

S/4 HANA Product Costing Configuration



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INTRODUCTION

Product costing module is required for all manufacturing industries. Depending on the type of industries Cost object controlling i.e. capturing cost of production needs to be set up.

Production order/Process orders are required for maximum number of industries which is also called as discreet manufacturing. In this cost object controlling by order needs to be configured.

Industries such as automotive, electronics, packaging do not require any production orders and require only period control. In this scenario cost object controlling by period needs to be configured.

Certain industries such as steel, complex equipment manufacturing etc. are only made on customer orders and as such cost needs to be tracked based on such customer sales order. Cost object controlling by sales order is configured in this scenario.

We cover configuration of all of the above scenarios in this training material

Universal Group a multinational group has a single controlling area 6600 and single operating concern, with companies based in various countries.

We will now proceed with product costing configuration in controlling area 6600.

A) Product Cost Planning

Configuration menu path on the SAP application screen is given below:-

SAP Menu → Tools → Customizing → IMG → SPRO - Execute Project →

 SAP Reference IMG

We always use the transaction code “spro” to go to customizing

1. Basic Settings for Material Costing

Universal Ltd. requires for its plant 6603 the following overheads:-

Material overhead

Let us create the Base, Overhead (OH) rate and Credit keys and also link in the costing sheet as per the table given below:-

OH description	OH key/OH Group	Base key	OH Rate key	OH Credit key	CE	%/Amt
Material OH		Z001	Z011	Z01	630420	5%

1.1 Maintain Overhead Cost Elements

SAP CUSTOMIZING IMPLEMENTATION GUIDE → Controlling → Product Cost Controlling → Product Cost Planning → Basic Settings for Material Costing → Overhead → Maintain Overhead Cost Elements

To allocate overhead to products, we need to define overhead cost elements. The SAP system then posts the overheads with these overhead cost elements.

The cost center is credited with the overhead cost element and the production order is debited with the overhead cost element.

Let us create secondary cost elements for overhead.

Create secondary cost elements of type 41 (overhead).

Update the following:-

G/L account Edit Goto Extras Environment Settings System Help

Create G/L Account Centrally

Edit financial statement version Edit set

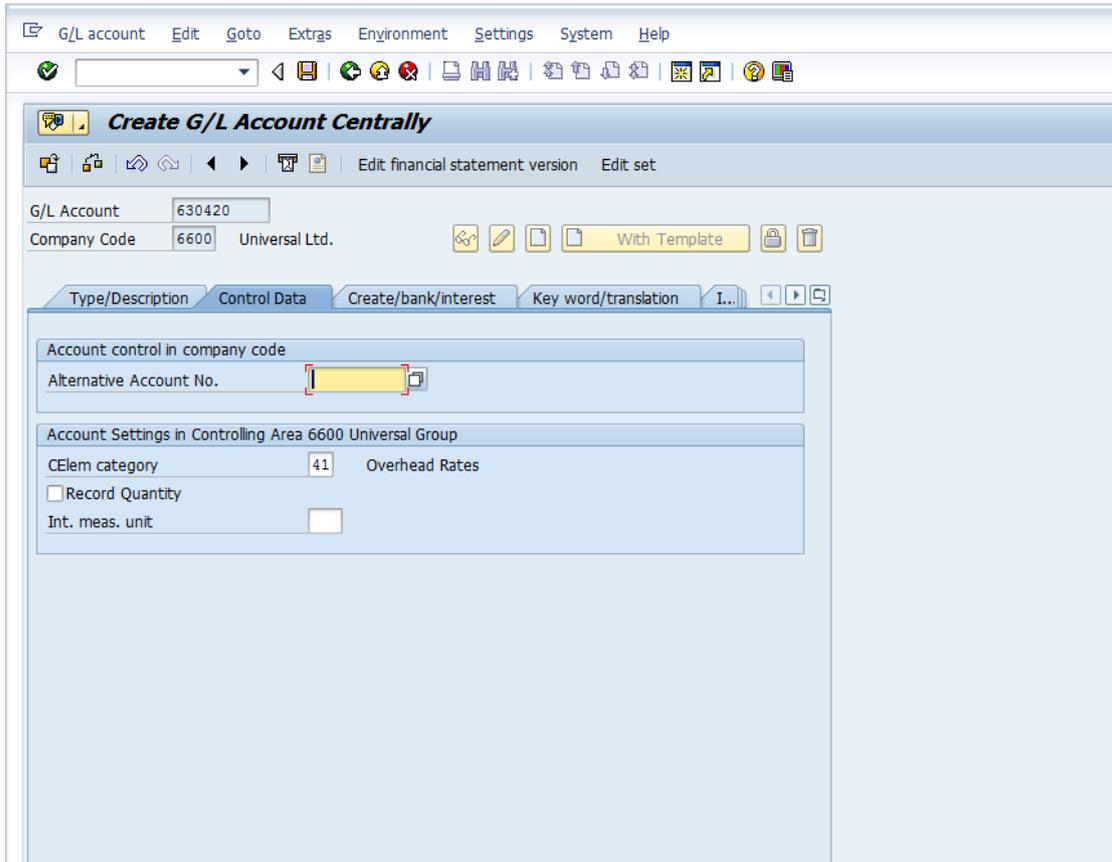
G/L Account 630420
Company Code 6600 Universal Ltd. With Template

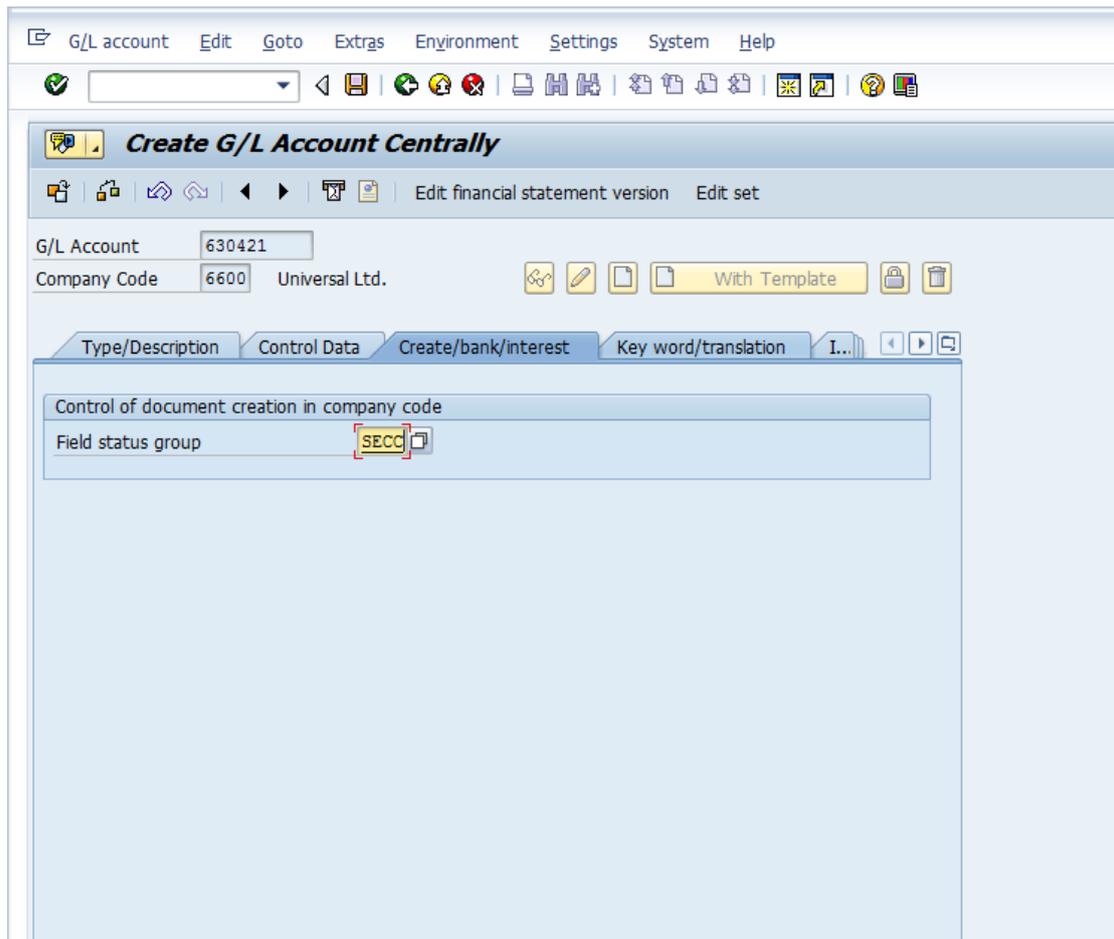
Type/Description Control Data Create/bank/interest Key word/translation I...

