

Avanade Flexible Calculation

User Documentation

Microsoft Dynamics 365

for Finance and Operations

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Document Information:

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Document Revision History

Version	Date	Changed By	Items Changed Since Previous Version
1.0	10/04/2018	Vidya Sagar	Version 3.0



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1 Introduction

All types of calculation in the range of overhead calculation can be mapped with the flexible calculation module **Flexible Calculation** in Dynamics 365 for Finance and Operations. The principle is based on the freely definable calculation schemas. Flexible Calculation is suitable for the trade (without BOMs) as also for production enterprises (with BOMs and work route). The different calculation plans and cost models can be processed easily in costing calculation. The continuous market changes are thus mapped comparable with small effort.

1.1 Performance characteristics

Implementing a calculation:

The calculation can be done directly from the following screens:

- Production job
- Customer offer
- Customer job
- Item stock

The calculation can be done one-level or multi-level (Explosion of the assemblies) depending upon selection. The calculation batch size can be stored in the standard job settings "Lager" [warehouse] of the Product master for each production stage in the quantity fields *minimum job quantity*, *maximum job quantity* or *standard job quantity*. The used material can be differently valued on request. The pricing can be done amongst other things as per purchase price, as per cost price or by the current purchase prices of the commercial agreements. The calculation overheads can be registered in the calculation schema depending on quantity and time. If necessary these can be customized with the costing calculation.

The functionality of the **Flexible Calculation** is always limited to the active clients.

Overview of calculation structure:

- **Calculation schemas:** The calculation schemas, consisting of costing row rows and variables is the computation base of the calculation. Several schemas and calculation models can be defined.
- **Calculation formulas:** The values are computed in the costing rows, rows through formulas.
- **Direct material costs (MEK),** usually raw material (purchased items) is valued depending upon requirement for example for the cost price, purchase price or with consideration of the current commercial agreements.
- **Material overheads (MGK):** Overhead on material can be made in general or differentiated as per Products or Products groups.
- **Manufacturing direct costs (FEK):** The valuation records for resources (e.g. machines) are separated according to setup and production costs.
- **Production costs overheads (FGK):** Overheads on production costs are calculated in general or after resources or resources groups.
- **Administration and Sales costs (VVGK):** Administration- and sales costs can be allocated in any number.



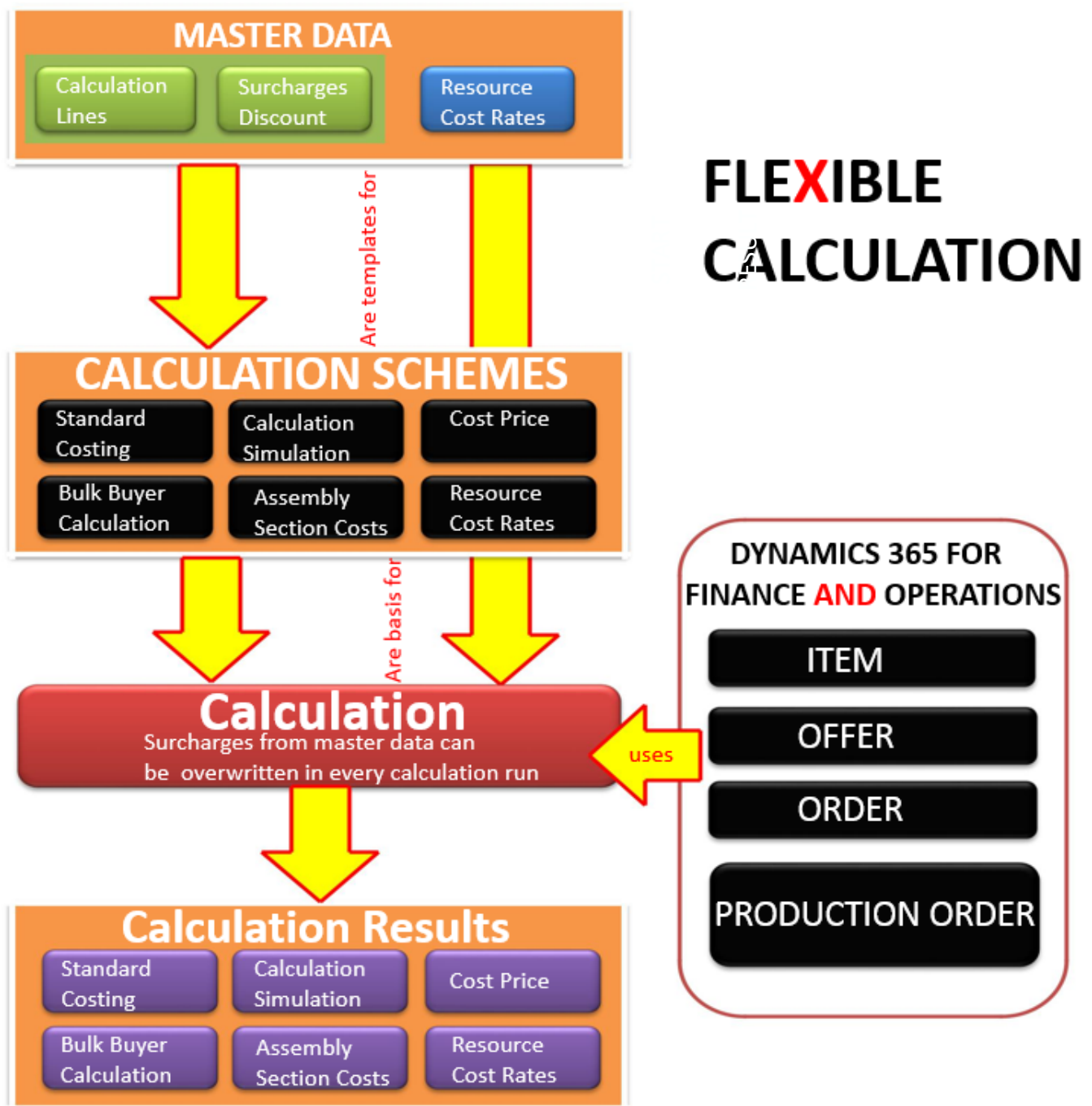
- **General overheads:** These include for example calculation overheads from discounts, profit overheads, cash discount etc.
- **Costing simulation:** Temporary market changes can be considered in the overheads (subsequent year calculation).
- **Cost allocations:** Cost redistribution for tool/teachings can be considered as unit cost prices per unit.

The result:

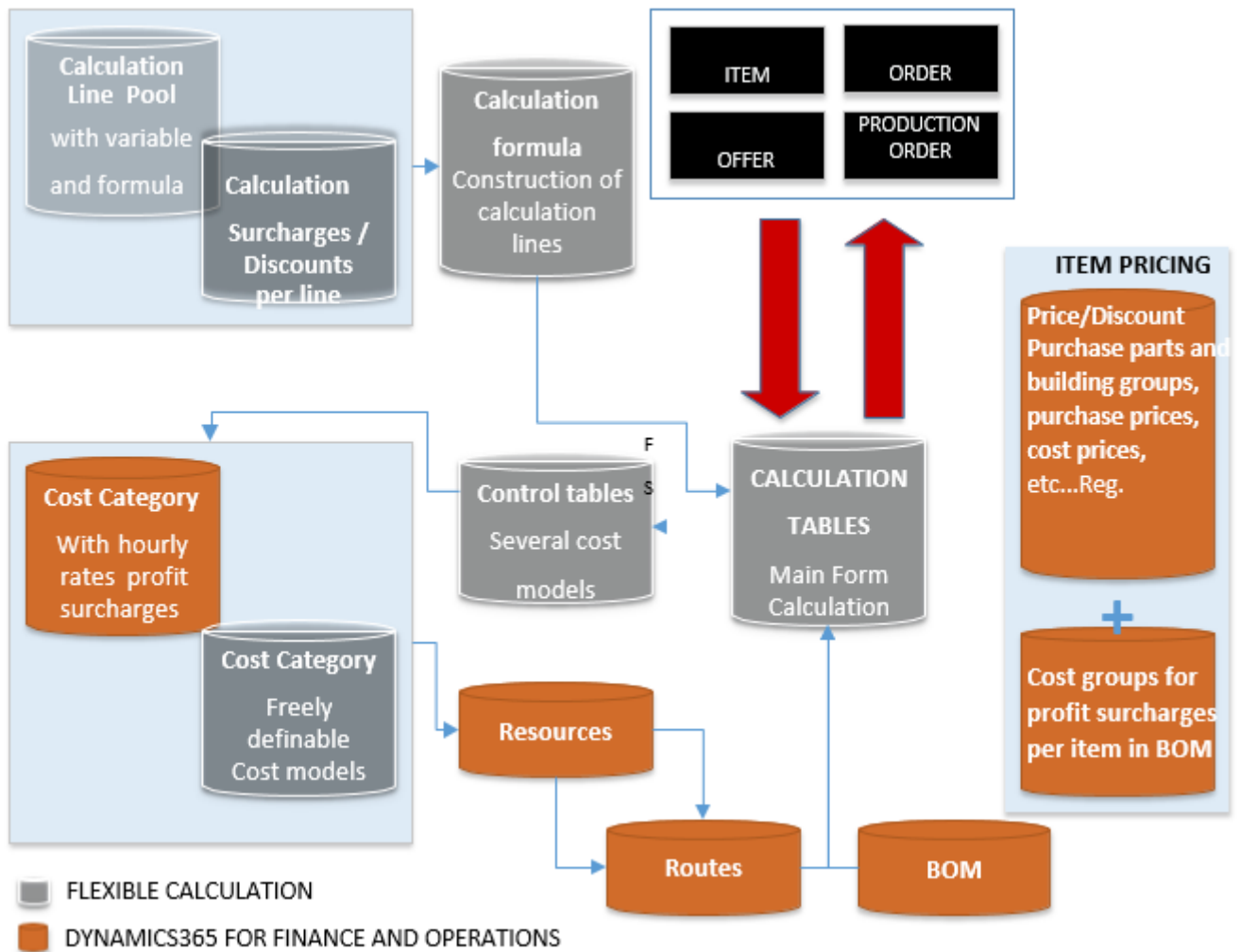
- **Acquisition in Product master:** The determined price per unit can be transferred as calculation, simulation, and acquisition or selling price to the Product master.
- **Acquisition in order and offer:** The determined unit price of the final stage can be transferred to the offer and/or to the job.
- **Representation of the calculation result:** The result is displayed in a clear structure representation.



2 Installation Structure



3 Table and data structure



4 Calculation parameter

The module basic settings are defined in the form *calculation parameters*.

