Max v2 workflow

**MM**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Name | Features | Remark |
| 1 | Inventory Voucher | Movement Codes and Pricing Codes. Automatic Entry in Stock, Excise and Accounts. | Serial Nos., Batch Nos. may be asked on issue to prod lot |
| 2 | MM Purchase Invoice | Invoice, Debit Note, Credit Note, Delivery Costs etc. | Ref SAP LIV |
| 3 | Purchase Order / Local Purchase Order | Account Assignment - Consumable Goods , Consumable Tools, Assets, NonStock | Work Order GP Clause |
| 4 | Job Work Order / Manufacturing Order | BOM ?  Account Assignment |  |
| 5 | Purchase Requisition |  |  |
| 6 | Incoming Delivery Note | Advance Notification for PO/JWO/MO |  |
| 7 | Outgoing Delivery Note | Pricing Code | Same as Challan |
| 8 | Rejection Note |  |  |
| 9 | SD Sale Invoice | Pricing Code | With Itemcode etc for goods and service |
| 10 | Inventory Opening Balances | Opening Balance movement code may be used only for the postperiod identified as opening. | Opening Balance receipt form will allow assignment of values and dates to stock as on opening date |

Notes

|  |  |
| --- | --- |
| Table | Purpose |
| ItemStockQtyDep | All Stock inside company premises   1. Company Owned 2. Consignment |
| ItemStockQtyCampus | Company owned stock   1. Inside Premises 2. In Transit 3. With Vendor or Customer |
| ItemStockValue | Company owned stock  Qty of one row = Sum of multiple qty rows inside ItemStockQtyCampus |

**FICO**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Name | Features | Remark |
| 1 | FI Journal Voucher |  |  |
| 2 | FI Purchase Invoice |  | Same as MM Purchase Invoice without items |
| ~~3~~ | ~~FI Contra Voucher~~ | ~~Cash to Bank or Bank to Cash transfer Voucher~~ | ~~UI Only~~ |
| 4 | FI Payment Receipt | Difference due to exchange rate field to be given for foreign vendors  Types:  New Payment  New Advance  Assign advance | |
| 5 | FI Payment Outgoing |
| 6 | FI Asset |  | Depreciation Type etc  Asset Class for Account Determination |
| 7 | FI Sale Invoice |  | Same as SD Sale Invoice without items |
| 8 | TA Bill | Primary Voucher Tables =  TourReport, TourTask, TourDA, TourHotelExp, TourJourney, TourLocalConv, TourMiscExp, TourStations, | Master Data = TaskType  The TA bill, when approved, will generate a GL voucher, debiting the expense account (from AAA) and crediting the TA Advance account.  To handle the case of TA bill for non-employee |
| 9 | TA Advance Requisition |  |  |
| 10 | Loans from FinParty |  |  |

NOTES

1. FI Purchase Invoice

Ref <http://help.sap.com/saphelp_46c/helpdata/en/6e/121a4d9f0411d189b80000e829fbbd/content.htm>

1. Clearing accounts will be maintained for GR/IR, Purchase, Sale and GI/II
2. REPORTS

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Balance Sheet and P&L |  |  |
| Cash Flow |  |  |
| Stock Report |  |  |
| Excise Registers |  |  |
| VAT / CST Reports |  |  |

1. Sub Ledger will be maintained for vendors, customers and assets.

**SD**

1. Sales Enquiry Form

Primary Voucher Tables

|  |  |
| --- | --- |
| SalesEnq | Enquiry |
| SalesEnqItem | Enquiry Item |
| TECompQuote | Comparative Quotes |
| BGCustomer | Bank Guarantees |
| TermsCond | Terms and Conditions |
| TEDocSubmit | Documents to be Submitted |
| Projects |  |

Master Data Used

|  |  |
| --- | --- |
| Item | Items |
| Attribute System |  |
| Customer |  |
| BGType |  |
| TCMaster |  |
| DocMaster |  |
| Person |  |

Secondary Tables

|  |  |
| --- | --- |
| PIDUnit |  |

Related Reports

|  |  |
| --- | --- |
| Tender Pre Check List |  |
| Quotation |  |

1. Sales Order Form

Primary Voucher Tables

|  |  |
| --- | --- |
| SalesOrder |  |
| WorkOrder |  |
| WODelSched | Delivery Schedule |
| BGCustomer |  |
| SOSpare |  |
|  |  |
| RepairUnit |  |
| RepairItemRate |  |
| RepairUnitItem |  |
|  |  |
| Inspection |  |
| Dispatch |  |
| ProdSerialUse |  |
| SOSpareUse |  |
| CustPersonUse |  |
|  |  |
| DocsReq | Document Requirement |
| DocsDue | Document Due |

Master Data Used

|  |  |
| --- | --- |
| Item | Items |
| Attribute System |  |
| Customer |  |
| BGType |  |
| ProdSerial |  |
| Person |  |

Secondary Tables

|  |  |
| --- | --- |
| PIDUnit |  |

Related Reports

|  |  |
| --- | --- |
| Work Order |  |

Notes:

Using SKU2AttribID, system will find the relation between SKU1 and SKU2 and then store in workorder or EnqItem, if applicable. Example, TF may be maintained in Nos and MVA and then the relation stored in PIDUnitItemVar => Qty2 for SKU2 required in WorkOrder and EnqItem tables also.

