BBL						
SLoc	MvT	S	Mat. Doc.	Item	Pstng Date	Quantity	BUn
RRM2	301		100000126	2	09.03.2023	100,000	BBL
RRM2	305		100000136	1	09.03.2023	100,000	BBL
RRM2	305		100000138	1	09.03.2023	0,314	BBL
RRM2	305		100000141	1	09.03.2023	0,943	BBL
RRM2	303		100000142	1	09.03.2023	51,257-	BBL
RRM2	303		100000143	1	09.03.2023	150,000-	BBL
RRM2	301		100000146	2	09.03.2023	100,000	BBL
RRM2	305		100000148	1	09.03.2023	150,000	BBL

In plant 2 there are 451 total barrels are receipted, 201 barrels has been taken out & now the new balance is 250 barrels.

STOCK IN TRANSIT

The stock in transit is the quantity of a material that was withdrawn from the stock of the issuing plant but has not yet arrived at the receiving plant.

SAP Menu → Logistics → Material Management → Inventory Management → Environment → Stock → MB5T – Stock in Transit

T Code – MB5T

In the initial screen provide the material data and click on execute icon.

Display Stock in Transit

Database Selections				
Material	6000000000000000024	to		
Receiving Plant		to		
Receiving Plant Company Code		to		
Issuing Plant		to		
Special Stock		to		
<input checked="" type="checkbox"/> Stock Transfer Orders <input checked="" type="checkbox"/> Cross-Company-Code <input type="checkbox"/> Valuated in Issuing Plant <input type="checkbox"/> Incl. POs w. Del. Cmpl. Status <input type="checkbox"/> Incl. Deleted Purchase Orders <input type="checkbox"/> Incl. Blocked Purchase Orders				

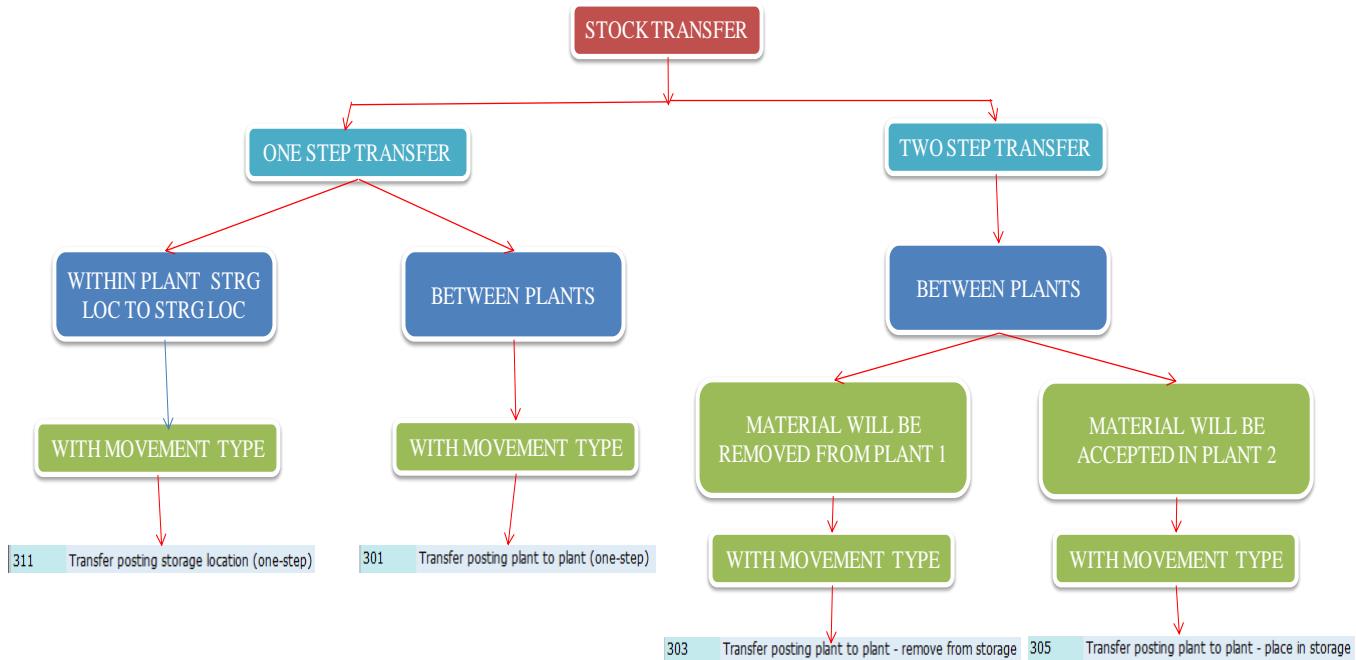
STOCK TRANSFER

Various types of stock types: There are three types of stock in Inventory Management. Each of these stock types indicates whether the material concerned can currently be used.

- Unrestricted-use stock
 - Quality inspection stock
 - Blocked stock

The stock transfer is nothing but transferring of materials from one plant to another storage location, from plant to plant, plant of company code to plant of another company code. When the stock transfer happens between plants, then the quantity changes in both plants. Transfer posting refers to a change in a

material's stock (for example, release from quality inspection, accepting consignment material).



SAP Menu → Logistics → Materials Management → **Inventory Management** → **Goods Movement** → **MIGO – Goods Movement** → **Transfer Posting**

T Code – MIGO

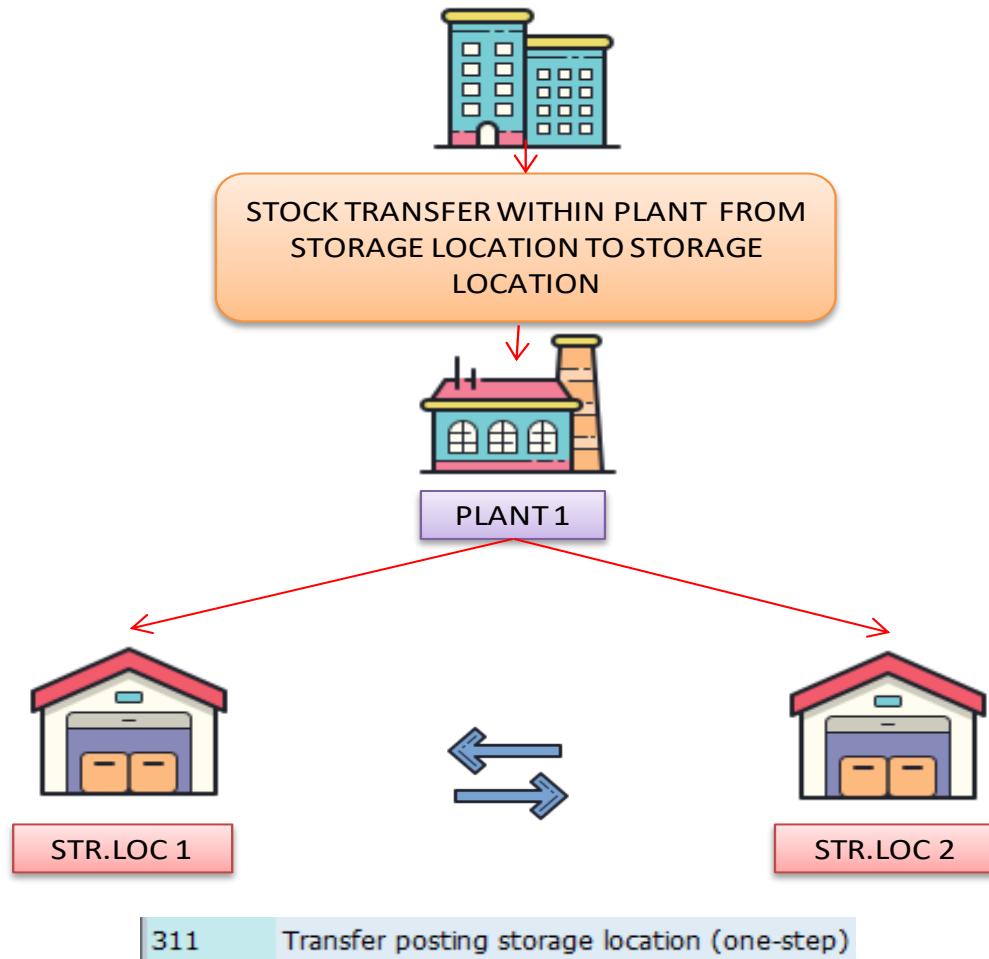
ONE STEP TRANSFER – FROM ONE STR LOC TO STR LOC

In one step stock transfer the goods from one storage location to another storage location will be transferred but the transaction takes place within the plant.

Movement type – 311 (Transfer Posting Storage location – one step)

Movement type in SAP is a 3-digit code that is used to identify the type of material movement in the system. The movement type is used to determine the type of transaction being executed, such as goods receipt, goods issue, transfer posting, or stock transfer.

ONE STEP STOCK TRANSFER



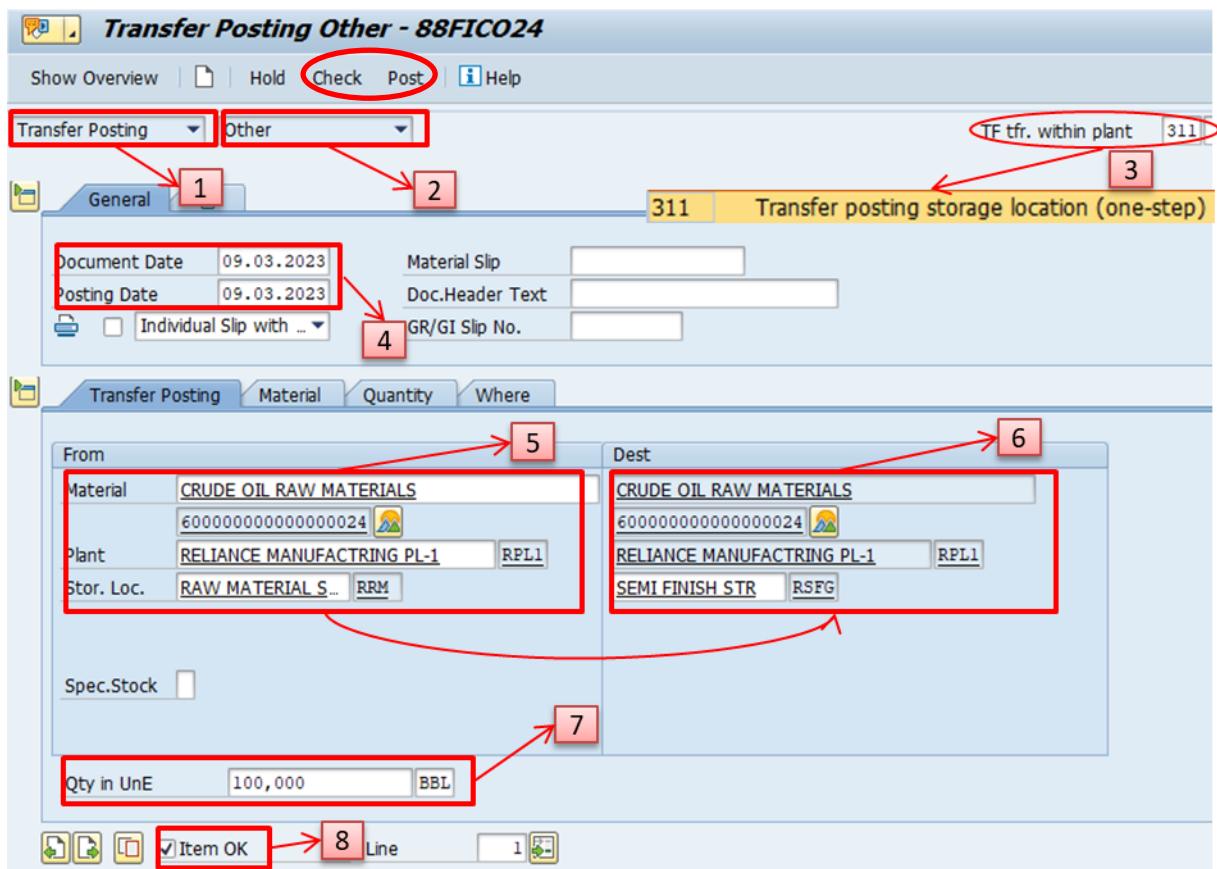
In the Following tab we need to provide the details like.

- 1 – Document type to be Transfer Posting
- 2 – Source document to be other or (Material Doc / GR Doc)
- 3- Moveemnt type is 311 for transferring stock from storage location to storage location within the same plant.
- 4 – posting date of TP document
- 5 – Material details, Plant Name, Storage location from which the goods will be taken

6 – Material details, Plant Name, Storage location from which the goods will be stored now.

7 – How much quantity to be transferred & unit of measurement.

8 – Click on Item Ok



Here 100 barrels are taken & transferred from storage location RRM (Raw materials storage) in plant 1 to storage location RSFG (Semi Finished storage) in the same plant 1.

Then click on check and post the document, while executing transfer posting the following tickets are faced.

TICKET 1

Display logs			
Typ	Item	Message text	LTxt
●	1	Material 600000000000000000024 RPL1 RSFG does not exist	?

This error is based the material is not maintained in the particular storage location at the plant.

We already having this material in another storage location within the same plant, now we need to extend the material to new storage location within the plant.

EXTENDING THE MATERIAL TO RSFG STORAGE LOCATION

Material Master Data

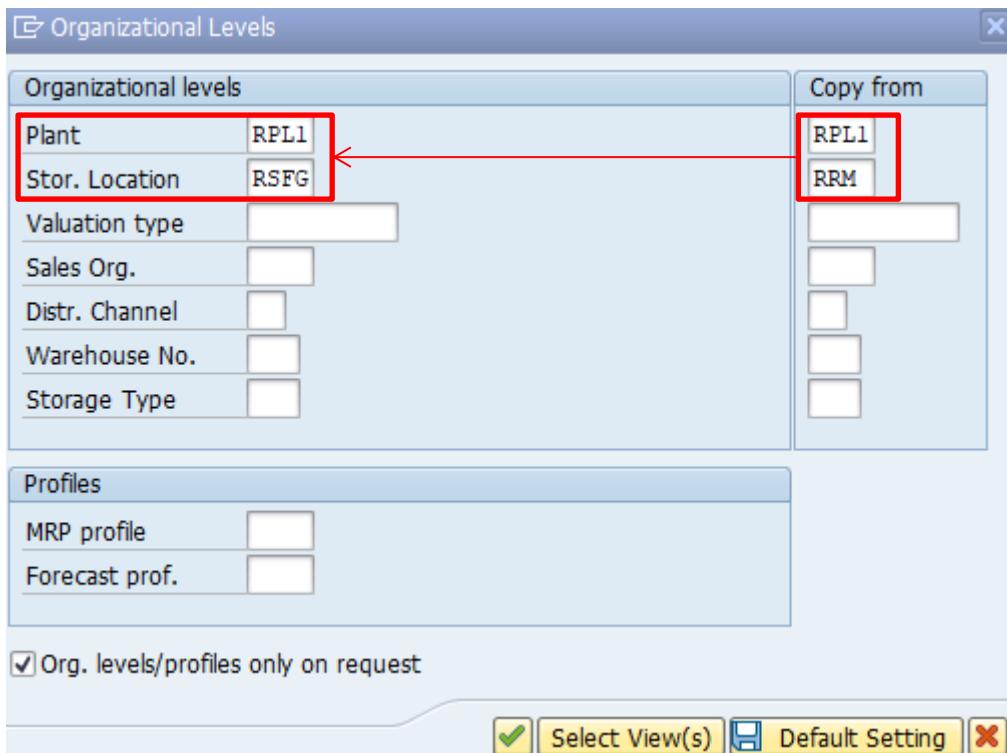
SAP Menu → Logistics → Materials Management → Material Master → Material → Create (General) → MM01 – Immediately

T Code – MM01,

Provide the details of material, Industry sector, Material type. Then enter the material number from which the data should be copied & extended.

Create Material (Initial Screen)

Select View(s)	Org. Levels	Data
Material	600000000000000000024	
Industry sector	ALL INDUSTRIAL S ... ▾	
Material Type	RLEI RAW MATERI... ▾	
Change Number	From which material the data to be copied	
Copy from...		
Material	600000000000000000024	



Next in the organizational level fields enter the data plant and storage location, Here we have provided the plant &storage location details in copy from field that will be copied to the new storage location RSFG in the plant RPL1.

Click on execute then the datas will be copied to the new storage location of plant for the material. The following message will be shown.

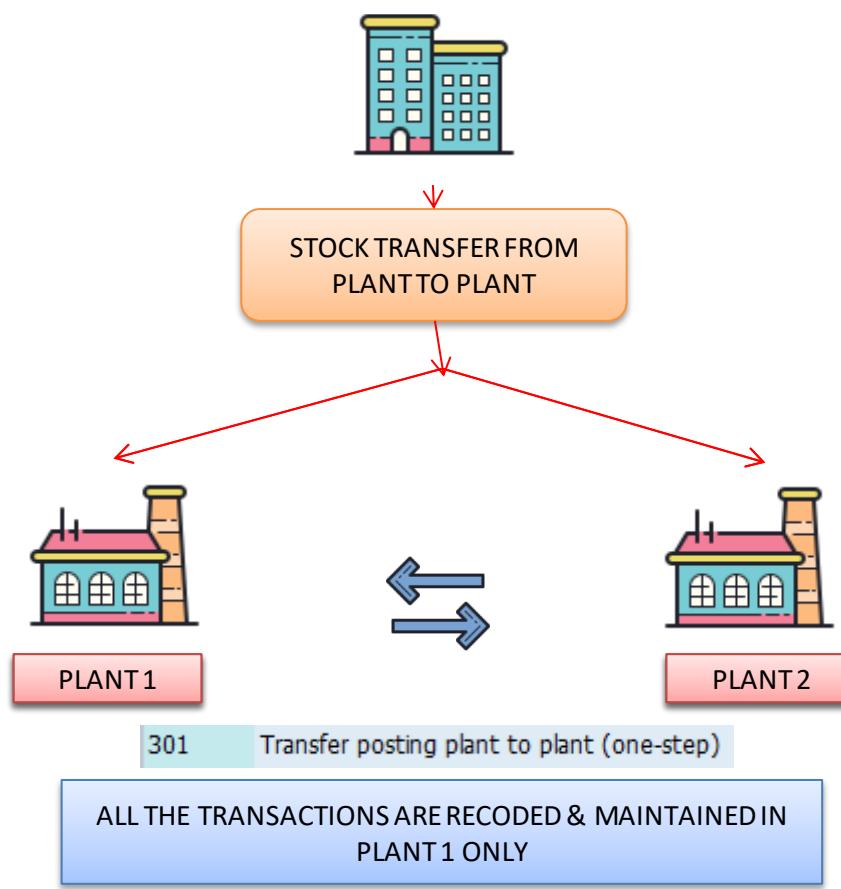
The material already exists and will be extended

ONE STEP TRANSFER FROM PLANT TO PLANT

In one step stock transfer from plant to plant involves transfer of material from one plant to another plant.

Movement type – 301 (Transfer posting plant to plant one step)

Here the transaction of goods will be recording in the issuing plant only.



Transfer Posting Other - 88FICO24

Show Overview Hold Check Post Help

Transfer Posting Other TF tfr.plnt.to plnt. 301

Movement Type

General

Document Date: 09.03.2023 Material Slip: _____
 Posting Date: 09.03.2023 Doc.Header Text: _____
 Individual Slip with ... GR/GI Slip No: _____

Transfer Posting

From	Dest:
Material: CRUDE OIL RAW MATERIALS 600000000000000024	CRUDE OIL RAW MATERIALS 600000000000000024
Plant: RELIANCE MANUFACTURING PL-1 RPL1	RELIANCE MANUFACTURING PL-2 RPL2
Stor. Loc.: RAW MATERIAL S... RRM	RAW MAT STR PL... RRM2

Spec.Stock:

Qty in UnE: 100,000 BBL

Item OK Line: 1

Above image shows that the material of 100 barrels crude oil from RPL1 plant RRM storage location has been transferred to RPL2 plant RRM2 storage location.