4.1 General

Calculation parameters

General

Number sequences

SCHEME

Scheme number

050-200

DEFAULT VALUES FOR NEW SCHEMES

BASIS

Extra charges modifiable

No

Trade agreements

Yes

Include also discount

No

RESOURCE COSTS

Version

10

ASSEMBLIES

Explode assemblies

No

Base price

According to calculation group

Search strategy

Active

Version

Alt. std. price

No

Search strategy

Active

Version

PURCHASED ITEMS

Base price

According to calculation group

Search strategy

Active

Version

Alt. std. price

No

Search strategy

Active

Version

QUANTITY BASE

Final product

Minimum

Assemblies

Standard/Minimum

RESULT

SALES ORDER LINE

Transfer to sales line

No

CALCULATED PRICE

Transfer as calculated price

No

Activate

No

Version

SIMULATION PRICE

Transfer as simulation price

No

Activate

No

Version

COST PRICE

Transfer as invent price

No

Activate

No

Version

SALES PRICE

Transfer as sales price

No

Activate

No

Version

ZERO-PROTECTION

Do not overwrite with zero

No

4.1.1 Schema



SCHEME

Scheme number

050-200

Schema number	Calculation schema for new calculations
---------------	---

4.1.2 Basis

BASIS
 Extra charges modifiable
 No ☐
 Trade agreements
 Yes ☒
 Include also discount
 No ☐

Modifiable overheads	The overheads from the costing row rows are copied with the start of the calculation. With selection, the copied overhead rates can be customized for the costing calculation (Simulation different market-and competitive positions).
Commercial agreements	Should the commercial agreements be considered for the pricing calculation? Only possible if purchase price is selected as price-basis and a price in the commercial agreements is deposited for the Product in combination with the main supplier.
Discounts also	If additionally, to the processing of the commercial agreements also the discounts in the pricing should be considered?

4.1.3 Resources costs

RESOURCE COSTS
 Version

Version	Selection of a post calculation version as valuation basis. If no post calculation version is selected, then it is calculated with the active cost category price.
----------------	--

4.1.4 Assemblies

ASSEMBLIES

Explode assemblies

No

Base price

According to calculation group

Search strategy

Active

Version

Alt. std. price

No

Search strategy

Active

Version

Explosion of Assemblies	If the calculation should be done single-level (base price) or multi-level (explosion of the assemblies)? Yes = multi-level processing; all the successor fields in the data area assemblies are not relevant.
Basis Price	The settings in the field basis price is only relevant if the Flag Assembly explosion is not activated:

	<ul style="list-style-type: none"> • Product Sales pricing Product master->administer costs • Product price->Price type: Pricing. If no price is found, then the price <i>Product master->In the range selling->Price</i> is considered. • Product cost price Product master->administer costs ->Product price->price type: Costs. If no price is found, then the price <i>item stock->area sales->price</i> is considered. • Product purchase price Product master ->administer costs ->Product price->price type: Costs. If no price is found, then the price <i>Product master ->In the area sales ->Price</i> is considered. • Last purchase price The last booked purchase price with a purchase invoice. • Calculation price Product master->administer costs ->Product price->price type: Calculation price • Simulation price Product master->administer costs ->Product price->price type: Simulation price • Backbilling group The price search is performed according to the costing groups (standard functionality of Dynamics 365 for Finance and Operations). Parameterization of the costing group see <i>7.2.1 Costing group</i>.
Search sequence (basis price)	<p>As possibly several prices can be found as basis price, it can be indicated after which strategy the basis price for the calculation is selected:</p> <ul style="list-style-type: none"> • Active: the active base price is selected. If several active basis prices are found, most current basis price from the activation date is selected. • Version: A price of a price version should be found. If several basis prices of a price version are found, the latest basis price of the activation date (or from- date) is selected. Thus, the prices do not have to be activated. • Version active then: A price of a price version is to be found. If no basis price of a price version can be found, the latest active basis price is
Version (basis price)	The current post calculation version, which should be used for the basis pricing.
Old. Std. - price	If the pricing could not be successfully performed over the field basis price, the <i>Basis cost price</i> can be used as alternative.
Search sequence (Old. Std.price)	See <i>search sequence (basis price)</i> with the difference that it concerns the alternative standard price (basis cost price).
Version (Old. Std.price)	The current post calculation version, which should be used for the basis cost pricing.

If a module is available for the bill of material item with costing group settings, end the *BOMbill of material explosion*, then the position for costing is handled like a purchased part. Otherwise the settings for assemblies are applicable.

Filter

Handel

MC1
Material Cost 1

STD
STD

Calculation groups

Calculation group

Handel

Name

General

COST PRICE

Cost price model

Trade agreement

Alternate cost price model

Trade agreement

SALES PRICE

Sales price model

Cost group

OTHER

Stop explosion

Yes

WARNINGS

☐ No BOM

☐ No route

☐ No resources

☐ No consumption

☒ No cost price

Max. age of cost price

0

Min. contribution margin

0.00

4.1.5 Purchased items

PURCHASED ITEMS

Base price

According to calculation group

Search strategy

Active

Version

Alt. std. price

No

Search strategy

Active

Version

Basis price	Selection of the required pricing for purchased items (Product type, Product and service, as well as BOMbill of materials, which are not exploded):
--------------------	---

	<ul style="list-style-type: none"> • Product selling price Product master->administer costs ->Product price->price type: Selling price. If no price is found, then the price <i>Product master->area sales->price</i> is considered. • Product cost price Product master->administer costs ->Product price->price type: Selling price. If no price is found, then the price <i>Product master->area sales->price</i> is considered. • Product purchase price Product master->administer costs ->Product price->price type: Selling price. If no price is found, then the price <i>Product master->area sales->price</i> is considered. • Last purchase price The last with a purchase invoice booked purchase price. • Calculation price Product master->administer costs ->Product price->price type: Calculation price • Simulation price Product master->administer costs ->Product price->Price type : Costing simulation price • After costing groups The price search is done according to the costing groups (standard functionality of Dynamics AX). Parameterization of the costing group see 7.2.1 Costing Group.
Search sequence (basis price)	See <i>search sequence (base price)</i> within the area <i>assemblies</i> .
Version (basis price)	See <i>version (base price)</i> within the area <i>assemblies</i>
Old. Std.price	See <i>Old Std.Price</i> within the area <i>assemblies</i>
Search sequence (alto. Hr. price)	See <i>search sequence (alto. Hr. - price)</i> within the range <i>Assemblies</i>
Version (alto. Hr. price)	See <i>version (Old Std.Price)</i> within the range <i>Assemblies</i>

4.1.6 Quantity basis

QUANTITY BASE

Final product

Minimum

Assemblies

Standard/Minimum

Final product

None	The lot quantities are not considered.
------	--



Minimum	<p>If the quantity in the calculation is smaller than the minimum lot size, then it is assumed that even if the minimum lot size is produced and the setup costs are considered proportionately for the calculation.</p> <p>Example: Quantity in calculation: 3 Minimum lot size: 100</p> <p>Result: The Setup costs enters at 3/100 in the calculation</p>
Standard	<p>If the quantity in the calculation is smaller than the standard lot size, then it is accepted that even if the standard lot size is produced and setup costs are considered proportionately for the calculation.</p> <p>Example such as minimum, only with standard -instead of minimum lot size</p>
Maximum	<p>If the quantity in the calculation is larger than the maximum lot size, then it is assumed always after attaining the maximum lot size renewed setup costs occur.</p> <p>Example: Quantity in calculation: 350' 000 Maximum lot size: 100' 000</p> <p>Result: The setup costs are calculated four times.</p>
Standard/Minimum	Functions like minimum however uses the higher value of minimum or standard lot size.
Minimum/Maximum	<p>If the minimum lot size is fallen below, then setup costs are proportionately considered as in the setting "minimum".</p> <p>If the maximum lot size is exceeded, then the setup costs are again calculated while reaching the maximum lot size as in the setting "maximum".</p>
Minimum / Standard/Maximum	Functions like the setting "Minimum/Maximum", only that the larger value of Minimum or Standard lot size is used.
Standard/Maximum	<p>If the standard lot size is fallen below, then setup costs are proportionately considered, as in the setting "standard".</p> <p>If the maximum lot size is exceeded, then setup costs are again calculated while reaching the maximum lot size, as in the setting "maximum".</p>

Assemblies

The quantity basis for the costing of setup costs on level modules (stage 1 - n) can be adjusted likewise (like the settings *quantity-basis Final product*).

4.1.7 Result



RESULT

SALES ORDER LINE

Transfer to sales line

No ☐

CALCULATED PRICE

Transfer as calculated price

No ☐

Activate

No ☐

Version

SIMULATION PRICE

Transfer as simulation price

No ☐

Activate

No ☐

Version

COST PRICE

Transfer as invent price

No ☐

Activate

No ☐

Version

SALES PRICE

Transfer as sales price

No ☐

Activate

No ☐

Version

Transfer to the order item	The calculation result per unit is transferred to the referenced offer and/or or- der item.
Takeover / Transfer as calculation price	The calculation result per unit is transferred to the Product price, price type calculation price.
Version (calculation price)	The price version must be specified. It must be ensured that a price version is selected, which allows a calculation price (parameter setting price version).
Activate (calculation price)	Should the calculation price be immediately activated?
Transfer as simulation price	The calculation result per unit (simulation) is transferred to the Product master in the field simulation price.
Version (simulation price)	It must be ensured that a price version is selected, which allows a simulation price (parameter setting price version).
Activate (simulation price)	Should the simulation price be immediately activated?
Transfer as cost price	The calculation result per unit is transferred to the item price type of price costs.
Version (cost price)	It must be ensured that a price version is selected, which allows a cost price (parameter setting price version).
Activate (cost price)	Should the cost price be immediately activated?
Transfer as selling price	The calculation result per unit is transferred to the Product price, price type selling price.

Version (selling price)	It must be ensured that a price version is selected, which allows a selling price (parameter setting price version).
Activate (selling price)	Should the selling price be immediately activated?

4.1.7 Protection



ZERO-PROTECTION

Do not overwrite with zero

No



Do not overwrite with zero The calculation result is not written back with result = 0 in the Product price.

4.2 Number range

Calculation parameters

General

Set up number sequences for calculations

Group

Number sequences

Reference	Number sequence code
Calculation number	Cal1
Schema number	Cal1
Calculation bom number	Cal1
Calculation route number	Cal1
Calculation product number	Cal1

Calculation number	Unique key, which is allocated to calculations.
Schema number	Unique key, which is allocated to the calculation schemas.
BOM Costing BOM number	Unique key to the numbering of the costing calculation of BOM bill of materials.
Costing calculation task list number	Unique key for the numbering of the calculation task lists BOM.
Costing calculation product number	Unique costing calculation product identification.



5 Costing row pool

Costing rows are managed in the form **costing row pool**.

Calculation line pool

Overview

General

✓	Line ↑	Variable	Line name	Type	Only ...	Formula	Extra charges ...
	80	Z_Forschung	Forschungsanteil (%)	Charge for BOM	<input type="checkbox"/>	SumHerstellkosten * CHARGE / ...	<input checked="" type="checkbox"/>
✓	80	Z_Gewinn	Gewinnzuschlag (via Ko...	Profit charge for ...	<input checked="" type="checkbox"/>	SumHerstellkosten * CHARGE ...	<input checked="" type="checkbox"/>
	80	Z_Lagergemei...	Lagergemeinkosten Hal...	Charge for BOM	<input type="checkbox"/>	HalbFabr * CHARGE / 100	<input type="checkbox"/>
	80	Z_Lagergemei...	Lagergemeinkosten Ro...	Material charges	<input type="checkbox"/>	Material * CHARGE / 100	<input type="checkbox"/>
	80	Z_STLZuschl	Zuschlag für Stückliste	Charge for BOM	<input type="checkbox"/>	SumMaterial * 2	<input type="checkbox"/>

+ New

🗑 Delete

Overview

General

Valid for	Dimension name	Relation	From date	To date	From amount	To amount	Extra charge amount	Find next
All ▾			3/13/2018 📅	📅	0.00	0.00	150.00	<input type="checkbox"/>

Item	Item number for the sorting
Variable	Unique identification of the costing row. Important: No umlauts used for variable names.
Line name	Description of the costing row.
Type	Defines the costing row (see chapter 5.1 <i>costing row type</i>). It is possible to create several costing rows of the same type.
Only for Final product	This parameter is valid only for overheads. The result of the row is calculated on the final product (without marking, the costing takes place in each calculation stage).
Formula	The formula determines costing in the costing row (see chapter 5.2 <i>formula definitions</i>).
Modifiable overheads	The overhead in the cost of the calculation (calculation run) should be changeable. The controlling takes place in combination with the flag overheads modifiable in the form parameter and/or in the calculation

Note that:

During the creation of a costing row, it must be paid attention to the fact that the character string ***ZUS* (Surcharges)** and ***MENGE* (Quantity)** can be used only in the field formula. The appropriate character string is used internally in costing routines.

