



# Do you know, how excellent our Cost Parameter Request (CPR) is?

The CPR at a glance

User Manual  
for internal and external use

Herzogenaurach 2018

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## General explanations:

Language:

The CPR is available in English.

Colours:

Primary Green 1

White 1

Secondary Green 1

Yellow 1

Yellow 2

Primary Green 2

General data query

These fields will be automatically filled with your data

Description of the desired information

Only these fields can be edited and are to be filled **by the supplier**

In these fields the subtotals will be calculated

In these fields the total prices will be calculated



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## General explanations:

Subtotal Material Scrap Costs:

**Subtotal Material Scrap Costs [EUR/1 pcs]:**

In this field the sum of material scrap costs will be calculated in the selected quantity unit

Subtotal Manufacturing Scrap Costs:

**Subtotal Manufacturing Scrap Costs [EUR/1 pcs]:**

In this field the sum of manufacturing scrap costs will be calculated in the selected quantity unit

Total Scrap Costs:

**Total Scrap Costs [EUR/1 pcs]:**

In this field the sum of material scrap costs and manufacturing scrap costs will be calculated

Subtotal Production Costs:

**Subtotal Production Costs [EUR/1 pcs]:**

In this field the sum of material costs, manufacturing costs, setup costs and total scrap costs will be calculated

Total Price:

**Total Price [EUR/1 pcs] (Price after reduction steps):**

In this field the sum of production costs, overhead costs and terms of payment and delivery costs will be calculated



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Header



CPR Link to the ERP cost		Cost Parameter Request (CPR)		Cost Parameter Request (Version: 3_ML_Communicat_20.03.2018)	
Part No. / Drawing No.:		Supplier Name:		Currency:	
Name / Part Name:		Supplier Manufacturing Location:		Date:	
Quantity in Year: 1:		Production Hours per Year:		Supplier Contact:	
Incooterms:		Currency / Price Unit (in): EUR		Schaeffler Contact: See PFD header details	
				Price Reduction Steps: 4 + 4 %	

Material Costs



Pos.	Material Designation [Plus Material / Purchased Parts / External Processes]	Reimbursement [per +]	Net Weight per Part [kg]	Gross Weight per Part [kg]	Material Price [Base] [EUR/kg]	Purchased Parts / External Processes [Quantity] [Price] [EUR/kg]	Material Overhead [%]	Scrap Rate [%]	Scrap Cost [EUR]	Material Cost [EUR/pc]
Mat 1										0,0000
Mat 2										0,0000
Mat 3										0,0000
Mat 4										0,0000
Mat 5										0,0000
Mat 6										0,0000
Mat 7										0,0000
Mat 8										0,0000
Mat 9										0,0000
Mat 10										0,0000
Subtotal Material Costs [EUR/1 pc]										0,0000

Manufacturing Costs



Pos.	Manufacturing Steps [Designation]	Material [Material Cost Flc] [e.g. Mat 1]	Equipment [Designation]	Net Output / CEE [pc/h]	Parts per Cycle [pc]	Working System Event [EUR]	Working System Hourly Rate [EUR/h]	Working System Cost per Part [EUR]	Direct Labor Hourly Rate [EUR/h]	Headcount at Working System [h]	Labor Cost per Part [EUR]	Residual Manufacturing Overhead [%]	Scrap Rate [%]	Scrap Cost [EUR]	Manufacturing Step Cost [EUR/pc]
1							0,0000				0,0000				0,0000
2							0,0000				0,0000				0,0000
3							0,0000				0,0000				0,0000
4							0,0000				0,0000				0,0000
5							0,0000				0,0000				0,0000
6							0,0000				0,0000				0,0000
7							0,0000				0,0000				0,0000
8							0,0000				0,0000				0,0000
9							0,0000				0,0000				0,0000
10							0,0000				0,0000				0,0000
Subtotal Manufacturing Costs [EUR/1 pc]															0,0000
Subtotal Manufacturing Scrap Costs [EUR/1 pc]															0,0000

