

# Inspection Planning (QM-PT-IP)



HELP.QMPTIP

Release 4.6C



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## Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax
	Tip

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## Inspection Planning (QM-PT-IP)

### Purpose

You use the inspection planning functions to define inspection criteria (for example, material to be inspected, how the inspection is to take place, characteristics to be inspected, required test equipment, work center and inspection specifications). The R/3 System contains the following inspection planning options:

- You can use task lists ([inspection plans \[Page 26\]](#), [routings \[Ext.\]](#), [rate routings \[Ext.\]](#), [master recipes \[Ext.\]](#), and [maintenance task lists \[Ext.\]](#)) to define inspection characteristics, their assignment to inspection operations and the test equipment to be used. This enables you to inspect materials at a quality inspection.
- The [material specification \[Page 8\]](#) allows you to structure simple inspection planning procedures at client level.



You can carry out a quality inspection without an inspection plan or material specification using an inspection lot.

You define the parameters for inspection planning in the [inspection setup \[Ext.\]](#) (Quality management view of the material master).

### Implementation Considerations

Inspection operations are increasingly integrated in the production operations. The R/3 System offers you inspection plans for different uses, for example, model inspection, goods receipt inspection, goods issue inspection, material inspection and audit. The system takes the task list usage that you defined into account when selecting task lists.

### Integration

In the inspection plan, you define the inspection operations, the inspection characteristics to be inspected and the test equipment to be used. The inspection plan that is included in the QM component is related to the routing and the rate routing in the *Production* (PP) component and to the master recipe in the *Process Industry PP-PI* component. These task list types only differ slightly, with respect to the inspection planning functions.

For inspections in production, you do not need to additionally maintain inspection plans. The inspection characteristics are defined in the routings, rate routings or master recipes. You can assign the characteristics to the production operations themselves, or to the operations intended for inspection.

In inspection planning, you can reference the following master data:

- **QM-specific data**
  - [Material specification \[Page 8\]](#)
  - [Inspection plans \[Page 26\]](#)
  - [Master inspection characteristics \[Ext.\]](#)
  - [Inspection methods \[Ext.\]](#)

- [Code groups \[Ext.\]](#) and [selected sets \[Ext.\]](#)
- [Sampling procedure \[Ext.\]](#)
- [Sampling schemes \[Ext.\]](#)
- [Dynamic modification rules \[Ext.\]](#)
- [Quality documents \[Ext.\]](#)
- [Quality info records \[Ext.\]](#)
- **Other master data**
  - [Material master records \[Ext.\]](#)
  - Data from the [classification \[Ext.\]](#)
  - [Vendor master records \[Ext.\]](#)
  - [Customer master records \[Ext.\]](#)
  - [Customer info records \[Ext.\]](#)
  - [Test equipment master records \[Ext.\]](#)
  - [Work centers \[Ext.\]](#)
  - [Routings \[Ext.\]](#)
  - [Rate routings \[Ext.\]](#)
  - [Reference operation sets \[Ext.\]](#)
  - [Master recipes \[Ext.\]](#)
  - [Maintenance task lists \[Ext.\]](#)

## Material Specification

# Material Specification

## Purpose

In the *Quality Management* (QM) component, you can inspect either based on an inspection plan, or (with certain limitations) based on material specifications that are valid on a company-wide basis.

In such an inspection, the specifications from the material specification are used as the inspection specifications. In contrast to the inspection plan, the material specification is a specification that you can use for all plants, that is easier to maintain, and that can replace or supplement a plant-specific inspection plan.

## Integration

Depending on the settings in [Customizing \[Ext.\]](#), you define which class characteristics are to be valued with the results of the inspection, by assigning master inspection characteristics to class characteristics. In addition, this allows you to use the intervals that have been defined in the batch classification as inspection specifications.

When an inspection lot is created, the system copies the master inspection characteristics from the inspection plan and material specification into the inspection lot. The inspection specifications from the material specification take precedence over the inspection specifications in the inspection plan.

## Features

- In the material specification, you can assign master inspection characteristics to a material.
- You can define special inspection specifications for the material for each master inspection characteristic contained in the material specification.
- When you use a referenced master inspection characteristic that is not assigned to a class characteristic, you can unlock the master inspection characteristic, change the inspection specifications for a material individually and store them in the material specification. If there is an assignment to a class characteristic, you make this change in the batch class of the material.
- A material specification enables simplified inspection planning at client level.
- When you inspect with a material specification, inspection results can be transferred automatically to batches and the class characteristics from the batch class can be [valuated \[Ext.\]](#) automatically at inspection completion, provided that the material is to be handled in batches.
- In an inspection with a material specification, the inspection specifications from the [batch determination \[Ext.\]](#) take precedence over the inspection specifications in the master inspection characteristic, if the master inspection characteristic is assigned to the class characteristic.
- In an inspection with a material specification, the inspection specifications from the [variant configuration \[Ext.\]](#) take precedence over the inspection specifications in the master inspection characteristic, if the master inspection characteristic is assigned to the class characteristic.



## Constraints

Note the following when you use a material specification in an inspection:

- You cannot predefine work centers



To download data using the [IDI \[Ext.\]](#), you must always use a work center. However, since you cannot predefine work centers in the material specification, but the inspection specifications are defined in the material specification, you must proceed as follows:

- a. You create a material specification with master inspection characteristics.
  - b. You create a dummy inspection plan that only contains one operation with one work center.
  - c. In the inspection setup (Quality Management view of the material master), set the indicators *Insp. with task list* **and** *Insp. with mat spec*.
- You cannot dynamically modify the inspection scope.
  - You cannot use all characteristic types.
  - You must completely maintain master inspection characteristics (reference characteristic or complete copy model).

## Inspection Planning with a Material Specification

### Use

If you plan inspections with a material specification, you can inspect a material using the inspection characteristics that are defined in the task list, as well as the master inspection characteristics that are defined in the material specification, or the class characteristics that are linked to these master inspection characteristics.

### Integration

- You can transfer the results of the quality inspection to the [batch classification \[Ext.\]](#), if the master inspection characteristic you are inspecting is linked to a class characteristic.



For an **inspection without inspection points**, when the quality inspection is completed, the class characteristics of the class are automatically valuated using the measurement results (mean value or code) of the closed characteristics, for which a link to the class characteristics of the batch class is maintained in the material specification. This only applies if in [Customizing \[Ext.\]](#) the *Batch valuation without mat. spec* indicator is **not** set.

You can manually enter values for inspection characteristics that are linked to class characteristics using the material specification, but that were not inspected or closed (they are for example in a skip stage, or are not included in the task list). However, this is only possible if the class characteristics in the batch have not been valuated.

In the long text for the usage decision, the system logs which class characteristics for the batch class have inspection results available. The values that have been copied over into the batch classification are overwritten by the inspection results of subsequent inspections.

For **Inspection lots with inspection point processing**, the transfer of results to batch classification takes place when results are recorded for the inspection point. Once you have entered a batch and saved the inspection results, the class characteristics for the batch class are automatically valuated using the measured results from the closed inspection characteristics. In this case, the values cannot be entered manually. In the long text for the partial lot, the system logs which class characteristics for the batch class have inspection results available.

The batch class contains the latest inspection results that were recorded.

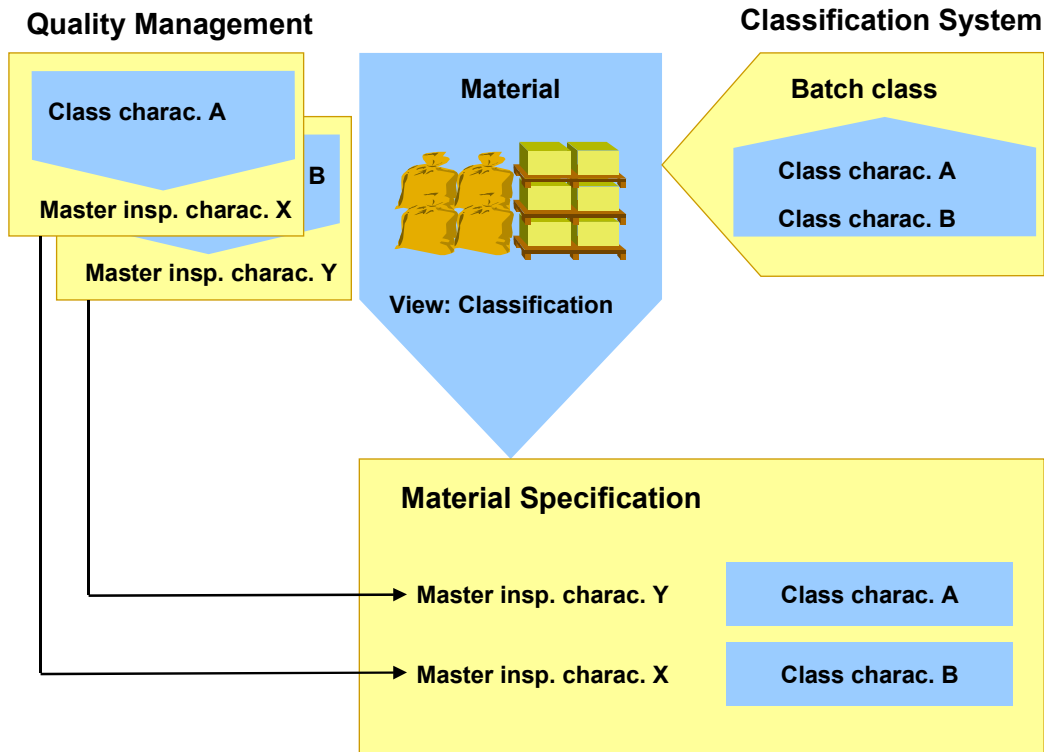


- Inspection point 1: Transfer inspection results to the batch
- Inspection point 2: Transfer inspection results to the batch
- Inspection point 3: Transfer inspection results to the batch
- If the inspection results for inspection point 2 are changed retrospectively, these new inspection results (for inspection point 2) are transferred to the batch.

Inspection Planning with a Material Specification

**Prerequisites**

Before you can use a material specification as a basis for an inspection, the following prerequisites must be fulfilled:



**Material Specification with Master Inspection Characteristics and Class Characteristics**

- The [class characteristic \[Ext.\]](#) to be inspected must have been created in the Classification System.
- A class for the [class type batch \[Ext.\]](#) must have been created in the Classification System.
- The class characteristic to be inspected must be assigned to the [batch class \[Ext.\]](#).
- The material to be inspected must be created.
- In the Classification view, the batch class must be assigned to the material to be inspected, so that you can inspect the material according to the specifications from the batch class for this material. If you do not assign the material to any batch class, you can only inspect the material according to the inspection specifications from the master inspection characteristic.
- The master inspection characteristic to be inspected must have been created in the QM basic data and been [linked \[Ext.\]](#) to the class characteristic to be inspected. The master inspection characteristic therefore automatically becomes a reference characteristic.
- If you want to inspect according to the classification intervals, you must assign the master inspection characteristic in the material specification to the class characteristic. If you **do not**

## Inspection Planning with a Material Specification

want to inspect according to the classification intervals, do not assign the master inspection characteristic in the material specification to a class characteristic.

- The material specification must have been created.
- In the [inspection setup \[Ext.\]](#) (Quality Management) view of the material master, the indicator [inspect with mat. spec \[Page 13\]](#) must be set.

## Material Specification with Master Inspection Characteristics and Without Class Characteristics

- The [master inspection characteristic \[Ext.\]](#) to be inspected must have been created in the QM basic data as a reference characteristic or a complete copy model.
- The material specification must have been created.
- In the inspection setup (Quality Management) view of the material master, the indicator *inspect with mat. spec* must be set.

## Features

When you plan inspections with a material specification, you can either:

- Assign master inspection characteristics to the class characteristics from the batch class, to be able to include the inspection specifications from the batch class for the inspection of the material.
- Include master inspection characteristics without a reference to class characteristics in the material specification.

### See also:

[Classification System \[Ext.\]](#)

[Link: Master Inspection Characteristic – Class Characteristic \[Ext.\]](#)

[Effects of Link at Lot Creation \[Ext.\]](#)

[Effects of Link at Batch Valuation \[Ext.\]](#)

[Effects of Link in Variant Configuration \[Ext.\]](#)

[Effects of Link at Batch Determination \[Ext.\]](#)

## Inspection with Material Specification and Task List

The use of the material specification depends on the settings of the following indicators in the inspection setup of the material master:

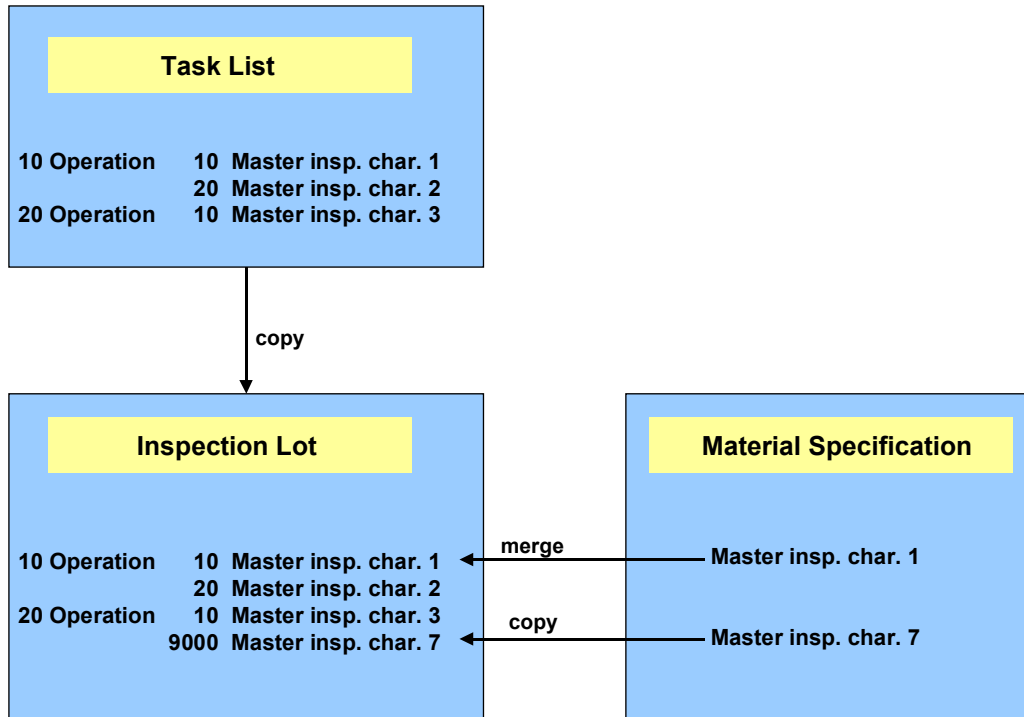
- *Insp. by charac.*
- *Insp. with mat. spec*
- *Insp. with task list*

You use the last two indicators to define how the inspection should take place. In addition, the material specification can either completely replace the inspection plan or supplement it.

You can set these indicators in the following ways:

Type of Inspection	Indicator	What You Should Know
With material specification	<i>Insp. with mat. spec</i> <i>Insp. by charac.</i>	In <a href="#">Customizing for inspection types [Ext.]</a> you must enter the operation data for the material specification (operation number and control key) and you must enter the number range for the inspection characteristics at <a href="#">client level [Ext.]</a> .
With task list	<i>Insp. with task list</i> <i>Insp. by charac.</i>	
With material specification and task list	<i>Insp. with mat. spec</i> <i>Insp. with task list</i> <i>Insp. by charac.</i>	Inspection specifications for master inspection characteristics that occur in the task list and in the material specification, are taken from the material specification. Additional master inspection characteristics entered in the material specification are assigned to the final operation of the task list.

Inspection with Material Specification and Task List



## Editing the Material Specification

1. Choose *Logistics* → *Quality management* → *Quality planning* → *Inspection planning* → *Material specification* → *Edit*.
2. On the initial screen, enter a *Material* and choose *Characteristics*.

The characteristic assignments screen in the material specification appears. The system displays QM-relevant class characteristics from the batch class that has been assigned to this material. The master inspection characteristics that were linked to class characteristics when the master inspection characteristics were processed are only shown when you edit the material specification.

The indicator *Reference* is set as a default value for all characteristic assignments in the material specification. This means that values (such as tolerances) are dynamically transferred to the material specification. If this indicator is set, the following can occur:

- If there is a link between a master inspection characteristic and a class characteristic in the material specification, the values (such as tolerances) are copied from the batch class of the material. Entries **cannot** be made in the corresponding fields in the material specification.
  - If there is no link between a master inspection characteristic and a class characteristic in the material specification, the values (such as tolerances) are copied from the master inspection characteristic. Entries **cannot** be made in the corresponding fields in the material specification.
3. If the *Smpl procedure* control indicator is set in the master inspection characteristic, you must enter one of the following sampling procedures in the dialog box for [Values \[Page 25\]](#)
    - Sampling procedure for a lot-based inspection
    - Sampling procedure for an inspection point-based inspection
  4. You have the following processing options:

To		What You Should Know
Enter new master inspection characteristics	Choose <i>New characteristic</i> and enter the required master inspection characteristic. If necessary, use the possible entries help.	To use a master inspection characteristic in the material specification, the master inspection characteristic must be fully maintained (reference characteristic or complete copy model) and released.  If a complete copy model has been entered, the reference is cancelled immediately, if the master inspection characteristic in the material specification is not assigned to a class characteristic.
Assign a new or other master inspection characteristic to a class characteristic	Enter the corresponding master inspection characteristic.	The values (such as tolerances) are copied from the batch class as inspection specifications.