5.1 Costing row type

The following selection options are available in the costing row:

Text	The text is used for a clear representation of the calculation result in the screen and in the report.
Material costs	The individual components of the BOM are calculated.
Material overheads	The overheads to the material are defined (formula), if necessary with different overhead rates to Product groups or Products.
Production costs-setup	The setup operation (tr, trB) is calculated in the work plan and/or operation. Basically, the production is valued through the cost category. In the setup operation the cost category and thus production direct costs are determined through the field setup cost category.
Production costs Processing	The processing operation (te, teB) is calculated in the work plan and/or operation. Basically, the production is valued through the cost category. In the processing operation, the cost category and thus production direct costs are determined through the field processing time cost category.
Production costs-unit	The valuation of the unit cost is calculated in the work plan and/or operation. Basically, the production is valued through the cost category. In the unit cost operation, the cost category and thus production direct costs are determined through the field unit cost category
Production overhead setup	The production overhead overheads to the production costs of setup are determined.
Production overhead-processing	The production overhead overheads to the production costs of processing are determined.
Production overhead unit	The production overhead overheads to the production costs of unit costs are determined.
Semi-finished goods*	An interim result on level module within the product structure must be determined. In the calculation schema it must be guaranteed that with multi-stage explosion the subtotal of the semi-furnished goods is projected for example in production costs. Example of a costing row: Production costs = Material costs (MK) + production costs (FK) + subtotal of semi-furnished goods (production costs of semi-furnished goods)
Overheads for BOM	An overhead row and the amount of overheads are defined, if it is desired in different amount to the calculated module (Product number and/or Product group).
Profit markup for BOM	A revenue overhead row and the amount are defined. If it is desired in different amount to the calculated module, normally as End-revenue overhead.
Unit cost price	Compute the unit cost per piece
Subtotal	Formation from any sums
Total*	Formation of the total
Unit price*	The price per unit results from the division of total and quantity.
Value flow overhead	Overhead from the post calculation sheet from the node type overhead.

Value flow Rate	Overhead from the post calculation sheet from the node type record.
------------------------	---



Value flow output units based	
Value flow output units based	
Value flow based on units	

* Costing row must be created per schema.

5.2 Formula definitions

The result of a costing row is determined through the row type and by the formula. In the field formula pre-defined variables can be linked with arithmetic unit operations in a defined syntax. The syntax of the formulas is checked with the acquisition of the costing row. A fundamental Plausibility check of the costing row is only made during the creation in the calculation schema.

Menge (Quantity)	The variable MENGE (Quantity) contains the quantity, with which it is calculated. The variable ZUS (Surcharges) contains the overhead value, which belongs to the current row. It is defined by the formula, whether the overhead value is an amount or a
Key	The variable KEY provides the option to use Product or resources-specific values for the costing depending upon level. <u>Application example:</u> All Products, which are determined for a QA-testing, should receive an overhead in the overhead calculation.
Kunde (Customer)	The variable KUNDE (Customer) provides the option to use customized values for the overhead calculation. <u>Application example:</u> For the selling price calculation, the custom duty should be computed in the form of VVGK overheads: CustTable: find (KUNDE). Country! = Company Info: find (). Country)? ZUS: 0 The overhead is calculated here, if the country code of the customer is not equal to the country code in the business data.

Other Formula Examples:

Variable	Formula	Remark
MatZu	MatZu * ZUS/100	Percent overhead to material costs (MatZu) The overhead ZUS is acquired in the field overhead (form area Overheads and deductions).
FeZuta	FeKota + ZUS	fixed overhead to production costs
EinKo	EndSum / MENGE[QUANTITY]	Costing per unit price
Rabatt	VARIABLE – (VARIABLE * ZUS / 100)	Discount – deduction in %
Skonto	VARIABLE * ZUS / (100-ZUS)	Discount - deduction in %, in hundreds



FeTot	FeTr+FeTrZus+FeTb+FeTbZus+FeStk	Total production costs
MindQuali	(SumFe+SumMat) *InventTable: find (KEY). AVA_CheapQualityOverhead/100	Compute low quality deduction
BruttoVP	NettoVP+ErlMind	calculated gross VP
BruttoVP1	BruttoVP/MENGE	calculated gross VP per unit
ErlMind	NettoVP/100*ZUS	Proceeds reductions (related to NettoVP) 5%, The overhead ZUS is acquired in the field overhead (form area Overheads and deductions).

Variable one	Formula	Remark
Gewinn [As-set]	SK/100*ZUS	Asset (related to SK) The overhead ZUS is registered in the field overhead (form area Overheads and deductions). Overhead only to final product
NettoVP	SK+Gewinn	calculated net VP
SK	HK+VtGK+VwGK	Cost price
VTGK	HK/100*ZUS	Sales overhead (related to HK) The overhead ZUS is acquired in the field overhead (form area Overheads and deductions). Overhead only to final product
VVGK	HK/100*ZUS	Administrative overheads (related to HK) The overhead ZUS is acquired in the field overhead (form area Overheads and deductions). Overhead only to final product

5.3 Overheads and Deductions

In the form **costing row pool**, the calculation overheads can be created in the lower part of form area overhead ("ZUS" in the field formula). There is a possibility to limit the overhead value over a certain period. The overhead value forms the basis for the formula (see chapter 5.1 *costing row type*). With the special characters (+ -/*) the desired result can be computed. The deductions can be controlled by the input of negative values. Basically, the fixed and proportional overheads can be registered.

Overheads and deductions can be defined for the following costing row types:

- *Material overheads*
- *Production overhead – Set up*
- *Production overhead - Processing*
- *Production overhead - Unit*
- *Overhead for BOM*



- *Asset overhead for BOM*

Calculation line pool

Overview
General

✓	Line ↑	Variable	Line name	Type	Only ...	Formula	Extra charges ...
	80	Z_Forschung	Forschungsanteil (%)	Charge for BOM	<input type="checkbox"/>	SumHerstellkosten * CHARGE / ...	<input checked="" type="checkbox"/>
✓	80	Z_Gewinn	Gewinnzuschlag (via Ko...	Profit charge for ...	<input checked="" type="checkbox"/>	SumHerstellkosten * CHARGE ... ▾	<input checked="" type="checkbox"/>
	80	Z_Lagergemei...	Lagergemeinkosten Hal...	Charge for BOM	<input type="checkbox"/>	HalbFabr * CHARGE / 100	<input type="checkbox"/>
	80	Z_Lagergemei...	Lagergemeinkosten Ro...	Material charges	<input type="checkbox"/>	Material * CHARGE / 100	<input type="checkbox"/>
	80	Z_STLZuschl	Zuschlag für Stückliste	Charge for BOM	<input type="checkbox"/>	SumMaterial * 2	<input type="checkbox"/>

+ New
Delete

Overview
General

Valid for	Dimension name	Relation	From date	To date	From amount	To amount	Extra charge amount	Find next
All ▾			3/13/2018		0.00	0.00	150.00	<input type="checkbox"/>

Costing variable	Unique identification of the costing row. Important: Use no umlauts for variable names.
Type	Defines the costing row (see chapter 5.1 <i>costing row type</i>). It is possible to create several costing rows of the same type.
Valid for	Restriction possibilities for <ul style="list-style-type: none"> • Table • Group • All • Cost group • Dimension
Dimension name	Selection of the financial dimension Only in connection with the previous setting. Valid for dimensions
Relation	Restriction in relation to the setting. Valid for and/or the financial interest
From date	Validity period of the overhead - starting date
To date	Validity period of the overhead - final date
From Amount*	Amount-dependent overhead - initial value
To Amount*	Amount-dependent overhead - final value
Amount of overhead	Value, which is used in the formula with the variable ZUS
Continue searching	Should further overheads be found? The found values are added.

* Only for costing row types **Overhead for BOM** and **asset overhead for BOM**



Example of use for time and quantity restriction: Changes, for example in the material overhead rate, can be variably created (time-dependent). In the costing the valid material overhead is determined by the costing date. In this way the calculations can be simulated by the costing date, say for the subsequent year.

6 Calculation schema

The calculation schemas are managed in the form **calculation schema**.

Register overview

Calculation scheme 050-300 , Scheme name Standardkalk ohne Zuschläge...

Overview

General

Other

✓ Scheme num... ↑	Scheme name	Calculation type	Extra charges modifiable
050-100	Standardkalk ohne Zuschläge (bereinigt)	Calculation	
050-200	Standardkalk mit Zuschlägen	Calculation	✓
✓ 050-300	Standardkalk ohne Zuschläge (bereinigt)	Calculation	
C-000000348	Standardkalk mit Zuschlägen	Calculation	✓
C-000000388	Kalk für Test's mit WerteFI-Zuschlägen als Ele...	Calculation	✓

+ New

🗑 Delete

Up

Down

Overview

General

✓ Variable	Line name	Type	Only for fina...	Formula
✓ SumMaterial	Summe Materialkosten inkl. ...	Sub total		Material
Kosten_Einheit	Kosten pro Einheit	Sub total		SumHerstellkosten / Berechnungsmenge
VkPreis	Verkaufspreis / Einheit	Unit price		SumTotal / Berechnungsmenge
Preis_PrEinheit_EP	Preis pro Preiseinheit EP	Sub total		SumTotal / Berechnungsmenge * Preiseinheit_
VKPreis_1000	Verkaufspreis / 1000 Einheit...	Sub total		SumTotal / Berechnungsmenge * 1000

Schema number	Unique identification of the calculation schemas. Several calculation schemas with different calculation basis can be managed. During the costing calculation a valid schema must be selected.
Schema name	Designation/Description of the calculation schema.
Calculation Type	The calculation type has no functionality. The field can be used for the sorting and filtering of calculations.
Modifiable overheads	Controls whether the overheads can be modified during the costing calculation.

(i) General Tab

In the tab **General** the pre-set/defined values can be managed per calculation schema. Depending upon requirements it can be controlled by the authorization management, whether the calculation user is authorized to change the parameter setting during costing calculation. The fields within the area **Basis, Assemblies, purchased items, Quantity basis** and **Result** override the values of the parameter setting.

Calculation scheme 050-300 , Scheme name Standardkalk ohne Zuschläge...