Setup Costs



Pos.	Manufacturing Steps [Designation]	Manufacturing Lot Size [pc]	Setup Time [h]	Setup Labor Hourly Rate [EUR/h]	Working System Hourly Rate [EUR/h]	Setup Cost [EUR]	Residual Manufacturing Overhead [%]	Setup Cost [EUR/pc]
1								0,0000
2								0,0000
3								0,0000
4								0,0000
5								0,0000
Subtotal Setup Costs [EUR/1 pc]								0,0000
Total Setup Costs [EUR/1 pc]								0,0000
Subtotal Production Costs [EUR/1 pc]								0,0000

Product Specific Allocation



Pos.	Designation [e.g. Tooling, Drawings, Research & Development, Validation, etc.]	Cost [EUR]	Allocation Quantity [h]	Allocation Cost [EUR/pc]
1				0,0000
2				0,0000
3				0,0000
4				0,0000
5				0,0000
6				0,0000
7				0,0000
8				0,0000
Subtotal Allocation Costs [EUR/pc]				0,0000

One-time Payments



Pos.	Designation [e.g. Tooling, Drawings, Research & Development, Validation, etc.]	Lifetime in Cycles [pc]	Cost [EUR]
1			
2			
3			
4			
5			
6			
7			
Total One-time Payments [EUR]			0,0000

Overheads	SG&A	Profit on Material			Profit on Value Add			Allocation Costs [Allocation Coef/pc]	
		Base 1 [EUR/pc]	Base 2 [EUR/pc]	Base 3 [EUR/pc]	Base 1 [EUR/pc]	Base 2 [EUR/pc]	Base 3 [EUR/pc]		
		0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	
Subtotal Overhead Costs [EUR/1 pc]									0,0000

Terms of Payment and Delivery						
Financing [EUR/pc]	Transport [EUR/pc]	Days [d]	Flight Time [Days]	[EUR/pc]		
0,00 %	0,00 %					
Subtotal Terms of Payment and Delivery Costs [EUR/1 pc]						0,0000

Degree of Filling: [ ]  
[ ]  
0 %

The degree of filling of the CPR is < 50 %. Please make sure that all required information has been entered.

Total Price [EUR/1 pc] (Price after reduction steps): 0,0000

Overheads

Terms of Payment and Delivery

Degree of Filling

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Part No. / Drawing No.:		Supplier Name:		Commodity:	
Item Name:		Supplier Manufacturing Location:	0	Date:	
Quantity in Year 1:	0	Production Hours per Year:		Supplier Contact:	
Incoterms:		Currency / Price Unit in: [pcs]	EUR 1	Schaeffler Contact:	See RFQ header details-
				Price Reduction Steps:	4 x - 4%

- 1. Commodity:** Schaeffler internal commodity-code with commodity-name.
- 2. Part No. / Drawing No.:** Group internal project code of the product in which the requested part will be installed / Group's internal identification number of the part, based on respective drawing index.
- 3. Item / Part Name:** Group internal identification of the requested component.
- 4. Quantity in Year X:** The year after considering the price reduction steps.
- 5. Incoterms:** International commercial terms. Select a incoterm by activating the drop-down list box. FCA and DAP are available.
- 6. Supplier Name:** Legal company name.
- 7. Supplier Manufacturing Location:** Planned manufacturing location of requested part.
- 8. Production Hours per Year:** The production hours per year are calculated as follows:  
 (gross working hours per shift) \* (shifts per day) \* (working days per year)
- 9. Currency / Price Unit:** All common currencies are available. Price Unit: 1, 100, 1000 are available.
- 10. Date:** Date of issue of the CPR.
- 11. Supplier Contact:** First and surname of responsible contact person at supplier.
- 12. Schaeffler Contact:** First and surname of responsible contact person at Schaeffler.
- 13. Price Reduction Steps:** The total price refers to the peak year after the reduction steps of 4x – 4%.

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**Reminder:** Yellow 1 Only these fields can be edited and are to be filled *by the supplier*
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Material Designation	Reimbursement
[Raw Material / Purchased Parts / External Processes]	[yes / no]
	no
	yes
	no

**Material Designation:**

Exact designation of material. (Designation in English language)

Examples

- ▷ Raw Material: AISi9Cu3, 50CrMo4
- ▷ Purchased Parts: Procurements of external parts
- ▷ External Processes: Outsourced manufacturing steps

**Reimbursement:**

Amount to be refunded.

