

SAP PP/QM Configuration Pack

Published by Team of SAP
Consultants at SAPTOPJOBS

Visit us at www.sap-topjobs.com

Copyright 2010-12 SAPTOPJOBS

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means electronic or mechanical including photocopying, recording or any information storage and retrieval system without permission in writing from SAPTOPJOBS

A Warm Welcome To You All! We are really excited to offer the complete SAP PP/QM configuration pack to the SAP community. This was a much-awaited pack and we are happy to present that to you... As you are aware that our SAP FICO, SD and MM/WM have already achieved the best selling status and have received lots of accolades and really helped the consultants take their SAP knowledge and career to the next level ...I am very confident that PP/QM configuration package will go a step forward and do much more than that.....

For those who have been on our list and who have bought from us earlier you all know that we have over-delivered on each of our configuration packs and we want to do the same thing with SAP PP/QM config pack too... For those who have visited our site for the first time I would like to welcome you to our site and promise you that we would do our best to ensure that your life at the clients place would be very comfortable...

What I have done here is given you a brief of around 74+ pages of content in PP/QM pack so that you can have a feel of what it would be like in terms of structure. The whole pack is extremely voluminous, step by step guide this is just a feeler... So I hope you enjoy this.... So lets dive right in....

OVER VIEW INDEX

1.	Master Data Configuration	3
1.1	Define Bill Of Materials (BOM) Usage	3
1.2	Define BOM Status.....	7
1.3	Define Item Category.....	10
1.4	Define Application.....	13
1.5	Define Work center Category.....	16
1.6	Define Parameters.....	19
1.7	Define Standard Value	23
1.8	Define Shift Sequence.....	25
1.9	Define Routing Selection – Automatic.....	30
2.	MRP Related configuration settings	33
2.1	Plant parameters.....	33
2.2	Define MRP controller.....	36
2.3	MRP Plant Parameter – Float (Schedule Margin Key)	39
2.4	MRP Plant Parameter – Special Procurement Key	42
2.5	Activating MRP and Planning file entries.....	46
2.6	MRP type.....	48
2.7	MRP Plant Parameter – Conversion	52
2.7	PRODUCTION EXECUTION.....	54
3.	Define Order Type	54
3.1	Define Number Range for Order type.....	57
3.2	Define Scheduling Parameter for order type.....	60
3.3	Define confirmation parameters	64
3.4	Define Default Values	70

In the following pages we will run through a summary of Master Data Configuration, MRP and Production execution parameter. This is just a summary and a small snapshot to enable you to understand the way we have laid out the whole pack of our best-selling PP/QM pack.

1. Master Data Configuration

1.1 Define Bill Of Materials (BOM) Usage

BACKGROUND

This configuration setting enables one to define Bill Of Material (BOM) usage.

BOM usage defines the usage of BOM in a specific application area in SAP.

Example, there can be a separate BOMs for

- ⦿ Design,
- ⦿ Production
- ⦿ Costing.

In this way, each area is dealing only with the specific data it requires.

Example:

- ⦿ The design BOM includes all the components of the product and their technical data from the design point of view. This BOM is generally not linked to any order.
- ⦿ The production BOM contains all the items required from the production and assembly point of view. Only items relevant to production, for which production data (such as the issue storage location) can be entered, are required. A production BOM does not contain any packaging materials required in the shipping department.

SCENARIO

Create new BOM usage.

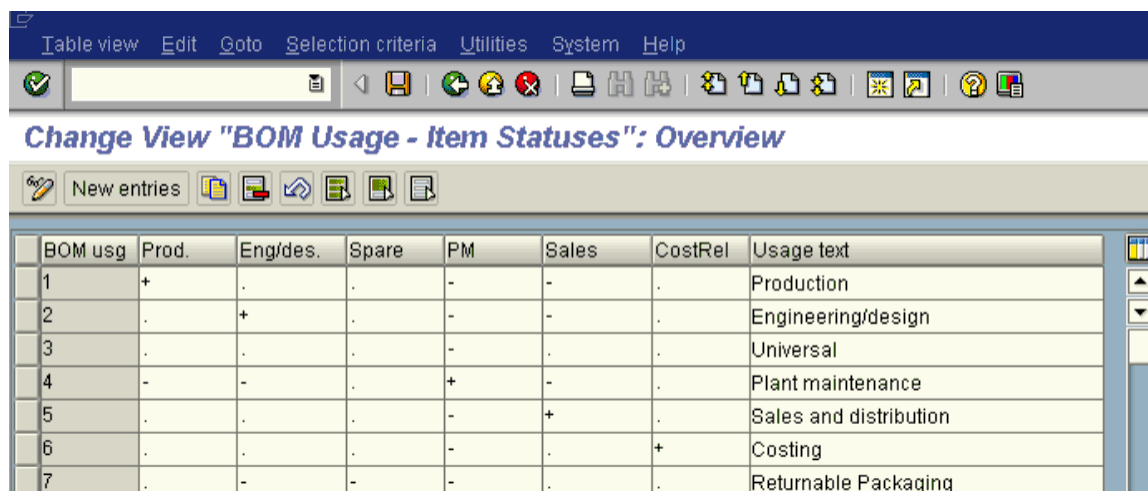
Note:-

Standard BOM usage available with SAP is sufficient. However any new BOM usage can be created.

INSTRUCTIONS

Follow the Menu Path: IMG → Production → Basic data → Bill of materials → General data ★ BOM Usage ★ Define BOM Usage

1. Click 



The screenshot shows the SAP interface for 'Change View "BOM Usage - Item Statuses": Overview'. The table below lists the standard BOM usage categories and their associated areas.

BOM usg	Prod.	Eng/des.	Spare	PM	Sales	CostRel	Usage text
1	+	.	.	-	-	.	Production
2	.	+	.	-	-	.	Engineering/design
3	.	.	.	-	.	.	Universal
4	-	-	.	+	-	.	Plant maintenance
5	.	.	.	-	+	.	Sales and distribution
6	.	.	.	-	.	+	Costing
7	.	-	-	-	.	.	Returnable Packaging

2. Click

3. Enter usage value; it can be either numeric or alphabet. It is suggested to be numeric.
4. Select +,- or . to indicate to which area this BOM is meant for like Production, Engineering, Spare, Plant Maintenance, Sales or for costing relevancy.

Note:-Based on this, during BOM explosion, entire dependent requirements are also planned,


5. Enter Usage text

6. Click Save 

Impact of this configuration in Master Data / Transaction

When creating the BOM, key defined here will appear in the BOM Usage field.

According to the requirement, BOM usage key has to be selected during BOM Creation.

Click Match code  or F4 in BOM usage field, to select the desired BOM usage.

Transaction code to create BOM is CS01

Create material BOM: Initial Screen

Create variant of...

BOM usage (1) 10 Entries found

Restrictions

Material

Plant in99

BOM usage |

Alternative BOM

Effectivity

Change number

Valid from

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
P	.	+	.	.	.	-	PGS-BoM
S	-	SAMBA Costing
Z	+	-	Longterm Planning

1.2 Define BOM Status

BACKGROUND

This configuration setting enables to define BOM status.

BOM status is used to define whether the BOM can be used by any application area or not.

Example: -

- ⊙ In the costing areas in a company, the BOM is exploded according to the application. While defining the BOM status, usage in costing area will be defined.

- ⊙ In MRP, the following indicators are checked directly from the definition of the BOM status:
 - Explosion in MRP
 - Released for orders

MRP only reads BOMs whose BOM status has at least one of these indicators.

BOM status defines whether

The BOM is active or inactive.

SCENARIO

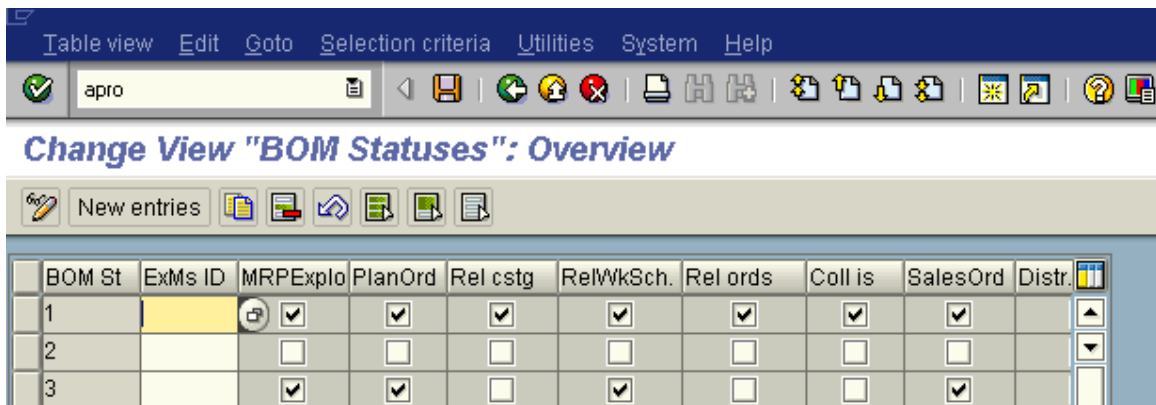
BOM need to be created for certain for product whose BOM can be finalized only after some trial and error.