Overview **General** Other

BASIS
Extra charges modifiable
No ☐
Trade agreements
Yes ☒
Include also discount

PURCHASED ITEMS
Base price
Calculated price
Search strategy
Version
Version

RESULT
SALES ORDER LINE
Transfer to sales line
Yes ☒
CALCULATED PRICE
Transfer as calculated price
Activate

+ New Delete Up Down

Overview **General**

Variable	Line name	Type	Only for fina...	Formula
<input checked="" type="checkbox"/> SumMaterial	Summe Materialkosten inkl. ...	Sub total		Material
Kosten_Einheit	Kosten pro Einheit	Sub total		SumHerstellkosten / Berechnungsmenge
VkPreis	Verkaufspreis / Einheit	Unit price		SumTotal / Berechnungsmenge
Preis_PrEinheit_EP	Preis pro Preiseinheit EP	Sub total		SumTotal / Berechnungsmenge * Preiseinheit_
VKPreis_1000	Verkaufspreis / 1000 Einheit...	Sub total		SumTotal / Berechnungsmenge * 1000

Basis	see 4.1.2 Basis
Resources costs	see 4.1.3 Resources costs
Assemblies	see 4.1.4 Assemblies
Purchased items	see 4.1.5 Purchased items
Quantity basis	see 4.1.6 Quantity basis
Result	see 4.1.7 Result
Protection	see 4.1.8 Protection

(ii) Others Tab

Calculation scheme FLEXCAL-000000012 , Scheme name Kopie von Standardkalk ohne Zuschläge (bereinigt)

OVERVIEW GENERAL **OTHER**

SYSTEM

Created date and time
7/12/2017 09:05:14 AM

Created by
ava1

Modified date and time
7/12/2017 09:05:14 AM

Modified by
ava1



Creation date and - time	Creation date with timestamp as well as modification date with timestamp are displayed.
Created by	User, who creates the calculation schema
Modification date and - time	Modification date with timestamp as well as modification date with times- tamp are displayed.
Changed by	User, who changed the calculation schema recently.

6.1 Schema items

(iii) Tab overview

Calculation scheme 050-300 , Scheme name Standardkalk ohne Zuschläge (bereinigt)

+ New Delete Check scheme Copy scheme

OVERVIEW GENERAL OTHER

✓	Scheme number ↑	Scheme name	Calculation type	Extra charges modifiable
	050-100	Standardkalk ohne Zuschläge (bereinigt)	Calculation	<input type="checkbox"/>
	050-200	Standardkalk mit Zuschlägen	Calculation	<input checked="" type="checkbox"/>
✓	050-300	Standardkalk ohne Zuschläge (bereinigt)	Calculation	<input type="checkbox"/>
	C-000000348	Standardkalk mit Zuschlägen	Calculation	<input checked="" type="checkbox"/>
	C-000000388	Kalk für Test's mit WerteFI-Zuschlägen als Ele...	Calculation	<input checked="" type="checkbox"/>
	FLEXCAL-000000001	Demo Scheme	Calculation	<input checked="" type="checkbox"/>

+ New Delete Up Down

OVERVIEW GENERAL

✓	Variable	Line name	Type	Only for final product	Formula
	Berechnungsmenge	Berechnungsmenge	Sub total	<input type="checkbox"/>	MENGE
	Preiseinheit_EP	Preiseinheit Einstandspreis	Sub total	<input type="checkbox"/>	InventTableModule::find(key,ModuleInventPurchSales::Invent).PriceUnit
	Material	Materialkosten (Rohmaterial)	Material costs	<input type="checkbox"/>	
	Fe_Stk	Fertigung Stückkosten	Production costs - unit	<input type="checkbox"/>	
	Fe_tr	Fertigung Rüsten	Production costs - setup	<input type="checkbox"/>	
	Fe_ta	Fertigung Ausführen	Production costs - process	<input type="checkbox"/>	
	SumFertigung	Summe Fertigungskosten	Sub total	<input type="checkbox"/>	Fe_Stk + Fe_ta + Fe_tr
	HalbFabr	Halbfabrikate (Baugruppen)	Semifinished products	<input type="checkbox"/>	
	SumHerstellkosten	Herstellkosten	Sub total	<input type="checkbox"/>	SumFertigung + Material + HalbFabr
	SumSelbstkosten	selbstkosten	Sub total	<input type="checkbox"/>	SumHerstellkosten
	SumTotal	SummeTotal	Total	<input type="checkbox"/>	SumSelbstkosten
	SumMaterial	Summe Materialkosten inkl. Zuschlag MGK	Sub total	<input type="checkbox"/>	Material
	Kosten_Einheit	Kosten pro Einheit	Sub total	<input type="checkbox"/>	SumHerstellkosten / Berechnungsmenge
	VkPreis	Verkaufspreis / Einheit	Unit price	<input type="checkbox"/>	SumTotal / Berechnungsmenge
	Preis_PrEinheit_EP	Preis pro Preiseinheit EP	Sub total	<input type="checkbox"/>	SumTotal / Berechnungsmenge * Preiseinheit_EP
	VkPreis_1000	Verkaufspreis / 1000 Einheiten	Sub total	<input type="checkbox"/>	SumTotal / Berechnungsmenge * 1000

Variable	Unique identification of the costing row
Line name	The description is read from the costing row
Type	The costing row type is read from the costing row
Only for final product	Flag controls whether the schema item should only be used for the final product (e.g. administrative and distribution costs overheads)



Formula	Read from the costing row and can be overwritten. For the formula calculation with overhead lines the variable ZUS can be freely inserted and in all formula-authorized lines the variable MENGE can be freely inserted (compare clarifications for the formula definition).
----------------	--

The sequence of the schema items can be changed by the buttons **Upward** and/or **downward**.

Schema items are selected and taken over from the existing costing row pool. Per Schema item/costing row a row result is computed as interim result. The interim result per costing row can be used in the following schema items (through the field variable) for further costing. The costing calculation is done sequentially in the calculation schema from row 1 to 99999. It is important that the logical structure is considered.

The overhead values are not managed in the calculation schema. Proportional or fixed overheads are copied directly from the costing row pool during the costing calculation. Depending upon processing, overhead numbers for the costing calculation can be customized, without master data being changed.

6.2 Functions in the form calculation schema

Check schema

With this function the essential elements of a calculation schemas can be checked for their correctness.

Copy schema

Using the button **Schema kopieren (copy schema) schema, an** existing calculation schema can be copied into a new schema.

7 Structure of the calculation

Avanade **Flexible Calculation** is a pure preliminary costing. The value flow in Microsoft Dynamics 365 for Finance and Operations provides the Application of the Standard manufacturing costs calculation, which is used as pre- and final costing at level item stock (BOM calculation) and production final costing.

The structure the standard production cost calculation and Avanade module Flexible Calculation, should usually be harmonized up to the determination of production costs (HKO). The result of the calculation(s) can be used for the valuation of the stock.



7.1 Valuation of the production

The valuation of the production controls the operation data of the work plan.

7.1.1 Cost groups

In the form **cost groups (production module)** the groups can be defined/ be allocated with those Materials, cost categories for work plan operations and calculation formulas for indirect costs. The definition of the cost groups is used mainly for the standard production costs calculation in Dynamics AX. For Flexible Calculation the

Cost group	Name
Out-Test	Test-Outsourcing

General

Cost group type	Behavior	Default
Direct outsourcing	Variable cost	Yes

Profit

Profit-setting	Profit percentage
Standard	0.00
Standard	5.00

Cost group is only relevant, if a standard price per cost category and cost group should be managed.

The cost groups are defined first for the creation of the calculation rates. Optionally it can be assigned to a cost group "asset specifications- percentage rates", so that a selling price can be suggested for a produced Product during the production costs calculation, which are based on the Cost plus premium approach.

7.1.2 Cost category

The basis for the valuation of the production is created in the form, **cost category (module production)** valuation.



000065 : SPEAKER PRO KIT
Route details : 000065

✓	Oper. No.	Priority	Operation	Scrap percentage	Accumulated	Next	Link type	Hourly rate / piecework rate
	10	Primary	Packing	0.00	1.00	0		All

+ New Delete Applicable resources Maintain resource requirements

OVERVIEW GENERAL **SETUP** TIMES RESOURCE LOAD RESOURCE REQUIREMENTS DESCRIPTION

CONSUMPTION CALCULATION COST CATEGORIES

Formula: Standard Setup: Polishing

Factor: 1.00 Run: Polishing

Costing resource: 1111 Quantity: Car Audio

The cost category is allocated in the work plan for setup costs, the processing costs and/or unit cost prices and (if necessary in combination with the cost group) is the basis of production costs determination in Dynamics 365 for Finance and Operations production cost calculation and in the Avanade Flexible Calculation.

Save + New Delete CATEGORY SETUP OPTIONS

CATEGORY SETUP

Setup Transactions Project control
Validation Committed costs Price
Function Forecast

Car Audio
Car Audio Install

Cutting
Cutting

Packinging
Packinging

PI-1
Burden cost

Polishing
Polishing

Q&A
Quality & Assurance

Usage
Use in Project
No

Production
Category: Polishing Cost price: 8.00 Worker: Cost group: L3

Ledger postings

ACCOUNTS - PHYSICAL

Estimated manufacturing cost absorbed	600500
Estimated cost of manufacturing consu...	150200

ACCOUNTS - FINANCIAL

Manufacturing cost absorbed	600500
Cost of manufacturing consumed, WIP	150100

With the button **price** the form for the manufacturing valuation of Avanade Flexi Kalk can be started. The valuation of the manufacturing is done per category, cost model (version) and location.

POLISHING : L3
Cost category price

Filter

✓	Status	Version	Name	Site	Price	From date	Blocked
	Current active	10	Current fiscal period	1	8.00	1/20/2012	<input checked="" type="checkbox"/>

7.1.3 Final costing versions

In the form **final costing versions**, the cost models can be administered as valuation models of the manufacturing for the calculation.



Costing version setup

OVERVIEW GENERAL RECORDING CALCULATION

Costing type	Version ↑	Name	Block	Block activation	Last activation	Last update
Standard cost	10	Current fiscal period	No	No	1/20/2016	6/22/2017
Planned cost	20	Current fiscal period	No	No	1/11/2016	6/22/2017
Standard cost	30	Next fiscal period	No	Yes		1/15/2016
Planned cost	40	mynewcalc	No	Yes		

Examples of valuation models are:

- Simulation subsequent year
- Partial manufacturing costs
- Full manufacturing costs

Costing version setup

OVERVIEW GENERAL RECORDING CALCULATION

IDENTIFICATION

BLOCKING POLICIES

MODEL

Version
10

Block changes
No

Costing type
Standard cost

Name
Current fiscal period

Block activation
No

Last activation
1/20/2016

Last update
6/22/2017

Costing version setup

OVERVIEW GENERAL RECORDING CALCULATION

VALID FOR

VERSION VALUES

Incl. in unit price

ALLOW PRICE TYPE

Cost price

Calculated price

From date
1/1/2016

Recording restriction
Yes

Yes

Purchase price
Yes

Sales price
No

Simulated price
No

Site

Round off
No

Block Changes	Specify, whether pending costs can be managed, deleted and computed in the final costing version.
Block Activation	Specify whether pending costs can be activated in the final costing version.
Allow Type of price	Which price types are to be approved for the final costing version/cost model. The settings facilitate the Overhead adding of cost data sets to Products: -> <i>Purchase price, cost price, selling price, calculation price, simulation price</i>

7.1.4 Route group

Route groups

Route group: Sfc Name: Shop Floor Control Routing Gro...