Example: Chips, Overflows, Sprues

Select "yes" by activating the drop-down list box or write in "yes" to agree a reimbursement.

If you do not have a reimbursement, select "no" or leave the field blank.

This option will subtract the calculated amount instead of adding it to the material costs.



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Net Weight per Part	Gross Weight per Part	Material Price	
[kg]	[kg]	[Base][EUR/kg]	[Surcharges][EUR/kg]

Purchased Parts / External Processes	
[Quantity][pcs]	[Price][EUR/pcs]

**Net Weight per Part:** Net remaining amount of material - after deduction of waste, scrap, irretrievable losses etc. Net Weight is also mentioned in drawings.

**Gross Weight per Part:** Gross amount of material – before deduction of waste, scrap, irretrievable losses etc.

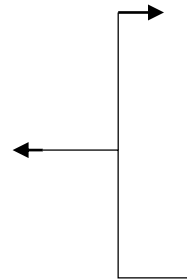
**Material Price [Base]:** The material cost are comprising the cost of direct material.

**Material Price [Surcharges]:** Material cost which are not included in the base price.  
 Example: Scrap and alloy surcharges

**Purchased Parts / External Processes [Quantity]:** The quantity is corresponding on the purchased parts or external processes and has **only** to be filled out combined with the cell "Purchased Parts / External Processes [Price]".

**Purchased Parts / External Processes [Price]:** Material, parts or processes of external procurements.  
 Example: Circuit boards / Coating

**Please note:**  
 Filling out this two fields at the same time will cause an error message. You can either enter a price for Raw Materials, or Purchased Parts / External Processes in all Material Costs rows.



Material Overhead	Scrap Rate	Scrap Cost
[%]	[%]	[EUR]

- Material Overhead:** Cost attributable to purchasing, receiving, handling, storing, and delivering materials used in assembly or production processes.
- Scrap Rate:** Material scrap cost in %, doesn't affect the material costs. (Information field)
- Scrap Cost:** Material scrap cost.

**Material Cost:**

Calculations:

*Raw Material:*

$(\text{Gross Weight per Part} * (\text{Material Price [Base]} + [\text{Surcharges}]) + (\text{Material Price [Base]} * \text{Gross Weight per Part} * \text{Material Overhead})) * \text{Price Unit}$

*Purchased Parts or External Processes:*

$(\text{Purchased Parts / External Processes [Quantity]} * \text{Purchased Parts / External Processes [Price]} + \text{Purchased Parts / External Processes [Quantity]} * \text{Purchased Parts / External Processes [Price]} * \text{Material Overhead}) * \text{Price Unit}$

*Reimbursement:*

If Gross Weight per Part > Net Weight per Part:

$(\text{Gross Weight per Part} * (\text{Material Price [Base]} + [\text{Surcharges}]) + (\text{Material Price [Base]} * \text{Gross Weight per Part} * \text{Material Overhead})) * \text{Price Unit}$

If Gross Weight per Part < Net Weight per Part:

$(\text{Net Weight per Part} * (\text{Material Price [Base]} + [\text{Surcharges}]) + (\text{Material Price [Base]} * \text{Net Weight per Part} * \text{Material Overhead})) * \text{Price Unit}$

*Error message :*

After filling following two fields at once, an error message will appear:  
 Material Price [Base] and Purchased Parts / External Processes [Price]

Material Cost
[EUR/1 pcs]
0,0000
0,0000
0,0000
0,0000
0,0000
0,0000
0,0000
0,0000
0,0000

**Subtotal Material Costs [EUR/1 pcs]:**

**Subtotal Material Costs:**

Subtotal of all material cost parameters.

