Dairy Costing
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1 Dairy Costing

Use

With the Dairy Costing module, you can plan and execute transactions and functions for the cost accountings. You map the plan calculations in models. The system defines models as references and reads the plan data from SAP into these models. Master data and transaction data is stored and processed per model. You can post the calculated variable cost planning from the reference model back to SAP Controlling (CO).

Integration

SAP Dairy Management by msg uses data from the following SAP components across applications in the Dairy Costing module (see also the Configuration Guide):

- SAP Materials Management (MM)
- SAP Sales and Distribution (SD)
- SAP Personnel Management (PA)
- SAP Controlling (CO)
- SAP Logistics - General (LO)
- SAP Profitability Analysis (CO-PA)
- SAP Production Planning and Control (PP)
- SAP Production Planning for Process Industries (PP-PI)
- SAP Financial Accounting (FI)

SAP Dairy Management by msg transfers data from the Dairy Costing module across applications to the following SAP components (see also the Configuration Guide):

- SAP Controlling (CO)
- SAP Profitability Analysis (CO-PA)
- SAP Overhead Cost Controlling (CO-OM)

Prerequisites

To be able to plan and execute cost accountings in the Dairy Costing module, you must create the corresponding basic data across modules in the Dairy Cross Functions, Dairy Planning and Dairy Operations modules in SAP Dairy Management by msg and make the necessary settings (see also the Configuration Guide).
Structure

The *Dairy Costing* module comprises the following planning and calculation functions:

- Production Cost Accounting [page 5]
- Distribution Cost Accounting [page 9]
- Information System [page 12]
- Master Data [page 14]
- Environment [page 31]
2 Production Cost Accounting

Structure

You can use the following transactions in the production cost accounting of the Dairy Costing module:

- Production Basic Data [page 5]
- Production Cost Accounting [page 6]

2.1 Production Basic Data

Use

In the Production Basic Data transaction, you can define key basic data for the production cost accounting in a plant.

To this end, you use different record types, such as quantities, prices, cost rates, and allocation bases, for a model. You enter data for the plan cost accounting in plan record types. You enter data for target or actual models in actual record types, for example, allocation bases of processes or cost centers and prices for the actual calculation.

In the cost accounting run, the system transfers all the data records processed in the Production Basic Data transaction to the results tables and calculation evaluations under Dairy Costing Information System. For this purpose, there must be no allocation relationships for these data records in the process cost accounting. The result of the cost accounting run is a complete picture of all cost center, internal order and process data.

Integration

You can transfer certain master data from SAP Controlling (CO) to plan record types via an interface; for example, data for cost center planning or for prices in the material master. You can use the material supply planning to transfer data of the sales quantities planned in SAP Profitability Analysis (CO-PA) (for each customer/article) together with the calculation of material-related output quantities for the individual production plants. To this end, the material supply planning for semifinished products performs a complete BOM explosion.

In addition, you can transfer data of plan models to plan record types from external sources via CSV upload.

Prerequisites

First, in the Record Types Dairy Costing transaction under Dairy Costing Master Data you must assign the record types to a controlling area and define that the record types are to be available in the production cost...
accounting. Here you also define whether you wish to use the respective record type in the plan or actual calculation. This distinction also affects the usability of the respective record type.

**Features**

The range of record types available for the production cost accounting is generally much more extensive than for the distribution cost accounting. For example, the price-related record types and the record type categories with reference to the manufacturing process, such as output quantities, stock quantity, production (production version and ripening version) and the material supply planning are relevant for the production cost accounting.

The record type categories “Cost Center Planning”, “Internal Order Planning” and “Process Cost Rates” enable the use of prices defined for planning purposes with which you can allocate costs center costs, internal order costs and process costs in a plant.

**Activities**

Call the Production Basic Data transaction under Dairy Costing Production Cost Accounting.

### 2.2 Production Cost Accounting

**Use**

You use the Production Cost Accounting transaction to start the calculation run for production cost accounting. If supply relationships between the plants exist, you can settle several plants within a controlling area. The system takes into account the deliveries between the plants in the respective output quantity calculations in the cost accounting run. The system calculates the cost rates of the material deliveries between the plants in iterative cross-plant costing loops. The determined cost rates are included in the plant-related cost object controlling.

You can perform the production cost accounting as a plan cost accounting or as a target/actual cost accounting. In the plan cost accounting, you must choose an overall model. However, a fixed target/actual model is stored for the target/actual cost accounting. You can settle the plan cost accounting for a fiscal year or for each month. The target/actual cost accounting always settles monthly periods.

In the cost accounting run, the system transfers all the data records processed in the Production Basic Data transaction under Dairy Costing Production Cost Accounting into the results tables and calculation evaluations. For this purpose, there must be no allocation relationships for these data records in the process cost accounting. The result of the cost accounting run is a complete picture of all cost center, internal order and process data.
Prerequisites

If you want to perform the production cost accounting as a plan cost accounting, you must select an overall model that you created in the Overall Models transaction under [Dairy Costing] [Master Dataa].

For the target/actual cost accounting variant, the system uses basic data of a target/actual model in conjunction with the actual output quantities calculated in the Dairy Operations module. The system uses master data on actual processes and actual manufacturing processes from the Dairy Cross Functions module.