General

ESTIMATION AND COSTING
 Setup time: Yes ☐ No ☐
 Run time: Yes ☐ No ☐
 Quantity: No ☐

AUTOMATIC ROUTE CONSUMPTION
 Setup time: Yes ☐ No ☐
 Run time: Yes ☐ No ☐
 Quantity: Yes ☐ No ☐

FEEDBACK
 Report operation as finished: No ☐

Setup

Route/job type	Activation	Job management	Working time	Capacity
✓ Queue before	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Setup	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Process	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Overlap	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transport	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
✓ Queue after	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Using the route group, one controls, which individual processes flow into the calculation. setup time, operating time and quantity are possible.

7.2 Valuation of the material

The valuation of the material used is administered in the forms **released products; Manage costs->item price** and **commercial agreements**.

The material used can be valued as follows (base price):

Commercial agreement	Purchase prices
Product selling price	Product and Information Management -> Products -> Released Products -> Manage costs -> item price -> type of price: Selling price. If no price is found, then the price of Product and Information Management -> Sales -> Price is considered.
Product cost price	Product master->Manage costs->item price->type of price: Costs. If no price is found, then the price of Product master->area sales->price is considered.
Product purchase price	Product master->Manage costs->item price->type of price: Purchase price. If no price is found, then the price of Product master->Manage area costs -> Preis is considered.
Last purchase price	The last purchase price booked with a purchase invoice (incoming invoice)
Calculation price	Product master->Manage costs->item price->type of price: Calculation price
Simulation price	Product master->Manage costs->item price->type of price: Simulation price
Backbilling group	The price search is accomplished in accordance with the calculation groups (standard functionality of Dynamics AX). For Parametrization of the calculation group see 7.2.1 calculation group.

The cost group (final costing) is consulted (used) for the classification of the calculation result. Besides the calculation report can be listed in the calculation report.

The screenshot displays the 'PURCHASE' tab for product 'M0004 : Crossover'. The interface includes a top navigation bar with tabs like 'VIEW', 'TRADE AGREEMENTS', 'APPROVED VENDOR', 'PURCHASE ORDER', 'INVOICE MATCHING', and 'RELATED INFORMATION'. The 'TRADE AGREEMENTS' tab is active, showing options to 'View trade agreements' and 'Create trade agreements'. The 'PRICES' section is highlighted with a red box, showing a price of 27.25 and a price quantity of 1.00. Other sections include 'PURCHASE ORDER', 'ADMINISTRATION', 'CHARGES', 'DISCOUNTS', 'VENDOR REBATE', and 'APPROVED VENDOR'.

The screenshot displays the 'Sell' tab. The interface includes a top navigation bar with tabs like 'Sell', 'PURCHASE', 'MANAGE INVENTORY', 'ENGINEER', 'PLAN', 'MANAGE PROJECTS', 'MANAGE COSTS', 'RETAIL', 'GENERAL', 'SETUP', and 'OPTIONS'. The 'Sell' tab is active, showing options to 'View trade agreements' and 'Create trade agreements'. The 'PRICE UPDATE' section is highlighted with a red box, showing a sales price model of 'None' and a base price of 'Purchase price'. The 'CHARGES' section is also highlighted with a red box, showing a price of 0.00. Other sections include 'SALES ORDER', 'ADMINISTRATION', 'TAXATION', 'BASE SALES PRICE', 'DISCOUNTS', 'INSTALLMENTS', 'ALTERNATIVE PRODUCT', 'AUTOMATIC NOTIFICATION AND CANCELLATION PROCESSING', 'PRICE ADJUST', 'CONTINUITY', 'SELL DATES', 'ITEM REBATE GROUP', and 'FREIGHT ALLOCATION'.



Manage costs

POSTING
Item group: AudioRM

COSTING
Cost group: M1
Use cost price by variant: No

PRICE UPDATE
Latest cost price: No
Date of price: 1/1/2012

PRICES
Unit: ea
Price: 27.80
Price quantity: 1.00

CHARGES
Price charges: 0.00
Charges quantity: 1.00
Incl. in unit price: Yes

ABC CLASSIFICATION
Value: None
Margin: None

Revenue: None
Carrying cost: None

In the form **item price** pending and active costs can be administered per price type, version and location.

Save + New Delete Calculation details PRODUCT PURCHASE SELL MANAGE INVENTORY ENGINEER PLAN MANAGE PROJECTS MANAGE COSTS RETAIL GENERAL SETUP OPTIONS

SET UP
Item price
Posting

COST TRANSACTIONS
Transactions
Cost entries

STANDARD COST TRANSACTIONS
Standard cost transactions

COSTING
Cost objects
Inventory statement and KPIs

RELEASED PRODUCT DETAILS
M0004 : Crossover

+ New Delete Calculate item cost View calculation details Report calculation details Cost rollout by cost group Activate pending price(s) Standard cost Log Dimensions display OPTIONS

M0004 : CROSSOVER
Item price

PENDING PRICES ACTIVE PRICES

Filter Show latest only

Costing type	Price type	Version	Name	Site	Price	Price quantity	Price charges	Charges quantity	Incl. in unit price	Unit	Activation date	Blocked	Calculated	Log
Standard cost	Cost	10	Current fiscal period	1	27.80	1.00		1.00	✓	ea	1/19/2012	✓	✓	

7.2.1 Calculation group

The calculation group is created per Product (approved (released) products->developers) and used for the standard Dynamics AX manufacturing costs calculation. By assigning the calculation groups to Products it can be specified, how a starting/selling price for the components classified in the calculation group should be charged for calculation. Beyond that the conditions can be configured for warnings, which are indicated with the manufacturing costs calculation, if these components are possible sources of error in calculation.

Engineer

BILL OF MATERIALS
BOM unit: ea
Constant scrap
Variable scrap

Level: 2
Phantom: No
Auto-report as finished: No

MEASUREMENT
Height
Width

Depth
Density

PRODUCTION
Production pool
Production group
Property

Arrival: No
Flushing principle: Start

CALCULATION
Calculation group: Handel

FORMULA PLANNING
Production type: None
Planning formula

Handel

MC1
Material Cost 1

STD
STD

Calculation groups

Calculation group

Name

STD

STD

General

COST PRICE

SALES PRICE

WARNINGS

Cost price model

Sales price model

Item cost price

Cost group

Alternate cost price model

OTHER

Item cost price

Stop explosion

No

☐ No BOM

☐ No route

☐ No resources

☒ No consumption

☒ No cost price

Max. age of cost price

0

Min. contribution margin

0.00

Cost price model	<p>The primary data source for the price calculation via the calculation group. The following options are available:</p> <ul style="list-style-type: none"> • Product cost price Product master->Manage costs->item price->type of price: Costs • Product purchase price Product master->Manage costs->item price->type of price: Purchase price • Commercial agreement The purchase price from the commercial agreement for the Product and the location is used (if one works with the function for multiple locations). • Stores price The current stock value for the Product is used, to compute the cost price per unit. A cost price per unit is computed only if the booked quantity and the physical quantity are greater than zero. Note that the
	Physical quantity depends on the parameter physical value including the stock control group.
Alternative cost price model	An alternative data source for the price calculation, if the primary source is missing. For example, the element costs are used, if a commercial agreement is missing. Available options in accordance with <i>cost price model</i> .
Selling price model	<ul style="list-style-type: none"> • Cost group The selling price is computed based on the cost price and the profit default percentage from the cost group. • Product selling price Product master->Manage costs->item price->type of price: Selling price.
Finish Bill explosion	If the flag <i>Stücklistenauflösung beenden (Finish bill explosion)</i> is set, the component is treated like a purchased part.
Warnings	Within the area warnings a plausibility checks can be made, e.g. whether a warning should be set, if no BOM has been assigned to this Product.

8 Execution of the calculation



8.1 Conditions

The execution of the calculation takes place depending upon the requirement of single or multi-stage. The bill of materials used (BOM) and the planned manufacturing (route) are exploded and computed in a multi-level calculation over the whole product structure of an Product.

Overview of calculation-relevant master data:

Product master	<p>Prices within the areas <i>Manage selling, buying and costing</i></p> <p><i>Area Manage costs->final costing->cost group</i></p> <p><i>Area developer->manufacturing costs calculation->calculation group</i> (at least standard calculation group should be present)</p> <p><i>standard Order settings ->Tab Stock->stock quantities</i></p> <p><i>Tab purchase->commercial agreements</i> (possible only if purchase price is selected as price base and a price in the commercial agreements is stored for the Product in combination with the main supplier.)</p>
BOM	<p>Definition of the product structure. In the <i>BOM item->Tab general</i> the flag checks the calculation, whether the BOM item should be considered for the calculation.</p>
Route (Route)	<p>Definition of Te, tr, teB, trB per manufacturing stage in the tab quantities.</p> <p>Definition of the routing group and the cost category for setup costs (tr, trB) processing cost (Te, teB) and unit cost prices.</p> <p>Route group</p>

The structure of the Flexible Calculation is defined with the definition of the costing rows, the calculation schema, cost models and the settings in the form **parameter**. The basis for the costing calculation is thus accomplished.

8.2 Form calculations

In the form **calculations** the actual calculation per Product can be implemented.

General information



(iv) Calculation

General		
CALCULATION	Quantity	ITEM
Calculation number FLEXCAL-000...	35.00	Is Calculation product No <input type="checkbox"/>
Price scale number	Calculation date 6/12/2017	Item number D0003
Calculation type Calculation	Execution date 6/12/2017	Product name StandardSpeaker
Scheme number 050-100	Status Calculated	Dimension number 000021

Calculation number	Unique identification of the calculation. The number is updated during the price transfer into the Product master in the field calculation number for identification. The allocation of numbers is regulated in the form parameter settings tab numbers ranges.
Price scale number	Unique identification, to identify associated calculations.
Type of calculation	The type of calculation has no functionality. The field can be used for the sorting and filtering of calculations.
Schema number	A defined calculation schema is selected.
Quantity	<p>The lot size of the calculation is prepared as follows from the fields minimum order quantity, maximum order quantity or standard order quantity in the standard order settings of the Product master (•tab stock quantities):</p> <ol style="list-style-type: none"> 1. Standard order quantity 2. Minimum order quantity 3. If standard quantity and minimum quantity are created in the Product master, the larger of the two quantities is used as calculation lot size. <p>The maximum order quantity is not used for the processing of the calculation lot size. The calculation lot size can be overwritten in the field quantity.</p> <p>For a reference of order for production, order item or sales quotation</p>
Calculation date	The scope of time-dependent prices and Overheads will be determined for the calculation by means of the calculation date. The used BOM version and route version may depend upon the calculation date.
Execution date	Date on that the calculation was done.

Status	Status of the calculation: created/computed
Changed by (visible only in the overview)	The user, who made the last change at the calculation.