TICKET 2

Display logs		
Typ	Item	Message text
●	1	Material 6000000000000000024 not maintained in plant RPL2

This error is based the material is not maintained in the new plant where the material will be received.

We already having this material in another plant, now we need to extend the material to new plant within the same company.

EXTENDING THE MATERIAL TO PLANT RPL1

Material Master Data

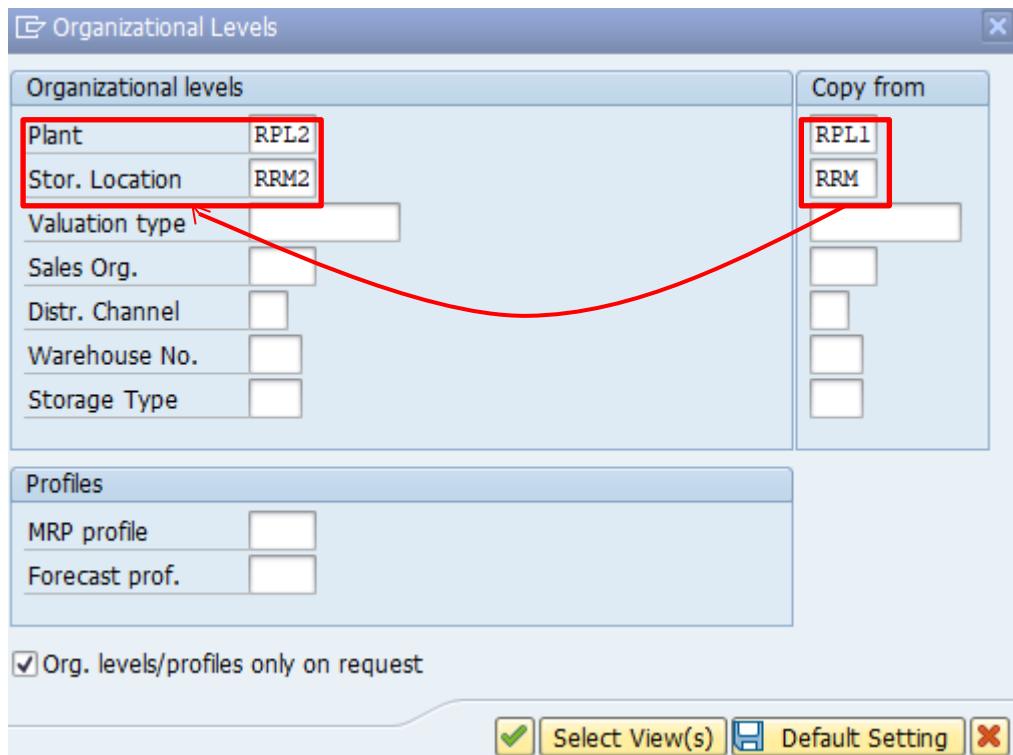
SAP Menu → Logistics → Materials Management → Material Master → Material → Create (General) → MM01 – Immediately

T Code – MM01,

Provide the details of material, Industry sector, Material type. Then enter the material number from which the data should be copied & extended.

Create Material (Initial Screen)

Select View(s)	Org. Levels	Data
Material	6000000000000000024	
Industry sector	ALL INDUSTRIAL S...	
Material Type	RLEI RAW MATERI...	
Change Number		From which material the data to be copied
Copy from... Material 6000000000000000024		



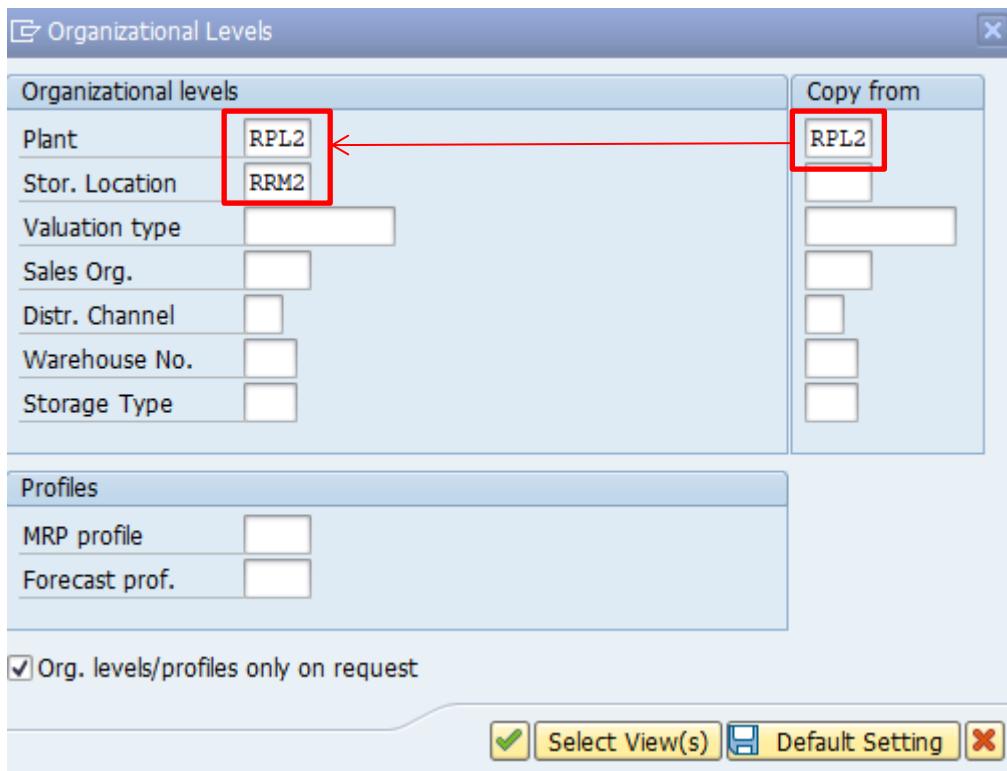
Next in the organizational level fields enter the data plant and storage location, Here we have provided the plant &storage location details in copy from field that will be copied to the new plant RPL2.

Click on execute then the datas will be copied to the new plant for the material. The following message will be shown.

TICKET 3

Display logs		
Typ	Item	Message text
1	1	Material 600000000000000024 RPL2 RRM2 does not exist

After extending also the error continues so first we copy the data from plant 1 to plant 2 and then from plant 2 to plant 2 storage locations.



Finally the material will be extended to the new plant & storage location of the plant.

TICKET 4

Display logs		
Typ	Item	Message text
●	1	No stock posting possible for this material

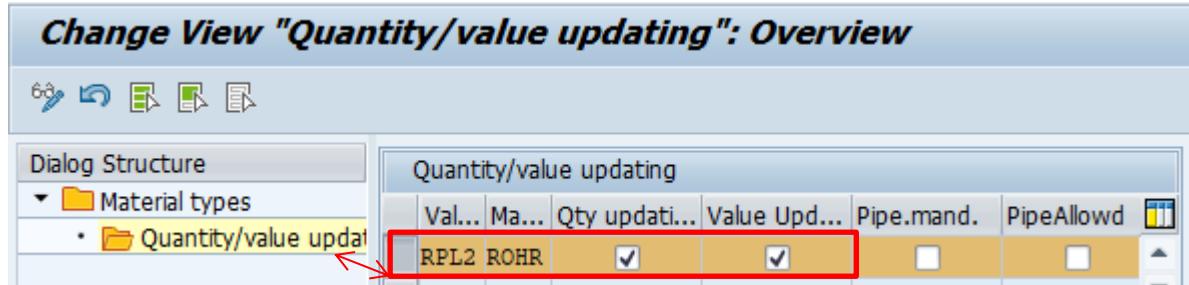
This error rose because we have not updated the quantity & value updation for this particular material type.

Quantity / Value updation

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Logistics – General → Material Master → Basic Settings → Material Types → Define Attributes of Material Types → Select & copy as

T Code – OMS2

In the field select your plant area and material type tick on the check boxes of quantity & value updation.



TICKET 5

MAINTAINING ACCOUNTING DATA IN MATERIAL MASTER

Display logs			
Typ	Item	Message text	LTxt
1	1	Accounting data not yet maintained for material RPL2 60000000000000000000...	?

This error came because we have not specified the accounting data in the material master creation.

T Code – MM52 – Change data

The screenshot shows the SAP interface for 'Create Material (Initial Screen)'. On the left, there are fields for 'Material' (value 600000000000000024), 'Industry sector' (value ALL INDUSTRIAL S...), 'Material Type' (value RLEI RAW MATERI...), 'Change Number' (empty), and a 'Copy from...' section with a 'Material' field (empty). On the right, a 'Select View(s)' dropdown menu is open, listing various views. The 'Accounting 1' and 'Accounting 2' options are highlighted with a red border, indicating they are the required views for maintaining accounting data.

In the change screen of material master data select the accounting parameters in the select views screen and click on execute.

Plant data / stor. 2 Accounting 1 Accounting 2 Plant stock

Material 600000000000000024 CRUDE OIL RAW MATERIALS

Plant RPL2 RELIANCE MANUFACTURING PL-2

General Data

Base Unit of Measure	BBL	Barrel	Valuation Category	<input type="text"/>
Currency	INR		Current period	03 2023
Division	P5		Price determ.	<input type="checkbox"/>
		<input type="checkbox"/> ML act.		

Current valuation

Valuation Class	3000	Proj. stk val. class	<input type="text"/>
VC: Sales order stk	<input type="text"/>	Price Unit	1
Price control	S	Standard price	100.000,00
Moving price	<input type="text"/>	Total Value	0,00
Total Stock	0,000	<input type="checkbox"/> Valuated Un	
Future price	<input type="text"/>	Valid from	<input type="text"/>

Previous period/year Std cost estimate

In the accounting tab provide the details about the valuation class (3000 is for raw material valuation class), Price control (s for stand price), enter the price of crude oil per 1 unit of barrel.

TICKET 6

EXTENDING MATERIAL IN WAREHOUSE

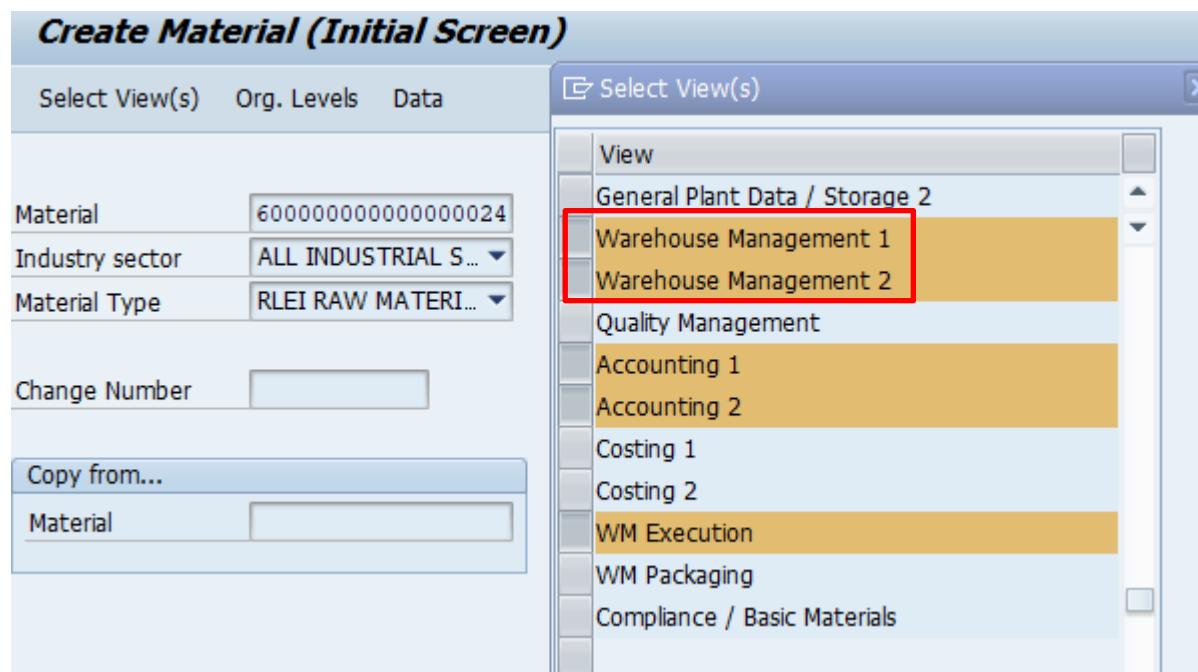
Display logs

Typ	Item	Message text	LTxt
1	1	Material 600000000000000024 does not exist in warehouse RWH	

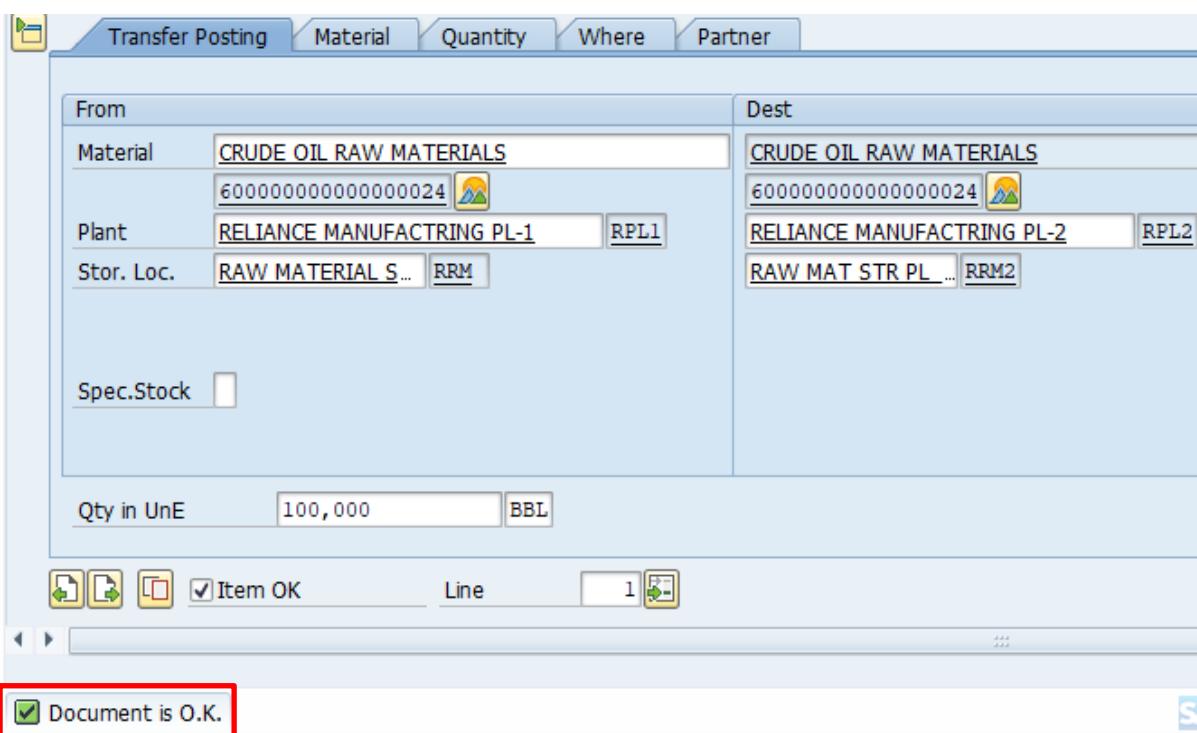
This error can be rectified by adding warehouse parameters in the Material Master Field.

T Code – MM52 – Change data

Provide the warehouse details in the warehouse tab of material master screen



After rectifying the entire tickets click on check it shows document is ok.



After you get document is ok click on post icon to proceed further.

TICKET 7

FI – MM – CO CONFIGURATION SETTINGS

T Code - OBYC

Display logs		
Typ	Item	Message text
●		Account determination for entry TTS AUM not possible

This error occurs due to the system did not find an account for this transaction. The system cannot update a G/L account for this transaction. We cannot post the transaction. Posting will be done automatically after account determination.

Configuration Accounting Maintain : Automatic Posts - Procedures

Group	RMK	Materials Management postings (MM)	
Procedures	Description	Transaction	Account determ.
Rev.from agency bus.		AG1	<input checked="" type="checkbox"/>
Sales fr.agency bus.		AG2	<input checked="" type="checkbox"/>
Exp.from agency bus.		AG3	<input checked="" type="checkbox"/>
Expense/revenue from consign.mat.consum.		AKO	<input checked="" type="checkbox"/>
Expense/revenue from stock transfer		AUM	<input checked="" type="checkbox"/>
Subsequent settlement of provisions		ROI	<input checked="" type="checkbox"/>
Subsequent	Enter Chart of Accounts		
Provision c			
Inventory	Chart of Accounts	TTS	<input checked="" type="checkbox"/>
Change in			<input checked="" type="checkbox"/>
Inventory			<input checked="" type="checkbox"/>
Revaluatio			<input checked="" type="checkbox"/>
Delkredere			<input checked="" type="checkbox"/>

In the configuration account maintenance screen proved the following details.

1 – Group – RMK for Material Management Posting (We will have separated group for different fields of posting)

2 – Chart of accounts – TTS is defined for our company code. The chart of accounts is a list of all accounts used to record financial position and activity in the GL. From which we can get details like P & L report, Balance sheet, Trial Balance. Individual transactions will be recorder in respective G/L account.

3 – Transaction Key - Transaction keys are used to determine general ledger accounts used by the system. Our Transaction key is AUM

AUM stands for Expense & revenue account for stock transfer.

Configuration Accounting Maintain : Automatic Posts - Accounts		
Posting Key Procedures Rules		
Chart of Accounts	TTS	Chart of Account of TTS for MM
Transaction	AUM	Expense/revenue from stock transfer
Account assignment		
Valuation class	Account	
3000	1	

Valuation class categorizes the G/L account on the basis of material type. For example, raw material will have different G/L account than the finished material, as the costs will be different in both the cases.

Here 3000 in valuation class is determined for Raw materials, then define the account key as 1. The valuation class determines the G/L accounts which will be updated as result of the goods movement generated for the material.

Finally save the changes.

TICKET 8

MAINTAINING NUMBER RANGE FOR ACCOUNTING DOCUMENT

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Financial Accounting → Financial Accounting Global Settings → Document → Document Number Ranges → Define Document Number Ranges → Edit – Intervals.

T Code – FBN1

Display logs		
Typ	Item	Message text
LTxt		
●		For object RF_BELEG RLEI, number range interval 20 does not exist FBN1

The message is related to the number range 20 not existing for saving the accounting document information.