Control in Chart of Accounts
Account Type S Secondary Costs
Account Group SECC Secondary Costs/Revenues

Description
Short Text Material Overhead
G/L Acct Long Text Material Overhead

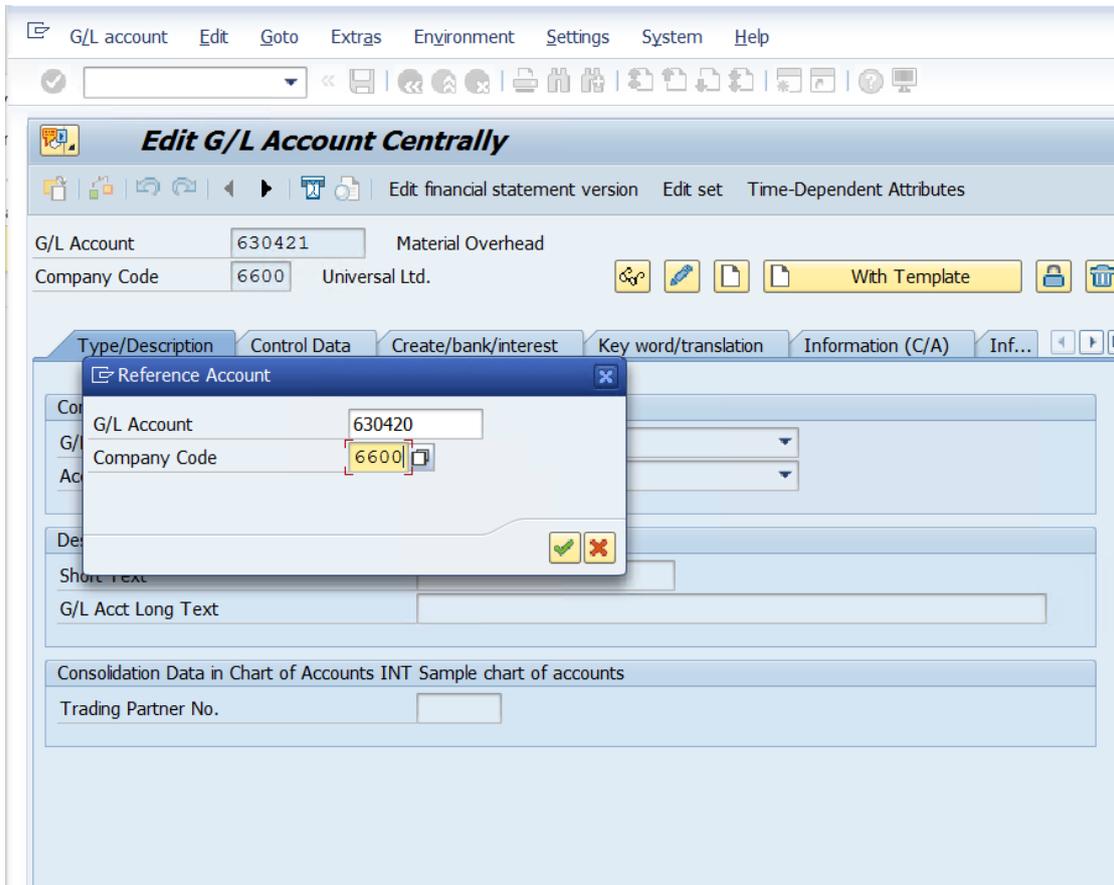
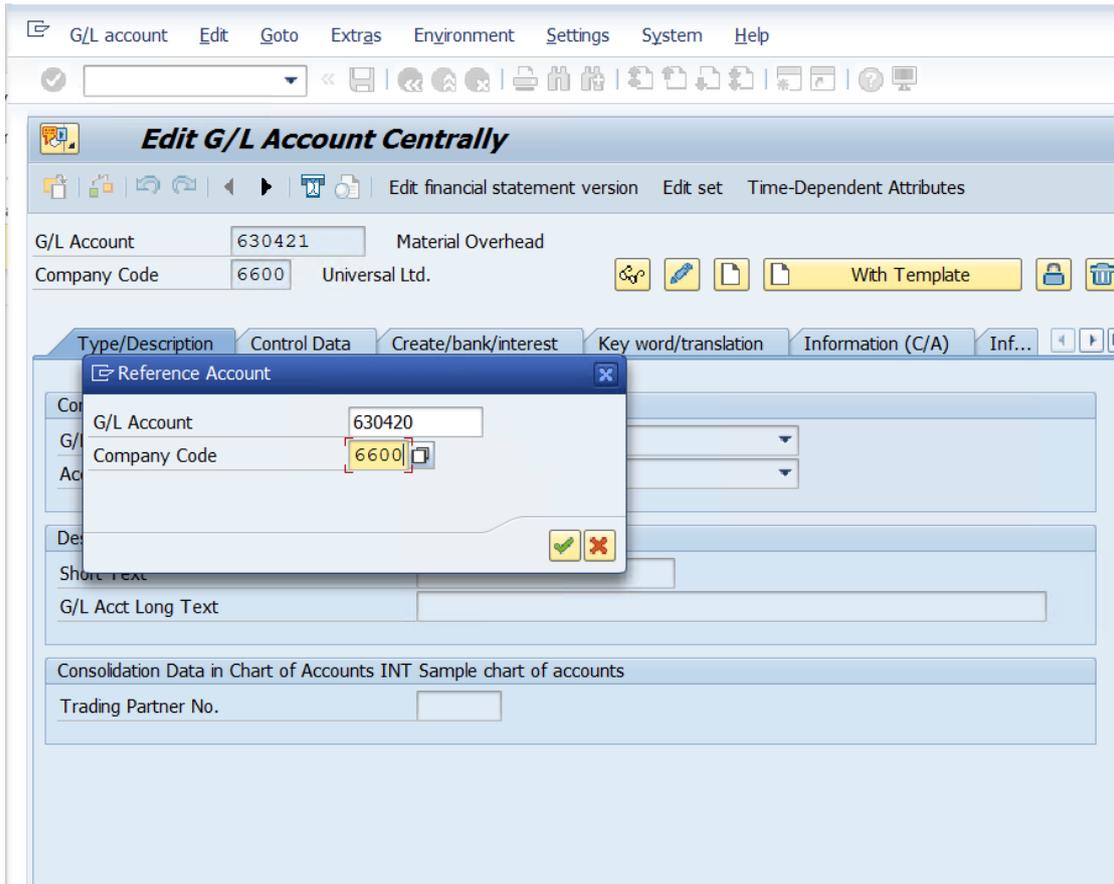
Consolidation data in chart of accounts
Trading Partner