**Editing the Material Specification**

Reference a master inspection characteristic	Enter the corresponding master inspection characteristic and choose <i>Create reference</i> .	The values (such as tolerances) are taken from the master inspection characteristic as inspection specifications, that is, changes that were made to the values in the master inspection characteristic without history are included in the material specification.
Cancel a reference to a master inspection characteristic	Select the required master inspection characteristic and choose <i>Cancel reference</i> .	You can unlock one or several master inspection characteristics, to change the specifications.  If you change the inspection specifications, these new values are then stored in the material specification for the material. The changes you make directly to the values in the master inspection characteristic <b>no longer</b> affect the values in the material specification.  You can only cancel the reference for master inspection characteristics that do not have a link to class characteristics of the batch class in the material specification.
Delete an assignment	Select the required master inspection characteristic and choose <i>Delete</i> .	

5. Save the data.

**Additional Functions on the Screen for Editing the Material Specification**

Function	Menu Path/Pushbutton	What You Should Know
Displaying the material	<i>Environment</i> → <i>Display material</i>	You can display the material, for which the material specification is valid.
<a href="#">Displaying values [Page 25]</a>	<i>Detail</i> pushbutton	You can change or display the values of: <ul style="list-style-type: none"> <li>• One master inspection characteristic (pushbutton in each row of the table)</li> <li>• Several master inspection characteristics (pushbutton below the table)</li> </ul>
Displaying master inspection characteristic	<i>Display mstr. insp. char.</i> pushbutton	You can display: <ul style="list-style-type: none"> <li>• One master inspection characteristic (pushbutton in each row of the table)</li> <li>• Several master inspection characteristics (pushbutton below the table)</li> </ul>



**Editing the Material Specification**

Displaying change history	<i>Change history</i> pushbutton	You can display the change history by characteristic for the material specification.
Displaying the class characteristic	<i>Display class char.</i> pushbutton	You can display one or several assigned class characteristic(s).

Planning a Material Specification

## Planning a Material Specification

### Use

Using this function, you can plan and manage different validity periods for a material specification. You can maintain a validity period that will become effective on a certain date.

### Procedure

1. Choose *Logistics* → *Quality management* → *Quality planning* → *Inspection planning* → *Material specification* → *For a key date* → *Edit*.

The initial screen for planning a validity period for a material specification appears.

2. Enter the required material and the key date, from which the changed validity period of the material specification is to apply and then choose *Characteristics*.

The characteristic assignments screen in the material specification appears. The QM-relevant class characteristics from the batch class assigned to the material are displayed on this screen. The master inspection characteristics that were [linked to class characteristics \[Ext.\]](#) when the master inspection characteristics were processed are only shown when you edit the material specification.

The indicator *Reference* is set as a default value for all characteristic assignments in the material specification. This means that values (such as tolerances) are dynamically transferred to the material specification. If this indicator is set, the following can occur:

- a. If a validity period has not yet planned for the specified date, the system displays a corresponding message. It then proposes the characteristics for the most recently planned validity period that is closest to the specified date. If no such validity period exists, the system proposes the currently valid material specification.
- b. If validity periods have already been planned, you can display them by choosing the *Validity periods* pushbutton, selecting one of the planned validity periods from the list, and changing it if necessary. If only one planned validity period exists, the system displays it directly.



The system selects and proposes the version of the material specification that is valid for the respective planning date.

To delete a validity period that has already been planned, delete all characteristics in the planned validity period.



The system contains two planned validity periods: February 1, 2000 and March 1, 2000. If a new validity period is created for April 1, 2000, the system proposes the characteristics that were planned for March 1, 2000. If you create a validity period for January 1, 2000, the system proposes the characteristics from the current material specification.

3. You have the following processing options:

To		What You Should Know
----	--	----------------------

Planning a Material Specification

<p>Enter new master inspection characteristics</p>	<p>Choose <i>New characteristic</i> and enter the required master inspection characteristic. If necessary, use the input help.</p>	<p>To use a master inspection characteristic in the material specification, the master inspection characteristic must be fully maintained (reference characteristic or complete copy model) and released.</p> <p>If a complete copy model has been entered, the reference is cancelled immediately, if the master inspection characteristic in the material specification is not assigned to a class characteristic.</p>
<p>Assign a new or other master inspection characteristic to a class characteristic</p>	<p>Enter the corresponding master inspection characteristic.</p>	<p>The values (such as tolerances) are copied from the batch class as inspection specifications.</p>
<p>Reference a master inspection characteristic</p>	<p>Enter the corresponding master inspection characteristic and choose <i>Create reference</i>.</p>	<p>The values (such as tolerances) are taken from the master inspection characteristic as inspection specifications; that is, changes that were made to the values in the master inspection characteristic without history are included in the material specification.</p>
<p>Cancel a reference to a master inspection characteristic</p>	<p>Select the required master inspection characteristic and choose <i>Cancel reference</i>.</p>	<p>You can unlock one or several master inspection characteristics, to change the specifications.</p> <p>If you change the inspection specifications, these new values are then stored in the material specification for the material. The changes you make directly to the values in the master inspection characteristic <b>no longer</b> affect the values in the material specification.</p> <p>You can only cancel the reference for master inspection characteristics that do not have a link to class characteristics of the batch class in the material specification.</p>
<p>Delete an assignment</p>	<p>Select the required master inspection characteristic and choose <i>Delete</i>.</p>	

4. Save the data.

## Planning a Material Specification



In contrast to active validity periods, the system does not create change documents for planned validity periods. Otherwise all functions are available.

### Additional Functions on the Screen for Planning the Material Specification

Function	Menu Path/Pushbutton	What You Should Know
Displaying the material	Environment → Display material	You can display the material, for which the material specification is valid.
<a href="#">Displaying values [Page 25]</a>	<i>Detail</i> pushbutton	You can change or display the values of: <ul style="list-style-type: none"> <li>• One master inspection characteristic (pushbutton in each row of the table)</li> <li>• Several master inspection characteristics (pushbutton below the table)</li> </ul>
Displaying master inspection characteristic	<i>Display mstr. insp. char.</i> pushbutton	You can display: <ul style="list-style-type: none"> <li>• One master inspection characteristic (pushbutton in each row of the table)</li> <li>• Several master inspection characteristics (pushbutton below the table)</li> </ul>
Displaying the class characteristic	<i>Display class char.</i> pushbutton	You can display one or several assigned class characteristic(s).

## Result

You have created a material specification that will be valid from the specified date. The validity period you edited is only a **planned** validity period and **not** an active one. For this reason, for example, the planned validity period for February 1, 2000 will **not** be used automatically when an inspection lot is created. You must first [activate \[Page 23\]](#) this validity period.

## Displaying a Material Specification for a Key Date

### Use

Using this function, you can display a material specification that is valid for a specific key date.

### Procedure

1. Choose *Logistics* → *Quality management* → *Quality planning* → *Inspection planning* → *Material specification* → *For a key date* → *Display*.

The initial screen for displaying a material specification for a specific key date appears.

2. Enter the required material and the key date upon which the material specification should become valid and then choose *Characteristics*.

The system displays the planned validity period for the material specification that lies nearest to the entered date. For example, if the system contains the planned validity periods of January 1, 2000, February 1, 2000, and March 1, 2000, and you enter a key date of February 15, 2000, the system displays the period for February 1, 2000.



If validity periods have already been planned, you can display these periods in a list by choosing *Edit* → *Validity periods*. You can then select a validity period from this list. If only one planned validity period exists, the system displays it directly.

### Additional Functions on the Screen for Displaying the Material Specification

Function	Menu Path/Pushbutton	What You Should Know
Displaying the material	Environment → Display material	You can display the material, for which the material specification is valid.
<a href="#">Displaying values [Page 25]</a>	<i>Detail</i> pushbutton	You can change or display the values of: <ul style="list-style-type: none"> <li>• One master inspection characteristic (pushbutton in each row of the table)</li> <li>• Several master inspection characteristics (pushbutton below the table)</li> </ul>
Displaying master inspection characteristic	<i>Display mstr. insp. char.</i> pushbutton	You can display: <ul style="list-style-type: none"> <li>• One master inspection characteristic (pushbutton in each row of the table)</li> <li>• Several master inspection characteristics (pushbutton below the table)</li> </ul>

### Displaying a Material Specification for a Key Date

Creating a Reference	<i>Create reference</i> pushbutton	The values (such as tolerances) are taken from the master inspection characteristic as inspection specifications; that is, changes that were made to the values in the master inspection characteristic without history are included in the material specification.
Canceling a reference	<i>Cancel reference</i> pushbutton	<p>You can unlock one or several master inspection characteristics, to change the specifications.</p> <p>If you change the inspection specifications, these new values are then stored in the material specification for the material. The changes you make directly to the values in the master inspection characteristic <b>no longer</b> affect the values in the material specification.</p> <p>You can only cancel the reference for master inspection characteristics that do not have a link to class characteristics of the batch class in the material specification.</p>
Displaying the class characteristic	<i>Display class char.</i> pushbutton	You can display one or several assigned class characteristic(s).

## Activating a Material Specification

### Use

You use this function to activate a planned validity period for a material specification.

### Procedure

1. Choose *Logistics* → *Quality management* → *Quality planning* → *Inspection planning* → *Material specification* → *For a key date* → *Activate manually*.



By choosing *Inspection planning* → *Material specification* → *For a key date* → *Job planning*, you can execute the activation program as a [planned job \[Ext.\]](#).

By choosing *Inspection planning* → *Material specification* → *For a key date* → *Job overview*, you can display an overview of the material specifications to be activated.

2. On the activation screen, enter the required key date and choose *Execute*.

The system displays a list of all material specifications that were activated.



If you want to display a list of the material specifications to be activated, before you delete them, you must set the *Simulate activation* indicator.

If you set the *Key-date-based selection* indicator, planned validity periods are activated exactly on the key date, so that they become the current period for the material specification. To make sure that a validity period is always activated on the planned date, we recommend you carry out the activation daily (for example, automatically on the basis of a batch job).

When a validity period is activated, it automatically becomes the current period for the material specification. This allows you to deliberately activate a period that lies in past or is planned for the future.

### Result

- When an inspection lot is created, the activated validity period is used as the current period for the material specification (that is, the system selects the planned changes for the inspection lot and activates them).
- When batches are valuated, the validity period is used as the current period for the material specification (that is, the system selects the planned changes for the inspection lot and activates them). This only applies if in [Customizing \[Ext.\]](#) the *Batch valuation without mat. spec* indicator is **not** set.
- The planned validity periods that were never activated and whose key dates lie before the current date are automatically deleted when a period is activated.
- The system creates change documents for the activated material specifications.

### Activating a Material Specification

- The system creates a log for the processed material specifications. In this log, you can also identify which material specifications could not be processed (because of a missing authorization or an existing block).



## Values for the Master Inspection Characteristic

You can display or change values for master inspection characteristics (for example, inspection specifications, such as, decimal places, specification limits, unit of measurement, or data for the characteristic ID and data origin) in the following ways:

- You select the required master inspection characteristic and choose *Detail* under the table.
- You choose *Detail* in the **line** of the table that contains the required master inspection characteristic.

### Changing Values

You can only change the inspection specifications for a master inspection characteristic, if

- It is **not** assigned to a class characteristic in the material specification
- The reference to a master inspection characteristic has been cancelled. This means that the master inspection characteristic has been unlocked.

If you change inspection specifications, they are stored directly in the material specification. The advantage of this is that you can define material-specific tolerance limits without having to create several master inspection characteristics.

You define an additional characteristic description in the field *Characteristic ID* or change the existing characteristic description in the master inspection characteristic. This description is used to identify a characteristic during the electronic exchange of characteristic values.

You specify in the field *Data origin* from which data source (for example, handheld application, quality certificate) the results data should be copied.

### Entering a sampling procedure

If the control indicator *Sampling procedure* is set in the inspection characteristic, you can enter the following sampling procedures:

- Sampling procedure for a **lot-based** inspection

This sampling procedure is used for an inspection with a task list and material specification, if a lot-based inspection is specified in the task list and the master inspection characteristic is **only** used in the material specification. If the master inspection characteristic is also used in the task list, the sampling procedure specified in this task list is used. If no sampling procedure has been defined in the material specification or task list, the sampling procedure defined in [Customizing \[Ext.\]](#) is used in the inspection.
- Sampling procedure for an **inspection point-based** inspection

This sampling procedure is used for an inspection during production with a task list and material specification, if an inspection-point-based inspection is specified in the task list and the master inspection characteristic is **only** used in the material specification. If the master inspection characteristic is also used in the task list, the sampling procedure specified in this task list is used.

## Inspection plans

# Inspection plans

## Purpose

You can create inspection plans for different uses (for example, model inspection, carrying out an audit, preliminary series inspection, goods receipt inspection, goods issue inspection, inspection of stock transfers, inspections in repetitive manufacturing).

## Integration

The R/3 System uses task lists as a planning and processing tool. In the R/3 System, you can inspect with or without a task list. If you use a task list, you can include inspection specifications in the production processes. Different task list types are used for planning purposes in the R/3 system, depending on the application component:

- In production (application component *PP*)
  - [Routings \[Ext.\]](#)
  - [Rate routings \[Ext.\]](#)
  - [Reference operation sets \[Ext.\]](#)
- In the process industry (application component *PP-PI*)
  - [Master recipes \[Ext.\]](#)
- In plant maintenance (application component *PM*)
  - [Maintenance task lists \[Ext.\]](#)
- In quality management (application component *QM*)
  - Inspection plans
  - Reference operation sets

The inspection plan is related to the rate routing and the master recipe. These task list types only differ slightly, with respect to the inspection planning functions.

For inspections in production, you do not need to additionally process inspection plans. The inspection characteristics are defined in routings (inspection during production), rate routings, master recipes (inspection during production in the process industry) or maintenance task lists (calibration inspection).

When you create an inspection plan, you can copy or link to a reference operation set (describes frequently-used operations but is not assigned to a material).

## Features

- You use an inspection plan to define which characteristics are to be inspected in each inspection operation and which test equipment is to be used in the inspection.
- You use an inspection plan, for example, to carry out a model, goods issue, goods receipt or recurring inspection.
- You can collate inspection plans in task list groups.

## Inspection plans

- The inspection plan is divided into the elements inspection plan header, inspection operation, inspection characteristic and test equipment as a production resource/tool.



The task list types used in production contain other elements, such as, alternative operation sequences and material components.

- In the inspection plan header, you can define general data, (for example, planner group, task list usage, task list status, information for dynamic modification, inspection points, physical-sample drawing).
- You can assign several materials to an inspection plan. You can create several inspection plans with different inspection operations or inspection characteristics for a material or a combination of material, vendor and manufacturer, or material and customer.
- You can assign an inspection plan to several vendors or customers.
- Plans are subject to engineering change management. The system manages separate change statuses for each structural element in the plan. Therefore, you can check at any time how a plan looked at a particular key date.

## Inspection Planning with Inspection Plans

### Use

Inspection plans help you to describe how a quality inspection of one or several materials is to take place. In the inspection plan, you define the sequence of inspection operations and the range of specifications available for inspecting inspection characteristics.

### Integration

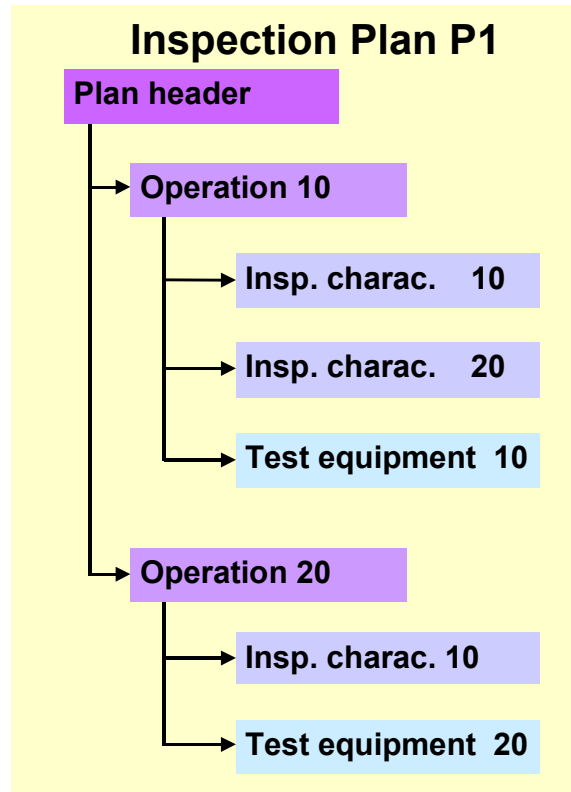
You can integrate the following master data in your inspection plans:

- **QM-specific data**
  - [Master inspection characteristics \[Ext.\]](#) to standardize the definition of the characteristics to be inspected.
  - [Inspection methods \[Ext.\]](#), to define the procedures used in the inspections.
  - [Code groups \[Ext.\]](#) and [selected sets \[Ext.\]](#), to define codes for results recording.
  - [Sampling procedures \[Ext.\]](#) for sample determination.
  - [Dynamic modification rules \[Ext.\]](#), to change inspection scopes based on the expected quality level.
- **Other master data**
  - [Reference operation sets \[Ext.\]](#), to structure operations and inspection characteristics.
  - [Work center \[Ext.\]](#), to define where the inspection is to take place. The work center is also used to settle [appraisal costs \[Ext.\]](#).
  - [Production resources/tools \[Ext.\]](#), to define the test equipment to be used. Inspection planning must ensure that the test equipment required for an inspection is available or can be obtained.
  - [Change master record \[Ext.\]](#) with which you can manage various change statuses.
  - [Classes in the class system \[Ext.\]](#), to classify inspection plans.
  - Scheduling, to check the expected run time and modify it if necessary.
  - [Material master records \[Ext.\]](#) for the materials that are inspected with the inspection plan.
  - [Vendor master records \[Ext.\]](#), to assign an inspection plan to a material in conjunction with a vendor.
  - [Customer master records \[Ext.\]](#) to assign an inspection plan to a material in conjunction with a customer.
  - [Sampling schemes \[Ext.\]](#) for sample determination.
  - Info records for combinations of material and vendor, or of material, customer and sales organization or purchasing data.