Interval Maintenance: Number Range Object Accounting document,						
1	2	3	4	Ext		
N. 20	Year 2023	From No. 6000000021	To Number 6000000040	NR Status 6000000026		

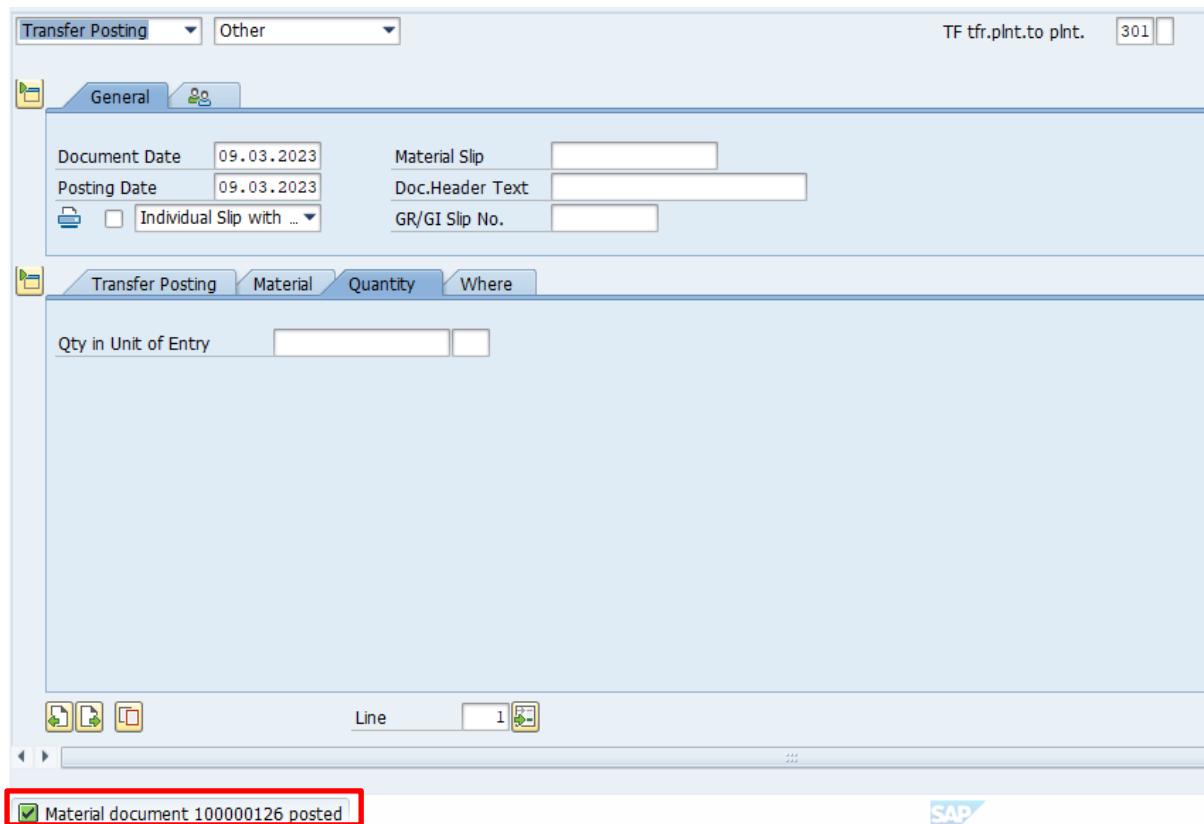
1 – Interval Number 20

2 – Current fiscal year 2023

3 - Interval range starts from 6000000021 to 40, we have limit of 20 documents posting.

4 – NR status shows the no of documents posted still.

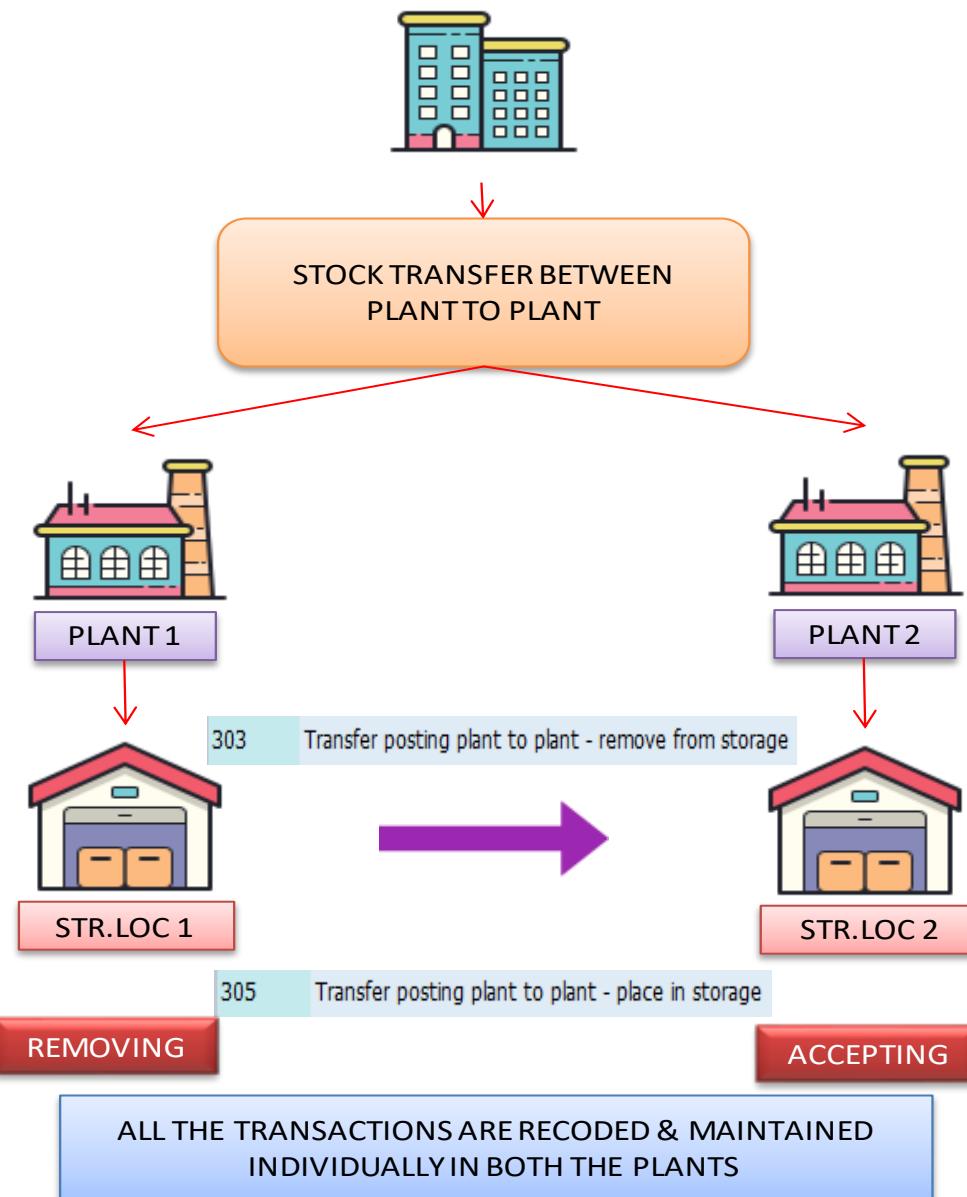
Finally Post the document you will get an material document number for the transaction.



We can cross check the transfer posting in stock overview list MMBE. From the below image we can see that 100 quantities are added in plant 2(RPL2). Plant 1 (RPL1) stocks has been reduced by 100 quantities.

Stock Overview: Basic List							
Selection							
Material	600000000000000024	CRUDE OIL RAW MATERIALS					
Material Type	ROHR	RLEI RAW MATERIALS					
Unit of Measure	BBL	Base Unit of Measure					
Stock Overview							
Client/Company Code/Plant/Storage Location/Batch/Special Stock	Unrestricted use	Qual. inspection	Reserved	Rcpt reservation	On-Order Stock	Consgt ...	
Full	3.000,000				1.500,000		
RLEI RELIANCE INDUSTRIES LTD	3.000,000				1.500,000		
RPL1 RELIANCE MANUFACTRING PL-1	2.900,000				1.500,000		
RRM RAW MATERIAL STR	2.900,000				1.500,000		
RPL2 RELIANCE MANUFACTRING PL-2	100,000				100,000		
RRM2 RAW MAT STR PL_2	100,000				100,000		

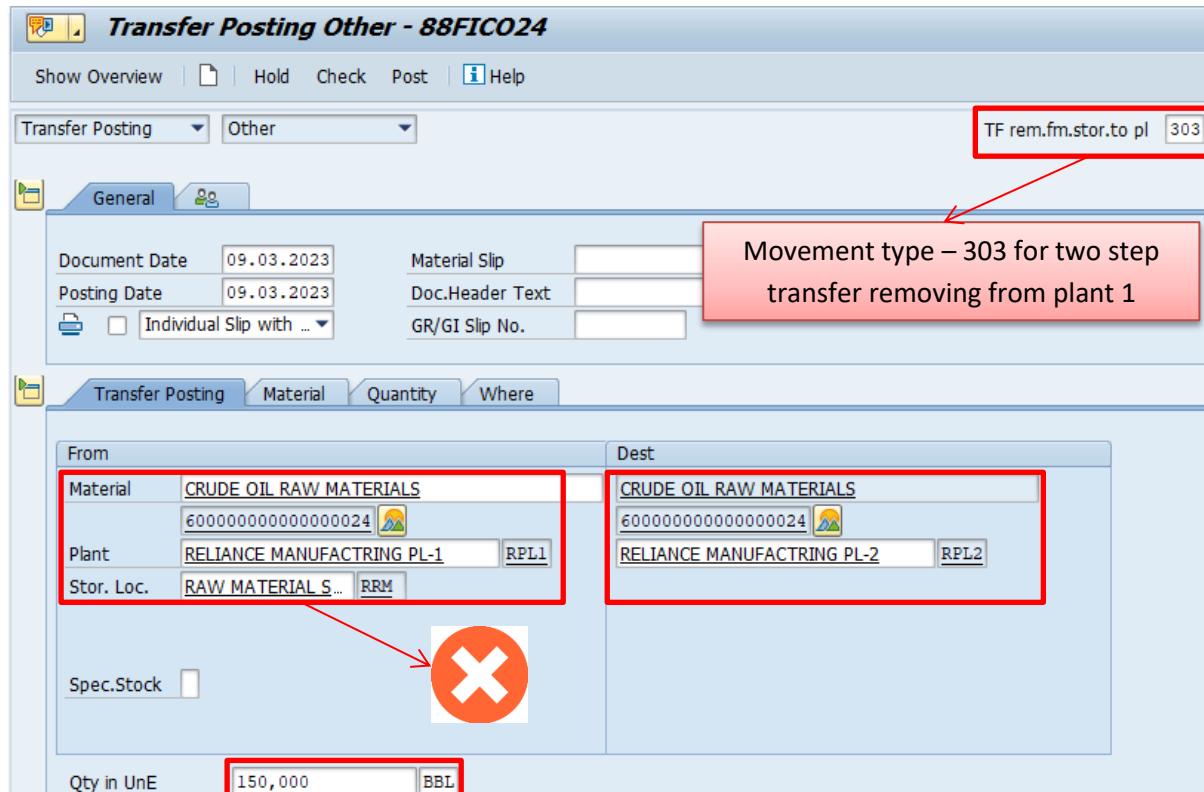
TWO STEP TRANSFER BETWEEN PLANT TO PLANT



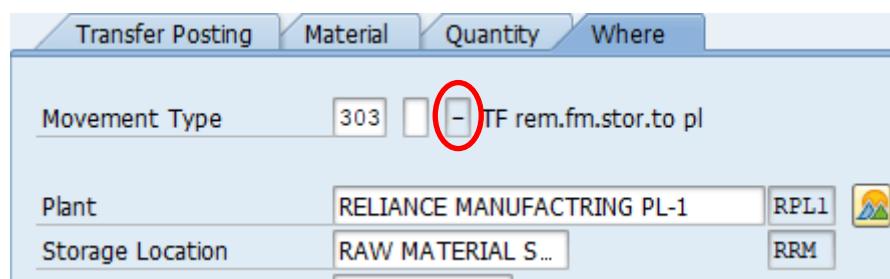
If you post a stock transfer from plant to plant using the two-step procedure, you post the removal from storage at the issuing plant first. After you post the removal from storage, the quantity being transferred is managed in stock in transfer at the receiving plant. It is not yet part of unrestricted-use stock, however. You post the placement into storage at the receiving plant in a second step. Only then are the event completed and the transferred quantity part of unrestricted-use stock. For example, materials transferring to another site after construction.

Here the individual stock transfer records are recorded & maintained in both the plant individually.

REMOVING FROM PLANT 1



The material from plant 1-RPL1 of 150 quantities has been removed by using the movement type – 303 (Transfer posting from plant to plant remove from storage).



The (-) minus or subtract symbol denotes that the material is reducing from the plant i.e. stock reducing / removing from the plant. Finally post the document.

Material document 100000134 posted

We can check the quantities removed in the plant 1 in the stock overview list MMBE.

Stock Overview: Basic List										
Selection										
Material	6000000000000000024	CRUDE OIL RAW MATERIALS								
Material Type	ROHR	RLEI RAW MATERIALS								
Unit of Measure	BBL	Base Unit of Measure	BBL							
Stock Overview										
		Detailed Display								
Client/Company Code/Plant/Storage Location/Batch/Special Stock	Unrestricted use	Qual. inspection	Reserved	Rcpt reservation	On-Order Stock					
Full	2,850,000				1,500,000					
RPL1 RELIANCE INDUSTRIES LTD	2,950,000				1,500,000					
RPL1 RELIANCE MANUFACTURING PL-1	2,750,000				1,500,000					
RRM RAW MATERIAL STR	2,750,000				1,500,000					
RPL2 RELIANCE MANUFACTURING PL-2	100,000									
RRM2 RAW MAT STR PL_2	100,000									

Previously there was 2900 quantities & now after removing 150 quantities from plant one it becomes 2750. But the removed 150 quantities are not yet added in any plant because in two steps we need to accept the quantities transferred.

ACCEPTING IN PLANT 2

The material removed from plant 1(RPL1) will be in transit to accept in another plant (plant 2 RPL2) we need to do another stock transfer.

Movement type – 305 (Transfer posting Plant to Plant Place in storage)

The same no of quantities removed from plant 1 – RPL1 (150) will be accepted in plant 2 (RPL2)

Transfer Posting Other - 88FICO24

Show Overview | Hold | Check | Post | Help

Transfer Posting | Other | TF pl.in stor.in pl. 305

General

Document Date: 09.03.2023 | Material Slip:
 Posting Date: 09.03.2023 | Doc.Header Text:
 Individual Slip with ... | GR/GI Slip No:

Transfer Posting

Dest	From
Material: CRUDE OIL RAW MATERIALS 600000000000000024 Plant: RELIANCE MANUFACTURING PL-2 RPL2 Stor. Loc.: RAW MAT STR PL... RRM2	Material: CRUDE OIL RAW MATERIALS 600000000000000024 Plant: RELIANCE MANUFACTURING PL-2 RPL2 Stor. Loc.: RAW MAT STR PL... RRM2

Spec.Stock:

Qty in UnE: 150,000 BBL

Item OK | Line: 1

Transfer Posting

Movement Type: 305 + TF pl.in stor.in pl.

Plant: RELIANCE MANUFACTURING PL-2 RPL2
 Storage Location: RAW MAT STR PL... RRM2

The (+) Plus or Addition symbol denotes that the material is added in the plant i.e. stock increasing / accepting from the plant. Finally post the document.

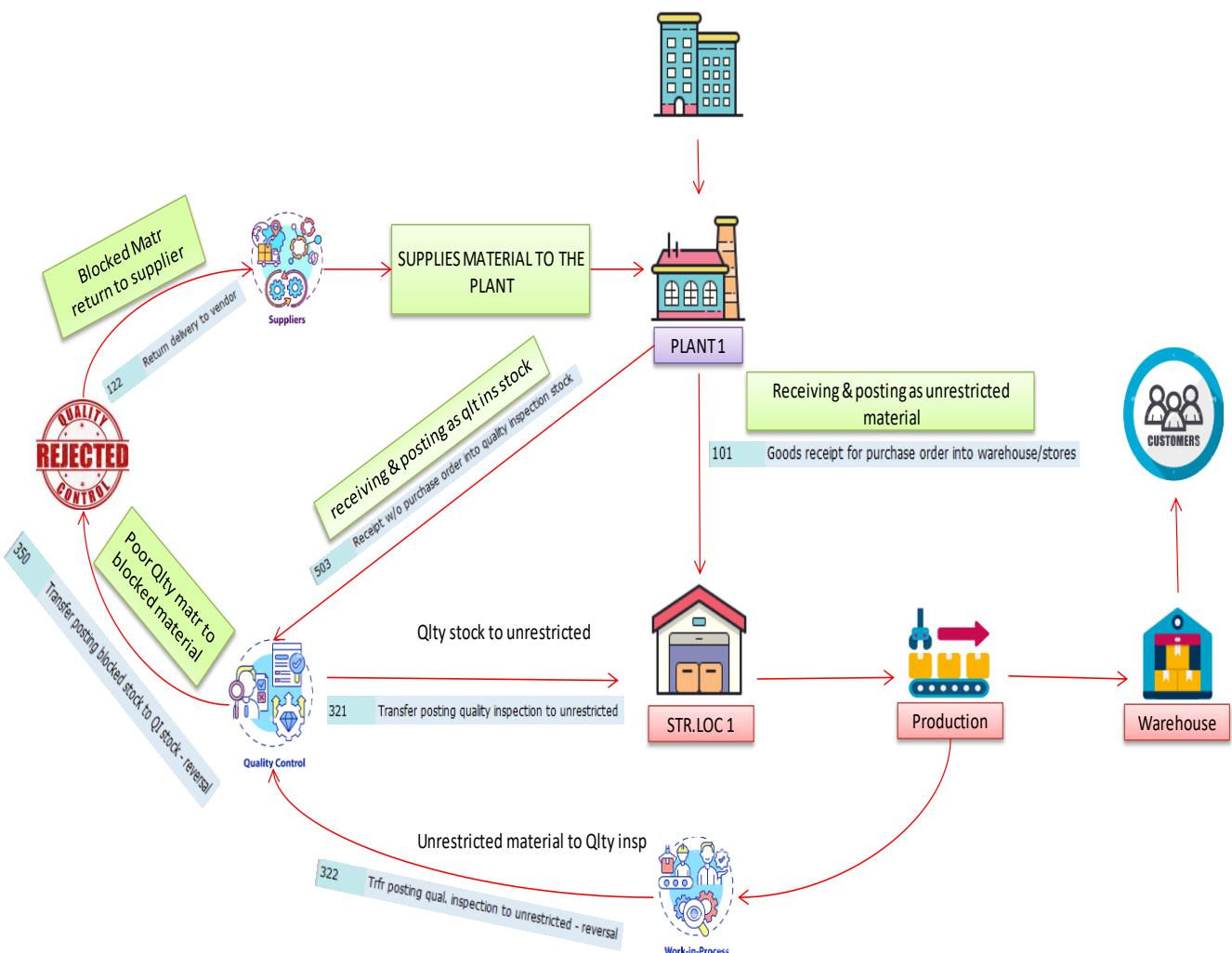
Material document 100000136 posted

We can check the quantities accepted in the plant 2 in the stock overview list MMBE.

The 150 quantities which was removed from plant 1 has been added to plant 2 & not the new quantity is 250 units of barrel crude oil.