While it is in preparation it is required not to be used by any application. Status “In preparation” has to be created.

INSTRUCTIONS

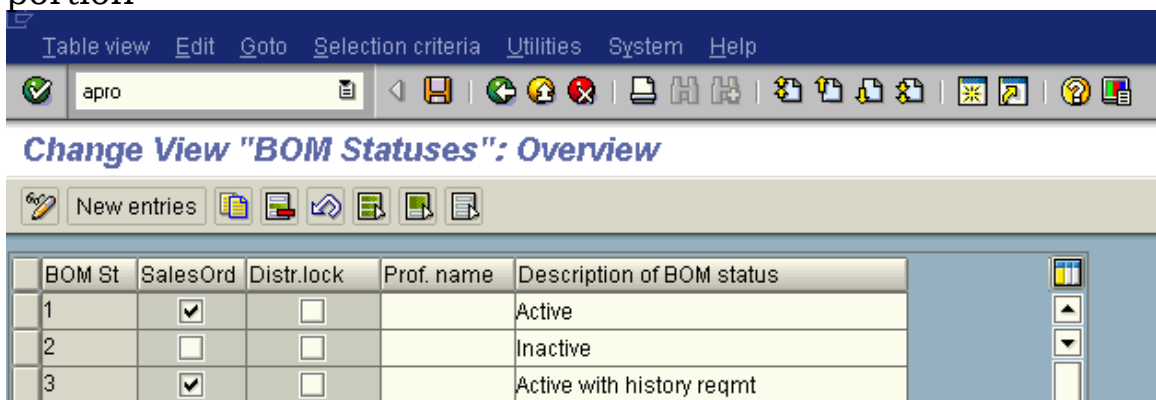
Follow the Menu Path: IMG★Production★Basic data★Bill of materials★ General data★Define BOM status

1. Click 



BOM St	ExMs ID	MRPEXplo	PlanOrd	Rel cstg	RelWkSch	Rel ords	Coll is	SalesOrd	Distr.
1		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	


.....continuation of the above screen's right side balance portion



BOM St	SalesOrd	Distr.lock	Prof. name	Description of BOM status
1	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Active
2	<input type="checkbox"/>	<input type="checkbox"/>		Inactive
3	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Active with history reqmt

2. Click 

3. Enter usage value as 2.

4. Leave all the check box EMPTY, i.e. do not tick any check box.
5. Mention description as “In preparation”
6. Click Save .

Impact of this configuration in Master Data / Transaction

BOM with status 2 can not be used for any application.

1.3 Define Item Category

BACKGROUND

This configuration setting enables to define item category.

The item category defines the attributes and functions of a BOM item. It controls field and screen selection for detail screens in BOM maintenance.

BOM can contain different type of items related to manufacture the finished product. There are

- ⊙ Pipeline items – i.e. items which are received through a pipeline from supplier not related to inventory
- ⊙ Stock items – i.e. materials are always issued from stock which are relate to inventory
- ⊙ Document item – i.e. Documents are referred in the BOM as a item trough the Document Management System (DMS)
- ⊙ Text item – i.e. brief note about the material usage can be maintained as a Text item. This will be useful in a long BOM to indicate any specific assembly.

The above different items are defined through item category in the BOM.

SCENARIO

Define item category.

Example:- An Item code may be defined as a normal item in the material master. The same item code for one specific BOM has to be treated as a phantom material.

In such a situation, item category inside the item detail of the BOM will be mentioned as a phantom assembly. It is now applicable only to this BOM.

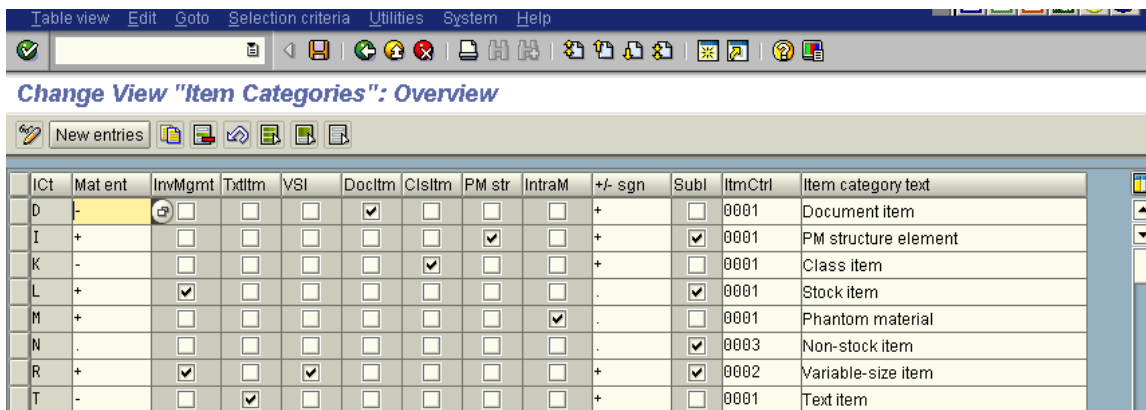
Let's look at the standard setting for item category.

Item categories defined by SAP will be sufficient in most of the cases. If required, any new item category can be created.


INSTRUCTIONS

Follow the Menu Path: IMG★Production★Basic data★Bill of materials★ Item data★Define item category

1. Click 



ICt	Mat ent	InvMgmt	Txltm	VSI	Docltm	Cisltn	PM str	IntraM	+/- sgn	Subl	ItmCtrl	Item category text
D	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+	<input type="checkbox"/>	0001	Document item
I	+	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	+	<input checked="" type="checkbox"/>	0001	PM structure element
K	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+	<input type="checkbox"/>	0001	Class item
L	+	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	.	<input checked="" type="checkbox"/>	0001	Stock item
M	+	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	.	<input type="checkbox"/>	0001	Phantom material
N	.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	.	<input checked="" type="checkbox"/>	0003	Non-stock item
R	+	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+	<input checked="" type="checkbox"/>	0002	Variable-size item
T	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+	<input type="checkbox"/>	0001	Text item

2. click 

3. Update the following fields

Field Name	Description
Item category	Desired item category to be

Inv.Mgmt	mentioned in the BOM Relevant to Inventory management
TxtItem	It is text item
Vsl	Variable size item
Document Item	To mention Document
Cls Item	To mention as Class item, used in Variant configuration
PM Str	To mention as PM structure element
IntraM	To mention Intra Material normally used in Master Recipe-PPPI
+/- sign	Negative value allowed in the BOM or not? This is required to indicate the by product.
SubI	To indicate sub items are supported.
Item Ctrl	Sequence of Item detail

4. Select check boxes according to the business requirement

5. Mention Item category Text

6. Click Save .

Impact of this configuration in Master Data / Transaction

While creating the BOM, required item category can be selected.

1.4 Define Application

BACKGROUND

This configuration setting enables to define BOM Application.

BOM application controls use of BOM in a specific area.

Example:- MRP run and cost estimate calculation will use the BOM of its own respective BOM application.

SCENARIO

BOM display at multiple levels (transaction code CS12) can be done for different BOM application. It is required to display only the costing BOM to certain users. Separate BOM application to be created to display the BOM related only to costing.

Note: - BOM with usage for costing should be available. i.e. with the right usage for costing.

INSTRUCTIONS

Follow the Menu Path: IMG★Production★Basic data★Bill of materials★ Alternative determination★Define order of priority for BOM usage.