## Features

The inspection plan has a similar structure to that of the routing. Inspection characteristics and test equipment (production resources/ tools) are assigned to one or more operations, which are in turn assigned to the inspection plan header.

Inspection specifications at inspection plan level (task list header, operation, inspection characteristic) can be overwritten by the specifications from a subordinate level.



## Inspection Plan Header

The structure of the inspection plan header is similar to that of the routing. The information defined in the plan header serves as the specification for the entire plan. The following information is defined in the plan header:

- Plan data (for example, assigned materials, task list group, group counter, plant, task list usage, plan status, planner group responsible, planning work center, validity of the plan for a certain lot-size range, old plan number).
- Information about dynamic modification and inspection points (for example, definition of inspection points, sample-drawing procedure, dynamic modification level, dynamic modification rule, dynamic modification criteria).
- Information about external numbering in results recording.
- Information about engineering change management (for example, change rule, change type).

## Inspection Planning with Inspection Plans

- Administrative data (for example, change number, validity period, creator, created on, changed by, changed on and date last archived).

From the plan header, you can also enter details of material-task list assignments and a long text that describes the inspection plan.

## Inspection Operation

You assign one or more inspection operations to the inspection plan header. The structure of the inspection operations is also similar to that of the operations in a routing. At the operation level, you define:

- How the inspection is to take place
- The work center for the inspection
- The sequence in which the inspections are to take place
- The test equipment (as production resources/tools) that is required for the inspection
- Default values (such as base quantity, unit of measure, conversion of units of measure (header/operation))
- Data for controlling results recording
- Information about the inspection point (reference, inspection point completion)
- Values for calculating appraisal costs
- User-specific fields

From the operation level, you can gain an overview of any work centers, test equipment and inspection characteristics that have been assigned.

## Inspection Characteristic

You can assign several inspection characteristics to each inspection operation. At inspection characteristic level, you define:

- What is to be inspected (characteristic number, short text, long text and master inspection characteristic, if required)
- Characteristic type (quantitative or qualitative inspection characteristic)
- Characteristic category (required characteristic, optional characteristic, conditional characteristic)
- Controls for results recording
- Dependent characteristic specifications
- Control indicators for the inspection characteristic
- Quantitative data for the quantitative characteristic
- Characteristic attributes (catalog type 1) for the qualitative inspection characteristic
- Other catalogs
- Test equipment to be used
- Inspection methods to be used

---

**Inspection Planning with Inspection Plans**

- Sampling procedures to be used
- Dynamic modification rules to be used

For inspection characteristics in an operation, you define:

- Whether a characteristic (conditional characteristic) is to be inspected, based on whether the previous characteristic has been accepted or rejected.
- Whether the sample size for a characteristic (dependent characteristic) is to be dynamically modified using a leading characteristic.
- Whether the system is to calculate the characteristic value for a characteristic (calculated characteristic) using data from other characteristics that have been previously valuated.

## Processing of Inspection Plans/Reference Operation Sets

### Purpose

You use inspection plans to process a quality inspection in *Quality Management* (QM). You use reference operation sets as copy models.

### Prerequisites

- If you want to create an inspection plan/reference operation set with a copy model, there must be at least one inspection plan or reference operation set already in the system.
- If you want to use master records in the inspection plan (for example, material, master inspection characteristics, inspection methods or work centers), these must exist and be released in the system.
- For inspection plans or reference operation sets that require history, the corresponding [change master record \[Ext.\]](#) must have been created.
- A released change order must have been created for inspection plans or reference operation sets requiring approval.
- The revision level of the material to be inspected must exist for inspection plans that are to be assigned to a revision level.

### Process Flow

1. You access inspection plan processing. Depending on which activities you want to perform, you use the following functions:
  - **Create inspection plan**

You can use an inspection plan or reference operation set as a copy model. The data in this copy model is copied into your inspection plan. You can change this data.
  - **Change inspection plan**
  - **Display inspection plan**
  - **Create reference operation set**

You can use an inspection plan or reference operation set as a copy model. The data in this copy model is copied into your reference operation set. You can change this data at any time. When you create an operation for a reference operation set, you cannot use a copy model. You must enter all data manually.
  - **Change reference operation set**
  - **Display reference operation set**



If task lists already exist for the same material or task list group in the system, once you access the function a screen appears, from which you can select the required inspection plan or reference operation set.



**Processing of Inspection Plans/Reference Operation Sets**

2. You edit the [header data \[Page 37\]](#) in the inspection plan or reference operation set.
3. You edit the [inspection operations \[Page 50\]](#) in the inspection plan or reference operation set.
4. You assign inspection characteristics to the inspection operations.
5. If necessary you perform the following steps (in any order):
  - You assign data at header and operation level.
  - You assign one or more materials (only for the inspection plan).
  - You edit [inspection characteristics \[Page 59\]](#).
  - You define material/customer/vendor-specific default values (dependent characteristic specifications) for an inspection characteristic.
  - You assign test equipment at operation, characteristic level, or both (as production resources/ tools). You must however note that you can assign several items of test equipment to an operation, but can only assign one item of test equipment to an inspection characteristic.
  - You assign QM [basic data \[Ext.\]](#) at operation, characteristic level, (or both).
  - You determine the work center, at which the inspection takes place.
6. You check the [consistency \[Page 80\]](#) of the data you entered.
7. You release the inspection plan or reference operation set.
8. You save the inspection plan or reference operation set.



If you want to delete an inspection plan or reference operation set, in the task list overview, select the inspection plan or reference operation set to be deleted and choose *Delete*.

## Creating an Inspection Plan (with or Without Copy Model)

# Creating an Inspection Plan (with or Without Copy Model)

## Use

You can create a new inspection plan, copy an existing inspection plan, or create a reference to or copy a reference operation set.



If you copy a reference operation set to an inspection plan (this means unlocking the reference operation set), no link exists afterwards between the inspection plan and the reference operation set. You cannot therefore create a where-used list for the reference operation set or replace it in the inspection plan. In addition, changes made to the reference operation set are not automatically included in the inspection plan. You can however, overwrite the data in the copied reference operation set.

## Prerequisites

Before creating an inspection plan, you must define:

- How (for example, at goods receipt and stock transfers) and when (validity) this inspection plan is to be used.
- Which materials are to be inspected with the inspection plan These materials must exist in the system when you create the inspection plan.
- The work centers where inspections are to take place These work centers must exist in the system when you create the inspection plan.
- The test equipment that is required for the inspection This test equipment must exist in the system and have been released when you create the inspection plan.
- Whether you want to create an inspection plan using a copy model In this case, there must be at least one inspection plan or reference operation set in the system.
- Whether you want to use master inspection characteristics These master inspection characteristics must exist in the system and have been released when you create the inspection plan.
- Whether you want to use inspection methods These inspection methods must exist in the system and have been released when you create the inspection plan.
- Whether you want to use code groups or selected sets. These code groups or selected sets must exist in the system and have been released when you create the inspection plan.
- Whether you want to use sampling procedures, sampling schemes or dynamic modification rules. This basic data must exist in the system when you create the inspection plan.

## Procedure

1. Choose *Logistics* → *Quality management* → *Quality planning* → *Inspection planning* → *Inspection plan* → *Create*.

The initial screen for creating an inspection plan appears.

**Creating an Inspection Plan (with or Without Copy Model)**

2. To create an inspection plan with or without a copy model, proceed as follows:

	<b>Create Inspection Plan with Copy Model</b>	<b>Create Inspection Plan Without Copy Model</b>
a)	Choose <i>Copy from...</i> A dialog box appears, in which you can select the task list type (inspection plan/reference operation set) for the copy model.	On the initial screen, enter the required data for the inspection plan and choose <i>Continue</i> .
b)	Select the required task list type and choose <i>Continue</i> . A dialog box appears, in which you can enter the following selection criteria for the plan you want to use as a copy model: <ul style="list-style-type: none"> <li>• Material</li> <li>• Plant</li> <li>• Task list group</li> <li>• Key date</li> <li>• Group counter</li> <li>• Status</li> <li>• Planner group</li> </ul>	
c)	Enter data as required and choose <i>Continue</i> . If there are several inspection plans available, another screen appears on which you can select the plan you require.	
d)	Mark an inspection plan and choose <i>Header</i> .	



You can also use the *Inspection plan create* function to make changes to existing inspection plans.

3. On the [header data screen \[Page 37\]](#) of the inspection plan, enter the required data. You can change the default values.
4. Choose *Operations*.  
The [operation overview \[Page 50\]](#) appears.
5. Create the required operations.
6. To create the required [inspection characteristics \[Page 59\]](#), choose *Inspection characteristics*.
7. To assign test equipment to an inspection characteristic, from the inspection characteristic overview, choose *PRT*.
8. Save the data.

---

**Creating an Inspection Plan (with or Without Copy Model)**



To delete an inspection plan, in the task list overview select the inspection plan to be deleted and choose *Delete*.

## Processing of Header Data

### Purpose

In the task list header, you define data that is to be valid for the entire inspection plan (for example, task list group, usage, status, deletion flag, dynamic modification parameters, definition of inspection points, details for engineering change management).

### Prerequisites

The master records used (for example, material master record, dynamic modification rule) must exist in the system and must have been released.

### Process Flow

1. You call up the header detail screen for the inspection plan.
2. You enter the following data:
  - Group counter
  - Text for the group counter
  - Plant
  - Deletion flag (if the inspection plan is to be deleted in the next archiving run)
  - Task list usage (required field)
  - Task list status (required field)
  - Planner group or department responsible, and the planned work center (optional)
  - Lot size (required field)
  - Old task list number (optional)
  - Definition of inspection points (optional)
  - Information for sample-drawing procedure (optional)
  - Information for dynamic modification (optional)
  - Whether the external numbering of units to be inspected is allowed (optional)
  - Data for the change rule and change type (optional)
3. You create a long text for the inspection plan, if required.
4. You assign one or more materials to the inspection plan, using the Mat.-Tlist assignment.
5. Save the data.

### Result

The inspection plan you created is uniquely identified by the following information, which is contained in the plan at header level:

Field	What You Should Know
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**Processing of Header Data**

<i>Plant</i>	Defines the organizational unit, in which the inspection plan was created
<i>Task list group</i>	Alphanumeric identification that is entered by you, or assigned by the system Similar task lists are collected in a task list group.
<i>Group counter</i>	Together with the task list group, this uniquely identifies the inspection plan. Each group counter stands for a group of operations, to which you can assign inspection characteristics.
<i>Use</i>	Indicates where the inspection plan is used (for example in a goods receipt inspection or in an inspection during production).
<i>Planner group</i>	People who are responsible for the processing of the inspection plan.

**See also:**

[Engineering Change Management \[Ext.\]](#)

## Editing Header Data

### Use

In the inspection plan header, you define data that applies to the entire inspection plan.

### Prerequisites



The master records used (for example, material master record, dynamic modification rule) must have been created and released in the system.

### Procedure

1. Call up the header detail screen from the create or change transaction for the [inspection plan \[Page 34\]](#).
2. Enter the following data:
  - Task list usage (the fields for defining the dynamic modification level and the dynamic modification rule are ready for input, depending on the usage).
  - Task list status (required field)
  - Group counter (you can overwrite the predefined entry).
  - Plant (you can overwrite the predefined entry).
3. Enter the following additional data, as required:

Field	What You Should Know
<i>Text for the group counter</i>	You can overwrite the predefined text.
<i>Planner group</i>	You enter the planner group or department that is responsible for the task list.
<i>From lot size</i> <i>To lot size</i>	You define the lot size range, that applies to the task list.
<i>Old task list no.</i>	You enter the task list number that the inspection plan was given in the “old system”.
<i>Inspec. points</i>	You can activate <a href="#">inspection points [Page 45]</a> in the task list to define that inspections must take place in intervals based on, for example, time or quantity.
<i>Sample-drawing proc.</i>	You enter the sample-drawing procedure to be used.

## Editing Header Data

<i>Dynamic mod. level</i>	<p>You enter the level, at which you want to define dynamic modification parameters. You can specify whether dynamic modification is to take place at characteristic, inspection lot, or inspection type level. You cannot dynamically modify at header <b>and</b> characteristic level of the task list. You can make an entry in this field, depending on the task list usage.</p> <p style="text-align: center;"></p> <p>If you dynamically modify at inspection type level with a task list, the dynamic modification rule that is defined in the <a href="#">inspection setup [Ext.]</a> is used. This allows dynamic modification to take place, based on inspection type when you use the same task list.</p>
<i>Modification rule</i>	<p>You enter the <a href="#">dynamic modification rule [Ext.]</a> to be used. You can make an entry in this field, depending on the task list usage.</p> <p style="text-align: center;"></p> <p>Dynamic modification in conjunction with a calibration inspection (task lists in Plant Maintenance) is not supported.</p>
<i>Dynamic modification criteria</i>	<p>If you want to use dynamic modification (with a task list) at inspection lot or inspection type level, you can define additional dynamic modification criteria, such as vendor or manufacturer. These criteria can then be included in the sample determination procedure.</p>
<i>Ext. numbering</i>	<p>You define whether external numbering of single values is to take place, when you record results and whether this numbering is to be unique.</p>
<i>Change rule</i>	<p>You enter the change procedure that is to be used when the inspection plan is processed.</p>
<i>Change type</i>	<p>You enter the change type for the inspection plan.</p>
<i>Deletion flag</i>	<p>You set this indicator if you want to delete the task list in the next <a href="#">archiving run [Ext.]</a>.</p>



The authorization for entering QM data at header level is controlled by the authorization object for the characteristics contained in the task list. All other data is controlled by the authorization objects for inspection plans or routings.

4. To edit a long text for the inspection plan, choose *Long text*.

Once you have edited the long text, choose *Continue* to return to the header detail screen.

5. To [assign one or more material\(s\) \[Page 48\]](#) to the inspection plan, choose *Material assignment*.

Once you have assigned all the required materials to the plan, choose *Continue* to return to the header detail screen.



6. Save the data.

**Additional Functions on the Data Header Screen**

Function	Pushbutton/Menu Path	What You Should Know
Editing the previous task list	<i>Previous task list</i> pushbutton	If there are several task lists available in the system that fulfill the selection criteria, you switch to the previous inspection plan on the list.
Editing the next task list	<i>Next task list</i> pushbutton	If there are several task lists available in the system that fulfill the selection criteria, you switch to the next inspection plan on the list.
Displaying the task list overview	<i>Task list overview</i> pushbutton	If there are several task lists available in the system that fulfill the selection criteria, you switch to the list of these.
Displaying/changing the <a href="#">operation overview</a> [Page 50]	<i>Operation overview</i> pushbutton	You can switch to the operation overview of the inspection plan.
Editing another task list	<i>Inspection plan → Other task list</i>	You can edit another task list.
Changing inspection plan	<i>Inspection plan → Change plan</i>	You switch to the function for changing the displayed inspection plan.
Displaying inspection plan	<i>Inspection plan → Display plan</i>	You switch to the function for displaying the inspection plan.
Displaying object overview	<i>Goto → Object overview</i>	You can display a hierarchical overview of all the objects contained in the inspection plan.
Editing the first task list	<i>Details → First task list</i>	If there are several task lists available in the system that fulfill the selection criteria, you switch to the first inspection plan on the list.
Editing the last task list	<i>Details → Last task list</i>	If there are several task lists available in the system that fulfill the selection criteria, you switch to the last inspection plan on the list.
<a href="#">Using profiles</a> [Page 43]	<i>Extras → Profile</i>	The information saved in a profile serves as the default for fields that are used repeatedly, when you create and change task lists.
Scheduling an inspection plan	<i>Extras → Scheduling → Schedule</i>	You can schedule inspection plans.

**Editing Header Data**

Classification at header level	<i>Extras → Classification → Header</i>	You can create a link to the classification system at task list header level.
Check inspection plan	<i>Extras → Task list check → Check task list</i>	You check the consistency of the data you entered.
Displaying check log	<i>Extras → Task list check → Consistency log</i>	You can display the consistency log for the task list check.
Displaying dynamic modification rule	<i>Environment → Header → Dynamic modification rule</i>	You can display the dynamic modification rule defined in the task list header.

## Using Profiles

### Use

Often, the same values are assigned to the same fields in different inspection plans. In such cases, it is advisable to predefine these fields in a profile and call them up when maintaining an inspection plan, thereby reducing the amount of work involved in entering data.

The information contained in the profile is a default that you can change, when you create and change inspection plans.



In addition, you can define profiles in [Customizing \[Ext.\]](#) for QM.

### Procedure

1. In the plan overview, header detail screen, operation overview or inspection characteristic overview of the inspection plan, choose *Extras* → *Profile*.

The Default Values for General Data screen appears.

4. Enter the following data, as required:

Field	What You Should Know
<i>Task list unit</i>	Default value for the base unit of measure of the material to be produced
<i>Predefined plnt</i>	Default value for the plant that applies to all operations
<i>Use</i>	Default value for the area, in which the inspection plan is to be used
<i>Status</i>	Default value for the inspection plan status
<i>Op./act. incrmnt</i>	Default value for the increment that is to be used for automatic numbering of the operations
<i>Base quantity</i>	Default value for the base unit of measure of the material to be produced
<i>Denominator</i>	Default value of the denominator for the conversion into base units of measure
<i>Numerator</i>	Default value of the numerator for the conversion into base units of measure

3. To call QM-specific default values, choose *QM data*.

The Default Values for Quality Assurance screen appears.