(i) Product

ITEM

Is Calculation product

No ☐

Item number

D0003

Product name

StandardSpeaker

Dimension number

000021

Actual calculation product	If master data are copied for the calculation, then this flag is set. It therefore concerns a calculation product (virtual product). See <i>0 Area calculation master data (only for copied master data)</i>
Product number	Product number, which should be computed.
Product name	Product name is displayed.
Dimensions nr.	Displays the used storage dimension.

(ii) Location and product dimensions

SITE

Site

1

PRODUCT DIMENSIONS

Configuration

Size

Location	For which location the calculation is valid. Necessary information
Variant, size, color, style	Product dimension(s) can be selected and considered for calculation.

(iii) BOM/Route

BOM/ROUTE

BOM

D0003BOM

Route number

000002

Sub BOMs	The BOM version can be selected, which is to be used for the calculation. The system proposes the currently valid BOM version (valid from, quantity, active, and calculation date).
Subordinated Route	The route routing plan can be selected, which is to be used for the calculation. The system proposes the currently valid route version (valid from, quantity, active, and calculation date).



(iv) Result

RESULT

Calculated price

161.00

Simulation price

0.00

Calculation price	Final result of the calculation.
Simulation price	Final result of simulation.

8.2.2. Calculation settings

Basis and resources costs (see 4.1.2 basis and 4.1.3 resources costs)

Calculation settings

BASIS

Extra charges modifiable

No ☐

Trade agreements

Yes ☐

Include also discount

No ☐

RESOURCE COSTS

Version

10

Assemblies and purchased items (see 4.1.4 Assemblies and 4.1.5 purchased items)

RESOURCE COSTS

Version

10

ASSEMBLIES

Explode assemblies

No ☐

Base price

According to calculation group

Search strategy

Active

Version

Alt. std. price

No ☐

PURCHASED ITEMS

Base price

According to calculation group

Search strategy

Active

Version

Alt. std. price

No ☐

Definitions of quantity basis (see 4.1.6 quantity basis)

QUANTITY BASE

Final product

None

Assemblies

Standard/Minimum

These settings check the consideration of the lot quantities from the Product master during the calculation of the return cost (separated by final products and semi-finished products).

8.2.3 Calculation result

Calculation result and security (see 4.1.7 result and 4.1.8 security)



Calculation result				
SALES ORDER LINE	Version	Version	Version	Version
Transfer to sales line	10	10	10	10
No <input type="checkbox"/>	Activate	Activate	Activate	Activate
	No <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No <input type="checkbox"/>
CALCULATED PRICE	SIMULATION PRICE	COST PRICE	SALES PRICE	ZERO-PROTECTION
Transfer as calculated price	Transfer as simulation price	Transfer as invent price	Transfer as sales price	Do not overwrite with zero
No <input type="checkbox"/>	No <input type="checkbox"/>	No <input type="checkbox"/>	No <input type="checkbox"/>	Yes <input type="checkbox"/>

8.2.4 Other

Other		
REFERENCE	Reference number	Customer account
Reference type	D0003	
Product		Item reference
		D0003

Type of reference	Unique identification of the module, to which the calculation is assigned. Product/order for production/order item/ sales quotation
Reference number	Reference to the system document e.g.: Order number or production number.
Receivable account	Reference to debtor identification in system document of order or offer for sale.
Product reference	Reference to the calculated Product.

8.3 Functions in the form calculation table

Edit + New Delete CALCULATION PRINT BATCH OPTIONS							
MAINTAIN	NEW	CALCULATION		VIEW	CALCULATION BASE DATA	BOM	ATTACHMENTS
Edit	Calculation	Price calculation	Copy calculation	Result	Calculation product	Lines	Attachments
Delete		Reset calculation	Price scale	Dimensions	Calculation route table	Designer	
		Copy master data					

8.3.1 Administration area

Edit button

The settings of the selected calculation can be edited, if the calculation was not accomplished yet. Otherwise this must first be *reset* using the function **reset calculation**.

Delete button

The selected calculation(s) will be deleted.

8.3.2 New area

Calculation button

A new calculation is made based on the price calculation parameters.

8.3.3 Calculation area



Price calculation area

The costing calculation is activated. As an alternate to the function “price calculation” in the form **calculations** the calculation can start from a customer offer, a customer order, a production order, the Product master or in the batch via the menu **periodical -> price calculation**.

Click the edit button to make changes.

CALCULATIONS
C-000000388 : D0003

Calculation number: FLEXCAL-000...
Price scale number: 60.00
Calculation date: [empty]
Execution date: [empty]
Calculation type: Calculation
Scheme number: C-000000388

Is Calculation product: No
Item number: D0003
Product name: StandardSpeaker
Dimension number: 000021

Site: 1
Style: [empty]
Configuration: [empty]
Size: [empty]

Calculated price: 0.00
Simulation price: 0.00

BOM/ROUTE
BOM: D0003BOM
Route number: 000002

Calculation settings

BASIS
Extra charges modifiable: Yes
Trade agreements: Yes
Include also discount: No

RESOURCE COSTS
Version: 10
Search strategy: Active
Version: [empty]
Alt. std. price: No

ASSEMBLIES
Explode assemblies: No
Base price: According to calculation group

PURCHASED ITEMS
Search strategy: Active
Version: [empty]
Alt. std. price: No
Base price: According to calculation group

QUANTITY BASE
Final product: None
Assemblies: Standard/Minimum

Calculation result
Other

After successful valuation the calculation is saved. A calculation can be valued only once. With renewed calculation the calculation must first *be reset* using the function **calculation reset** and if necessary deleted. A calculation can *be deleted* using the button delete or using the function **delete calculations** in the menu product calculation/ periodically. Further information about the calculation result is described in chapter 9 *calculation result*.

Reset calculation result button

The calculation result can *be deleted* using the button **reset calculation**. The function enables a revaluation for the calculation.

CALCULATION

Price calculation
Copy calculation
Price scale
Copy master data

VIEW
Result
Dimensions

CALCULATION BASE DATA
Calculation product
Calculation route table

BOM
Lines
Designer

ATTACHMENTS
Attachments

Copy master data button

Using the button **copy master data** the Products, - route and BOM data are copied for the selected calculation in the calculation module (single-step).



The screenshot shows the 'Copy master data' dialog box. At the top, there is a navigation bar with buttons: Edit, + New, Delete, CALCULATION (highlighted), PRINT, BATCH, and OPTIONS. Below this is a menu bar with categories: MAINTAIN, NEW, CALCULATION, VIEW, CALCULATION BASE DATA, BOM, and ATTACHMENTS. Under the 'CALCULATION' category, the 'Copy master data' button is highlighted with a red box. The main area of the dialog is titled 'Copy master data' and contains a 'Parameters' section with the description 'Copy calculation master data to a virtual calculation structure'. At the bottom right are 'OK' and 'Cancel' buttons.

Calculation copy button

An existing calculation can be copied using the button "**copy calculation**".

The screenshot shows the 'Copy calculation' dialog box. The title is 'Microsoft Dynamics 365 for Operations'. The 'Parameters' section includes a 'Calculation quantity of copy' field with the value '60.00'. At the bottom, there are 'OK' and 'Cancel' buttons. A message bar at the bottom states: 'Calculation 'FLEXCAL-000000014' has been copied from calculation 'FLEXCAL-000000008'.'

Price scales button

Using the button **Price scale** quantity scale can be created for the calculation. A calculation result can be computed (**flag calculation**) per quantity scale.

The screenshot shows the 'Price scale' dialog box. It has a 'Price scale number' field with the value 'FLEXCAL-000000004'. Below this is a table with three columns: 'Calculation number', 'Quantity', and 'Calculate'. The table contains one row with the values 'FLEXCAL-000000004', '35.00', and a checked checkbox. At the bottom are 'OK' and 'Cancel' buttons.

Calculation number	Quantity	Calculate
FLEXCAL-000000004	35.00	<input checked="" type="checkbox"/>

8.3.4 Display area

Result button



In the form **calculations the** calculation can be seen using the button **result** (see chapter 9 *calculation result*).

Dimensions button

Here the stock and back tracing dimensions can be displayed.

8.3.5 Calculation master data area (only for copied master data)

Calculation product button

Dynamics 365

Finance and Operations

>>> All Calculations

USMF

Edit

+ New

Delete

CALCULATION PRODUCT

OPTIONS

MAINTAIN

ATTACHMENTS

Edit

Attachments

Click the edit button to make changes.

CALCULATION PRODUCTS : SCHEME-0004 : CALCPROD-000004

Mouse : Mouse

General

PRODUCT

Product

Mouse

Item number

Mouse

Product name

Mouse

Search name

Mouse

Item type

Item

Unit

ea

IDENTIFICATION

Calculation product number

CALCPROD-000

CALCULATION

Calculation number

CALC-000000024

GROUPS

Item group

Consume

Cost group

Purchase

PRICE

Price

3.74

Price unit

1.00

PURCHASE

Vendor

Financial dimensions

DEFAULT FINANCIAL DIMENSIONS

BusinessUnit

002

Auto

CostCenter

007

Trade Shows

Department

022

Sales & Marketing

ItemGroup

CarAudio

Car Audio Products

Project

000002

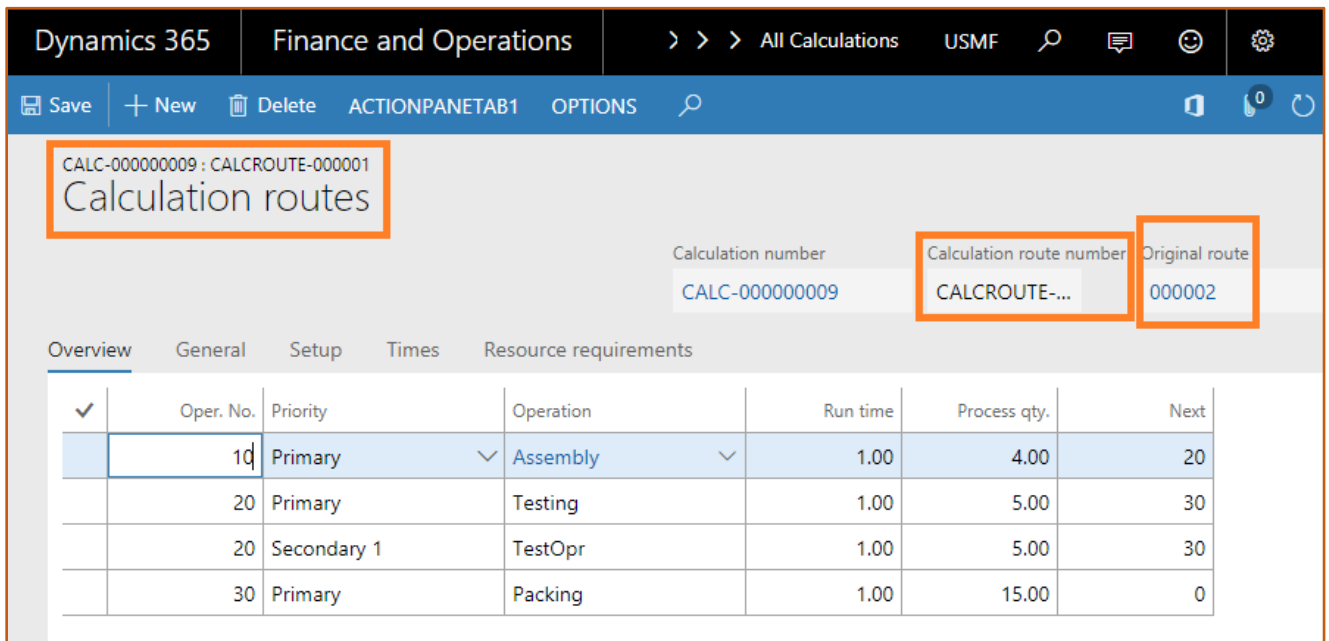
Budget stereo install

The Product can be reworked at any time. The change is valid only for the current calculation (calculation number).