1. Click 

The screenshot shows a SAP configuration screen for BOM applications. At the top, there is a toolbar with icons for 'New entries', save, print, and other functions. Below the toolbar, the 'BOM application' field is set to 'PC01 Costing'. The 'Selection ID' field is set to '05'. There are two main sections of checkboxes:

- Override alternative selection from material master:**
 - Alt.det. mult. BOM
 - Production versions
- Minimum BOM status requirements:**
 - MRP explosion
 - Rel planned orders
 - Release costing
 - Rel wk scheduling
 - Rel productn orders
 - Collective issue
 - Sales ord. explosion

2. Update the Following fields

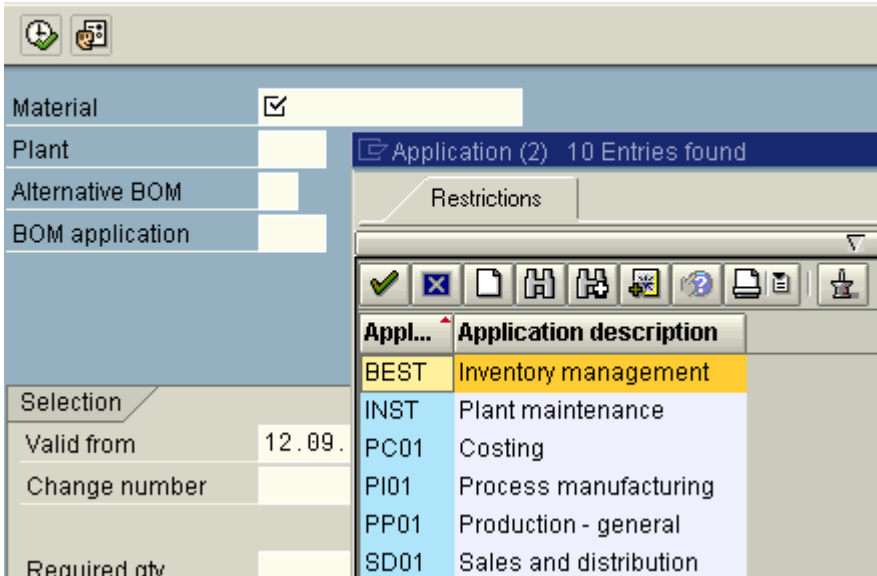
Field	Description
BOM Application	Enter any four digit BOM application area
Description	Enter description
Selectin ID	Selection ID through which BOM selected
Alternative Det.Multi.BOM	To select for alternative BOM if multiple BOM is available. Tick this check box
Production Version	If there is a production version, that is used as a selection criteria.
MRP explosion	Leave Blank
Rel planned orders	Leave Blank
Release costing	Tick this check box
Other check boxes	

3. Click Save .

Impact of this configuration in Master Data / Transaction

When displaying the BOM through transaction code CS12, Right BOM usage will be displayed according to the settings maintained here. In this example, with BOM application, only the costing BOM will be displayed.

Explode BOM: Multi-Level BOM: Initial Screen



Appl...	Application description
BEST	Inventory management
INST	Plant maintenance
PC01	Costing
PI01	Process manufacturing
PP01	Production - general
SD01	Sales and distribution

Press F4 in BOM application, where all the available setting will be displayed.

1.5 Define Work center Category

BACKGROUND

This configuration setting enables to define work center category.

Work center category is the major classification of work center by SAP. E.g. Machine, processing unit, labor are defined as a different work center category.

Work center category controls the field selection inside the work center.

SCENARIO







Create a work center category to mention skilled labor work center category.

INSTRUCTIONS

Follow the Menu Path: IMG★Production★Basic data★Work center★ General Data ★Define work center category.

1. Click 

Change View "Work center category": Overview

New entries      

Dialog Structure

- Work center category
 - Application

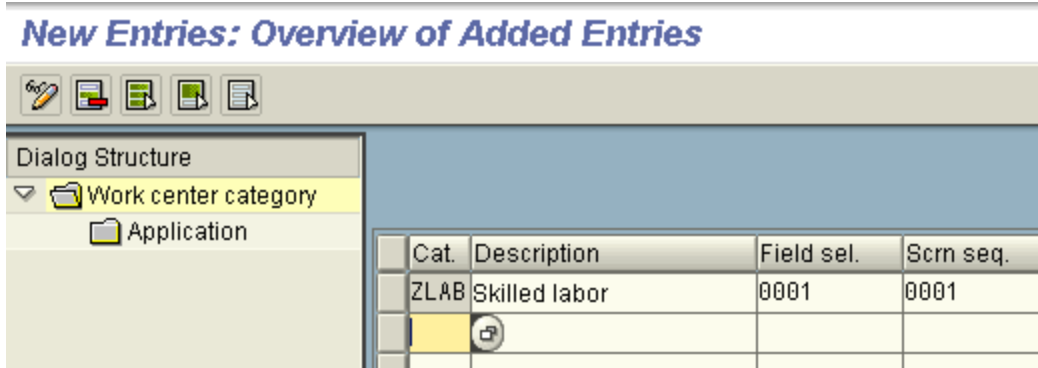
Cat.	Description	Field sel.	Scrn seq.
0001	Machine	0001	0001
0002	Stat. WkCtr MchneGrp	0002	0002
0003	Labor	0001	0001
0004	Stat. WkCtr LaborGrp	0002	0002
0005	Plant maintenance	0005	0005
0006	Project management	0006	0006
0007	WkCtr on prod. line	0007	0007
0008	Processing unit	0008	0008


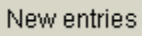

2. Click 

3. Update the Following fields

Field	Description
Cat	Capacity category. Any new value may be entered. E.g. ZLAB
Description	Description of the desired capacity category
Field Selection	Contains the fields required to this capacity category. Enter standard SAP value according to the capacity category
Screen sequence	Sequence of tab screen to be appeared in the work center master data. Enter the standard SAP value.

4. Click Enter 



5. Select Created capacity category
6. Double Click  Application
7. Click 
8. Enter Application – Area in SAP where this work center category can be used. E.g. P – Routing; C - Master Recipe; Q - Quality task list etc.
9. Note:- If this work center category is to be applicable to all, maintain all the entry in this application field.
10. Click .

Impact of this configuration in Master Data / Transaction

When creating the work center for skilled labor, work center category is to be mentioned as it is a mandatory entry.

1.6 Define Parameters

BACKGROUND

This configuration setting enables to define Parameter (activities) for formula.

Parameter is one of the required settings to calculate the conversion cost incurred in the Work center during manufacturing.

Example for activities:-

Work center while in use can consume

- Power
- Labour
- Setup time
- Depreciation
- Steam etc.

The above costs incurred during conversion will be captured through the activity. Parameter is the structure to capture this activity.

Link to the Master data is established as below:-

- Parameter will be assigned to the standard value key.
- Standard value key will be assigned in the work center.


- Work center will be assigned to the task list (Routing or Master Recipe).
- Data of planned duration of these activities will be maintained in the task list (Routing or Master recipe)

SCENARIO

Create a Parameter. Note: - Standard SAP setting is sufficient. Let us discuss the creation of new parameter.

INSTRUCTIONS

Follow the Menu Path: IMG★Production★Basic data★Work center★ General Data ★Standard Value★Define Parameters.

1. Click 
2. Click **New entries**

Parameter	LABOUR
Origin	2 Standard value in the operation
Attributes	
Short key word	Labor
Keyword	Labor
Dimension	TIME
Std. value	
Standard value unit	MIN
Field name	

3. Update the Following fields
- | Field | Description |
|-------|-------------|
|-------|-------------|

Parameter	Parameter to hold the value. Any alphanumeric six digit may be entered. E.g. LABOUR
Origin	Place where from the value is to be taken. E.g. To indicate value to be taken from task list maintain 2 in this field.
Short key word	Short description
Key work	Key word to identify
Dimension	Dimension of the parameter. E.g. Any thing related to Duration may have TIME as dimension.
Standard Value Unit	Unit of this parameter. E.g. Time dimension may have

Note: - If any parameter for which there is no unit, it may be mentioned as no unit.

4. Click Save .

Impact of this configuration in Master Data / Transaction

Link between the parameter and the master data is as below.

- This parameter will be assigned to the standard value key.
- Standard value key will be attached with the work center.
- Work center will be attached in the task list. I.e. in the routing or in the master recipe.
- Standard value (i.e. duration of labour hours required) will be maintained in the task list as a master data.

1.7 Define Standard Value

BACKGROUND

This configuration setting enables to define the standard value key.

Standard value key is very essential to capture the cost incurred in the work center.

Standard value key will contain the activities. One standard value key can contain up to six activities. Each activity refers to the cost.

Example:-

- Production cost
- Set up cost
- Labour cost
- Quality Cost
- Power cost
- Steam cost

One work center can have only one standard value key.

SCENARIO

Create a standard value key to have the activities of setup, machine, labor, and over head.

INSTRUCTIONS

Follow the Menu Path: IMG★Production★Basic data★Work center★ General Data ★Standard Value★Define standard value key.

1. Click 

2. Click **New entries**

3. Update the Following fields

Field	Description
Standard value key	Enter any alpha numeric to indicate standard value key. E.g. STD1
Description	Maintain standard value key description. E.g. setup/machine/labor/overhead
Parameter	Maintain the parameters. Up to six parameters can be maintained.

