

PP Integration with Other SAP Modules

Course ID : PP1019_PP_Integration_with_other_SAP Modules

Lesson Objectives

- Objectives -On successful completion of this training module, you should have:
 - Understood the basics of how SAP PP Module Integrated with other logistic modules

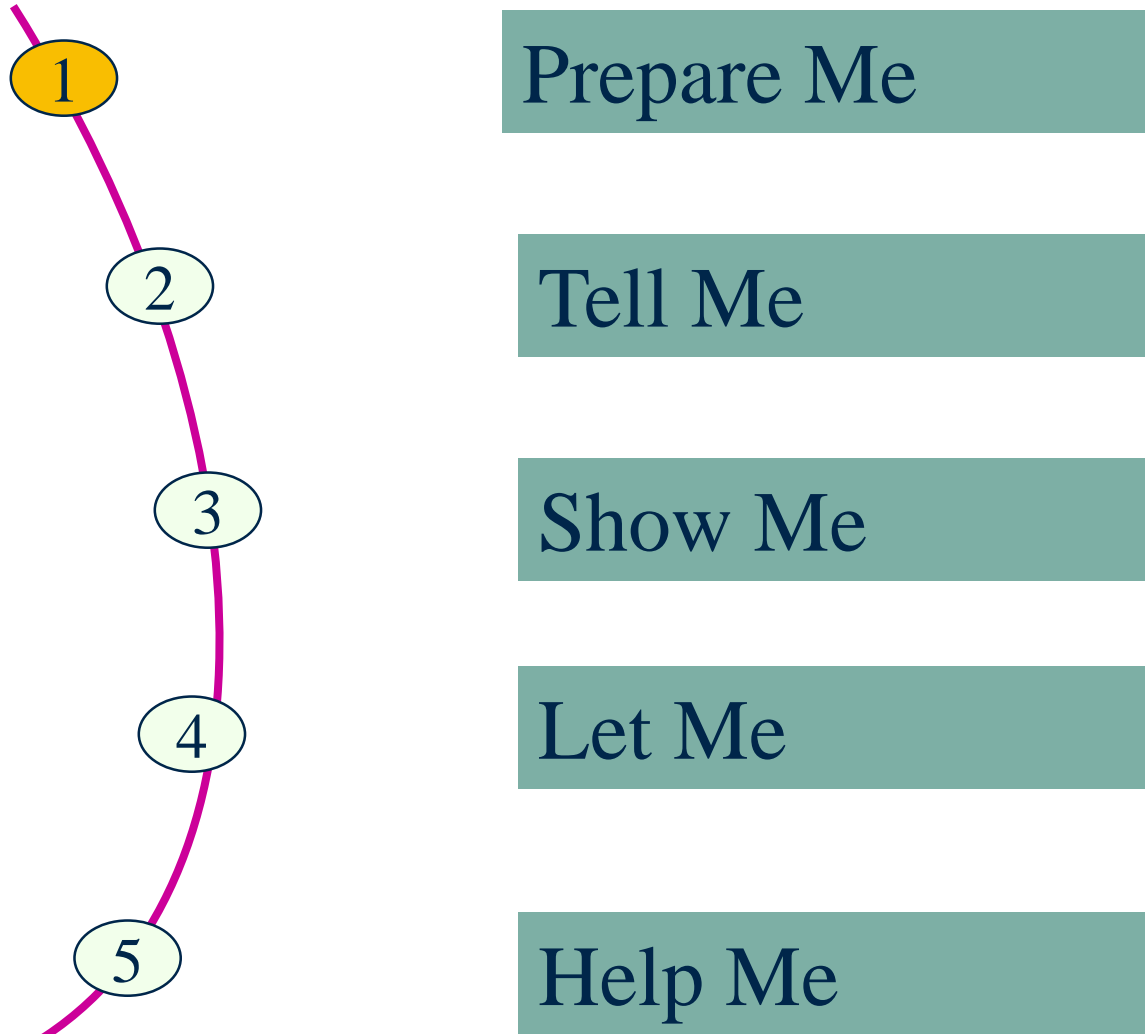


Training Agenda

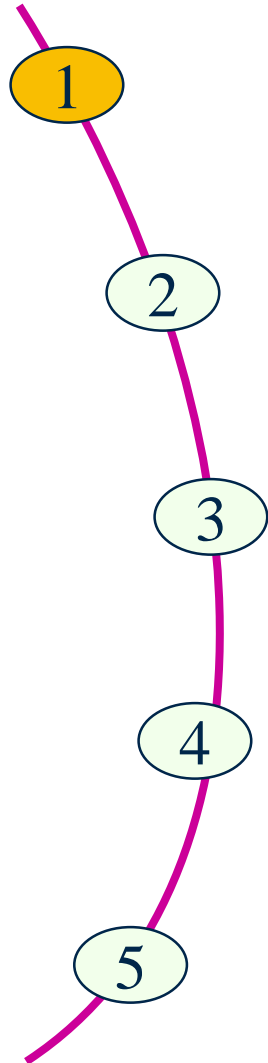