Features

When you start a production cost accounting run, the system imports and settles the basic data using the selected parameters. In this connection, the system runs the following subcalculation runs:

1. Determine quantities, process quantities and factor consumptions:
   - Import output quantities
   - Explode the BOMs assigned to the output quantities and determine the factor consumptions down to the lowest level with the ingredients
   - Take account of excess consumptions and division into net and excess consumption quantities
   - Determine and explode the manufacturing processes based on the record types for the production version or taking into account the standard manufacturing process
   - Settle the relationships within the account assignment objects (cost centers, internal orders) and processes, taking account of the planning data and allocation bases.

2. Valuate the factor consumptions:
   - Determine all factor quantities and valuate with the corresponding prices
   - Iterative cost determination up to a defined difference minimum
   - Cost component split based on the primary cost determination
   - Explode the primary costs to display the cost object report in its detailed form
   - Compare the processes with their master cost center to close the controlling area.

The system distinguishes between the following cost plannings:

- Overall cost planning:
  The overall cost planning is referred to as a capped cost planning. The cost center managers plan their annual budgets that are consolidated and approved in the course of the planning process. Once the budget has been fixed, its absolute amount should no longer be modified by the cost accounting run. However, since processes in the cost accounting run also determine proportional costs based on the process cost accounting, these costs must be compared with the primary costs of their assigned cost center (master cost center). This is done by allocating the proportional costs to the cost center while also deducting them in the fixed cost planning area. The resulting fixed cost balance (both planned fixed costs and fixed costs from assessments) are then allocated back to the processes - depending on the proportional costs of the assigned individual processes. The result is a balanced set of values in which the total of the cost center costs must be identical to the total of all the assigned processes.

- Fixed cost planning:
  In the case of fixed cost planning, it is assumed that the budget manager only plans the fixed primary costs. Consequently, the proportional costs from the process cost accounting are regarded as additive. The proportional costs of the processes (and also the assessment costs) are allocated to the master cost center.
The primary planned fixed costs and assessment costs of the master cost center are then allocated back again to the processes. The result is again a balanced set of values. However, the cost calculation run produced an increase in costs that must be taken into account in the reintegration with SAP Profitability Analysis (CO-PA).

Activities

Call the Production Cost Accounting transaction under Dairy Costing Production Cost Accounting.
3 Distribution Cost Accounting

Structure

You can use the following transactions in the distribution cost accounting of the Dairy Costing module:

- Distribution Basic Data [page 9]
- Distribution Cost Accounting [page 10]

3.1 Distribution Basic Data

Use

In the Distribution Basic Data transaction, you can define key basic data for the distribution cost accounting in a sales organization.

To this end, you use different record types, such as cost rates, prices and allocation bases, for a model.

You enter data for the plan cost accounting in plan record types. You enter data for target or actual models in actual record types, for example, allocation bases of processes or cost centers.

In the cost accounting run, the system transfers all the data records processed in the Distribution Basic Data transaction to the results tables and calculation evaluations under Dairy Costing Information System. For this purpose, there must be no allocation relationships for these data records in the process cost accounting. The result of the cost accounting run is a complete picture of all cost center, internal order and process data.

Integration

You can transfer certain master data from SAP Controlling (CO) to plan record types via an interface, for example, data for cost center planning or statistical key figures for the record type category Allocation Bases. In addition, you can transfer data of plan models to plan record types from external sources via CSV upload.

You can transfer a portion of the data planned on record types in the production cost accounting for the distribution cost accounting from SAP Profitability Analysis (CO-PA), for example, sales quantities of distribution cost accounting and customer-specific allocation bases.

In addition, you can transfer data of plan models to plan record types from external sources via CSV upload.
Prerequisites

First, in the Record Types Dairy Costing transaction under Dairy Costing Master Data, you must assign the record types to a controlling area and define that the record types are to be available in the distribution cost accounting. Here you also define whether you wish to use the respective record type in the plan or actual calculation. This distinction also affects the usability of the respective record type.

Features

The range of record types available for the distribution cost accounting is generally less extensive than for the production cost accounting. For example, the price-related record types and the record type categories with reference to the manufacturing process, such as output quantities, stock quantity, production (production version and ripening version) and the material supply planning are not relevant for the distribution cost accounting.

Process cost records and allocation cost records enable the use of prices defined for planning purposes that are used to allocate process costs, costs center costs and internal order costs in a sales organization. For cost centers and distribution processes that are allocated to a cost object via a distribution method, the values of (alternative) allocation bases can be defined on the corresponding record type.

In addition, you can specify planned prices for a cost element. This enables you to plan the cost rates of a factor consumption that describes process-related direct costs through distribution processes.

Activities

Call the Distribution Basic Data transaction under Dairy Costing Distribution Cost Accounting.

3.2 Distribution Cost Accounting

Use

You use transaction Distribution Cost Accounting to map customer-oriented processes with their assignments according to cause in the cost accounting run and in the settlement report. For this purpose, distribution data of a sales organization and data from SAP Profitability Analysis (CO-PA) are used.

The system displays the cost accounting results in a high level of detail in reporting under Dairy Costing Information System.
Integration

SAP Dairy Management by msg uses plan and actual sales data from SAP CO-PA in the distribution cost accounting. You can transfer a sales plan from an external source to SAP CO-PA. The CO-PA structure retrieves the actual sales data, for example, incoming sales orders or billing, from the SAP Sales and Distribution (SD) module. The distribution cost object is always a combination of customer and article.

The system writes back plan data and sales plan data to SAP CO-PA via an interface.