Stock Overview: Basic List							
Selection							
Material	60000000000000024	CRUDE OIL RAW MATERIALS					
Material Type	ROHR	RLEI RAW MATERIALS					
Unit of Measure	BBL	Base Unit of Measure					
Stock Overview							
		Detailed Display					
Client/Company Code/Plant/Storage Location/Batch/Special Stock	Unrestricted use	Qual. inspection	Reserved	Rcpt reservation	On-Order Stock		
Full	3.000,000				1.500,000		
RLEI RELIANCE INDUSTRIES LTD	3.000,000				1.500,000		
RPL1 RELIANCE MANUFACTURING PL-1	2.750,000				1.500,000		
RRM RAW MATERIAL STR	2.750,000				1.500,000		
RPL2 RELIANCE MANUFACTURING PL-2	250,000				250,000		
RRM2 RAW MAT STR PL_2	250,000				250,000		

MATERIAL FLOW IN THE PLANT PERMISES

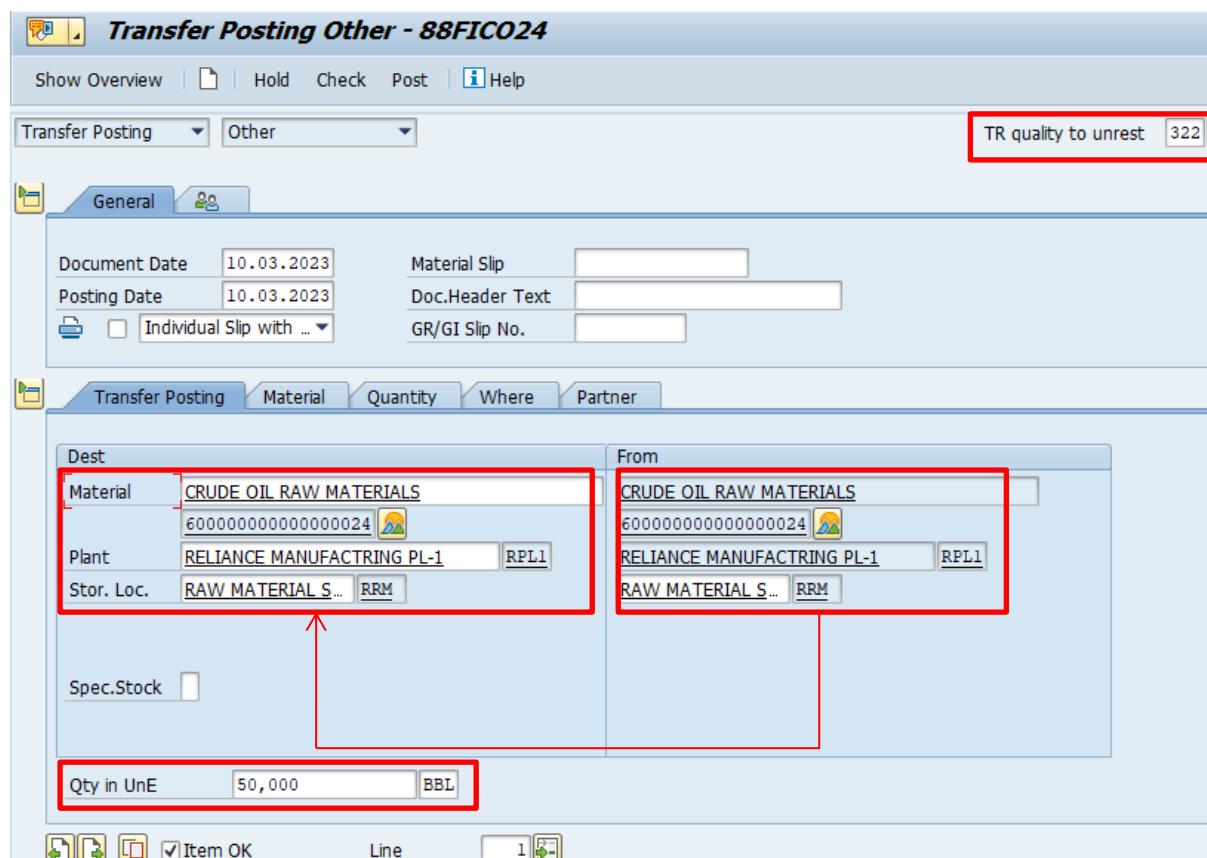


UNRESTRICTED MATERIAL INTO QUALITY INSPECTION

When the material purchase order rises we have given the movement type for the material. This will be used to store the goods at the time of goods receipt note.

When material is posted as unrestricted use it can be used for direct consumption to the production. If any issues found it should be inspected so this material transfer form unrestricted to quality inspection are used.

Movement Type – 322 (Transfer posting quality inspection to unrestricted reversal)



Here the goods are transferred to same storage location of identical plant, where the quality inspection has separate area.

Provide the no of quantities to be inspected due to issues.

Transfer Posting Material Quantity Where Partner

Movement Type	322	+ TR quality to unrest
Direction Short Descript.	Receipts	
Plant	RELIANCE MANUFACTURING PL-1	RPL1
Storage Location	RAW MATERIAL S...	RRM

The material is being added to the quality inspection.

We can check the transferred material from unrestricted to quality inspection in stock overview list MMBE.

Stock Overview: Basic List

Client/Company Code/Plant/Storage Location/Batch/Special Stock	Unrestricted use	Qual. inspection	Reserved	Rcpt reservation	On-Order Stock
Full	2,950,000	50,000			1,500,000
RELIANCE INDUSTRIES LTD	2,950,000	50,000			1,500,000
RPL1 RELIANCE MANUFACTURING PL-1	2,700,000	50,000			1,500,000
RRM RAW MATERIAL STR	2,700,000	50,000			1,500,000
RPL2 RELIANCE MANUFACTURING PL-2	250,000				
RRM2 RAW MAT STR PL_2	250,000				

QUALITY INSPECTION TO UNRESTRICTED FOR GOODS IN RIGHT CONDITION

After inspection of stocks in quality inspection goods or materials in right condition are again transfer to the unrestricted stock for production process.

Movement Type – 321 (quality inspection to unrestricted)

Here after quality inspection only 20 quantities have been found good and they are transferred to unrestricted use.

Transfer Posting Other - 88FICO24

Show Overview | Hold | Check | Post | Help

Transfer Posting | Other | TF quality to unrest [321]

General

Document Date: 10.03.2023 | Material Slip:
 Posting Date: 10.03.2023 | Doc.Header Text:
 Individual Slip with ... | GR/GI Slip No:

Transfer Posting | Material | Quantity | Where | Partner

From	Dest
Material: CRUDE OIL RAW MATERIALS 600000000000000024 Plant: RELIANCE MANUFACTURING PL-1 RPL1 Stor. Loc.: RAW MATERIAL S... RRM	CRUDE OIL RAW MATERIALS 600000000000000024 RELIANCE MANUFACTURING PL-1 RPL1 RAW MATERIAL S... RRM
Spec.Stock: <input type="checkbox"/>	
Qty in UnE: 20,000 BBL	

Item OK | Line: 1

Transfer Posting | Material | Quantity | Where | Partner

Movement Type: 321 TF quality to unrest

Plant: RELIANCE MANUFACTURING PL-1 RPL1
 Storage Location: RAW MATERIAL S... RRM

Quantities are decreasing from the stock i.e. issued out.

We can check the transferred material from quality inspection to unrestricted in stock overview list MMBE.

Where over 50 quantities in the quality inspection stock only 20 has been transferred to unrestricted use, now the total quantities in unrestricted use is 2720 barrels. Still there are 30 quantities in quality inspection stock which was rejected during inspection.

Stock Overview: Basic List								
Selection								
Material	600000000000000024	CRUDE OIL RAW MATERIALS						
Material Type	ROHR	RLEI RAW MATERIALS						
Unit of Measure	BBL	Base Unit of Measure			BBL			
Stock Overview								
		Detailed Display						
Client/Company Code/Plant/Storage Location/Batch/Special Stock		Unrestricted use	Qual. inspection	Reserved	Rcpt reservation	On-Order Stock		
Full		2,970,000	30,000			1,500,000		
RLEI RELIANCE INDUSTRIES LTD		2,970,000	30,000			1,500,000		
RPL1 RELIANCE MANUFACTURING PL-1		2,720,000	30,000			1,500,000		
RRM RAW MATERIAL STR		2,720,000	30,000			1,500,000		
RPL2 RELIANCE MANUFACTURING PL-2		250,000						
RRM2 RAW MAT STR PL_2		250,000						

QUALITY INSPECTION TO BLOCKED MAT FOR POOR GOODS

The goods after quality inspection which are all rejected will be then transferred as blocked stock or blocked material. Blocked stock is those products that are rejected due to bad quality. A product is moved to blocked stock in the SAP system if it is rejected due to inferior quality. This also happens due to irregularities in the production of the stock and thus blocked from using it further.

Movement Type – 350 (Transfer posting blocked stock to QI stock – reversal)

The rejected quantities of about 30 barrels are removed from quality inspection stock and stored in blocked stock to avoid any further usage of the material.

Transfer Posting Other - 88FICO24

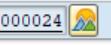
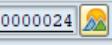
Show Overview | Hold | Check | Post | Help

Transfer Posting | Other | TR blocked to qual. [350]

General

Document Date: 10.03.2023 | Material Slip:
 Posting Date: 10.03.2023 | Doc.Header Text:
 Individual Slip with ... | GR/GI Slip No:

Transfer Posting

Dest	From
Material: CRUDE OIL RAW MATERIALS  Plant: RELIANCE MANUFACTRING PL-1 RPL1 Stor. Loc.: RAW MATERIAL S... RRM	Material: CRUDE OIL RAW MATERIALS  Plant: RELIANCE MANUFACTRING PL-1 RPL1 Stor. Loc.: RAW MATERIAL S... RRM

Spec.Stock:

Qty in UnE: 30,000 BBL

   Item OK Line 1 

Transfer Posting

Movement Type: 350 + TR blocked to qual.

Plant: RELIANCE MANUFACTRING PL-1 RPL1 
 Storage Location: RAW MATERIAL S... RRM

The + sign depicts that the stock has been added to blocked stock storage location.

We can check the stock overview list in MMBE

The total stocks in plant 1 remain same with 2720.

But the 30 barrels in quality inspections stocks has been removed and placed as blocked material for further proceeds.

Stock Overview: Basic List								
Selection								
Material	600000000000000024	CRUDE OIL RAW MATERIALS						
Material Type	ROHR	RLEI RAW MATERIALS						
Unit of Measure	BBL	Base Unit of Measure						
Stock Overview								
		Detailed Display						
Client/Company Code/Plant/Storage Location/Batch/Special Stock		Unrestricted use	Qual. inspection	Reserved	Rcpt reservation	Blocked	On-Order Stock	
		2.970,000				30,000	1.500,000	
		2.970,000				30,000	1.500,000	
		2.720,000				30,000	1.500,000	
		2.720,000				30,000	1.500,000	
		250,000				250,000	1.500,000	
		250,000				250,000	1.500,000	

BLOCK MATERIALS RETURN TO VENDOR

The materials rejected during quality inspection are kept as blocked materials. These materials will not be used henceforth, so these materials will be returned to vendor for replacing the same quantity or returning the money.

Return Delivery Material Document 4000000139 - 88FICO24

Show Overview	Hold	Check	Post	Help																																				
Return Delivery	Material Document	4000000139	2023																																					
1	2																																							
<table border="1"> <tr> <td>Document Date</td> <td>03.03.2023</td> <td>Delivery Note</td> <td></td> <td>Vendor</td> <td>CHINA OIL COMPANY</td> </tr> <tr> <td>Posting Date</td> <td>10.03.2023</td> <td>Bill of Lading</td> <td></td> <td>HeaderText</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Individual Slip</td> <td></td> <td>GR/GI Slip No.</td> <td></td> <td><input type="checkbox"/> Via Delivery</td> <td></td> </tr> </table>					Document Date	03.03.2023	Delivery Note		Vendor	CHINA OIL COMPANY	Posting Date	10.03.2023	Bill of Lading		HeaderText		<input type="checkbox"/> Individual Slip		GR/GI Slip No.		<input type="checkbox"/> Via Delivery																			
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Line	Mat. Short Text	OK	Qty in UnE	E...	SLoc	Bu...	B..	V..	Movement Type	Direction	Stock Type																													
1	CRUDE OIL RAW MATERIALS	<input checked="" type="checkbox"/>	30,000		BBL	RAW MATERIAL STR	RBA	122	-		Blocked sto...																													
3																																								
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Qty in Delivery Note			Amount in LC	22500.000.000,00																																				
Quantity Ordered	1.500,000	BBL																																						

Details to be given

1 – Document type – Return Delivery

If you want to return delivered goods to the vendor for some reason (for example, due to poor quality or because they are damaged), you can use this function to return the goods, even if you have already posted the goods receipt.

2 – Source Document is Material Document based on which the goods will be returned. The material document posted while doing Goods Receipt.

3 – Through the material number it will automatically fetch details about vendor, material type, quantities received,

4 – Quantities to be returned i.e. 30 units from blocked stock

5 – Total ordered quantities and goods receipt for particular vendor & material.

6 – Total price of the Goods

The screenshot shows a SAP Fiori application interface for a material movement document. At the top, there are several tabs: Material, Quantity, Where, Purchase Order Data, Partner, Freight, and Account Assignment. Below the tabs, there are input fields for Movement Type (set to 122 with a minus sign, indicating a reduction in stock), Stock type (set to 'Blocked stock'), Plant (RELIANCE MANUFACTURING PL-1), Storage Location (RAW MATERIAL S...), Goods recipient, and Unloading Point. The 'Movement Type' and 'Stock type' fields are circled in red.

Movement type – 122 (Return to vendor), - sign denotes stock is reducing.

Stock Type - provide the stock type in which the returning material is placed.

TICKET 1

The screenshot shows a ticketing system interface with a message log. At the top, there is a button labeled 'Display logs'. Below it, a table has three columns: Typ, Item, and Message text. The first row shows a red circular icon in the Typ column and the number 1 in the Item column. The message text is 'Enter Reason for Movement'. There is also a question mark icon in the bottom right corner of the message text area.

While doing return delivery i.e. return the material to vendor we need to provide the details or reason for returning.

The screenshot shows the SAP MR01 screen for a material return. The 'Reason for Movement' field is highlighted with a red box and contains the value '0001'. A red arrow points from this field to a dropdown menu titled 'Reason for Movement' which lists four options: 'Poor quality' (highlighted in yellow), 'Incomplete', 'Damaged', and 'Delivered wrong prod'. Other fields visible include Movement Type (122), Stock type (Blocked stock), Plant (RELIANCE MANUFACTURING PL-1), Storage Location (RAW MATERIAL S...), Goods recipient, Unloading Point, and Partner (RPL1).

Reason for Movement	Description
0001	Poor quality
0002	Incomplete
0003	Damaged
0004	Delivered wrong prod

Reason for movement – 0001 meant for the material is in poor quality.

Finally post the document.

Material document 4000000183 posted

We can check the quantities returned from blocked stock to vendor in Stock overview list MMBE

The 30 quantities from blocked material are moved to on order stock i.e. the quantity still to be delivered for the material against the return delivery. Hence the total quantities have been reduced in the company from 3000 units to 2970.

The screenshot shows the SAP MMBE screen. In the 'Stock Overview' section, the 'On-Order Stock' column for the 'Blocked' row is highlighted with a green box and contains the value '30,000'. A red arrow points from this cell to the corresponding 'Unrestricted use' cell in the same row, which also contains '30,000'. The 'Unrestricted use' cell is highlighted with a red box. Other columns shown include Client/Company Code/Plant/Storage Location/Batch/Special Stock, Qual. inspection, Reserved, Rcpt reservation, and Blocked. The 'Material' field is set to 'CRUDE OIL RAW MATERIALS'.

The returned material for the particular material document against po can be seen in purchase order history

The screenshot shows the SAP Purchase Order History screen for document NB - Standard PO 4500018366. The header information includes Document Overview On, Print Preview, Personal Setting, Save As Template, and Load from Template. The main table displays a single item row: Item 10, Material 6000000000, Description CRUDE OIL RAW MATERI..., PO Quantity 1.500,000 BBL, Deliv. Date 06.03.2023, Net Price 4.455,00 INR, Curr... Per 1 BBL, Matl Group Industrial Ma..., Pint RELIANCE MANUF..., Stor. Locat... RAW MATERI... The table also shows three rows of returned material: BzWE 4000000183 (Quantity 0,000, Delivery cost quantity 30,000- BBL), BzWE 4000000139 (Quantity 0,000, Delivery cost quantity 1.500,000 BBL), and WE 122 4000000183 (Quantity 0,000, Delivery cost quantity 30,000- BBL). A red box highlights the 'Purchase Order History' tab in the navigation bar, and another red box highlights the 'Delivery cost quantity' column in the table.

Sh. Text	MvT	Material Document	Item Posting Date	Quantity	Delivery cost quantity	QUn	Amount in LC L.C.,	Qty in OPUn	DelCostQty (OPUn)	Order Price Unit	
BzWE	4000000183		1 10.03.2023	0,000	30,000- BBL		4.009,50- INR	0,000	30,000- BBL	4.009,50- INR	
BzWE	4000000139		1 03.03.2023	0,000	1.500,000 BBL		200.475,00 INR	0,000	1.500,000 BBL	200.475,00 INR	
Tr./Ev. Delivery costs				0,000	BBL	196.465,50 INR	0,000	BBL	196.465,50 INR	0,000	
WE	122 4000000183		1 10.03.2023	30,000-	0,000 BBL	133.650,00- INR	30,000-	0,000 BBL	133.650,00- INR	0,000 BBL	133.650,00- INR
WE	101 4000000139		1 03.03.2023	1.500,000	0,000 BBL	6.682.500,00 INR	1.500,000	0,000 BBL	6.682.500,00 INR	0,000 BBL	6.682.500,00 INR
Tr./Ev. Goods receipt				1.470,000	BBL	6.548.850,00 INR	1.470,000	BBL	6.548.850,00 INR	0,000 BBL	6.548.850,00 INR

To view purchase order histories of returned material to vendor go to the

T code - ME22N

Provide the details as document type & PO document number & select on Purchase Order History. You will see that 1500 quantities have been received on 3rd march against which 30 quantities returned to vendor on 10th march.

PURCHASE ORDER HISTORY / ITEM ORDER HISTORY

SAP Menu → Logistics → Materials Management → Purchasing → Purchase Order → Create → ME21N – Change

T Code ME22N – Change

Provide the details as document type & PO document number & select on Purchase Order History. You will see that 1500 quantities have been received on 3rd march against which 30 quantities returned to vendor on 10th march.

Item	Description	PO Quantity	Delivery Date	Net Price	Unit	Matl Group	Plnt	Stor. Locat
10	CRUDE OIL RAW MATERI...	1.500,000 BBL	06.03.2023	4.455,00 INR	1	BBL	Industrial Ma...	RELIANCE MANUF...

Sh. Text	MvT	Material Document	Item	Posting Date	Quantity	Delivery cost quantity	OUn	Amount in LC	L.C.	Qty in OPUn	DelCostQty (OPUn)	Order Price	Unit
BzWE		4000000183		1 10.03.2023	0,000	30,000-	BBL	4.009,50-	INR	0,000	30,000-	BBL	4,009,50
BzWE		4000000139		1 03.03.2023	0,000	1.500,000	BBL	200,475,00	INR	0,000	1.500,000	BBL	200,475,00
Tr./Ev. Delivery costs					0,000	BBL	196,465,50	INR		0,000	BBL		196,465,50
WE	122	4000000183		1 10.03.2023	30,000-	0,000	BBL	133,650,00-	INR	30,000-	0,000	BBL	133,650,00
WE	101	4000000139		1 03.03.2023	1.500,000	0,000	BBL	6.682,500,00	INR	1.500,000	0,000	BBL	6.682,500,00
Tr./Ev. Goods receipt					1.470,000	BBL	6.548,850,00	INR		1.470,000	BBL		6.548,850,00

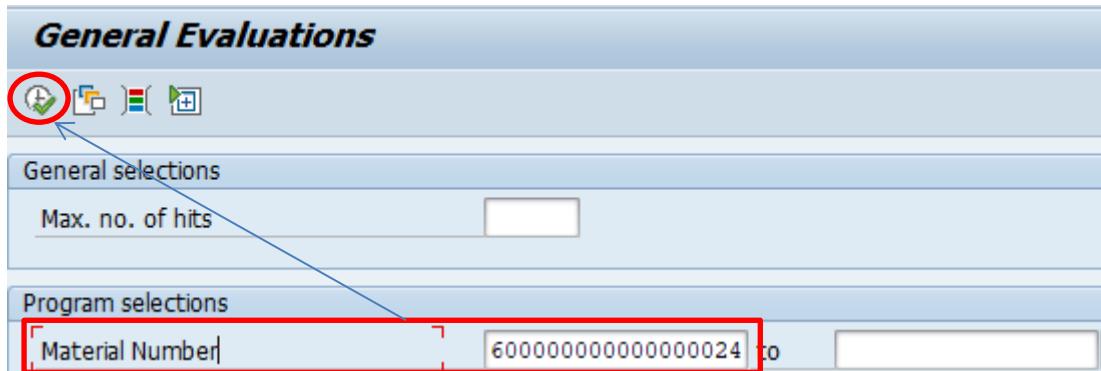
Document Hierarchy	Doc.	Item	Quantity	Unit	Status
Purchase requisition	0010020055	10	1.500,000	BBL	Active
Purchase order	4500018366	10	1.500,000	BBL	Active
Purchase order/Goods	4000000139	1	1.500,000	BBL	
Purchase order/Goods	4000000183	1	30,000	BBL	
Sch. Line	4500018366	10	1.500,000	BBL	

In Material document overview we can see the complete hierarchy of material from PR to return. In this the particular material Purchase requisition, Purchase Order against the PR, Goods Receipt against the Po, Return Delivery against Material document, number & quantity are listed.

GENEREL ANALYSING OF PURCHASE ORDER

SAP Menu → Logistics → Materials Management → Purchasing → Purchase Order → Create → ME80FN - General Analyses

T Code – ME80FN



Provide the material number & then click on execute icon.

