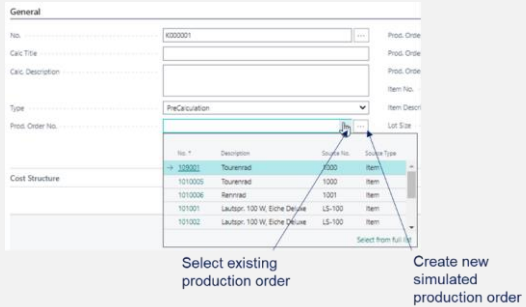


# PreCalculation

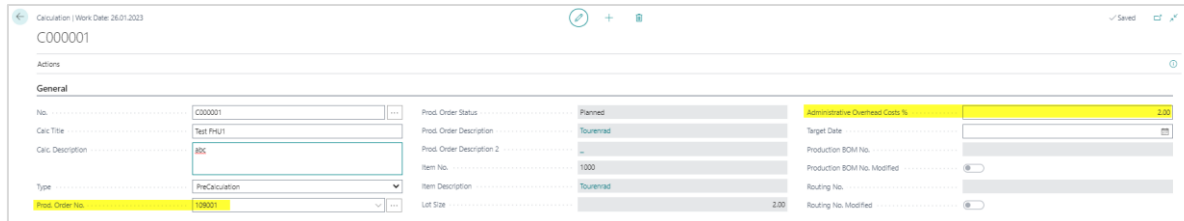
## Calculation Header PreCalculation

If type is *PreCalculation*, relevant fields in header are:

Field Name	Description
Production Order No.	User has to create new or select existing production-order.  <p>The screenshot shows the SAP PreCalculation header form. The 'Type' field is set to 'PreCalculation'. Below it, a table lists items with columns for 'No.', 'Description', 'Stock No.', and 'Source Type'. The items listed are: 1010001 (Tourenrad, Stock No. 1000, Item), 1010005 (Tourenrad, Stock No. 1000, Item), 1010006 (Rennrad, Stock No. 1001, Item), 1010007 (Lautsprecher 100 W, Eiche Deluxe, LS-100, Item), and 1010002 (Lautsprecher 100 W, Eiche Deluxe, LS-100, Item). Below the table, there are two buttons: 'Select existing production order' and 'Create new simulated production order'.</p>
Target date	Optional: User can enter date, for which purchase-prices are used from purchase prices for purchase items, following BC standard logic. If table purchase prices has no datasets for item, from item card field Last Direct Cost is used.

# PreCalculation

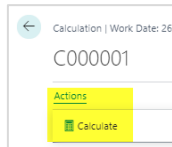
1. Select following values in calculation header.



The screenshot shows the SAP Calculation Header for C000001. The 'General' section contains the following fields and values:

No.	C000001	Prod. Order Status	Planned	Administrative Overhead Costs %	2.00
Calc Title	Test PHU1	Prod. Order Description	Tourenrad	Target Date	
Calc. Description	BSC	Prod. Order Description 2		Production BOM No.	
Type	PreCalculation	Item No.	1000	Production BOM No. Modified	
Prod. Order No.	128001	Item Description	Tourenrad	Routing No.	
		Lot Size	2.00	Routing No. Modified	

2. Select *Actions*, *Calculate*.



The screenshot shows the SAP Calculation Header for C000001. The 'Actions' menu is open, and the 'Calculate' option is highlighted in yellow.

Therewith calculations are performed, calculations from area *Calculation Lines* (Detail-Level) serve as base for calculations in area *Cost Structure* (Overview-Level):

# PreCalculation

Therewith calculations are performed, calculations from area *Calculation Lines* (Detail-Level) serve as base for calculations in area *Cost Structure* (Overview-Level):

The screenshot displays the SAP PreCalculation interface. The top section is the 'General' tab, which contains various input fields for calculation parameters. Below this is the 'Cost Structure' table, which provides a detailed overview of costs. A blue arrow points from the 'PreCalculation Total per Base Unit (LCY)' column in the Cost Structure table to the 'Calculation Lines' table below it, indicating the data flow.