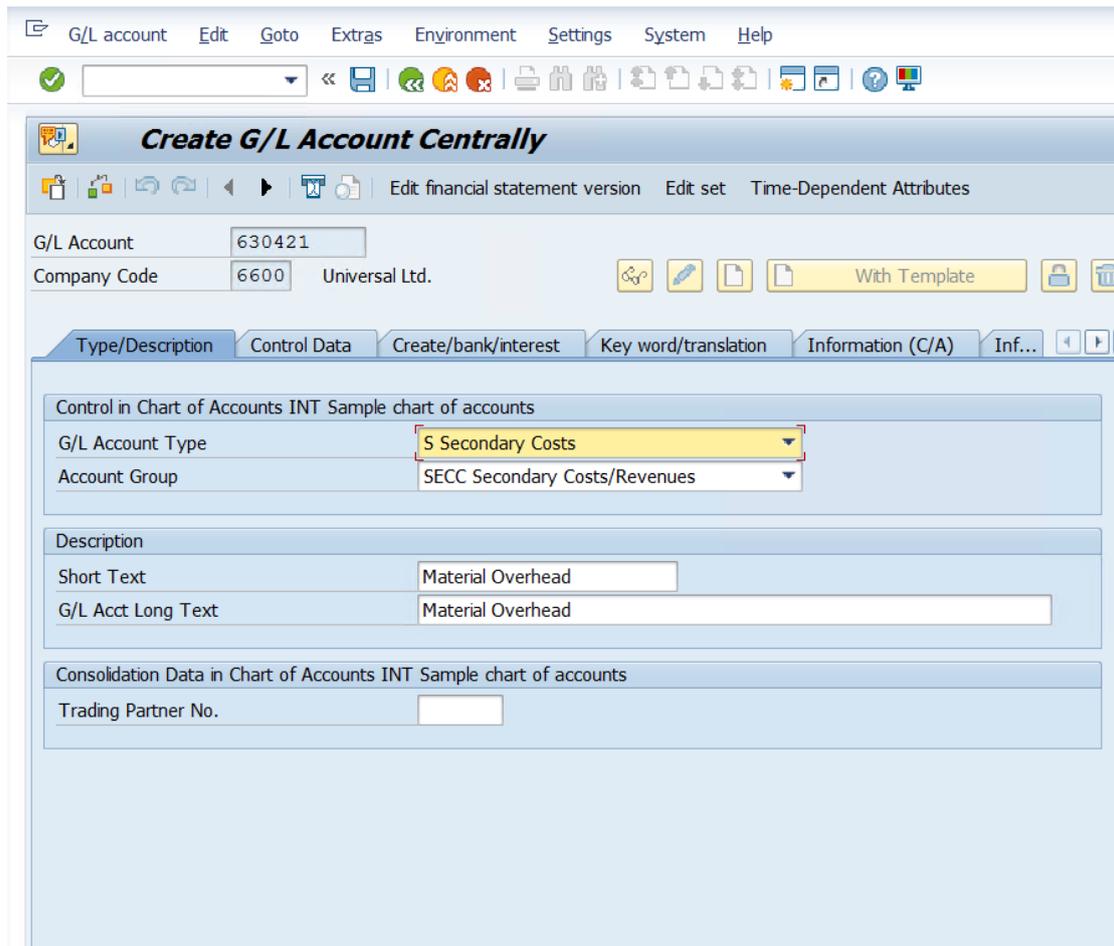




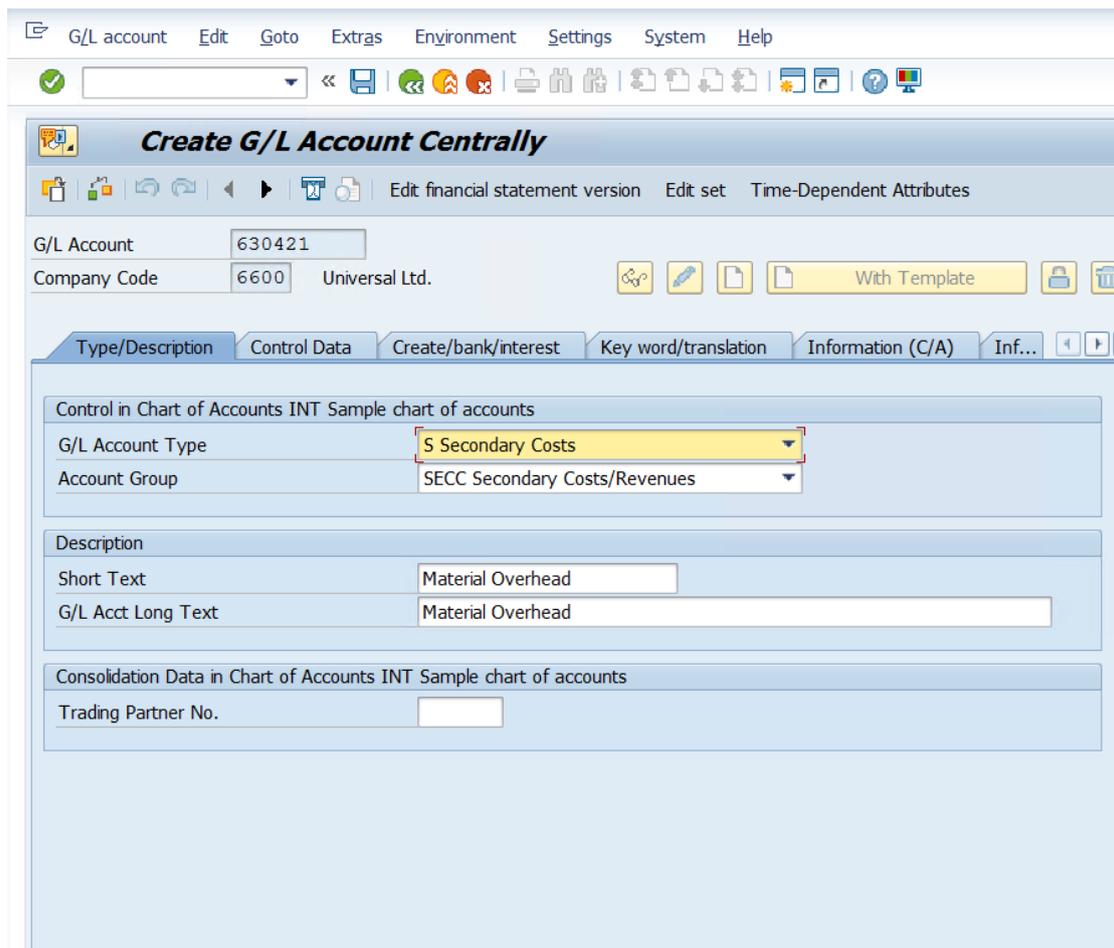
Click on 

Create one cost element for Packing material overhead





Change the description



Click on 

1.2 Define Calculation Bases

SAP CUSTOMIZING IMPLEMENTATION GUIDE → Controlling → Product Cost Controlling → Product Cost Planning → Basic Settings for Material Costing → Overhead → Costing Sheet: Components → Define Calculation Bases

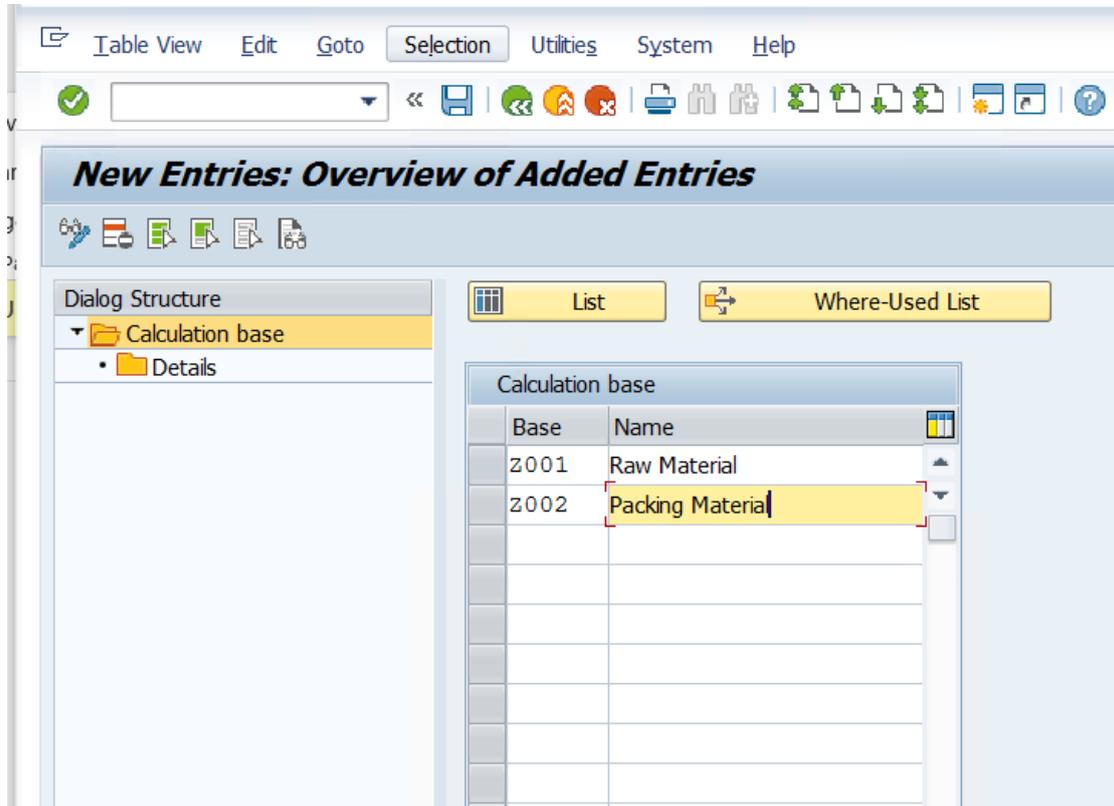
The calculation base determines to which cost elements overhead is applied together.

We will define a base on which overheads will be calculated:-

- 1) Material

Proceed as follows:-

Click on **New Entries** and **update the following:-**



Click on 



Double click  Details



Click on **New Entries** and **Update the following:-**

The Raw material consumption is booked to cost elements 400000, 400010 or you could also create a cost element group.

We update this as base for our calculation of overhead.

Base	Name
z001	Raw Material

Click on 

Click  twice

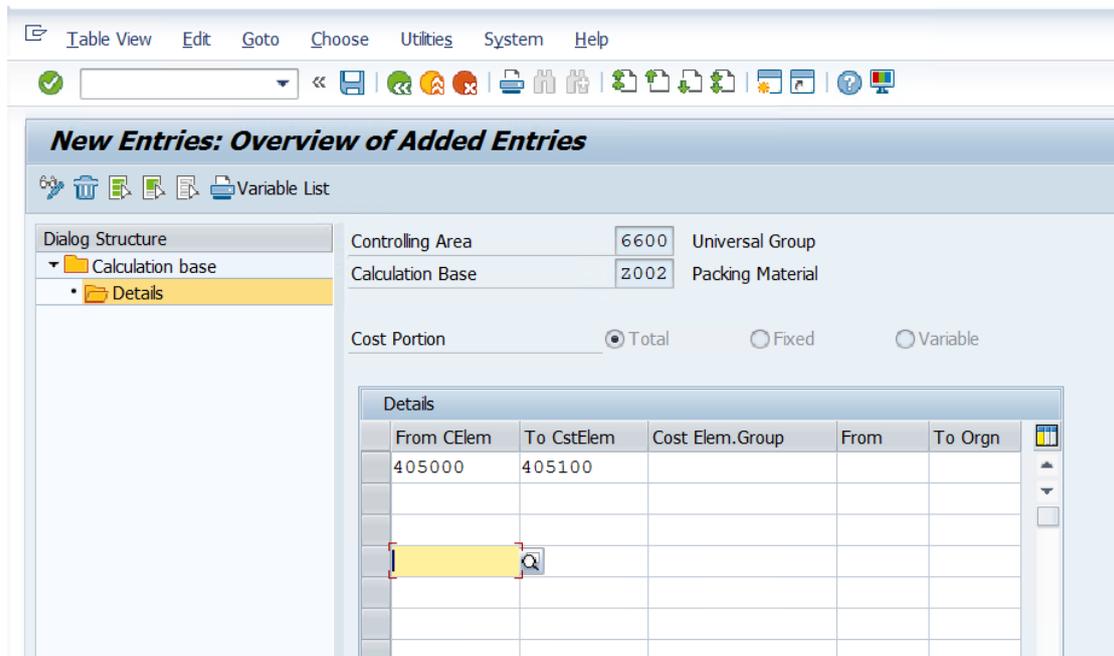
z002	Packing Material
------	------------------

