Quality Management (QM)



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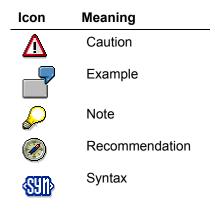
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Typographic Conventions

Type Style	Description
Example text	Words or characters that appear on the screen. These include field names, screen titles, pushbuttons as well as menu names, paths and options.
	Cross-references to other documentation
Example text	Emphasized words or phrases in body text, titles of graphics and tables
EXAMPLE TEXT	Names of elements in the system. These include report names, program names, transaction codes, table names, and individual key words of a programming language, when surrounded by body text, for example, SELECT and INCLUDE.
Example text	Screen output. This includes file and directory names and their paths, messages, names of variables and parameters, source code as well as names of installation, upgrade and database tools.
Example text	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<example text=""></example>	Variable user entry. Pointed brackets indicate that you replace these words and characters with appropriate entries.
EXAMPLE TEXT	Keys on the keyboard, for example, function keys (such as ${\tt F2})$ or the ${\tt ENTER}$ key

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Quality Management (QM)

Quality Management (QM)

Quality Management in Materials Management [Page 12]

Quality Management in Procurement and Storage [Page 15]

Acceptance Inspections [Page 98]

Quality Notifications as Complaints Against the Vendor [Page 130]

Quality Control [Page 169]

Quality Management of Batches [Page 203]

Quality Management in Sales and Distribution [Page 245]

Sample Management [Page 261]

Calibration of Measurement Instruments (PM/QM) [Page 291]

Returns and Repair Processing [Page 303]

Internet Processes [Page 329]

Quality Management in Materials Management

Quality Management in Materials Management

Purpose

This process describes the interaction of Quality Management with Materials Management. It applies to all branches of industry.

You can learn about the functions of the R/3 application component QM in their basic form in this process. You should use this process as the starting point for the QM application and then look at the other, often industry-specific QM processes.

We recommend that you follow the suggested process flow. However, it is possible for you to run each of the processes individually.

You can find the data for this process under [2] [Page 13].

Process Flow

1. Quality Management in Procurement and Storage [Page 15]

Quality Management can be used to guide purchasing and inventory management activities. For the main part, it consists of releasing supply relationships, source and receiving inspections, managing stocks during quality inspections, and quality documents.

2. Acceptance Inspection [Page 98]

The detailed inspection lot processing scenario explains inspection planning, sample creation, printing of shop papers for inspectors, recording of inspection results - characteristic values and defect data -, and it describes how appraisal costs are settled.

3. Quality Notifications as Complaints Against the Vendor [Page 130]

You see how a defect determined in quality inspection is analyzed and documented in a quality notification. The measures required to correct the problem include a complaint against the vendor and the processing of returns.

4. Quality Control [Page 169]

Quality control includes vendor evaluation, quality analysis in the QM Information System, and statistical process control using control charts.

5. Quality Management of Batches [Page 203]

These processes show you how to inspect, classify, and monitor materials that are managed in batches.

6. Quality Management in Sales and Distribution [Page 245]

Quality Management is linked to sales and distribution processes. Quality documents, quality inspections, and quality records can be controlled independent of customer and material.

QM Data in Materials Management

Different variations of a hexagonal head screw are used as the material. In the columns to the right of the material, you see special features that are demonstrated in the processes. These special features, for example, the development of the supply relationship status, are only demonstrated for specific materials.

You can use the materials QS6Xxx to view Quality Management in Procurement.

The material QS6X20 is the basic variant for a procurement process with quality control.

The material QS6X40 demonstrates the development of the supply relationship status.

The material QS6X60 or the manufacturer part QS6X60-1001 is supplied by a distributor, who can only get the materials from an authorized manufacturer.

The materials QS8Xxx are used to examine the quality inspection in greater detail.

The material QS8X20 is the basic variant for an inspection using an inspection plan.

The material QS8X40 is used to demonstrate the material-dependent planning of inspection specifications.

The inspection scope of material QS8X60 and manufacturer part number QS8X60-1001 depends on both the distributor and manufacturer.

The materials QS8X30 and QS8X35 are used to demonstrate the quality management of batches.

The material QS8X30 is used to demonstrate the quality inspection of materials to be handled in batches. In this case, the batch quality characteristics become inspection characteristics, and the inspection results are used to classify batches and issue certificates for batch attributes on the quality certificate.

The material QS8X35 is used to demonstrate batch inspections that are performed for different reasons, for example, a source inspection in procurement or a recurring inspection during storage.

Material	Status of supply relationshi p	Mfg. processing	Inspection w/o insp. plan	Inspection w inspection plan	Inspection w. material specs	Dynamic modif. level
QS6X20			Х			0
QS6X40	Х		Х			0
QS6X60		X (QS6X60- 1001)	X			0
QS8X20				Х		1
QS8X30			Х		Х	

QM Data in Materials Management

QS8X35		Х		Х	
QS8X40			Х	Х	3
QS8X60	X (QS6X60- 1001)		Х		1

The vendor is usually vendor 1235.

Vendor 1234 is only required when demonstrating how German documents are created, for example, when printing a purchase order.

The vendors 1234 and 1235 – being distributors – may be required to get materials from vendor 1001, an authorized manufacturer.

Vendor	Language	Automatic Ret. Proc.	Manufacturer
1001	DE		X
1234	DE	x	
1235	EN	Х	

Quality Management in Procurement and Storage

Quality Management in Procurement and Storage

Purpose

This process describes how Quality Management (QM) is used in Purchasing and Inventory Management.

Prerequisites

This process does not require any data from other processes. The individual processes can be run separately. We recommend that you start with a simplified process.



If you want to continue with the acceptance inspection process after completing the QM in procurement process, you need to use materials QS8X ##, instead of materials QS6X ##.

Process Flow Variants

1. Quality Management in Procurement and Inventory Management (Simplified) [Page 16]

This process provides a simplified description of the integration of QM with Procurement and Inventory Management.

2. Quality Management in Procurement and Inventory Management (Detailed) [Page 24]

This process provides a detailed description of the integration of QM with Procurement and Inventory Management.

3. Developing the Status of Supply Relationships [Page 49]

This process describes the development of the status of a supply relationship.

4. Quality Management in Manufacturer Processing [Page 58]

This describes the special features of the role of QM in manufacturer processing.

- 5. Quality Management of Handling Units [Page 72]. This process describes the creation of individually packaged partial quantities (Handling Units) when a delivery is received.
- 6. Quality Management in Warehouse Management [Page 84]

This describes the transport and storage process for the inspection lot and sample in Warehouse Management (WM).

QM in Procurement and Inventory Management (Simplified)

QM in Procurement and Inventory Management (Simplified)

Purpose

This process provides a simplified description of the interaction between Quality Management (QM) and Purchasing and Inventory Management.

You learn about the most important QM functions that are used in Materials Management (MM). This includes:

- Quality documents (quality assurance agreements, technical delivery terms, certificates)
- · Receiving inspection
- Management of stock during quality inspections
- Usage decision for an inspection lot



If you want to continue directly with the process *Acceptance Inspection (Simplified)*, after completing this process, use material QS8X20 instead of material QS6X20. This means that instead of performing step 4 (usage decision), you continue with the *Acceptance Inspection* process.

Prerequisites

You do not require any data from other processes.

We recommend that you perform this simplified process, before performing the extensive version.

Process Flow

You can find the data for this process under [2] [Page 26].

1. Creating a Purchase Order and Displaying a Message [Page 33]

You send the vendor a written purchase order. The purchase order message contains QM notes regarding technical delivery terms, quality assurance agreements, and the obligation to include a quality certificate with a delivery.

2. Displaying Stock [Page 37]

In a second session, you call up the stock overview so that you can continue to follow the development of the stock situation.

3. Posting the Goods Receipt for the Purchase Order [Page 38]

When the delivery arrives, you post the goods receipt. The system generates an inspection lot and determines the sample. During the receiving inspection, the goods have the status "in quality inspection", which means that it is restricted-use stock.

4. Making the Usage Decision [Page 23]

QM in Procurement and Inventory Management (Simplified)

You inspect the sample from the inspection lot. No defects are found and you accept the inspection lot. You post the inspection lot quantity to unrestricted-use stock.



If you intend to continue with the acceptance inspection process, do not make a usage decision.

Data Used During This Process

Data Used During This Process

Field	Data	Description
Company code	1000	IDES AG
Purchasing organization	1000	IDES Deutschland
Purchasing group	001	Dietl, B.
Vendor	1234	K.F.W. Berlin (German version)
	or 1235	K.F.W. London (English version)
Material	QS6X20	Hexagonal head screw M6X20
Net price	0.10	Price per screw
Plant	1000	Hamburg
Storage location	0002	Finished goods warehouse

Creating a Purchase Order and Displaying a Message

Creating a Purchase Order and Displaying a Message

Use

You now create a purchase order that contains the terms of delivery defined by QM.

Procedure

1. Call up the transaction as follows:

Menu Path	Logistics $ o$ Materials Management $ o$ Purchasing $ o$ Purchase Order $ o$ Create $ o$ Vendor/Supplying Plant Known
Transaction Code ME21N	

There is documentation explaining the function on the left side of the screen.

2. To hide this documentation, choose **Z** Close.



The system now stores this setting for your user ID.

To activate the documentation at any time, choose **Help**.

3. Enter the following data:

Field	Data	Description
〒 field	Standard PO	
Vendor	1234	K.F.W. Berlin (German version)
	1235	K.F.W. London (English version)
Document date	Today's date (defaulted)	

- 4. Choose .
- 5. If required, you can expand the area for the item header data by choosing Theader.
- 6. Enter the following data in the *Org data* tab page:

Field	Data	Description
Purchasing org.	1000	IDES Deutschland
Purch. group	001	Dietl, B.
Company code	1000	IDES AG

- 7. If required, you can expand the item overview area, by choosing 🛅 Item overview.
- 8. Enter the following data:

Field	Data
Material	QS6X20
PO quantity	1000
C (Category of delivery date)	D (Day format)

Creating a Purchase Order and Displaying a Message

Deliv. date	Today's date + 7 days (possible entries help)
Net price	0.10 EUR
Plant	1000

9. Choose .



It is possible that the material already has an info record, which overwrites the amount you have entered. If required, correct the net price and choose .