4. Enter the following data, as required:

Field	What You Should Know
<i>Char. increment</i>	Default value for the intervals, in which the inspection characteristic numbers are to be created in the inspection plan.
<i>Ch. insrt incr.</i>	Increments that are to be used if new inspection characteristics are added between already existing characteristics.
<i>Assign. increment</i>	Default value for the intervals, in which the assignment numbers are to be created

**Using Profiles**

<i>Sample unit</i>	Base unit of measure for sample determination for a characteristic
<i>Base smp. qty</i>	Factor for calculating the inspection quantity The system uses this factor to calculate the size of the single sample that is required for the inspection of the characteristic

5. Choose *Continue*.

The screen from which you called the profile appears again.

# Inspection Point

## Definition

An inspection point is an identifiable record of inspection results that is assigned to a work or inspection operation. Several inspection points can be assigned to an inspection operation.

## Use

With inspection points, you can have several inspections and can record multiple sets of characteristic results for an operation.

### Inspection Points for Inspections During Production

If you **inspect during production** using routings, rate routings or master recipes and you want to record inspection results in specific intervals, choose the inspection point type *Free inspection points in production*. You can define your own field combinations for this inspection type in [Customizing \[Ext.\]](#).

### Inspection Points in Goods Receipt

If you carry out **goods receipt inspections** with inspection points, choose the inspection point type *Free inspection points in production*. You can create your own field combinations for this inspection type in Customizing.

### Inspection Points in Plant Maintenance

If you carry out **calibration inspections** and want to record inspection results for equipment or functional locations, choose the inspection point type for *Equipment* or *Functional location*. You can create your own field combinations for these inspection types in Customizing. However, the field *Equipment* or *Functional location* must exist in the field combination.

### Inspection Points in Sample Management

If you use the **sample management** functions in a goods receipt inspection, or inspection during production with planned physical samples, each sample number is uniquely identified by an inspection point. Choose the inspection point type *Physical sample*. You can create your own field combinations for this inspection type in Customizing. However, the field *Sample* must exist in the field combination.

## Integration

### Inspection Point Data in Planning Objects

- **Task lists**

You enter the inspection point field combination for inspection point processing at header level. You can enter the following additional data: Sample-drawing procedure for the inspection point type for a *Physical sample*, partial lot assignment in the routing

At operation level, you enter how the inspection point is to be valuated, when you record results. Either you make the valuation manually, or the system makes it automatically. In addition, you enter a reference for the inspection point, (quantity reference, time reference, freely defined reference)

- **Sampling procedures**

## Inspection Point

In each sampling procedure that you reference at characteristic level in an inspection plan, you must have also set the indicator for inspection point processing.

### Inspection Point Data in Customizing

To identify inspection points, you can define a combination of fields in [Customizing \[Ext.\]](#). In such a field combination, user-defined fields as well as fixed fields based on the inspection point type are defined with individual key words and an individual sequence. You can, for example, use key words such as “Container”, “Barrel” or “Pallet” for the inspection point *Free inspection points* and for example “model” for the inspection point type *Physical sample*. If this task list is used in an inspection, the chosen field combination appears on the initial screen for results recording.

### Data in the Routing/Inspection Plan Header

In the task list header (of application components PP and PI), you can set detail levels for assigning the produced quantities.

- At the first and most detailed level (“Partial lots not supported”), the produced partial quantities are assigned to the inspection points, for which inspection results are also recorded.
- At the second detail level (“Partial lot for each inspection point”), the partial quantities that were assigned to the inspection points are combined into partial lots.
- At the third detail level (“Partial lot and batch for each insp. point”), the partial lots are collected in batches.

You then have the following options for defining the partial lot assignment:

- In the [task list header \[Page 39\]](#), if you do not make an entry in the partial lot assignment field, the settings are taken from [Customizing \[Ext.\]](#). If no value is defined in Customizing, this means that partial lots are not supported.
- If you define a partial lot assignment in the partial lot assignment field of the task list header, this assignment takes precedence over the values defined in Customizing.

## Processing Inspection Point Data in the Task List

### Use

With inspection points, you can have several inspections and can record multiple sets of characteristic results for an operation.

### Prerequisites

To Record Insp. Results for Insp. Points	Choose the Following Task List Type
In an inspection during production	Routing, rate routing or master recipe
At a goods receipt	Inspection plan
In Plant Maintenance	Maintenance task list
In sample management	Inspection plan, routing, rate routing or a master recipe.

### Procedure

1. Call up the [header detail screen \[Page 39\]](#) from the create or change transaction for the [inspection plan \[Page 34\]](#).
2. In the section *Parameters for dynamic modification/inspection points* select an inspection point to activate the inspection based on inspection points.
3. Choose *Operation overview*
4. In the operation overview, select the operation, for which you want to define inspection points and choose *Operation*
5. On the operation detail screen, in the section *Quality management inspection points*, select a variant for inspection point completion, as well as a reference (for a routing, rate routing or master recipe).
6. Choose *Inspection characteristic overview* and create the inspection characteristics for the operation.



You can only assign sampling procedures with an active indicator for an inspection point type to an inspection characteristic. You can also enter the inspection frequency in the sampling procedure.

7. Save the data.

## Editing Material-Task List Assignments

## Editing Material-Task List Assignments

### Use

To use an inspection plan for inspecting materials, you must assign one or more materials to it.

### Prerequisites

- You create the link between the material type and the task list type in [Customizing \[Ext.\]](#).
- The unit of measure for the material is the same as the unit of measure defined in the task list header.

### Procedure

1. On the header details screen choose *Mat-List assignment*.

A screen containing a list of all existing material assignments appears.

2. Edit the following for each assignment:

Field	What You Should Know
<i>Group counter</i>	You enter the group counter of the inspection plan, to which this material-task list assignment is to apply.
<i>Material</i>	You enter the material, to which this material-task list assignment is to apply.
<i>Plant</i>	You enter the plant, in which this material-task list assignment is to apply.

3. If required, edit the following additional data for each assignment:

Field	What You Should Know
<i>Vendor</i>	You can also make assignments that are based on a combination of material and vendor and/or a customer. If necessary, use the input help.
<i>Customer</i>	You can also make assignments that are based on a combination of material and vendor and/or a customer. If necessary, use the input help.



When an inspection lot is created, the system calls the task list for inspecting a material that corresponds most closely to the material/task list allocation. The following hierarchy applies:

- Material/Customer/Vendor
- Material/Customer
- Material

4. Choose *Continue*.

The system checks the assignments.



## Editing Material-Task List Assignments



If there are no errors, the new assignments are added to the list of existing assignments and the header details screen reappears.

The system displays a warning message when you change the material-task list assignment that material-dependent characteristic specifications exist and may also need to be changed:

If you change the data with a change number, the existing data record of the dependent characteristic specifications is copied, (that is a new data record is created on the key date for the change number).

5. To delete a material-task list assignment, place the cursor on the corresponding assignment and choose *Delete*.



When you delete a material-task list assignment, the system displays a warning message before carrying out the deletion that material-dependent characteristic specifications exist and will also be deleted automatically.

The data record for the dependent characteristic specifications is deleted immediately, or on the key date for the change number, depending on whether you delete with a change number.

## Processing of Operations

### Purpose

You use operations to describe individual inspection steps in an inspection plan. You define the work center, at which the inspection takes place and the default values for the inspection. You can describe how the inspection is to take place in the text for the inspection operation.

In an inspection plan, the inspection operation is identified by a number. The sequence of inspection operation numbers determines the sequence, in which you process the inspection operations for an inspection plan. You define the increment for these inspection operation numbers in the [Profile \[Page 43\]](#). You use the control key to define how an inspection operation in an inspection plan is to be managed.

### Prerequisites

- The header data for the inspection plan is already defined in the system.
- The master records used (for example, material master record, dynamic modification rule) must have been created and released in the system.
- The unit of measure defined in the header of a reference operation set that is to be referenced is the same as the unit of measure in the existing inspection plan.

### Process Flow

3. You call up the operation overview for the inspection plan.
4. You create the required inspection operations. You can then link to reference operation sets to simplify data entry.
5. You can enter the following data:
  - Operation number (required field)
  - Work center (optional)
  - Plant (required field)
  - [Control keys \[Ext.\]](#) (required field)
  - Standard text key (optional)
  - Description of the operation (optional)
  - Base quantity (required field)
  - Unit of meas. for op. (required field)
  - Long text for the operation (optional)
  - Recording view (optional)
  - Inspection point completion (obligatory when inspection points are defined in the task list header)
  - Inspection point reference (in routing)
  - [Scheduling \[Ext.\]](#) data

**Processing of Operations**

4. You assign one or more items of test equipment as [production resources/tools \[Ext.\]](#) (PRT), if you want to inspect with particular test equipment.
5. You run a consistency check on the inspection plan.
6. Save the data.



You can delete an operation at any time.

The authorization for entering QM data at operation level is controlled by the authorization object for the characteristics contained in the task list.

**Result**

You have created an inspection plan with operations, to which you can assign [inspection characteristics \[Ext.\]](#).

Editing Inspection Operations

## Editing Inspection Operations

### Use

You use inspection operations to describe individual inspection steps in an inspection plan and to define the work center and the default values for an inspection.

### Prerequisites

- The header data for the inspection plan is already defined in the system.
- The master records used (for example, material master record, dynamic modification rule) must have been created and released in the system.
- The unit of measure defined in the header of a reference operation set that is to be referenced is the same as the unit of measure in the existing inspection plan.

### Procedure

3. Call up the operation overview screen from the create or change transaction for the [inspection plan \[Page 34\]](#).
4. Create the required operations. You can link to [reference operation sets \[Page 56\]](#) to simplify data entry.
5. Enter the following data in the operation overview:

Field	What You Should Know
<i>Operation</i>	You enter the operation number. You can overwrite the proposed value.
<a href="#">Control key [Ext.]</a>	The control key defines the business relevance of the operation. Make sure that the <i>Inspection characteristics</i> indicator is set in <a href="#">Customizing [Ext.]</a> .
<i>Work center</i>	You define the place where the inspection is to take place or the person responsible for carrying out the inspection.
<i>Standard text key</i>	The standard text key provides a default for the description of an operation. This key simplifies data entry.
<i>Description</i>	You enter a short description of the operation.
<i>Base quantity</i>	You define the base quantity for the material to be manufactured. The default values for the operation relate to this quantity. You can overwrite the proposed value.
<i>Unit of meas. for op</i>	You define the unit for the material to be manufactured. You can overwrite the proposed value.

4. Choose *Operation* and on the operation detail screen, enter data as required:

Field/Screen Section	What You Should Know
<a href="#">Work center/Plant [Page 58]</a>	You define the place where the inspection is to take place or the person responsible for carrying out the inspection. You can overwrite the proposed entry for the plant.

Editing Inspection Operations

<i>Required qualification, Qualifications</i>	You define the qualification that must be held by the inspection personnel.
<i>Recording view</i>	You enter the recording view that is to appear when you confirm inspection results.
<i>Insp.pointCompletion</i>	You enter the reference and the type of valuation for the inspection point. If you have defined inspection points in the task list header, this is a required entry. You can overwrite the proposed entry.
<i>Field key</i>	You enter the default key words (field names) for the user fields.

5. To edit a long text for the operation, choose *Long text*.

Once you have edited the long text, choose *Continue* to return to the operation overview.

6. To check if the inspection plan is [consistent \[Page 80\]](#), choose *Check*.

7. Save the data.



The authorization for entering data at operation level is controlled by the authorization object for the characteristics contained in the task list.

**Additional Functions on the Operation Overview/Operation Detail Screen**

Function	Pushbutton/Menu Path	What You Should Know
Editing the previous task list	<i>Previous task list</i> pushbutton	If there are several task lists available in the system that fulfill the selection criteria, you switch to the previous inspection plan on the list.
Editing the next task list	<i>Next task list</i> pushbutton	If there are several task lists available in the system that fulfill the selection criteria, you switch to the next inspection plan on the list.
Displaying/Editing task list header	<i>Header</i> pushbutton	You can switch to the <a href="#">header detail screen [Page 39]</a> of the inspection plan.
Deleting an operation	<i>Delete</i> pushbutton	You can delete a selected operation at any time.
Creating a reference	<i>Create Ref.</i> pushbutton	When you create an inspection operation, you can link to one or more <a href="#">reference operation sets [Page 56]</a> .
Displaying/Editing operation details	<i>Operation</i> pushbutton	On the operation detail screen, you can edit additional data for the inspection plan.

**Editing Inspection Operations**

Editing inspection characteristics in the operation	<i>Inspection characteristic overview</i> pushbutton	You can switch to the inspection characteristic overview of the operation.
Assigning test equipment to the operation	<i>PRT overview</i> pushbutton	You can switch to the production resources/tools overview of the operation.
Displaying the task list overview	<i>Task list overview</i> pushbutton on the operation detail screen	If there are several task lists available in the system that fulfill the selection criteria, you switch to the list of these.
Other inspection plan	<i>Inspection plan → Other task list</i>	You can edit another inspection plan.
Creating an inspection plan	<i>Inspection plan → Create</i>	You can switch to the transaction for creating inspection plans.
Changing an inspection plan	<i>Inspection plan → Change</i>	You can switch to the transaction for changing inspection plans.
Display inspection plan	<i>Inspection plan → Display</i>	You can switch to the transaction for displaying inspection plans.
Editing/Displaying material-task list assignments	<i>Inspection plan → Mat.-TList assignment</i>	You can assign one or more <a href="#">materials [Page 48]</a> to an inspection plan.
Displaying/Editing operation overview	<i>Goto → Operation overview</i>	From the operation detail screen, you can switch to the operation overview of the inspection plan.
Displaying object overview	<i>Goto → Object overview</i>	You can display a hierarchical overview of all the objects contained in the inspection plan.
Displaying the first operation	<i>Details → First operation</i>	If there are several operations available in the system that fulfill the selection criteria, you switch to the first operation on the list.
Displaying the last operation	<i>Details → Last operation</i>	If there are several operations available in the system that fulfill the selection criteria, you switch to the last operation on the list.
Displaying data for production resources/tools	<i>Details → Production resources/tools</i>	If production resources/tools were assigned to the operation, you can display general, scheduling and administrative data for these resources/tools.
Displaying data for the inspection characteristic	<i>Details → Inspection characteristic</i>	If inspection characteristics were entered in the operation, you can display general, quantitative and qualitative data for these characteristics.

Editing Inspection Operations

<a href="#">Using profiles [Page 43]</a>	<i>Extras → Profile</i>	The information saved in a profile serves as the default for fields that are used repeatedly, when you create and change task lists.
Displaying the validity, change number and revision level	<i>Extras → Validity initial screen</i>	You can display the validity, change number and revision level for the current inspection plan.
Displaying other operation overview variants	<i>Extras → Other overview</i>	You can display your own operation overview variants that only show the columns you require.
Creating, displaying or unlocking references	<i>Extras → Reference → Create reference → Display → Unlock</i>	You can link to reference operation sets, display these references and <a href="#">unlock [Page 56]</a> them to make changes.
Scheduling an inspection plan	<i>Extras → Scheduling → Schedule → Sched. results → GANTT chart → Display protocol</i>	You can schedule inspection plans.
Classification at operation level	<i>Extras → Classification → Operation on the operation detail screen</i>	You can create a link to the classification system at operation level.
Displaying consistency log	<i>Extras → Task list check → Consistency log</i>	You can display a log of the inspections that have taken place.
Displaying the work center	<i>Environment → Header → Work center or Work center pushbutton on the operation detail screen</i>	You can display the work center, at which the inspection is to take place and for which the appraisal costs are to be confirmed.

## Linking a Reference Operation Set

# Linking a Reference Operation Set

## Use

When creating an inspection operation, you can link to one or several reference operation sets.



You can create where-used lists for reference operation sets and if required, replace these sets with others in one or several operation(s) in inspection plans.

If you change the referenced operation set, this change is also made in the inspection plan.

If you subsequently want to make changes to the data in the inspection operation, you must first cancel the link to the reference operation set (unlock).

## Prerequisites

You can only link to a reference operation set if:

- It has *Released (general)* status
- The unit of measure that was defined in the header of the set agrees with the unit of measure that was entered in the inspection operation that you want to create.
- You have not yet made any entries in the inspection operation fields. If you enter data, the system assumes that the inspection operation has already been created and does not therefore allow the use of a reference operation set.

## Procedure

1. In the operation overview, choose *Create Ref.*

The operation detail screen for creating links to a reference operation set appears.

2. Enter the following data:

Field	What You Should Know
<i>Operation</i>	You enter the operation number that you want to create with the help of the reference operation set.
<i>Standard text key</i>	Default for an operation description; optional entry.
<i>Group referred to</i>	You enter the task list group of the reference operation set to be linked.
<i>Grp counter ref. to</i>	You enter the group counter for the reference operation set to be linked. You can overwrite the proposed value.
<i>Operation increment</i>	You enter the increment for operation numbers when the reference is created. You can overwrite the proposed value.

3. Choose *Continue*.

The system copies the operations you chose with their corresponding information into the operation overview.



## Linking a Reference Operation Set



You cannot enter values in the new fields in the operation overview. This means that you cannot edit the data in this operation without first unlocking the reference.

4. To edit referenced operations, mark the required operations and choose *Extras* → *Reference* → *Unlock*.

You can now edit the operations, the link to the reference operation set no longer exists.



For these operations, the where-used list, replacement function and the central change function are no longer available for the reference operation set.

## Assigning Work Centers

# Assigning Work Centers

## Use

If you assign a particular work center to an inspection operation, you can confirm the activities performed in the inspection operation. The appraisal costs are determined in the *Controlling (CO)* application component with the help of the confirmed activity times.