**QM + CMMS**

Same as v1.

**HR**

FORMS

|  |  |  |
| --- | --- | --- |
| Salary Structure | SalStructure  SalComponent  SalBenefit |  |
| Rate Master | RateMaster  SalBenefitRate | Any Change in either will lead to recalc in EmpSalRateCalc, where intersection of RateMaster and EmpSalary valid dates will be pre calculated and stored. |
| Employee Salary Definition | EmpSalary  EmpSalComp |
| Pay Period | PayPeriod  Payslip  PayslipCalc  PayslipWOT | Calculate Salary |
| Bonus | Payslip |  |
| Leave | LeaveLedger |  |
| Pay Proposal | PayProjection  PayProjEmp  PayProposal |  |
| Employee | Employee  EmpAccident  EmpAddChange  EmpLoanPF |  |
| Employee Loan | EmpLoan  EmpLoadPayBack |  |
|  |  |  |

**PP + ME**

1. Work Order Head based material list

Primary Voucher Tables

|  |  |
| --- | --- |
| Matlist1 |  |
| MatlistVMS |  |
| MatlistVMSBOM |  |

Master Data Used

|  |  |
| --- | --- |
| MatHeads | Material Head |
| MatHeadType | Material Head Type |
| MatHdISC | Material Head Sub Categories |
| PlnSeqProcMat | Sequence Process Material Heads |

User has two options for creating Work Order Product Definition

* 1. Head based material list.

Since head has relation to sequence processes, Ma x will generate the Routing+BOM from the head based material list.

* 1. Direct Entry

Through point no. 5

1. Product Manual Costing

Primary Voucher Tables

|  |  |
| --- | --- |
| MatlistCost |  |

Master Data Used

|  |  |
| --- | --- |
| Items |  |
| ItemSubcats |  |
| CostingItem |  |

1. Spares Definition

Primary Voucher Tables

|  |  |
| --- | --- |
| MatlistSpare |  |

Master Data Used

|  |  |
| --- | --- |
| Items |  |
| ItemSubcats |  |
| ItemVMS |  |

1. Standard Routing + Basic Productions

|  |  |
| --- | --- |
| PlnStdSeq | Standard Sequence |
| PlnProc | Standard Plan Process |
| PlnStdSeqProc | Standard Sequence Process |
| PlnRouting | Standard Routing |
| PlnOp | Standard Routing Operation |
| ProdBasic | Basic Productions |

1. Work Order Product Definition (Routing + BOM)

Primary Voucher Tables

|  |  |
| --- | --- |
| PlnPIDURoute | PlnStdSeqProcID may be null for manually added processes. This will allow creation of custom transformer production sequence and addition of required material heads/items |
| PlnPIDURouteOp |  |
| PIDUMatBOM |  |
| PlnPIDURouteBasic | Multiple basic productions for PlnPIDURoute  Example HV Winding U Ph can have 20 Interleaved and 60 normal discs |

Standard Routing Data will be used as input for above.

WorkFlow

1. Tab 1 would be selection of standard sequence and generation of Work Order Production Process on that basis. This screen would allow Routings and Operations to be manually changed after generation.
2. Tab 2 would be generation of 1st stage BOM from the Production Process created. The screen would then allow material to be manually added or changed after generation.

This BOM would have links to the production process from which it has been created. The link is for following purposes

* 1. If a child material has been ordered/notified to arrive at a later date, the parent process cannot start/finish before it is to arrive. (Before Start/Finish and margin days noted in the BOM itself)
  2. Child material with a link to process has no effect on the start dates of parent process because that is controlled by the process themselves. But if MO is to be given for child materials, the dates of the MO may be matched with that of the process.
  3. When a material with a link to process is recd in stores, system will show the related process in a different color to show something should be done.
  4. When a process is marked complete, system wont show any thing because all mfd materials wont be taken into inventory.
  5. BOM shall be of following types:
     1. Master BOM. Stored in database. Each node has full information about material and process. (ItemVMSID and PlnPIDURouteID)
     2. Multi Level Item BOM – Process information is removed. Then certain nodes may be combined to give more quantity. Example HV Winding UPh, VPh, W Ph will become HV Winding.
     3. Single Level Item BOM – All leaf nodes are aggregated. Example if we have same copper strip in HV and LV, it will get aggregated to give more qty. Also, an intermediate node may be marked as purchased to make it a leaf node. Example Radiators.