- 10. If required, you can expand the item detail area, by choosing a ltem details.
- 11. On the Invoice tab page, choose V1 (Input tax Domestic 15%).
- 12. Choose .



The system confirms the posting and assigns a purchase order number. Make a note of this number.

- 13. Choose C until the overview tree appears.
- 14. To display the message, call up the following transaction:

Menu Path	From the Purchasing node, choose Purchase Order $ ightarrow$ Messages $ ightarrow$ Print/Transmit
Transaction Code	ME9F

15. Enter the following data:

Field	Data
Document number	Your purchase order number

- 16. Choose .
- 17. Select your message and choose Display message.

The system displays the print preview for this message. This contains the additional texts defined by Quality Management.

18. Choose until the overview tree appears.

Displaying Stock

Displaying Stock

Usage

You now display the stock of the material. You open a second session to monitor the stock activities.

Procedure

- 1. To call up a new session, choose 🕱
- 2. Call the transaction as follows:

Menu Path	$\begin{tabular}{ll} Logistics \rightarrow Materials Management \rightarrow Inventory Management \rightarrow Environment \rightarrow Stock \rightarrow Stock Overview \end{tabular}$
Transaction Code	MMBE

3. Enter the following data:

Field	Data
Material	QS#X## (your material)

Delete any entries in the Plant and Storage location fields.

4. Choose .

You now see the stocks, subdivided by company code, plant, and storage location. In the list, you can see 3 stock types "Unrestricted use", "Quality inspection", and "Reserved".

- 5. To display all of the stock types, double-click on the *Total* line.
- 6. To return to the stock overview, choose ...
- 7. Switch to the first session.

Posting the Goods Receipt for the Purchase Order

Posting the Goods Receipt for the Purchase Order

Use

You now post the goods receipt for a delivery. As you do this, the system generates an inspection lot in the background.

Procedure

1. Call up the transaction as follows:

Menu Path	From the <i>Inventory Management</i> node, choose <i>Goods Movement</i> \rightarrow <i>Goods Receipt</i> \rightarrow <i>For Purchase Order</i> \rightarrow <i>PO Number Known.</i>
Transaction Code	MIGO

2. Enter the following data:

Field	Data
Purchase order	Your purchase order number

3. Choose .

The system copies the header data of the purchase order into the header data area of the goods receipt document.

The purchase order item is copied into the item overview.

- 4. If required, you can close the area for the item detail data, by choosing Detail data.
- 5. Enter the following data:

Field	Data
Stor. loc	0002
OK	Select

6. Choose Post.



The system confirms the posting and assigns a material document number. Make a note of this number.

7. Switch to the second session with the stock overview and choose **1**.

The stock list is updated. You can see the posted quantity in the *Quality inspection* column.

- 8. Switch sessions.
- 9. Choose until the overview tree appears.

Making the Usage Decision

Making the Usage Decision

1. Call up the transaction as follows:

Menu Path	$ \begin{array}{l} \textit{Logistics} \rightarrow \textit{Quality Management} \rightarrow \textit{Quality Inspection} \rightarrow \textit{Inspection Lot} \\ \rightarrow \textit{Usage Decision} \rightarrow \textit{Record} \end{array} $
Transaction Code	QA11

2. Enter the following data:

Field	Data
Inspection lot	Inspection lot number (defaulted)



If you need to search for the number, use the possible entries help for the *Inspection lot* field. In the dialog box, choose *Goods Movement*. Enter your material document number and choose . In the list, select your inspection lot and choose .

The system copies the number into the field.

- 3. Choose .
- 4. Choose *Edit* → *Confirm receipt of certificate*.
- 5. In the UD code field, use the possible entries help to select A1. Then choose ...

 The system determines the quality score 100 (very good) for this inspection lot.
- 6. Choose *Proposal* on the *Inspection lot stock* tab page.

The system proposes the quantity of the goods ready to be posted to unrestricted-use stock.

7. Choose .

The system confirms the posting.

- 8. Choose until the overview tree appears.
- 9. Switch to the second session and choose 3.

You can see the posted quantity in the Unrestricted use column.

10. Close the second session.

QM in Procurement and Inventory Management (Detailed)

QM in Procurement and Inventory Management (Detailed)

Purpose

This process provides a detailed description of the interaction of Quality Management with Purchasing and Inventory Management.

You learn about the most important QM functions that are used in Materials Management (MM). This includes:

- QM control functions in a supply relationship
- · Release of supply relationships
- Quality documents (quality assurance agreements, technical delivery terms)
- Certificate processing
- · Source and receiving inspections
- Management of stock during quality inspection
- Payment block
- Usage Decision



If you want to continue directly with the process *Acceptance Inspection* after completing this process, use material QS8X40 to run the detailed version, or material QS8X20 to go through the simplified version of the process, instead of using material QS6X20.

Process Flow

You can find the data for this process under ? [Page 26].

1. Process Control

You get to know the control functions for a supply relationship defined in the master data for the material and vendor.

Process Control [Page 28]

2. Request for quotation (RFQ) at the vendor

You send a written request for a quotation to a vendor to determine whether they can deliver. The RFQ contains QM notes regarding terms of delivery, quality assurance agreements, and the obligation to include a quality certificate with the delivery.

See also Creating a request for a quotation and Displaying a Message [Page 31]

3. Purchase order

After the vendor has sent the quotation, you send them a purchase order document. The purchase order item contains more information about QM.

See also Creating a Purchase Order and Displaying a Message [Page 33]

QM in Procurement and Inventory Management (Detailed)

4. Source inspection at the vendor

You now create an overview of the purchase orders for which source inspections are required within a fixed period of time. You then decide whether source inspections really need to be performed for these purchase orders at the vendor before the goods are delivered. If required, you can create an inspection lot and make a usage decision.

See also Performing the Source Inspection [Page 35]

5. Displaying Stock

You can now open a second session in which you can display the current stock situation after each transaction.

See also Displaying Stock [Page 37]

6. Goods receipt

When the delivery arrives, you post the goods receipt. As you post the goods receipt, the system generates an inspection lot and creates a sample. During the receiving inspection, the product has the status "in quality inspection", which means that it is restricted-use stock.

See also Posting the Goods Receipt for a Purchase Order [Page 38]

7. Certificate processing

The vendor was obliged to include a quality certificate. You now need an overview of incoming and outstanding certificates. As no certificate exists for the posted inbound delivery, you send a reminder to the vendor and then confirm certificate receipt.

See also Sending a Reminder and Confirming the Certificate Receipt [Page 39]

8. Invoice verification

If the incoming inspection has not yet been completed and the goods have not yet been accepted, you must manually release the invoice for payment.

See also Creating an Invoice [Page 41] and Releasing Invoice Items [Page 44]

9. Receiving inspection

You inspect the sample from the inspection lot. You note defects and record the defect data. However, you still accept the inspection lot. You post the defective pieces to blocked stock, and the remainder of the inspection lot to unrestricted-use stock. Since you accepted the inspection lot even though you recorded defects, you must enter a usage decision.



If you intend to continue with the acceptance inspection process, do not make a usage decision.

See also Recording Defects for the Inspection Lot [Page 45] and Making the Usage Decision [Page 47]

Data Used During This Process

Data Used During This Process

Field	Data	Description
Company code	1000	IDES AG
Purchasing organization	1000	IDES Deutschland
Purchasing group	001	Dietl, B.
Vendor	1234	K.F.W. Berlin (German version)
	or 1235	K.F.W. London (English version)
Material	QS6X20	Hexagonal head screw M6X20
Net price	0.10	Price per screw
Plant	1000	Hamburg
Storage location	0002	Finished goods warehouse

Process Control

Process Control

Usage

This procedure explains the control functions for Quality Management in Materials Management. The control parameters are defined in the following master data:

- Material master record
- Vendor master record
- QM info record for the supply relationship (that is, for the material, plant, and vendor)

Procedure

Control Functions in the Material Master Record

1. Call the transaction as follows:

Menu Path	$Logistics ightarrow Quality \ Management ightarrow Quality \ Planning ightarrow Logistics \ Master \ Data ightarrow Material ightarrow Display$
Transaction Code	MM03

2. Enter the following data:

Field	Data
Material	QS6X20

- 3. Choose .
- 4. In the Select View(s) dialog box, select the view Quality Management and choose ♥.
- In the Organizational Levels dialog box, enter plant 1000 and choose
- 6. In the *Procurement Data* screen area, position your cursor on the *QM control key* field and choose *F1*.
- 7. Choose & (Customizing).
- 8. Choose Skip in the dialog box that appears.

This takes you to the Implementation Guide (IMG) for Customizing settings.

9. Choose in the selected line *Define control keys*.

You now see the table of control key definitions for QM in procurement.



To avoid making unwanted changes, choose *Table view* \rightarrow *Change* \rightarrow *Display*. The system is now in display mode.

10. To view the control parameters for QM in Procurement, select control key 9999 and choose

Explanations are available for all of the fields in this view.

11. Choose until you return to the Display Material xxx (Semi-finished product) screen.

Process Control

- 12. Choose 🛂.
- 13. Repeat steps 6 to 10 for the *Target QM system* field (in the *Define QM system* line).
- 14. Place your cursor in the Certificate type field and choose F1.
- 15. Choose
 (Customizing).
- 16. Choose *Skip* in the dialog box that appears.
- 17. Select the QM in logistics line and choose ...
- 18. Choose the in the Define certificate processing line.
- 19. Place your cursor in the *Define certificate types* field and choose **Select**. ■
- 20. Choose until you return to the Display Material xxx (Semi-finished product) screen.
- 21. Choose Insp. setup.
- 22. Place your cursor on the fields *InspType*, *Post to insp. stock*, and *Control insLot*. Choose F1 for each field.
- 23. To close the Inspection Setup Data screen, choose 36.
- 24. Choose Additional data and choose the Document data tab page.
- 25. Position your cursor on the line for the *hexagonal head screw* and choose & (*Display originals*).