**Examples:**  
 (Fictitious numbers)

**Raw Material:**

**Material Costs**

Pos.	Material Designation [Raw Material / Purchased Parts / External Processes]	Reimbursement [yes/no]	Net Weight per Part [kg]	Gross Weight per Part [kg]	Material Price		Purchased Parts / External Processes		Material Overhead [%]	Scrap Rate [%]	Scrap Cost [EUR]	Material Cost [EUR/pcs]
					[Base][EUR/kg]	[Surcharges][EUR/kg]	[Quantity][pcs]	[Price][EUR/pcs]				
Mat 1	50CrMo4		0,5000	1,0000	1,0000	1,0000			1,00			2,0100

**Purchased Parts / External Processes:**

**Material Costs**

Pos.	Material Designation [Raw Material / Purchased Parts / External Processes]	Reimbursement [yes/no]	Net Weight per Part [kg]	Gross Weight per Part [kg]	Material Price		Purchased Parts / External Processes		Material Overhead [%]	Scrap Rate [%]	Scrap Cost [EUR]	Material Cost [EUR/pcs]
					[Base][EUR/kg]	[Surcharges][EUR/kg]	[Quantity][pcs]	[Price][EUR/pcs]				
Mat 1	Screws 9 mm						3	1,0000	1,00			3,0300
Mat 2	Housing_FBT-GF 30						1	1,0000	1,00			1,0100
Mat 3	Sealing						2	1,0000	1,00			2,0200
Mat 4	PCB_FR4 6 layer (20 x 80 mm)						1	1,0000	1,00			1,0100
Mat 5	Heat Treatment						1	1,0000	1,00			1,0100

**Reimbursement:**

**Material Costs**

Pos.	Material Designation [Raw Material / Purchased Parts / External Processes]	Reimbursement [yes/no]	Net Weight per Part [kg]	Gross Weight per Part [kg]	Material Price		Purchased Parts / External Processes		Material Overhead [%]	Scrap Rate [%]	Scrap Cost [EUR]	Material Cost [EUR/pcs]
					[Base][EUR/kg]	[Surcharges][EUR/kg]	[Quantity][pcs]	[Price][EUR/pcs]				
Mat 1	Chips	yes		1,0000	1,0000							-1,0000
Mat 2	Sprues	yes		0,5000	1,0000							-0,5000
Mat 3	Turning	yes	0,5000		1,0000							-0,5000
Mat 4	Sawdust	yes	1,0000		1,0000							-1,0000
Mat 5	Trimings and Stampings	yes	0,5000		1,0000							-0,5000

**Error message:**

**Error: Please select either material price base OR cost for purchased parts/external processes for Mat 1**

Material Price		Purchased Parts / External Processes		Material Overhead [%]	Scrap Rate [%]	Scrap Cost [EUR]	Material Cost [EUR/pcs]
[Base][EUR/kg]	[Surcharges][EUR/kg]	[Quantity][pcs]	[Price][EUR/pcs]				
1,0000			1,0000				0,0000 0,0000



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Manufacturing Steps [Designation]	Material* [Material Cost Pos.] [e.g.: Mat.1]	Equipment [Designation]	Net Output / OEE [pos/h]	Parts per Cycle [pos]	Working System Invest [EUR]	Working System Hourly Rate [EUR/h]	Working System Cost per Part [EUR]
Annealing Annealing Anti-Corrosion Assembling							

### Manufacturing Steps:

Exact designation of process / production step or the sequence of operations, e.g. DIN, VDA.  
(Designation in English language)

Select a manufacturing step by activating the drop-down list box. At the next page you will find an overview of all available manufacturing steps. If you can not find the proper manufacturing step, you can choose "others", but then you should necessarily use the Equipment [Designation] field to explain your manufacturing step in detail.

### Material:

For assemblies this field can be filled with the affected Material Positions.  
Example: M1, M2, M4

### Equipment:

Designation - Brand / Type - of the machine or equipment. (Designation in English language)

### Net Output / OEE:

The output quantity will be defined as number of good parts subtracted of scrap and set up in regard of utilization / Overall Equipment Effectiveness.

### Parts per Cycle:

Number of parts which are manufactured in one cycle, e.g. 6 cavity tool.

### Working System Invest:

Cost of working system in the year of acquisition.

### Working System Hourly Rate:

The machine hourly rate is the sum of costs, which causes a machine during one hour of operation. Machine attributable costs include calculatory depreciation, calculated interest, cost of maintenance and insurance, space and energy costs of the working system, maintenance costs and auxiliary and operating materials.

