

# Controlling Case Study Cost Center Accounting (CO-CCA)

This case study explains an integrated cost center accounting process in detail and thus fosters a thorough understanding of each process step and underlying SAP functionality.

### **Product**

SAP ERP G.B.I. Release 6.0

#### Level

Undergraduate Graduate Beginner

#### **Focus**

Controlling
Cost Center Accounting

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#### Version

2.11

### **MOTIVATION**

The data entry requirements in the controlling exercises (CO 1 thorough CO 4) were minimized because much of the data was stored in the SAP system. This stored data, known as master data, simplifies the processing of business transactions.

In this case study, costs of GBI's cafeteria are assessed and allocated to organizational units that use its services.

In order to allocate costs, cost centers will be created and output costs will be planned.

#### **PREREQUISITES**

Before you use this case study, you should be familiar with navigation in the SAP system.

In order to successfully work through this case study, it is not necessary to have finished the CO exercises (CO 1 through CO 4). However, it is recommended.

#### **NOTES**

This case study uses the Global Bike Inc. (G.B.I.) data set, which has exclusively been created for SAP UA global curricula.



### Process Overview

Learning Objective Understand and perform a cost center accounting process. Time 105 min

**Scenario** In order to perform the cost center accounting you will take on different roles within the GBI company, e.g. cost accountant or chief accountant. You will be working in the Controlling (CO) department.

**Employees involved** Jermain Kumins (Production Data Administrator)

Jamie Shamblin (Cost Accountant)

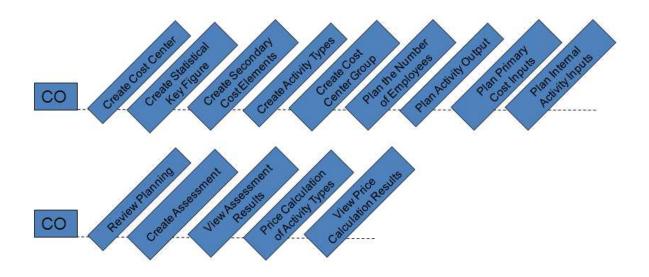
Shuyuan Chen (Chief Accountant)

To assess and allocate costs associated with the cafeteria cost centers, cost elements and activity types are created first. You will then plan the activity outputs, the primary cost inputs and the internal activity inputs.

Process description

After reviewing your planning you create and execute an assessment cycle and display its results.

Finally, you will calculate the prices of the activity types.



### Create Cost Center

Task Create three cost centers.

Time 10 min

**Short Description** Create cost center for canteen, maintenance and assembly.

Name (Position) Jamie Shamblin (Cost Accountant)

A cost center represents an organizational unit within a controlling area and specifies a uniquely definable instance where costs are incurred. This definition can be based on functions, settlement specific, geography, or cost responsibility.

To create a new cost center, follow the menu path:

Menu path

Accounting ► Controlling ► Cost Center Accounting ► Master Data ► Cost Center ► Individual Processing ► Create

Note: If the system prompts you to enter the relevant controlling area, enter **NA00**. Press ENTER to confirm.

NA00

On the following screen enter CC-CA### (replace ### with your number, e.g. 012) as cost center number. The cost center should be valid from 01/01 of the current fiscal year. Now, press ENTER or click to confirm.

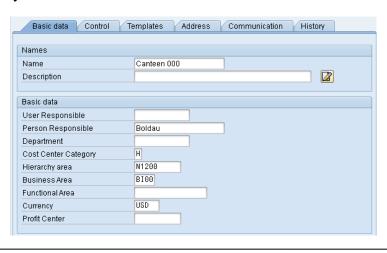
CC-CA### 01/01 of current year

Enter **Canteen** ### as the cost center name and enter your name for the person responsible. Select cost center category Service cost center **H** and assign the cost center to hierarchy area Internal services **N1200**. In addition, choose business area **Bikes** via the F4-Help and currency **USD**.

Canteen ### Your name H N1200

Compare your entries with the screen shown below.

\*, USD



F

Click to save your cost center.

Repeat the above process to create cost center for maintenance. Use the following data:

Cost Center: CC-MA###

Valid from: 01/01 of the current fiscal year 01/01 of current year

Name: Maintenance ### Maintenance ###

Person responsible: Your name

Your name

Cost center type: H

Hierarchy area: N4300 N4300

Business area: BI00

Currency: USD USD

Repeat the above process to create cost center for assembly. Use the following data.