Cost Structure	PreCalculation Total per Base Unit (LCY)	PreCalculation Percentage to Cost of Goods
Material Single Costs	274.28	58.18
Material Overhead Costs	0.00	0.00
Material Costs	274.28	58.18
Production Single Costs	186.72	39.60
Production Overhead Costs	0.00	0.00
Production Costs	186.72	39.60
Roll-up Subcosts Cost	0.00	0.00
Roll-up Scrap Cost	1.22	0.26
Manufacturing Costs	462.21	98.04
Administrative Overhead Costs	9.24	1.96
Cost of Goods	471.45	100.00

Calculation Lines	Parent	Line Type	Source Type	Prod. Order No.	No.	Description	Routing No.	Operation No.	Prod. BOM No.	Qty. per Parent	Qty. per Top Item	Qty. per Prod. BOM Line	Unit of Measure Code	Lot Size	Material Cost	Unit Price	Unit Cost	Calc. Discount (LCY)	Calc. Discount Description
C000001	0	Prod. Order	Prod. Order	109001	1000	Tourenrad	1000		1000	1.00	1.00	0.00	51%	2.00	274.28	0.00	0.00		

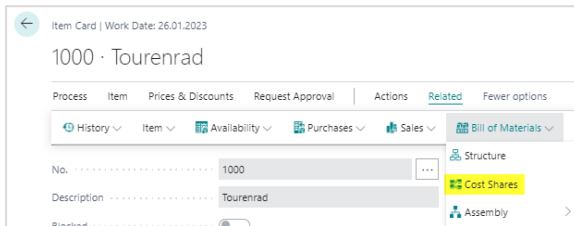
# PreCalculation

## Calculation Lines (PreCalculation)

Calculation lines can be unfolded by arrow, marked in following screenshot:

Calculation No.	Entry No.	Level	Relevant Element No.	Line Type	Source Type	Prod. Order No.	No.	Description	Routing No.	Operation No.	Prod. BOM No.	Qty. per Parent	Qty. per This Item	Unit of Measure Code	Lot Size	Schedule Material Code	Line Cost	Cost Desc.
C000002	1	1	0	Prod. Order	Prod. Order	108001	1000	Tourenrad	2000		1000	1,00	1,00	0,00	575	2,00	274,28	0,00
>	C000001	2	2	1	Prod. Order	Master Data	1100	Nippelrad	1100		1000	1,00	1,00	1,00	57K	10,00	109,91	0,00
>	C000001	22	2	1	Prod. Order	Master Data	1200	Minirad	1200		1000	1,00	1,00	1,00	57K	10,00	105,52	0,00
>	C000001	42	2	1	Prod. Order	Master Data	1300	Kette komplett			1000	1,00	1,00	1,00	57K	10,00	13,16	0,00
C000001	46	2	1	Item	Prod. Order		1400	Schutzblech vorn			1000	1,00	1,00	1,00	57K	10,00	3,90	3,90
C000001	47	2	1	Item	Prod. Order		1400	Schutzblech hinten			1000	1,00	1,00	1,00	57K	10,00	3,90	3,90
C000001	48	2	1	Item	Prod. Order		1500	Bereifungsanlage komplett			1000	1,00	1,00	1,00	57K	10,00	5,30	5,30
C000001	49	2	1	Item	Prod. Order		1600	Klingel			1000	1,00	1,00	1,00	57K	10,00	2,70	2,70
>	C000001	50	2	1	Prod. Order	Master Data	1700	Bremsanlage komplett			1000	1,00	1,00	1,00	57K	10,00	9,77	0,00
C000001	53	2	1	Item	Prod. Order		1800	Lichter komplett			1000	1,00	1,00	1,00	57K	10,00	2,12	2,12
C000001	55	2	1	Item	Prod. Order		1900	...			1000	1,00	1,00	1,00	57K	10,00	9,77	9,77

Most fields are same as BC-Standard function *Cost Shares*:



If for line *Replenishment System Prod. Order* is selected and *Manufacturing Policy Make-To-Stock*, lotsizes and values are taken from master data, if *Manufacturing Policy Make-To-Order* is selected, data are taken from production order line.