Calculation route number button

The copied route can be reworked at any time. The change is valid only for the current calculation (calculation number).



✓	Oper. No.	Priority	Operation	Run time	Process qty.	Next
	10	Primary	Assembly	1.00	4.00	20
	20	Primary	Testing	1.00	5.00	30
	20	Secondary 1	TestOpr	1.00	5.00	30
	30	Primary	Packing	1.00	15.00	0

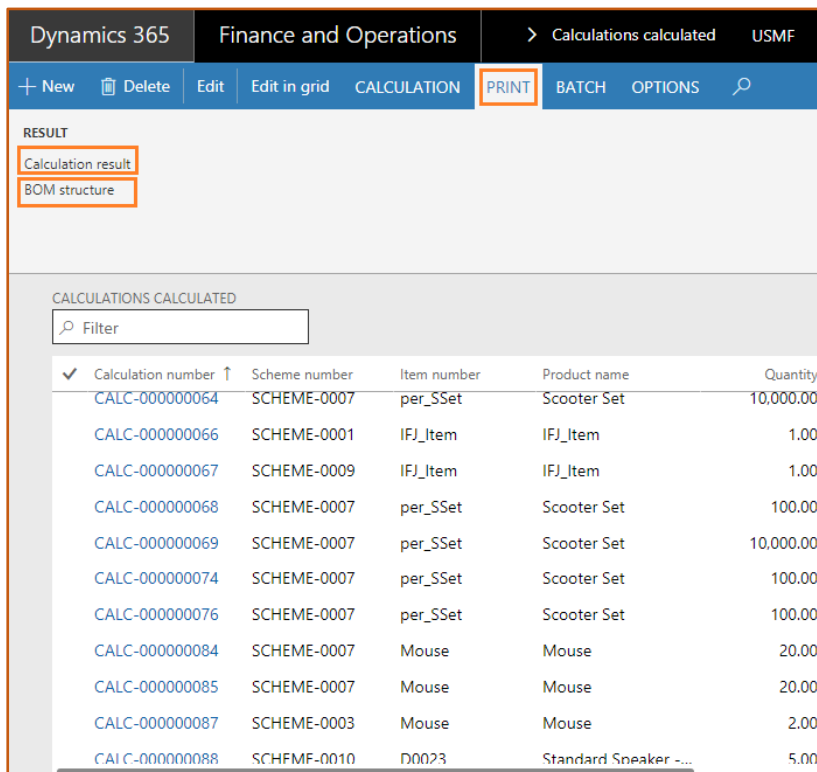
8.3.6 BOM area (only for copied master data)

Button Items (lines)

The BOM can be reworked at any time. The change is valid only for the current calculation.

Button designer

Print area – result



✓	Calculation number	Scheme number	Item number	Product name	Quantity
	CALC-000000064	SCHEME-0007	per_SSet	Scooter Set	10,000.00
	CALC-000000066	SCHEME-0001	IFJ_Item	IFJ_Item	1.00
	CALC-000000067	SCHEME-0009	IFJ_Item	IFJ_Item	1.00
	CALC-000000068	SCHEME-0007	per_SSet	Scooter Set	100.00
	CALC-000000069	SCHEME-0007	per_SSet	Scooter Set	10,000.00
	CALC-000000074	SCHEME-0007	per_SSet	Scooter Set	100.00
	CALC-000000076	SCHEME-0007	per_SSet	Scooter Set	100.00
	CALC-000000084	SCHEME-0007	Mouse	Mouse	20.00
	CALC-000000085	SCHEME-0007	Mouse	Mouse	20.00
	CALC-000000087	SCHEME-0003	Mouse	Mouse	2.00
	CALC-000000088	SCHFMF-0010	D0023	Standard Speaker -...	5.00



Calculation result button

Calculation result

Parameters

Detailed

Yes

Chart cost groups

Yes

Destination

Change

Screen

Records to include

Filter

CALCULATIONS

Status

Calculated

Calculation number

CALC-000000109

Run in the background

Recurrence

Alerts

Batch processing

No

Task description

Calculation result

Batch group

Private

No

Critical Job

No

Monitoring category

Start date: 4/21/2018 (02:27:27 pm) (GMT) Coordinated Universal Time

OK

Cancel

Detailed	Displays the calculation result with details. (Entries with arrow - >)
cost groups valuate	A total is printed at the end of the report per cost group.
Status	Filter possibility as per the calculation status using the button <i>select</i>
Calculation number	Filter possibility as per calculations using the button <i>select</i>

Calculation result

Contoso Entertainment System USA

Page 1 of 1

4/21/2018

2:35 PM

Calculation number	CALC-000000109
Item number	D0003
Product name	StandardSpeaker
Scheme number	050-300

Quantity	40.00 ea
Calculation date	4/11/2018
Calculated price	34.47 USD
Simulation price	

Variable	Line name	Amounts calculated	Amounts simulated	Markup
Berechnungsmenge	Berechnungsmenge	40.00		
Preiseinheit_EP	Preiseinheit Einstandspreis	1.00		
Material	Materialkosten (Rohmaterial)			
->	M0001, Wiring Harness			
->	M0002, Mid-Range Speaker Unit			
->	M0003, Tweeter Speaker Unit			
->	M0004, Crossover			
->	M0007, Standard Cabinet			
Fe_Stk	Fertigung Stückkosten			
->	1211, Speaker assembly worker 1			
->	1225, Speaker test rig 1			
->	1221, Speaker test operator 1			
->	1222, Speaker packing worker 1			
Fe_tr	Fertigung Rüsten			
->	1211, Speaker assembly worker 1			
->	1225, Speaker test rig 1			
->	1221, Speaker test operator 1			
->	1222, Speaker packing worker 1			
Fe_ta	Fertigung Ausführen	1,378.67		
->	1211, Speaker assembly worker 1	1,000.00		
->	1225, Speaker test rig 1	80.00		
->	1221, Speaker test operator 1	32.00		
->	1222, Speaker packing worker 1	266.67		
SumFertigung	Summe Fertigungskosten	1,378.67		
HalbFabr	Halbfabrikate (Baugruppen)			
SumHerstellkosten	Herstellkosten	1,378.67		
SumSelbstkosten	selbstkosten	1,378.67		
SumTotal	SummeTotal	1,378.67		
SumMaterial	Summe Materialkosten inkl. Zuschlag			
Kosten_Einheit	Kosten pro Einheit	34.47		
VkPreis	Verkaufspreis / Einheit	34.47		
Preis_PrEinheit_EP	Preis pro Preiseinheit EP	34.47		
VKPreis_1000	Verkaufspreis / 1000 Einheiten	34,466.67		

Cost group	Name	Amount
L1	Packaging	266.67
L2	Assembly	1,000.00
L4	Q&A	112.00
M1	Electronic comp.	
M2	Cabinets comp.	
M3	Misc comp.	
M9	No costing sheet	
OVH2	Plant overhead	
OVH3	Material overhead	
OVH4	Labor overhead	

BOM structure button



BOM structure

Parameters

Expand markups
Yes ☒

Chart cost groups
Yes ☒

Destination

[Change](#)

Screen

Records to include

[Filter](#)

CALCULATIONS

Status
Calculated

Calculation number
CALC-000000109

CALCULATION LINES

BOM level

Run in the background

Recurrence Alerts

Batch processing
No ☒

Task description
BOM structure

Batch group
▼

Private
No ☒

Critical Job
No ☒

Monitoring category
▼

Start date: 4/21/2018 (02:43:45 pm) (GMT) Coordinated Universal Time

OK Cancel

overheads explosion	Displays the detailed information about the overheads from the schema. These are displayed in separate rows where applicable.
Evaluate cost groups	A sum per cost group is printed in the end the report. A total is printed at the end of the report per cost group
Status	Filter possibility as per the calculation status using the button <i>select</i>
Calculation number	Filter possibility as per the calculation using the button <i>select</i>
BOM level	The displayed levels can be configured for multi-level BOMs. Example: "1": displays levels 0 and 1



BOM structure

Contoso Entertainment System USA

Calculation number
CALC-000000109

Item number
D0003

Product name
StandardSpeaker

Scheme number
050-300

Quantity
40.00 ea

Calculation date
4/11/2018

Calculated price
34.47 USD

Simulation price

Level	Position	Item/Resource	Name	Cost group	Total consumption	Unit	Markup	Cost	Markup from schema	Amount
0	BOM	D0003	StandardSpeaker	M9	40.00	ea				1,378.67
1	Item	M0001	Wiring Harness	M3	40.00	ea				
1	Item	M0002	Mid-Range Speaker Unit	M1	40.00	ea				
1	Item	M0003	Tweeter Speaker Unit	M1	40.00	ea				
1	Item	M0004	Crossover	M1	40.00	ea				
1	Item	M0007	Standard Cabinet	M2	40.00	ea				
1	Human ressource	1211	Speaker assembly worker 1							
1	Process costs	Assembly	Speaker assembly	L2	10.00	Hours		1,000.00		1,000.00
1	Machine	1225	Speaker test rig 1							
1	Process costs	Q&A	Speaker testing and calibration	L4	8.00	Hours		80.00		80.00
1	Human ressource	1221	Speaker test operator 1							
1	Process costs	Q&A	Operating the speaker test and calibration environment	L4	3.20	Hours		32.00		32.00
1	Human ressource	1222	Speaker packing worker 1							
1	Process costs	Packaging	Packing	L1	2.67	Hours		266.67		266.67
1	no calculation	Machine depreciation	Output unit based	OVH2						
1	no calculation	Internal logistics	% of cost	OVH3						
1	no calculation	Indirect labor cost	Rate per process time	OVH4						

Cost group	Name	Amount
L1	Packaging	266.67
L2	Assembly	1,000.00
L4	Q&A	112.00
M1	Electronic comp.	
M2	Cabinets comp.	
M3	Misc comp.	
M9	No costing sheet	
OVH2	Plant overhead	
OVH3	Material overhead	
OVH4	Labor overhead	

8.3.7 Batch area



+ New

Delete

Edit

Edit in grid

CALCULATION

PRINT

BATCH

OPTIONS

BATCH

Calculation batch

Delete calculations

CALCULATIONS CALCULATED

Filter

✓	Calculation number ↑	Scheme number	Item number	Product name	Quantity	Price scale number	Modified by	Calculation date	Calculated price	Simulation price
	CALC-000000100	SCHEME-0007	IFJ_Package	IFJ_Package	25.00		ava2	3/26/2018	1,356.18	0.00
	CALC-000000101	SCHEME-0007	IFJ_Package	IFJ_Package	75.00		ava2	3/26/2018	1,351.70	0.00
	CALC-000000102	SCHEME-0007	IFJ_Package	IFJ_Package	400.00		ava2	3/26/2018	1,346.18	0.00
	CALC-000000103	SCHEME-0007	IFJ_Package	IFJ_Package	400.00		ava1	4/13/2018	837.63	0.00
	CALC-000000104	SCHEME-0009	IFJ_Package	IFJ_Package	1.00		ava1	4/13/2018	768.49	0.00
	CALC-000000105	SCHEME-0009	IFJ_Package	IFJ_Package	1.00		somil.karani	4/13/2018	418.49	0.00
	CALC-000000106	SCHEME-0007	IFJ_Package	IFJ_Package	50.00		ava1	4/19/2018	842.31	0.00
	CALC-000000107	SCHEME-0012	IFJ_Package	IFJ_Package	50.00		ava1	4/19/2018	1,657.95	0.00
	CALC-000000108	SCHEME-0012	D0001	MidRangeSpeaker	1.00		ava1	4/9/2018	165,104.11	0.00
✓	CALC-000000109	050-300	D0003	StandardSpeaker	40.00	CALC-000000109	vidyasagar.patnaik	4/11/2018	34.47	0.00

Batch calculation Button

The function of the batch calculation is handled in chapter *8.4 Batch calculation*.