Select

Double click  Details

Click on  and **Update the following:-**

The packing material consumption is booked to cost elements 400500 to 400510 or you could also create a cost element group



New Entries: Overview of Added Entries

Dialog Structure: Calculation base > Details

Controlling Area: 6600 Universal Group
 Calculation Base: z002 Packing Material

Cost Portion: Total Fixed Variable

From CElem	To CstElem	Cost Elem.Group	From	To Orgn
405000	405100			

Click on 

1.3 Define Percentage Overhead Rates

SAP CUSTOMIZING IMPLEMENTATION GUIDE → Controlling → Product Cost Controlling → Product Cost Planning → Basic Settings for Material Costing → Overhead → Costing Sheet: Components → Define Percentage Overhead Rates

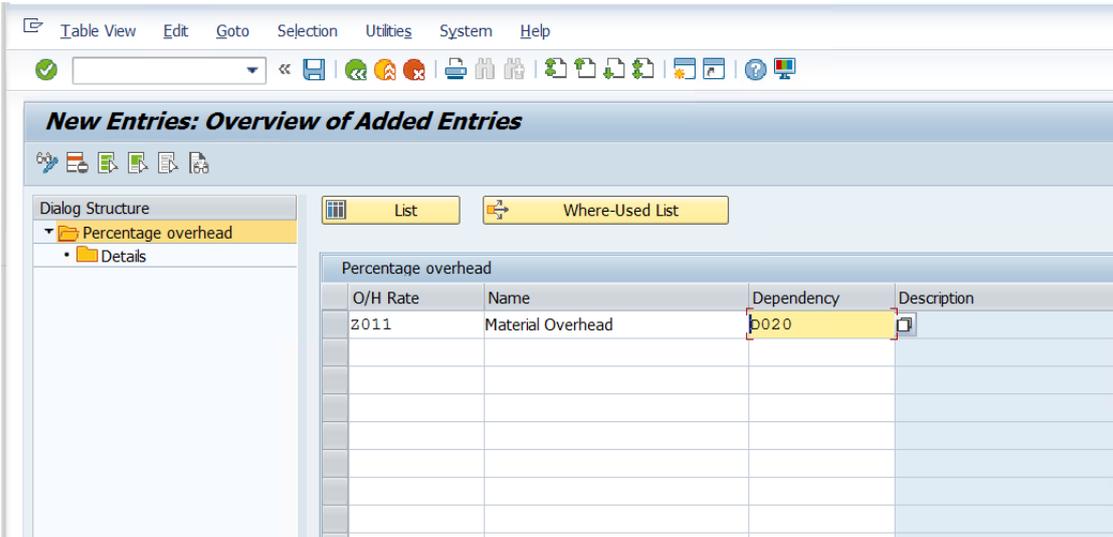
We want to calculate 5 % overhead on Material. But the condition is that, it should be only calculated for plant 6603.

To fulfill the above requirement we need to select the dependency **overhead type/ plant**. Thus the system will only calculate overhead rate for plant 6603. In the Std. SAP system there are quite a number of dependencies available such as plant, order type, overhead type, overhead key, company code etc.

Here we can calculate Plan and actual overhead. Plan overhead rate is required for the purpose of planning the cost of the product (standard cost estimate). Actual overhead rate is required for the purpose of charging it to the production order.

In this step we will create the **overhead rate**, attach the dependency and define the overhead rate. Further we will also define whether it is plan or actual.

Click on  and **update the following:-**



O/H Rate	Name	Dependency	Description
2011	Material Overhead	D020	<input type="checkbox"/>

D020 is 

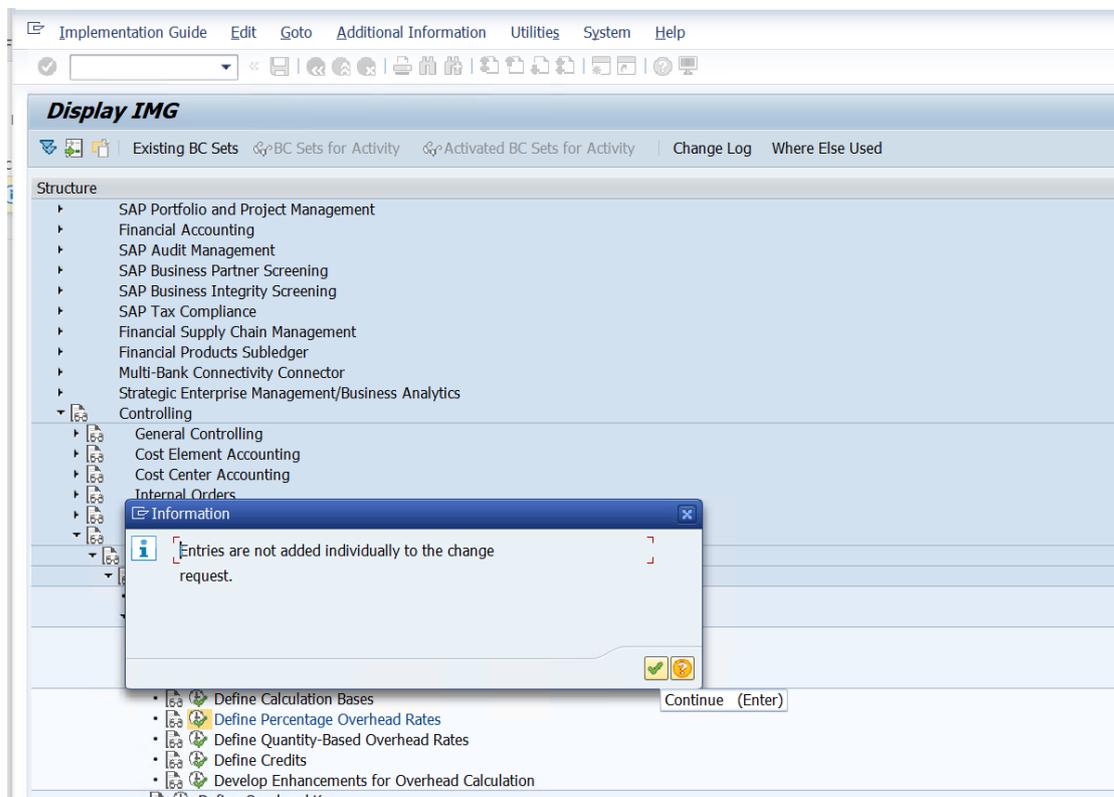
Click on Save 

Select

Percentage overhead			
O/H Rate	Name	Dependency	Description
2011	Material	D020	Overhead Type/Plant

Double click  Details

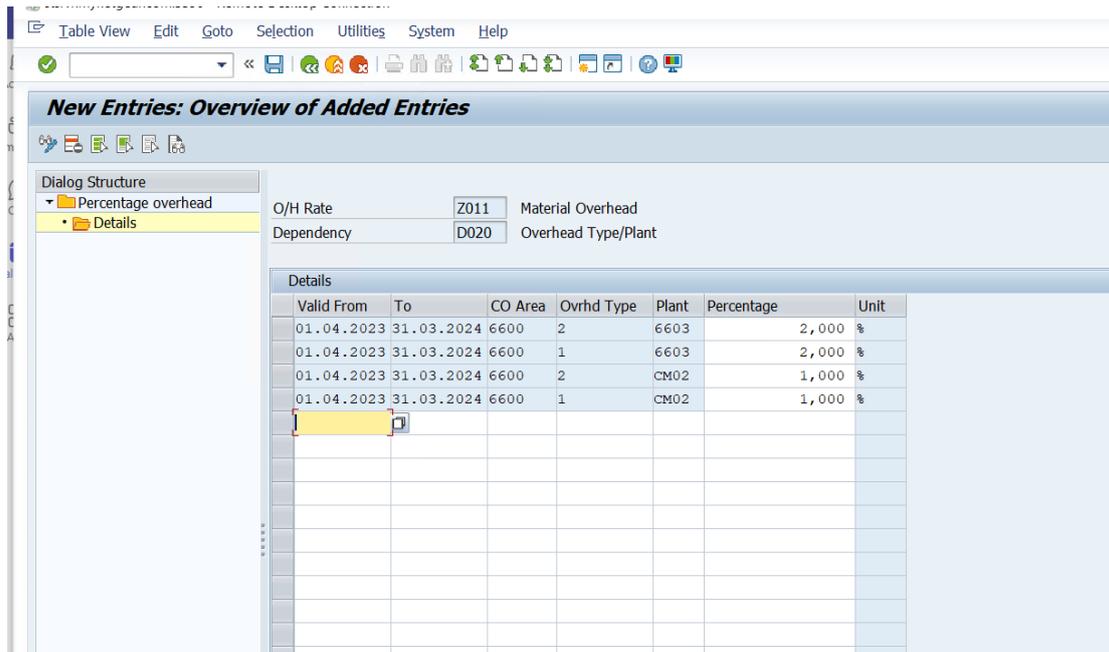
Click on 



Press enter to continue, note this entry of percentage will not be added in the change request. This has to be maintained manually in each system.