Cost Center: CC-AS###

Valid from: 01/01 of the current fiscal year 01/01 of current year

Name: Assembly ###

Assembly ###

**Person responsible:** Your name

Cost center type: F

Hierarchy area: N4200

Business area: BI00

Currency: USD USD

Click on the exit icon 6 to return to the SAP Easy Access Menu.

### Create Statistical Key Figure

Task Create a new statistical key figure.

Time 5 min

**Short Description** Create a new statistical key figure.

Name (Position) Jamie Shamblin (Cost Accountant)

Because the canteen costs are assessed for three cost centers (including itself), the number of employees in the cost centers is the allocation base for cost assessment. You have to create a statistical key figure for this purpose.

To create a new statistical key figure, follow the menu path:

Menu path

Accounting ► Controlling ► Cost Center Accounting ► Master

Data ► Statistical Key Figures ► Individual Processing ► Create

Enter **EMP###** (replace ### with your number) as the key figure number and click **②**.

EMP###

On the following screen, enter **Number of employees** as name and choose Number of Persons (**PRS**) as the unit. Make sure the category **Fxd val.** is selected. Then, click ...

Number of employees PRS, Fxd val.

Click on the exit icon 6 to return to the SAP Easy Access Menu.



### **Create Secondary Cost Elements**

Task Create secondary cost elements.

Time 5 min

**Short Description** Create secondary cost elements to assess the cost of the canteen, assembly and maintenance.

Name (Position) Jamie Shamblin (Cost Accountant)

Internal cost flows and activity flows are always allocated in SAP ERP using secondary cost elements. A cost element classifies the purpose-related, valuated consumption of factors of production within a controlling area. In contrast to primary cost elements, secondary cost elements do not have any corresponding, cost-relevant G/L account.

To create a new secondary cost element follow the menu path:

Menu path

Accounting ► Controlling ► Cost Center Accounting ► Master

Data ► Cost Element ► Individual Processing ► Create Secondary

Enter **PLA###** as the cost element number. The cost element should be valid from **01/01 of the current fiscal year**. Now, click

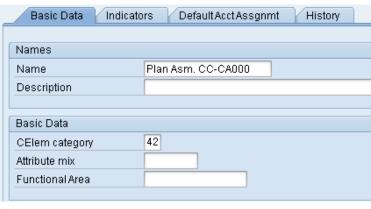
PLA###

01/01 of current year

Type in the name **Plan Asm. CC-CA###** and assign it to cost element category Assessment (42). Compare your screen to the one shown below.

Plan Asm CC-CA###

42



Now, click save.

Repeat the process above for the maintenance allocation cost element with the following data:

Cost Element: MAI###

Valid from: 01/01 of the current fiscal year 01/01 of current year

Name: Allocation CC-MA### Allocation CC-MA###

Cost. Elem. Cat.: 43

Now, click save.

Repeat the process for the maintenance allocation cost element with the following data:

Cost Element: ASM###

Valid from: 01/01 of the current fiscal year 01/01 of current year

Name: Allocation CC-AS### Allocation CC-AS###

Cost. Elem. Cat.: 43

Now, click save.

Click on the exit icon 6 to return to the SAP Easy Access Menu.

# Create Activity Types

Task Create activity types.

Time 10 min

**Short Description** Create activity types to allocate cost for activities within maintenance and assembly.

Name (Position) Jamie Shamblin (Cost Accountant)

Activity types are organizational units within the controlling area that classify the activities performed by a cost center. As units of measure, they are used to allocate internal activities.

To create a new activity type, follow the menu path:

Menu path

Accounting ► Controlling ► Cost Center Accounting ► Master Data ► Activity Type ► Individual Processing ► Create

Enter M### (replace ### with your assigned number) as the activity type number. It should be valid from 01/01 of the current fiscal year. Click .

M###

01/01 of current year

Maint. Hours 000

H, all cost center categories

Manual entry, manual allocation MAI###

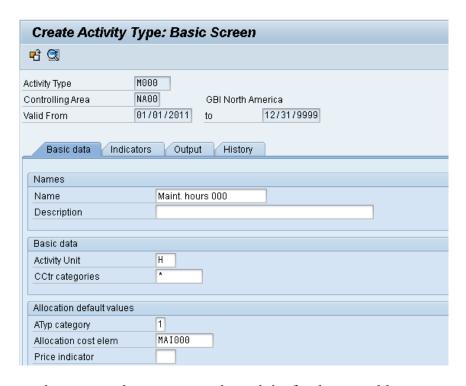
On the following screen, type in **Maint. Hours** ### as the name. The activity unit is Hour (**H**), the activity type should be valid for **all cost center categories** (\*). Use the F4-Help to choose the activity type category **Manual entry, manual allocation** and assign it to the allocation cost element you just created (**MAI**###). Your screen should look similar to the one depicted below. Now, Click

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allocation

ASM###



Repeat the process above to create the activity for the assembly cost center.