- SAP PP Integrated with other logistic modules
- Logistics Process Flow
- SAP PP-QM Integration
- SAP PP-MM Integration
- SAP PP-SD Integration
- Cross Functional Transactional Codes



PP Integration with Other Modules



PP Integration with Other Modules



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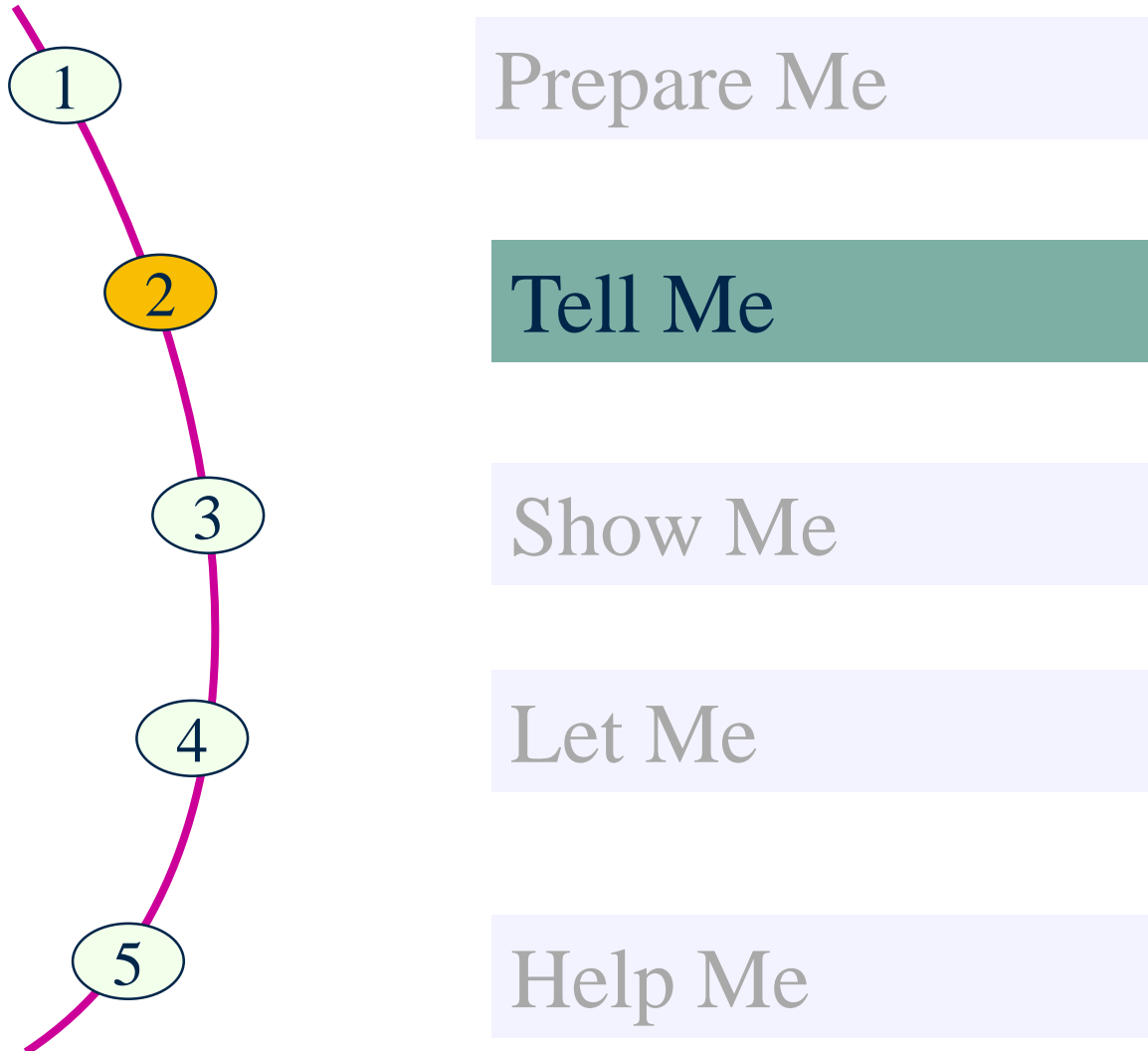