## Prerequisites

For you to be able to confirm the activities for an inspection operation, the following conditions must be fulfilled:

- You must assign a work center to the inspection operation.
- The work center must be assigned to a cost center in the CO component.
- The cost center must define different activity types (such as, set up, machine or labor times) and a rate must be defined for each activity type.
- A QM order must be assigned in the [inspection setup \[Ext.\]](#).

## Procedure

1. In the operation overview, enter a control key for the inspection operation. This key is configured in [Customizing \[Ext.\]](#) as follows:
  - The *Cost* indicator is set
  - The type of confirmation was defined
2. Enter a work center for the operation on the operation detail screen.  
Additional data fields are then displayed in the screen section for default values.
3. Enter the following data in the additional fields, as required:
  - Unit for the activity type (hours, minutes etc.)
  - Activity types to be confirmed (for example, set up, machine or labor times)

## Result

You can record and settle the costs incurred in the inspection.

### See also:

[Quality-Related Costs \[Ext.\]](#)

## Processing of Inspection Characteristics

### Purpose

You use inspection characteristics to describe what is to be inspected and how the inspection is to take place. Inspection characteristics are assigned to inspection operations and are identified within an operation by a number.

To standardize processes, you can reference or copy master inspection characteristics. You can also copy inspection characteristics from other inspection plans into the current inspection operation or use reference operation sets.

### Prerequisites

- The operation has already been created in the system and contains a control key that specifies inspection characteristics.
- The master records used (for example, inspection method, dynamic modification rule, sampling procedure, sampling scheme, code groups, selected sets, production resources/tools) have been created and released in the system.
- In the basic data, the master inspection characteristic must have been created as:
  - A *Reference characteristic*, if it is to be referenced
  - A *Complete copy model*, if it is to be changed in the task list without first having to be unlocked
  - At least as an *Incomplete copy model*, if it is to be copied into the task list

### Process Flow

1. You call up the inspection characteristic overview for the inspection plan.
2. Create the required inspection characteristics. You can then reference (reference characteristic) or copy (complete or incomplete copy model) [master inspection characteristics \[Ext.\]](#) to simplify data entry.
3. You can enter the following data:
  - Characteristic number (required field)
  - Proposal for characteristic control indicator (optional)
  - Quantitative or qualitative characteristic (you must make one entry)
  - Characteristic category (optional characteristic, conditional characteristic, required characteristic)
  - Recording type
  - Additional [control indicators \[Ext.\]](#) for the characteristic (optional)
  - Master inspection characteristic (optional)
  - Plant for the characteristic (required field for a master inspection characteristic)
  - Characteristic version (required field for a master inspection characteristic)
  - Short text for the inspection characteristic (optional)

## Processing of Inspection Characteristics

- Long text for the inspection characteristic (optional)
  - Tolerance key (optional)
  - Dependent characteristic specifications (optional)
  - Information for inspection method (name, plant, version)
  - Selected set
  - Partial sample (optional)
  - Info fields (optional)
4. Enter the following additional data, as required:
- Detail data for general data  
You can define an additional characteristic description in the field *Characteristic ID*, or change the existing characteristic description in the master inspection characteristic (if the master inspection characteristic was locked). This description identifies a characteristic during the electronic exchange of characteristic values.  
  
In the field *Data origin*, you specify from which data source (for example, handheld application, quality certificate) the results data should be copied.
  - Information for [quantitative data \[Ext.\]](#) (for example, SPC criteria, plausibility limits)
  - Information for [catalogs \[Ext.\]](#) (for example, defect codes)
  - Information for the sample (for example, sampling procedures, dynamic modification rules)
5. You assign an item of test equipment to the inspection characteristic as a [production resource/tool \[Ext.\]](#) (PRT), if you want to inspect with particular test equipment.



The test equipment must first be assigned to the operation as a production resource/tool.

6. You run a consistency check on the inspection plan.
7. Save the data.



The authorization for entering data at inspection characteristic level is controlled by the authorization object for the characteristics contained in the task list.

## Result

You have created an inspection plan with inspection characteristics that you can use in inspections.

## Editing Inspection Characteristics

### Use

You use inspection characteristics to describe what is to be inspected and how the inspection is to take place.

### Prerequisites

- The operation has already been created in the system and contains a control key that specifies inspection characteristics.
- The master records used (for example, inspection method, dynamic modification rule, sampling procedure, sampling scheme, code groups, selected sets, production resources/tools) have been created and released in the system.
- In the basic data, the [master inspection characteristic \[Ext.\]](#) must have been created as:
  - A *Reference characteristic*, if it is to be referenced
  - A *Complete copy model*, if it is to be changed in the task list without first having to be unlocked
  - At least as an *Incomplete copy model*, if it is to be copied into the task list

### Procedure

6. Call up the operation overview screen from the create or change transaction for the [inspection plan \[Page 34\]](#).
7. Select the [operation \[Page 52\]](#), for which you want to create inspection characteristics and choose *Inspection characteristics*.
8. Create the required inspection characteristics. You can then reference or copy master inspection characteristics to simplify data entry.
9. Enter the following data in the inspection characteristic overview, as required:

Field	What You Should Know
<i>Char.</i>	You enter the number of the inspection characteristic; you can define the increment for this inspection characteristic number in the <a href="#">profile [Page 43]</a> .
<i>Preset indicators</i>	Default values for <a href="#">control indicators [Ext.]</a> to simplify data entry. You can change these values in the inspection characteristic, except if the <i>Fixed</i> indicator is set in the control key. Depending on the control key you entered, you cannot enter values in some of the fields in the inspection characteristic overview, (fields are shaded gray).
<i>Qn or Ql</i>	You define the inspection characteristic as quantitative or qualitative characteristic.

**Editing Inspection Characteristics**

<p><i>Master inspection characteristic</i></p>	<p>You enter the identifier for the master inspection characteristic that you want to reference or copy. The system selects the current version of the master inspection characteristic.</p> <p>If a master inspection characteristic is used both in an inspection plan and a material specification, then the inspection characteristics from the material specification take precedence over those in the inspection plan, if the corresponding material is being inspected.</p> <p>The data in a copied master inspection characteristic is locked, if it is marked as a reference characteristic.</p>
<p><i>Plant</i></p>	<p>You enter the plant for the master inspection characteristic. You can overwrite the proposed value.</p>
<p><i>Version</i></p>	<p>You enter the version for the master inspection characteristic. If you do not enter a version number, the current version of the characteristic is assigned.</p>
<p><i>Short text insp. char.</i></p>	<p>You enter a description for the inspection characteristic.</p>
<p><i>Long text</i></p>	<p>You enter a descriptive long text for the inspection characteristic. Once you have edited the long text, choose <i>Continue</i> to return to the characteristic overview.</p>
<p><i>Tolerance key (for quantitative inspection characteristics)</i></p>	<p>Default for tolerance values that can contain target values, units of measurement, accuracy and the specification limits. You can use the <a href="#">Tolerance key [Ext.]</a> to include DIN norm specifications that are defined in <a href="#">Customizing [Ext.]</a>.</p>
<p><i>DepChar specs</i></p>	<p>You can create/edit material, customer or vendor-specific characteristic specifications. These dependent characteristic specifications overwrite the characteristic specifications.</p>
<p><i>Method</i></p>	<p>You enter the name of the <a href="#">inspection method [Ext.]</a> that you want to use to inspect the inspection characteristic. For referenced master inspection characteristics, you can select an inspection method from the list of inspection methods assigned to the master inspection characteristic. For other master inspection characteristics, you can assign any released inspection method. If an <a href="#">inspector qualification [Ext.]</a> has been defined in the inspection method, the system copies the qualification from the inspection method.</p>
<p><i>Plant</i></p>	<p>You enter the plant for the inspection method to be used.</p>
<p><i>Version</i></p>	<p>You enter the version for the inspection method to be used.</p>
<p><i>Par. sample</i></p>	<p>You enter the number of the partial sample that is assigned to the inspection characteristic in the task list. You can combine several characteristics within an operation into a partial lot.</p>
<p><i>InfoField 1</i> <i>InfoField 2</i> <i>InfoField 3</i></p>	<p>You can enter information for the inspection characteristic.</p>

## Editing Inspection Characteristics

5. Choose *Continue*.

Different screens for editing the control indicators appear, depending on the characteristic type that you have defined, (qualitative or quantitative). Information relating to the sample calculation, results recording, inspection scope, determination of the characteristic type and details for a long-term inspection is linked to these [control indicators \[Ext.\]](#).

6. Edit the control indicators and choose *Continue*.

If you have not entered all the required data in the inspection characteristic overview, the general data screen for the characteristic appears. You can enter any missing information (such as the inspection characteristic short text, quantitative data, catalog assignment, partial sample, inspector qualification) on this screen.



If you create a task list group that is not yet assigned to a material, you must define catalogs for qualitative characteristics (if you have set the indicator *Characteristic attribute*) and quantitative data for quantitative characteristics.

7. Enter data as required and choose *Continue*.

The inspection characteristic overview screen reappears.

8. To check if the inspection plan is [consistent \[Page 80\]](#), choose *Consistency check*.

9. Save the data.



The authorization for entering data at inspection characteristic level is controlled by the authorization object for the characteristics contained in the task list.

**See also:**

[Functions in the Inspection Characteristic Overview \[Page 64\]](#)

[Quantitative Data \[Ext.\]](#)

## Functions in the Characteristic Overview

## Functions in the Characteristic Overview

You can access the following functions from the inspection characteristic overview:

Function	Pushbutton/Menu Path	What You Should Know
Displaying/Editing task list header	<i>Header</i> pushbutton	You can switch to the <a href="#">header detail screen [Page 39]</a> of the inspection plan.
Displaying the test equipment overview	<i>PRT overview</i> pushbutton	You can switch to the test equipment overview of the operation.  If you have assigned <a href="#">test equipment [Ext.]</a> to the operation and have set the <i>Assign test equipment</i> indicator, you can assign one of these items of equipment to the inspection characteristic.
Copying inspection characteristics within a task list and from other task lists	<i>Copy characteristic...</i> pushbutton	You can copy inspection characteristics from the same inspection plan (by setting the <i>Current task list</i> indicator) or from another inspection plan (enter data in the screen section <i>Other task list</i> on the selection screen) into the operation you are currently processing. To do this, you select the inspection characteristics you want to copy from the list created by the system
Displaying the overview of dependent characteristic specifications	<i>Dependent characteristic specs</i> pushbutton	You can switch to the overview of the dependent characteristic specifications.
Inserting an inspection characteristic between existing inspection characteristics	<i>Insert insp. char.</i> pushbutton	You can insert inspection characteristics between existing inspection characteristics.
Deleting an inspection characteristic	<i>Delete insp. char.</i> pushbutton	You can delete the inspection characteristics you have selected.
Copying inspection characteristics within an operation	<i>Copy insp. char.</i> pushbutton	You can copy inspection characteristics within the operation you are currently processing.



Functions in the Characteristic Overview

<p>Unlocking master inspection characteristics</p>	<p><i>Unlock master. insp. char.</i> pushbutton</p>	<p>You can unlock the inspection characteristics you have selected. The master inspection characteristics are then treated as copied inspection characteristics (this means you can make changes to the master inspection characteristics in the task list). The changes that you make in the master inspection characteristic do not affect the task list.</p>
<p>Displaying/editing general data for the inspection characteristic</p>	<p><i>General data details</i> pushbutton</p>	<p>You can switch to the general data view for the inspection characteristic and:</p> <ul style="list-style-type: none"> <li>• Assign an inspection method</li> <li>• Assign test equipment</li> <li>• Define an additional characteristic ID in the field <i>Characteristic ID</i>, or change the existing characteristic description in the master inspection characteristic (if the master inspection characteristic was locked). This description identifies the characteristic during the electronic exchange of characteristic values.</li> <li>• Assign a data source in the field <i>Data origin</i> (for example, handheld application, quality certificate), from which the results data should be copied.</li> </ul>
<p>Editing quantitative data for the inspection characteristic</p>	<p><i>Quant.Data</i> pushbutton</p>	<p>You can edit the <a href="#">quantitative data [Ext.]</a> for an inspection characteristic.</p>

**Functions in the Characteristic Overview**

<p>Assigning selected sets, defect codes and additional catalogs to the inspection characteristic</p>	<p><i>Catalogs</i> pushbutton</p>	<ul style="list-style-type: none"> <li>You can assign <a href="#">selected sets and code groups to the inspection characteristic [Ext.]</a>.</li> <li>If an inspection characteristic is rejected on the basis of its valuation in results recording, the system automatically creates a defect record for the inspected item. These defect records can then be processed further in the form of quality notifications. Make sure that the <i>Defects recording</i> control indicator is set for the inspection characteristic. If you have entered a defect code, you can display this code using the <i>Display defect code</i> pushbutton.</li> <li>You can assign several catalogs to an inspection characteristic (for example, defect location).</li> </ul>
<p>Assigning sampling procedures to an inspection characteristic</p>	<p><i>Sample</i> pushbutton</p>	<p>You can assign <a href="#">sampling procedures [Ext.]</a> and <a href="#">dynamic modification rules [Ext.]</a> to the inspection characteristic.</p>
<p>Editing control indicators</p>	<p><i>Control indicators</i> pushbutton</p>	<p>You can edit the <a href="#">control indicators [Ext.]</a> that characterize the inspection characteristic.</p>
<p>Displaying/Editing the task list</p>	<p><i>Inspection plan</i> → <i>Other task list</i></p>	<p>You can edit another task list.</p>
<p>Create inspection plan</p>	<p><i>Inspection plan</i> → <i>Create</i></p>	<p>You can switch to the transaction for creating inspection plans.</p>
<p>Change inspection plan</p>	<p><i>Inspection plan</i> → <i>Change</i></p>	<p>You can switch to the transaction for changing inspection plans.</p>
<p>Display inspection plan</p>	<p><i>Inspection plan</i> → <i>Display</i></p>	<p>You can switch to the transaction for displaying inspection plans.</p>
<p>Editing/Displaying material-task list assignments</p>	<p><i>Inspection plan</i> → <i>Mat. plan assignment</i></p>	<p>You can assign one or more <a href="#">materials [Page 48]</a> to an inspection plan.</p>
<p>Editing physical-sample drawing text</p>	<p><i>Edit</i> → <i>Physical-sample drawing text</i></p>	<p>You can edit a physical-sample drawing text for the selected inspection characteristic.</p>
<p>Displaying the task list overview</p>	<p><i>Goto</i> → <i>Task list overview</i></p>	<p>You can switch to the task list overview.</p>

Functions in the Characteristic Overview

Displaying/Editing operation header	<i>Goto</i> → <i>Operation overview</i>	You can switch to the operation overview of the inspection plan.
Displaying object overview	<i>Goto</i> → <i>Object overview</i>	You can display a hierarchical overview of all the objects contained in the inspection plan. You define the objects you want to display in <a href="#">Customizing [Ext.]</a> .
Displaying/Editing operation details	<i>Details</i> → <i>Operation</i>	You can switch to the operation detail screen.
Displaying data for the inspection characteristic	<i>Details</i> → <i>Inspection characteristic</i> → <i>General data</i> → <i>Quantitative data</i> → <i>Catalogs</i> → <i>Dynamic modification</i> → <i>Control indicators</i>	You can display or edit the following data for the inspection characteristic: <ul style="list-style-type: none"> <li>• General information (for example inspection method or test equipment)</li> <li>• Quantitative data (for example, unit of measurement, target value)</li> <li>• Qualitative data (for example, assigned defect codes, code groups)</li> <li>• Dynamic modification data (for example, sampling procedures, dynamic modification rules)</li> <li>• Control indicators</li> </ul>
Editing first inspection characteristic	<i>Details</i> → <i>First characteristic</i> on the inspection characteristic detail screen	If you have selected several inspection characteristics, you switch to the detail screen for the first characteristic you selected.
Editing previous inspection characteristic	<i>Details</i> → <i>Previous characteristic</i> on the inspection characteristic detail screen	If you have selected several inspection characteristics, you switch to the detail screen for the previous characteristic you selected.
Editing next inspection characteristic	<i>Details</i> → <i>Next characteristic</i> on the inspection characteristic detail screen	If you have selected several inspection characteristics, you switch to the detail screen for the next characteristic you selected.
Editing last inspection characteristic	<i>Details</i> → <i>Last characteristic</i> on the detail screen	If you have selected several inspection characteristics, you switch to the detail screen for the next characteristic you selected.

**Functions in the Characteristic Overview**

<a href="#">Using profiles [Page 43]</a>	<i>Extras → Profile</i>	The information saved in a profile serves as the default for fields that are used repeatedly, when you create and change task lists.
Displaying consistency log	<i>Extras → Task list check → Consistency check</i>	You can check the consistency of the task list.
Displaying assigned catalogs and defect codes	<i>Environment → Inspection characteristic → Catalogs → Selected set → Catalog entry → Upper quant. defect → Lower quant. defect → Qual. defect code</i>	You can display the catalogs, selected sets, and defect codes that are assigned to the selected inspection characteristics.
Displaying assigned inspection method	<i>Environment → Inspection characteristic → Method</i>	You can display the <a href="#">inspection method [Ext.]</a> that is assigned to the inspection characteristic.
Displaying master inspection characteristic	<i>Environment → Inspection characteristic → Master insp. charac.</i>	You can display the linked master inspection characteristic.
Displaying the class characteristic	<i>Environment → Inspection characteristic → Class characteristic</i>	You can display the class characteristic that is assigned to the master inspection characteristic.
Displaying the assigned sampling procedure	<i>Environment → Inspection characteristic → Sampling procedure</i>	You can display the sampling procedure assigned to the inspection characteristic, if you have specified dynamic modification at characteristic level in the <a href="#">task list header [Page 39]</a> .
Displaying assigned dynamic modification rule	<i>Environment → Inspection characteristic → Dynamic modification rule</i>	You can display the dynamic modification rule assigned to the inspection characteristic, if you have specified dynamic modification at characteristic level in the task list header.
Displaying where-used list for master inspection characteristic in material specification	<i>Environment → Inspection characteristic → Use in specification</i>	You can display a list of the material specifications, in which the linked master inspection characteristic is used.