Nevertheless, we just show it how to maintain

Update the following:-



Overhead type – 1 is actual overhead rate

Overhead type – 2 is planned overhead rate

Click on 

Click 

To maintain a new dependency the path is as follows:-

SAP CUSTOMIZING IMPLEMENTATION GUIDE → Controlling → Cost Center Accounting → Actual Postings → Period-End Closing → Overhead → Costing Sheet: Components → Extras: Dependencies / Condition Tables → Define Condition Tables/ Define Dependencies.

Create a new Condition table with table name as 999

You need to select fields Controlling area, Overhead type. Profit center and plant.

Create a new dependency.

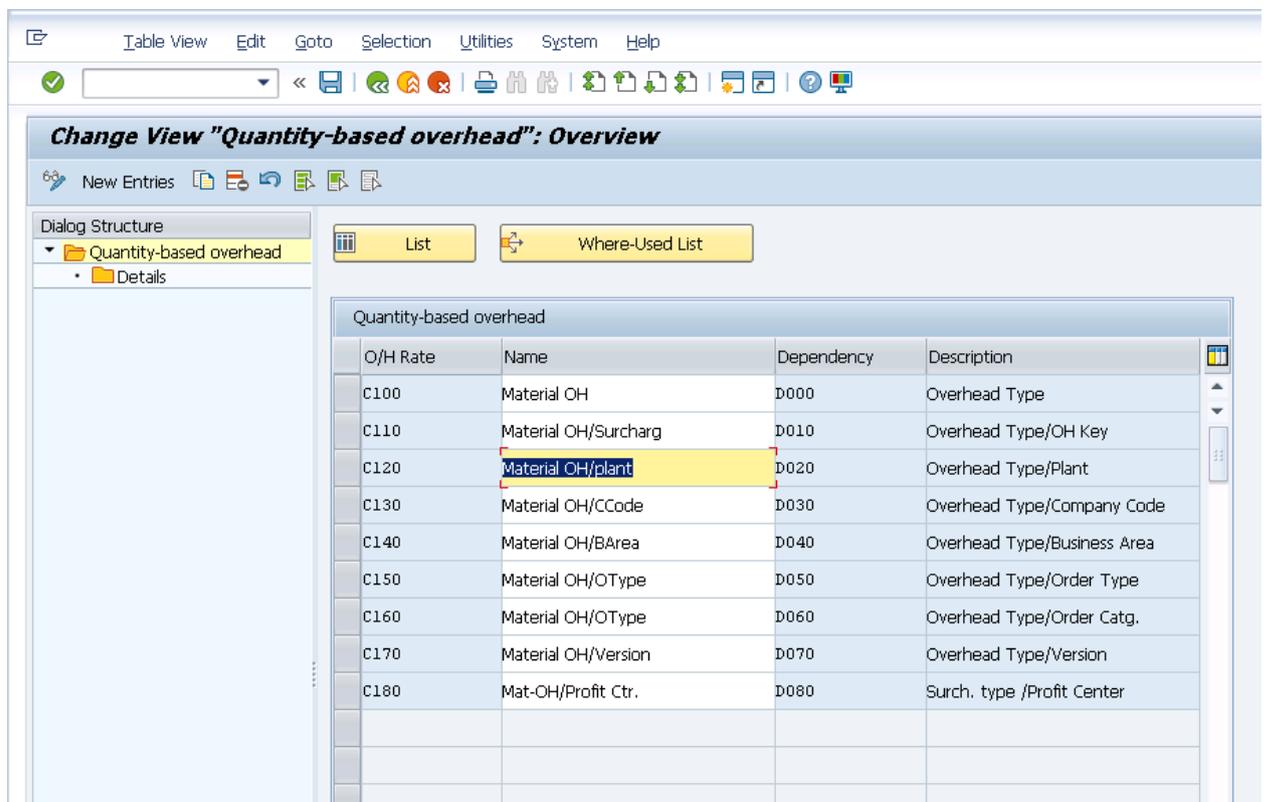
Create a new access sequence. In this access sequence you will assign the condition table.

1.4 Define Quantity-Based Overhead Rates

SAP CUSTOMIZING IMPLEMENTATION GUIDE → Controlling → Product Cost Controlling → Product Cost Planning → Basic Settings for Material Costing → Overhead → Costing Sheet: Components → Define Quantity-Based Overhead Rates

In addition to percentage-based overhead rates, you can also define quantity-based overhead rates, for example, 5 USD per kg or per piece.

You can determine overhead rates in the plan and actual. Here too you need to attach the dependency.

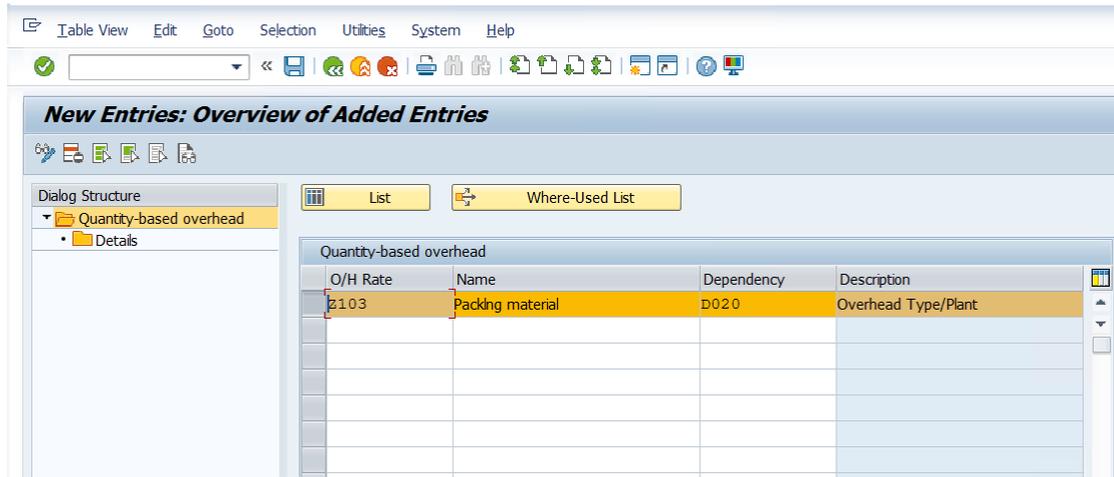


The screenshot shows the SAP S/4HANA 'Change View Quantity-based overhead: Overview' interface. The table below lists the overhead rates and their dependencies.

O/H Rate	Name	Dependency	Description
C100	Material OH	D000	Overhead Type
C110	Material OH/Surcharg	D010	Overhead Type/OH Key
C120	Material OH/plant	D020	Overhead Type/Plant
C130	Material OH/CCode	D030	Overhead Type/Company Code
C140	Material OH/BArea	D040	Overhead Type/Business Area
C150	Material OH/OType	D050	Overhead Type/Order Type
C160	Material OH/OType	D060	Overhead Type/Order Catg.
C170	Material OH/Version	D070	Overhead Type/Version
C180	Mat-OH/Profit Ctr.	D080	Surch. type /Profit Center