The system posts actual data of the costing-based profitability analysis to SAP CO-PA.

You can select the period for performing the cost accounting using the fiscal year variant set for the controlling area in SAP Overhead Cost Controlling (CO-OM).

Prerequisites

If you wish to execute a plan cost accounting, you must have created an overall model in transaction Dairy Costing ➔ Master Data ➔ Overall Models.

Features

You can perform the distribution cost accounting for all the sales organizations of a controlling area.

You can execute the distribution cost accounting either as a plan or as an actual cost accounting. You can perform a plan cost accounting as an annual calculation or a monthly calculation based on an overall model. An actual cost accounting is only possible based on an overall model of the type “Costing” and is a simple monthly calculation. Several months can be settled retroactively.

The goods usage accounting valuates the manufacturing costs of the sales articles and assigns the costs proportionally to the individual customer/article combinations.

The condition accounting calculates (periodic or non-periodic) customer-dependent revenue reductions and creates the top-level deduction items of the contribution margin scheme. The distribution cost accounting settles cost centers, internal orders and processes in the same way as the production cost accounting. The allocation bases for the settlement are created by the integration of the distribution methods into the calculation run. Lastly, the created cost rates are enriched from Customizing via characteristic determination to SAP CO-PA.

Activities

Call the Distribution Cost Accounting transaction under Dairy Costing ➔ Distribution Cost Accounting.
4 Information System

Use

In the information system of the Dairy Costing module, you can display reports and evaluations for your cost planning, based on the settings you made in the master data of Dairy Costing.

Structure

In the information system of the Dairy Costing module, reports and evaluations are grouped according to:

- Production [page 12]
- Distribution [page 13]

4.1 Production

Structure

You can use the following transactions to output reports and evaluations under Production in the Dairy Costing module:

- Cost Object Report
- Process Report
- Cost Center Report
- Internal Order Report
- Cost Element Report - Cost Center
- Cost Element Report - Cost Element
- Cost Element Report - Material
- Cost Element Report - Internal Order
- Cost Element Report - Process
- Cost Element Report - Job Title
- Primary Cost Statement
- Allocation Control Processes Production
- Allocation Control CO Objects Production
- Allocation Control Materials
4.2 Distribution

Structure

You can use the following transactions to output reports and evaluations under Distribution in the Dairy Costing module:

- Process Report - Distribution
- Cost Center Report - Distribution
- Internal Order Report - Distribution
- Cost Element Itemization - Distribution - Cost Center
- Cost Element Itemization - Distribution - Condition
- Cost Element Itemization - Distribution - Cost Element
- Cost Element Itemization - Distribution - Material
- Cost Element Itemization - Distribution - Internal Order
- Cost Element Itemization - Distribution - Process
- Cost Element Itemization - Distribution - Job Title
5  Master Data

Use

In the master data of the *Dairy Costing* module, you can set and modify parameters to execute plan and actual cost accountings in production and distribution cost accounting.

Structure

You can use the following transactions for cost planning in the master data of the *Dairy Costing* module:

- Models [page 14]
- Overall Models [page 15]
- Record Types Dairy Costing [page 16]
- Plan BOMs [page 18]
- Plan Processes [page 19]
- Plan Manufacturing Processes [page 20]
- Assign Department to Group Category for Distribution [page 22]
- Job Titles - Distribution [page 23]
- Work Stations - Distribution [page 23]
- Distribution Processes [page 24]
- Distribution Methods [page 25]
- Assign Cost Categories to Plant [page 27]
- Assign Cost Category to a Sales Organization [page 29]

5.1  Models

Use

You use the *Models* transaction to create plan models for a controlling area. By means of the controlling area, you create the relationship between a plan model and one or more plants and/or one or more sales organizations. You use plan models for simulation purposes in the cost accounting planning and for the comparative costing of plan acceptance alternatives. You can link a plan model, specifically for the internal order planning and cost center planning, with plan versions from *SAP Controlling (CO)* to create alternative plan scenarios based on different plan acceptances.

You use the plan models created in this transaction in the subsequent steps of the cost accounting planning in the following transactions under *Dairy Costing > Master Data*.
• **Overall Models**
• **Plan BOMs**
• **Plan Processes**
• **Plan Manufacturing Processes**
• **Distribution Processes**
• **Distribution Methods**

**Features**

You create a model for a controlling area, create the model type ("Plan" or "Target/Actual") and, if necessary, a plan version of a controlling area. You assign plants or sales organizations to the created model via the controlling area in the detail tables provided for this purpose.

For a controlling area, you can assign each plant and each sales organization to any number of models of the type "Plan". For a controlling area, you may assign each plant to a model of the type "Target/Actual" once only. This also applies for each sales organization.

You can define a date for the lock indicator **Locked To** to ensure that completed planning runs cannot be modified.

**Activities**

Call the **Models** transaction under **Dairy Costing -> Master Data**.

**5.2 Overall Models**

**Use**

You use the **Overall Models** transaction to manage models. You can create overall models, assign plants and sales organizations to them and define with which plan models you wish to plan, depending on the overall model parameters for each plant and sales organization. If you want to perform a plan cost accounting based on plan models, you make settings here that are taken into account both in the production cost accounting and in the distribution cost accounting. You can output the results of the production cost accounting and distribution cost accounting as reports, based on the overall model, in the transactions under **Dairy Costing -> Information System**, for example, to assess the impact of modified parameter settings on the planning.