## Use of Calculated Characteristics

# Use of Calculated Characteristics

## Use

If you inspect with quantitative inspection characteristics, you can use calculated characteristics if you want the system to calculate inspection results from the inspection results of other inspection characteristics (calculation input characteristics) according to a predefined formula.

## Prerequisites

Take the following points into account to ensure that the characteristics can be calculated by the system correctly:

- Compatibility of characteristics  
The calculation input characteristics and the calculation characteristics must, for example, be compatible with regard to the results to be confirmed and the inspection scope.
- Dynamic modification at characteristic level (optional)  
It is advisable to enter a dynamic modification rule in a calculated characteristic or a calculation input characteristic and then to reference the other characteristic for dynamic modification.

## Features

Unlike other inspection characteristics, the results of a calculated characteristic are not recorded manually.

In results recording, you process and value the calculation input characteristics. The system then uses the predefined formula to calculate the inspection results for the calculated characteristic, based on the inspection results for the calculation input characteristics.

You define this formula in the calculated characteristic, when you enter it in the inspection plan. You can use standard mathematical functions in this formula, as well as the following operands:

- Numerical constants
- Formula parameters that reference the values and results of calculation input characteristics.  
Calculation input characteristics and calculated characteristics must be contained in the same operation.
- Formula parameters that call external function modules.  
In certain cases, an input value for a calculated characteristic may not be available in the current operation (for example, if you want to use a value contained in another inspection lot). In this case, you can use your own function module to call the necessary data and calculate the input value



In [Customizing \[Ext.\]](#) you can find default values for the formula parameters that you can supplement.

## Activities

- Make sure that the *Calculated characteristic control indicator [Ext.]* is set for the inspection characteristic.
- On the [quantitative data \[Ext.\]](#) screen, enter the formula. When entering the formula, use the following guidelines:
  - Use the format **ppnnnn** for the operands and parameters.

The value **pp** stands for the formula parameter (for example A0). The value **pp** stands for the number of the task list characteristic (for example, characteristic 0010).

For example, to multiply the value of characteristic 10 (measured value of a single unit) by the value of characteristic 20 (measured value of a single unit), enter the following formula: A00010 \* A00020.
  - If the formula parameter references a function module, you can enter a formula parameter without a characteristic number.
  - To select a formula parameter that is defined in Customizing, use the input help for the formula field.
  - You can use the result for the calculated characteristic as a calculation input value for a second calculated characteristic.

## Use of Leading and Dependent Characteristics

# Use of Leading and Dependent Characteristics

## Use

To ensure that there is no conflict between the inspection stages for a characteristic in an operation, define leading and dependent characteristics.

You use leading and dependent characteristics in connection with:

- **Dynamic modification at characteristic level**

The system determines the appropriate inspection stage using the specifications in the dynamic modification rule and updates the stage in the quality level for the characteristic.

- **Recording results**

If you accept some characteristics and reject others, inspection characteristics in an operation may have different inspection stages, for example, some characteristics are in the “skip” stage, while others are in the “normal” or “tightened” stage.

If the current inspection stage for a leading characteristic requires a “skip,” but a skip is not allowed for one of the dependent characteristics because of its characteristic weighting (defined in [Customizing \[Ext.\]](#)), the skip only applies to the leading characteristic. The dependent characteristic must be inspected after the **next** inspection stage contained in the dynamic modification rule for the leading characteristic.

- **Calculated characteristics**

If the two input characteristics have different inspection stages, the system cannot calculate the characteristics correctly.



A calculated characteristic depends on the values or results of two input characteristics. If these have different inspection stages (for example, “normal” and “skip”), the system cannot calculate the formula in the calculated characteristic because one of the input characteristics is not inspected (in a “skip” stage).

## Prerequisites

- The following must be available in the system:
  - Dynamic modification rule
  - Sampling procedures
- The leading characteristic must be a required characteristic.
- A dynamic modification rule is assigned to the leading characteristic.
- The leading characteristic does not reference another leading characteristic (not checked by the system).

## Activities

- In the inspection plan header, you define dynamic modification at characteristic level.



### Use of Leading and Dependent Characteristics

- On the inspection characteristic overview screen, mark the inspection characteristic that you want to define as the leading characteristic for the operation.
- You set the indicators *Sampling procedure* and *Required characteristic* in the control indicators for this inspection characteristic.
- Enter the required data for the characteristic.
- You enter a dynamic modification rule for the inspection characteristic.
- You mark all other inspection characteristics in the operation (or in the characteristic group) that you want to be treated as dependent inspection characteristics.



You can assign the same leading characteristic to different dependent characteristics in an operation. You can create several characteristic groups within an operation.

- On the sample screen, do not enter a dynamic modification rule as before, but enter the number of the leading characteristic.
- If you use calculated characteristics in an inspection plan, only enter a dynamic modification rule for the calculated characteristic. Reference the calculated characteristic as a leading characteristic in the calculation input characteristics.

## Assignment of Dependent Characteristic Specifications

## Assignment of Dependent Characteristic Specifications

### Use

For both qualitative and quantitative characteristics you can define dependent characteristic specifications, based on a combination of material, vendor, and customer, if these combinations have been assigned to the inspection plan.



You **cannot** define dependent characteristic specifications for master inspection characteristics referenced in inspection plans or for inspection characteristics in reference operation sets.



In inspection plan “Pipes”, there is a measurement inspection operation with several inspection characteristics. One of these characteristics, “diameter”, has several dependent characteristic specifications, depending on the type of pipe.

Material	Target Value	Lower Specification Limit	Upper Specification Limit
Pipe 1	4.5	4.0	5.0
Pipe 2	7.5	7.0	8.0
Pipe 3	8.2	7.0	9.4
Pipe 4	5.0	4.0	6.0

When you inspect pipes, the system checks whether dependent characteristic specifications exist in the inspection plan for pipes. If this is the case, the system then uses these dependent characteristic specifications in the inspection. If there are no dependent characteristic specifications in the inspection plan, at the inspection the system uses the values defined for the inspection characteristic.

### Prerequisites

One or more [materials \[Page 48\]](#) are assigned to the inspection plan. You can make an assignment at any stage during processing of an inspection plan.

### Activities

- In the inspection characteristic overview, you mark the required inspection characteristic.
- To process dependent characteristic specifications, in the line of the table for the required inspection characteristic, choose *Create dependent characteristic specs* or *Change dependent characteristic specs*.

The overview of the dependent characteristic specifications appears.

- To enter new dependent characteristic specifications,
  - Choose *Insert assignment*
  - In the list of material-task list assignments that is displayed, mark the required combination of material, vendor and customer and choose *Choose*.

**Assignment of Dependent Characteristic Specifications**

- To enter data for the dependent characteristic specifications, mark the required combination of material, vendor and customer.
  - Choose *Quant.Data* and enter specification limits and target values.



If you define dependent characteristic specifications for a quantitative characteristic, you can use a tolerance key.

- Choose *Catalogs* and enter code groups or selected sets.
- To delete existing dependent characteristic specifications, mark the required assignment and choose *Delete line*.

## Changes to Task Lists

# Changes to Task Lists

## Use

You use this function to change existing inspection plans or reference operation sets.



Changes to task lists are not included in existing inspection lots.

## Prerequisites

You can change an inspection plan and a reference operation set with one of the following:

- Key date
- Change master record

## Features

### Changing Without a Change Number

If you change a task list and enter a date in the *Key date* field on the initial screen,

- The old values in the task list are overwritten by new values
- The change is backdated to the valid-from date for the task list object (for example, inspection characteristic or operation). This means that the key date only serves to select the task list that is to be changed.
- A change document is created. This document records all changes to the task list.

### Changing with a Change Number

To change a task list with a change number, enter a change master record number in the *Change number* field on the initial screen of the change function.

When you change a task list with a change master record,

- A record containing the new values is written to the database. For example, if you change the target value and specification limits of an inspection characteristic, a new characteristic record is written to the database.
- The date in the new database record is the date contained in the change master record.
- The system lists all the changes to the task list (all changes to individual fields).

### Maintaining a Revision Level for a Task List

If your company maintains several versions of a material that are only distinguished by [revision levels \[Page 78\]](#), you can create and edit corresponding inspection plan variants for these materials. In this way, the system can automatically select the appropriate inspection plan for an inspection, whenever such a material is subject to a goods receipt inspection.

## Creating Change Documents

You use the change document function to record changes to inspection plans. The change documents are listed in chronological order. In the change document, changes are structured according to task list level (header, operation, inspection characteristic).

## Activities

### Changing with a Change Number

- With the [engineering change management \[Ext.\]](#) function, you create a change master record, in which you enter the objects to be changed (such as, material, inspection plan). The system assigns a change number to the change master record.
- Use the change number to make the required changes to the material in the material master and assign a revision level to the material.
- You call up the function for changing an inspection plan or reference operation set.
- Make the changes to the original inspection plan and save it.
- You choose *Logistics* → *Quality management* → *Quality planning* → *Inspection planning* → *Inspection plan* → *Display plan changes*.
- The system displays a list of all changes to the plan in chronological order. For changes that were made with a change number, the “old” and “new” version of the entries is shown.
- You print this list (menu path: *List* → *Print*) or save it to a PC file (menu path: *List* → *Save* → *File..*).

### Changing Without a Change Number

- You call up the function for changing an inspection plan or reference operation set.
- Make the changes to the original inspection plan and save it.
- You choose *Logistics* → *Quality management* → *Quality planning* → *Inspection planning* → *Inspection plan* → *Change documents*. On the initial or selection screen, enter the selection criteria and choose *Execute*.
- The system displays a list of all change documents that have been created.
- In the list, mark the change document you require and choose *Choose*.
- The system displays the change document you have chosen, containing all the changes that took place.
- You print the change document (menu path: *List* → *Print*) or save it to a PC file (menu path: *List* → *Save* → *File..*).

Use of Revision Levels

## Use of Revision Levels

### Use

In discrete production processes, assembly parts are often modified slightly, so they can be used in the manufacture of other similar products. In many cases, the company must keep both the original and modified parts in stock for production purposes. Instead of assigning a new plant number to the modified part, both parts retain the same number, but are assigned different revision levels (for example, original part = revision level "A" and modified part = revision level "B").

### Features

If the modification does not affect the inspection of the part, you can use the existing inspection plan to inspect both the original and modified parts.

However, if the new part has to be inspected differently as a result of the modification, you must create a new version of the inspection plan that takes into account the revised inspection procedures. This can be done by assigning a new revision level to the existing plan and making the required changes to this new version of the inspection plan.

In this way, if an order is placed for the material with a revision level, the system automatically selects the appropriate inspection plan when a delivery of new parts is received.

### Activities

- With the [engineering change management \[Ext.\]](#) function, you create a change master record, in which you enter the objects to be changed (such as, material, inspection plan). A change number is assigned to the change master record.
- Use the change number to make the required changes to the material in the material master and assign a revision level to the material.
- Make the changes to the original inspection plan with a change number and save.

If you create an inspection lot with a revision level, the key date for selecting the inspection plan is taken from the *Valid from* date of the change number that forms the basis of the revision level (example 1).



You changed characteristic 10 in an operation for the 01.03.1999 with the revision level A. You later change the same inspection characteristic with revision level B, so that it is valid on the 01.04.1999.

	Inspection of Characteristic 10	Revision Level Used in Inspection
Example 1	On 01.05.1999	Revision level at 01.04.1999 (level B)
Example 2	On 01.04.1999 with revision level A	Revision level at 01.03.1999 (level A)



When you change the inspection plan, the system creates new versions of the changed inspection plan objects (for example, inspection plan header, operation,

**Use of Revision Levels**

inspection characteristic) and stores the change number and key date in these objects. The key date indicates when the changes come into effect.

## Consistency Check for Inspection Plans

# Consistency Check for Inspection Plans

## Use

If you create or change an inspection plan, the system cannot automatically check all dependencies between:

- Inspection plan headers and inspection characteristics
- Operations and inspection characteristics
- Different inspection characteristics
- Dependent characteristic specifications and inspection characteristics
- Dependent characteristic specifications and production resources/tools
- Dependent characteristic specifications and material/task list assignments

As a result, when you are creating or editing an inspection plan, inconsistencies can occur. Such inconsistencies can in certain circumstances only be removed at a later date, once the production sequence is fixed. For this reason, you can specify when certain consistency checks are to be performed.

## Prerequisites

In [Customizing \[Ext.\]](#), the *Cons. chk.* consistency check indicator must be set in status management, if the inspection plan consistency is to be checked automatically before saving. If this indicator is not set, you can only carry out a consistency check if you call the corresponding function directly from the inspection planning functions.

## Features

The system makes a consistency check for the entire task list group. The check is made not only for the key date, but for the entire validity period of the change status you have called up.

During the inspection plan check, the system checks the consistency of the following elements:

- **Entire Inspection Plan**

The system checks the consistency of the entire inspection plan, when you exit the inspection planning function or when you choose the consistency check pushbutton in inspection planning. Examples of inconsistencies:

- The indicator for inspection characteristics is set in the control key of an operation; however, no inspection characteristics exist for this operation.
- The indicator for inspection characteristics is not set in the control key of an operation; however, inspection characteristics exist for this operation.
- No inspection point type has been entered in the chosen sampling procedure, although the inspection plan specifies an inspection with inspection points.
- Inspection points have been entered in the inspection plan header, although neither time nor quantity has been specified in the inspection operation.



**Consistency Check for Inspection Plans**

- Results recording by unit to be inspected has been defined in the inspection operation. No inspection characteristics with single-value recording or without dependent multiple samples have been included in the inspection plan.
- The unit of measure for the sample cannot be converted into the base unit of measure for the material.



The system checks the consistency of an inspection plan from the **key date** that was specified on the initial screen. The system proposes the current date as a default value for the key date. If you want the consistency check to be carried out for a period of time prior to the current date, you must call the transaction again and change the key date accordingly.

**• Inspection Characteristics**

The consistency of the inspection characteristics is checked automatically, when you exit the characteristic overview. This check takes place, irrespective of whether the consistency check indicator is set in Customizing. Examples of inconsistencies:

- The formula is incorrect. As a result, automatic value calculation is not possible.
- Calculated characteristics reference invalid characteristics.
- There is no required characteristic as a leading characteristic for at least one conditional characteristic.
- Leading characteristics are assigned to other leading characteristics.
- The inspection characteristic references a production resource/tool that has been deleted in the meantime.
- The dynamic modification criteria defined at inspection characteristic level cannot be used for the chosen inspection plan usage.
- A master inspection characteristic or class characteristic appears repeatedly.
- Sample processing using inspection points has been defined in the inspection plan header. As a result, the long text for the sample-drawing procedure is overridden by the text from the inspection plan header, or the units of measure for the sample and partial samples do not correspond.

**• Dependent Characteristic Specifications**

Examples of inconsistencies:

- Dependent characteristic specifications reference invalid material/task list assignments
- Data from dependent characteristic specifications are inconsistent with control indicators from the inspection characteristics.
- The assigned production resource/tool was deleted in the meantime.

If the system finds inconsistencies, it displays information, warning or error messages in the message log. If the system displays a warning message, you can still save the plan without correcting the inconsistency. However, if it displays an error message, you must correct the inconsistencies before you can save the plan.

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## Consistency Check for Inspection Plans

### Activities

#### Automatic Consistency Check

- In Customizing, you set the *Cons. chk.* indicator.
- Before saving, the system checks the consistency of the inspection plan. The consistency of the inspection characteristics is also checked, when you exit the characteristic overview.
- If the system finds inconsistencies, it displays warning or error messages in the message log.

#### Manual Consistency Check

- On the operation overview screen, or in the inspection characteristic overview, choose *Check task list*.
- The system checks the consistency of the inspection plan and records any generated messages in a consistency log.
- To display the list of messages choose *Extras → Task list check → Consistency log*.

## List of Missing Inspection Plans

### Use

You use this function to determine which materials have invalid inspection plans assigned to them.

### Features

#### Missing Inspection Plans (General)

You use this function to generate a list of materials, for which:

- No inspection plans are available
- There is no task list usage for the inspection type you entered
- The inspection plans available are not released



You can search for the materials using any combination of the following selection criteria: Material, plant, inspection type and key date

You can switch directly to the material master record and the inspection plan from the list that the system generated.

#### Missing Inspection Plans (in Procurement)

You can use this function to generate a list of materials, for which purchase orders have been created, but for which no inspection plans exist.

For example, if a material that must be inspected with an inspection plan is delivered for a goods receipt inspection and a plan does not exist, you cannot complete the inspection. Although the goods receipt is posted and an inspection lot is created, you cannot make the usage decision.

This function helps you to plan activities, to make sure that the required plans are available.



You can search for the materials using any combination of the following selection criteria: Material, plant, inspection type and key date

You can switch directly to the material document (purchase order), the material master record and the quality info record from the list that the system generated.

### Activities

- You choose:
  - Logistics → *Quality management* → *Quality planning* → *Inspection planning* → *Inspection plan* → *Missing/ Unusable inspection plans* or
  - Logistics → *Quality management* → *Quality planning* → *Inspection planning* → *Inspection plan* → *Missing/ Unusable inspection plans in procurement*
- Enter the required selection criteria and choose:

**List of Missing Inspection Plans**

- *Program → Execute*
- *Program → Execute and print*
- *Program → Execute in background*

Depending on the function you selected, the system displays and/or prints the list of information concerning the missing inspection plans.