4. Click Save .

Impact of this configuration in Master Data / Transaction

When creating the work center, standard value key will be assigned to the work center.

1.8 Define Shift Sequence

BACKGROUND

This configuration setting enables to define shift sequence.

Shift sequence is used to define the specific working pattern. I.e. weekly holidays, number of shift and working hours of each shift.

Work center capacity is calculated from its working hours defined in the capacity header details of the work center.

There are mainly three ways to define capacity for each work center.

Normal capacity

Available Interval capacity

Interval and shifts

Normal capacity is defined through the working hrs and break in the capacity header

Available interval capacity is the capacity available for any specific duration; it is defined at the capacity header detail


Interval and shifts is defining the shifts in which the machine or industry works.

SCENARIO

Create a shift sequence with two shifts a day and Thursday and Friday as weekly holiday.

INSTRUCTIONS

Follow the Menu Path: IMG★Production★Basic data★Work center★ Capacity Planning★ Available capacity★ Define shift sequence

1. Click 

2. Click **New entries**

3. Update the Following fields

Field	Description
Grouping	Enter shifting grouping. E.g. SG
Description	Enter description E.g. Special Grouping

4. Click 

5. Select the Grouping

6. Double Click  **Work break schedule**

7. Click **New entries**

8. Update the Following fields

Field	Description
Break	Enter the Break name. E.g. IND6
Break Number	Enter the break number E.g. 1
Description	Description of break. E.g. First shift break
Start	Break start time
End	Break end time

9. Click 

Change View "Work break schedules": Overview

New entries

Dialog Structure

- Grouping
 - Work break schedule
 - Shift definitions
 - Shift sequences

Grouping ThursdayFridaygroup

Work break schedules

Break	B..	Description	Start	End	After	Breaks len.
IND6	1	First shift break	10:00:00	10:30:00		0.50
IND6	2	Second shift break	18:30:00	19:00:00		0.50

10. Select Break 1 line

11. Double click Shift definitions

12. Click

13. Update the Following fields



Field	Description
Shift	Enter shift name. E.g.1SHF
Shift text	Enter shift definition. E.g. First shift
Start date	Starting date of the shift
End date	End date of the shift
Start time	Starting time of the shift
End Time	End time of the shift
Break	Enter the Break schedule. E.g. IND6

14. Click

Grouping ThursdayFridaygroup

Shift definitions

Shift	Shift def. text	Start date	End date	Start	Finish	WrkHrs	Break	HR
1SHT	first shift	01.01.0001	31.12.9999	06:00:00	14:30:00	8.00	IND6	<input type="checkbox"/>
2SHT	Second shift	01.01.0001	31.12.9999	14:30:00	23:00:00	8.00	IND6	<input type="checkbox"/>
		01.01.0001	31.12.9999	00:00:00	00:00:00	24.00		<input type="checkbox"/>

15. Select the 1SHT line
16. Double click  Shift sequences
17. Click 

Grouping S6 ThursdayFridaygroup									
Shift sequences									
Se...	Shft	Description	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
01	1	Two shift per day	1SHT	1SHT	1SHT			1SHT	1SHT
01	2	two shift per day	2SHT	2SHT	2SHT			2SHT	2SHT

18. Update the Following fields

Field	Description
Sequence	Enter the sequence No. E.g 01
Shift No.	Shift number in the sequence. E.g. 1
Description	Description of the shift sequence. E.g. Two shift per day
Day1 to Day 7	Maintain the desired shift definition the day to follow. E.g. 1SHT and 2SHT in all days except Thursday and Friday.

19. Click 
20. Click Save .

Impact of this configuration in Master Data / Transaction

This shift sequence can be maintained as an interval of available capacity.

This can be maintained in the work center capacity header detail.

Once this is assigned, working days and hours to this work center will be as per this shift sequence.

1.9 Define Routing Selection – Automatic

BACKGROUND

This configuration setting enables to configure the automatic selection of routing (Task list).

Task list has to be selected automatically during

- Production order creation (Routing)
- Process order creation (Master recipe)
- Cost estimate calculation
- MRP run

Routing is essential to

- Calculate the conversion cost
- Calculate the capacity requirements
- Schedule the operation
- To schedule the material at right time in MRP

SCENARIO

Define Automatic routing selection.

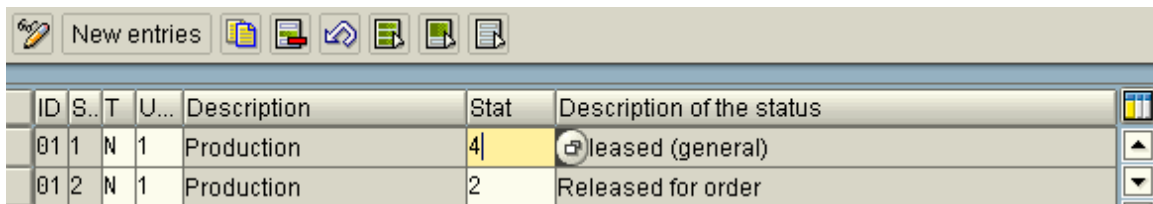
INSTRUCTIONS

Follow the Menu Path: IMG★Production★Basic data★Routing★ Routing selection★ Select automatically

1. Click 
2. Click **New entries**
3. Update the Following fields

Field	Description
ID	Selection id. E.g. 01
Selection Priority	Priority of selection in this ID. E.g. enter from 1,2 ...
Task List type	Mention the task list type. E.g. N for routing, 2 for master recipe
Usage	Enter the Usage of this task list. E.g. 1
Status	Enter the status of this task list E g 4

Note: - Repeat the above with the same id as shown below.



ID	S.	T	U...	Description	Stat	Description of the status
01	1	N	1	Production	4	released (general)
01	2	N	1	Production	2	Released for order

Impact of this configuration in Master Data / Transaction

In the order type dependant parameter and MRP plant parameter configuration

Selection id 01 will be mentioned.

While performing the transaction (creation of process order or production order or MRP run), automatic selection of routing will be performed in the following sequence:

- First system will search task list type routing as per the sequence 1
- System will search for routing with usage 1
- System will search for routing with status 4

If the above search fails, system will go to the next sequence in the same selection id. I.e. sequence no. 2 in our above shown screen shot.

- system will search task list type routing as per the sequence 2
- System will search for routing with usage 1
- System will search for routing with status 2

2. MRP Related configuration settings

2.1 Plant parameters

BACKGROUND

This configuration setting enables to configure the plant parameter for Materials Requirement Planning (MRP).

MRP will ensure

- Availability of right material at right time.
- Calculate the capacity requirements.

Following MRP related parameters must be configured to perform MRP.

- Frequency of planning,
- How to explode the BOM,
- Order type to be used when converting planned order
- Planning horizon
- Scheduling

Apart from above there are more parameters to be configured, which we shall discuss.

When creating plant by copying from one plant, many plant parameters are copied, however it is required to maintain plant specific parameters.

SCENARIO

Maintain MRP plant parameter for the plant IND6.

INSTRUCTIONS

Follow the Menu Path: IMG★Production★Material Requirement Planning ★Plant parameters★ carryout over all maintenance of plant parameters

Click 

Click 

Enter Plant IND6

Click 

Maintain Plant Parameters

Plant	IND6 ABC Ltd	Reference plant	Initial
Environment		Planning run	
Number ranges	Maintained	BOM/routing selection	Maintained
Check.rule: backorders	Maintained	BOM explosion	Initial
Master data		Param: detailed sched.	Maintained
MRP controllers	Maintained	External procurement	Maintained
Special procurement	Maintained	Rescheduling	Maintained
Floats	Maintained	Planning horizon	Maintained
Planned orders		Available stock	Maintained
Conversion	Maintained	Direct procurement	Maintained
Dep.reqmt availability	Maintained	Error handling	Maintained
Reporting	Maintained	Item numbers	Maintained
Performance	Initial	Order start in past	Initial

Status **Maintained** indicates that the values are maintained and the status **Initial** denotes that no value is maintained.

Let's discuss the important tab screens one by one.

2.2 Define MRP controller

BACKGROUND

This configuration setting enables to configure MRP controller specific to a plant.

MRP controller will

- Material availability for production.
- Confirm the purchase request generated by MRP run.
- Schedule the production.
- Initiate action for shortage items and avoid shortages.

SCENARIO

Maintain MRP controller for the plant IND6.