You now see a technical drawing of the screw.

- 26. Quit this screen.
- 27. Position your cursor on the entry *Packaging in carton with window* and choose (*Display document*).
- 28. Choose until the overview tree appears.

Control Functions in the Vendor Master Record

A. QM system of the vendor

1. Call the transaction as follows:

Menu Path	Logistics → Materials Management → Purchasing → Master Data → Vendor → Purchasing → Display (Current)
Transaction Code	MK03

2. Enter the following data:

Field	Data
Vendor	1235
Purch. organization	1000
Control	Select

- 3. Choose .
- 4. Position your cursor on the *Actual QM* sys. field and choose *F1*.

Process Control

The field is empty because the QM system of the vendor is recognized only for certain materials. However, the corresponding field in the QM info record for the supply relationship contains an entry.

B. Blocking the Vendor

1. Call the transaction as follows:

Menu Path	From the Quality Management node, choose Quality Planning \rightarrow Logistics Master Data \rightarrow Vendor \rightarrow Block
Transaction Code	MK05

2. Enter the following data:

Field	Data
Vendor	1235
Purch. organization	1000

- 3. Choose .
- 4. Position your cursor on the *Block for quality reasons* field, then choose the possible entries help.

This vendor is not blocked.

Control Functions in QM-Info Record for the Supply Relationship

1. Call the transaction as follows:

Menu Path	From the Quality Info Record: Procurement node, choose Display
Transaction Code	Q103

2. Enter the following data:

Field	Data
Material	QS6X20
Vendor	1235
Plant	1000

- 3. Choose .
- 4. Position your cursor on all the fields on the *Release* and *Insp. Control* tab pages in turn and choose F1.
- 5. Choose the Quality agreement tab page.
- Select the line with the document "QA_S" and choose ■.
- 7. On the *Display Document: Basic Data Quality Agreement (Q01)* screen, choose ...

 The quality agreement is displayed.
- 8. Choose until the overview tree appears.

Creating a Request for a Quotation and Displaying a Message

Creating a Request for a Quotation and Displaying a Message

Use

You can use this process to create a request for a quotation at the vendor's, listing the terms of delivery set by Quality Management.

Procedure

1. Call up the transaction as follows:

Menu Path	Logistics \to Materials Management \to Purchasing \to RFQ/Quotation \to Request for Quotation \to Create
Transaction Code	ME41

2. Enter the following data:

Field	Data	Description
Quotation deadline	Today's date +7 days (possible entries help)	
Purch. organization.	1000	IDES Deutschland
Purchasing group	001	Dietl, B.
Delivery date	Today's date +14 days	

- 3. Choose (Enter).
- 4. Enter the following data:

Field	Data
Coll.no.	QS6X20

- 5. Choose 2 (overview).
- 6. Enter the following data:

Field	Data
Material	QS6X20
RFQ quantity	1000

- 7. Choose 🖾.
- 8. To confirm the message, choose ...
- 9. Choose (Vendor address).
- 10. Enter the following data:

Field	Data	Description
Vendor	1234	K.F.W. Berlin (German version)
	or 1235	K.F.W. London (English version)

Creating a Request for a Quotation and Displaying a Message

If you choose the English option, the system creates the request for quotation in English.

11. Choose 🖾.

The complete address of the vendor is displayed.

12. Choose (Save).



The system confirms the transaction and assigns a number. Make a note of this number.

- 13. Choose 🙆.
- 14. To display the message for the generated request for quotation, call up the following transaction:

Menu Path	From the <i>Request for Quotation</i> node, choose <i>Messages</i> → <i>Print/Transmit</i>
Transaction Code	ME9A

The Message Output screen appears.

15. Enter the following data:

Field	Data
Document number	Your document number (defaulted)

- 16. Choose (Execute).
- 17. Select your message and choose *Display message*.

You see the print preview of the message. The system assigns the following texts automatically to the message:

- · Purchase order text
- · Quality assurance agreement
- · Technical delivery terms
- Note regarding the request of a quality certificate
- 18. Choose until the overview tree appears.

Creating a Purchase Order and Displaying a Message

Creating a Purchase Order and Displaying a Message

Use

You now create a purchase order that contains the terms of delivery defined by QM.

Procedure

19. Call up the transaction as follows:

Menu Path	Logistics $ o$ Materials Management $ o$ Purchasing $ o$ Purchase Order $ o$ Create $ o$ Vendor/Supplying Plant Known
Transaction Code	ME21N

There is documentation explaining the function on the left side of the screen.

20. To hide this documentation, choose Z Close.



The system now stores this setting for your user ID.

To activate the documentation at any time, choose **Help**.

21. Enter the following data:

Field	Data	Description
〒 field	Standard PO	
Vendor	1234	K.F.W. Berlin (German version)
	1235	K.F.W. London (English version)
Document date	Today's date (defaulted)	

- 22. Choose .
- 23. If required, you can expand the area for the item header data by choosing Theader.
- 24. Enter the following data in the *Org data* tab page:

Field	Data	Description
Purchasing org.	1000	IDES Deutschland
Purch. group	001	Dietl, B.
Company code	1000	IDES AG

- 25. If required, you can expand the item overview area, by choosing 🛅 Item overview.
- 26. Enter the following data:

Field	Data
Material	QS6X20
PO quantity	1000
C (Category of delivery date)	D (Day format)

Creating a Purchase Order and Displaying a Message

Deliv. date	Today's date + 7 days (possible entries help)
Net price	0.10 EUR
Plant	1000

27. Choose .



It is possible that the material already has an info record, which overwrites the amount you have entered. If required, correct the net price and choose .

- 28. If required, you can expand the item detail area, by choosing a ltem details.
- 29. On the Invoice tab page, choose V1 (Input tax Domestic 15%).
- 30. Choose .



The system confirms the posting and assigns a purchase order number. Make a note of this number.

- 31. Choose C until the overview tree appears.
- 32. To display the message, call up the following transaction:

Menu Path	From the Purchasing node, choose Purchase Order $ ightarrow$ Messages $ ightarrow$ Print/Transmit
Transaction Code	ME9F

33. Enter the following data:

Field	Data
Document number	Your purchase order number

- 34. Choose .
- 35. Select your message and choose Display message.

The system displays the print preview for this message. This contains the additional texts defined by Quality Management.

36. Choose until the overview tree appears.

Performing the Source Inspection

Performing the Source Inspection

Use

You now execute a source inspection for the goods you have ordered. You create an inspection lot, execute a source inspection at the vendor, and make the usage decision for the source inspection lot.

Procedure

1. Call up the transaction as follows:

Menu Path	From the Quality Management node, choose Quality Inspection \rightarrow Worklist \rightarrow Inspection Lot Creation \rightarrow Source Inspection \rightarrow Trigger Manually
Transaction Code	Q107

2. Enter the following data:

Field	Data
Vendor	1234 (German)
	1235 (English)
Material	QS6X20
Plant	1000
Opening period (D)	30 (default)

- 3. Choose .
- 4. Select your purchasing document, then choose Inspection lot.
- 5. Choose .

Your purchasing document disappears from the list.

- 6. Choose 4 until the overview tree appears.
- 7. To display your inspection lot, call up the following transaction:

Menu Path	From the Quality Management node, choose Quality Inspection \rightarrow Inspection Lot \rightarrow Editing \rightarrow Display
Transaction Code	QA03

8. To confirm the inspection lot number, choose $\ensuremath{\mathfrak{G}}$.



Note the number of the inspection lot.

- 9. Choose 🕘.
- 10. You now execute a source inspection at the vendor.
- 11. To enter the usage decision for your source inspection lot, call up the following transaction:

Performing the Source Inspection

Menu Path	From the Quality Management node, choose Quality Inspection \rightarrow Inspection Lot \rightarrow Usage Decision \rightarrow Record
Transaction Code	QA11

- 12. Enter the number of your inspection lot, then choose $\ensuremath{\mathfrak{G}}$.
- 13. In the *UD Code* field, choose F4 input help.
- 14. Choose Code A.
- 15. Choose 🖽.

The system issues a message to confirm the posting.

16. Choose until the overview tree appears.

Displaying Stock

Displaying Stock

Usage

You now display the stock of the material. You open a second session to monitor the stock activities.

Procedure

- 8. To call up a new session, choose 🕱
- 9. Call the transaction as follows:

Menu Path	$\begin{tabular}{ll} Logistics \rightarrow Materials Management \rightarrow Inventory Management \rightarrow Environment \rightarrow Stock \rightarrow Stock Overview \end{tabular}$
Transaction Code	MMBE

10. Enter the following data:

Field	Data	
Material	QS#X## (your material)	

Delete any entries in the Plant and Storage location fields.

11. Choose 🗣.

You now see the stocks, subdivided by company code, plant, and storage location. In the list, you can see 3 stock types "Unrestricted use", "Quality inspection", and "Reserved".

- 12. To display all of the stock types, double-click on the *Total* line.
- 13. To return to the stock overview, choose ...
- 14. Switch to the first session.

Posting the Goods Receipt for the Purchase Order

Posting the Goods Receipt for the Purchase Order

Use

You now post the goods receipt for a delivery. As you do this, the system generates an inspection lot in the background.

Procedure

10. Call up the transaction as follows:

Menu Path	From the <i>Inventory Management</i> node, choose <i>Goods Movement</i> \rightarrow <i>Goods Receipt</i> \rightarrow <i>For Purchase Order</i> \rightarrow <i>PO Number Known.</i>	
Transaction Code	MIGO	

11. Enter the following data:

Field	Data	
Purchase order	Your purchase order number	

12. Choose 🛂.

The system copies the header data of the purchase order into the header data area of the goods receipt document.

The purchase order item is copied into the item overview.

- 13. If required, you can close the area for the item detail data, by choosing Detail data.
- 14. Enter the following data:

Field	Data
Stor. loc	0002
OK	Select

15. Choose Post.



The system confirms the posting and assigns a material document number. Make a note of this number.

16. Switch to the second session with the stock overview and choose **3**.

The stock list is updated. You can see the posted quantity in the *Quality inspection* column.

- 17. Switch sessions.
- 18. Choose until the overview tree appears.