1. Tab 3 would be incentive basic productions selection. For each sequence process, we need to select applicable prodbasicid from table prodbasic, applicable for plnprocid of the sequence process.
2. Notes: Conductor LV, HV, Tap, Ter etc are PIDURoutes that are “Incentive Only” and entry is done in ProdbyPlnPIDUROuteID to make the link between process and material for reports. For Insulation, there will be a single Insulation winding process, but with four material outputs ie INS HV, INS LV, INS TER, INS TAP. This is because these items are required at different times as per conductor availability etc and single MO for “Insulation Winding” may be counter-productive.
3. Production Lots

Primary Voucher Tables

|  |  |
| --- | --- |
| ProdLots | Lot Description will be in terms of Serial Nos. Example KT-8000/1-8, or KT-50000/1 etc. |
| ProdSerials |  |

Master Data Used

|  |  |
| --- | --- |
| PIDUnit |  |

1. PRP/MRP

Primary Voucher Tables

|  |  |
| --- | --- |
| ProdLotRoute | Lot Routing |
| ProdLotSchedOp | Lot Scheduled Operation |
| ProdLotSchedAct | Lot Scheduled Activities |
| ProdLotSchedActRes | Lot Scheduled Activity Resources |
| PlnReserve | Reservation of Lot Against inventory |
| PlnPlanOrder | Plan Order for AutoMRP |

Master Data Used

|  |  |
| --- | --- |
| MatReq |  |
| MatReqItem |  |
| PurOrder |  |
| PurItems |  |
| internalOrder | For Manufactured AUC like testing transformer. InternalOrder leads to entry in PIDUnit table. |

* 1. Copy Work Order Product Definition (BOM+Routing+Incentive) to Lot
  2. Change if required –Routing (example Nesting Rithani or Gagol etc)
  3. Change if required – Basic Production Data. Incentive Type would be copied from ProcIncType and may be changed if no calculation has been done.
  4. PRP Manual Change –
     1. Define/Copy Scenarios
     2. Plan in a scenario
     3. Gantt charts for plan process and campus (Rithani/Winding, Gagol/Winding etc) with machines and resources taken up from plnrouting.
     4. Publish Scenario (scenario no. 0 is the published scenario)
  5. Auto MRP
     1. Generate Reservations
     2. Generate Plan Orders – for MO and for Purchase Requisitions
     3. Convert Plan order into MO and Requisitions
  6. Manual MRP
     1. Reservations
     2. Requisitions

1. Auto PRP (TACTIC?)
   1. Export TACTIC definitions
   2. Import in a Planning scenario
   3. Modify manually
   4. Publish Scenario
2. Incentive/Daily Production Report

Primary Voucher Tables

|  |  |
| --- | --- |
| ProdReport | Daily Production Report |
| ProdProgress | Daily Lot Progress in each Sequence Process |
| ProdContriEmp | Daily Employee Contribution in each lot in each sequence process. |
| ProdComment | Comments |

Master Data Used

|  |  |
| --- | --- |
| DepsMat |  |
| PlnProc |  |
| PlnProcShop |  |
| ProdLotRoute |  |
| Employees |  |

Incentive Calculation at Month End

Primary Voucher Tables

|  |  |
| --- | --- |
| ProdCalcGrp | Production Calculation Group |
| ProdIncen | Production Incentive for each calc group |
| ProdCalcEmp | Employee Contribution in each calc group |
| PayslipWOT | Incentive and Overtime |

System will colour code the following situations:

1. Prodprogress is 100% but prodlotroute has not been marked complete
2. Associated MO item has been recd in inventory but prodlotroute has not been marked complete

**Master Data**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Name | Features | Remark |
| 1 | Classification and Parameter System  Used in Item, VMS, ETO Item, Vendor, Customer, Inspection | Attribute Definition  Class Definition  Class Assignment  Attribute Values | List Display  Filtering System  WO screen, list and format  Inspection Report |
| 2 | Item | Material BOM |  |
| 3 | Item Sub Category | - Multiple Units and relationship type between them  - BOM Template | - Valuation Class for Account Determination  - Option for list display for class system or old system |
| 4 | Item Schedule |  |  |
| 5 | Item Stock Book Head |  | Tree |
| 6 | GL Account |  | Can be marked as “Post Automatically only” |
| 7 | GL Account Group |  | Tree ref Tally with Type as A, L, I, E |
| 8.1 | Financial Party | May be bank or lender | Two tables ref TFSerial, TFRepair |
| 8.2 | Vendor |  |
| 8.3 | Customer |  |
| 9 | Bank Account | Linked to a GL Account |  |
| 10 | Valuation Code | May be Material or Service | For Sale Invoice account determination, service valuation codes may be used |
| 11 | Pricing Element, Procedure and Code | With Keys for entry in Account Assignment Table |  |
| 12 | Account Determination | Processing Key wise | All account determinations in a single tabbed screen |
| 13 | Posting Period 🡪 Old Closing / New Opening and Finalizing | Upon year end, all income / expense account balances will be 0 and net amount will be transferred to retained earnings account. | If subsequent entry is made for earlier periods, this balance will also be changed. |
|  |  |  |  |