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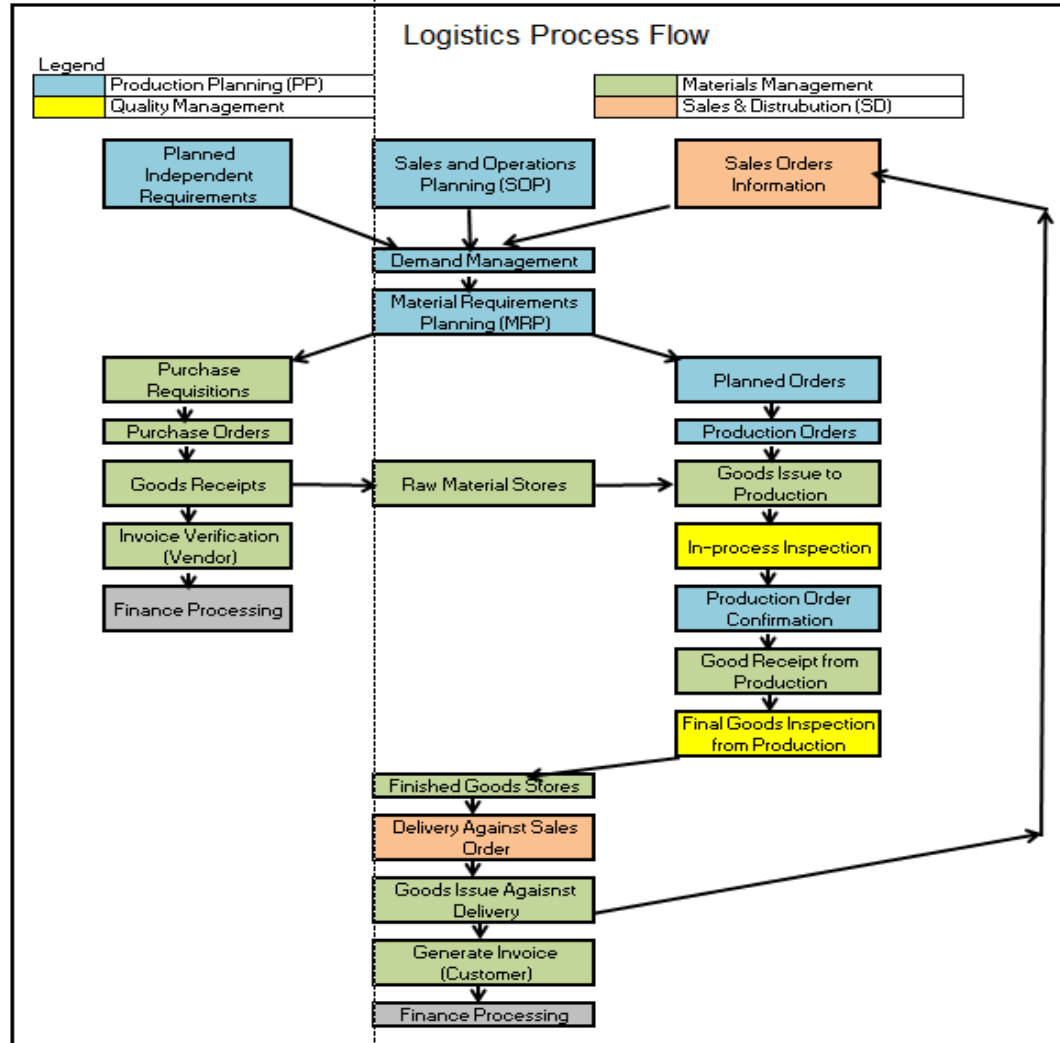
- SAP PP integrated with other logistics modules like
 - Quality Management (QM)
 - Materials Management (MM)
 - Sales and Distribution (SD)
- SAP PP Integration with Controlling (CO) modules is separately covered in other session
- SAP PP also integrated with Plant Maintenance (PM) and Project Systems (PS)
- Cross module integration is maintained as customization data and master data in related modules
- Some transactions will automatically update transactional data in different cross module objects.