Sending a Reminder and Confirming Certificate Receipt

Use

You now send a reminder to your vendor that a necessary certificate has not yet been provided. You then confirm that the certificate has been received. Both of these transactions are performed using the worklist.

Procedure

1. Call up the transaction as follows:

Menu Path	From the Quality Management node, choose Quality Certificates \rightarrow Inbox \rightarrow Worklist
Transaction Code	QC55

2. Enter the following data:

Field	Data
Status cert. receipt	No entry
Material	QS6X20
Vendor	1234 or 1235
Plant	1000

3. Choose 🕒

You now see the purchasing document in the worklist. If the traffic light is red, a reminder must be sent.

- 4. Select the line with your purchasing document.
- 5. Choose Dunning notices.

The *Print* dialog box appears. You print the reminder even though the number of reminder days has not yet been exceeded.

6. Enter the following data:

Field	Data
Output device	LP01

- 7. Choose (Print preview).
- 8. Choose 🕒

Your certificate is still selected; the traffic light is green.

- 9. Choose Certificate.
- 10. Use the possible entries help to change the content of the *Cert. status* field from *Reminder for certificate sent* to *Certificate filed and inspected*.
- 11. Choose 🖳

Sending a Reminder and Confirming Certificate Receipt

- 12. If any warning messages appear, choose **2**.
- 13. Choose C until the overview tree appears.

Creating an Invoice

Creating an Invoice

Use

When the goods and certificate have arrived, you create an invoice.

Procedure

1. Call the transaction as follows:

Menu Path	From the Materials Management node, choose Invoice Verification \rightarrow Logistics Invoice Verification \rightarrow Document Entry \rightarrow Enter Invoice	
Transaction Code	MIRO	

2. In the dialog box, enter the following data:

Field	Data
Company code	1000

- Choose ♥.
- 4. Enter the company code 1000. In the field above the item overview, use the possible entries help to choose *Purchase order/Scheduling agreement* if it is not already defaulted.
- 5. On the Basic Data tab page of the header data area, enter the following data:

Field	Data
Invoice date	Today's date
Posting date	Today's date (defaulted)
To the right of the Purchase order/Scheduling agreement field	Your purchase order number

6. Choose 🕝.



In the item overview, the system displays the purchase order data and the net amount in the balance field that is required to calculate the gross amount. The traffic light in the *Balance* field is red.

The value of the goods delivered plus VAT is normally entered on the invoice sent to you by the vendor. In this scenario, we simulate this procedure and determine the invoice amount ourselves.

- 7. Choose the *Tax* tab page.
- 8. Enter the following data:

Field	Data
Calculate tax	Select



When you activate *Calculate tax*, the system displays the gross amount in the *Balance* field. The corresponding tax portion appears in the *Tax total* field.

Creating an Invoice

9. On the Basic data tab page, enter the following data:

Field	Data
Amount	Determined gross amount
(Booking OK)	Select

10. Choose 📽.



When you confirm your entries, the traffic light in the *Balance* field changes to green. In this scenario, we assume that the invoiced amount equals the calculated amount.

11. Choose .

The system confirms the posting with the message *Document no. ### has been created*. Make a note of this document number.

12. Choose until the overview tree appears.

Releasing Invoice Items

Releasing Invoice Items

Use

You now release the invoice items that you previously entered for payment.

Procedure

1. Call up the transaction as follows:

Menu Path	From the <i>Logistic Invoice Verification</i> node, choose <i>Further Processing</i> → <i>Release Invoices</i>
Transaction Code	MRBR

2. Enter the following data:

Field	Data
Company code	1000
Vendor	Selected vendor (1234/ 1235)

3. Choose .

You now see a list of invoices to be released. The document you created is one of these.

4. Select your document, then scroll right until you see the columns listing the blocking reasons.

Your document has blocking reason I, because you have not yet made a usage decision for the inspection lot. This means that an automatic release of the payment is not possible.

5. Choose P.

You have now released the invoice for payment despite the blocking reason.

6. Choose Save change.

The system confirms that ## invoices have been released.

7. To check this, choose 4 and then repeat step 1.

You can see that the entry with your invoice document and purchasing document no longer exists.

8. Choose until the overview tree appears.

Recording Defects for the Inspection Lot

Recording Defects for the Inspection Lot

Usage

During the goods receipt inspection, you note that some of the screws are defective. You now record these defects in the system and generate a problem message.

Procedure

1. Call up the transaction as follows:

Menu Path	From the Quality Management node, choose Quality Inspection \rightarrow Defects \rightarrow Record for Inspection Lot
Transaction Code	QF11

2. Enter the following data:

Field	Data
Inspection lot	Inspection lot number (defaulted)
Report type	0000071

- 3. Choose .
- 4. Place your cursor in the *Defect type* column and choose the possible entries help.
- 5. In the dialog box, select defect type 0011 and choose ♥ Copy.
- 6. Select your defect entry and choose 🔼
- 7. In the dialog box, enter the following data:

Field	Data
No. of defects	10
Activity	QM-S2 0004 (using the possible entries help)
DefectValuation	123

8. Choose ♥.

You would like to carry out corrective tasks at a later date. Therefore, you create a problem notification.

- 9. Select your item and choose ** Notification (Activate notification).
- 10. In the dialog box, use the possible entries help to enter the following data:

Field	Data
Priority	3
Coding	QM-1 (Problem notification)
Description	Problems with hexagonal head screws
Department responsible	50010100

Recording Defects for the Inspection Lot

Coordinator Your user name

- 11. Choose ♥. If any system messages appear, choose ♥.
- 12. Choose .
- 13. Choose until the overview tree appears.

Making the Usage Decision

Making the Usage Decision

Use

You now make the usage decision for the inspection lot that was generated at the goods receipt.

Procedure

11. Call up the transaction as follows:

Menu Path	From the Quality Management node, choose Quality Inspection \rightarrow Inspection Lot \rightarrow Usage Decision \rightarrow Record
Transaction Code	QA11

12. Enter the following data:

Field	Data
Inspection lot	Inspection lot number (defaulted)

- 13. Choose 🕰.
- 14. In the UD code field, use the possible entries help to select A1.
- 15. Choose .

The system determines the quality score 100 (very good) for this inspection lot.

16. Choose *Proposal* on the *Inspection lot stock* tab page.

Based on the usage decision, the system proposes the quantity of goods ready to be posted to unrestricted-use stock.

17. Enter the following data:

Field	Data
To unrestricted use	990
To blocked stock	10

18. Choose 🖽.

The system requests you to enter a comment as to why you accepted the inspection lot although you recorded defects.

- 19. Enter a reason.
- 20. Choose until the overview tree appears.
- 21. To change the quality score manually, call up the transaction as follows:

Menu Path	From the Quality Management node, choose Quality Inspection \to Inspection Lot \to Usage Decision \to Change with History
Transaction Code	QA12

22. Enter the following data:

Field Data	
------------	--

Making the Usage Decision

- 23. Choose 🖾.
- 24. In the Usage Decision screen area, change the quality score to 90.
- 25. Choose .
- 26. Choose until the overview tree appears.
- 27. To display the changes, call up the transaction as follows:

Menu Path	From the Usage Decision node, choose Display
Transaction Code	QA13

- 28. Enter the number of your inspection lot (defaulted) and choose .
- 29. Choose Strange history.
- 30. In the dialog box, select your change and choose ☑.

 You now see the change.
- 31. Choose ** twice.
- 32. Choose 🙆.
- 33. To check the effects on the stock, switch to the second session and choose **1**. In the *Unrestricted usage* column, you see the posted quantity.
- 34. To display all of the stock types, double-click on one of the stock lines.

 In the *Blocked* column, you see the quantity posted to blocked stock.
- 35. Close the second session.

Developing the Status of Supply Relationships

Developing the Status of Supply Relationships

Purpose

This process deals with the status of a supply relationship. In this process, the supply relationship goes through the following statuses (depending on the results of the corresponding receiving inspections):

- a.) Supply relationship created
- b.) Prototype, specimen
- c.) Pilot series
- d.) Series

Prerequisites

This process does not require any data from other processes. It is a more detailed version of the "QM in Procurement and Inventory Management" process.



When you start this process, the supply relationship must not have gone beyond the *Model* status. To verify that it has not gone beyond model status, see the <u>Supply</u> Relationship [Page 52] documentation.

Process Flow

You can find the data for this process under [? [Page 51].

1. Status of the Supply Relationship

You use the quality info record to determine whether the supply relationship has been created or whether a particular status has been reached.

Supply Relationship [Page 52]

2. Purchase order

You send a purchase order to the vendor.

Creating a Purchase Order [Page 53]

3. Goods receipt

You post the goods receipt for a partial delivery. The system generates an inspection lot with an inspection type that corresponds to the status of the supply relationship. The system then creates the sample appropriate to this inspection type.

Posting the Goods Receipt [Page 55]

4. Receiving inspection

You inspect the sample from the inspection lot. No defects are found and you accept the inspection lot. You post the inspection lot quantity to unrestricted-use stock.

Processing [Page 56] the Inspection lot

5. Developing the Supply Relationship

Developing the Status of Supply Relationships

Repeat steps 3 and 4 several times. Note how the status changes in step 1.

Data Used During this Process

Data Used During this Process

Field	Data	Description
Company code	1000	IDES AG
Purchasing organization	1000	IDES Deutschland
Purchasing group	001	Dietl, B.
Vendor	1234	K.F.W. Berlin (German version)
	or 1235	K.F.W. London (English version)
Material	QS6X40	Hexagonal head screw M6X40
Net price	0.10	Price per screw
Plant	1000	Hamburg
Storage location	0002	Finished goods warehouse

The Supply Relationship

The Supply Relationship

Use

You use the QM info record to check the current status of the supply relationship.