**Prerequisites**

Sie haben zunächst ein Planmodell in der Transaktion **Modelle** unter **Dairy Costing -> Stammdaten** zu einem Kostenrechnungskreis erstellt und ihm mindestens ein Werk bzw. eine Verkaufsorganisation zugeordnet.
Features

In the main table of the *Overall Models* transaction, you define an overall model and specify the associated overall model type.

Folgende vier verschiedene Typen von Gesamtmodellen existieren:

- Annual Plan
- Costing
- Target/Actual
- Simulation

You can assign plants and/or sales organization to the overall model in the detail tables *Plants for <Overall Model>, <Name of Overall Model>* and *Sales Organizations for <Overall Model>, <Name of Overall Model>*. You may assign each plant to an overall model of the type “Annual Plan”, “Costing” or “Target/Actual” once only. This also applies for each sales organization. You can create any number of overall models of the type “Simulation”.

Sie steuern die Kostenrechnungsplanung über die Satzarten. Für Werke und Verkaufsorganisationen können Sie in der Transaktion *Gesamtmodelle* unterschiedliche Gruppierungen von Satzarten als Gesamtmodellparameter verwenden. You create the reference to the plan models using the overall model parameters.

You may only assign plants and/or sales organizations in the status “active” to the overall model types “Annual Plan”, “Target/Actual” and “Costing” once only. If you wish to assign a plant or a sales organization to another unique overall model type, you must first lock the overall mode currently set as active using the “inactive” status. Wenn Sie den Status “aktiv” setzen, können Sie mit dem Parameter *gesperrt bis* festlegen, bis zu welchem Datum Sie das Gesamtmodell für die weitere Bearbeitung sperren.

Activities

Call the *Overall Models* transaction under [Dairy Costing ➔ Master Data]

5.3 Record Types Dairy Costing

Use

You use the *Record Types Dairy Costing* transaction to manage record type master data. You configure record types for a controlling area to be able to process them as basic data in the transactions for the production cost accounting and the distribution cost accounting.

Features

You assign record types to a controlling area in the *Record Types Dairy Costing* transaction. The system takes into account the record types both in the production cost accounting and in the distribution cost accounting.
You first assign a record type category with a validity period to a controlling area. You can define whether you use the record type categories for the plan calculation or actual calculation in the “Production” or “Distribution” organization. You can use the record types accordingly in the following transactions:

- **Production Basic Data** under [Dairy Costing > Production Cost Accounting]
- **Distribution Basic Data** under [Dairy Costing > Distribution Cost Accounting]

The record types are distinguished according to the following groups and their record type categories:

- Quantity-related record types
  - Allocation bases
  - Output quantities
  - Stock quantity
- Record types object planning
  - Cost center planning
  - Internal order planning
  - Material supply planning
  - Production
- Tariff-related record types
  - Wage rates
  - Process cost rates
  - Allocation rates cost centers
  - Allocation rates internal order
  - Plan prices cost element
- Price-related record types
  - Ingredient price
  - Material price
  - Semifinished product price
  - Finished product price
  - Raw material price

You enter predefined record types as data of objects in two dimensions, for example:

- Record type category “Material Price” as record type “Plant Price Material” (material prices per plant) in the dimension “Plant/Material”
- Record type category “Process Cost Rates” as record type “Cost Rate Process Plant” (process cost rates for a plant) in the dimension “Plant/Process” or as record type “Cost Rate Process Sales Organization” in the dimension “Sales Organization/Process”.

You can define the type of price control with the **Price Type** parameter. The difference in the types of price control lies in the handling of price variances that can arise due to goods receipts or invoice receipts. When you create a material, you define the procedure used for price control from the accounting perspective. The system proposes the price types “S Price” (standard price) or “Moving Average” (moving average price) from **SAP Materials Management (MM)**.

**Activities**

Call the **Record Types Dairy Costing** transaction under [Dairy Costing > Master Data].
5.4 Plan BOMs

Use

You use the Plan BOMs transaction to create plan BOMs for a plan model for which you wish to execute the production cost accounting. You can define additional alternative BOMs to supplement the existing material BOMs in SAP Sales and Distribution (SD). You can only use the alternative BOMs in plan models for simulation or planning purposes.

Prerequisites

You have already created a plan model in the Models transaction under Dairy Costing Master Data.

Features

In the Plan BOMs transaction, you create plan BOMs for a plan model. To do this, you must select a material and a plan model for a plant and define a start data for the validity period.

You can define several alternative BOMs independently of the material BOMs from SAP Sales and Distribution (SD) in the plan BOMs in the first detail table <Material>, <Material Description>. If a different prioritization is not defined by a production version, the system takes into account the respective first alternative BOM in the production cost accounting.

The structure of the plan BOMs is restricted to the key parameters for Dairy cost accounting:

For the material, for which you are creating a plan BOM, you define a base quantity in the Quantity column. The quantity specifications of the components in the second detail table <Material>, <Material Description>, 02> relate to this material base quantity. The base unit of measure of the material and the unit of measure of the (material) component of the associated alternative BOM are predefined.

In particular, the parameters for batch and component scrap (Fixed Quantity and Component Scrap in %), which you can set for each component material based on past values, play a special role in the dairy industry for assessing the efficiency of manufacturing processes. Both scrap types are additive in the case of excess consumption.