PP Integration with Other Modules



Logistics Process Flow



SAP PP-QM Integration

Integration Points: In-process Inspection

- Inspection specifications are maintained in material routing (PP Master Data) and inspection type “03” activated in material master
- In-process Inspection lot is created for each production order while releasing it
- Inspection observations, test results are stored in inspection lot
- Inspection observations, test results can be collected against various field combinations
- The field combinations can be day, shift number, operator number, machine number, bin number etc
- Quality department can restrict some of production functions if actual test results are out of specifications
- Goods movements cannot be controlled via in-process inspection lots
- After all test results are completed usage decision is made for the inspection lot

SAP PP-QM Integration

Integration Points: Final Inspection From production

- Inspection specifications are maintained in inspection plan(QM Master Data) and inspection type “04” activated in material master
- In-process Inspection lot is created for each production order during goods receipt
- Inspection observations, test results are stored in inspection lot
- Inspection observations, test results can be collected against various field combinations
- The field combinations can be day, shift number, operator number, machine number, bin number, sample number etc
- Quality department can restrict material movements (like move to blocked stock) if actual test results are out of specifications
- Goods movements can be controlled via these inspection lots
- After all test results are completed usage decision is made for the inspection lot

SAP PP-MM Integration

Integration Points: Procurement

- Procurement related master data maintained in material master (MRP2)
- Purchase Requisitions (Request to procure materials or services) are created by MRP or manually
- Planned orders can also be converted to purchase requisitions
- External operations in routing are integrated with procurement
- Lot size procedure integrated with procurement
- Sub contracting process is integrated with PP
- Consignment process is integrated with PP

SAP PP-MM Integration

Integration Points: Goods Issue to Production

- Components required for production order are issued from inventory
- Material Reservations are created for production order components
- Goods issue can be executed manual or automatic.
- Partial goods issues also can be performed
- Goods issue can be executed against single or multiple production orders at a time
- Material documents generated for all goods issues
- A material document can contain multiple goods issue line items
- Additional components can be issued to production order manually
- Batch determination of production order components is integrated with inventory management
- Movement type for goods issue from inventory to production order is “261”
- Back-flushing (Transaction MFBF) can be used for goods issue in some cases.

SAP PP-MM Integration

Integration Points: Goods Receipts from Production

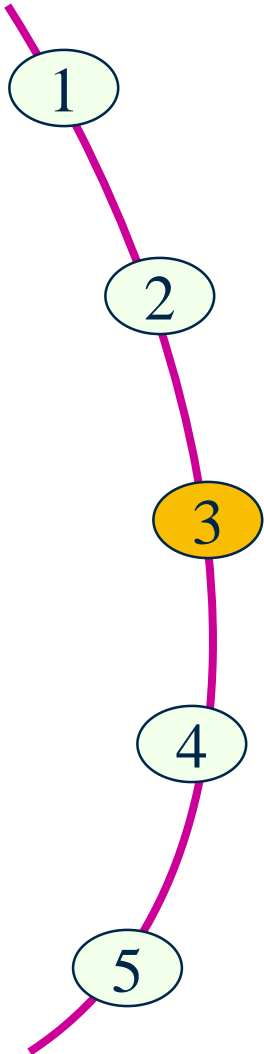
- Goods receipts are performed final products from production to inventory
- Goods receipts can be manual or automatics
- Goods receipts can be executed against single or multiple production orders at a time
- Material documents generated for all goods receipts
- A material document can contain multiple goods receipts line items
- Movement type for goods issue from production order to inventory is “101”
- Back-flushing (Transaction MFBF) can be used for goods receipt some cases.
- If quality inspection for final inspection from production is active for the final product, material can be moved to blocked stock instead of unrestricted stock