INSTRUCTIONS

Follow the Menu Path: IMG★Production★Material Requirement Planning ★Plant parameters ★ carryout over all maintenance of plant parameters

Click 

Click 

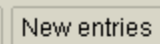






Enter Plant IND6

Click 

Click 

Click  again in the next screen

Change View "MRP Controllers": Overview

Plnt	Name 1	MRP ctrlr	MRP controller name
IND6	ABC Ltd	IAM	AI - Manufactured
IND6	ABC Ltd	IAP	AI - Purchased
IND6	ABC Ltd	IBK	Bulk - Manufactured
IND6	ABC Ltd	IFG	FG
IND6	ABC Ltd	IMS	MRO - Spares
IND6	ABC Ltd	IPM	PM
IND6	ABC Ltd	IRM	RM
IND6	ABC Ltd	ITG	Trading Goods

To create the new MRP controller,

Click 

Update the Following fields

Field	Description
Plant	Enter the plant number. E.g. IND6
MRP controller	Enter the MRP controller. E.g. RMP
MRP controller Name	Name of the MRP controller. E.g. RM planner

Click Save .

Impact of this configuration in Master Data / Transaction

MRP controller has to be maintained in the material master MRP1 view.

2.3 MRP Plant Parameter – Float (Schedule Margin Key)

BACKGROUND

This configuration setting enables to define the float for production.

It is used to schedule the production or process order. Float is the cushioning durations in days before and after the actual production date. It is also called as schedule margin key.

Cushioning period covers the days

- Before production
- After production

In order to take care of any unforeseen situation during manufacturing and to make the committed date of production safer, the extra days are defined here.


These extra days defined here will be added in the start date of production and in the end date of production.

SCENARIO

Create schedule margin key for plant IND6

INSTRUCTIONS

Follow the Menu Path: IMG★Production★Material Requirement Planning ★Plant parameters ★ carryout over all maintenance of plant parameters

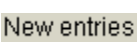
Click 

Click 

Enter Plant IND6

Click 

Click 

Click 

Update the Following fields

Field	Description
Plant	Enter the plant number. E.g. IND6
SMK – Schedule Margin Key	Key identify the float periods. E.g. 555
Opening Period	Number of working days subtracted from the order start date to find the creation date. This is an extra time to MRP controller. It is used in backward scheduling only
Float Before production	Number of working days between the order start date and the scheduled start date; used as a float in production Scheduling
Float after production	Number of working days used as a float for scheduling between the order due date and the scheduled finish date. The safety margin after production is used for

	compensating malfunctions within the order production.
--	---

Click Save .

Impact of this configuration in Master Data / Transaction

Schedule Margin Key has to be maintained in the material master MRP1 view.

2.4 MRP Plant Parameter – Special Procurement Key

BACKGROUND

This configuration setting enables to define the special procurement key.

Special procurement key used to

- Transfer requirements from one plant to another plant.
- Make material issue from another plant
- Create the direct process order in another plant or in own plant
- Define the phantom item. I.e. item not exist physically but planning will be done.
- To calculate standard cost estimate in one plant referring the BOM and Task list data from another plant.

SCENARIO

Define the special procurement key for plant IND6

INSTRUCTIONS

Follow the Menu Path: IMG★Production★Material Requirement Planning ★Plant parameters ★ carryout over all maintenance of plant parameters

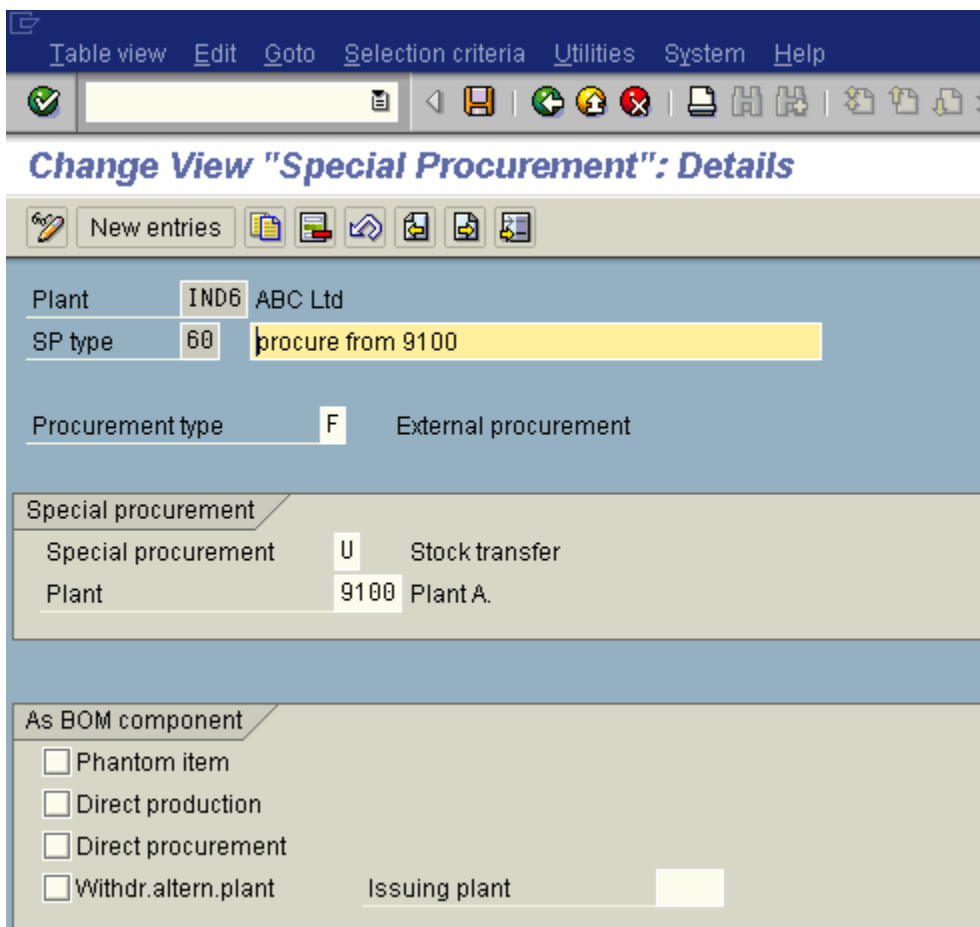
Click 

Click 

Enter Plant IND6

Click 


Click 



The screenshot shows the SAP 'Change View Special Procurement' details screen. The title bar reads 'Change View "Special Procurement": Details'. The main area is divided into several sections:

- Plant:** IND6 ABC Ltd
- SP type:** 60 procure from 9100
- Procurement type:** F External procurement
- Special procurement:**
 - Special procurement: U Stock transfer
 - Plant: 9100 Plant A.
- As BOM component:**
 - Phantom item
 - Direct production
 - Direct procurement
 - Withdr.altern.plant
 - Issuing plant:

To create new entries follow the below steps.

Click 

Update the Following fields

Field	Description
-------	-------------

Plant	Enter the plant number. E.g. IND6
Special procurement type	Enter the special 2 digit procurement type key, alpha numeric field. E.g. 60
Description	Description of this key. E.g. procure from Plant 9100.
Procurement Type	Indicating what type of procurement, whether internal or external. Enter F to denote external procurement
Special procurement	Indicating what type of procurement it is. Whether produced in other plant, procured outside, stock transfer, sub-contracting. Enter value U for stock transfer
Plant	Enter the plant from which the material is going to be stock transferred. E.g.9100
Phantom item	To indicate this is a phantom item.
Direct production	If the item is directly produced for superior item as a collective order. The item is not put into stock, directly consumed by higher level material
Direct procurement	Indicates that the items is directly procured and consumed. Item will not be stocked, directly consumed to the order
With drawn from alternate plant	Controls whether the material can be procured as a component using withdrawal from an alternative plant. This means the reservation occurs

	at an alternative plant if dependent requirements exist.
Issuing Plant	If the check box of with drawn from alternate plant is selected, it is mandatory to mention issuing plant.

Click Save .

Impact of this configuration in Master Data / Transaction

When the material is to be stock transferred from another plant, maintain the special procurement key in MRP2 view of the material master.

In this configuration example, if the special procurement key 60 is maintained, stock transfer PR will be generated indicating the supplying plant as 9100.

2.5 Activating MRP and Planning file entries

BACKGROUND

This configuration setting enables to activate or deactivate the MRP single item multilevel.

MRP single item multi level is used to run MRP for a specific material at any given point of time.

Single item multi level MRP run can be done to check the planning result of a specific material after changing the plan.

Planning file is the internal file in SAP. Items which undergo any change will be maintained in the planning file internally by the system automatically.

Items maintained in the planning file will be considered in the next net change MRP run.

SCENARIO

Activate MRP in the Plant IND6.

INSTRUCTIONS

Follow the Menu Path: IMG★Production★Material Requirement Planning★ Planning file entries★ Activate MRP and setup planning file entries

Click 

Click **Material requirements planning**

Update the Following fields

Field	Description
Plant	Select the Plant from the display. E.g. IND6
Activate Requirement Planning	Check box to be ticked to activate single item multilevel MRP run. E.g. Ensure the check box is ticked.