Activities

Call the Plan BOMs transaction under Dairy Costing Master Data.
5.5 Plan Processes

Use

You can use the Plan Processes transaction to define plan processes for a plan model in the production area. You can use plan processes to map individual operations in the production facility.

The Processes transaction under Dairy Cross Functions > Master Data in the actual models is the counterpart to the Plan Processes transaction in the plan models. Both transactions Processes and Plan Processes have practically the same structure. You also use the actual processes in Performance Controlling in the Dairy Operations module as well in the actual cost accounting to determine variances.

Processes constitute the link between the cost centers and the cost objects for the allocation of cost center costs to cost objects according to cause. They are one of the key elements of process cost accounting in the Dairy Costing module.

Prerequisites

You have created a plan model in the Models transaction under Dairy Costing > Master Data.

Features

In the Plan Processes transaction, you create processes in relation to a plant. You can assign a cost center from SAP Controlling (CO) to the processes via the selection of a work station. Multiple processes can be assigned to a work station. However, only a single work station is assigned to the individual process. The assignment of a process to a cost center via the work station is thus unique.

You can categorize processes. For this purpose, you can create and manage occupancy types for occupancy categories for plan processes and for actual processes in Customizing Manage Occupancy Types under Dairy Operations > General Settings.

The base quantity with the related base quantity unit is used as a calculation factor for a process in a plan manufacturing process and is the benchmark for the factor consumptions in the detail tables for consumption factors.

You can map the factor consumptions in the following detail tables for consumption factors:

- Facilities
- Labor Values
- Cost Center
- Plan Processes
- Cost Element
- Materials
- Internal Order
The consumption factors can be divided into direct process costs (facilities, labor values, cost element, materials) and indirect process costs (cost center, internal order, plan processes).

The degree of utilization or the consumption ratio is modelled by the Factor parameter. Factors are to be interpreted as reference quantities for variable costs or as quantity-related weighting factors for fixed costs. If multiple plan process are charged to one and the same cost center, the factor affects the distribution of the costs among the cost objects.

**Activities**

Call the Plan Processes transaction under Dairy Costing Master Data.

### 5.6 Plan Manufacturing Processes

**Use**

You use the Plan Manufacturing Process transaction to define a plan manufacturing process for a material in a plan model for the plan cost accounting. You define the parameters for the plan manufacturing of a finished product, semifinished product, ingredient or milk raw material. You can define allocation bases for the consumption factors to allocate direct costs and overhead costs of input factors to cost objects according to the number of batches. You can use the allocation bases in the form of calculation formulas.

The plan manufacturing process is a counterpart to the (actual) manufacturing process that you define in the Manufacturing Processes transaction under Dairy Cross Functions Master Data. You additionally use the actual manufacturing process in performance controlling in the Dairy Operations module. The structure of both transactions Manufacturing Process and Plan Manufacturing Process is identical.

The plan manufacturing process in the production cost accounting is also a counterpart to the distribution method in the distribution cost accounting. Both act as an interface of a different type to allocate direct costs and overhead costs to cost objects according to the cost-by-cause principle.

Contrary to distribution methods, which also take into account customers, manufacturing processes only relate to materials. In comparison to the distribution methods, the manufacturing processes are more focused on processes due to their direct reference to production. Internal orders, which do not manage processes, play a relatively lesser role in relation to cost centers in the manufacturing processes.

**Prerequisites**

You have already made cross-module material classifications, like the classification as milk used as raw material and as ingredient types, in the Enhancement Material Master transaction under Dairy Cross Functions Master Data.

You have created a plan model in the Models transaction under Dairy Costing Master Data.
If required, you have defined a cross-module ripening process in the Customizing activity Manage Occupancy Types under Dairy Operations > General Settings.

Features

In the Plan Manufacturing Process transaction, for a plant, you must specify a plan model with a validity period and a material, for which you would like to create a plan manufacturing process.

There is only one standard manufacturing process and several alternative manufacturing processes. If a standard process has not been defined for a material, the system uses the first manufacturing process alternative as the standard process in the production cost accounting.

You can activate plan manufacturing processes using the status “productive” or deactivate them with the status “inactive” or manage them as “test” manufacturing processes.

Define a reference quantity for a material for the plan manufacturing process. This is the benchmark for the factor consumptions in the detail tables for consumption factors. The units of measure for the reference quantity from SAP Materials Management (MM) are available for selection. The system always converts to the material’s base unit of measure in the production cost accounting.

You can use the following consumption factors to plan consumptions of cost factors in relation to a base quantity:

- Plan processes
- Cost centers
- Cost elements
- Materials
- Internal orders

The consumption factors comprise cost object direct costs (cost elements, materials) and cost object overhead costs (plan processes, cost centers, internal orders).

The Factor parameter in the detail tables for consumption factors models the degree of utilization of the cost factors or the consumption ratio. Factors are to be interpreted as reference quantities for variable costs or as quantity-related weighting factors for fixed costs.

For each cost factor (for each new row in the detail tables), you define a calculation formula that determines the allocation base on the cost object.

Activities

Call the Plan Manufacturing Process transaction under Dairy Costing > Master Data.
5.7 Assign Department to Group Category for Distribution

Use

You use the Assign Department to Group Category for Distribution transaction to assign the individual departments within a sales organization to group categories. You can use this transaction to control, and, if necessary, restrict authorizations and access rights for individual departments to use cases.