Procedure

1. Call up the transaction as follows:

Menu Path	$Logistics ightarrow Quality \ Management ightarrow Quality \ Planning ightarrow Logistics \ Master \ Data ightarrow Quality \ Info \ Record: \ Procurement ightarrow Display$
Transaction Code	Q103, Q102

2. Enter the following data:

Field	Data
Material	QS6X40
Vendor	1235

- 3. Choose 📽.
- 4. Choose the *Status* tab page, then check whether the *Status reached* is *Supply relationship* opened or *Prototype*, *specimen*.
- 5. If the status is set to *Pilot series* or *Series* at the beginning of the process choose *Q-Info record* → *Change*. Then choose .
- 6. Choose Status management.
- 7. To skip any warning messages that may appear, choose .
- 8. In the dialog box, select the status Prototype, specimen.
- 9. To exit status management, choose ♥.
- 10. Choose 🖽.
- 11. Choose C until the overview tree appears.

Creating a Purchase Order

Creating a Purchase Order

37. Call up the transaction as follows:

Menu Path	Logistics $ o$ Materials Management $ o$ Purchasing $ o$ Purchase Order $ o$ Create $ o$ Vendor/Supplying Plant Known
Transaction Code	ME21N

38. Enter the following data:

Field	Data	Description
₩ field	Standard PO	
Vendor	1234	K.F.W. Berlin (German version)
	1235	K.F.W. London (English version)
Invoice date	Today's date (defaulted)	

- 39. Choose .
- 40. If required, you can expand the area for the item header data, by choosing Theader.
- 41. On the *Org. Data* tab page of the header data area, use the possible entries help to enter the following data:

Field	Data	Description
Purchasing org.	1000	IDES Deutschland
Purch. group	001	Dietl, B.
Company code	1000	IDES AG

- 42. If required, you can expand the item overview area, by choosing **1** *Item overview*.
- 43. Enter the following data:

Field	Data
Material	QS6X40
PO quantity	1000
C (Category of delivery date)	D (Day format)
Deliv. date	Today's date +7 days (possible entries help)
Net price	0.10
Plant	1000

44. Choose 🛂.



It is possible that the material already has an info record, which overwrites the amount you have entered. If required, correct the net price and choose .

45. If required, you can expand the item detail area, by choosing Taltem details.



Creating a Purchase Order

- 46. On the Invoice tab page, choose V1 (Domestic input tax 15%).
- 47. Choose .



The system confirms the posting and assigns a purchase order number. Make a note of this number.

48. Choose **C** until the overview tree appears.

Posting the Goods Receipt

Posting the Goods Receipt

Use

You post the goods receipt for a partial delivery of 200 pieces. The system generates an inspection lot with an inspection type corresponding to the status of the supply relationship. The system then creates the sample appropriate to this inspection type.

Procedure

19. Call up the transaction as follows:

Menu Path	From the <i>Inventory Management</i> node, choose Goods Movement \rightarrow Goods Receipt \rightarrow For Purchase Order \rightarrow PO Number Known.
Transaction Code	MIGO

20. Enter the following data:

Field	Data
Purchase order	Your purchase order number

21. Choose 🗳.

The system copies the header data of the purchase order into the header data area of the goods receipt document.

The purchase order item is copied into the item overview.

- 22. If required, you can close the area for the item detail data, by choosing Detail data.
- 23. Enter the following data:

Field	Data
Quantity in UnE	200
Storage location	0002
OK	Select

24. Choose Post.



The system confirms the posting and assigns a material document number. Make a note of this number.

25. Choose until the overview tree appears.



Once you have posted the goods receipt, you cannot post another goods receipt until you have made the usage decision for the inspection lot. During this time, the QM info record refers to the desired status and to the still outstanding inspection lot. With the UD (acceptance), the system sets the desired status.

Processing the Inspection Lot

Processing the Inspection Lot

Use

When you check the sample from the inspection lot, you do not note any defects and accept the inspection lot. You post the inspection lot quantity to unrestricted-use stock.

Procedure

Receiving Inspection

36. Call up the transaction as follows:

Menu Path	From the Quality Management node, choose Quality Inspection \rightarrow Inspection Lot \rightarrow Usage Decision \rightarrow Record
Transaction Code	QA11

37. Enter the following data:

Field	Data
Inspection lot	Inspection lot number (defaulted)



If you need to search for the number, use the possible entries help for the *Inspection lot* field. In the dialog box, choose the tab page *Goods Movement*. Enter your material document number and choose . In the list, select your inspection lot and choose . The system copies the number into the field.

- 38. Choose 🕰.
- 39. In the UD code field, use the possible entries help to select A1. Then choose ...



If you reject the inspection lot, the status of the supply relationship remains as it was.

Choose the *Inspection lot stock* tab page and enter the inspection lot quantity to be posted to unrestricted use.

40. Choose .

The system confirms the posting.

41. Choose until the overview tree appears.

Status of the Supply Relationship

1. To display the status of the supply relationship, call up the following transaction:

Menu Path	Logistics → Quality Management → Quality Planning → Logistics Master Data → Quality Info Record: Procurement → Display
Transaction Code	Q103

2. Enter the following data:

Processing the Inspection Lot

Field	Data
Material	QS6X40
Vendor	1235
Plant	1000

- 3. Choose .
- 4. Choose the *Status* tab page.

You can see that the status has changed in accordance with the usage decision.

5. Choose until the overview tree appears.

QM in Manufacturer Processing

QM in Manufacturer Processing

Purpose

This process describes the interaction of Quality Management (QM) with Purchasing during manufacturer processing. During this process, the vendor acts as a distributor of goods produced by an authorized manufacturer.

This process emphasizes the following functions:

- QM control functions in a supply relationship
- Purchase order
- Receiving inspection



If you want to continue with the process *Acceptance Inspection* after completing this process, use material QS8X60 instead of material QS6X60.

Prerequisites

This process does not require any data from other processes.

We recommend that you go through the simplified process QM in Procurement and Inventory Management, before running this more complex process.

Process Flow

You can find the data for this process under [Page 61].

1. Process Control

You get to know the control functions that are used to link Purchasing and QM during the indirect procurement of manufacturer parts from distributors.

Process Control [Page 62]

2. Purchase order

You send a purchase order to the vendor, who is also the distributor in this scenario. You refer to the manufacturer part number. The purchase order message specifies the following for the inventory-managed material: Valid technical delivery termsThe quality assurance agreement for the supply relationshipA note concerning the requirement to include a quality certificate with the delivery

Creating a Purchase Order and Displaying a Message [Page 65]

3. Goods receipt

When the delivery arrives, you post the goods receipt of the inventory-managed material (the manufacturer part number has no significance in Inventory Management). The system generates an inspection lot and determines the sample.

Posting the Goods Receipt [Page 67]

4. Receiving inspection



QM in Manufacturer Processing

In addition to the vendor (distributor) and inventory-managed material, the inspection lot data record also refers to the manufacturer and the manufacturer part number. You accept the inspection lot and make the usage decision.



If you intend to continue with the acceptance inspection process, do not make a usage decision.

Processing the Inspection Lot [Page 70]

Data Used During This Process

Data Used During This Process

Field	Data	Description
Company code	1000	IDES AG
Purchasing organization	1000	IDES Deutschland
Purchasing group	001	Dietl, B.
Vendor	1234	K.F.W. Berlin (German version)
	or 1235	K.F.W. London (English version)
Manufacturer	1001	H-Lux GmbH
Material (manufacturer part)	QS6X60-1001	Hexagonal head screw M6X60
Material (inventory-managed)	QS6X60	Hexagonal head screw M6X60
Net price	0.10	Price per screw
Plant	1000	Hamburg
Storage location	0002	Finished goods warehouse

Process Control

Process Control

Use

This procedure shows you the particular functions used by Purchasing and Quality Management to control the indirect procurement of manufacturer parts through a distributor. The control parameters are defined in the master data of the:

- Material master record of the inventory-managed material
- Material master record of the manufacturer part (material type HERS)
- Vendor master record
- Manufacturer master record
- QM info record for the supply relationship (that is, for the manufacturer part, plant, and vendor)

Procedure

Control Functions in the Material Master Record of the Inventory-Managed Material

29. Call up the transaction as follows:

Menu Path	Logistics → Quality Management → Quality Planning → Logistics Master Data → Material → Display	
Transaction Code	MM03	

30. Enter the following data:

Field	Data	
Material	QS6X60	

- 31. Choose 🛂.
- 32. In the Select View(s) dialog box, select the view Purchasing, and choose ♥.
- 33. In the *Organizational levels* dialog box, enter plant 1000, then choose ♥.
- 34. In the Other data / manufacturer data screen area, position your cursor on the Mfr part profile field, and choose F1.
- 35. Choose 4.
- 36. Choose Skip in the dialog box that appears.

This takes you to the Implementation Guide (IMG) for Customizing settings.

37. Choose in the selected line *Define Manufacturer Part Profile*.

You now see the table containing the definitions of the manufacturer part profiles.



Choose Table view \rightarrow Change \rightarrow Display.

38. To display the control parameters, select manufacturer part profile 1256, and choose 🔜



Process Control

Choose the F1 help to call up descriptions for the fields displayed on this screen.

39. Choose until the overview tree appears.

Control Functions in the Material Master Record of the Manufacturer Part

1. Call up the transaction as follows:

Menu Path	$\textit{Logistics} \rightarrow \textit{Quality Management} \rightarrow \textit{Quality Planning} \rightarrow \textit{Logistics Master} \\ \textit{Data} \rightarrow \textit{Material} \rightarrow \textit{Display}$	
Transaction Code	MM03	

2. Enter the following data:

Field	Data
Material	QS6X60-1001

- 3. Choose 🖾.
- 4. In the Select View(s) dialog box, select the view Purchasing, and choose ♥.
- 5. In the *Manufacturer parts* screen area, position your cursor on the *Int. material number, Mfr part number,* and *Manufacturer* fields respectively and choose F1 to call up descriptions of the fields.
- 6. To close the dialog box, choose **■**.
- 7. Choose until the overview tree appears.

Control Functions in the Vendor Master Record of the Manufacturer

5. Call up the transaction as follows:

Menu Path	Logistics → Materials Management → Purchasing → Master Data → Vendor → Purchasing → Display (Current)
Transaction Code	MK03

6. Enter the following data:

Field	Data
Vendor	1001
Purch. organization.	1000
Control	Select

- 7. Choose 🕰.
- 8. Position your cursor on the Actual QM sys. field, and choose F1.