Purch.Doc.	Item	Vendor	Matl Group	Material	POrg	PGr	Plant	SLoc	Doc. Date	Order Quantity	OUn	Net Order Value	Crcy	OPU Type	SPt	Short Text
4500018366	10	1000200036	23000000	600000000000000024	RLPO	RPU	RPL1	RRM	28.02.2023	1,500,000	BBL	6.682.500,00	INR	BBL	NB	CRUDE OIL RAW M
4500018369	10	1000200035	23000000	600000000000000024	RLPO	RPU	RPL1	RRM	28.02.2023	1,500,000	BBL	8.647.500,00	INR	BBL	NB	CRUDE OIL RAW M
4500018404	10	1000200015	23000000	600000000000000024	RLPO	RPU	RPL1	RRM	04.03.2023	1,500,000	BBL	81.000.000,00	INR	BBL	NB	CRUDE OIL RAW M
4500018421	30	1000200015	23000000	600000000000000024	RLPO	RPU	RPL1		09.03.2023	100,000	BBL	4.800.000,00	INR	BBL	NB	CRUDE OIL RAW M
4500018425	10	1000200036	23000000	600000000000000024	RLPO	RPU	RPL1	RRM	10.03.2023	1,500,000	BBL	6.682.500,00	INR	BBL	NB	CRUDE OIL RAW M

It will show the complete Purchase order history for the particular material.

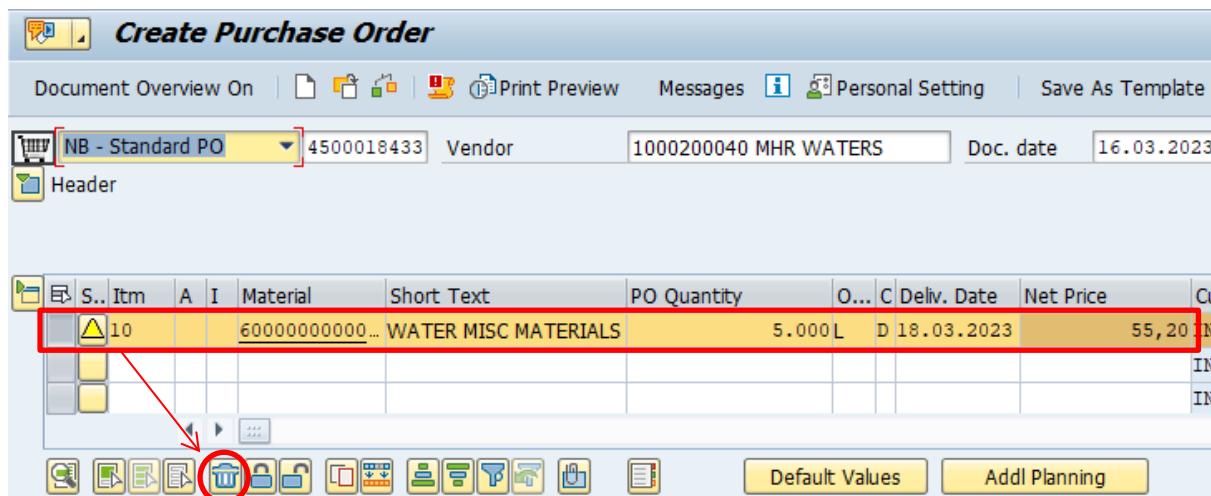
CANCELING THE PURCHASE ORDER

If you do no longer require an item ordered in a purchase order after you have sent the purchase order to the supplier, you can cancel the item and inform the supplier about the cancellation.

SAP Menu → Logistics → Materials Management → Purchasing → Purchase Order → Create → ME21N – Change

T Code ME22N – Change

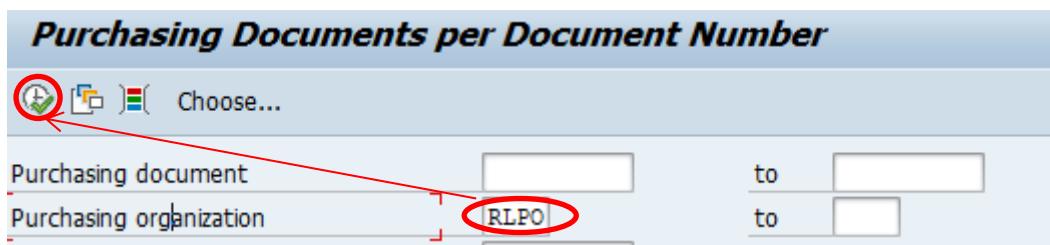
DELETING LINE ITEMS



Provide the Purchase order number and select the line item to which you need to delete the purchase order & click on delete icon

Also we can view Purchasing document & deleted line items in ME2N

T Code – ME2N



Purchasing Documents by Document Number													
PO	Type	Vendor	Name	PGp Order Date									
Item	Material	Short Text		Mat. Group									
D	I	A	Plnt SLoc	Order Qty	Un	Net Price	Curr.	per Un					
4500018366	NB	1000200036	CHINA OIL COMPANY			RPU	28.02.2023						
00010	600000000000000024	CRUDE OIL RAW MATERIALS					23000000						
RPL1	RRM		1.500,000 BBL		4.455,00	INR	1 BBL						
Still to be delivered		30,000 BBL		133.650,00	INR	2,00 %							
Still to be invoiced		1.500,000 BBL		6.682.500,00	INR	100,00 %							
4500018369	NB	1000200035	SAUDI ARABIA OIL COMPANY			RPU	28.02.2023						
00010	600000000000000024	CRUDE OIL RAW MATERIALS					23000000						
RPL1	RRM		1.500,000 BBL		5.765,00	INR	1 BBL						
Still to be delivered		0,000 BBL		0,00	INR	0,00 %							
Still to be invoiced		1.500,000 BBL		8.647.500,00	INR	100,00 %							
4500018404	NB	1000200015	ROSNEFT OIL COMPANY			RPU	04.03.2023						
00010	600000000000000024	CRUDE OIL RAW MATERIALS					23000000						
RPL1	RRM		1.500,000 BBL		81.000.000,00	INR	1.500 BBL						
Still to be delivered		1.500,000 BBL		81.000.000,00	INR	100,00 %							
Still to be invoiced		1.500,000 BBL		81.000.000,00	INR	100,00 %							
4500018421	NB	1000200015	ROSNEFT OIL COMPANY			RPU	09.03.2023						
00030	600000000000000024	CRUDE OIL RAW MATERIALS					23000000						
RPL1			100,000 BBL		72.000.000,00	INR	1.500 BBL						
Still to be delivered		0,000 BBL		0,00	INR	0,00 %							
Still to be invoiced		100,000 BBL		4.800.000,00	INR	100,00 %							

SPECIAL PROCUREMENT TYPES OF PURCHASE ORDER:

CREATING SEPARATE DOCUMENT TYPE FOR PURCHASE ORDER

DEFINING NUMBER RANGES FOR THE DOCUMENT TYPE

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Materials Management → Purchasing → Purchase Order → Define Number Ranges

T Code – OMY6

Maintain Intervals: Purchasing document				
	N..	From No.	To Number	NR Status
	66	1111110000	1111119999	0
	70	7000000000	7099999999	7000000016
	80	8000000000	8099999999	0
	99	6600000000	6699999999	0

No 66 is for external documents & 99 are used for internal documents.

DEFINING DOCUMENT TYPE FOR PURCHASE ORDER TYPES

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Materials Management → Purchasing → Purchase Order → Define Document Types

T Code – OMEC

Document Types Purchase order Change					
New Entries	Doc. Type Descript.	ItmInt.	NoRgeInt	NoRge Ext	
DP	DIRECT PO	1	99	66	

Creating document type and assigning number range to the document type.

DIRECT PURCHASE ORDER

Direct procurement involves acquiring the raw materials, parts, or components that are used to create a product. These are the materials that often end up in the final product for customers. These purchases are generally made in large quantities, acquired from a pool of suppliers at the best possible cost, quality and reliability. These purchases are made frequently and are necessary for key business practices, such as a baker acquiring flour to produce bread.

If direct procurement stops functioning or encounters problems, companies are no longer able to manufacture their product and create revenue.

Direct procurement is often related to manufacturing operations where raw materials are turned into physical products.

Day to day procurement like pipeline vendors we use this direct purchase order. In the Direct PO we no need to create PR and raise PO instead we can directly raise PO by configuring the vendors & materials. Because our day to day requirements may fluctuate & as per fluctuation we can raise PO daily.

The screenshot shows the SAP 'Create Purchase Order' interface. At the top, there's a toolbar with various icons and menu options like 'Document Overview On', 'Hold', 'Park', 'Print Preview', 'Messages', 'Personal Setting', 'Save As Template', and 'Load from Template'. Below the toolbar, a dropdown menu is open, showing 'DIRECT PO' as the selected option. To the right of the dropdown, fields for 'Vendor' (1000200040 MHR WATERS), 'Doc. date' (12.03.2023), and other document details are visible. A navigation bar below the vendor field includes tabs for 'Delivery/Invoice', 'Conditions', 'Texts', 'Address', 'Communication', 'Partners', 'Additional Data', 'Org. Data', 'Status', and 'Payment Processing'. Under the 'Delivery/Invoice' tab, there's a section for 'Purch. Org.' (RLPO RELIANCE PURCHAS ORG), 'Purch. Group' (RPU RELIANCE PUR GRP-1), and 'Company Code' (RLEI RELIANCE INDUSTRIES LTD). At the bottom of the screen, a table displays a single purchase line item. The table has columns for S..., Item, A..., Material, Short Text, PO Quantity, O..., C..., Deliv. Date, Net Price, Curr..., Per, O..., Matl Group, Plnt, and Stor. Location. The first row of the table is highlighted with a red border, showing values: Item 1, Material 6000000000... WATER MISC MATERIALS, PO Quantity 5.000 L, Deliv. Date 17.03.2023, Net Price 57,60 INR, Per 1, Matl Group L, and Plnt Miscellaneous RELIANCE MANUF..

First select the document types as Direct PO and provide the details of the material and check for tickets then post the document.

You will get the following message.

DIRECT PO created under the number 6600000000

INDIRECT PURCHASE ORDER

Indirect procurement involves purchasing goods and services, supplies, and materials that are required to keep the day-to-day business running. One way of classifying indirect procurement is that it doesn't add to a business's bottom line. Indirect procurement may include purchases such as repairing equipment, buying office supplies, maintenance, travel, or other services.

Without indirect procurement functions, businesses wouldn't be able to operate effectively.

Mainly the materials procured for internal use (Internal Procurement)

The screenshot shows the SAP 'Create Purchase Order' interface. The document type is set to 'INDIRECT PO'. The vendor is '1000200040 MHR WATERS' and the document date is '12.03.2023'. The purchase organization is 'RLEO' (RELIANCE PURCHAS ORG), purchase group is 'RPU' (RELIANCE PUR GRP-1), and company code is 'RLEI' (RELIANCE INDUSTRIES LTD). In the item table, there is one row with Item '1' and Short Text 'PRINTER CARTRIDGE'. The table includes columns for Item, Material, Short Text, PO Quantity, Delivery Date, Net Price, Curr..., Per, O..., Matl Group, and Plnt.

In the above screen provide the document type as Indirect Purchase Order.

The main fields to be provided in indirect PO is account assignment category and item category. Material number is optional for this Indirect Po

Account Assignment Category

It indicates what type of purchase the company is doing in Purchasing Documents, whether it is for consumption or anything relation to orders,

projects etc. The nature of this also indicates which accounts it needs to be charged for when the incoming invoice and Goods Receipt are posted.

Cost Centre is a component in which the costs occur inside an organization. It is an organizational unit within a controlling area which represents locations where costs occur. It helps to capture the costs of an organization.

A company can classify a business unit in three ways – Profit center, Cost center, Investment center. The nature of the account assignment (cost center, sales order, and so on).

Which accounts are to be charged when the incoming invoice or goods receipt is posted? Which account assignment data you must provide?

Here we need to provide the cost centre details as **K – meant for cost centre**

Item category

The item category determines whether the following are mandatory or permitted for an item: Material Number, Account assignment, Inventory Management, Goods Receipt & Invoice Receipt.

Item category	Description
M	the material is unknown
W	value and quantity are unknown
D	you are procuring an external service
K	consignment material is involved
U	the account assignment is unknown
L	subcontracting material is involved

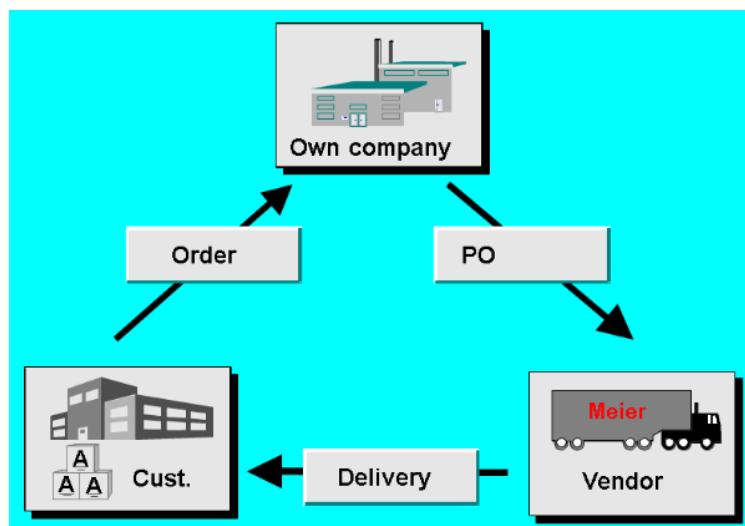
THIRD PARTY PURCHASE ORDER

In third-party process the delivery of the goods required by the customer is not done by sales organization where customer orders. Instead, the request of the goods is forwarded to an external vendor who sends the material directly to the customer.

The company's Vendor supplies material to the company's Customer (Or) Vendor Supplies material to a customer of a customer is called the Third-party.

Our Company sales department receives a PO from our customer for the material.

Then the company sends a PO with a delivery address as a Customer to supply this material. The vendor will supply this material directly to the customer



VENDOR TO CUSTOMER

Here consider our customer HP Gas have asked packaging materials, hence we won't have much stock so we have raised the PO to procure for our customer directly from the supplying vendor. Vendor then delivers the product to the customer. It will be done for a commission basis.

Document Overview On | Hold | Print Preview | Messages | Personal Setting | Save As Template | Load from Template

THIRD PARTY PO | Vendor: 1000400005 FULCRUM SHIPPING... | Doc. date: 12.03.2023

S..	Itm	A	I	Material	Short Text	PO Quantity	O...	C	Deliv. Date	Net Price	Curr...	Per	O...	Matl Group	Plnt
1				K S	BARRELS PACKAGING RL...	100 L	D	14.03.2023	980,00 INR	1	L	OIL	RELIANCE MANUF...		

Item: [1] BARRELS PACKAGING RLEI

Material Data | Quantities/Weights | Delivery Schedule | Delivery | Invoice | Conditions | Account Assignment | Texts | **Delivery Address** | Confirmations

Delivery Address:

Title: Company	<input type="button" value="Address details"/>
Name: HP Gas	<input type="button" value="Reset address"/>
Street/House number:	<input type="checkbox" value="Repeat address on"/>
District: Gandhinagar	
Postal Code/City:	
Country: IN India Region: 06 Gujarat	

Address: _____
Customer: _____
Vendor: _____

Provide the details document types as third party PO, Material no is optional.

Account Assignment category – K for cost centre

Item category as – S (for third party)

Provide the customer details, customer address for delivery.

CUSTOMER TO VENDOR

Document Overview On | Hold | Print Preview | Messages | Personal Setting | Save As Template | Load from Template

THIRD PARTY PO | Vendor: 5000010001 NAYARA ENERGY | Doc. date: 15.03.2023

S..	Itm	A	I	Material	Short Text	PO Quantity	O...	C	Deliv. Date	Net Price	Curr...	Per	O...	Matl Group	Plnt
10				K S	PREMIUM PETROL	2.000,000	D	12.03.2023	6.000,00 INR	1		Oils	RELIANCE MANUF...		

Item: [10] PREMIUM PETROL

Material Data | Quantities/Weights | Delivery Schedule | Delivery | Invoice | Conditions | Account Assignment | Texts | **Delivery Address** | Confirmations

Delivery Address:

Title: Company	<input type="button" value="Address details"/>
Name: RELIANCE MANUFACTURING PL-1	<input type="button" value="Reset address"/>
Street/House number: MAHARASTRA	<input type="checkbox" value="Repeat address on"/>
District: MUMBAI	
Postal Code/City:	
Country: IN India Region: 13 Maharashtra	

Address: _____
Customer: _____
Vendor: _____

Provide the details document types as third party PO. Material no is optional.

Account Assignment category – K for cost centre

Item category as – S (for third party)

Provide the customer details (here the customer as vendor), customer address for delivery.

Our vendor has asked for premium petrol we are out of stock but our distributor Nayara has stock so we have procured from them and stored in our warehouse then they are delivering to the vendor (customer).

CONSIGNMENT PO

In consignment processing, the vendor provides materials and stores them on your premises. The vendor remains the legal owner of the material until you withdraw materials from the consignment stores. Only then does the vendor require payment. The invoice is due at set periods of time, for example, monthly. In addition, you can also arrange with the vendor that you take over ownership of the remaining consignment material after a certain period of time.

The supplier (vendor) would not invoice the purchaser initially when they come into the premises of the purchaser. The purchaser is liable to pay the supplier (Vendor) only when the stock is withdrawn (consumed).

CREATING PIR UNDER CONSIGNMENT CATEGORY

Activate Purchasing Info Record for Info category as Consignment.

SAP Menu → Logistics → Materials Management → **Purchasing** → **Master Data** → **Info Record** → ME11 – Create.

T Code – ME11 – Create Data

Create Info Record: Initial Screen

Vendor	1000200035
Material	600000000000000024
Purchasing Org.	RLPO
Plant	RPL1
Info Record	

Info category

- Standard
- Subcontracting
- Pipeline
- Consignment

Specify the material details & vendor details for which PIR should be created.

Create Purchase Order

Document Overview On | Hold | Park | Print Preview | Messages | Personal Setting | Save As Template | Load from Template

CONSIGNMENT PO	Vendor	1000200035 SAUDI ARABIA OIL ...	Doc. date	12.03.2023
<input type="radio"/> Delivery/Invoice <input type="radio"/> Conditions <input type="radio"/> Texts <input type="radio"/> Address <input type="radio"/> Communication <input type="radio"/> Partners <input type="radio"/> Additional Data <input type="radio"/> Org. Data <input type="radio"/> Status <input type="radio"/> Payment Processing				
Purch. Org.	RLPO	RELIANCE PURCHAS ORG		
Purch. Group	RPU	RELIANCE PUR GRP-1		
Company Code	RLEI	RELIANCE INDUSTRIES LTD		

S..	Itm	A	Material	Short Text	PO Quantity	O... C	Deliv. Date	Net Price	Curr...	Per	O...	Matl Group	Plnt
	1	K	600000000000000024	CRUDE OIL RAW MATERI...	25.000,000 BBL	D	20.03.2023					Industrial Ma...	RELIANCE MANUF...

Select the document as Consignment Purchase Order.

Provide the Item category as K for consignment.

