

**BOM CONFIGURATION SETTINGS:**

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Path: SPRO - SAP IMG – Production – Basic data – Bill of material

**Control data for bill of material:****1. Define Modification parameters (OS27):**

**Validity**

☐ Low Date

☒ BOM validity maint.

☒ EC management active

☐ History reqmt

Hist. reqmt. variant ☐

☐ Sub-item documentn

☐ Header

Handling Del. Flag ☐

**Technical Type**

☒ Mult. BOM inactive

☒ Variant BOM inactive

**BOM Item**

Item explosion type ☐

Desc. var. size item ☐

☐ Rptd itm effctvty via external item ID

**General Settings**

Unit 'piece'

☒ CAD active

The marked default changes should be made as it is. Here,

*Multiple BOM inactive* meant for, if you activate this field you will not be eligible to create a multiple BOM for a single product.

*Variant BOM inactive* meant for, if you activate this field you cannot create a variant BOMs using a particular component.

Multiple BOM is related to final product where as variant BOM is related to a component or an item of a product.

**2. Define default values (OS28):**

Default values	
Base quantity	1,000
BOM status	1
Size unit	MM
Var-size item unit	PC

## General Data:

### 1. BOM usage:

General Data	
BOM Usage	
Define BOM Usages	SIMG_CFMENUOLPSOS20
Define Default Values for the Item Status	SIMG_CFMENUOLPSOS21
Define Copy Default for Item Status	SIMG_CFMENUOLPSOS22

#### 1.1 Define BOM usages (OS20):

Table View Edit Goto Selection Utilities(M) System Help

Change View "BOM Usage - Item Statuses": Overview

New Entries

BOM Usq	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
8	-	.	-	-	-	-	Stability Study

Engineering/design Short text

+	Required entry
.	Optional entry
-	No entry

*Note: if you assign '+' for any activity and later if you want to change to '-', you can change it before you create a BOM with that particular type BOM usage number only. In such cases you can go for an optional entry i.e. '.'*

### 1.2 Define default values for the item status (OS21):

**Change View "Copy defaults for BOM usage - item statuses": Overview**

BOM Usg	Prod.	Eng/des.	Spare	PM	Sales	Relevan
1	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		X
2	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>		
3	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		X
4	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>		X
5	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	X	
6	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		X
7	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	X	X

Sales	Description
	Not relevant
X	Relevant for SD
Z	OC:Transport fudge

CostRel	Description
	Not relevant to costing
1	Not relevant to costing
2	Packaging operation
3	Packaging material
X	Relevant to costing

Here if you have to activate any of the field, first you need to give a require entry or an optional entry in OS20. Otherwise system will not allow you to activate for those fields.

### 1.3 Define copy default for the item status (OS22):

**Change View "Defaults for Copying Item Statuses": Overview**

RefUsage	UsageNew	Prod.	Eng/des.	Spare	PM	Sales	Relevan
1		<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>		
2	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>		

This particular setting will be used rarely when you copy a BOM from the exiting BOM with a different usage then this particular configuration will fill the default data for a tab item status in BOM front end.

### 2. Define material types allowed for BOM header (OS24):

**Change View "Define material types allowed for BOM header": Overview**

BOM Usg	Mat type headr	Allowed
1	FERT	+
1	HALB	+
1	YFER	+
1	YHAL	+

'+' indicates allowed.

If all fields in a single row filled with '\*' then the BOM header will allow all material types as a header material. Usually final products (finished & semi finished) will be assign as a BOM header material.

*(Possible error: if you have not specified the BOM header material type then you will be stopped by showing an error 'the material type not defined in BOM header level'.)*

Here should define material types which are allowing as a header material.

### 3. Define BOM status (OS23):

## Change View "BOM Statuses": Overview

[illegible]

Generally usage of the BOM is '1' which allows BOM while MRP explosion, planned order, rework order scheduling, release orders, sales orders and for collective issues.

#### 4. Configuration history requirement for BOM (OS25):

[illegible]

of material with history, you can only change it with history after that. If you have changed a bill of material with history and want to change it without history, you need a special authorization.

*Requirements:*

If you want to define BOM maintenance with history as a default, the following must apply:

- First, you must complete step "Define BOM usages".
- You must also complete step "Define BOM statuses".
- In step "Configure modification parameters", you must activate
  - Validity date maintenance.
  - Engineering change management.

*Activities:*

Define for which BOM usage and which BOM status changes to BOMs are to be made with history. For Document structures leave the field BOM usage empty and only create the BOM status for which a change number is obligatory.