Insert the following data and use the F4-Help if necessary:

A### Activity type: A### 01/01 of current year Valid from: 01/01 of current fiscal year Assembly hours ### Name: Assembly hours ### Hour Activity unit: Hour All Cost Center Catel Cost center cat.: **All Cost Center Cate** Activity type cat.: manual entry, manual allocation manual entry, manual

Alloc. Cost element: ASM###

Now, click uo save your activity type.

Click on the exit icon to return to the SAP Easy Access Menu.

## Create Cost Center Group

**Task** Create the cost center group.

Time 10 min

**Short Description** Create a cost center group to assess the canteen cost. Receivers of the canteen cost are the canteen, the maintenance and the assembly cost center you created previously.

Name (Position) Jamie Shamblin (Cost Accountant)

Cost centers can be grouped together to form cost center groups by various perspectives to model the company's structure as cost centers in the SAP System. You can use these groups to form cost center hierarchies that summarize the areas for decision-making, responsibility, and control according to the company's specific needs.

To create a new cost center group, follow the menu path:

Menu path

```
Accounting ► Controlling ► Cost Center Accounting ► Master Data ► Cost Center Group ► Create
```

The group shall be named **GROUP###** (replace ### with your assigned number). Click to continue.

GROUP###

Name the displayed hierarchy **Canteen cost receivers** and click Cost Center (not to be confused with

Canteen cost receivers

In the left-hand column, enter the cost centers CC-CA###, CC-MA### and CC-AS### in that sequence and click to confirm. The names of the cost centers should then be displayed

If you see >>> No valid master record instead, it means you have misspelled one of the cost centers. Select the involved cost center, click and then . Enter the correct cost center and click .



Click . Then return to the SAP Easy Access menu by clicking twice.



### Plan the Number of Employees

**Task** Plan the number of employees.

Time 5 min

**Short Description** Plan the number of employees working in the organizational units associated with the previously created cost centers.

Name (Position) Shuyuan Chen (Chief Accountant)

To plan the number of employees, follow the menu path:

Menu path

**Accounting** ► Controlling ► Cost Center Accounting ► Planning

► Statistical Key Figures ► Change

The planning layout Statistical key figures: standard (1-301) appears. Choose the **Plan/actual version** via the F4-Help and **periods 1 to 12 in the current fiscal year**. Enter cost center **CC-AS###** and key figure **EMP###**. Make sure you leave all other fields blank.

Plan/actual version 1,12, current fiscal year CC-AS###, EMP###

Compare your entries with the screen shown below.

Change Statistical Key Figure Planning: Initial Screen							
<u> </u>							
Layout	1-301 Statistical Key Figures: Standard						
Variables							
Version	0						
From Period	1						
To Period	12						
Fiscal year	2011						
Cost Center	CC-AS000						
to							
or group	Canteen cost receivers						
Stat. key figure	EMP000						
to							
or group							

Click Form-Based at the bottom of the screen. Then click or hit F5.

Enter 15 as the current plan value and click .

15

Repeat the process for cost center **CC-MA###** and enter **5** as current plan value. Repeat the process again for the canteen cost center for **5** planned employees.

CC-MA###, 5 CC-CA###, 5

Click on the exit icon to return to the SAP Easy Access Menu.

### Plan Activity Output

**Task** Plan the activity output.

Time 5 min

**Short Description** Plan the activity output of the maintenance and assembly.

Name (Position) Shuyuan Chen (Chief Accountant)

To plan the activity output, follow the menu path:

Menu path

Accounting ► Controlling ► Cost Center Accounting ► Planning ► Activity Output/Prices ► Change

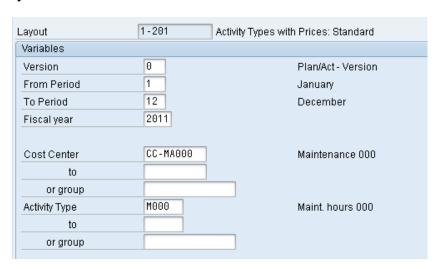
The layout Activity types with prices: standard appears.