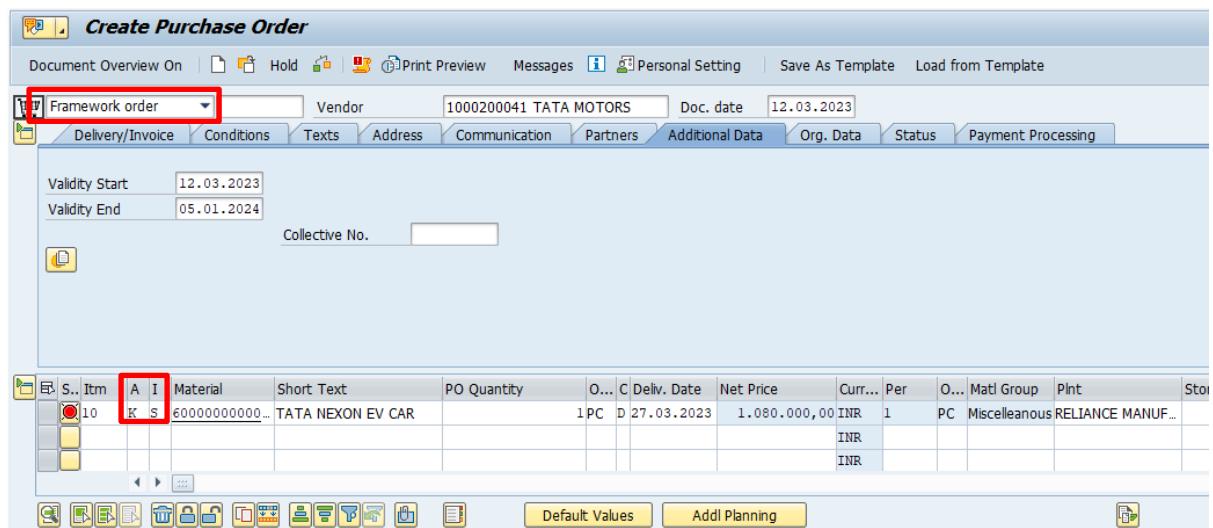
Finally post the document.

CONSIGNMENT PO created under the number 6600000001

BLANKET & FRAMEWORK PO

Blanket Purchase Orders is the business process that provides a Purchase Order to the user with a validity period and also a limit on the item. No goods receipt takes place for this PO.

For example if the company decide to present a car to the best employee, in order to procure we may use this PO. For consumable materials such as Xerox papers with a short text (does not need to have Master Record) with Item Category ' B' i.e. Limit, where in the PO validity period as well as the limits are to be mentioned for the simplicity of procurement.



For example, the company raises a PO for procuring Nixon car from Tata motors to present to the employee.

Account assignment category – k means cost centre

Item category – B (limit), we can specify the overall limit in rs from which the material price should not exceeded. B category does not need goods receipt.

The screenshot shows the SAP Material Master Data screen for item [10] TATA NEXON EV CAR. The 'Overall Limit' field is empty and has a red border. The 'Actual' Value field contains '0,00'. A checkbox labeled 'No limit' is checked. The currency code 'INR' is selected.

Overall Limit		INR	<input checked="" type="checkbox"/> No limit
Expected value			
"Actual" Value	0,00		

We either specify the limit or select no limit.

STOCK TRANSPORT ORDER PURCHASE ORDER

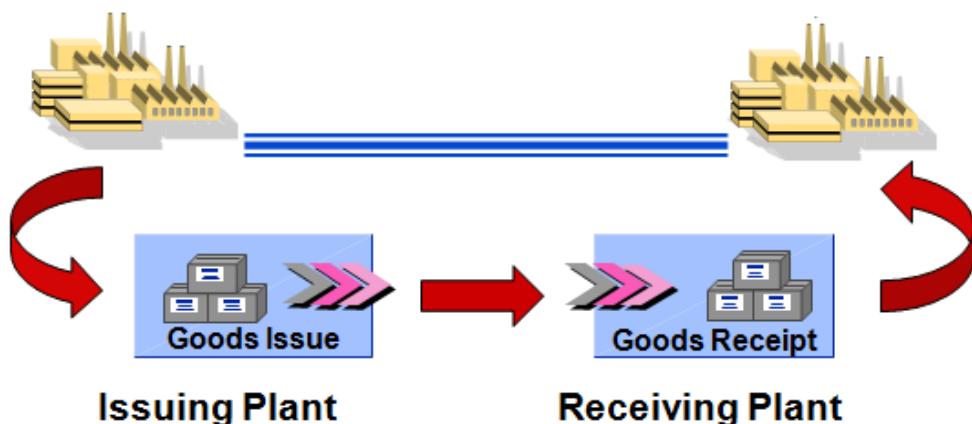
Let we assume that companies having numerous plants in different geographical locations and frequently require stock movement between plants so Stock transport Order operation helps company to make movement of the stock/material between plants, plant of a company code to plant of another company code and monitor the stock movement using stock reports .

There can be many reason to transfer the stock for example to reduce the freight cost, to reduce the price of a material, Tax Handling (Valuation type – Tax), capacity limitation in specific storage area, shortage of stock in one plant, demand of a material increase in certain location/plants suddenly or decrease, it could be slow moving item at some plants, sometime company import material from abroad, received material at a Central location and distribute the stock quantities partially into different plants as demand raised by the receiving plant using stock transfer order and product is manufactured in the manufacturing plant and distribute to the other plants within a company or plants of a subsidiary companies to meet the regional or international (export) locations requirement.

DIFFERENCE BETWEEN STOCK TRANSPORT ORDER & TRANSFER POSTING

Stock Transport Order:

Separate document type is available in Standard SAP. Stock Transfer Order is created with ME21N. Delivery Costs and any other charges can be given in PO Conditions. Separate Pricing procedure for STO is also available. This process is generally preferred when client has plants in different cities or states and when client requires monitoring any other details like conditions related etc.



Transfer Posting:

This process is done through MIGO. Conditions can't be maintained. This is a transaction where only goods can be transferred so facilities which can be monitored in PO can't be done. This process is generally preferred when plants are in same city or client doesn't want to monitor freight etc.

TICKET 1

This error comes because the material is not yet included in the source list or the source of supply is not determined.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Materials Management → Purchasing → Source List → Define Source List Requirement at Plant Level

T Code – OME5

Change View "Source List/Plant": Overview			
	Plnt	Name	Source list
	RPL1	RELIANCE MANUFACTURING PL-1	<input checked="" type="checkbox"/>
	RPL2	RELIANCE MANUFACTURING PL-2	<input checked="" type="checkbox"/>

Activate the source list respective to your plant.

DEACTIVATING SOURCE LIST IN PURCHASING FIELD OF MATERIAL MASTER.

If the error still continues proceed with MM02 Material Master Data changing.

Un-check the check box of source list in purchasing field of material master data.

The screenshot shows the SAP MM02 - Change Material screen for material number 6000000000000000024 (RLEI RAW MATERIALS). The Purchasing tab is selected. Under Purchasing values, there is a checkbox labeled 'Source list' which is highlighted with a red box. Other fields visible include Purchasing Group (RPU), Plant-sp.mati status, Tax ind. f. material, Material freight grp, Material Group (23000000), Valid from, Qual.f.FreeGoodsDis., Autom. PO, OB Management, OB ref. material, and various reminder and tolerance settings.

Create Purchase Order

Document Overview On Hold Park Print Preview Messages Personal Setting Save As Template Load from Template

Stock Transp. Order ▾ Supplying Plant RPL1 RELIANCE MANUFACTRING ... Doc. date 12.03.2023

Delivery/Invoice Texts Address Communication Partners Additional Data Org. Data Status Payment Processing

Purch. Org. RLPO RELIANCE PURCHASES ORG
Purch. Group RPU RELIANCE PUR GRP-1
Company Code RLEI RELIANCE INDUSTRIES LTD

S..	Item	A I	Material	Short Text	PO Quantity	O...	C	Deliv. Date	Matl Group	Plnt
1		A	60000000000...	CRUDE OIL RAW MATERI...	500,000 BBL	D	15.03.2023	Industrial Ma...	RELIANCE MANUFACTURING PL-2	
		I								
		U								

Default Values Addl Planning

Item [1] 60000000000000024 , CRUDE OIL RAW ... ▾

Material Data Quantities/Weights Delivery Schedule Delivery Texts Delivery Address Confirmations Retail

Title Company ▾
Name RELIANCE MANUFACTURING PL-2
GUJARAT

Address details

Enter the document type as stock transport order; Here the vendor is supplying plant we need to specify the plant details where the goods will be issued to receiving plant.

Here supplying plant is RPL1 & receiving plant is RPL2.

Specify the item category as U which is meant for consignment.

Enter the receiving plant details in delivery address. Finally post the PO

Stock Transp. Order created under the number 4500018432

We can view the transferring stocks in stock overview list T Code – MMBE.

We can see that there were 500 quantities in consignment ordered.

Stock Overview: Basic List						
Selection						
Material	600000000000000024	CRUDE OIL RAW MATERIALS				
Material Type	ROHR	RLEI RAW MATERIALS				
Unit of Measure	BBL	Base Unit of Measure BBL				
Stock Overview						
Client/Company Code/Plant/Storage Location/Batch/Spec...		Unrestricted use	Qual. inspection	Reserved	Rcpt reservation	On-Order Stock
Full		2,970,000			30,000	50.000.000
RLEI RELIANCE INDUSTRIES LTD		2,970,000			30,000	50.000.000
RPL1 RELIANCE MANUFACTRING PL-1		2,720,000			30,000	50.000.000
RRM RAW MATERIAL STR		2,720,000			30,000	50.000.000
RPL2 RELIANCE MANUFACTRING PL-2		250,000			250,000	
RRM2 RAW MAT STR PL_2		250,000			250,000	

CHECKING IN PURCHASING DOCUMENT PER SUPPLYING PLANT

Sap menu → logistics → materials management → purchasing → purchase order → List Display → By supplying plant.

T Code - ME2W

Purchasing Documents per Supplying Plant								
Supplying plant		Purchasing organization		to				
Choose...		RPL1		to				
Purchasing organization				to				
Purchasing Documents per Supplying Plant								
PO	Ty.	Suppl. Plnt Name	Short Text	Mat.	Gp	Order Date		
Item	Material	D I A	Plnt Sloc	Order Qty	Un	Net Price	Curr.	per Un
4500018432	EUB	Plant RPL1	RELIANCE MANUFACTRING PL-1			RPU	12.03.2023	
00001	600000000000000024		CRUDE OIL RAW MATERIALS				23000000	
U	RPL2			500,000	BBL	0,00	INR	0 BBL
	Still to be delivered			500,000	BBL	0,00	INR	100,00 %
	Still to be invoiced			0,000	BBL	0,00	INR	0,00 %

Here we can clearly notice that from plant RPL1 crude oil is been transferred to plant RPL2.

SUB CONTRACTING PO

In subcontracting process, raw materials are provided to subcontracting vendor. It's being processed by subcontracting vendor, convert it to semi-finish material and deliver back.

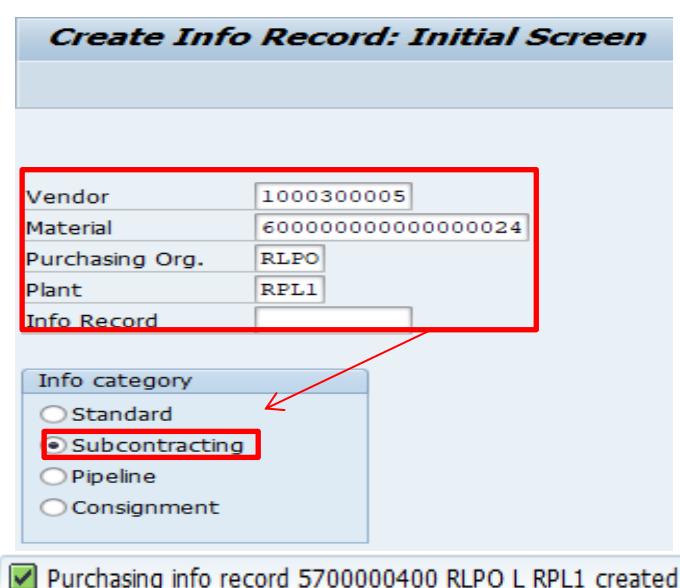
The manufacturer does not have the technology or ability to do the value addition in the finished that he has produced. There can be another scenario where the manufacturer will produce the required finished good or semi-finished good and for the final packaging/serialization/electroplating/painting, he will give the partially complete manufactured goods to the subcontracting vendor and he will perform the value addition and will give back the final finished goods to the manufacturer. This is not considered as a sale from the manufacturer.

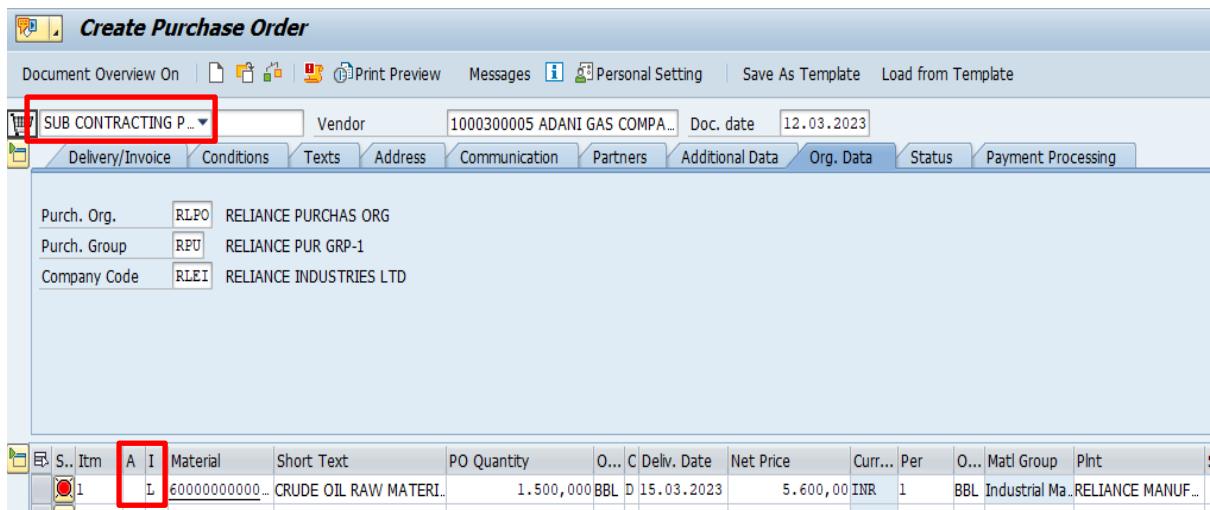
CREATING PIR UNDER SUB-CONTRACT CATEGORY

Activate Purchasing Info Record for Info category as Consignment.

SAP Menu → Logistics → Materials Management → **Purchasing** → **Master Data** → **Info Record** → ME11 – Create.

T Code – ME11 – Create Data





First specify the document type as subcontracting PO,

Then enter the vendor for sub contract, In Item category enter L (subcontract).

AUTOMATIC PO

By activating automatic PO we can automatically convert requisitions that have been assigned to sources into purchase orders.

Materials which are all procured daily with standard demand requirements.

Mainly used for pipeline items.

Steps 1 → Activating automatic PO in Vendor Master (purchasing)

SAP Menu → Logistics → Materials Management → Purchasing → Master Data → Vendor → Central → XK02 – Change

T Codes – XK02

Change Vendor: Purchasing data

Vendor 1000200040 MHR WATERS
 Purchasing Org. RLPO RELIANCE PURCHAS ORG

Conditions

Order currency	INR	Indian Rupee
Terms of paymnt	0001	
Incoterms	COD	MAHARASTRA
Minimum order value		
Schema Group, Vendor	<input type="checkbox"/> Standard procedure vendor	
Pricing Date Control	<input type="checkbox"/> No Control	
Order optim.rest.		

Sales data

Salesperson		
Telephone		
Acc. with vendor		

Control data

<input type="checkbox"/> GR-Based Inv. Verif.	ABC indicator	<input type="checkbox"/>	<input type="checkbox"/> RMA Required
<input type="checkbox"/> AutoEvalGRSetmt Del.	ModeOfTrnsprt-Border	<input type="checkbox"/>	
<input type="checkbox"/> AutoEvalGRSetmt Ret	Office of entry	<input type="checkbox"/>	
<input type="checkbox"/> Acknowledgment Reqd	Sort criterion	<input type="checkbox"/>	By VSR sequence number
<input checked="" type="checkbox"/> Automatic purchase order	PROACT control prof.	<input type="checkbox"/>	

In the vendor master data we need to activate the field automatic purchase order. Then only the automatic PO will be execute for the vendor.

Steps 2 → Activating automatic PO in Material Master (purchasing)

SAP Menu → Logistics → Materials Management → Material Master → Material → Create (General) → MM02 – Change

T Code – MM02

Here also we need to activate automatic PO filed in material master for which the PO to be executed.

Change Material 600000000000000024 (RLEI RAW MATERIALS)

Additional Data Org. Levels Check Screen Data

Sales text Purchasing Foreign trade import Purchase order t...

Material	600000000000000024	CRUDE OIL RAW MATERIALS																																																	
Plant	RPL1	RELIANCE MANUFACTURING PL-1																																																	
General Data <table border="1"> <tr> <td>Base Unit of Measure</td> <td>BBL</td> <td>Barrel</td> <td>Order Unit</td> <td><input type="text"/></td> <td>Var. OUn <input type="checkbox"/></td> </tr> <tr> <td>Purchasing Group</td> <td>RPU</td> <td></td> <td>Material Group</td> <td>23000000</td> <td></td> </tr> <tr> <td>Plant-sp.matl status</td> <td><input type="checkbox"/></td> <td></td> <td>Valid from</td> <td><input type="text"/></td> <td></td> </tr> <tr> <td>Tax ind. f. material</td> <td><input type="checkbox"/></td> <td></td> <td>Qual.f.FreeGoodsDis.</td> <td><input type="checkbox"/></td> <td></td> </tr> <tr> <td>Material freight grp</td> <td><input type="text"/></td> <td></td> <td><input checked="" type="checkbox"/> Autom. PO</td> <td><input type="checkbox"/></td> <td></td> </tr> <tr> <td colspan="3"></td> <td>OB Management</td> <td><input type="checkbox"/></td> <td></td> </tr> <tr> <td colspan="3"></td> <td>OB ref. material</td> <td colspan="2"><input type="text"/></td> </tr> <tr> <td colspan="3"></td> <td><input type="checkbox"/> Batch management</td> <td colspan="2"></td> </tr> </table>				Base Unit of Measure	BBL	Barrel	Order Unit	<input type="text"/>	Var. OUn <input type="checkbox"/>	Purchasing Group	RPU		Material Group	23000000		Plant-sp.matl status	<input type="checkbox"/>		Valid from	<input type="text"/>		Tax ind. f. material	<input type="checkbox"/>		Qual.f.FreeGoodsDis.	<input type="checkbox"/>		Material freight grp	<input type="text"/>		<input checked="" type="checkbox"/> Autom. PO	<input type="checkbox"/>					OB Management	<input type="checkbox"/>					OB ref. material	<input type="text"/>					<input type="checkbox"/> Batch management		
Base Unit of Measure	BBL	Barrel	Order Unit	<input type="text"/>	Var. OUn <input type="checkbox"/>																																														
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			OB Management	<input type="checkbox"/>																																															
			OB ref. material	<input type="text"/>																																															
			<input type="checkbox"/> Batch management																																																

Step 3 → CREATING PIR UNDER PIPELINE CATEGORY

T Code – ME11

Create Info Record: Initial Screen

Vendor	1000200040
Material	6000000000000000200
Purchasing Org.	RLPO
Plant	RPL1
Info Record	<input type="text"/>

Info category

Standard
 Subcontracting
 Pipeline
 Consignment

Create Info Record: Purch. Organization Data 1

General Data	Conditions	Texts
Info Record	650001003	MHR WATERS MISC MATERIALS
Vendor	1000200040	MHR WATERS
Material	6000000000000000200	WATER MISC MATERIALS
Material Group	00107	Miscellaneous
Purchasing Org.	RPL0	Plant RPL1 Pipeline

Control					
Pl. Deliv. Time	1 Days	Tol. Underdl.	<input type="text"/>	%	<input type="checkbox"/> No MText
Purch. Group	RPL0	Tol. Overdl.	<input type="text"/>	%	<input type="checkbox"/> Ackn. Rqd
Standard Qty	5.000 L	<input type="checkbox"/> Unlimited	<input type="checkbox"/> Conf. Ctrl		
Minimum Qty	2.000 L	<input type="checkbox"/> GR-Bsd IV	<input type="checkbox"/> Tax Code		
Rem. Shelf Life	<input type="text"/> D	<input type="checkbox"/> No ERS			
Differential Invoicing	Not Relev... ▾				
Shippg Instr.	<input type="checkbox"/>				
Max. Quantity	20.000 L	Procedure	<input type="text"/>		UoM Group <input type="text"/>
		Rndg Prof.	<input type="text"/>		RMA Req. <input type="checkbox"/>

Conditions					
Net Price	59,40 INR / 1 L	Valid to	31.12.9999		
Effective Price	60,89 INR / 1 L	<input type="checkbox"/> No Cash Disc.			
Qty Conv.	1 L <-> 1 L	Cond. Grp	<input type="text"/>		
Pr. Date Cat.	<input type="checkbox"/> No Control				
Incoterms	<input type="text"/>				

ACTIVATING PIPELINE MANDATORY FIELD IN QUANTITY / VALUE UPDATION FIELD OF MATERIAL GROUP

T Code – OMS2

In that provide the company code it will display your material groups then in the particular material group for which automatic PO is to be created check box the Pipeline mandatory.