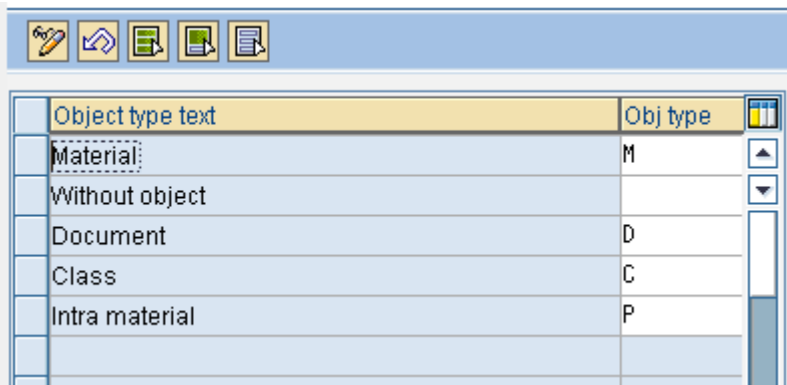
*Note:*

If you do not make any settings here, you can maintain bills of material either with or without history. However once you have maintained a bill



## 2. Define object type (OS16):

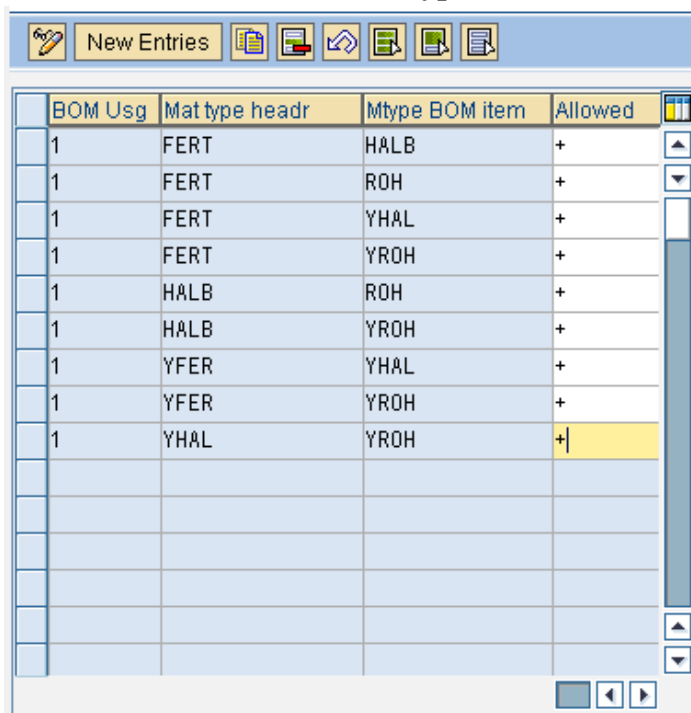
No need to go for this because the standard sap will suggest to not to change the existing objects. If you observe the screen bellow there is no copy as option. You can change the object only in a client requirement basis.



The screenshot shows the SAP Object Type (OS16) screen. It has a toolbar with icons for edit, save, and other functions. The main table has two columns: 'Object type text' and 'Obj type'. The data is as follows:

Object type text	Obj type
Material	M
Without object	
Document	D
Class	C
Intra material	P