## Printing of Inspection Plans

### Use

You can use this function to print inspection plans. There are the following options for print control:

- You can select and print task lists according to various criteria.
- You can selectively print task lists for a material.

### Features

#### Printing Inspection Plans (General)

You use this executable program (report) to print an inspection plan that has already been created.

If you do not enter a group counter, all task lists in the task list group and all dependent characteristic specifications in the task list are printed.



The fields *Task list type* and *Key date* are required fields. You can overwrite the date proposed by the system in the key date field.

#### Printing Inspection Plans for Materials

Unlike the program given above, this executable program (report) allows you to selectively print the dependent characteristic specifications that apply to this material or to a predefined combination of material, vendor and customer.

The system chooses the same task list version as the one chosen when an inspection lot is created for a material.

### Activities

- Depending on which data you want to display or print, you choose:
  - *Logistics* → *Quality management* → *Quality planning* → *Inspection planning* → *Print* → *General* or
  - *Logistics* → *Quality management* → *Quality planning* → *Inspection planning* → *Print* → *General* or
- Enter the required selection criteria and choose:
  - *Program* → *Execute*
  - *Program* → *Execute and print*
  - *Program* → *Execute in background*

Depending on the function you selected, the system displays or prints the list of existing inspection plans.

Printing of Inspection Plans

## Inspection Plan Deletion

### Use

You can use this function to delete inspection plans without [archiving \[Ext.\]](#).



Deleting objects without archiving can lead to loss of data. Use this type of deletion process solely for data that was created for test purposes.

### Prerequisites



You can only delete inspection plans that are not being used.

### Procedure


1. Choose *Logistics* → *Quality management* → *Quality planning* → *Inspection planning* → *Inspection plan* → *Delete*.

The *Delete Task Lists Without Archiving* screen appears.

2. Enter your required selection criteria.
3. If necessary, set the following indicators:

If	Set the indicator
You only want to select plans that have a deletion flag	<i>Deletion flag</i>  In this case, you can only delete complete plans. You cannot delete individual inspection plan objects.
You want to delete all inspection plans and plan objects from the database that you have only deleted online, (using the transaction for changing plans).	<i>Objects deleted online</i>
You want to delete datasets for the whole period	<i>Task lists</i>  The system deletes all plans that fulfill your selection criteria.
You want the system to check whether an inspection plan is still being used before the deletion run	<i>Check for task list usages</i>

**Inspection Plan Deletion**

You want to create a deletion log	<i>Log</i>  If the inspection plan check identifies an inspection plan that is still being used or that fulfills your user-specific inspection criteria, the deletion program completes its run.
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4. Choose *Execute*.

**Result**

- The plans you selected or plan objects are completely deleted from the database.
- You receive a standard log if you set the *Log* indicator. If you did not set this indicator, the deletion program terminates as soon as it selects an inspection plan that is still being used.



## Where-Used Lists and Central Replacement

### Purpose

Quality Management contains inspection functions that you can use to:

- Create where-used lists for particular master records that inform you where and how often these objects are used in task lists, material specifications, inspection setup data or certificate profiles
- Centrally replace master inspection characteristics in task lists and material specifications
- Centrally replace inspection methods in task lists
- Centrally replace code groups in master inspection characteristics and characteristics in a task list
- Centrally replace sampling procedures in task lists (routings, inspection plans, master recipes but **not** maintenance task lists)
- Centrally replace dynamic modification rules in inspection plans



You need the functions for *where-used lists* and *central replacement* if you change basic data and want to update all task lists, material specifications, inspection setup data or certificates, in which this basic data is used with the latest versions.

### Features

#### Master Inspection Characteristics

You create master inspection characteristics to use in task lists, material specifications or certificate profiles.

You can display where-used lists for reference characteristics, completely maintained copy models and incompletely maintained copy models. You can only use the replacement functions if the master inspection characteristics are **referenced** and **locked** in task lists or material specifications.

	In Task Lists	In Material Specifications	In Certificate Profiles
Where-used list	Yes(1)	Yes	Yes
Replacement	Yes(2)	Yes(2)	No

1 = Including incompletely maintained and copied characteristics

2 = Only referenced and locked characteristics

For master inspection characteristics, the system creates an overview showing their use in task lists, material specifications or certificate profiles.

From the where-used list, you can display the inspection plan, the material specification and the certificate profile, in which the master inspection characteristic is referenced.

**Where-Used Lists and Central Replacement**

**Inspection Methods**

You create inspection methods to assign them either to master inspection characteristics or to the characteristics contained in task lists. Inspection methods are referenced in master inspection characteristics and inspection characteristics. You cannot replace inspection methods that are referenced in master inspection characteristics.

	<b>In Task List Characteristics</b>	<b>In Master Inspection Characteristics</b>
Where-used list	Yes	Yes(3)
Replacement	Yes	No(3)

3 = Only possible if the method is assigned to a master inspection characteristic that was copied into a task list or that was referenced and unlocked.

For inspection methods, the system creates an overview showing their use in task list characteristics or master inspection characteristics.

From the overview of usage in master inspection characteristics, you can display the master inspection characteristic to which the inspection method is assigned.

**Code Groups**

You create code groups to assign them either to master inspection characteristics or to the characteristics contained in task lists. Code groups are referenced in master inspection characteristics and in inspection characteristics.

	<b>In Task List Characteristics</b>	<b>In Master Inspection Characteristics</b>
Where-used list	Yes	Yes(4)
Replacement	No	No

4 = Only possible if the code group is assigned to a master inspection characteristic that was copied into a task list or that was referenced and unlocked.

For code groups, the system creates an overview showing their use in inspection characteristics.

From the overview of usage in master inspection characteristics, you can display the master inspection characteristic to which the inspection method is assigned.

**Sampling Procedures**

You create sampling procedures to use in task lists, material specifications or inspection setup data. Sampling procedures are referenced in task lists (routings, inspection plans, master recipes but **not** maintenance task lists), material specifications and inspection setup data. You cannot replace sampling procedures that are referenced in a material specification or in inspection setup data.

	<b>In Task Lists</b>	<b>In Material Specifications</b>	<b>In Inspection Setup Data</b>
Where-used list	Yes	Yes	Yes
Replacement	Yes	No	No

For sampling procedures, the system creates an overview showing their use in task lists, material specifications and in inspection setup data.

**Where-Used Lists and Central Replacement**

You can display the relevant inspection plan, task list characteristics, master inspection characteristic, sampling procedure and the assigned dynamic modification rule, from the overview of usage in task lists.

From the overview of usage in material specifications, you can display the corresponding material specification and the master inspection characteristic.

From the overview of usage in inspection setup data, you can display the dynamic modification rule and the inspection type.

**Dynamic Modification Rules**

You create dynamic modification rules to use in task lists or in the inspection setup. Dynamic modification rules are referenced in inspection plans and in the inspection setup. You cannot replace dynamic modification rules that are referenced in the inspection setup.

	<b>In Task Lists</b>	<b>In Inspection Setup Data</b>
Where-used list	Yes	Yes
Replacement	Yes	No

For dynamic modification rules, the system creates an overview showing their use in task lists and in inspection setup data.

You can display the relevant inspection plan, task list characteristics, master inspection characteristic, the assigned sampling procedure and the dynamic modification rule, from the overview of usage in task lists.

From the overview of usage in inspection setup data, you can display the master inspection characteristic, the assigned sampling procedure and the inspection type.

## Displaying the Use of Master Inspection Characteristics

# Displaying the Use of Master Inspection Characteristics

## Use

Master inspection characteristics can be used in inspection plans, (reference characteristics, copied, unlocked master inspection characteristics), material specifications (copied master inspection characteristics) and certificate profiles (reference characteristics). The where-used list displays the task lists, material specifications and certificate profiles, in which a particular master inspection characteristic is used.

## Procedure

1. Choose *Logistics* → *Quality management* → *Quality planning* → *Basic data* → *Inspection characteristic* → *Where-used list*.
2. On the initial screen, enter a characteristic number and a plant. If necessary, use the input help.



The input help list only contains one version of the master inspection characteristic – the **current version**. If there are other versions of the master inspection characteristic, they are not displayed in the list. This can result in the following:

- The version on the list is not yet released or is not referenced. If you select and try to process such a version from the list, you receive a message that the master inspection characteristic is not referenced.
- Another version of the master inspection characteristic (that is not displayed in the list) may be referenced. In this case, you should delete the version number from the initial screen and continue processing.

You cannot reference master inspection characteristics with status 1 in task lists or material specifications. In addition, you can only reference master inspection characteristics that are completely maintained. Therefore choose a master inspection characteristic that has status 2 and is maintained as a reference characteristic.

3. To display a particular version of an inspection characteristic, enter the required version.

If you do not make an entry, the usage overview includes all versions of the master inspection characteristic.

4. Choose *Usage*.

If the master inspection characteristic is used in at least one inspection plan, a usage overview of the task lists appears which displays the following data:

- Name of the master inspection characteristic
- Plant
- Key date
- Total number of times used, as well as the number of uses in task lists, material specifications and certificate profiles
- Task list type, task list group, group counter and task list description

**Displaying the Use of Master Inspection Characteristics**

- Operation number
- Characteristic number
- Sampling procedures
- Change number
- Dynamic modification rule
- SPC



The data displayed corresponds to the usage overview that is currently selected (highlighted in color).

You can switch between the overview screens for the usage of master inspection characteristics in task lists, material specifications or certificate profiles by clicking hotspots. There are different lists for the entries in the usage overview.

5. You can call up other functions from the usage overviews:

Overview	Function	Menu Path/Pushbutton
Task lists	Displaying usage for other master inspection characteristic	<i>Master inspection characteristic</i> → <i>Other master inspection characteristic</i>
	Replacing a master inspection characteristic	<i>Master inspection characteristic</i> → <i>Replace</i>
	Downloading	<i>Master inspection characteristic</i> → <i>Download</i>
	Printing list	<i>Print list</i> pushbutton
	Displaying the class characteristic	<i>Display class characteristic</i> pushbutton
	Displaying master inspection characteristic	<i>Display master inspection characteristic</i> pushbutton
	Displaying characteristic in task list	<i>Display characteristic in task list</i> pushbutton
	Displaying usage in material specification	Hotspot
	Displaying usage in certificate profiles	Hotspot
	Displaying dynamic modification rule	Hotspot in table
Material specification	Displaying usage for other master inspection characteristic	<i>Master inspection characteristic</i> → <i>Other master inspection characteristic</i>
	Downloading	<i>Master inspection characteristic</i> → <i>Download</i>

### Displaying the Use of Master Inspection Characteristics

	Printing list	<i>Print list</i> pushbutton
	Displaying material specification	<i>Specification for characteristic</i> pushbutton
	Displaying master inspection characteristic	<i>Display master inspection characteristic</i> pushbutton
	Displaying usage in task lists	Hotspot
	Displaying usage in certificate profiles	Hotspot
	Displaying sampling procedure	Hotspot in table
	Displaying sampling procedure	Hotspot in table
Certificate profiles	Displaying usage for other master inspection characteristic	<i>Master inspection characteristic</i> → <i>Other master inspection characteristic</i>
	Downloading	<i>Master inspection characteristic</i> → <i>Download</i>
	Printing list	<i>Print list</i> pushbutton
	Displaying certificate profile	<i>Display certificate profile</i> pushbutton
	Displaying the class characteristic	<i>Display class characteristic</i> pushbutton
	Displaying master inspection characteristic	<i>Display master inspection characteristic</i> pushbutton
	Displaying usage in task lists	Hotspot
	Displaying usage in material specification	Hotspot

## Displaying the Use of Inspection Methods

### Use

Inspection methods can be referenced in master inspection characteristics and inspection characteristics in a task list.

The where-used list displays the master inspection characteristics and task list characteristics, in which an inspection method is used.

### Procedure

1. Choose *Logistics* → *Quality management* → *Quality planning* → *Basic data* → *Inspection method* → *Where-used list*.
2. On the initial screen, enter an inspection method and a plant. If necessary, use the input help.



The input help list only contains one version of the inspection method – the **current version**. If there are additional versions available for the inspection method, these are not displayed in the list. This can result in the following:

- The version on the list is not yet released or is not referenced. If you select and try to process such a version from the list, you receive a message that the inspection method is not referenced.
- Another version of the inspection method, (one that is not on the list), may be referenced. In this case, you should delete the version number from the initial screen and continue processing.

You cannot reference inspection methods with status 1 in master inspection characteristics or task list characteristics. Therefore, choose an inspection method with status 2.

3. To display a particular version of an inspection method, enter the required version. If you do not make an entry, the usage overview includes all versions of the inspection method.
4. Choose *Usage*.

If the inspection method is used in at least one master inspection characteristic or task list characteristic, a usage overview appears which displays the following data:

- Name of the inspection method
- Key date
- Task list type and task list group
- Operation number
- Characteristic number and characteristic description for the master inspection characteristic or task list characteristic, in which the inspection method is referenced.

**Displaying the Use of Inspection Methods**



The list of master inspection characteristics for an inspection method is generated only if the method is used in a task list. If the method is not used in a task list, **no** lists are generated, even if the method is used in master inspection characteristics.

5. You can call up other functions from the usage overviews:

<b>Overview</b>	<b>Function</b>	<b>Menu Path/Pushbutton</b>
Inspection characteristic in a task list	Displaying usage for other inspection method	<i>Inspection method → Other inspection method</i>
	Replacing an inspection method	<i>Inspection method → Replace</i>
	Displaying a task list characteristic	<i>Goto → Display task list characteristic</i>
	Displaying usage in master inspection characteristic	<i>In master inspection characteristic pushbutton</i>
Master inspection characteristic	Displaying usage for other inspection method	<i>Inspection method → Other inspection method</i>
	Replacing an inspection method	<i>Inspection method → Replace</i>
	Displaying a task list characteristic	<i>Goto → Display task list characteristic</i>
	Displaying master inspection characteristic	<i>In master inspection characteristic pushbutton</i>
	Displaying usage in task list characteristic	<i>In task lists pushbutton</i>



## Displaying the Use of Code Groups

### Use

Code groups can be referenced in master inspection characteristics and inspection characteristics in a task list. The where-used list contains task lists, in which a code group is used.



A where-used list **cannot** be displayed for code groups that are referenced in master inspection characteristics but not in task lists.

### Procedure

To display the usage overview for code groups, proceed as follows:

1. Choose *Logistics* → *Quality management* → *Quality planning* → *Basic data* → *Catalog* → *Code group* → *Where-used list*.
2. On the initial screen, enter a catalog type and a code group.



You cannot display where-used lists for code groups in catalogs **1** (characteristic attributes) and **3** (usage decision), since code groups in this catalog type are **not** used in task lists.

3. Choose *Usage*.

If the code group is used in a task list, a usage overview appears which displays the following data:

- Catalog type
- Name of the code group
- Task list type, task list group, group counter and task list description
- Operation number
- Characteristic number and characteristic description
- Key date (*Valid from*)

4. In the usage overview, you can call up other additional functions:

Overview	Function	Menu Path/Pushbutton
Code group	Displaying usage for other code group	<i>Dynamic modification rule</i> → <i>Other code group</i>

## Displaying the Use of Dynamic Modification Rules

# Displaying the Use of Dynamic Modification Rules

## Use

Dynamic modification rules can be referenced in task lists and in the inspection setup. The where-used list displays the task lists and inspection setup data, in which a code group is used.

## Procedure

1. Choose *Logistics* → *Quality management* → *Quality planning* → *Basic data* → *Sample* → *Dynamic modification rule* → *Where-used list*
2. On the initial screen, enter the dynamic modification rule.



Use the various selection options to limit your search and improve system performance.

3. Choose *Usage*.

If the dynamic modification rule is used in at least one task list or inspection setup, a usage overview appears which displays the following data:

- Name of the dynamic modification rule
- Key date
- Total number of times used, as well as the number of uses in task lists and the inspection setup
- Task list
- Task list description
- Dynamic modification level (*Lvl* column)
- Task list level (*Use* column), at which the dynamic modification rule is to be replaced.
- An X in the *A* column shows whether the dynamic modification rule that is to be replaced is active (this means that it is taken into consideration at dynamic modification).
- Operation number
- Characteristic number and characteristic description
- Master inspection characteristic
- Sampling procedure
- Key date (*Valid from*)



The data displayed corresponds to the usage overview that is currently selected (highlighted in color).

You can switch between the overview screens for the usage of dynamic modification rules in task lists or the inspection setup by clicking hotspots. There are different lists for the entries in the usage overview.

Displaying the Use of Dynamic Modification Rules

4. You can call up other functions from the usage overviews:

Overview	Function	Menu Path/Pushbutton
Task lists	Displaying usage for other dynamic modification rule	<i>Dynamic modification rule → Other dynamic modification rule</i>
	Replacing dynamic modification rule	<i>Dynamic modification rule → Replacement initial screen</i>
	Printing list	<i>Dynamic modification rule → Print</i>
	Downloading	<i>Dynamic modification rule → Download</i>
	Displaying dynamic modification rule	<i>Display dynamic modification rule pushbutton</i>
	Displaying plan data	<i>Display plan data pushbutton</i>
	Displaying usage in inspection setup	Hotspot
	Displaying a task list characteristic	Hotspot in table
	Displaying master inspection characteristic	Hotspot in table
	Displaying sampling procedure	Hotspot in table
Inspection setup	Displaying usage for other dynamic modification rule	<i>Dynamic modification rule → Other dynamic modification rule</i>
	Printing list	<i>Dynamic modification rule → Print</i>
	Downloading	<i>Dynamic modification rule → Download</i>
	Displaying usage in task lists	Hotspot
	Displaying sampling procedure	Hotspot in table
	Displaying dynamic modification rule	<i>Display dynamic modification rule pushbutton</i>
	Displaying inspection type	Hotspot in table
	Displaying usage in task lists	Hotspot in table

Displaying the Use of Sampling Procedures

## Displaying the Use of Sampling Procedures

### Use

Sampling procedures can be referenced in task lists, material specifications and in the inspection setup. The where-used list displays the task lists, material specifications and inspection setup, in which a sampling procedure is used.