For Direct Po we need to activate as pipeline allowed.

Change View "Quantity/value updating": Overview								
		Val...	Ma...	Qty updati...	Value Upd...	Pipe.mand.	PipeAllowd	
		ROB1	RMIS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		RP1	RMIS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		RP2	RMIS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		RPL1	RMIS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		RPL2	RMIS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		RQP1	RMIS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CREATE PURCHASE REQUISITION

T Code - ME51N

Display Purchase Req. 10020117

Document Overview On		Save As Template																												
Standard PR	10020117																													
Header																														
<table border="1"> <tr> <td>St...</td> <td>Item Material</td> <td>Short Text</td> <td>Quantity</td> <td>Unit</td> <td>C</td> <td>Delivery Date</td> <td>Matl Group</td> <td>Plant</td> <td>Stor. Loc.</td> <td>PGr</td> <td>Requested By</td> <td>Tracking...</td> <td>Des.Vendor</td> </tr> <tr> <td></td> <td>1 600000000000000200</td> <td>WATER MISC MATERIALS</td> <td>5.000</td> <td>L</td> <td>D</td> <td>18.03.2023</td> <td>Miscellaneous</td> <td>RELIANCE M...</td> <td>RAW MAT...</td> <td>RPU</td> <td>1000200040</td> <td></td> <td>1000200040</td> </tr> </table>			St...	Item Material	Short Text	Quantity	Unit	C	Delivery Date	Matl Group	Plant	Stor. Loc.	PGr	Requested By	Tracking...	Des.Vendor		1 600000000000000200	WATER MISC MATERIALS	5.000	L	D	18.03.2023	Miscellaneous	RELIANCE M...	RAW MAT...	RPU	1000200040		1000200040
St...	Item Material	Short Text	Quantity	Unit	C	Delivery Date	Matl Group	Plant	Stor. Loc.	PGr	Requested By	Tracking...	Des.Vendor																	
	1 600000000000000200	WATER MISC MATERIALS	5.000	L	D	18.03.2023	Miscellaneous	RELIANCE M...	RAW MAT...	RPU	1000200040		1000200040																	

RAISING AUTOMATIC PO

SAP Menu → Logistics → Materials Management → Purchasing → Purchase Order → Create → ME59 - Automatically via Purchase Requisitions

T Code - ME59

Provide the details

1. Purchasing Group
2. Purchasing Organization
3. Plant
4. Already created Purchase Requisition.

Automatic Creation of Purchase Orders from Requisitions

Purchasing Group	RPU	to	
Purchasing Organization	RLPO	to	
Vendor		to	
Contract		to	
Plant	RPL1	to	
Receiving Storage Location		to	
Supplying Plant		to	
Issuing Storage Loc.		to	

New Purchase Order

<input type="checkbox"/> Per Purchasing Group	<input type="checkbox"/> Per Delivery Date
<input type="checkbox"/> Per Plant	<input type="checkbox"/> Per Vendor Subrange
<input type="checkbox"/> Per Storage Location	<input type="checkbox"/> Per Requisition
<input type="checkbox"/> Per Item Category	<input type="checkbox"/> Per Requisition Item
<input checked="" type="checkbox"/> Per Company Code	

Material Group	<input type="text"/>	to	<input type="text"/>
Release Date	<input type="text"/>	to	<input type="text"/>
Delivery Date	<input type="text"/>	to	<input type="text"/>
MRP Controller	<input type="text"/>	to	<input type="text"/>
Purchase Requisition	10020117	to	<input type="text"/>
Material	<input type="text"/>	to	<input type="text"/>

System will give a successful message as shown below. It displays purchase order has been created for the material and the number is 4500018433.

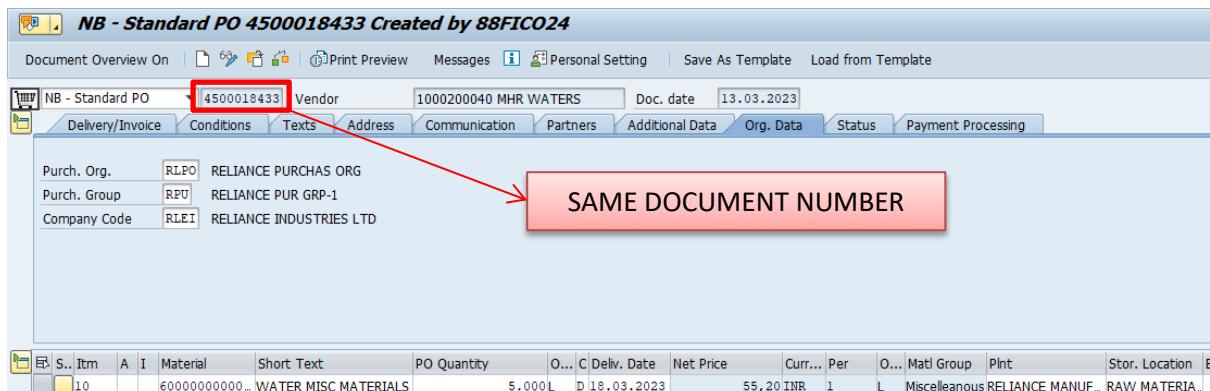
Automatic Creation of Purchase Orders from Requisitions



POrg	OTy.	Contract	Reqs	PO	Item	Message
Vendor	1000200040					
RLPO	NB	W/o Contract	1	1		Purchase order 4500018433 Created

VERIFYING THE AUTOMATIC PO CREATED

T CODE - ME53N



PURCHASE ORDER FOR EXTERNAL SERVICE

Service purchase orders are entered for services that are procured internally or externally. These purchase orders are different from standard ones as they don't require a goods receipt since they have no stock.

TICKET 1

Cost center RLEI/RLEI does not exist

Message no. KI265

We need to create cost centre for our company.

Cost Center in SAP is a component in which the costs occur inside an organization. It is an organizational unit within a controlling area which represents locations where costs occur. It helps to capture the costs of an organization. It does not directly generate revenue but incurs additional expenses to operate. A cost center is an organizational unit or department (sales, services, IT, finance, marketing, engineering, and so on) that is used to allocate the cost of a business activity to an existing budget.

T Code – KS01

Master Data			
Cost Center	RLCC		
Valid From	26.03.2023	to	31.12.9999

TICKET 2

Controlling area RLEI does not have a standard hierarchy (please assign one)

Message no. KS055

We need to mention standard hierarchy in controlling area because it will help to link all the different cost centres within the company.

T Code - OKKP

Controlling Area	RLEI	
Name	RELIANCE COA	
Person Responsible		
Assignment Control		
CoCd->CO Area	Cross-company-code cost accounting	
Currency Setting		
Currency Type	10	Company code currency
Currency	INR	Indian Rupee
Curr/Val. Prof.		<input type="checkbox"/> Diff. CCode Currency <input type="checkbox"/> Active
Other Settings		
Chart of Accts	TTS	Chart of Account of TTS for MM
Fiscal Year Variant	K4	Fiscal Year Variant of India
CCtr Std. Hierarchy	STDHIR	

Then provide the details in cost centre and execute.

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → Accounting → Controlling → Cost Centre Accounting → Master Data → Cost Centre → Individual Processing → Create.

Create Cost Center: Initial Screen

Master Data	
Cost Center	RLCC
Valid From	26.03.2023
to	31.12.9999

Create Cost Center: Basic Screen

Cost Center	RLCC	RLEI COST CENTRE
Controlling Area	RLEI	RELIANCE COA
Valid From	26.03.2023	to 31.12.9999

Basic data Control Templates Address Communication History

Names

Name	RLEI COST CENTRE
Description	COST CENTRE FOR RELIANCE

Basic data

User Responsible	88FIC021	
Person Responsible	GOKUL	
Department		
Cost Center Category	M	Material
Hierarchy area	STDHIR	
Business Area	RLBA	PETROLEUM PRODUCTS MANUFACT...
Functional Area		
Currency	INR	
Profit Center		

After creating the cost centre specify the cost centre in purchase order.

Account Assignment of Service in Line 10

Line	10	Distribution Indicator
Quantity	8,0	<input checked="" type="radio"/> No Multi Acct Assignment
Activity	HR	<input type="radio"/> Distrib. on Qty Basis
Short Text	GENERAL ELECTRIC SERVICE	<input type="radio"/> Distrib. by Percentage
Quantity/Percent	Net Value	Cost Ctr
8,000	8.000,00	RLCC
		G/L Account
		3

TICKET 3

 Create account 3 for 26.03.2023 as a cost element in controlling area RLEI

Account is not maintained for cost element.

T Code – KA01 Create Cost Element

Create Cost Element: Initial Screen

Master Data		
Cost Element	7	
Valid From	26.03.2023	to 31.12.9999

TICKET 4

 Create the G/L account 7. first

We need to specify the G/L account for cost element separately.

Go To

T Code – FS00

Change G/L Account Centrally

G/L Account	7	COST ELEMENT ACCOUNT
Company Code	RLEI	RELIANCE INDUSTRIES LTD

Type/Description Control Data Create/bank/interest Key word/

Control in chart of accounts

Account Group: Material Management A/c of TTS

P&L statement acct
 Balance sheet account

Detailed control for P&L statement accounts

Functional Area: [empty]

Description

Short Text: COST ELEMENT

G/L Acct Long Text: COST ELEMENT ACCOUNT

Create Cost Element: Basic Screen

Cost Element	7	COST ELEMENT
Controlling Area	RLEI	RELIANCE COA
Valid From	26.03.2023	to 31.12.9999

Basic Data Indicators Default Acct Assgnmt History

Names

Name: COST ELEMENT

Description: COST ELEMENT ACCOUNT

Basic Data

CElem category: 1 Primary costs/cost-reducing revenues

Then do account assignment for service purchase order.

Account assignment

Account Assignment of Service in Line 10

Line	10	Distribution Indicator	
Quantity	8,0	<input checked="" type="radio"/> No Multi Acct Assignment	
Activity		<input type="radio"/> Distrib. on Qty Basis	
Short Text	GENERAL ELECTRIC SERVICE	<input type="radio"/> Distrib. by Percentage	
Quantity/Percent	Net Value	Cost Ctr	G/L Account
8,000	8.000,00	RLCC	7

Create Purchase Order

Document Overview On	Hold	Park	Print Preview	Messages	Personal Setting	Save As Template	Load from Template																																																																		
EXTERNAL SERVICE P...	Vendor	1000200041 TATA MOTORS	Doc. date	26.03.2023																																																																					
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EXTERNAL SERVICE PO created under the number 6600000006

For External Service purchase order we need to provide the details like

Account Determination category as – K (Cost Centre)

Item Category as – D (services)

PHYSICAL INVENTORY

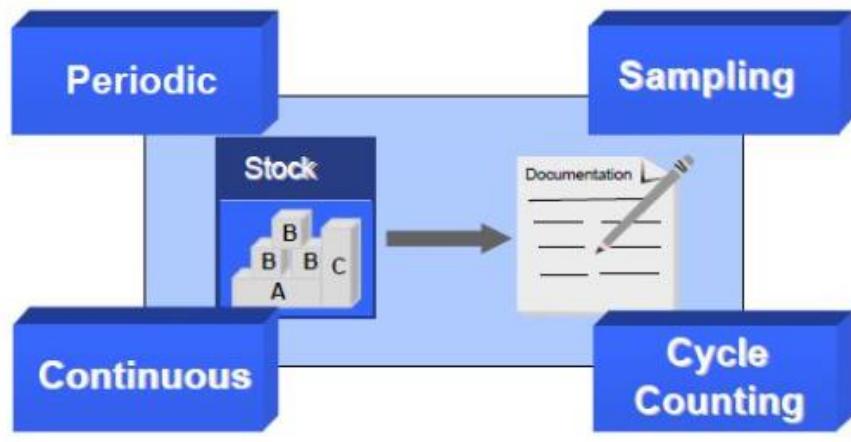
Physical inventory is a process of determining that the inventory quantities are exact, or if there are differences in quantity mentioned physically present and that mentioned in the SAP system. Basically, after you are finished with physical inventory, your system and physical stock levels must be the same.



It is extremely helpful having the correct stock quantities in the system matching the physical stock. Management can have the correct information on the value of stock materials.



TYPES OF PHYSICAL INVENTORY



Periodic Physical Inventory

In a periodic inventory, all stocks of the company are physically counted on the balance sheet key date (specified date) . In this case, every material must be counted. During counting, the entire warehouse must be blocked for material movements.

Continuous Physical Inventory

In the continuous physical inventory procedure, stocks are counted continuously during the entire fiscal year. In this case, it is important to ensure that every material is physically counted at least once during the year.

Cycle Counting / Quadratic Inventory

Cycle counting is a method of physical inventory where inventory is counted at regular intervals within a fiscal year. These intervals (or cycles) depend on the cycle counting indicator set for the materials.

Inventory Sampling

Inventory Sampling means randomly selected stocks of the company are physically counted. Materials which are all meant for high valued items will undergo this.

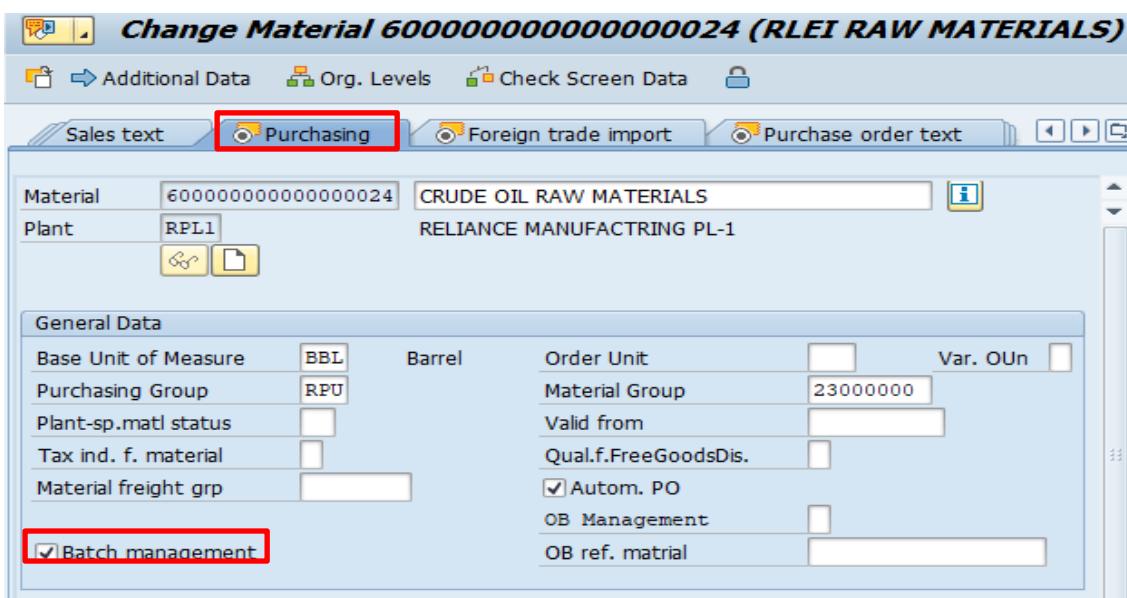
ACTIVATING BATCH MANAGEMENT ON MM PURCH

SAP Batch Management is used to enhance transparency in the manufacturing process. A batch is an entire amount of any material in an exact manufacturing cycle. The main purpose of a manufacturing batch is to ensure the uniformity of the batch. By activating Batch management we can able to identify the materials from which batch are damaged. Usually at the time of receiving a separate number will be given to each batches thereby we can identify the materials easily.

We can also identify the materials missed from which batches at the time of counting inventory.

In the material master field of purchasing tab activate the batch management check box.

T Code – MM02



CREATING PHYSICAL INVENTORY DOCUMENT

SAP Menu → Logistics → Materials Management → Physical Inventory → Physical Inventory Document → MI01 - Create

T code – MI01 – Create, MI02 – Change, MI03 - Display

Create Physical Inventory Document: Initial Screen

Document date 13.03.2023
Planned count date 13.03.2023

Loc.of phys.inv.

Plant	RPL1
Storage Location	RRM
Special Stock	

Other information

<input type="checkbox"/> Posting Block
<input type="checkbox"/> Freeze book inventory
<input checked="" type="checkbox"/> Batches w. del. flag
Phys. inventory no.
Phys. Inventory Ref.
Grouping type
Name

Provide the plant & storage data.

WARNING

The warning states that plant parameters are to be maintained.

 Check table 159L: entry RPL1 does not exist

SAP Menu → Tools → Customizing → IMG → SPRO-Execute Project → SAP Reference IMG → SAP customizing Implementation Guide → **Materials Management** → **Inventory Management and Physical Inventory** → **Plant parameters**

In the plant parameters provide the plant details and save, it will activate the plant data to the inventory management field.

Change View "General plant settings in Inventory Management":

		New Entries				
Plnt	Name 1					
RPL1 RELIANCE MANUFACTRING PL-1						

Create Physical Inventory Document: New Items

			Deletion Indicator	Other Phys. Inventory Doc.			
Plant	RPL1	RELIANCE MANUFACTRING PL-1					
Stor. Loc.	RRM	RAW MATERIAL S...					
Items							
Item	Material	Material Description	Batch	STy	MUn	BD	Del
1	60000000000000000024	CRUDE OIL RAW MATERIALS		1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Give the material number & stock type as 1 (where the material is located).
Save the document you will get following message.

Physical inventory document 100000165 created

MANUAL COUNTING RESULT

SAP Menu → Logistics → Materials Management → Physical Inventory →
Physical Inventory Document → MI04 - Create

T code – MI04 – Create, MI05 – Change, MI06 - Display

Enter Inventory Count: Initial Screen

Other Count

Phys. Inventory Doc.	100000165
Fiscal Year	2023

Date

Count Date	13.03.2023
------------	------------

Provide the details like already posted physical inventory document. Specify the current fiscal year for counting. Enter the counting date.

Enter Inventory Count 100000165: Collect.Processing

Physical Inventory History Set Zero Count Other Count

Plant RPL1 RELIANCE MANUFACTURING PL-1
Stor. Loc. RRM RAW MATERIAL S...

Items	Item Material	Batch	Sales Value	Quantity	UnE ZC
	Material Description		STy	Quantity	SKU
1	60000000000000000024			2,707,000	BBL
	CRUDE OIL RAW MATERIALS		1	2,707,000	BBL

Provide the manual counting data in the quantity column & save the document.

Count entered for phys. inv. doc. 100000165

POSTING PHYSICAL INVENTORY DIFFERENCE

SAP Menu → Logistics → Materials Management → Physical Inventory → Difference → MI07 - Post

T Code - MI07

Post Inventory Difference: Initial Screen

Selection Screen Other Difference

Phys. Inventory Doc.	100000165
Fiscal Year	2023
Date	
Posting Date	13.03.2023

The below picture shows that there is 13 quantities is less than the system count. Displayed in – sign, then we need to specify the reason for missing as per real situation.

Post Inventory Difference 100000165: Selection Screen

Physical Inventory History (circled)

Plant: RPL1 RELIANCE MANUFACTURING PL-1
Stor. Loc.: RRM RAW MATERIAL S...