SAP PP-SD Integration

Integration Points:

- Creation of sales order & sales requirements impacts material requirements planning
- Delivery against sales order impacts material requirements planning
- In make to order production (MTO), production order is created with reference to sales order
- Material availability check can be performed against sales orders
- Specifications from sales orders are transferred to production in case of variant configuration products
- In case MTO planning strategies without final assembly, sales order creation impacts planned order to production order conversion.

PP Integration with Other Modules



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PP-QM Integration

Material Master QM View

Display Material 520 (Finished products)

Additional data Organizational levels

Plant data / stor. 2 Quality management Accounting 1 Accounting 2

Material 520 Finished Product 520
Plant 2010 GB India Manufacturing

Plant 2010 Material 520 : Inspection Setup Data

S...	InspType	Short text	PreferredInsTyp	Active	Ins
<input checked="" type="checkbox"/>	03	In-process insp. for production order	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<input type="checkbox"/>	04	Goods receipt inspection from production	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Inspection Type 03 In-process insp. for production order

Detailed information on inspection type

Smpl.procedure ☒ Serial numbers poss.

☐ 100% inspection

Inspection % 0

☐ Insp. with mat spec.

☐ Insp. with task list

☐ Insp. by configuratn

☐ Check Chars

☒ Manual sample calc.

☒ Manual sample entry


Dyn. mod. rule

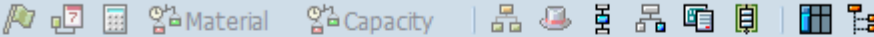
☒ Skips allowed


Q-Score Procedure 06 From usage d...
Allowed scrap share 0.0000

PP-QM Integration

Production Order Released

 **Production order Display: Header**



Order Type
Material Finished Product 520 Plnt
Status REL PRC CSER BCRQ ILAS MANC SETC 


General Assignment Goods receipt Control data Dates/qtys Master data Long text

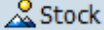

Quantities

Total Qty	<input type="text" value="299"/>	EA	Scrap portion	<input type="text" value="0"/>	<input type="text" value="0.00"/>	%
Delivered	<input type="text" value="0"/>		ExpectYieldVar	<input type="text" value="0"/>		

PP-QM Integration



In-process Inspection Lot Created

 **Display inspection lot**

 Stock  Change history... Admin. data ...

Plant 2010 GB India Manufacturing


Inspection Lot 30000000000

Material 520 ☐ Finished Product 520  

Batch

Insp.lot origin 03 Production

Inspection Type 03 In-process insp. for production order

System Status CRTD UserStatus 


Data for lot origin Insp. lot quantities Insp. Specifications Usage decision

Scheduling data

Start date 22.02.2015

Insp. End Date 25.04.2015

Data for order

Order 1000020 

PP-QM Integration

Goods Receipt from Production Executed

Display inspection lot

Stock Change history... Admin. data ... Acc.assgmt... Material documents...

Plant 2010 GB India Manufacturing

Inspection Lot 40000000001

Material 520 Finished Product 520

Batch 0000000021 0001

Insp.lot origin 04 Goods Receipt from Production

Inspection Type 04 Goods receipt inspection from production

System Status REL CALC SPRQ UserStatus

Data for lot origin Insp. lot quantities Insp. Specifications Usage decision

Scheduling data

Start date 22.02.2015

Insp. End Date 22.02.2015

Data for goods receipt

Material Doc. 5000000303 Item 1 PlantStock 2010

Data for order

Order 1000020

PP-MM Integration

Procurement Data in Material Master

Display Material 518 (Raw materials)

➔ Additional data 🏢 Organizational levels

MRP 1 **MRP 2** MRP 3 MRP 4 Plant data / stor. 1 Plant data / sto...