In the further course of the cost accounting planning, the restriction to a department within a sales organization is used for the detailed planning of consumption factors in the Distribution Processes transaction under Dairy Costing Master Data and for specific effectiveness measurements in the Work Stations - Distribution transaction under Dairy Costing Master Data.

Prerequisites

You created cross module group categories by using the Customizing activity Maintain Group Categories under Dairy Cross Functions General Settings and assigned those group categories by using the Customizing activity Assign Group Categories to Use Cases under Dairy Cross Functions General Settings. You must assign a group category as standard to each use case to ensure the group category’s access to the respective use case.

In exceptional cases, you can assign additional group categories for a use case in non-standard mode in Customizing. Using the assignment of a function, you can give priority to the non-standard assignment over the standard assignment for the same use case.

You can grant all departments access to the use case “Distribution Cost Accounting” via the group category.

You can restrict access rights, for example, by creating the group categories “Distribution Controlling” and “Production Controlling” and assigning them to the use cases “Distribution Cost Accounting” and “Production Cost Accounting” in Customizing. In the Assign Department to Group Category for Distribution transaction, you assign the group category “Distribution Controlling” to the department “Assistance Distribution Management” and the group category “Production Controlling” to the department “Assistance Production Management”.

Activities

Call the Assign Department - Group Category for Distribution transaction under Dairy Costing Master Data.
5.8  Job Titles - Distribution

Use

You can use the Job Titles - Distribution transaction to enter personnel costs within a sales organization. You define job titles and a cost element for the different personnel departments and groups to be able to settle the distribution process correctly.

The Job Titles - Distribution transaction is structured identically to the Job Titles transaction under Dairy Cross Functions > Master Data, that you use to define the job titles in the production area within a plant.

Features

In the Job Titles - Distribution transaction, you can enter and manage job titles for a sales organizational for a specific validity period. Job titles may be:

- Storage/Logistics Personnel
- Distribution/Sales Personnel
- Accounting
- Marketing
- Controlling
- Other Departments

You must link the job titles for the respective personnel group with a primary cost element to be able to use them in distribution cost accounting.

Activities

Call the Job Titles - Distribution transaction under Dairy Costing > Master Data.

5.9  Work Stations - Distribution

Use

You can use the Work Stations - Distribution transaction to link distribution processes with their master cost center, depending on a sales organization. In addition, within performance controlling, you can use work stations for specific effectiveness measurements in distribution, for example, effectiveness measurements of picking processes.
The structure of Work Stations - Distribution transaction is identical to that of the Work Stations transaction under Dairy Cross Functions > Master Data, in which you create work stations in the production area for a plant.

Features

You can use the Work Stations - Distribution transaction to create and manage work stations for a sales organization. You select a department, a validity period and, if necessary, preselect a cost center or a service cost center Labor. You create new work stations for a sales organization and assign them uniquely to a cost center and optionally to a pool cost center. The pool cost center is used to enter and settle personnel costs of a personnel pool. In addition, you can define target values of performance key figures with upper and lower limits. Calculation formulas are stored for the performance key figures labor productivity indicator (%), operational performance indicator (%), overall equipment effectiveness (%), capacity and productivity.

Activities

Call the Work Stations - Distribution transaction under Dairy Costing > Master Data.

5.10 Distribution Processes

Use

You can use the Distribution Processes transaction to create processes in the distribution area for the two model types: actual model and plan model. In the production area, you create actual manufacturing processes in the Processes transaction under Dairy Cross Functions > Master Data and plan processes in the Plan Processes transaction under Dairy Costing > Master Data. Processes constitute the link between the cost centers and the cost objects for the allocation of cost center costs to cost objects according to cause. They are one of the key elements of process cost accounting in the Dairy Costing module.

Prerequisites

You have created a plan model in the Models transaction under Dairy Costing > Master Data.
Features

In the Plan Processes transaction, you create distribution processes for a sales organization. You can assign a cost center from SAP Controlling (CO) to the processes via the selection of a work station. Multiple processes can be assigned to a work station. However, only a single work station is assigned to the individual process. The assignment of a process to a cost center via the work station is thus unique.

You can realize process typing for production-related logistic processes in a sales organization. For this purpose, you can create and manage occupancy types for occupancy categories for distribution process and for actual processes in the Customizing activity Manage Occupancy Types under Dairy Operations General Settings.

The base quantity with the related base quantity unit is used as a calculation factor of a process in a distribution method and is the benchmark for the factor consumptions in the detail tables for consumption factors.

You can map the factor consumptions in the following detail tables for consumption factors:

- Labor Values
- Cost Center
- Distribution Processes
- Cost Element
- Internal Order

The detail tables contain direct process costs (labor values, cost element) and indirect process costs (distribution processes, cost center, internal order). Process costs for facilities and materials play no role in the distribution process (unlike in the manufacturing processes).

The Factor parameter models the degree of utilization or the consumption ratio. Factors are to be interpreted as reference quantities for variable costs or as quantity-related weighting factors for fixed costs. If multiple plan processes are charged to the same cost center, the factor affects the distribution of the costs among the cost objects.

Activities

Call the Distribution Processes transaction under Dairy Costing Master Data.