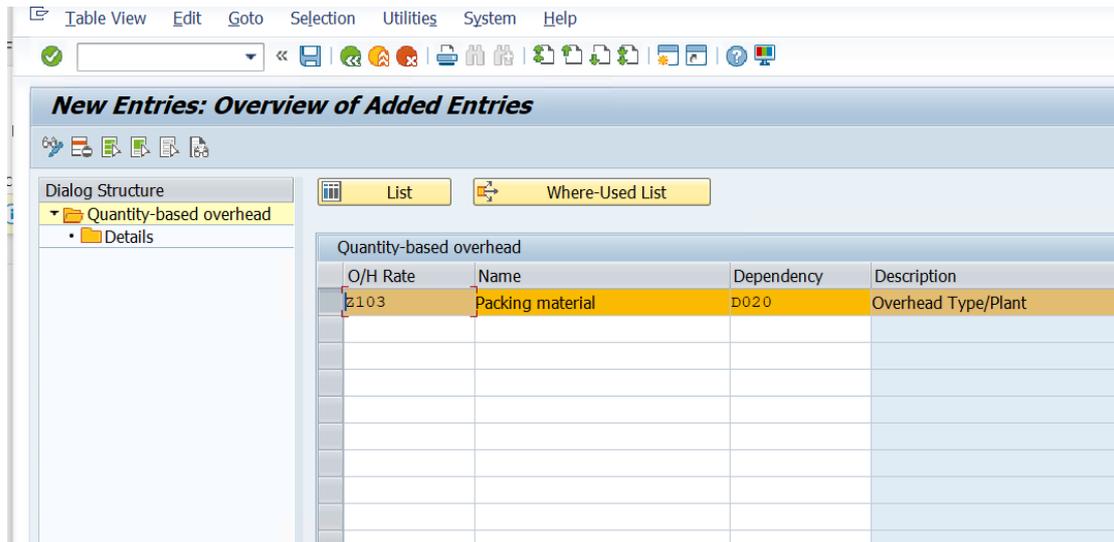
Click on **New Entries**

Update the following:-

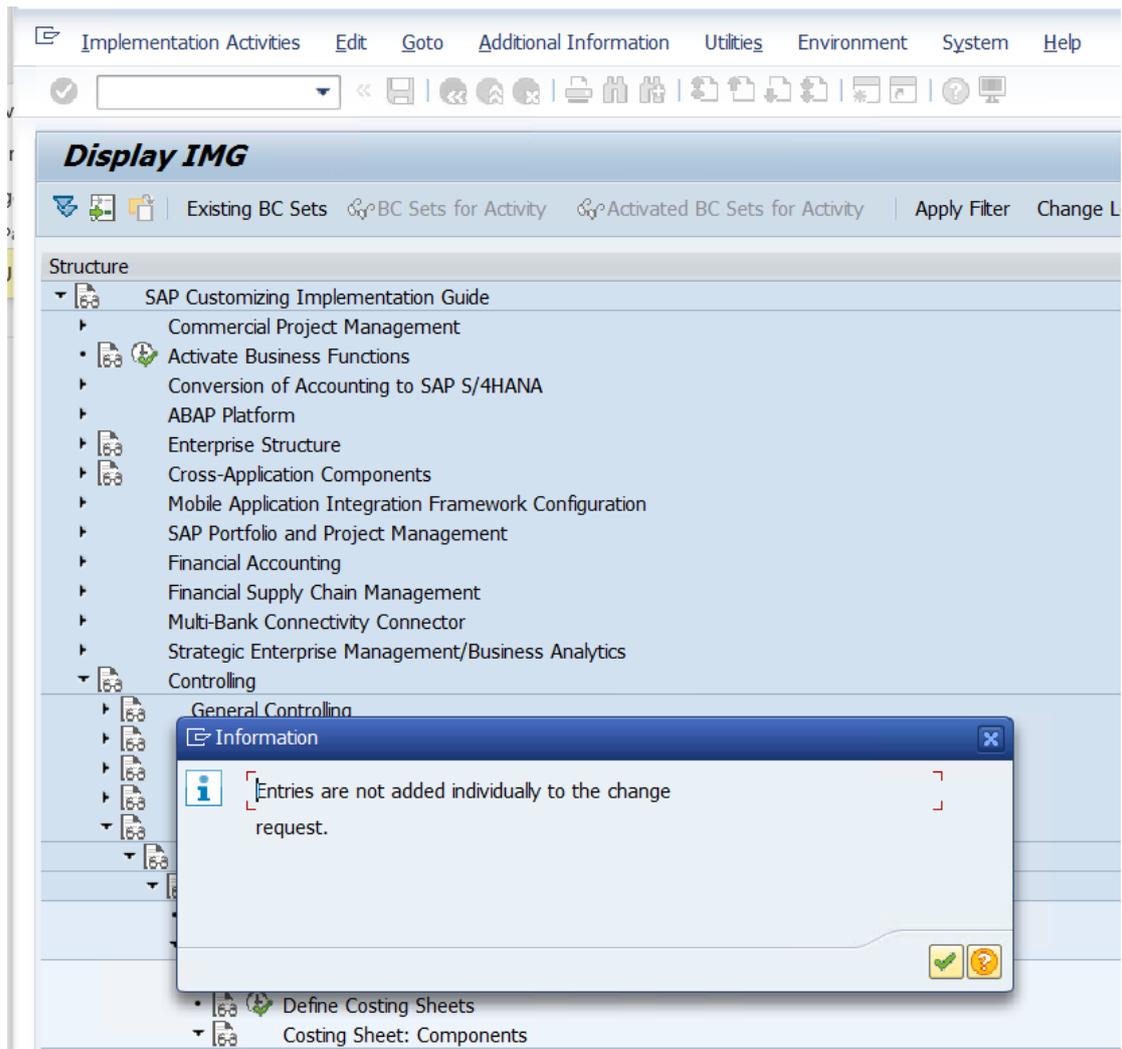


Click 

Select



Double click  Details



Click on **New Entries**

Update the following:-

Valid From	To	CO Area	Ovrhd Type	Plant	Amount	Unit	per	Uni
01.04.2023	31.03.2024	6600	1	6603		2 USD	1	ea
01.04.2023	31.03.2024	6600	2	6603		2 USD	1	ea
01.04.2023	31.03.2024	6600	1	CM02		1 USD	1	ea
01.04.2023	31.03.2024	6600	2	CM02		1 USD	1	ea

Click 

1.5 Define Credits

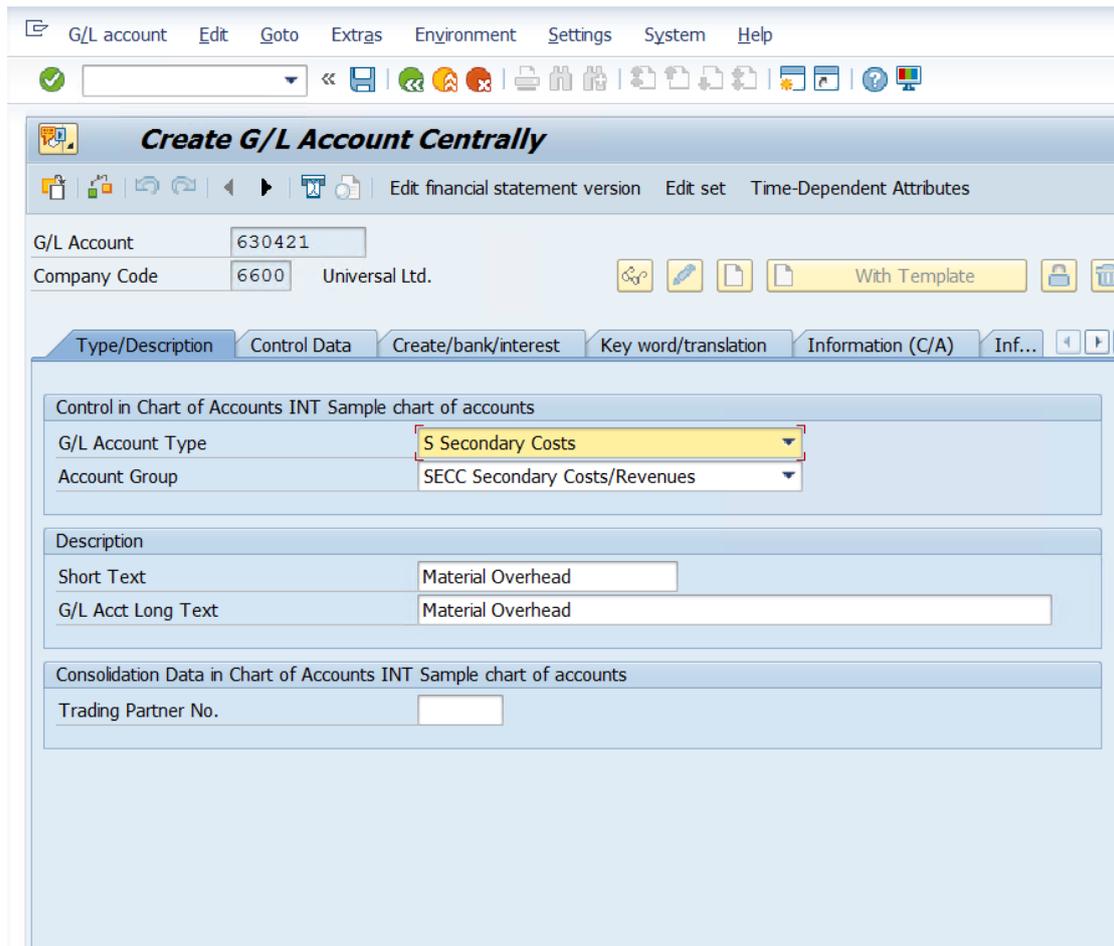
SAP CUSTOMIZING IMPLEMENTATION GUIDE → Controlling → Product Cost Controlling → Product Cost Planning → Basic Settings for Material Costing → Overhead → Costing Sheet: Components → Define Credits

By defining the credit key we are crediting the cost center and debiting the product or the production order. The credit on the cost center takes place with the overhead cost element which we created earlier 630420 - Material overhead and 63041 – Packing material overhead

Here we attach the overhead cost center which is to be credited.

We can also define what percentage of the overhead is to be allocated as fixed costs.