Delete calculation button

The function deletes calculations in accordance with the specified filter criteria.



?

Delete calculations

Records to include

Restore

Filter

CALCULATIONS

Calculation date

2/14/2018

Item number

Modified by

Scheme number

Calculation number

Customer account

Status

Calculated

Run in the background

Recurrence

Alerts

Batch processing

Yes

Task description

Delete calculations

Batch group

Private

No

Critical Job

No

Monitoring category

Start date: 4/21/2018 (03:15:06 pm) (GMT) Coordinated Universal Time

OK

Cancel

8.4 Batch calculation

In the form **periodic->batch calculation** a costing calculation can be implemented for several Products. Using the "select" button the data volume for the calculation run can be restricted.



Calculation batch

Parameters

SCHEME

Default schema Use item schema ☒

PRODUCT DIMENSIONS

Calculate combined prices
No ☒

BASIS

Trade agreements
No ☒

Include also discount
No ☒

Calculation date

RESOURCE COSTS

Version

ASSEMBLIES

Explode assemblies
No ☒

Base price
 Item - sales price

Search strategy
 Active

Version

Alt. std. price
No ☒

Search strategy
 Active

Version

PURCHASED ITEMS

Base price
 Item - sales price

Search strategy
 Active

Version

Alt. std. price
No ☒

Search strategy
 Active

Version

QUANTITY BASE

Quantity base
 None

Quantity base
 None

SALES ORDER LINE

Transfer to sales line
No ☒

CALCULATED PRICE

Transfer as calculated price
No ☒

Version

Activate
No ☒

SIMULATION PRICE

Transfer as simulation price
No ☒

Version

Activate
No ☒

COST PRICE

Transfer as invent price
No ☒

Version

Activate
No ☒

SALES PRICE

Transfer as sales price
No ☒

Version

Activate
No ☒

ZERO-PROTECTION

Do not overwrite with zero
No ☒

Records to include

Filter

ITEMS

Item number

Run in the background

Recurrence Alerts

Batch processing

No ☒

Private
No ☒

Critical Job
No ☒

Task description
 Calculation batch

Batch group

Monitoring category

Start date: 4/21/2018 (03:20:50 pm) (GMT) Coordinated Universal Time

OK

Cancel



Standard Schema	The standard calculation schema is used.
Use schema of the Product master	The calculation schema in the Product master is used for the costing calculation. If no calculation schema was entered in the Product, the standard schema will be used.
Compute combination prices	The calculation is implemented per Product dimension. If several Product dimensions are active, the calculation for all combinations is computed

** All remaining parameters are described in chapter 8.2 *calculations forms*.

9 Calculation result

The calculation is displayed in the form **calculation result** in a structural representation.

9.1 Overview tab

The structure of the display corresponds to the selected calculation schema. Total amounts and headings are marked in colors. In the **overview** tab the result of the selected item for each Products or assemblies is displayed on the right side. The allocation in machine, personnel, supplier, set-up, processing depends upon



050-100 : CALCPROD-000001

Calculation result

OverviewCalculation linesSimulation linesCalculation overview

✓	Li...	BOM...	Position	Item/Resource	Name	Cost group	Cost price per unit	Total consumpti...	Base for trade a...	Markup	Base for setup	Setup quantity	Unit	Cost	Markup from sc...	Amount
	1	0	BOM	CALCPROD-000001	StandardSpeaker	M9		100.00			100.00		ea		35,431.90	35,431.90
	2	1	Item	M0001	Wiring Harness	M3	3.93	200.00					ea	786.00		786.00
	3	1	Item	M0002	Mid-Range Speaker Unit	M1	78.99	200.00					ea	15,798.00		15,798.00
	4	1	Item	M0003	Tweeter Speaker Unit	M1	23.45	200.00					ea	4,690.00		4,690.00
	5	1	Item	M0004	Crossover	M1	27.80	200.00					ea	5,560.00		5,560.00

OPERATIONS		BOM/ROUTE	BASE PURCH PRICE	COST GROUPS		
Oper. No.		BOM	Base for trade agreements	✓ Cost group ↑	Name	Amount
				L1	Packaging	46.67
Operation		Route number	Vendor account	L2	Assembly	195.00
				L4	Q&A	280.00
Priority		Calculation bom number	Purchase currency	M1	Electronic comp.	26,048.00
Primary		CALCBOM-0...		M2	Cabinets comp.	4,000.00
Configuration		Calculation route number	Purch base price	M3	Misc comp.	786.00
		CALCROUTE-...	0.00	M9	No costing sheet	35,431.90
Formula		Reference	Cash discount amount			
Standard		0	0.00			
Size			Discount percentage			
			0.00			
Color			Purch price			
			0.00			

BOM level	Displays the stage in the product structure.
Item	Unique identification of the item. Valid values are: <i>BOM, Product, service, machine, tool, personnel, supplier, setup, processing cost, unit cost prices, value flow of Overheads.</i>
Product resources	Unique identification of the computed Product, computed resources from the route or the used cost category from the route.
Name	Product name, resources name or name of the processing step.
Cost group	cost group assigned to the product (item) or to the cost category
Cost price per unit	Displays the basis of valuation used for calculation (cost category with re- sources, base price with Product/service in accordance to settings of the calculation).
Total consumption	Shows the quantity per calculation line, which is used based on appropriate costing calculation.

Basis of commercial agreements	What quantity is the basis for the selling price calculation in the commercial agreements?
Overhead	Determined overhead
Basis of setup	Shows the quantity basis for setup costs calculation in accordance with definition (see chapter 4.1.6 <i>quantity basis</i>).
Number of setups	How many preparation procedures take place?



Unit	<p>Display the unit</p> <p>Usually the unit of the Product master in the Stock area or unit of the accordingly assigned cost category in the processing step (setup costs cate- gory/operating time category/unit cost price category).</p>
Costs	<p>computed costs of the costing row</p> <p>Costs = cost price per unit x total consumption</p>
Overhead from schema	<p>Computed overheads per costing row (in accordance with calculation schema).</p>
Amount	<p>Amount = costs + overhead from schema.</p>

9.3 Simulation lines Tab

The structure in the **simulation lines tab** is like the **calculation lines tab**.

050-100: CALCPROD-000001

Calculation result

OverviewCalculation linesSimulation linesCalculation overview

✓	Line number	BOM...	Position	Item/Resource	Name	Cost group	Cost price per unit (Simulation)	Total consumption	Base for trade agreements	Markup (Simulation)	Base for setup	Setup quantity	Unit	Cost (Simulation)	Markup from schema (Simulation)	Amount (Simulation)
	1	0	BOM	CALCPROD-000001	StandardSpeaker	M9		100.00			100.00		ea		35,436.42	35,436.42
	2	1	Item	M0001	Wiring Harness	M3	3.95	200.00					ea	790.00		790.00
	3	1	Item	M0002	Mid-Range Speaker Unit	M1	78.99	200.00					ea	15,798.00		15,798.00
	4	1	Item	M0003	Tweeter Speaker Unit	M1	23.45	200.00					ea	4,690.00		4,690.00
	5	1	Item	M0004	Crossover	M1	27.80	200.00					ea	5,560.00		5,560.00

OPERATIONS		BOM/ROUTE		COST GROUPS	
Oper. No.	10	BOM		✓ Cost group	Amount
Operation		Route number		L1	Packaging 46.67
Priority	Primary	Calculation bom number		L2	Assembly 195.00
Configuration		Calculation route number		L4	Q&A 280.00
Formula	Standard	Reference	5637144576	M1	Electronic comp. 26,048.00
Size				M2	Cabinets comp. 4,000.00
Color				M3	Misc comp. 790.00
Style				M9	No costing sheet 35,436.42
Site	1			OVH2	Plant overhead 0.00
				OVH3	Material overhead 0.00
				OVH4	Labor overhead 0.00

For costing simulation, the values of the fields' **cost price** and **Overhead** can be adapted per costing row. Lines changed for costing simulation are displayed in red.

9.4 Calculation overview tab

In the **calculation result** tab, the sums of the calculation are displayed as supplementing information in an overview.



050-100 : CALCPROD-000001

Calculation result

Overview

Calculation lines

Simulation lines

Calculation overview

	Costs	Extra charges	Sum
Material	30,834.00	0.00	30,834.00
Production - setup	0.00	0.00	0.00
Production - process	521.67	0.00	521.67
Production - unit	0.00	0.00	0.00
Production - total	521.67	0.00	521.67
Extra charges for BOMs		4,076.24	4,076.24
Profit extra charge for BOMs		31,355.67	31,355.67
Sums	31,355.67	35,431.90	66,787.57

Display values for position

☒ with subsidiary BOMs
 ☐ without subsidiary BOMs
 ☐ subsidiary BOMs only

Calculation/Simulation

☒ Calculation
 ☐ Simulation

Sums fields	The calculated values are summarized in the sum fields (material, manufacturing, setup etc.).
Display values for items	<ul style="list-style-type: none"> with subordinated BOM: without subordinated BOM: subordinated assemblies are not included only subordinated BOM: <p>The sum values in the calculation result can be displayed in single and multi-level.</p>
Calculation/simulation	The display between "calculation" and "costing simulation" can be changed.

9.5 Modify overheads

The overheads can be modified using the button **used calculation overheads** in the form **calculation result**. For this the flag **overheads modifiable** in the selection as well as in the costing row pool must be selected on the appropriate row

Note: To permit overhead modifications for all calculations of a schema, the flag **Overheads modifiable** can be set in the calculation schema. The settings are applied in future calculations.



10 Product dimensions and variants

The Product dimensions **color**, **size of variant** and/or **style** is considered in the explosion of calculation in Flexi Kalk. For calculation it must be displayed, which Product dimension (e.g. color black) should be computed.

Dimensions display

PRODUCT DIMENSIONS

☒ Location

☒ Configuration

☒ Size

☐ Color

☐ Style

☐ License plate

☐ Inventory status

STORAGE DIMENSIONS

☒ Site

☒ Warehouse

TRACKING DIMENSIONS

☐ Batch number

☐ Serial number

☐ Owner

Save setup

Yes ☐

OK

Cancel

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