Material 518 MS Fastners ⓘ
Plant 2010 GB India Manufacturing

🔄

Procurement

Procurement type	F	Batch entry	<input type="checkbox"/>
Special procurement	<input type="checkbox"/>	Prod. stor. location	<input type="text"/>
Quota arr. usage	4	Default supply area	<input type="text"/>
Backflush	<input type="checkbox"/>	Storage loc. for EP	<input type="text"/>
JIT delivery sched.	<input type="checkbox"/>	Stock det. grp	<input type="text"/>
<input type="checkbox"/> Bulk Material			

Scheduling

GR Processing Time	0 days	Planned Deliv. Time	5 days
SchedMargin key	000	Planning calendar	<input type="text"/>

Net requirements calculation

Safety Stock	0	Service level (%)	0.0
Min safety stock	0	Coverage profile	<input type="text"/>
Safety time ind.	<input type="text"/>	Safety time/act.cov.	0 days
STime period profile	<input type="text"/>		

PP-MM Integration

Material Reservations against Production Order Components

Stock/Requirements List as of 08:29 Hrs

Show Overview Tree

Material MS Fastners
MRP area GB India Manufacturing
Plant MRP type Material Type Unit

A.	Date	MRP ...	MRP element data	Rescheduli...	E..	Rec./reqd.qty	Available qty
	22.02.2015	Stock					21
	12.12.2014	OrdRes	520			0.100-	20.900
	22.02.2015	OrdRes	520			2.990-	17.910

Additional Data for MRP Element

Reservation	<input type="text" value="0000000182"/>	<input type="text" value="0002"/>	Reqmt Date	<input type="text" value="22.02.2015"/>	DKey	<input type="text"/>
Reqmt Qty	<input type="text" value="2.990"/>	<input type="text" value="KG"/>	Latest req.date	<input type="text" value="25.04.2015"/>		
Pegged reqmt	<input type="text" value="520"/>	Finished Product 520				
ProdOrder	<input type="text" value="1000020"/>	Oper./Act.		<input type="text" value="0010"/>		

PP-MM Integration

Material Document-Goods Issue Against Production Order

Display Material Document 4900000201 -

Show Overview | Hold | Check | Post | Help

A04 Display | R02 Material Docu... | 4900000201 | 2015


General | Doc. info



Document Date: 22.02.2015
Posting Date: 22.02.2015
Material Slip:
Doc.Header Text:
☐ 2 Individual Slip wit...




Line	Mat. Short Text	Qty in ...	E...	SLoc	Order	G/L Account	Batch	Valuation ...	M...	D	Stock Type
1	Adhesive XYZ	2.990	KG	Warehouse	1000020	510000			261	-	Unrestrict...
2	MS Fastners	2.990	KG	Warehouse	1000020	510000	0000000018		261	-	Unrestrict...



PP-MM Integration


Material Document-Goods Receipt Against Production Order

 **Display Material Document 5000000303**

Show Overview |  | Hold | Check | Post |  Help

A04 Display ▾ R02 Material Docu... ▾ 5000000303 2015   

 General  Doc. info

Document Date 22.02.2015 Delivery Note
Posting Date 22.02.2015 Doc.Header Text
 ☐ 1 Individual Slip ▾

Line	Mat. Short Text	Qty in UnE	E...	SLoc	Order	Batch	Valuation ...	M...	D	Stock Type	Plnt
1	Finished Product 520	299	EA	Warehouse	1000020	0000000021		101	+	2 Quality i...	GB India Ma...

PP-SD Integration

Sales Order for Make To Order Production

Display Standard Order 27: Overview

Standard Order 27 Net value 50,000.00 USD

Sold-to party 100010 MILLION AIR / 8501 Telephone Rd / Houston 77061

Ship-to party 100010 MILLION AIR / 8501 Telephone Rd / Houston 77061

PO Number 20150222 PO date 01.02.2015

Sales Item overview Item detail Ordering party Procurement Shipping Reason for rejection