Fill the fields Version, Periods and Fiscal Year as in the previous step, if they do not already contain the correct default values.

0, 1,12, current year

Enter CC-MA### as the cost center and M### as the activity type. Leave all other fields blank. Then click and enter 1,800 hours as the plan activity. Click ...

CC-MA###, M### 1 800



Repeat the process for the assembly cost center and activity type **A###** with a plan activity of **6,000 hours**.

CC-AS###, A### 6,000

Click on the exit icon to return to the SAP Easy Access Menu.

### Plan Primary Cost Inputs

Task Plan primary cost inputs.

Time 10 min

**Short Description** Plan the primary cost inputs for the canteen, assembly and maintenance.

Name (Position) Shuyuan Chen (Chief Accountant)

Primary costs are incurred in all three cost centers each fiscal year. These costs are 60,000 for salaries and 90,000 for purchased services in the canteen, maintenance salaries in the amount of 60,000, and assembly wages in the amount of 150,000.

To plan the primary cost inputs, follow the menu path:

Menu path

Accounting ► Controlling ► Cost Center Accounting ► Planning ► Cost and Activity Inputs ► Change

The Cost elements *Acty.-Indep./Acty.-Dep.* layout appears.

Fill the fields Version, Periods and Fiscal Year as in the previous step, if they do not already contain the correct default values.

0, 1,12, current year

Enter **CC-CA###** as the cost center and choose **Labor** via the F4-Help as cost element. Leave all other fields blank. Click *Overview Screen*.

CC-CA###, 700000

On the following screen, enter the plan fixed costs of **60,000** and save.

60,000

Repeat the process for the canteen and cost element **741000** with planned fixed costs of **90,000**.

741000 90,000

On the *Change Cost Element/Activity Input Planning* screen, change the cost center to **maintenance** and **labor** as cost element. Enter the planned salary cost of **60,000**.

CC-MA###, 700000 60,000

Enter cost center **CC-AS###**, activity type **A###** and cost element **Labor**. Now that you have added the activity type, the primary cost input can be planned activity specific – that is, with a fixed and variable price. Then click ...

CC-AS###, A###, 700000

The <u>Plan variable cost</u> field should now be ready for input. Enter **150**, **000** her and save.

150,000

Click on the exit icon 6 to return to the SAP Easy Access Menu.

### Plan Internal Activity Inputs

Task Plan internal activity inputs.

Time 5 min

**Short Description** Plan the internal activity inputs.

Name (Position) Shuyuan Chen (Chief Accountant)

To plan the internal activity inputs, follow the menu path:

Menu path

# Accounting ► Controlling ► Cost Center Accounting ► Planning ► Cost and Activity Inputs ► Change

The Cost elements *Acty.-Indep./Acty.-Dep.* layout appears. Because this screen is only suitable for cost elements, not activity types, click to go to the next layout, *Activity Input Acty.-Indep./Acty.-Dep.* (1-102)

Fill the fields Version, Periods and Fiscal Year as in the previous step, if they do not already contain the correct default values.

0, 1,12, current year

Enter CC-AS### as the cost center, CC-MA### as the sender cost center and M### as the sender activity type. Leave all other fields blank.

CC-AS###, CC-MA### M###

Go to the overview screen by clicking on A, and enter **600** hours as plan fixed consumption. Save.

600

Click on the exit icon to return to the SAP Easy Access Menu.



**Task** Review the planned costs via the planning report.

Time 5 min

Short Description Review the planned costs for the canteen, maintenance and assembly.

Name (Position) Shuyuan Chen (Chief Accountant)

All cost centers have been charged with primary costs. In Addition, you can also see the total inputs and internal allocation quantities in maintenance and assembly.

To open the report, follow the menu path:

Menu path

Accounting ► Controlling ► Cost Center Accounting ► Information System ► Reports for Cost Center Accounting ► Planning Reports ► Cost Centers: Planning Overview

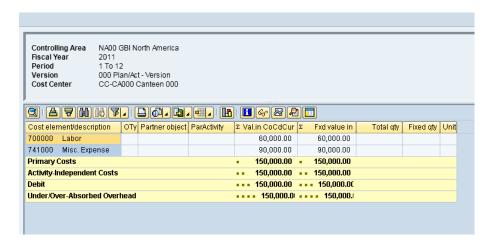
If not already filled in, enter the current fiscal year, period 1 to 12 and Version 0 as report parameters.