### Working System Cost per Part:

The machine cost of the manufacturing step are calculated as follows:  
(Working System Hourly Rate / Net Output)



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## Overview Manufacturing Steps:

alpha-v-check	disassembling	injection	quench + tempering	winding
annealing	DMC marking	inspection	reaming	x-ray
anti-corrosion	drilling	intermediate test	reflow oven	others
AOI / automated optical inspection	drying	laser marking	rolling	
arc forming	durability test	leakage test	selective soldering	
assembling	e-coating	liquid dispensing, application (seal, paste)	setting	
balancing	eddy current	loading, feeding	shearing	
bending	EOL test / end of line test	machining	shot blasting	
blanking	fine cutting	magnetization	shot peening	
bonding	finishing	marking	sintering	
boring	forging	measuring	sizing	
broaching	forming	melting	skiving	
brushing	friction welding	micro peening	SMT / surface mounted technology	
calibration	functional test	milling	software flashing	
carburizing	gating removal	mixing	solder paste printing	
casting	gearing	molding	soldering	
chamfering	glue	MPI	sorting	
cleaning	green machining	nitriding	spinning	
coating	grinding ID	oiling	spot welding	
coiling	grinding OD	others / miscellaneous	stamping	
compacting	handling	outbound logistics	straightening	
condensation	HAR / hot air riveting	overmolding	surface treatment	
conservation	hardening	pack	tempering	
cooling	heat- / force-set test	PCB depaneling	testing	
cooling lubricant system	heat treatment	phosphating	transform	
crimping	high pressure washing	pickling	transport	
curing	hobbing	plating	trimming	
cutting	honoring	polishing	tumbling	
debinding	hot bar soldering	post curing	turning	
deburring	hot rolling	potting	ultrasonic cleaning	
deep drawing	hot setting	powder coating	ultrasonic welding	
deflection test	hot staking	preforming	varnishing	
demagnetize	IC test / integrated circuit test	press-fit assembly	vulcanization	
dephosphating	inbound logistics	pressing	washing	
detensioning	induction heating	pressure test	welding	



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Direct Labor Hourly Rate	Headcount at Working System	Labor Cost per Part	Residual Manufacturing Overhead	Scrap Rate	Scrap Cost
[EUR/h]	[%]	[EUR]	[%]	[%]	[EUR]

**Direct Labor Hourly Rate:** The labor costs per hour needed for staff employed in this manufacturing process are made up of the direct hourly wage and the additional labor costs.

**Headcount at Working System:** The Head Count at Working System are calculated as follows:  
 (Number Workers / Number of Supervised Working Systems)

**Labor Cost per Part:** The labor cost per part of the manufacturing step are calculated as follows:  
 ((Direct Labor Hourly Rate / Net Output) \* Headcount at Working System)

**Residual Manufacturing Overhead:** Residual manufacturing overhead costs (RMOC) include all manufacturing costs that cannot be directly allocated. These include, among others, indirect personnel, general equipment and auxiliary areas as well as indirect materials and auxiliary and operating supplies.

**Scrap Rate:** Manufacturing scrap cost in %, doesn't affect the manufacturing costs. (Information field)

**Scrap Costs:** Manufacturing scrap cost.

**Manufacturing Cost:**

Manufacturing Step Cost	
	[EUR/1 pcs]
.....	0,0000
.....	0,0000
.....	0,0000
.....	0,0000
.....	0,0000
.....	0,0000
.....	0,0000
.....	0,0000
.....	0,0000
.....	0,0000
.....	0,0000
.....	0,0000

**Calculations:**

*Working System Cost per Part:*  
 (Working System Hourly Rate / Net Output)

*Labor Cost per Part:*  
 ((Direct Labor Hourly Rate / Net Output) \* Headcount at Working System)

*Manufacturing Step Cost:*  
 ((Working System Cost per Part + Labor Cost per Part) + ((Working System Cost per Part + Labor Cost per Part) \* Residual Manufacturing Overhead)) \* Price Unit