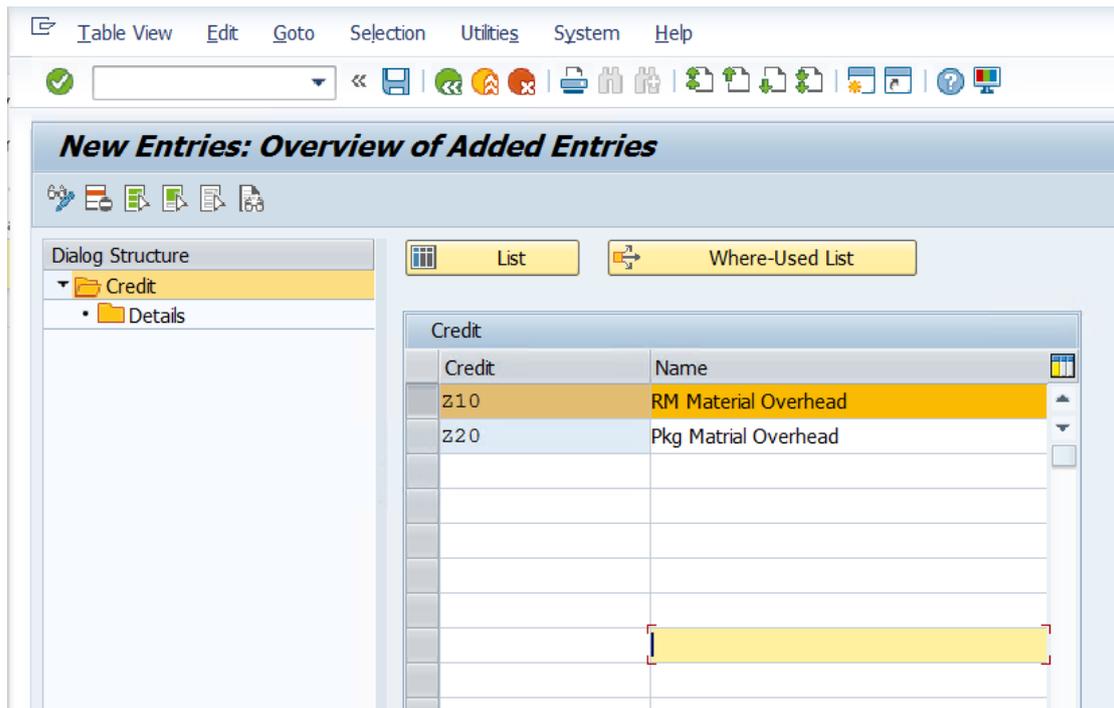
Therefore we will create 2 credit keys.



Click on 

Click on  and update the following:-

Select



Double click 

Update the following:-



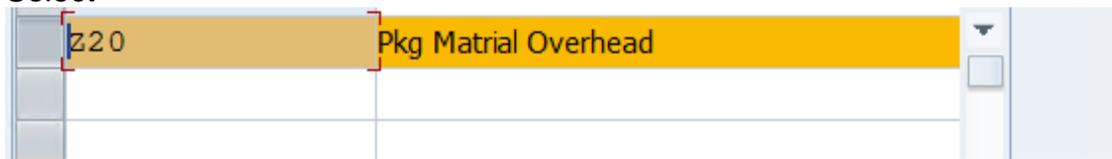
Click on 

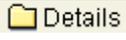
Click on Save button so that the pop up does not appear everytime.

Click on 

We update the cost center which is to be credited using the overhead cost element.

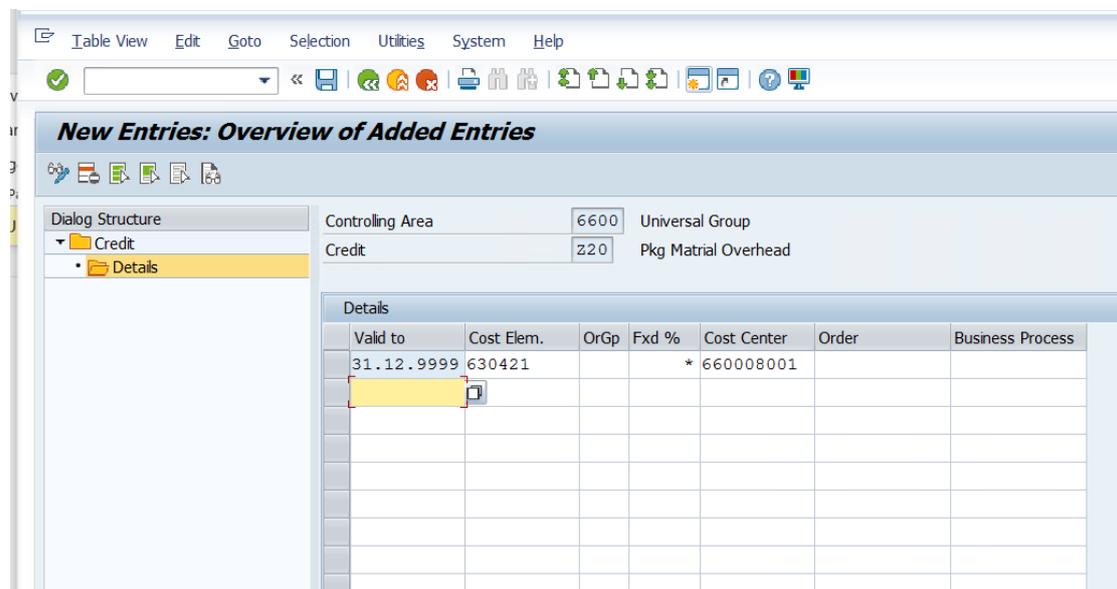
Select



Double click 

Click on 

Update the following:-



Click on 

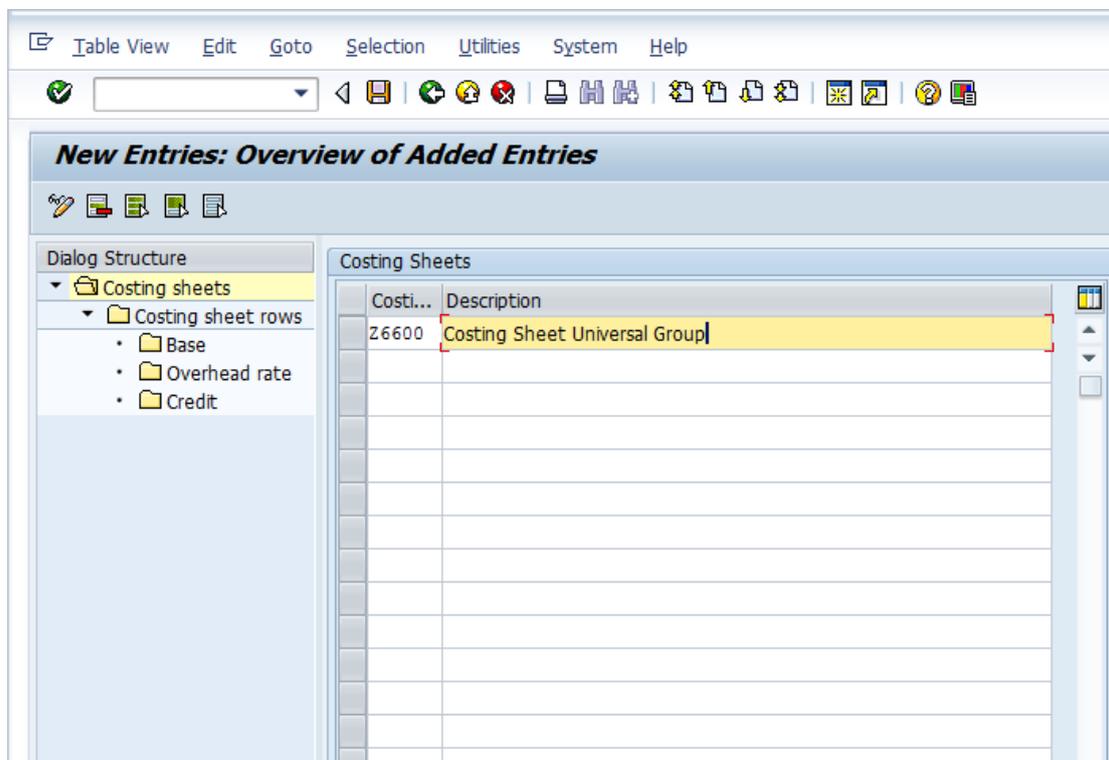
1.7 Define Costing Sheets

SAP CUSTOMIZING IMPLEMENTATION GUIDE → Controlling → Product Cost Controlling → Product Cost Planning → Basic Settings for Material Costing → Overhead → Define Costing Sheets

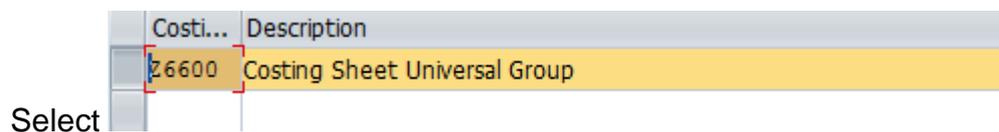
The costing sheet integrates all elements of overhead costing defined earlier such as calculation base (**Z001 Raw Material, Z002 Packing Material**), overhead rates (**Z011, Z013**) and the credit key (**Z10 +and Z11**).