The *Actual QM Sys.* field is empty because the QM system of the manufacturer is recognized only for specific manufacturer part number (MPN) materials.

9. To close the dialog box, choose **■**.

Process Control

10. Choose C until the overview tree appears.

Control Functions in QM Info Record for the Supply Relationship

1. Call up the transaction as follows:

Menu Path	From the Quality Info Record: Procurement node, choose Display
Transaction Code	Q103

2. Enter the following data:

Field	Data
Material	QS6X60-1001
Vendor	1235
Plant	1000

3. Choose .

4. Choose the *Insp. control* tab page, then position your cursor on the *Existing QM sys.* Field, and choose *F1*.

You can see that the manufacturer's QM system is recognized for this manufacturer part.

- 5. Choose .
- 6. Choose C until the overview tree appears.

Approval of the Manufacturer

1. Call up the transaction as follows:

Menu Path	$\begin{tabular}{ll} Logistics \rightarrow Materials Management \rightarrow Purchasing \rightarrow Master Data \rightarrow Approved Manufacturer Parts \rightarrow Display \\ \end{tabular}$
Transaction Code	MP02

2. Enter the following data:

Field	Data
Inventory-managed material	QS6X60

3. Choose 🖾.

You can see that the inventory-managed material QS6X60 is approved for the MPN Material QS6X60-1001 of manufacturer 1001.

4. Choose until the overview tree appears.

Creating a Purchase Order and Displaying a Message

Use

You now create a purchase order for the manufacturer part that contains the terms of delivery defined by Quality Management.

Procedure

Creating a Purchase Order

49. Call up the transaction as follows:

Menu Path	$\begin{tabular}{ll} Logistics \to \textit{Materials Management} \to \textit{Purchasing} \to \textit{Purchase Order} \to \\ \textit{Create} \to \textit{Vendor/Supplying Plant Known} \\ \end{tabular}$
Transaction Code	ME21N

50. Enter the following data:

Field	Data	Description
₩ field	Standard PO	
Vendor	1234	K.F.W. Berlin (German version)
	1235	K.F.W. London (English version)
Invoice date	Today's date (defaulted)	

- 51. Choose 🖾.
- 52. If required, you can expand the item header data area, by choosing Theader.
- 53. In the *Org data* tab page enter the following data:

Field	Data	Description
Purchasing org.	1000	IDES Deutschland
Purchasing group	001	Dietl, B.
Company code	1000	IDES AG

- 54. If required, you can expand the item overview area, by choosing Taltem overview.
- 55. Enter the following data:

Field	Data
Material	QS6X60-1001
PO quantity	1000
C (Category of delivery date)	D (Day format)
Deliv date	Today's date +7 days (possible entries help)
Net price	0.10
PInt	1000

Creating a Purchase Order and Displaying a Message

56. Choose 🛂.



It is possible that the material already has an info record, which overwrites the amount you have entered. If necessary, correct the net price and choose .

- 57. If required, you can expand the item detail area, by choosing **1** *Item details*.
- 58. On the Invoice tab page, choose V1 (Input tax Domestic 15%).
- 59. Choose .



The system confirms the posting and assigns a purchase order document number. Make a note of this number.

60. Choose until the overview tree appears.

Display Message

1. To display the message, call up the following transaction:

Menu Path	From the Purchasing node, choose Purchase Order \rightarrow Messages \rightarrow Print/Transmit
Transaction Code	ME9F

2. Enter the following data:

Field	Data
Document number	Your purchase order number

- 3. Choose .
- 4. Select your message, then choose Display message.

The system displays the print preview for this message. This contains the description of the manufacturer part, the manufacturer, and the additional text defined by QM.

5. Choose until the overview tree appears.

Posting the Goods Receipt

Posting the Goods Receipt

Use

You now post the goods receipt for a delivery of manufacturer parts. As you do this, the system generates an inspection lot in the background.

Procedure

Posting the Material Document

26. Call the transaction as follows:

Menu Path	From the <i>Inventory Management</i> node, choose <i>Goods Movement</i> \rightarrow <i>Goods Receipt</i> \rightarrow <i>For Purchase Order</i> \rightarrow <i>PO Number Known.</i>
Transaction Code	MIGO

27. Enter the following data:

Field	Data
Purchase order	Your purchase order number

28. Choose 🛂.

The system copies the header data of the purchase order into the header data area of the goods receipt document.

The purchase order item is copied into the item overview. Instead of the manufacturer part number, you now see the number of the inventory-managed material.

- 29. If required, you can close the area for the item detail data, by choosing **Detail data**.
- 30. Enter the following data:

Field	Data
Storage location	0002
OK	Select

31. Choose Post.



The system confirms the posting and assigns a material document number. Make a note of this number.

32. Choose until the overview tree appears.

Displaying Stock

1. To display the stock overview, call up the following transaction:

Menu Path	From the <i>Inventory Management</i> node, choose $Environment \rightarrow Stock \rightarrow Stock Overview.$
Transaction Code	MMBE

2. Enter the following data:

Posting the Goods Receipt

Field	Data
Material	QS6X60

Delete any entries in the *Plant* and *Storage location* fields.

3. Choose .

You now see the stocks, subdivided by company code, plant, and storage location. In the list, you can display 3 stock types - "Unrestricted use", "In quality inspection", and "Reserved".

4. Choose until the overview tree appears.

Inspection Lot Processing

Inspection Lot Processing

Usage

When you check the sample from the inspection lot, you do not note any defects and accept the inspection lot. You post the inspection lot quantity to unrestricted-use stock.

Procedure

Making the Usage Decision

42. Call the transaction as follows:

Menu Path	From the Quality Management node, choose Quality Inspection $ o$ Inspection Lot $ o$ Usage Decision $ o$ Record
Transaction Code	QA11, QA03

43. Enter the following data:

Field	Data
Inspection lot	Inspection lot number (defaulted)



If you need to search for the number, use the possible entries help for the *Inspection lot* field. In the dialog box, choose the *Goods Movement* tab page. Enter your material document number, then choose . In the list, select your inspection lot and choose . The system copies the number into the *Inspection lot* field.

- 44. Choose .
- 45. Choose *Edit* → *Confirm receipt of certificate*.
- 46. Choose Inspection certificate.

In addition to the inventory-managed material and vendor, you see the manufacturer part and manufacturer in the data for the inspection lot origin.

- 47. To return to the *Record Usage Decision* screen, choose .
- 48. In the UD code field, use the possible entries help to select A1. Then choose $\ensuremath{ extit{$arphi}}$

The system determines the quality score 100 (very good) for this inspection lot.

49. Choose *Proposal* on the *Inspection lot stock* tab page.

The system proposes the quantity of the goods ready to be posted to unrestricted-use stock.

50. Choose .

The system confirms the posting.

51. Choose until the overview tree appears.

Inspection Lot Processing

Displaying the Quality Level

1. Call the transaction as follows:

Menu Path	From the Quality Management node, choose Quality Inspection \rightarrow Quality Level \rightarrow Display
Transaction Code	QDL3

2. Enter the following data:

Field	Data
Plant	1000
Material	QS6X60

3. Choose Quality level.

You can see that the data record key includes the *Vendor* and the *Manufacturer* fields. Vendor and manufacturer are criteria for the dynamic modification of the inspection scope.

4. Choose until the overview tree appears.

Quality Management of Handling Units

Quality Management of Handling Units

Purpose

This process describes how you create Handling Units when you receive an inbound delivery. Handling Units are individually packaged partial quantities. The Handling Units (HUs) undergo a quality inspection. When you are making the usage decision, you can perform an individual stock posting for each HU.

Process Flow

You can find the data for this process under [Page 73].

1. Creating a Purchase Order [Page 74]

You create a purchase order. When creating this purchase order, you specify that the goods are to go through an inbound delivery process during which partial quantities will be formed. These partial quantities will then be individually packaged and placed in storage in a special storage location.

2. Creating the Inbound Delivery [Page 76]

At inbound delivery, you create individually packaged HUs. As you do this, the system generates an inspection lot for all HUs. After inbound delivery, you can begin with the quality inspection and enter the results of the inspection.

3. Posting a Goods Receipt [Page 77]

You post the goods receipt to the warehouse. During the receiving inspection, the goods have the status "in quality inspection", which means that it is restricted-use stock.

4. Performing the Inspection [Page 78]

For each HU, the system created a sample data record and printed a label for the bar code reader when the HUs were packaged. You can display the relevant data and print other shop papers, such as inspection instructions. It is possible to skip this step.

5. Entering Inspection Results [Page 80]

You inspect the HUs individually to check that the labels are in good condition. You can also skip this step if you do not wish to record inspection results.

6. Making the Usage Decision [Page 82]

You post the inspection lot quantity to the appropriate stock. HUs with good inspection results to unrestricted-use stock and HUs with a poor inspection result to blocked stock.

Data for This Example

Data for This Example

Field	Data	Description
Vendor	1234	K.F.W. Berlin (German version)
	1235	K.F.W. London (English version)
Purchasing organization	1000	IDES Deutschland
Purchasing group	001	Dietl,B.
Company code	1000	IDES AG
Material	QS8X25	Hexagonal head screw M8X25
Storage location	0007	Handling Unit warehouse without WM
Plant	1000	Plant - Hamburg

Creating a Purchase Order

Creating a Purchase Order

61. Call up the transaction as follows:

Menu Path	Logistics → Materials Management → Purchasing → Purchase Order → Create → Vendor/Supplying Plant Known
Transaction Code	ME21N

62. Enter the following data:

Field	Data	Description
₩ field	Standard PO	
Vendor	1234	K.F.W. Berlin (German version)
	1235	K.F.W. London (English version)
Invoice date	Today's date (defaulted)	

- 63. Choose .
- 64. If required, you can expand the area for the item header data, by choosing Theader.
- 65. On the *Org. data* tab page of the header data area, use the possible entries help to enter the following data:

Field	Data	Description
Purchasing org.	1000	IDES Deutschland
Purchasing group	001	Dietl, B.
Company code	1000	IDES AG

- 66. If required, you can expand the item overview area, by choosing 1 Item overview.
- 67. Enter the following data:

Field	Data
Material	QS8X25
PO quantity	1000
C (Category of delivery date)	D (Day format)
Delivery date	Today's date +7 days (possible entries help)
Net price	0.10
Plant	1000
Storage loc.	0007 (HU warehouse WM)

68. Choose 🚳.



It is possible that the material already has an info record, which overwrites the amount you have entered. If required, correct the net price and choose .