### Procedure

1. Choose *Logistics* → *Quality management* → *Quality planning* → *Basic data* → *Sample* → *Sampling procedure* → *Where-used list*
2. On the initial screen, enter the sampling procedure.



Use the various selection options to limit your search and improve system performance.

3. Choose *Usage*.

If the sampling procedure is used in at least one task list, material specification or inspection setup, a usage overview appears which displays the following data:

- Name of the sampling procedure
- Key date
- Total number of times used, as well as the number of uses in task lists, material specifications and the inspection setup
- Task list
- Operation number
- Characteristic number and characteristic description
- Master inspection characteristic
- Dynamic modification rule



The data displayed corresponds to the usage overview that is currently selected (highlighted in color).

You can switch between the overview screens for the usage of sampling procedures in task lists, material specifications or the inspection setup by clicking hotspots.

There are different lists for the entries in the usage overview.

4. You can call up other functions from the usage overviews:

Overview	Function	Menu Path/Pushbutton
Task lists	Displaying usage for other sampling procedure	<i>Sampling procedure</i> → <i>Other sampling procedure</i>

Displaying the Use of Sampling Procedures

	Replacing sampling procedure	<i>Sampling procedure</i> → <i>Replacement initial screen</i>
	Printing list	<i>Sampling procedure</i> → <i>Print</i>
	Downloading	<i>Sampling procedure</i> → <i>Download</i>
	Displaying sampling procedure	<i>Display sampling procedure</i> pushbutton
	Displaying task list data	<i>Display task list data</i> pushbutton
	Displaying usage in material specification	Hotspot
	Displaying usage in inspection setup	Hotspot
	Displaying a task list characteristic	Hotspot in table
	Displaying master inspection characteristic	Hotspot in table
	Displaying dynamic modification rule	Hotspot in table
Material specification	Displaying usage for other sampling procedure	<i>Sampling procedure</i> → <i>Other sampling procedure</i>
	Printing list	<i>Sampling procedure</i> → <i>Print</i>
	Downloading	<i>Sampling procedure</i> → <i>Download</i>
	Displaying sampling procedure	<i>Display sampling procedure</i> pushbutton
	Displaying material specification	<i>Display material specification</i> pushbutton
	Displaying master inspection characteristic	<i>Display master inspection characteristic</i> pushbutton
	Displaying usage in task lists	Hotspot
	Displaying usage in inspection setup	Hotspot
Inspection setup	Displaying usage for other sampling procedure	<i>Sampling procedure</i> → <i>Other sampling procedure</i>
	Printing list	<i>Sampling procedure</i> → <i>Print</i>
	Downloading	<i>Sampling procedure</i> → <i>Download</i>
	Displaying inspection type	<i>Display certificate profile</i> pushbutton <i>Inspection Type</i>
	Displaying sampling procedure	<i>Display sampling procedure</i> pushbutton
	Displaying usage in task lists	Hotspot

**Displaying the Use of Sampling Procedures**

	Displaying usage in material specification	Hotspot
	Displaying dynamic modification rule	Hotspot in table

## Replacing Master Inspection Characteristics

### Use

In the *Quality Management* application component, you can replace the following master inspection characteristics:

- Master inspection characteristics that are referenced in one or more task lists
- Master inspection characteristics that are referenced in material specifications
- Master inspection characteristics with inspection methods that are referenced in task lists



You cannot replace a master inspection characteristic, if for example, it is no longer referenced, it was created as an incomplete copy model or it was controlled by a customer exit. You can recognize these cases, since the master inspection characteristic is marked by a block indicator (padlock) in the where-used list that is created.

### Procedure

1. Choose *Logistics* → *Quality management* → *Quality planning* → *Basic data* → *Inspection characteristic* → *Replace*.
2. On the initial screen, enter a characteristic number and a plant for the master inspection characteristic that you want to replace (*characteristic no.*) and a characteristic number, a plant and a version for the new master inspection characteristic (*New characteristic*). If necessary, use the input help.



The input help list only contains one version of the master inspection characteristic – the **current version**. If there are other versions of the master inspection characteristic, they are not displayed in the list. This can result in the following:

- The version on the list is not yet released or is not referenced. If you select and try to process such a version from the list, you receive a message that the master inspection characteristic is not referenced.
- Another version of the master inspection characteristic (that is not displayed in the list) may be referenced. In this case, you should delete the version number from the initial screen and continue processing.

You cannot reference master inspection characteristics with status 1 in task lists or material specifications. In addition, you can only reference master inspection characteristics that are completely maintained. Therefore choose a master inspection characteristic that has status 2 and is completely maintained.

3. If necessary, enter a replacement inspection method.



When you replace a master inspection characteristic in a task list, any references to inspection methods (if they exist in the characteristic being replaced) are also

**Replacing Master Inspection Characteristics**

removed from the task list. To add an inspection method to the replacement master inspection characteristic, you must enter the inspection method data (method number, plant, and version).

If you enter an inspection method, it must already have been assigned to the replacement master inspection characteristic. Use the possible entries help to select an inspection method using a master inspection characteristic.

4. Enter the required key date, from which you want the replacement to take effect.



If you enter a change number, the date of this number is the key date, from which the replacement applies.

5. Set the *Disp. all records* indicator, if you want to display all master inspection characteristics in the where-used list that are referenced in task lists.
6. Choose *Usage*.

If the master inspection characteristic is used in at least one inspection plan, the system displays a list of all task lists, material specifications and certificate profiles, in which the master inspection characteristic to be replaced is used. The operation number and characteristic number are shown for each task list.

7. Select the task lists or material specifications, in which you want to replace the master inspection characteristic.



The data displayed corresponds to the usage overview that is currently selected (highlighted in color).

8. Define the [replacement mode \[Ext.\]](#) (optional).
9. Choose *Start*.



If you have not already defined the replacement mode, a dialog box appears, in which you can specify this mode.

10. To determine if the replacement was successful, check the [replacement log \[Ext.\]](#) (created automatically after the replacement is carried out).
11. You can call up other functions from the usage overviews:

Overview	Function	Menu Path/Pushbutton
Task lists	Displaying usage for other master inspection characteristic	<i>Master inspection characteristic</i> → <i>Other master inspection characteristic</i>
	Downloading	<i>Master inspection characteristic</i> → <i>Download</i>
	Displaying the class characteristic	<i>Goto</i> → <i>Display class characteristic</i>
	Printing list	<i>Print list</i> pushbutton



Replacing Master Inspection Characteristics

	Updating list	<i>Update list</i> pushbutton
	Entering replacement mode	<i>Settings</i> pushbutton
	Displaying master inspection characteristic	<i>Display master inspection characteristic</i> pushbutton
	Batch input	<i>Batch input</i> pushbutton
	Displaying usage in material specification	Hotspot
	Displaying usage in certificate profiles	Hotspot
	Displaying sampling procedure	Hotspot in table
	Displaying dynamic modification rule	Hotspot in table
Material specification	Displaying usage for other master inspection characteristic	<i>Master inspection characteristic</i> → <i>Other master inspection characteristic</i>
	Downloading	<i>Master inspection characteristic</i> → <i>Download</i>
	Printing list	<i>Print list</i> pushbutton
	Displaying material specification	<i>Specification for material</i> pushbutton
	Displaying the class characteristic	<i>Display class characteristic</i> pushbutton
	Displaying master inspection characteristic	<i>Display master inspection characteristic</i> pushbutton
	Displaying usage in task lists	Hotspot
	Displaying usage in certificate profiles	Hotspot
	Displaying sampling procedure	Hotspot in table
Certificate profiles	Displaying usage for other master inspection characteristic	<i>Master inspection characteristic</i> → <i>Other master inspection characteristic</i>
	Downloading	<i>Master inspection characteristic</i> → <i>Download</i>
	Printing list	<i>Print list</i> pushbutton
	Displaying certificate profile	<i>Display certificate profile</i> pushbutton
	Displaying the class characteristic	<i>Display class characteristic</i> pushbutton

**Replacing Master Inspection Characteristics**

	Displaying master inspection characteristic	<i>Display master inspection characteristic</i> pushbutton
	Displaying usage in task lists	Hotspot
	Displaying usage in material specification	Hotspot

## Replacing an Inspection Method

### Use

In the *Quality Management* application component, you can replace an inspection method that is used in task list characteristics.

### Procedure

1. Choose *Logistics* → *Quality management* → *Quality planning* → *Basic data* → *Inspection method* → *Replace*.
2. On the initial screen, enter an inspection method and a plant for the inspection method that you want to replace (*Insp. method*) and an inspection method, a plant and a version for the new inspection method (*New method*). If necessary, use the input help.



The input help list only contains one version of the inspection method – the **current version**. If there are additional versions available for the inspection method, these are not displayed in the list. This can result in the following:

- The version on the list is not yet released or is not referenced. If you select and try to process such a version from the list, you receive a message that the inspection method is not referenced.
- Another version of the inspection method, (one that is not on the list), may be referenced. In this case, you should delete the version number from the initial screen and continue processing.

You cannot reference inspection methods with status 1 in task list characteristics. Therefore, choose an inspection method with status 2.

3. Enter the required key date, from which you want the replacement to take effect.



If you enter a change number, the date of this number is the key date, from which the replacement applies.

4. Set the *Disp. all records* indicator, if you want to display all inspection methods in the where-used list that are referenced in task list characteristics.
5. Choose *Usage*.

If the inspection method is used in at least one task list characteristic, a usage overview appears which displays all task lists that use the inspection method to be replaced. The operation number and characteristic number are shown for each task list.
6. Select the task lists, in which you want to replace the inspection method.
7. Define the [replacement mode \[Ext.\]](#) (optional).
8. Choose *Start*.

**Replacing an Inspection Method**



If you have not already defined the replacement mode, a dialog box appears, in which you can specify this mode.

9. To determine if the replacement was successful, check the [replacement log \[Ext.\]](#) (created automatically after the replacement is carried out).
10. You can call up other functions from the usage overviews:

<b>Overview</b>	<b>Function</b>	<b>Menu Path/Pushbutton</b>
Inspection characteristic in a task list	Displaying usage for other inspection method	<i>Inspection method → Other inspection method</i>
	Displaying usage for inspection method	<i>Inspection method → Display usage</i>
	Displaying a task list characteristic	<i>Goto → Display task list characteristic</i>
	Batch input	<i>Extras → Batch input</i>
	Displaying usage in master inspection characteristic	<i>Use In master inspection characteristic pushbutton</i>
Master inspection characteristic	Displaying usage for other inspection method	<i>Inspection method → Other inspection method</i>
	Displaying usage for inspection method	<i>Inspection method → Display usage</i>
	Displaying a task list characteristic	<i>Goto → Display task list characteristic</i>
	Displaying master inspection characteristic	<i>Display master inspection characteristic pushbutton</i>
	Displaying usage in task list characteristic	<i>Use in task list pushbutton</i>

## Replacing Dynamic Modification Rules

### Use

In the *Quality Management (QM)* application component, you can replace a dynamic modification rule that is used in task lists.

### Procedure

1. Choose *Logistics* → *Quality management* → *Quality planning* → *Basic data* → *Sample* → *Dynamic modification rule* → *Replace*
2. On the initial screen, enter the dynamic modification rule to be replaced (*Dynamic modification rule*) and the new dynamic modification rule (*New dynamic modification rule*). If necessary, use the input help.



Use the various selection options to limit your search and improve system performance.

3. Enter the required change key date, from which you want the replacement to take effect.



If you enter a change number, the date of this number is the key date, from which the replacement applies.

4. Choose *Usage*.

If the dynamic modification rule is used in at least one task list, the system displays a list of all task lists in which the modification rule to be replaced is used. The operation number, characteristic number and characteristic description, as well as a master inspection characteristic and a sampling procedure (if they exist), are given for each task list. In addition, the system displays the dynamic modification level and the task list level, where the dynamic modification rule was defined that is to be replaced (*Use* column). An *X* in the *A* column shows whether the dynamic modification rule that is to be replaced is active (this means that it is taken into consideration at dynamic modification).

5. Select the task lists, in which you want to replace the dynamic modification rule.
6. Define the [replacement mode \[Ext.\]](#) (optional).
7. Choose *Start*.



If you have not already defined the replacement mode, a dialog box appears, in which you can specify this mode.

8. To determine if the replacement was successful, check the [replacement log \[Ext.\]](#) (created automatically after the replacement is carried out).
9. You can call up other functions from the usage overviews:

Overview	Function	Menu Path/Pushbutton
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**Replacing Dynamic Modification Rules**

Task lists	Displaying usage for other dynamic modification rule	<i>Dynamic modification rule → Change dynamic modification rule</i>
	Displaying usage for dynamic modification rule	<i>Dynamic modification rule → Usage initial screen</i>
	Printing list	<i>Dynamic modification rule → Print</i>
	Downloading	<i>Dynamic modification rule → Download</i>
	Displaying change number	<i>Extras → Display change number</i>
	Displaying dynamic modification rule	<i>Display dynamic modification rule pushbutton</i>
	Displaying inspection plan data	<i>Display plan data pushbutton</i>
	Displaying replacement mode	<i>Settings pushbutton</i>
	Batch input	<i>Batch input pushbutton</i>
	Displaying usage in inspection setup	Hotspot
	Displaying a task list characteristic	Hotspot in table
	Displaying master inspection characteristic	Hotspot in table
	Displaying sampling procedure	Hotspot in table
Inspection setup	Displaying usage for other dynamic modification rule	<i>Dynamic modification rule → Change dynamic modification rule</i>
	Displaying usage for dynamic modification rule	<i>Dynamic modification rule → Usage initial screen</i>
	Printing list	<i>Dynamic modification rule → Print</i>
	Downloading	<i>Dynamic modification rule → Download</i>
	Displaying dynamic modification rule	<i>Display dynamic modification rule pushbutton</i>
	Displaying inspection type	<i>Display inspection type pushbutton</i>
	Displaying usage in task lists	Hotspot
	Displaying sampling procedure	Hotspot in table

## Replacing Sampling Procedure

### Use

In the *Quality Management* application component, you can replace a sampling procedure that is used in task lists.

### Procedure

1. Choose *Logistics* → *Quality management* → *Quality planning* → *Basic data* → *Sample* → *Sampling procedure* → *Replace*
2. On the initial screen, enter the sampling procedure to be replaced (*Sampling procedure*) and the new sampling procedure (*New sampling procedure*). If necessary, use the input help.



Use the various selection options (task list, material and material specification) to limit your search and improve system performance.

3. Enter the required change key date, from which you want the replacement to take effect.



If you enter a change number, the date of this number is the key date, from which the replacement applies.

4. Choose *Usage*.

If the sampling procedure is used in at least one task list, the system displays a list of all task lists in which the sampling procedure to be replaced is used. The operation number, characteristic number and characteristic description, as well as a master inspection characteristic and a dynamic modification rule (if they exist), are given for each task list.

5. Select the task lists, in which you want to replace the sampling procedure.
6. Define the [replacement mode \[Ext.\]](#) (optional).
7. Choose *Start*.



If you have not already defined the replacement mode, a dialog box appears, in which you can specify this mode.

8. To determine if the replacement was successful, check the [replacement log \[Ext.\]](#) (created automatically after the replacement is carried out).
9. You can call up other functions from the usage overviews:

Overview	Function	Menu Path/Pushbutton
Task lists	Displaying usage for other sampling procedure	<i>Sampling procedure</i> → <i>Other sampling procedure</i>
	Displaying usage for other sampling procedure	<i>Sampling procedure</i> → <i>Usage initial screen</i>

**Replacing Sampling Procedure**

	Printing list	<i>Sampling procedure → Print</i>
	Downloading	<i>Sampling procedure → Download</i>
	Displaying change number	<i>Extras → Display change number</i>
	Displaying sampling procedure	<i>Display sampling procedure pushbutton</i>
	Displaying task list data	<i>Display task list data pushbutton</i>
	Entering replacement mode	<i>Settings pushbutton</i>
	Batch input	<i>Batch input pushbutton</i>
	Displaying usage in material specification	Hotspot
	Displaying usage in inspection setup	Hotspot
	Displaying a task list characteristic	Hotspot in table
	Displaying master inspection characteristic	Hotspot in table
	Displaying dynamic modification rule	Hotspot in table
Material specification	Displaying usage for other sampling procedure	<i>Sampling procedure → Other sampling procedure</i>
	Displaying usage for other sampling procedure	<i>Sampling procedure → Usage initial screen</i>
	Printing list	<i>Sampling procedure → Print</i>
	Downloading	<i>Sampling procedure → Download</i>
	Displaying sampling procedure	<i>Display sampling procedure pushbutton</i>
	Displaying material specification	<i>Display material specification pushbutton</i>
	Displaying master inspection characteristic	<i>Display master inspection characteristic pushbutton</i>
	Displaying usage in task lists	Hotspot
	Displaying usage in inspection setup	Hotspot
Inspection setup	Displaying usage for other sampling procedure	<i>Sampling procedure → Other sampling procedure</i>
	Displaying usage for other sampling procedure	<i>Sampling procedure → Usage initial screen</i>



Replacing Sampling Procedure

	Printing list	<i>Sampling procedure → Print</i>
	Downloading	<i>Sampling procedure → Download</i>
	Displaying inspection type	<i>Inspection type</i> pushbutton, hotspot in table
	Displaying sampling procedure	<i>Display sampling procedure</i> pushbutton
	Displaying usage in task lists	Hotspot
	Displaying usage in material specification	Hotspot
	Displaying dynamic modification rule	Hotspot in table