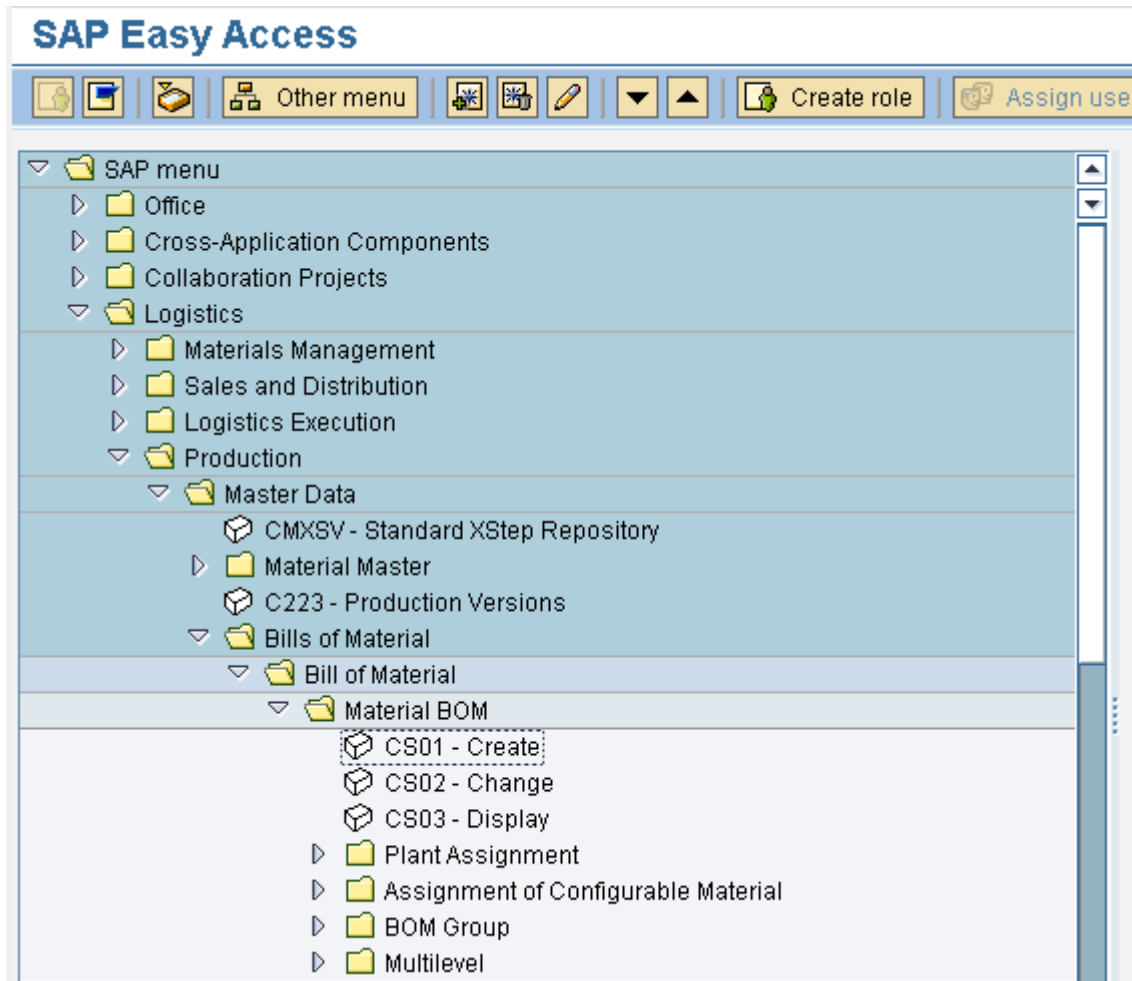
## 3. Define allowed material types for BOM items (OS14):



The screenshot shows the SAP Define allowed material types for BOM items (OS14) screen. It has a toolbar with icons for edit, save, and other functions. The main table has four columns: 'BOM Usg', 'Mat type headr', 'Mtype BOM item', and 'Allowed'. The data is as follows:

BOM Usg	Mat type headr	Mtype BOM item	Allowed
1	FERT	HALB	+
1	FERT	ROH	+
1	FERT	YHAL	+
1	FERT	YROH	+
1	HALB	ROH	+
1	HALB	YROH	+
1	YFER	YHAL	+
1	YFER	YROH	+
1	YHAL	YROH	+

- Once after the allowed material type for the header is defined, it is mandatory to define the allowed material types for the BOM items. So the combinations can be given as bellow.
- In general the header material types are finished (FERT) and semi finished (HALB). Under these material types the allowable items are HALB and ROH respectively.
- For a material type FERT the items will be HALB and ROH. So these combinations you have to set in this t-code.
- For a material type ROH there will not be items, but there will be sub items which we will not concentrate much.

**BOM FRONT ENDING PART:***Path:***CS01:***Initial screen:*

**Create material BOM: Initial Screen**

Material:

Plant:  MNR GROUP

BOM Usage:  Production

Alternative BOM:

**Effectivity**

Change Number:

Valid From:

Revision Level:

Item overview:

## Display material BOM: General Item Overview

Material: PUMP  
 Plant: MNR1 MNR GROUP  
 Alternative BOM: 1

Material Document General

Item	ICt	Component	Component description	Quantity	Un	As	Sl	Valid From	Valid to	Change No.
0010	L	MOTOR	SEMFISHED PRODUCT1		EA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10.01.2017	31.12.9999	
0020	L	NOZZLE	RAW MATERIAL FOR PUM1		EA	<input type="checkbox"/>	<input type="checkbox"/>	10.01.2017	31.12.9999	
0030	L	STEEL	RAW MATERIAL FOR PUM20		M	<input type="checkbox"/>	<input type="checkbox"/>	10.01.2017	31.12.9999	