Creating a Purchase Order

- 69. If required, you can expand the item detail area, by choosing Taltem details.
- 70. On the *Invoice* tab page, enter the tax code *V1* (*Domestic input tax 15%*).
- 71. On the *Confirmations* tab page, enter the confirmation control *Delivered* using the possible entries help.
- 72. Choose 🖳



The system confirms the posting and assigns a purchase order number. Make a note of this number.

73. Choose until the overview tree appears.

Creating Inbound Deliveries

Creating Inbound Deliveries

Use

1. Call up the transaction as follows:

Menu Path	Logistics ightarrow Logistics $Execution ightarrow Inbound$ $Process ightarrow Goods$ $Receipt$ for $Inbound$ $Delivery ightarrow Inbound$ $Delivery ightarrow Create ightarrow Single$ $Documents$.
Transaction Code	VL31N

- 2. Enter the previously noted purchase order number in the *Purchase Order* field or accept the system proposal.
- 3. Choose .

The Create Shipping Notification: Overview screen appears.

- 4. Select the item line copied from the purchase order, and choose *Pack.
- 5. Enter the packaging material *QHU01* in the *Packaging Materials* column on the *Pack Material* tab page.
- 6. In the item overview, enter 200 in the Partial Quantity column.
- 7. Select the item line with the material to be packaged (QS8X25) and also select the line with the packaging material QHU01 on the tab page, and then choose *Per part. qty.

For each partial quantity, the system creates a Handling Unit and it displays all existing Handling Units that the partial quantities could be packed into.

8. Choose .



The system generates an inspection lot data record in the background, confirms the posting, and assigns a shipping notification number to the posting.

- 9. Make a note of the shipping notification number.
- 10. Choose until the overview tree appears.

Posting the Goods Receipt

Posting the Goods Receipt

1. Call up the transaction as follows:

Menu Path	Logistics ightarrow Logistics $Execution ightarrow Inbound$ $Process ightarrow Goods$ $Receipt$ for $Inbound$ $Delivery ightarrow Inbound$ $Delivery ightarrow Change ightarrow Single$ $Document$.
Transaction Code	VL32N

- 2. In the *Inbound delivery* field, enter the previously noted shipping notification number or accept the system proposal.
- 3. Choose .

The Change Shipping Notification: Overview screen appears.

- 4. Choose the *Stock Placement* tab page and enter the value 1000 (the total delivered quantity) in the *Putaway qty* field in the item line.
- 5. Select the line, and choose Post goods receipt.



The system posts the quantity specified to inspection stock. You can display the <u>Stock Overview [Page 37]</u>.

6. Choose **Q** until the overview tree appears.

Performing the Inspection

Usage

You display the inspection lot data and see that the system has already created a physical-sample record for each Handling Unit. You can later document the inspection results with reference to these samples.

Procedure

1. Call up the worklist as follows:

Menu Path	$\textit{Logistics} \rightarrow \textit{Quality Management} \rightarrow \textit{Quality Inspection} \rightarrow \textit{Worklist} \rightarrow \textit{Inspection} \rightarrow \textit{Change Data}$
Transaction Code	QA32

2. Enter the following data:

Field	Data
Plant	1000
Insp. lot origin	01
Material	QS8X25
List settings	Select only inspection lots without a usage decision

3. Choose .

The current inspection lot appears in the worklist.

- 4. Select the first inspection lot and choose *Inspection lot*.
- 5. If you want to print an inspection instruction, choose \(\begin{align*} \begin{align*} Inspection instruction. \\ \end{align*}
- 6. Choose the Sample tab page, and choose \(\textit{\textit{\textit{\textit{2}}}} \) Samples.

On the *Overview primary samples* screen, the number of samples will be equivalent to the number of Handling Units packaged earlier.

7. Click on one of the lines containing a sample.

The system opens the sample data. On the *Physical-sample drawing* tab page, you can find the number of the assigned Handling Unit in the *Handling Unit* field.

8. To return to the *Inspection lot worklist* screen, choose 🚭, then 🕷, and then 🚭.



If you would like to display the barcode labels for the Handling Units, choose *System* -> *Own spool requests*. Select script LG02 and then choose *Pisplay contents*.

The inspection instruction may appear as script LV01.

- 9. Choose C.
- 10. Do not leave the worklist





You can make the usage decision for the inspection lot and record results from this worklist.

Entering Inspection Results

Entering Inspection Results

Usage

You inspect each individual Handling Unit (sample) and record the results of the quality inspection.

Procedure

1. If required, call up the worklist as follows:

Menu Path	$\begin{tabular}{ll} Logistics \rightarrow Quality Management \rightarrow Quality Inspection \rightarrow Worklist \rightarrow Inspection \rightarrow Change Data \end{tabular}$
Transaction Code	QA32

2. Enter the following data:

Field	Data
Plant	1000
Insp. lot origin	01
Material	QS8X25
List settings	Select only inspection lots without a usage decision

3. Choose 🕒.

The current inspection lot appears in the worklist.

Using this worklist, you can enter inspection characteristic values and defect data. When an inspection characteristic is rejected, the system automatically creates a defect data record.

You only need to record results when an inspection characteristic or Handling Unit (physical sample) is rejected.

In the preceding inspection, you noted that the label on the first Handling Unit is illegible. On the basis of this, you record a suitable evaluation of the "label" inspection characteristic.

Select the current inspection lot and choose Pesults.

The inspection plan contains two operations. You can select one of these two operations.

- Select the operation Visual inspection and choose

 ✓.
- 6. In the dialog box, choose Assigned insp. points.
- 7. In the list that appears, double-click on the line containing the first physical sample.
- 8. On the characteristic overview screen, select the *Reject* field in the line containing the "label" inspection characteristic and enter "Illegible" in the *Inspection description* field.
- 9. Choose (Close) and .
- 10. Do not leave the worklist



Entering Inspection Results



You can make the usage decision for the inspection lot from the results recording worklist.

Making the Usage Decision

Making the Usage Decision

Usage

You post each individual Handling Unit to a suitable stock type on the basis of the inspection results and make the usage decision for the entire inspection lot.

Procedure

1. If required, call up the worklist as follows:

Menu Path	$\textit{Logistics} \rightarrow \textit{Quality Management} \rightarrow \textit{Quality Inspection} \rightarrow \textit{Worklist} \rightarrow \textit{Inspection} \rightarrow \textit{Change Data}$
Transaction Code	QA32

2. Enter the following data:

Field	Data
Plant	1000
Insp. lot origin	01
Material	QS8X25
List settings	Select only inspection lots without a usage decision

3. Choose .

The current inspection lot appears in the worklist.

4. Select the current inspection lot and choose *Usage decision (UD).*

The defect overview screen appears and you can see that the system has created a defect data record.



To check for which characteristic and sample the defect was recorded, choose *Goto* -> *Defect Structure*.

5. Choose the *Phys. samples* tab page.

You can see that the first sample (Handling Unit) has been rejected. The rest of the samples have not been valuated.

- 6. Since you do not wish to record any further inspection results, choose *Edit* → *Inspection Completion* → *Complete*.
- 7. In the dialog box, choose Yes.

In the preceding inspection, you noted that the label on the first Handling Unit (sample) is illegible. You post this Handling Unit to blocked stock. You can post the rest of the Handling Units, for which no defects have been recorded, to unrestricted-use stock.

- 8. Choose the *Inspection lot stock* tab page.
- 9. Choose the possible entries help in the *Posting* field and choose *To unrestricted-use stock*. Then choose *Use for all HUs*.

Making the Usage Decision

- 10. In the line containing the first Handling Unit, choose the possible entries help and then choose To blocked stock.
- 11. Choose the *Defects* tab page. In the *UD code* field, choose the usage decision *M100* using the possible entries help.

An automatic follow-up action related to this usage decision is that the person responsible (in this case you are the person responsible) receives an express mail.

12. Choose .

The system requests that you make a comment on your decision.

13. Explain your decision and choose 😂.

The usage decision is saved and you return to the worklist.

14. Choose Refresh.

The inspection lot disappears from the worklist.

The system advises you that you have received an express document.

- 15. To display the document, choose .
- 16. Choose until the overview tree appears.

Quality Management in Warehouse Management

Quality Management in Warehouse Management

Purpose

This process covers the transport and placement in storage of the inspection lot and the sample within Warehouse Management (WM).

After posting the goods receipt, you can follow the sample as it is transported to the work center, while the remainder of the inspection lot is stored in the high rack storage area. The sample and inspection lot are "in quality inspection" and have not been posted to unrestricted use. After the usage decision has been made, the sample is placed in storage with the rest of the inspection lot. By consulting the storage location data, you can determine which purchase order and goods receipt posting the goods stem from and which inspection lot was used to inspect them.



If you want to continue directly with the process *Acceptance Inspection (Simplified)*, after completing this process, use material QS8X20 instead of material QS6X20.

Prerequisites

This process does not require any data from other processes. It is a more detailed version of the "QM in Procurement and Inventory Management" process.

Process Flow

You can find the data for this process under <a>! Page <a>[Page <a>[86].

1. Creating a Purchase Order

You send a purchase order to the vendor.

Creating a Purchase Order [Page 87]

2. Goods receipt

You post the goods receipt to the warehouse managed by Warehouse Management (WM). The system generates an inspection lot and determines the sample. During the receiving inspection, the goods have the status "in quality inspection", which means that it is restricted-use stock.

Posting the Goods Receipt [Page 89] and Displaying the WM Stock Overview [Page 90]

3. Transporting the sample to the work center.

The sample is transported to the work center and the rest of the inspection lot is taken to the high storage area.

Processing the Transfer Order for the Work Center [Page 91]

4. Receiving inspection

You inspect the sample from the inspection lot. No defects are found and you accept the inspection lot. You post the inspection lot quantity to unrestricted-use stock.