All items

Item	Material	Plnt	Confirmed Qty	SU	Mat.Av.Dt.	SLCa	RqTy	I.	A	D	Delivery D...	N..	ATP quantity	Loading D...	Route	P..	D..
	10520	2010	0	EA	23.02.2015	CP	KEB			D	23.02.2015	<input checked="" type="checkbox"/>	0	23.02.2015			0
			500	EA	09.03.2015	CP				D	09.03.2015	<input checked="" type="checkbox"/>		09.03.2015			

PP-SD Integration

Production Order for Make To Order Production

Production order Display: Header

Material 520 Finished Product 520

Order 1000021 Type PP01

Status CRTD PRC CSER BCRQ MANC SETC Plnt 2010

General Assignment Goods receipt Control data Dates/qtys Master data Long text Administration

Quantities

Total Qty 500 EA Scrap portion 0 0.00 \$

Delivered 0 ExpectYieldVar 0

Dates

	BasicDates	Scheduled	Confirmd
Finish	07.06.2015 00:00	06.06.2015 09:00	
Start	22.02.2015 00:00	22.02.2015 00:00	00:00
Release		20.02.2015	







Sales Order


Sales Order	27	10	0	G.DelDate	23.02.2015	1.del.dat	09.03.2015
Ordering prty	100010	MILLION AIR		Houston			