Current year 1, 12, 0

Enter the canteen cost center and click on



CC-CA###



Your report should look similar to the one depicted above.

Go back to the previous screen and view the planning reports for the maintenance and assembly as well.

CC-MA###, CC-AS###

Click on the exit icon twice to return to the SAP Easy Access Menu.

### Creating Assessment

**Task** Create assessment for canteen costs.

Time 15 min

**Short Description** Create assessment for canteen costs.

Name (Position) Shuyuan Chen (Chief Accountant)

To asses canteen cost, follow the menu path:

Menu path

Accounting ► Controlling ► Cost Center Accounting ► Planning ► Allocations ► Assessment

In the *Execute Plan Assessment: Initial Screen*, choose Extras ▶ Cycle ▶ Create. Enter cycle number C###, which is valid from **01/01 of the** current fiscal year and click .

C###, 01/01 of current vear

This will produce the following screen.

Create Plan Assessment Cycle: Header Data									
Attach segment									
Controlling Area	NA00 GBI North America								
Cycle	C000	Status new							
Start Date	01/01/2011 To	12/31/2011							
Text									
Indicators		Field Groups							
✓ Iterative		Object Currency							
	Derive Func. Area	☐ Transaction Currency							
Preset Selection Criteria									
Version	0	Plan/Act - Version							

Type in **Cycle CC-CA###** as text, **uncheck** the iterative field and click Attach segment

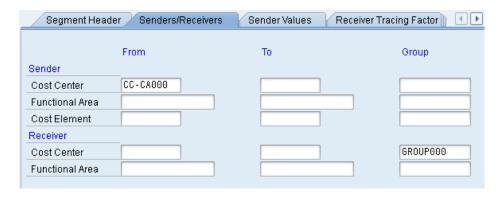
CC-CA##, uncheck iterative

On the *Segment Header* tab type in **SEG###** as segment name. Enter **PLA###** as the Assessment CEle.

SEG### PLA###

On the *Senders/Receivers* tab enter **CC-CA###** as Sender Cost center (from) and Cost center Group **GROUP###** as receiver. Compare with the screen shown below.

CC-CA### GROUP###



On the *Receiver Tracing Factor* tab choose the value **Plan Stat. Key Figures** in the *Var. portion type* field.

Plan Stat. Key Figures

The following information popup indicates that new fields are displayed. Click , choose **Plan/actual version** via the F4-Help and statistical key figure **EMP##**.

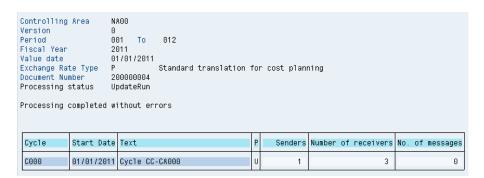
0 EMP###

Click Save, click three times to go back, and confirm the subsequent confirmation Yes.

In the *Execute Plan Assessment: Initial Screen* enter C### in the cycle field and click ♥. Uncheck *Test Run* and click ♥.

C###

The system should notify you that processing was completed without errors. The number of senders should be 1 and the number of receivers 3.



Click on . Choose when asked for exiting the assessment list. Click again to return to the SAP Easy Access Menu.

### Vie

### View Assessment Results

**Task** Review the results of the assessment.

Time 10 min

**Short Description** Review the results of the assessment.

Name (Position) Shuyuan Chen (Chief Accountant)

To open the report, follow the menu path:

Menu path

Accounting ► Controlling ► Cost Center Accounting ► Information System ► Reports for Cost Center Accounting ► Planning Reports ► Cost Centers: Planning Overview

On the *Planning Report: Initial Screen*, find your canteen cost center via the F4-Help. If not already filled out, use the current year, period 1 to 12 and version 0 as report parameters. Click on results of the assessment.

\*### current year, 1,12

0

Repeat the process above and view assessment results for the maintenance and assembly cost centers.