Plant	Activate requirements planning
IND6	<input checked="" type="checkbox"/>

Click Save .

Impact of this configuration in Master Data / Transaction

Transaction codes MD01 and MD02 can be performed only with this configuration setting.

Error message will be generated if this is not configured.

2.6 MRP type

BACKGROUND

This configuration setting enables to define the MRP type.

MRP type determines the type of planning to be employed to a material.

Important types of Planning are

Material Requirement Planning (MRP)

Consumption Based Planning

Forecast based planning

Parameter which are defined in the MRP types are

- MRP procedure or MPS procedure
- Basis for planning
- Reorder point and consumption method
- Lot size procedure
- Forecast
- Not to plan the material at all

Above types of planning are governed through the MRP type.

SCENARIO

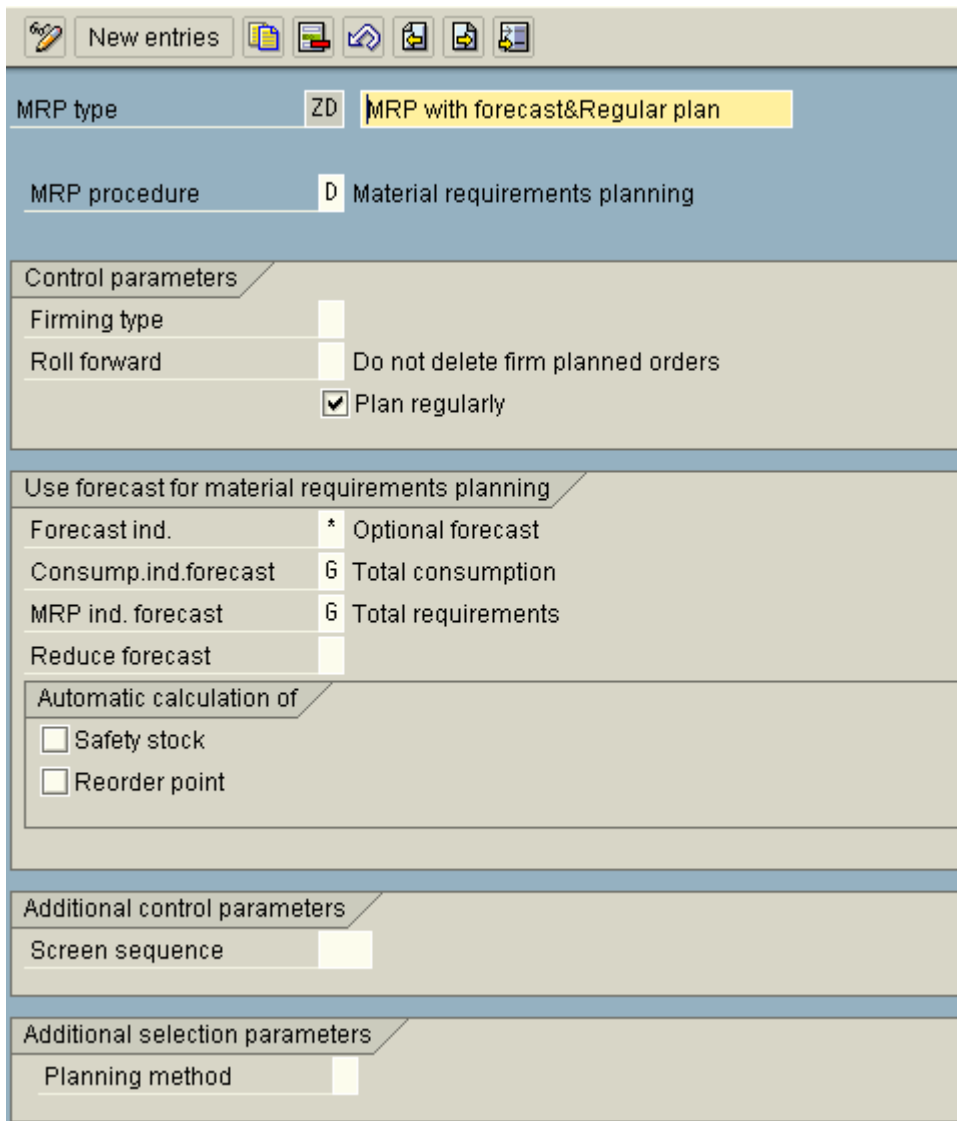
Create a MRP type ZD with forecast and to plan regularly.

INSTRUCTIONS

Follow the Menu Path: IMG★Production★Material Requirement Planning★ Master data★ check MRP type

Click 

Click **New entries**




The screenshot shows the SAP MRP type configuration screen. At the top, there is a toolbar with icons for 'New entries', 'Save', 'Print', 'Back', 'Forward', and 'Home'. Below the toolbar, the 'MRP type' field is set to 'ZD' and 'MRP with forecast&Regular plan'. The 'MRP procedure' is set to 'D' and 'Material requirements planning'. Under 'Control parameters', 'Firming type' is empty, 'Roll forward' is set to 'Do not delete firm planned orders', and 'Plan regularly' is checked. The 'Use forecast for material requirements planning' section includes 'Forecast ind.' set to '*', 'Consump.ind.forecast' set to '6', 'MRP ind. forecast' set to '6', and 'Reduce forecast' is empty. Under 'Automatic calculation of', both 'Safety stock' and 'Reorder point' are unchecked. The 'Additional control parameters' section has 'Screen sequence' empty. The 'Additional selection parameters' section has 'Planning method' empty.

Update the Following fields

Field	Description
MRP Type	Key defining the MRP type. E.g. Enter ZD and maintain

	description.
MRP Procedure	SAP internally identified key to do the planning according to the internal control. E.g. Enter D for MRP
Firming type	Confirming the order proposal. Leave it blank here.
Roll forward	To delete or not the old planned orders. Leave it blank
Plan Regularly (Check box)	Planning takes place only if any change happened to the material, other wise it is not planned, if this check box is ticked, material will be planned in every MRP irrespective of any changes happening to it. E.g. Tick this check box
Forecast Indicator	To consider the forecast requirement. E.g. Enter * to make it as optional forecast. Forecast requirement consideration become optional
Consumption Indicator forecast	Defines, which consumption are relevant for forecast. E.g. Enter G to indicate Total consumption
MRP indicator forecast	To define whether the forecast requirements are to be considered in MRP. E.g. Enter G to consider total requirement in MRP run
Reduce forecast	Indicates how the forecast requirements are to be reduced. E.g. Leave blank to reduce forecast value by
Safety stock (Check box)	To calculate safety stock

	automatically, tick this check box. E.g. Leave it blank
Reorder Point	To calculate Reorder point automatically, tick this check box. E.g. Leave it blank

Click Save .

Impact of this configuration in Master Data / Transaction

Assign this MRP type ZD to the material master MRP1 view.

This material will be planned regularly irrespective any changes happening to this material.

If is required Forecast can be run and those forecast requirements will be considered in MRP.

2.7 MRP Plant Parameter – Conversion

BACKGROUND

This configuration setting enables to define the order types while converting the planned order in to process order or production order.

Order type is a mandatory entry while creating the process order or production order. Order type controls the creation of order and responsible for entire production or process order processing.

MRP run will create the planned order for the net required quantity after considering the stocks and receipts. Planned order will be converted to process order if it is produced in-house or into the purchase request if it is procured from outside.

SCENARIO

Maintain the conversion parameter to convert planned order into the production order or into the process order.