**Subtotal Manufacturing Costs [EUR/1 pcs]:**

**Subtotal Manufacturing Costs:** Subtotal of all manufacturing cost parameters, excluded setup costs.

**Examples:**  
 (Fictitious numbers)

**Annealing:**

**Manufacturing Costs**

Pos.	Manufacturing Steps [Designation]	Material* [Material Cost Pos.] [e.g., Mat 1]	Equipment [Designation]	Net Output / OEE [pcs/h]	Parts per Cycle [pcs]	Working System Invest [EUR]	Working System Hourly Rate [EUR/h]	Working System Cost per Part [EUR]	Direct Labor Hourly Rate [EUR/h]	Headcount at Working System [%]	Labor Cost per Part [EUR]	Residual Manufacturing Overhead [%]	Scrap Rate [%]	Scrap Cost [EUR]	Manufacturing Step Cost [EUR/h pcs]
1	Annealing		Multipindle Index MS32C	250	100	800.000	18,50	0,0740	8,50	20	0,0068	4,00			0,0840

**Assemblies:**

**Manufacturing Costs**

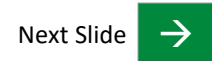
Pos.	Manufacturing Steps [Designation]	Material* [Material Cost Pos.] [e.g., Mat 1]	Equipment [Designation]	Net Output / OEE [pcs/h]	Parts per Cycle [pcs]	Working System Invest [EUR]	Working System Hourly Rate [EUR/h]	Working System Cost per Part [EUR]	Direct Labor Hourly Rate [EUR/h]	Headcount at Working System [%]	Labor Cost per Part [EUR]	Residual Manufacturing Overhead [%]	Scrap Rate [%]	Scrap Cost [EUR]	Manufacturing Step Cost [EUR/h pcs]
1	Assembling	M1-M3	Assembly Line Brand 123	400	4	1500.000	5,50	0,0138	14,00	50	0,0175	5,00	0,10	0,0100	0,0328



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Manufacturing Steps [Designation]	Manufacturing Lot Size [pcs]	Setup Time [h]	Setup Labor Hourly Rate [EUR/h]	Working System Hourly Rate [EUR/h]
Annealing				
Anti-Corrosion				
Assembling				

**Manufacturing Steps:**

Exact designation of process / production step or the sequence of operations, e.g. DIN, VDA.  
(Designation in English language)

Select a manufacturing step by activating the drop-down list box. At the next page you will find an overview of all available manufacturing steps. If you can not find the proper manufacturing step, you can choose "others". Please make sure that the **manufacturing steps** from the **Setup Costs** refers to the **manufacturing steps** from the **Manufacturing Costs**.

**Manufacturing Lot Size:**

Number of pieces per manufacturing lot.

**Setup Time:**

The setup time includes all efforts caused by the arm- and disarming processes of the production unit.  
The setup time has to be filled in absolute hours.

**Setup Labor Hourly Rate:**

The labor costs per hour needed for staff employed in this setup process are made up of the hourly wages of direct and indirect setup processes.

**Working System Hourly Rate:**

The machine hourly rate is the sum of costs, which causes a machine during one hour of operation. Machine attributable costs include calculatory depreciation, calculated interest, cost of maintenance and insurance, space and energy costs of the working system, maintenance costs and auxiliary and operating materials.