5.11 Distribution Method

Use

You use the Distribution Method transaction to create the calculation basis for distribution cost accounting. You define how the costs of resources in the sales area are distributed among customer-article combinations. The distribution methods enable you to flexibly define the reference objects by assigning sales allocation types to individual cost objects (account assignment objects) of a sales organization. In this way, you can dynamically configure distribution process cost accounting to satisfy customer requirements.
The distribution method in distribution cost accounting corresponds to the manufacturing process in production cost accounting. Both act as an interface of a different type to allocate direct costs and overhead costs to cost objects according to the cost-by-cause principle.

Contrary to manufacturing processes, distribution methods do not simply relate to a material, but take into account customers and articles alike. The system reads customers and articles from SAP Profitability Analysis (CO-PA). The allocation bases of the distribution method are determined only during distribution cost accounting, whereas manufacturing processes are created for a defined base quantity. Distribution methods are thus more strongly aligned to the individual SAP ERP system than manufacturing processes that are simply based on the SAP ERP material master.

The meaning of the processes in cost accounting gradually declines as the distance from the manufacturing processes increases. The processes and activities outside of the production area have an increasingly weak direct reference to the cost object. This means that additional effort is required to determine the cause-based assignment of costs incurred to individual cost objects with any degree of certainty.

Consequently, in certain areas of distribution and administration, it is better to speak of cost allocation than of cost consumption of individual factors by cost objects. Costs on some administration cost centers can even be distributed directly to cost objects without processes. In addition, internal orders (without processes) have a higher share in their relationship to cost centers that manage processes in the distribution method - and thus a greater significance - than in the manufacturing process.

### Prerequisites

You have created a plan model in the Models transaction under Dairy Costing > Master Data.

### Features

You must enter a plan model with a validity period for a sales organization in the Distribution Method transaction.

For distribution methods, there is no standard method, with possibly several alternative methods. You can map alternatives using different plan models. In the manufacturing processes, however, there is a standard manufacturing process and several alternative manufacturing processes.

The assignment of sales allocation types to cost objects of a distribution cost type (account assignment object) lies at the core of the distribution method.

The following four distribution cost types (account assignment objects) are linked as master data from SAP Sales and Distribution (SD):

- Condition
- Cost center
- Internal order
- Distribution process

The distribution cost types ‘cost center’, ‘internal order’ and ‘distribution process’ collect sales overhead costs, whereas the distribution cost type “condition” is used to enter sales direct costs. In most cases, this involves a 1:1 assignment. There can also be a 1:n assignment for the account assignment object “condition”. SAP SD provides condition types for entering sales direct costs as condition records.
You define sales allocation types in Customizing for SAP Dairy Management by msg in the Customizing activity Dairy Costing > General Settings > Map Characteristic Fields to Sales Allocation Types. You can flexibly assign up to five characteristics from SAP CO-PA to the sales allocation types. The CO-PA characteristic classification distinguishes:

- product-related characteristics (for example, article number, product hierarchy),
- customer-related characteristics (for example, goods recipient, country, customer group, customer hierarchy),
- organization-related characteristics (for example, company code, sales organization).

This makes sales allocation types combinations of customers-articles-groups. All of the possible combinations of the assignment of sales allocation types to the above mentioned distribution cost types (account assignment objects) are available for distribution methods. Sales allocation types enable you to flexibly define the reference objects of the distribution method and thus to dynamically configure distribution process cost accounting to meet customer-specific requirements.

For the system to be able to determine the allocation bases to be used for each customer-article combination in distribution cost accounting, the assignment of sales allocation types to distribution cost objects includes the link with a calculation formula. You may only use one calculation formula per overhead cost object in the distribution method ("cost center", "internal order", "distribution process"), even if several sales allocation types are assigned to the cost object.

The distribution method always calculates with reference values and/or allocation bases. The company code of the sales organization determines the currency.

The combination of sales allocation type and calculation formula is also known as the distribution method object. Distribution method objects are the key elements in the subsequent distribution cost accounting. Whereas the respective sales allocation type selects a group of profitability segments in SAP CO-PA based on a combination of characteristics, the allocation base of the respective customer-article combination is determined in the distribution cost accounting via the specified value fields using the associated calculation formula.

### Activities

Call the Distribution Method transaction under Dairy Costing > Master Data.

### 5.12 Assign Cost Categories to Plant

**Use**

You use the Assign Cost Category to Plant transaction to populate and organize a functional contribution margin scheme in the cost accounting and to ensure account determination for the integration when writing back costs to SAP Profitability Analysis (CO-PA).

A contribution margin scheme (or a costing-based profitability analysis in SAP CO-PA) is characterized by functional cost categorization. The (cost category) scheme and its functional cost categories are defined and linked in the Customizing activity Assign Cost Category to Cost Category Scheme under Dairy Costing > General
Settings. You assign data to the scheme by assigning cost objects to individual functional cost categories. The system processes the assigned cost objects in individual rows of the cost object controlling.

The process cost accounting provides useful information about cost occurrence for each cost object. The cost object scheme is the generally selected structure to map the cost consumption of a cost object in an aggregated structure, for example, for a report. The assignment of the cost objects to individual cost categories of the scheme thus fulfills an aggregation or summarization function.

Given their strict cost center assignment in SAP Dairy Management by msg, processes have a genuine functional character. A costing-based profitability analysis with functional cost statement is thus the logical presentation of a process cost accounting. A presentation aligned to cost elements, such as an account-based profitability analysis, is much less suitable for this.