INSTRUCTIONS

Follow the Menu Path: IMG★Production★Material Requirement Planning ★Plant parameters ★ carryout over all maintenance of plant parameters

Click 

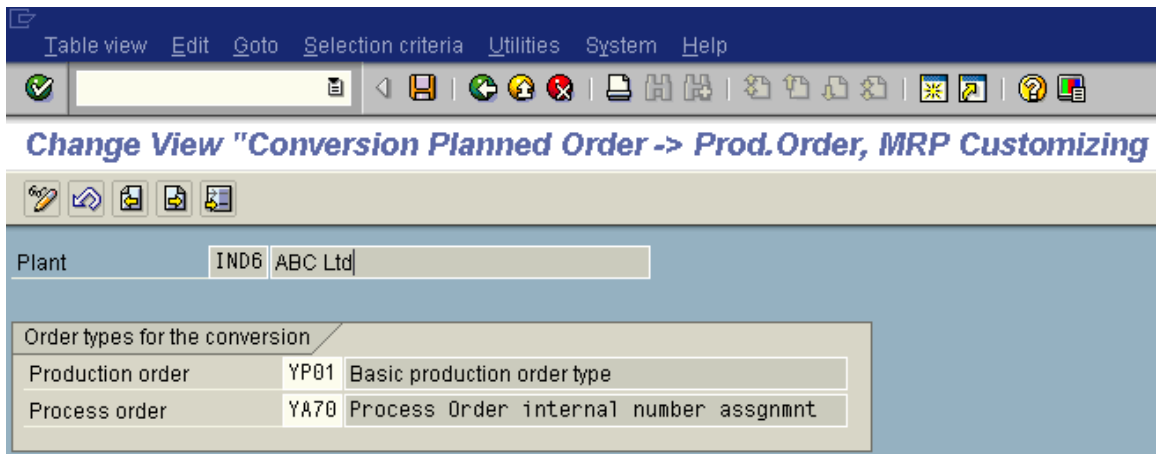
Click 


Enter Plant IND6

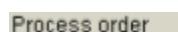
Click 

Click 

Click 



 **YP01** - Maintain the production order type to convert planned order into production order

 **YA70** - Maintain process order type to convert planned order into process order.

Click Save .

Impact of this configuration in Master Data / Transaction

When converting the planned order into production order or process order, order will be determined automatically by the system.

3.PRODUCTION EXECUTION

3.1 Define Order Type

BACKGROUND

This configuration setting enables to define order type.

Order type governs the parameters relevant to controlling and defines what type of master data are to be picked up during the production or process order creation.

There can be more than one order type for different production method. E.g. one order type for regular production and another order type for rework processing.

SCENARIO

Create order type YP01 for plant IND6

INSTRUCTIONS

Follow the Menu Path: Production★ shop floor control ★ Master Data ★ Order ★ Define order types.

Click 

Click **New entries**

Table view Edit Goto Selection criteria Utilities System Help

Change View "Maintain Production Order Types": Details

New entries

Order category 10

Order type YP01 Basic production order type

Control indicator

CO partner update Semi-active

Classification

Commitments mangmnt.

Reorganization

Residence time1

Residence time2

Profiles for controlling area

Settl. Profile 30 Production order

Coll.order with goods movement

Status management

StatusProfile Header

Oprtn status profile

Number range general

Update the Following fields

Field

Order category

Order type

Description

Classification check box

Description

Order category defined by SAP. Leave it as it is.

Key identifying the order type. E.g. enter YP01 to refer the production order type.

Enter the description. E.g. Basic production order type.

Tick mark in this check box will classify the production order internally

Resident time 1 and 2	Related to Archiving the object. It indicates, there should be one month gap between deletion indicator setting and deletion flag. E.g. Enter 1 in Resident time 1 and in resident time 2.
Settlement profile	Profile defining how the order is to be settled. Related to costing. E.g. enter 30
Status profile Header	User created status profile applicable to this order type.
Operation Status profile	User created status profile for operation applicable to this

Click Save .

Impact of this configuration in Master Data / Transaction

Order type is a mandatory entry while creating production or process order.

Number range and controlling parameter (settlement rule) are picked during creation of production or process order according to the configuration setting defined in the order type.

3.2 Define Number Range for Order type

BACKGROUND

This configuration setting enables to define number range to the order type.

For each production or process order a unique number has to be assigned. Internal number will be picked up from the number range defined and it will be assigned automatically at the time of saving the production or process order.

SCENARIO

Define Number Range for order type YP01.

INSTRUCTIONS

Follow the Menu Path: IMG★Production★ shop floor control
★ Master Data ★ Order ★ Define number range for order type.


Click 

Click  Groups

```
Number range object Order
Grouping..... Order type

[ ] Production orders - internal number assignment
PB01 Production Order - Bulk
PD Planning and Development Order
PI01 Process Order internal number assgnmnt)
PP01 Standard Production Order -Packaging
PP04 Assembly Order
PPK1 Production Order for Kanban
YA40 Process Order
YA61 Process Order for Trail Production
YA99 Setup/Clean-out Order
YAPP Standard Production Order
```

Order type which is already assigned to one group is displayed. YP01 not appearing here as it is yet to be assigned.


Click  to reach bottom of this page

```
Not assigned
PI02 Process Order (external number assgnmnt)
PPC1 Order Type for Costing
QM01 QM: sample drawing instruction
QM02 QM: inspection instruction
YFP1 BCS Project Order
YP01 Basic production order type
```

Click on the line YP01

Click 


Click check box of Production orders - internal number assignment

Click  Element/Group to assign

The number range assigned to order type YP01

✓ Production orders - internal number assignment
PB01 Production Order - Bulk
PD Planning and Development Order
PI01 Process Order internal number assignmnt)
PP01 Standard Production Order -Packaging
PP04 Assembly Order
PPK1 Production Order for Kanban
YA40 Process Order
YA61 Process Order for Trail Production
YA99 Setup/Clean-out Order
YAPP Standard Production Order
YP01 Basic production order type

Click Save .

Click .

Impact of this configuration in Master Data / Transaction

While saving the production or process order, number will be assigned automatically to the order.

If an order type does not have a number range assignment, abnormal termination of program will be displayed while saving the production or process order.

3.3 Define Scheduling Parameter for order type

BACKGROUND

This configuration setting enables to define the scheduling parameter for production or process order type.

Scheduling parameter is essential to schedule the production order according to the Task list data. I.e. to determine the start date and end date for the order and to the each operation.

Scheduling data for specific order type defines

- How to schedule production order
- Whether to generate capacity requirements
- How to adjust order dates while scheduling

SCENARIO

Define scheduling parameter for order type YP01 in plant IND6.

INSTRUCTIONS

Follow the Menu Path:- IMG★Production ★ Shop floor control ★ Operation ★ Scheduling★ Define scheduling parameters for production orders

Click 

Click **New entries**

Plant	IND6
Order type	YP01
ProdScheduler	*

Detailed scheduling

SellID: Detailed	<input type="checkbox"/>	<input checked="" type="checkbox"/> Scheduling
		<input checked="" type="checkbox"/> Generate capacity reqs.

Rate-based scheduling

SellID:rate plng	<input type="checkbox"/>	<input type="checkbox"/> Scheduling
		<input type="checkbox"/> Generate capacity reqs.

Rough-cut scheduling

SellID:roughPlng	<input type="checkbox"/>	<input type="checkbox"/> Scheduling
		<input type="checkbox"/> Generate capacity reqs.

Adjust scheduling

Adjust dates	Adjust basic dates, adjust dep. reqmts to order start	
--------------	---	--

Scheduling control for detailed scheduling

Scheduling type	Backwards in time		<input checked="" type="checkbox"/> Automatic scheduling
Start in the past	<input type="checkbox"/>		<input type="checkbox"/> Automatic log
			<input type="checkbox"/> Latest dates f. material
			<input type="checkbox"/> Scheduling with breaks
			<input type="checkbox"/> From production dates
			<input type="checkbox"/> Shift order

Update the Following fields

Field

Description

Plant

Plant to which this setting is to be applicable. E.g. IND6

Order type

Order type under the Plant IND6 to which this scheduling type is to be applicable. E.g. Enter YP01

Production scheduler

Production scheduler to which

SellID: Detailed

Scheduling

Generate capacity reqs.

Adjust dates

Scheduling type

Automatic Scheduling check box

Click Save .

this setting is applicable. E.g. * to indicate applicable to all production scheduler in the plant IND6.

Production orders and process orders are scheduled at a detailed planning level using the routing or the master recipe. Therefore you cannot enter a selection ID. Also the scheduling indicator is set automatically.

To indicate the system to calculate capacity requirement. Tick this check box.

Indicating how to adjust the dates of production order or dependant requirement when rescheduling. E.g. Select Adjust basic date or depend date to adjust order start date.

Type of scheduling. E.g. Backward scheduling.

Tick this check box to indicate scheduling to be automatic. E.g. Tick this check box.

Impact of this configuration in Master Data / Transaction

This setting determines the scheduling type while creating the production order.

If it is backward scheduling, it is required to enter only order finish date while creating the production or process order.

3.4 Define confirmation parameters

BACKGROUND

This configuration setting enables to define the confirmation parameter to the order type in specific plant.

Through confirmation transaction, completion of production will be reported in the system. Confirmation parameter to each order type is essential to perform the confirmation.

Confirmation parameter defines

- To propose partial confirmation, or full confirmation
- To propose value of activity
- To calculate the activity value according to the quantity change
- Confirmation sequence is to be adhered to or not
- To display all component irrespective back-flush indicator

SCENARIO

Define confirmation parameter for order type YP01 in Plant IND6.