Item	Material	Batch	ST	Difference qty	BU	Difference Amnt	Reas.
<input checked="" type="checkbox"/>	1 600000000000000024		1	13,000-	BBL	195.000.000,00	0002
						0,00	

Quantity diff from system count to manual count

Mvt Reas. Reason for Movement

- 103 0103 Spoiled
- 122 0001 Poor quality
- 122 0002 Incomplete
- 122 0003 Damaged
- 122 0004 delivered wrong prod
- 261 0261 Unplanned use
- 262 0262 Reversal Reason
- 543 0543 Damage in transport
- 544 0544 Damage in ret.transp
- 551 0001 Shrinkage
- 551 0002 Spoiled**
- 552 0001 Shrinkage
- 552 0002 Spoiled
- 701 0001 phy inventory
- 701 0003 implete toward stock
- 702 0001 phy inventory
- 702 0002 dAMAGED
- 702 0100 MISSING
- 703 0003 St Difference
- 704 0001 phy inventory
- 922 0001 Poor quality
- 922 0002 Incomplete
- 922 0003 Damaged

By clicking on history we can view the complete details of the material.

Display Physical Inventory History 100000165 / 001

Other Item... Display Material Document

Material: 600000000000000024 CRUDE OIL RAW MATERIALS

Location of phys.inv.

Plant: RPL1 RELIANCE MANUFACTURING PL-1
Stor. Location: RRM RAW MATERIAL S...
Stock type: Warehouse

Promotions

Phys.inv.status	Counted
Count date	13.03.2023
Counted by	88FICO24

Quantities and values

Quantity	2.707,000	BBL
Book quantity	2.720,000	BBL
Difference qty	13,000-	BBL
Ext.sales value	0,00	
Book value	0,00	

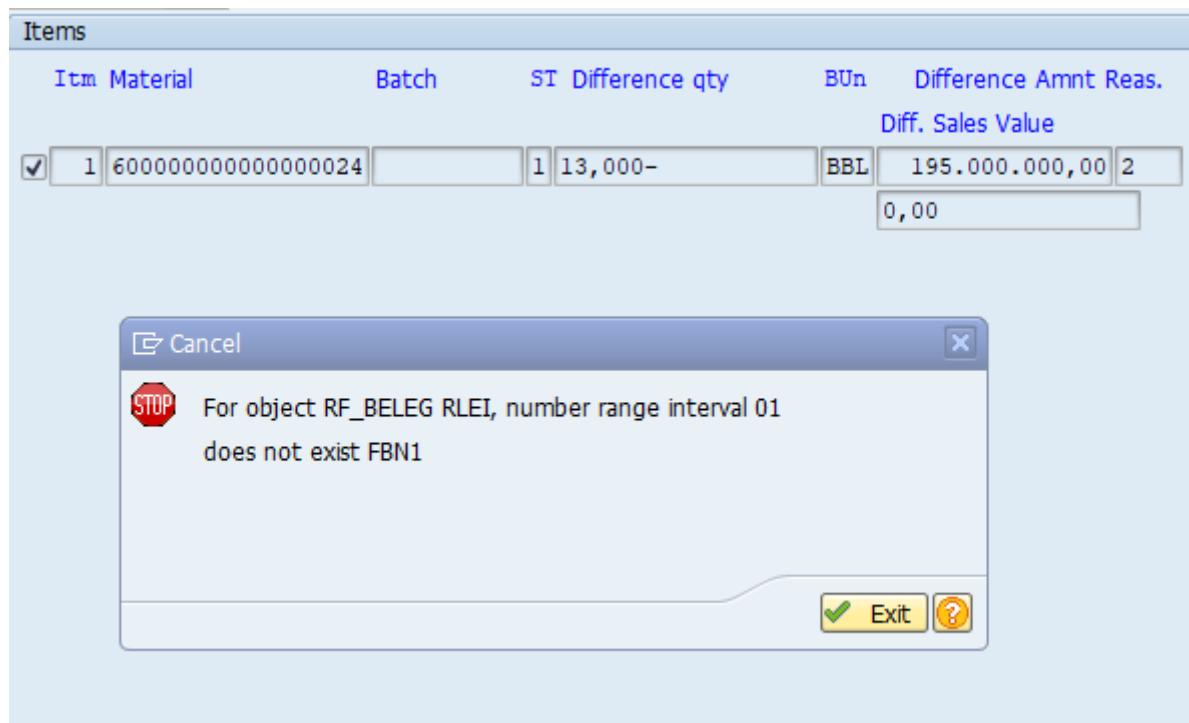
From the history the total count quantity as in system is 2720, but while manual counting it is 2707 & 13 quantities are missing.

Cross checking the total quantities in system by MMBE stock overview list.

Stock Overview: Basic List						
Selection						
Material	600000000000000024	CRUDE OIL RAW MATERIALS				
Material Type	ROHR	RLEI RAW MATERIALS				
Unit of Measure	BBL	Base Unit of Measure BBL				
Stock Overview						
					
Client/Company Code/Plant/Storage Location/Batch/Special Stock		Unrestricted use	Qual. inspection	Reserved	Rcpt reservation	On-Order Stock
▼ Full		2.970,000				530,000 50.000
▼ RELIANCE INDUSTRIES LTD		2.970,000				530,000 50.000
▼ RPL1 RELIANCE MANUFACTURING PL-1		2.720,000				30,000 50.000
• RRM RAW MATERIAL STR		2.720,000				30,000
▼ RPL2 RELIANCE MANUFACTRING PL-2		250,000				500,000
• RRM2 RAW MAT STR PL_2		250,000				

TICKET 1

The message is related to the number range 20 not existing for saving the accounting document information.



T Code – FBN1

Interval Maintenance: Number Range Object Accounting document,					
N..	Year	From No.	To Number	NR Status	Ext
01	2023	6000000041	6000000060	0	

Finally save the document & post the difference.

INVENTORY DIFFERENCE LIST

SAP Menu → Logistics → Materials Management → Physical Inventory → Difference → MI20 - Difference List

T Code – MI20

List of Inventory Differences





Database Selection	
Material	600000000000000000000024

Enter the material number & execute.

To view the detail display select the item & choose detailed display.

List of Inventory Differences												
<input checked="" type="checkbox"/> 100000165	1	600000000000000024		RPL1	RRM	2.720,000	2.707,000	13,000-	BBL	195.000.000,00	INR	

Column	Contents
Phys. Inventory Doc.	100000165
Item	1
Material Description	CRUDE OIL RAW MATERIALS
Stock type	Warehouse
Physical inventory status	Counted
neg. diff. value	195.000.000,00-
Posting period	032023
Fiscal Year	2023
Counted By	88FICO24
Count date	13.03.2023
Material	600000000000000024
Plant	RPL1
Storage Location	RRM
Book quantity	2.720,000
Qty Counted	2.707,000
Difference Quantity	13,000-
Base Unit of Measure	BBL
Difference amount	195.000.000,00
Currency	INR

In this we will get the complete details of the material in difference.

DISPLAYING MATERIAL DOCUMENT

SAP Menu → Logistics → Material Management → Inventory Management
→ Material Document → MB03 – Display

T Code – MB03

Display Material Document:

Material Doc.	4000000139
Mat. Doc. Year	

Display Material Document 4000000139 : Overview

			Details from Item	Material	Accounting Documents...						
Posting Date	03.03.2023	Name	88FICO24								
Items											
F	Item	Quantity	EUn	Material	Plnt	SLoc	PO	Item	S	DCI	
			BUn	Material Description				Batch	R	MvT	S
	1	1.500,000	BBL	600000000000000024	RPL1	RRM	4500018366	10			
				CRUDE OIL RAW MATERIALS				101	+		

OUTLINE AGREEMENTS

Vendor selection is an important process in the procurement cycle. Vendors can be selected by quotation process. After having shortlisted a vendor, an organization enters into an agreement with that particular vendor to supply certain items with certain conditions. Typically when an agreement is reached, a formal contract is signed with the vendor. So, an outline agreement is a long-term purchasing agreement with a vendor.

An outline agreement is a long-term purchasing agreement with a vendor containing terms and conditions regarding the material that is to be supplied by the vendor.

The terms of an outline agreement are valid up to a certain period of time and cover a certain predefined quantity or value.

An outline agreement can be of the following two types

- Contract
 - 1. Quantity Based Agreements.
 - 2. Value Based Agreements.
- Scheduling Agreement

Contract

A contract is a long-term outline agreement between a vendor and an ordering party over a predefined material or service over a certain framework of time.

Quantity Contract: This contract considered to fulfil when the company supplied an agreed total quantity of materials against the contract.

Value Contract: This contract considered to fulfil when the company supplied agreed total value of material against the contract.

QUANTITY BASED CONTRACT / AGREEMENTS

SAP Menu → Logistics → Material Management → Purchasing → Outline Agreement → Contract → ME31K – Create

T Code – ME31K – Create, ME32K – Change, ME33K – Display.

Create Contract : Initial Screen

			<input type="checkbox"/> Reference to PReq	<input type="checkbox"/> Reference to RFQ
Vendor	1000200016	Type	Doc. Type Descript.	
Agreement Type	MK	S-WK	Value contract-STAR	
Agreement Date	13.03.2023	WK_R	Value contract RBI	
Agreement		BAV1	Value contract	
Organizational Data				
Purch. Organization	RLPO	GAWK	Value contract	
Purchasing Group	RPU	T-WK	Value contract	
Default Data for Items				
Item Category		WK	Value contract	
Acct Assignment Cat.		MK_R	Quantity contract_RB	
Plant	RPL1	BAVI	Quantity contract	
Storage Location	RRM	GAMK	Quantity contract	
Material Group		MK	Quantity contract	
Req. Tracking Number		YK01	Quantity contract	
Vendor Subrange		S-MK	Qty Contract-STAR	
<input type="checkbox"/> Acknowledgment Reqd				

SPECIFY THE FOLLOWING DETAILS

Vendor data to whom the contract is going to be signed, contract date of start, Agreement type (MK) for quantity based contract, Organizational purchasing data through which the contracts are made & finally plant name, storage location.

Create Contract : Header Data

Agreement [] Company Code RLEI Purchasing Group RPU

Agreement Type MK Purch. Organization RLPO

Vendor 1000200016 CHEVRON OIL COMPANY

Administrative Fields

Agreement Date	13.03.2023	Item Number Interval	10	Subitem Interv.	1
Validity Start	13.03.2023	Validity End	12.03.2024	Language	EN

Terms of Delivery and Payment

Payt Terms	0001	Targ. Val.	[] INR	
Payment in	Days	%	Exch. Rate 1,00000	Ex.Rate Fx
Payment in	Days	%	Incoterms COD MAHARASTRA	
Payment in	Days Net			

Reference Data

Quotation Date	[]	Quotation	[]
Your Reference	[]	Salesperson	S NIKIL
Our Reference	[]	Telephone	876324789
Suppl. Vendor	1000200016	Invoicing Party	1000200016

Next screen specify the material and total quantity to be supplied within the contract period and net price of the material.

Create Contract : Item Overview

Agreement [] Agreement Type MK Agmt Date 13.03.2023

Vendor 1000200016 CHEVRON OIL COMPANY Currency INR

Outline Agreement Items

Item	I	A Material	Short Text	I...	Targ. Qty	O...	Net Price	Per	O...	Mat. Grp	Plnt	SLoc
10		600000000000000024	CRUDE OIL RAW MATERI...		15.000,000 BBL		4.980,551		BBL	23000000	RPL1	RRM

Finally Post the document, then the system will show the following message.

Quantity contract created under the number 4030200008

VALUE BASED CONTRACT / AGREEMENT

Vendor data to whom the contract is going to be signed, contract date of start, Agreement type (WK) for value based contract, Organizational purchasing data through which the contracts are made & finally plant name, storage location.

In the below screen provide the following details

1 – Validity end period

2 – Total targeted price / value, for which the material to be supplied as per the targeted value.

Here the vendor should supply the material to the business for the total value 10000000 within the specified period of contract.

The period of contract may be monthly, quarter or yearly.

Create Contract : Header Data

Agreement [] Company Code RLEI Purchasing Group RPU
Agreement Type WK Purch. Organization RLPO
Vendor 1000200035 SAUDI ARABIA OIL COMPANY

Administrative Fields

Agreement Date	13.03.2023	Item Number Interval	10	Subitem Interv.	1
Validity Start	13.03.2023	Validity End	12.03.2024	Language	EN

Terms of Delivery and Payment

Payt Terms	0001	Targ. Val.	10000000	INR	
Payment in	Days	%	Exch. Rate	1,00000	<input type="checkbox"/> Ex.Rate Fx
Payment in	Days	%	Incoterms	COD MAHARASTRA	
Payment in	Days Net				

Reference Data

Quotation Date		Quotation	
Your Reference		Salesperson	M MARUTHI
Our Reference		Telephone	3635757457
Suppl. Vendor	1000200035	Invoicing Party	1000200035

Create Contract : Item Overview

Agreement [] Agreement Type WK Agmt Date 13.03.2023
Vendor 1000200035 SAUDI ARABIA OIL COMPANY Currency INR

Outline Agreement Items

Item	I	A	Material	Short Text	I...	Targ. Qty	O...	Net Price	Per	O...	Mat. Grp	Plnt	SLoc
10			600000000000000024	CRUDE OIL RAW MATERI...		1.000,000 BBL		5.765,001		BBL	23000000	RPL1	RRM
20												RPL1	RRM

Save the document

Value contract created under the number 4030200009

SCHEDULING AGREEMENT

SAP Menu → Logistics → Material Management → Purchasing → Outline Agreement → Scheduling Agreement → Create → ME31L – Vendor unknown.

T Code – ME31L – Create, ME32L – Change, ME33L – Display.

Create Scheduling Agreement

				Reference to PReq	<input type="checkbox"/> Re
Vendor					
1000200035					
Agreement Type LP					
Agreement Date 13.03.2023					
Agreement					
Organizational Data					
Purch. Organization RLPO					
Purchasing Group RPU					
Default Data for Items					
Item Category					
Acct Assignment Cat.					
Plant RPL1					
Storage Location RRM					
Material Group					
Req. Tracking Number					
Vendor Subrange					

Type	Doc. Type Descript.
LP	Scheduling agreement
LPA	Scheduling agreement
LP_R	Sch. agreement_RBI
LSRM	Sched. agreement/SRM
LU	Transp. sched. agmt.
S-LP	Schedulingagree-STAR
SAHA	Scheduling agreement
T-LP	Scheduling agree-TCL
YK01	Scheduling agreement
ZGTS	Scheduling agreement

In the scheduling agreement field provide the details of Vendor data to whom the contract is going to be signed, contract date of start, Agreement type (LP) for scheduling, Organizational purchasing data thorough which the contracts are made & finally plant name, storage location.

Create Scheduling Agreement : Header Data

Agreement		Company Code	RLEI	Purchasing Group	RPU	
		Agreement Type	LP	Purch. Organization	RLPO	
Vendor		1000200035 SAUDI ARABIA OIL COMPANY				
Administrative Fields						
Agreement Date		13.03.2023	Item Number Interval	10	Subitem Interv.	1
Validity Start		13.03.2023	Validity End	12.03.2024	Language	EN
Terms of Delivery and Payment						
Payt Terms		0001	Targ. Val.	INR		
Payment in		Days	%	Exch. Rate	1,00000	
Payment in		Days	%	Incoterms	COD MAHARASTRA	
Payment in		Days Net				

Create Scheduling Agreement : Item Overview

Agreement Type: LP
Agmt Date: 13.03.2023
Vendor: 1000200035 SAUDI ARABIA OIL COMPANY
Currency: INR

Item	I	A	Material	Short Text	I...	Targ. Qty	O...	Net Price	Per	O...	Mat. Grp	PInt	SLoc
10			600000000000000024	CRUDE OIL RAW MATERI..	<input type="checkbox"/>	10.000,000 BBL		5.765,001		BBL	23000000	RPL1	RRM
20					<input type="checkbox"/>								RPL1 RRM

Then specify the material data & save. The system will issue the following message.

Scheduling agreement created under the number 5500000197

DELIVERY SCHEDULE

SAP Menu → Logistics → Material Management → Purchasing → Outline Agreement → Delivery Schedule → ME38 - Maintain.

T Code – ME38 – Maintain, ME39 – Display.

Maintain Sch. Agmt Schedule : Initial Screen

Agreement: 5500000197

Provide the schedule agreement number and then proceed.

TICKET 1

Material 600000000000000024 not included in source list despite source list requirement

This error comes because the material is not yet included in the source list or the source of supply is not determined.

We need to provide the material with schedule agreement number in the source list field for activating the schedule agreement for the material & vendor.

T Code – ME01

Maintain Source List: Overview Screen

Material	600000000000000024	CRUDE OIL RAW MATERIALS
Plant	RPL1	RELIANCE MANUFACTURING PL-1

Source List Records

Valid from	Valid to	Vendor	POrg	PPI	OUn	Agmt	Item	Central Co...	Cent. Con...	Fix	Blk	M...	MRP Area
20.02.2023	30.04.2023	1000400005	RLPO							<input type="checkbox"/>	<input type="checkbox"/>		
20.02.2023	16.08.2023	1000300005	RLPO							<input type="checkbox"/>	<input type="checkbox"/>		
20.02.2023	31.12.2023	1000200015	RLPO							<input type="checkbox"/>	<input type="checkbox"/>		
20.02.2023	31.12.2023	1000200036	RLPO							<input type="checkbox"/>	<input type="checkbox"/>		
20.02.2023	01.01.2024	1000200035	RLPO							<input type="checkbox"/>	<input type="checkbox"/>		
20.02.2023	19.02.2024	1000200016	RLPO							<input type="checkbox"/>	<input type="checkbox"/>		
13.03.2023	12.03.2024	1000200035	RLPO	BBL	5500000197	10				<input type="checkbox"/>	<input type="checkbox"/>	RPL1	

Agreement no

Maintain Sch. Agmt Schedule : Delivery Schedule for Item 00010

Agreement	5500000197	Quantity	12,000,000	BBL	Date	Date type descript	
Material	600000000000000024	CRUDE OIL RAW MATERIALS	D Day format				
Last Transm.	00:00:00	Next Transmission Number	1	T Day format			
Cum. Rec. Qty	0,000	Old Qty	0,000	W Week format			
				M Month format			

C	Delivery D...	Scheduled Quantity	Time	F...	St.DelDate	Purchase ...	Item	Cum. Sch. Qty	Prev. CQ	Sc...	Previous Qty	GR Qty	N...	Fl...	Open Quantity
W	12.2023	2,000,000			R20.03.2023			2,000,000		1			<input checked="" type="checkbox"/>		2,000,000
W	20.2023	2,000,000			R15.05.2023			4,000,000		2			<input checked="" type="checkbox"/>		2,000,000
W	24.2023	4,000,000			R12.06.2023			8,000,000		3			<input checked="" type="checkbox"/>		4,000,000
W	40.2023	3,000,000			R02.10.2023			11,000,000		4			<input checked="" type="checkbox"/>		3,000,000
W	52.2023	1,000,000			R25.12.2023			12,000,000		5			<input checked="" type="checkbox"/>		1,000,000
										0			<input type="checkbox"/>		
										0			<input type="checkbox"/>		
										0			<input type="checkbox"/>		

Details to be given in delivery schedule

- 1 – Delivery Date format – Week format, we are scheduling the delivery in 12th, 20th, 24th, 40th, 52nd week of year 2023.
- 2- Quantities to be given at each delivery schedule.
- 3- Date for particular week will be given.

CONCLUSION

The SAP implementation project has been successfully completed to the client end Reliance petroleum industries limited. The requirements of the client have been configured at the optimum level. Defining the company, company code, plant, business area, storage location, controlling area, divisions, sales & purchase organization. Then assigning the plant, storage location, sale & purchase organization to the company code. Activating global parameters.

Creation of master data to the company. Vendor master data, customer master, material master. Procure to pay cycle, purchase info record, source list, request for quotation, maintaining the quotation, price comparison, PO, goods receipt, Invoice verification, Inventory Management, stock transfer, special procurement types, outline agreements etc.....

Has been configured and implemented to the client.