Features

You assign production cost objects in relation to a plant. You assign cost objects for each cost category in the following detail tables:

- Processes
- Cost Center
- Materials
- Internal Order

Materials and internal orders are assigned directly to a plant. Cost centers and processes are assigned to a plant via the company code in SAP Controlling (CO) and the account assignment object assignment is made in the Assign Account Assignment Object to Plant/Sales Organization under Dairy Cross Functions Master Data.

Within a controlling area, you generally use only one cost category scheme or very few alternative schemes.

You can also assign primary and secondary cost types to the cost categories. Using this assignment, you can write back primary and secondary costs to SAP CO-PA. You use the cost elements to link the cost objects with the cost categories.

Unlike the cost element assignment for each cost category, a cost category is split according to cost element groups in the cost accounting. The cost object controlling differentiates and displays the overhead cost object allocations according to cost element groups. These cost elements are managed in SAP CO and are assigned to specific fields in the production cost accounting table ProdCost to classify the consumptions on cost element level in the calculation run.

Activities

Call the Assign Cost Categories to Plant transaction under Dairy Costing Master Data.
5.13 Assign Cost Category to Sales Organization

Use

You use the Assign Cost Category to Sales Organization transaction to populate and organize a functional contribution margin scheme in the cost accounting and to ensure account determination for the integration when writing back costs to SAP Profitability Analysis (CO-PA).

A contribution margin scheme (or a costing-based profitability analysis in SAP CO-PA) is characterized by functional cost categorization. The (cost category) scheme and its functional cost categories are defined and linked in the Customizing activity Assign Cost Category to Cost Category Scheme under Dairy Costing General Settings. You assign data to the scheme by assigning cost objects to individual functional cost categories. The system processes the assigned cost objects in individual rows of the cost object controlling.

The process cost accounting provides useful information about cost occurrence for each cost object. The cost object scheme is the generally selected structure to map the cost consumption of a cost object in an aggregated structure, for example, for a report. The assignment of the cost objects to individual cost categories of the scheme thus fulfills an aggregation or summarization function.

Given their strict cost center assignment in SAP Dairy Management by msg, processes have a genuine functional character. A costing-based profitability analysis with functional cost statement is thus the logical presentation of a process cost accounting. A presentation aligned to cost elements, such as an account-based profitability analysis, is much less suitable for this.

Features

You assign distribution cost objects to a sales organization. You assign cost objects for each cost category in the following detail tables:

- Distribution Processes
- Cost Center
- Internal Order
- Condition Type

Cost centers, distribution processes and internal orders are assigned to a sales organization via the account assignment object assignment in the Assign Account Assignment Object to Plant/Sales Organization transaction under Dairy Cross Functions Master Data. Condition types represent cost object direct costs that are typical to distribution.

Within a controlling area, you generally use only one cost category scheme or very few alternative schemes.

You can also assign primary and secondary cost types to the cost categories. Using this assignment, you can write back primary and secondary costs to SAP CO-PA. You use the cost elements to link the cost objects with the cost categories.

Unlike the cost element assignment for each cost category, a cost category is split according to cost element groups in the cost accounting. The overhead cost object allocations are differentiated and displayed according to cost element groups in the Cost Object Controlling. These cost elements are managed in SAP Controlling (CO)
and are assigned to specific fields in the distribution cost accounting table `SalesCost` to classify the consumptions on cost element level in the calculation run.

**Activities**

Call the *Assign Cost Category to Sales Organization* transaction under `Dairy Costing > Master Data`. 
6 Environment

Structure

You can use the following transactions in the environment of the *Dairy Costing* module:

- Copy Models Production [page 31]
- Copy Models Distribution [page 32]
- Write Back Future Material Prices
- Process Cost Allocation Manufacturing Orders
- Transfer Account Assignment Objects from Production Cost Accounting
- Transfer Account Assignment Object from Distribution Cost Accounting
- Send External Data to CO-PA
- Sales Distribution for Finished Products
- Profitability Analysis
- Accounting Direct Postings

6.1 Copy Models Production

Use

You use the *Copy Models Production* transaction to copy selective actual plan model data or plan model data to other plan models. If you wish to use largely identical data records in different plan models, this transaction reduces time-consuming effort thanks to its selection options.

Features

In the *Copy Models Production* transaction, you can currently only copy plant-related data records, such as processes, manufacturing processes and BOMs. The system supports actual and plan data here.

The source of actual data can be master data from SAP, for example, BOMs from *SAP Materials Management (MM)* and also master data, such as processes or manufacturing processes, which you have created in the *Dairy Cross Functions*.

The source of plan data is always plan models that you have created in SAP Dairy Management by msg.

The target object of a copy is always a plan model.

You can restrict the selection of the objects to be copied via the material hierarchies for manufacturing processes and BOMs and via the process hierarchies.
For the master data objects ‘processes’, ‘manufacturing processes’ and ‘BOMs’, you can specify whether the system is to delete or replace master data that already exists in the target model for the specified period. Note that master data that already exists in the target model is only replaced if the validity periods of the source data and of the target model match.

Activities

Call the **Copy Models Production** transaction under **Dairy Costing > Environment**.

### 6.2 Copy Models Distribution

**Use**

You use the **Copy Models Distribution** transaction to copy selective plan model data to new plan models. If you wish to use largely identical data records in different plan models, this transaction reduces time-consuming effort thanks to its selection options.

**Activities**

Call the **Copy Models Distribution** transaction under **Dairy Costing > Environment**.
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