Item data: Basic data:

## Display material BOM: Item: All data

Reference items Subitems Long Text

Material: PUMP  
 Plant: MNR1 MNR GROUP  
 Alternative BOM: 1

Basic Data Status/Lng Text Administr. Document Assgmt

**BOM item**

Item Number: 0010  
 Component: MOTOR SEMIFISHED PRODUCT FOR PUMP  
 Item Category: L Stock item  
 Item ID: 00000004  
 Sort String:  
☐ Sub-item ID

**Quantity Data**

Quantity: 1 EA ☐ Fixed quantity  
 Operation scrap in %: 0,00 ☐ Net ID  
 Component scrap (%): 0,00

**General Data**

☐ Co-product  
 AltItemGroup:  
☐ Recurs. allowed  
☐ Recursive  
☐ CAD Indicator  
☐ ALE indicator  
 Discontin. data  
 Reference point:

**MRP Data**

Lead-time offset: 0  
 Oper. LT offset: 0  
 Distribution key:  
☐ Phantom item  
 Explosion type:  
 Special procurement:



Item data: Status/long text:

### Change material BOM: Item: All data

Reference items Subitems Long Text

Material: PUMP  
 Plant: MNR1 MNR GROUP  
 Alternative BOM: 1

Basic Data | **Status/Lng Text** | Administr. | Document Assgmt

**BOM Item**

Item Number: 0040  
 Component: RAW MATERIAL - C RAW MATERIAL FOR MRP-1  
 Item Category: L Stock item  
 Item ID:

**Item Text**

Line 1:   
 Line 2:

**Item Status**

☐ Engineering/design  
☒ Production relevant  
☐ Plant maintenance  
 Spare part indicator: ☐  
 Relevant to sales: ☐  
 Costing Relevancy: X

**Further Data**

Mat. Provision Ind.: ☐  
☐ Bulk Material  
☐ Bulk Mat. Ind. Mat. Mst  
 Prod. stor. location:   
 Supply Area:

- This data is the most important data for PP.
- In data *Item status* tab will be filled by default by configuration for OS20, and OS21.
- In *Further data* tab the only data we have to take care is Prod. Stor. Location.

Item data: Administrator & Document assignment:

Basic Data | Status/Lng Text | **Administr.** | Document Assgmt

**BOM Item**

Item Number: 0040  
 Component: RAW MATERIAL - C RAW MATERIAL FOR MRP-1  
 Item Category: L Stock item  
 Item ID:

**Administrative Data**

Created on:  By:   
 Changed on:  by:

Validity Periods					
Valid From	Valid to	Change No.	Chg No. To	DeID	Effect. type
30.01.2017	31.12.9999			<input type="checkbox"/>	

Basic Data	Status/Lng Text	Administr.	Document Assgmt																				
<b>BOM item</b> Item Number: 0040 Component: RAW MATERIAL - C    RAW MATERIAL FOR MRP-1 Item Category: L Stock item Item ID:																							
<b>Linked Documents</b> <input type="radio"/> Current version <input checked="" type="radio"/> All versions																							
<table border="1"> <thead> <tr> <th>Ty.</th> <th>Document</th> <th>Dpt</th> <th>Vr</th> <th>Description</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				Ty.	Document	Dpt	Vr	Description															
Ty.	Document	Dpt	Vr	Description																			

Header data: Quants & Long texts:

### Change material BOM: Header Overview

Item             Summ.BOM             Alternative Long Text             BOM Long Text	
Material	PUMP
Plant	MNR1 MNR GROUP
BOM	00003021
Alternative BOM	1
BOM Usage	1 Production
Technical type	
BOM group	

Quants/long bt	Further data	Admin. data	Doc. assignment
<b>BOM and alternative text</b>			
BOM text	<input type="text"/>		
Alt Text	<input type="text"/>		
<b>Quantity data</b>			
Base quantity	<input type="text" value="1"/>	PC	
<b>Validity</b>			
Change Number	<input type="text"/>	BOM status	<input type="text" value="1"/>
Valid From	<input type="text" value="26.12.2016"/>	Authorization group	<input type="text"/>
<input type="checkbox"/> Deletion Indicator		<input type="checkbox"/> Deletion Flag	

Here PP will only take care about *BOM text*, *base quantity*, *BOM status*. So before processing to customise BOM all the required fields you need to collect from the client in advance and you need to do the same.