**Overview Manufacturing Steps:**

alpha-v-check	disassembling	injection	quench + tempering	winding
annealing	DMC marking	inspection	reaming	x-ray
anti-corrosion	drilling	intermediate test	reflow oven	others
AOI / automated optical inspection	drying	laser marking	rolling	
arc forming	durability test	leakage test	selective soldering	
assembling	e-coating	liquid dispensing, application (seal, paste)	setting	
balancing	eddy current	loading, feeding	shearing	
bending	EOL test / end of line test	machining	shot blasting	
blanking	fine cutting	magnetization	shot peening	
bonding	finishing	marking	sintering	
boring	forging	measuring	sizing	
broaching	forming	melting	skiving	
brushing	friction welding	micro peening	SMT / surface mounted technology	
calibration	functional test	milling	software flashing	
carburizing	gating removal	mixing	solder paste printing	
casting	gearing	molding	soldering	
chamfering	glue	MPI	sorting	
cleaning	green machining	nitriding	spinning	
coating	grinding ID	oiling	spot welding	
coiling	grinding OD	others / miscellaneous	stamping	
compacting	handling	outbound logistics	straightening	
condensation	HAR / hot air riveting	overmolding	surface treatment	
conservation	hardening	pack	tempering	
cooling	heat- / force-set test	PCB depaneling	testing	
cooling lubricant system	heat treatment	phosphating	transform	
crimping	high pressure washing	pickling	transport	
curing	hobbing	plating	trimming	
cutting	honoring	polishing	tumbling	
debinding	hot bar soldering	post curing	turning	
deburring	hot rolling	potting	ultrasonic cleaning	
deep drawing	hot setting	powder coating	ultrasonic welding	
deflection test	hot staking	preforming	varnishing	
demagnetize	IC test / integrated circuit test	press-fit assembly	vulcanization	
dephosphating	inbound logistics	pressing	washing	
detensioning	induction heating	pressure test	welding	

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Setup Cost
[EUR]

**Setup Cost:**  
(without Overhead)

The setup costs include all costs caused by the arm- and disarming processes of the production unit, e.g. personnel costs and machinery costs.

The setup cost of the manufacturing step are calculated as follows:  
 $((\text{Setup Labor Hourly Rate} + \text{Working System Hourly Rate}) * \text{Setup Time})$

Residual Manufacturing Overhead
[%]

**Residual Manufacturing Overhead:**

Residual manufacturing overhead costs (RMOC) include all manufacturing costs that cannot be directly allocated. These include, among others, indirect personnel, general equipment and auxiliary areas as well as indirect materials and auxiliary and operating supplies.

**Setup Cost:**

Calculations:

Setup Cost
[EUR/1 pcs]
0,0000
0,0000
0,0000
0,0000
0,0000

*Setup Cost (without Overhead):*  
 $((\text{Setup Labor Hourly Rate} + \text{Working System Hourly Rate}) * \text{Setup Time})$

*Setup Cost:*  
 $((\text{Setup Labor Hourly Rate} + \text{Working System Hourly Rate}) * \text{Setup Time}) + ((\text{Setup Labor Hourly Rate} + \text{Working System Hourly Rate}) * \text{Setup Time}) * \text{Residual Manufacturing Overhead} / \text{Manufacturing Lot Size} * \text{Price Unit}$

**Subtotal Setup Costs [EUR/1 pcs]:**

**Subtotal Setup Costs:**

Subtotal of all setup cost parameters.

Examples:  
(Fictitious numbers)

Turning:

Setup Costs

Pos.	Manufacturing Steps [Designation]	Manufacturing Lot Size [pcs]	Setup Time [h]	Setup Labor Hourly Rate [EUR/h]	Working System Hourly Rate [EUR/h]	Setup Cost [EUR]	Residual Manufacturing Overhead [%]	Setup Cost [EUR/pcs]
1	Turning	5,000	3,00	5,50	25,50	93,0000	1,00	0,0188



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Designation	Cost	Allocation Quantity
[e.g. Tooling, Devices, Research & Development, Validation, etc.]	[EUR]	[1..n]

**Designation:** Exact designation of allocated tools, devices, R&D and validations. (Designation in English language)

**Cost:** Allocation Cost

**Allocation Quantity:** Number of parts over which the costs are allocated in the piece price.

**Allocation Cost:** Calculation:

*Allocation Cost:*  
 (Cost / Allocation Quantity)

Allocation Cost
[EUR/pcs]
0,0000
0,0000
0,0000
0,0000
0,0000
0,0000
0,0000
0,0000
0,0000
0,0000

**Subtotal Allocation Costs [EUR/pcs]:**

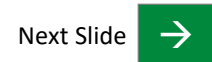
**Subtotal Allocation Costs:** Subtotal of all allocation cost parameters.



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Designation [e.g. Tooling, Devices, Research & Development, Validation, etc.]	Lifetime in Cycles [pcs]
--	-----------------------------

**Designation:** Exact designation of tools, devices, R&D and validations. (Designation in English language)

**Lifetime in Cycles:** Lifetime of the respective tools and / or devices. This Lifetime will be stated in pieces per total.