# PreCalculation

Field Name	Description																																				
<b>Calc. Discount (LCY)</b>	<p>Optional: For quick simulations of calculation-scenarios user can enter value in LCY, which is discounted to fields:</p> <p>If line type = Prod. Order: Value is subtracted from field Rolled-up Capacity Cost incl. Calc Discount.</p> <p>If line type = Material: Value is subtracted from field Material Single Costs.</p>																																				
<b>Calc. Discount Description</b>	Optional: User can enter describing information about Calc. Discount (LCY).																																				
<b>Material Single Cost (Unit Cost)</b>	<p>If table purchase prices is used for item, price is taken from there according field target date in calculation header and standard BC-Logic. If table purchase prices is not used for item, field Last Direct Cost from item card is used.</p> <p>Calculation Discount (LCY) is subtracted.</p> <p>Cost are rolled-up by level of calculation lines:</p> <table border="1" data-bbox="751 806 1082 1078"> <thead> <tr> <th colspan="2">Calculation Lines</th> <th colspan="2">Manage</th> </tr> <tr> <th>Calculation No.</th> <th>Level</th> <th>Parent Element No.</th> <th>Lin</th> </tr> </thead> <tbody> <tr> <td>C000001</td> <td>1</td> <td>0</td> <td>Pr</td> </tr> <tr> <td>→ C000001</td> <td>2</td> <td>1</td> <td>Pr</td> </tr> <tr> <td>C000...</td> <td>3</td> <td>2</td> <td>lfe</td> </tr> <tr> <td>C000...</td> <td>3</td> <td>2</td> <td>lfe</td> </tr> <tr> <td>C000...</td> <td>3</td> <td>2</td> <td>Pr</td> </tr> <tr> <td>C000...</td> <td>3</td> <td>2</td> <td>lfe</td> </tr> <tr> <td>C000...</td> <td>3</td> <td>2</td> <td>lfe</td> </tr> </tbody> </table>	Calculation Lines		Manage		Calculation No.	Level	Parent Element No.	Lin	C000001	1	0	Pr	→ C000001	2	1	Pr	C000...	3	2	lfe	C000...	3	2	lfe	C000...	3	2	Pr	C000...	3	2	lfe	C000...	3	2	lfe
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C000...	3	2	Pr																																		
C000...	3	2	lfe																																		
C000...	3	2	lfe																																		
<b>Material Overhead Cost</b>	For lines with line type item, field takes from item card field Overhead Rate and adds from item card field Indirect Cost % related to Material Single Cost (Unit Cost) from calculation line.																																				
<b>Rolled-up Capacity Cost inc. Calc Discount</b>	<p>BC-Standard field Rolled-up Capacity Cost, with Calc. Discount (LCY) subtracted, if line-type = Prod. Order.</p> <p>Cost are rolled-up by field Level of calculation lines.</p>																																				

# PreCalculation

## Cost-Structure

Results from area *Calculation Lines* are summarized in *Cost Structure* in columns:

- PreCalculation Total per Base Unit Local currency
- PreCalculation Percentual to *Cost of Goods* (last row of Cost Structure)

Cost Structure		PreCalculation Total per Base Unit (LCY)	PreCalculation Percentual to Cost of Goods
→	Material Single Costs	274.28	58.18
	Material Overhead Costs	0.00	0.00
	Material Costs	274.28	58.18
	Production Single Costs	186.72	39.60
	Production Overhead Costs	0.00	0.00
	Production Costs	186.72	39.60
	Rolled-up Subcontr. Cost	0.00	0.00
	Rolled-up Scrap Cost	-1.22	0.26
	Manufacturing Costs	462.21	98.04
	Administrative Overhead Costs	9.24	1.96
	Cost of Goods	471.45	100.00

# PreCalculation

Field Name	Description
<b>Material Single Costs</b>	= Material Single Cost (Unit Cost) top-line from area Calculation Lines.
<b>Material Overhead Costs</b>	= Material Overhead Cost from top-line from area Calculation Lines.
<b>Material Costs</b>	= Material Single Cost + Material Overhead Cost.
<b>Production Single Costs</b>	= Rolled-up Capacity Cost incl. Calc Discount from top-line of Calculation Lines.
<b>Production Overhead Costs</b>	= Rolled-up Mfg. Ovhd Cost + Rolled-up Capacity Ovhd. Cost top-line from area Calculation Lines.  Calculation Lines with line type Prod. Order are considered, values are taken from item card Indirect Cost % + Overhead rate = Mfg. Ovhd. Cost, as well as from Routing Lines assigned work centers / machine centers card Indirect Cost % + Overhead rate = Capacity Ovhd. Cost.  Calculation according BC-Standard more complex as here can be described.
<b>Production Costs</b>	= Production Single Costs + Production Overhead Costs.
<b>Rolled-Up Subcontr. Cost</b>	= Rolled-up Subcontracted Cost from top-line of Calculation Lines.
<b>Rolled-Up Scrap Cost</b>	= Rolled-Up Scrap Cost from top-line of Calculation Lines.
<b>Manufacturing Costs</b>	= Material Costs + Production Costs + Rolled-Up Subcontr. Cost + Rolled-Up Scrap Cost.
<b>Administrative Overhead Costs</b>	= Manufacturing Cost * Administrative Overhead Costs % of calculation header.
<b>Cost of Goods</b>	= Manufacturing Cost + Administrative Overhead Costs.