PP-SD Integration

Stock Requirements List of Components in Make To Order Production

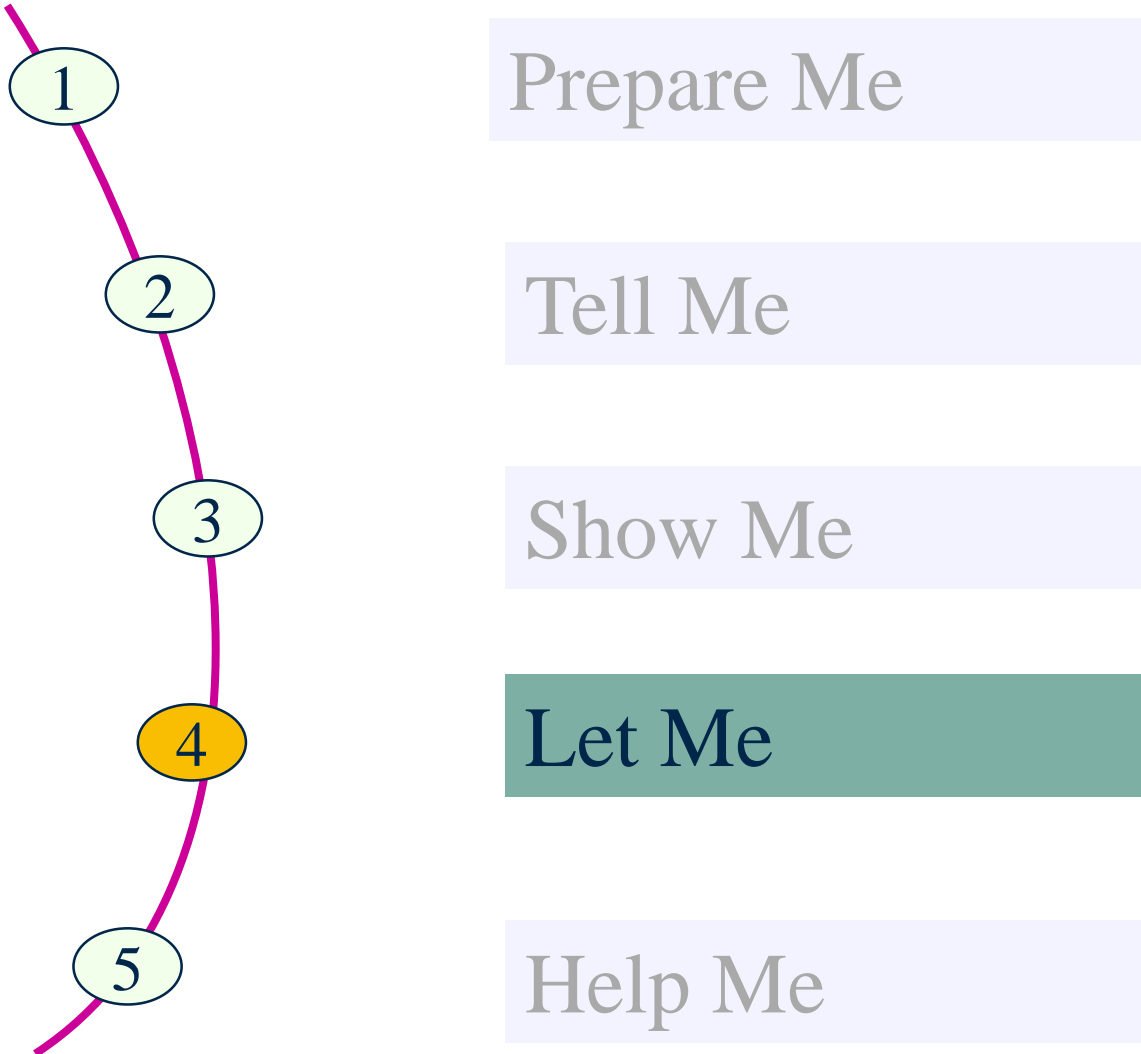
Stock/Requirements List as of 10:03 Hrs

Show Overview Tree |      

Material MS Fastners
MRP area GB India Manufacturing
Plant MRP type Material Type Unit 

A..	Date	MRP ...	MRP element data	Rescheduli...	E..	Rec./reqd.qty	Available qty
	22.02.2015	Stock					18.010
	12.12.2014	OrdRes	520			0.100-	17.910
	22.02.2015	CustSt	0000000027/000010				0
	22.02.2015	OrdRes	520			5-	5-

PP Integration with Other SAP Modules



Let Me SAP PP-QM Integration

- MM02-Activate In-process Inspection Type “03”
- MM03-Activate GR from Production Inspection Type “04”
- CO01-Create Production Order
- CO02-Release Production Order
- QA33-Display In-process Inspection Lot type “03”
- MIGO-Perform Goods Receipt for Production Order
- QA33-Display GR from Production Inspection Lot type “04”

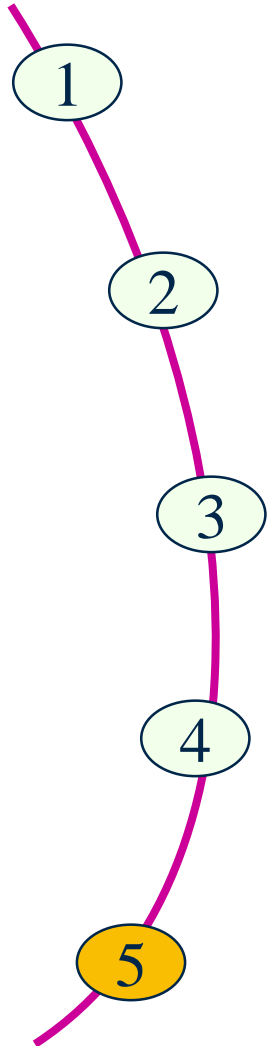
Let Me SAP PP-MM Integration

- MM02-Activate Procurement Data in MRP2 view
- CO01- Create Production Order
- CO02-Release Production Order
- MD04- Display Reservations for Components
- MIGO-Goods Issue for Production Order-Movement Type-261
- MIGO-Display Goods Issue Document
- CK11N-Confirm Production Order
- MIGO-Goods Receipt for Production Order-Movement Type-101
- MIGO-Display Goods Receipt Document

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- MM02-Activate Sales Data in Sales Views
- VA01-Create Standard Sales Order with Requirement Type Make to Stock
- CO08- Create Production Order with reference to above Sales Order
- CO03-Release Production Order
- MD04- Display Stock & Requirements List

PP Integration with Other SAP Modules



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Cross Functional Transaction Codes

- MM02-Activate Data in Sales Views
- MM02-Activate Inspection Type “03” and “04” in Quality Management View
- QP03- Display Inspection Plan
- QA03-Display Inspection Lot
- QA33-Display Quality Management Work List
- MMBE-Stock Overview
- ME51N-Create Purchase Requisition
- ME21N- Create Purchase Order
- MIGO-Goods Movements (All Types)
- MB51- Material Documents List
- VA01- Create Sales Order

PP Integration with Other SAP Modules

Q & A



PP Integration with Other SAP Modules

THANK YOU