Cost [EUR]
---------------

**Cost:** One-time Costs.

**Total One-time Payments [EUR]:**

**Total One-time Payments:** Total of all one-time payments.

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**Overheads**

SG&A		Profit on Material		Profit on Value Add		Allocation Costs
Base 1	[%]	Base 2	[%]	Base 3	[%]	[Allocation Cost/pcs]
0,0000		0,0000		0,0000		0,0000
0,0000	[EUR/1 pcs]	0,0000	[EUR/1 pcs]	0,0000	[EUR/1 pcs]	0,0000
<b>Subtotal Overhead Costs [EUR/1 pcs]:</b>						<b>0,0000</b>

Base 1 = Production Costs, Base 2 = Material Costs without sum of Surcharges, Base 3 = Sum of Manufacturing Costs and Setup Costs

- SG&A:** The sales, general and administration costs are percentage based on manufacturing costs. These includes for example costs for central expenses as business functions and costs of distribution or storage of finished goods. The SG&A are calculated as follows:  
 (Subtotal Production Costs \* SG&A)
- Profit on Material:** The difference between the revenue and costs for a period according to a cost accounting, based on material. The profit on material is calculated as follows:  
 ((Subtotal Material Costs – Sum of Material Price [Surcharges] \* Gross Weight per Part) \* Profit on Material)
- Profit on Value Add:** The difference between the revenue and costs for a period according to a cost accounting, based on value add. The profit on value add is calculated as follows:  
 ((Subtotal Manufacturing Costs + Subtotal Setup Costs) \* Profit on Value Add)
- Allocation Costs:** The sum of the allocation costs will appear here. In the second row the allocation costs will be shown in the selected price unit.

**Subtotal Overhead Costs [EUR/1 pcs]:**

**Subtotal Overhead Costs:** Subtotal of all overhead cost parameters.



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# Terms of Payment and Delivery

## Terms of Payment and Delivery

Packaging [EUR/1 pcs]	Transport [EUR/1 pcs]	Duty		Payment Terms [days]
		Base	[%]	[EUR/1 pcs]
0,00 %	0,00 %		0,00	
<b>Subtotal Terms of Payment and Delivery Costs [EUR/1 pcs]:</b>				<b>0,0000</b>

**Packaging:**

Costs of the packaging.  
The packaging percentage will be calculated as follows:  
(Packaging / Subtotal Production Costs)

**Transport:**

Sum of transportation costs according to incoterms.  
The transport percentage will be calculated as follows:  
(Transport / Subtotal Production Costs)

**Duty:**

All efforts of duty. Please state the base and the costs in the selected quantity unit, the percentage will be calculated automatically.  
The duty percentage is calculated as follows:  
(Duty Costs / Duty Base)

**Payment Terms:**

All efforts of payment terms. In the first row the days and in the second row the quotation currency are to be filled.

<b>Subtotal Terms of Payment and Delivery Costs [EUR/1 pcs]:</b>
--

**Subtotal Terms of Payment and Delivery Costs:**

Subtotal of all terms of payment and delivery cost parameters.



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Degree of Filling:

[%]
15 %

The degree of filling of the CPR is < 50 %. Please make sure that all required information has been entered.

Degree of Filling:

[%]
100 %

Degree of Filling:

The percentage will show the fill grade of the CPR.  
By entering data it will automatically change its status.  
There is a maximum of 100 %.

The degree of filling shows us your transparency in cost – Schaeffler always expects 100%.  
**If you do not have any costs that you can list in some fields, please enter "0" in these fields to make sure you do not negatively affect the degree of filling!**



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**SupplyOn Homepage:**

<https://www.supplyon.com/de/>

**SupplyOn Manuals:**

<https://cms.application.prd.supplyon.com/en/info-portal/schaeffler-handout?bcid=163&rtid=1>

You can find manuals here that you need in dealing with the SupplyOn integrated CPR.  
For sourcing manuals please follow the service button "Sourcing".



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**Because yesterday we were  
already thinking about tomorrow.**



**Don't miss your chance to join our mission on the way to excellence – thank you**

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