INSTRUCTIONS

Follow the Menu Path:- IMG★Production ★ Shop floor control ★ Operation ★ Confirmation★ Define Confirmation parameters


Click 

Click **New entries**





Plant	IND6
Order type	YP01

Generally valid settings | **General individual entry** | Operation indiv. entry usi...

Control data

Process control 

Checks

Operation sequence	Error when operation sequence is not adhered to	
Underdelivery	Underdelivery tolerance is not checked	
Overdelivery	Overdelivery tolerance is not checked	
QM results rec.	Message if no inspection results exist	

Date in future

HR update

No HR update

Selection

Open orders

Propose time units

Automatic optimization

Hours

Minutes

Goods movements

All components

Update the Following fields

Field

Plant

Description

Enter plant name to which this setting is to be applicable.
E.g. IND6

Order type

Enter the order type to which this setting is to be applicable.
E.g. YP01

Operation sequence

While confirming, whether operation sequence is to be followed as per routing or not. Select as shown above.

Under delivery

While confirming, if the yield quantity is less than the tolerance limit maintained in the work scheduling view of material master how the system to behave. Select as above

Over delivery

While confirming, if the yield quantity is more than the tolerance limit maintained in the work scheduling view of material master how the system to behave. Select as above.

QM Result rec.

Operation contains the quality characteristics and if that operation has to be confirmed, how the system to behave when that confirmation by QC is not done.



E.g. Select as shown above

Leave this blank if only the back-flush components are to be proposed during the confirmation. If this indicator is set, system will propose all the components assigned to

Click
screen

General individual entry

tab

Plant	IND6	ABC Ltd
Order type	YP01	Basic production order type

Generally valid settings
General individual entry
Operation indiv. entry usi...

Confirmation function except fast entry

Confirm.type Partial confirmation 📄

Post open reservations

Error handling/logs

Act.costs

Goods movements

Field	Description
Confirm type	Type of confirmation to be proposed during confirmation transaction. E.g. Select as shown above
Goods Movements	If this check box is ticked, system will give you a log message screen and request you to say yes or no to correct the errors occurred in Goods movement during confirmation.

Click Operation indiv. entry usi... tab screen

Plant	IND6	ABC Ltd
Order type	YP01	Basic production order type

General individual entry
Operation indiv. entry using initial scrn

Quantities

Propose

Display confirmed quantities

Display defaults

Services

Propose

Display confirmed services

Display defaults

Dates

Propose dates

Display confirmed dates

Display defaults

Personnel data

Display defaults

Screen control for time ticket

Quantity/activity

Act.data

Selection

+ Finally confirmed operations

+ Confirmable operations

Update the Following fields

Field

Propose

Services
 Propose

Description

To propose the quantity during confirmation transaction.

When the yield quantity is changed from the default display, according to the new yield quantity, all other activity and quantities are calculated with this tick in this check box.

Make other ticks in the check boxes as shown above, as they are self explanatory.

Click Save .

Impact of this configuration in Master Data / Transaction

While confirming the production order, system will perform according to the setting maintained here.

Example:-

Production order quantity = 1000.

Over delivery tolerance 25 % maintained in the work scheduling view of material master

While confirming, the confirmation quantity entered as 1500 (which is more than over delivery tolerance).

As per the configuration setting here, system will allow to continue the transaction.

If it is not to be allowed, change the over delivery tolerance checking into an error message.

3.5 Define Default Values

BACKGROUND

This configuration setting enables to define Default values for task list.

Default values are required to create the operation inside the production order or process order automatically if there is no task list.

Default values are defined to a specific order type.

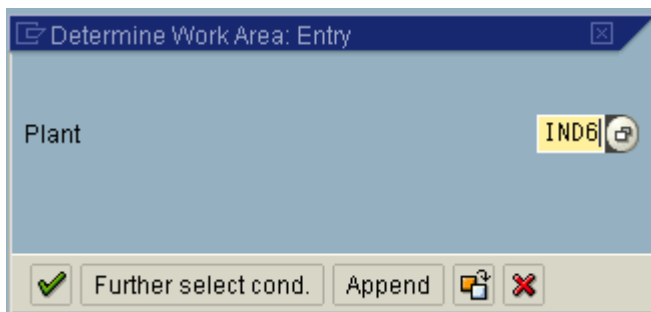
SCENARIO

Define default values to the order type YA70 in Plant IND6.

INSTRUCTIONS

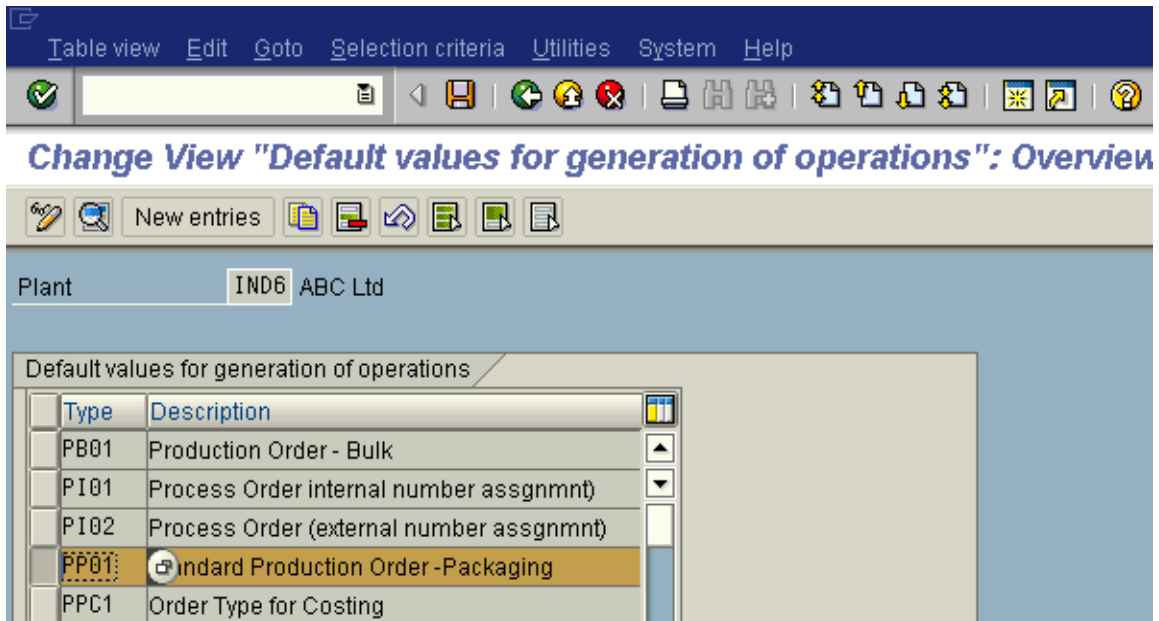
Follow the Menu Path: IMG★Production★Shop floor control★Operations★Task list selection★Define default values

Click 



Enter Plant. E.g. IND6

Click 



Note: - it is suggested to copy from the standard order type.

Select PP01 by clicking the grey box in the left.

Click 

Table view Edit Goto Selection criteria Utilities System Help

Change View "Default values for generation of operations": Details o

Plant	IND6	ABC Ltd
Order type	YP01	Standard Production Order -Packaging

Default values		
Control key	PP01	
Task list unit		
Usage	1	Production
Denominator	1	
Numerator	1	
Base quantity	1.000	
Work center		
Oper./act.	0010	Default operation
Purchasing group		
Material group		

Enter the order type as YP01

Note: - values mentioned in each field can be left as it is. If required it can be changed.

Click

Click

Impact of this configuration in Master Data / Transaction

When creating the production order or process order, if the task list is not found, system will create a dummy operation with operation number 0010.

The above is only a sample presented. To get hold of the full SAP PP/QM pack with the entire configuration, end user documents and power point plus all the bonuses of PP Questionsnd Answers, Resume Builder,Networking Audio an the very special CO Product Costing and Million Dollar SAP PP-CO Integration report click on the below link

<http://www.sap-topjobs.com/SpecialPP/8431654645.html>

All our packs are shipped thru FedEx and reaches you in three days time. One more thing this configuration pack is compatible with version 4.7, version 5.0 and 6.0 So you really do have to worry about the version at all.. We have taken care of that... Also all future version changes will be provided as free updates to you. So you can sit back relax and play the music

Your order will be shipped through FedEx and will reach you

What I want from you now is to do yourself a favour by bringing the brains and wisdom of SAP PP/QM Experts with more than 12+yrs of implementation experience to your drawing room today. Do it right now my dear friend and take your SAP career to the next level.... You will love it I promise you....

<http://www.sap-topjobs.com/SpecialPP/8431654645.html>

www.sap-topjobs.com