Let us create a new costing sheet.

Click on **New Entries** and **Update the following:-**



Click on **Save** 



Double click on **Costing sheet rows**

You should get message “No validity errors were found”

1.10 Define Cost Component Structure

SAP CUSTOMIZING IMPLEMENTATION GUIDE → Controlling → Product Cost Controlling → Product Cost Planning → Basic Settings for Material Costing → Define Cost Component Structure

The cost components breaks down the results of the standard cost estimate into factors such as raw materials, packing material, material overhead, salaries and wages, production overheads, depreciation and other costs.

If we define the cost component structure as a primary cost component split, then primary costs from cost centers are included in the cost estimate.

There are various configuration settings to be defined for the individual cost component.

We will briefly discuss each of them here:-

- 1) Cost share – Whether the cost component is relevant only for variable cost or Fixed and Variable costs.
- 2) Roll up cost component - The "Roll up" indicator determines, for example, that the costs for the usage of a raw material in a semifinished product are displayed in the cost estimates of the higher-level semifinished products and of the finished product. Always select this.
- 3) Filter criteria – Whether the cost component is cost of good manufactured or Sales and administration costs.
- 4) Inventory valuation – Whether the cost component is relevant for inventory valuation or not, or only relevant for variable costs or relevant for both fixed and variable costs.

Cost Component Views

You can display the results of the cost estimate in the following views:

- Cost of goods manufactured
- Sales and administration costs
- Inventory (commercial)

The cost component views are created using the attributes of the cost components in the cost estimate. When you create a cost estimate, you can display the costs in the cost component views defined.

Cost Component Groups

You can create cost component groups for example in order to group together all production costs or all raw material costs. These cost component groups can be evaluated in the costed multilevel BOM or in the custom-programmed reports.

For each cost component, you can assign two cost component groups.

Click on  and **Update the following:-**

Let us create a cost component structure for the following:-

- 1) Raw Material and SFG**
- 2) Packing material**
- 3) Conversion Costs**
- 4) Depreciation Costs**
- 5) Material Overhead**
- 6) External Activity**

1. Create a cost component structure.

Enter an alphanumerical key and a name for the cost component structure, and specify whether the cost component structure is a primary cost component split.

Click on 

Update the following:-

Select

New Entries: Overview of Added Entries

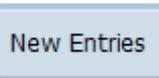
Dialog Structure

- Cost Component Structure
 - Cost Components with...
 - Assignment: Cost
 - Update of Additiv
 - Transfer Structur
 - Cost Component Views
 - Assignment: Organiz. Un
 - Cost Component Groups

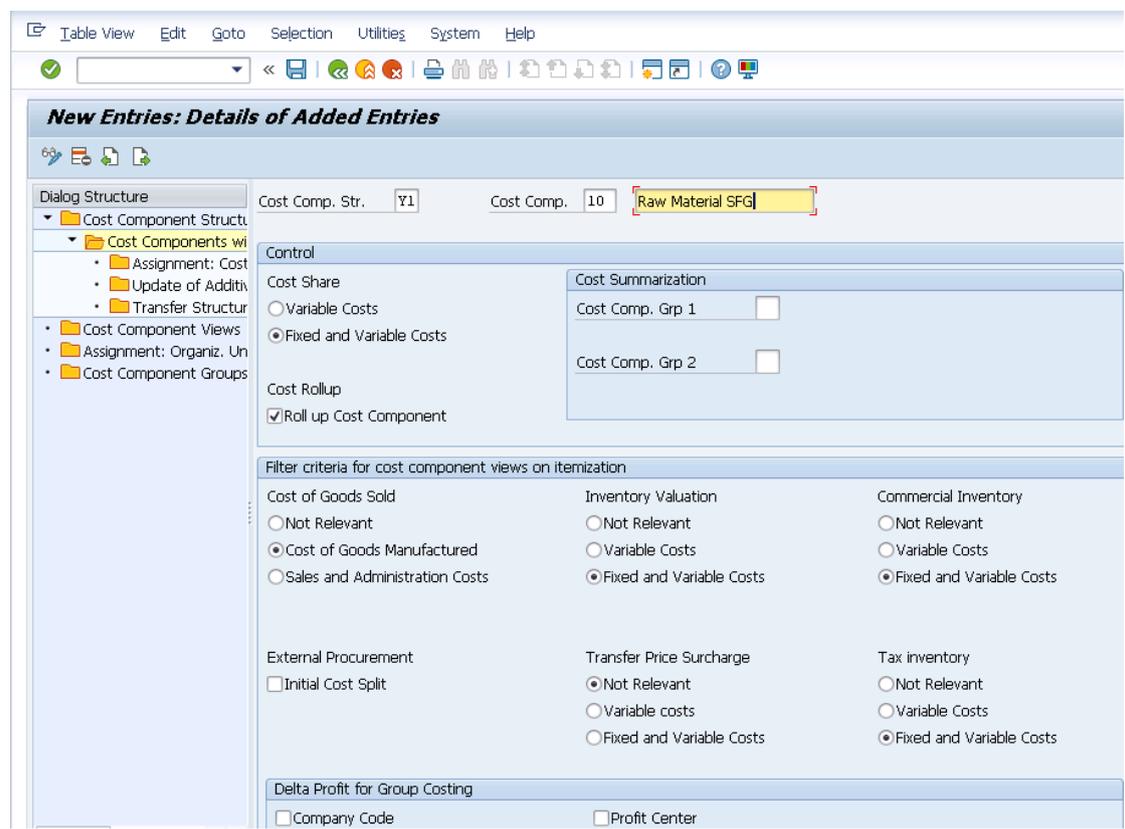
Cost Comp. Str.	Active	Prim. Cost Comp. Split	Name
01	<input type="checkbox"/>	<input type="checkbox"/>	Universal Group
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Position... Entry 1 of 1

Double click  Cost Components wi

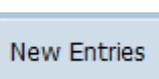
Click on 

Update the following:-



Click on Save 

Click Back 

Click on 

Update the following:-

Table View Edit Goto Selection Utilities System Help

New Entries: Details of Added Entries

Dialog Structure

- Cost Component Structu
 - Cost Components wi
 - Assignment: Cost
 - Update of Additio
 - Transfer Structur
 - Cost Component Views
 - Assignment: Organiz. Un
 - Cost Component Groups

Cost Comp. Str. Y1 Cost Comp. 20 **Packaging Material**

Control

Cost Share

Variable Costs

Fixed and Variable Costs

Cost Rollup

Roll up Cost Component

Cost Summarization

Cost Comp. Grp 1

Cost Comp. Grp 2

Filter criteria for cost component views on itemization

<p>Cost of Goods Sold</p> <p><input type="radio"/> Not Relevant</p> <p><input checked="" type="radio"/> Cost of Goods Manufactured</p> <p><input type="radio"/> Sales and Administration Costs</p>	<p>Inventory Valuation</p> <p><input type="radio"/> Not Relevant</p> <p><input type="radio"/> Variable Costs</p> <p><input checked="" type="radio"/> Fixed and Variable Costs</p>	<p>Commercial Inventory</p> <p><input type="radio"/> Not Relevant</p> <p><input type="radio"/> Variable Costs</p> <p><input checked="" type="radio"/> Fixed and Variable Costs</p>
<p>External Procurement</p> <p><input type="checkbox"/> Initial Cost Split</p>	<p>Transfer Price Surcharge</p> <p><input checked="" type="radio"/> Not Relevant</p> <p><input type="radio"/> Variable costs</p> <p><input type="radio"/> Fixed and Variable Costs</p>	<p>Tax inventory</p> <p><input type="radio"/> Not Relevant</p> <p><input type="radio"/> Variable Costs</p> <p><input checked="" type="radio"/> Fixed and Variable Costs</p>

Delta Profit for Group Costing

Company Code Profit Center

Click on Save 

Click Back 

Click on 

Update the following:-

The screenshot shows the 'New Entries: Details of Added Entries' dialog box in SAP. The interface includes a menu bar (Table View, Edit, Goto, Selection, Utilities, System, Help) and a toolbar with various icons. The main area is divided into several sections:

- Dialog Structure:** A tree view on the left showing the current path: Cost Component Structure > Cost Components with Attr...
- Control:** Fields for 'Cost Comp. Str.' (Y1), 'Cost Comp.' (30), and 'Conversion Costs'. Below are radio buttons for 'Variable Costs' and 'Fixed and Variable Costs', and a checked checkbox for 'Roll up Cost Component'.
- Cost Summarization:** Two checkboxes for 'Cost Comp. Grp 1' and 'Cost Comp. Grp 2'.
- Filter criteria for cost component views on itemization:** A grid of radio buttons for 'Cost of Goods Sold', 'Inventory Valuation', 'Commercial Inventory', 'External Procurement', 'Transfer Price Surcharge', and 'Tax inventory'. 'Cost of Goods Manufactured' and 'Fixed and Variable Costs' are selected.
- Delta Profit for Group Costing:** A checkbox for 'Company Code' and a partially visible 'Profit Center' checkbox.

Click on Save 

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