CC-MA### CC-AS###

Cost eler	nent/description	ОТу	Partner object	ParActivity	ΣVa	l.in CoCdCur	Σ	Fxd value in	Total qty	Fixed qty	Unit
PLA000	Plan Asm. CC-C#	CTF	CC-CA000			90,000.00		90,000.00			
Assessment				90,000.00		90,000.00					
MAI000	Allocation CC-MAC	ATY	CC-MA000	M000		0.00		0.00	600	600	Н
Activity In	put					0.00		0.00			
Activity-II	ndependent Costs				**	90,000.00		90,000.00			
700000	Labor					150,000.00		0.00			
A000	Assembly hours OC	10				150,000.00		0.00			
Activity-Dependent Costs				150,000.00	• •	0.00					
Debit						240,000.00		90,000.00			
ASM000	Allocation CC-AS					0.00		0.00	6,000-	0	Н
A000	Assembly hours OC	10				0.00		0.00			
Activity A	llocation				44	0.00		0.00			
Credit						0.00		0.00			
Under/Ov	Under/Over-Absorbed Overhead   •					<b>240,000.0</b>		• 90,000.0			

The maintenance and assembly cost centers should have been charged with a canteen assessment of 30,000 and 90,000 and the canteen cost center credited with 120,000. 30,000 remain with CC-CA###.

You may have noticed that the activity inputs and activity allocations of cost centers CC-AS### and CC-MA### are still valuated with zero, even though all the quantity information has been entered. This is because no prices have been planned yet for the involved activity types. You will do this in the next step.

Click on the exit icon twice to return to the SAP Easy Access Menu.

### Price Calculation of Activity Types

**Task** Calculate the prices of the activity types.

Time 5 min

**Short Description** Calculate the prices of the activity types.

Name (Position) Shuyuan Chen (Chief Accountant)

To calculate prices of activity types, follow the menu path:

Menu path

Accounting ► Controlling ► Cost Center Accounting ► Planning ► Allocations ► Price Calculation

On the following screen, choose the first radio button (Cost center group) in the Cost centers field group and enter your cost center group **GROUP###**. Again, use the parameters version **0**, periods **1** to **12** and the **current year**. Uncheck the Test Run box and click .

GROUP###

If everything worked correctly, the SAP system reports that the calculated prices have been posted correctly.



Click **৺** to display the prices.

Write down the prices the system calculated for your activity types:

Total price for CC-AS### and activity type A###:\_\_\_\_\_

Total price for CC-MA### and activity type M###:\_\_\_\_\_

Click on Select when asked upon leaving the price calculation. Click on or to return to the SAP Easy Access Menu.

### View Price Calculation Results

Task View the results of the price calculation.

Time 5 min

**Short Description** View the results of the price calculation.

Name (Position) Shuyuan Chen (Chief Accountant)

To open the report, follow the menu path:

Menu path

Accounting ► Controlling ► Cost Center Accounting ► Information System ► Reports for Cost Center Accounting ► Planning Reports ► Cost Centers: Planning Overview

On the *Planning Report: Initial Screen*, find your canteen cost center via the F4-Help. If not already filled out, use the current year, period 1 to 12 and version 0 as report parameters. Click on essential expectation and view the results of the assessment.

\*### current year, 1,12

0

Repeat the process above and view assessment results for the maintenance and assembly cost centers. Your assembly cost center report could look like the example below.

CC-MA### CC-AS###

		,			_				
Cost element/description	OTy Partner object	ParActivity :	ΣVa	al.in CoCdCur	Σ	Fxd value in	Total qty	Fixed qty	Unit
PLA000 Plan Asm. CC-C#	CTF CC-CA000			90,000.00		90,000.00			
Assessment				90,000.00		90,000.00			
MAI000 Allocation CC-MAC	ATY CC-MA000	M000		30,000.00		30,000.00	600	600	Н
Activity Input				30,000.00		30,000.00			
Activity-Independent Costs			• •	120,000.00	• •	120,000.00			
700000 Labor				150,000.00		0.00			
A000 Assembly hours 00	10	1		150,000.00		0.00			
Activity-Dependent Costs				150,000.00	• •	0.00			
Debit		ı	• • •	270,000.00	• •	<b>120,000.0</b> 0			
ASM000 Allocation CC-AS				270,000.00-		120,000.00-	6,000-	0	Н
A000 Assembly hours 00	10	1		270,000.00-		120,000.00-			
Activity Allocation = 270,000.00- = 120,000.00-									
Credit		1		270,000.00-	• •	<b>120,000.00</b>			
Under/Over-Absorbed Overl	nead			0.00		- 0.00			

As you can see, the canteen costs and assessment of the maintenance cost center amount to 120,000. Labor costs in the amount of 150,000 are also incurred. If the total input is 6,000 hours, this results in a price of 45.00 for one assembly hour.

Click on the exit icon twice to return to the SAP Easy Access Menu.