You could also use the Acceptance Inspection (Simplified) process at this point.

Quality Management in Warehouse Management

Processing [Page 93] the Inspection Lot

5. Making a transfer posting to unrestricted-use stock.

You display the posting change notice using the usage decision and create a (pseudo) transfer order from inspection stock to unrestricted-use stock for the sample and inspection lot.

Processing the Posting Change Notice [Page 95]

6. Transporting the sample to the warehouse

The sample is now transported from the work center to the high storage rack, where it is stored with the inspection lot.

Transporting the Sample to the Warehouse [Page 97]

Data Used During This Process

Data Used During This Process

Field	Data	Description
Company code	1000	IDES AG
Purchasing organization	1000	IDES Deutschland
Purchasing group	001	Dietl, B.
Vendor	1234	K.F.W. Berlin (German version)
	or 1235	K.F.W. London (English version)
Material	QS6X20	Hexagonal head screw M6X20
Net price	0.10	Price per screw
Plant	1000	Hamburg
Storage location	0088	Central warehouse WM
Storage type	001	High rack storage area
	917	Work center
	922	Transfer posting area

Creating a Purchase Order

Use

You now create a purchase order that contains the terms of delivery defined by QM.

Procedure

74. Call up the transaction as follows:

Menu Path	$Logistics o Materials \ Management o Purchasing o Purchase \ Order o Create o Vendor/Supplying \ Plant \ Known$
Transaction Code	ME21N

75. Enter the following data:

Field	Data	Description
₩ field	Standard PO	
Vendor	1234	K.F.W. Berlin (German version)
	1235	K.F.W. London (English version)
Invoice date	Today's date (defaulted)	

- 76. Choose 🕰.
- 77. If required, you can expand the area for the item header data by choosing Theader.
- 78. On the *Org. Data* tab page of the header data area, use the possible entries help to enter the following data:

Field	Data	Description
Purchasing org.	1000	IDES Deutschland
Purchasing group	001	Dietl, B.
Company code	1000	IDES AG

- 79. If required, you can expand the item overview area by choosing Titem overview.
- 80. Enter the following data:

Field	Data
Material	QS6X20
PO quantity	1000
C (Category of delivery date)	D (Day format)
Deliv. date	Today's date + 7 days (possible entries help)
Net price	0.10
Plant	1000

81. Choose .



Creating a Purchase Order



It is possible that the material already has an info record, which overwrites the amount you have entered. If required, correct the net price and choose .

- 82. If required, you can expand the item detail area, by choosing **1** *Item details*.
- 83. On the Invoice tab page, choose V1 (Domestic input tax 15%).
- 84. Choose 🖽.



The system confirms the posting and assigns a purchase order document number. Make a note of this number.

85. Choose C until the overview tree appears.

Posting the Goods Receipt

Posting the Goods Receipt

Use

You now post the goods receipt for a delivery. As you do this, the system generates an inspection lot in the background. Select storage location 0088. This includes the components Inventory Management (IM) and Warehouse Management (WM).

Procedure

33. Call up the transaction as follows:

Menu Path	From the <i>Inventory Management</i> node, choose <i>Goods Movement</i> \rightarrow <i>Goods Receipt</i> \rightarrow <i>For Purchase Order</i> \rightarrow <i>PO Number Known</i> .
Transaction Code	MIGO

34. Enter the following data:

Field	Data
Purchase order	Your purchase order number

35. Choose 🗳.

The system copies the header data of the purchase order into the header data area of the goods receipt document.

The purchase order item is copied into the item overview.

- 36. If required, you can close the item detail data area by choosing Detail data.
- 37. Enter the following data:

Field	Data	Description
Storage location	0088	Central warehouse WM
OK	Select	

38. Choose Post.



The system confirms the posting and assigns a material document number. Make a note of this number.

39. Choose until the overview tree appears.

Displaying the WM Stock Overview

Displaying the WM Stock Overview

Use

You now display a WM-specific stock overview. You can see which material is located in which storage location and in which storage bin. Open a second session to monitor the stock during this process.

Procedure

- 1. To call up a new session, choose 💹
- 2. Call up the transaction as follows:

Menu Path	Logistics → Logistics Execution → Information System → Warehouse → Stock → Total Stock per Material (Inventory Management)
Transaction Code	MMBE

3. Enter the following data:

Field	Data
Material	QS6X20

- 4. Choose 🕒.
- 5. Position your cursor on line 0088 and choose *Environment* \rightarrow *WM stocks*.

You can see that storage location 0088 of MM corresponds to warehouse number 001 (central warehouse) of WM. You can also see the quantity of stock in each stock type and storage type.



Double-click on one of the plant stock lines to call up information about the storage bin. Click on the *Storage bin* field to call up more information, including a list of the stock (quantities) for each storage bin. If you select a partial stock and then choose *Quant details*, you can see that the number of the goods receipt document and the stock qualification Q are saved in the Quant.

To return to the stock overview, choose .

6. Switch sessions.

Processing the Transfer Order for the Work Center

Use

You now create and confirm a transfer order for the material document.

Procedure

Creating the Transfer Order

1. Call up the transaction as follows:

Menu Path	$\label{logistics} \begin{tabular}{ll} Logistics \rightarrow Logistics Execution \rightarrow Internal Whse Processes \rightarrow PostChange \rightarrow Via Inventory Management \rightarrow Transfer Order \rightarrow Create \rightarrow By Material Document. \end{tabular}$
Transaction Code	LT06

2. Enter the following data:

Field	Data	
Material document	Your material document number (defaulted)	
Mat. document year	Current year	

- 3 Choose
- 4. To confirm that the sample quantity of the inspection lot is to be transferred to the quality work center, choose ♥.

The prepared sample item is transferred from goods receipt (storage type 902) to the work center (storage type 917).

5. Choose . If any system messages appear, choose .

The second item, the remaining 920 pieces, are transferred to the high storage rack (storage type 001).

6. Choose .

The system creates the transfer order.

The system confirms the posting and assigns a number. Make a note of this number.

7. Choose until the overview tree appears.

The goods are now taken to the storage bins. When the goods arrive, you confirm the transfer order.

Confirming the Transfer Order

1. Call up the transaction as follows:

Menu Path	From the Internal Whse Processes node, choose Stock Transfer \rightarrow Confirm Transfer Order \rightarrow Single Document \rightarrow In One Step
Transaction Code	LT12



Processing the Transfer Order for the Work Center

2. Enter the following data:

Field	Data
Transfer order no.	Number of your transfer order

3. Choose .

You now see an overview of the transfer order items.

You can see that 80 pieces of your material have been posted to the quality work center and 920 pieces to the high storage rack.

4. To confirm the transfer order, choose \blacksquare .

Monitoring the Warehouse Stock

- 1. Call up the second session with the WM stock overview.
- 2. To update the data, choose 1.

You can see that the sample is now stored in storage type 917 Quality Assurance. The remainder of the inspection lot is stored in the high storage rack.

Result

You have now processed and confirmed the transfer order.

Processing the Inspection Lot

Processing the Inspection Lot

Use

When you inspect the sample from the inspection lot you do not note any defects and, therefore, accept the inspection lot. You post the inspection lot quantity to unrestricted-use stock.

Procedure

52. Call up the transaction as follows:

Menu Path	From the Quality Management node, choose Quality Inspection \rightarrow Inspection Lot \rightarrow Usage Decision \rightarrow Record
Transaction Code	QA11

53. Enter the following data:

Field	Data	
Inspection lot	Inspection lot number (defaulted)	



If you need to search for the number, use the possible entries help for the *Inspection lot* field. In the dialog box, choose the tab page *Goods Movement*. Enter your material document number and choose . In the list, select your inspection lot and choose . The system copies the number into the field.

- 54. Choose .
- 55. Choose $Edit \rightarrow Confirm\ receipt\ of\ certificate$.
- 56. In the UD code field, use the possible entries help to select A1.
- 57. Choose 🖾.

The system determines the quality score 100 (very good) for this inspection lot.

58. On the Inspection lot stock tab page choose Proposal.

The system proposes the quantity of goods ready to be posted to unrestricted-use stock.

59. Choose .

The system confirms the posting.

- 60. Choose until the overview tree appears.
- 61. Switch to the second session and choose **3**.

You can see the posted quantity in storage type 922 – transfer posting area.

62. Switch sessions.

Processing the Inspection Lot

Processing the Posting Change Notice

Processing the Posting Change Notice

Use

You now display the posting change notice. When you made the usage decision, the system generated a posting change notice for all items in the inspection lot (the sample in the work center and the rest of the inspection lot in the high rack storage area). You now need to create and confirm a (Pseudo) transfer order to close the activities from the WM perspective.

Procedure

Displaying the Posting Change Notice

1. Call up the transaction as follows:

Menu Path	From the Logistics Execution node, choose Internal Whse Processes \rightarrow PostChange \rightarrow Via Inventory Management \rightarrow Transfer Order \rightarrow Create \rightarrow From List of Posting Change Notices
Transaction Code	LU04

2. Enter the following data:

Field	Data	Description
Warehouse number	001	Central warehouse
Material	QS6X20	Hexagonal head screw M6X20

- 3. Choose 2.
- 4. Select your material and then choose Display Posting Chge.
- 5. To return to the List of Posting Change Notices screen, choose 📞
- 6. Select your entry, then choose Create trans. order.
- 7. Select both items, then choose **Quant list**.
- 8. Choose .

The system confirms the posting and assigns a TO number. Make a note of this number.

9. Choose until the overview tree appears.

Confirming the Transfer Order

1. Call up the transaction as follows:

Menu Path	From the Internal Whse Processes node, choose Stock Transfer \to Confirm Transfer Order \to Single Document \to In One Step
Transaction Code	LT12

2. Enter the following data:

Field	Data
Transfer order no.	Number of your transfer order

Processing the Posting Change Notice

3. Choose .

You now see an overview of the transfer order items.

- 4. To confirm the transfer order, choose \blacksquare .
- 5. Choose 4.

Result

Switch to the other session to verify that the stock type has changed from inspection stock to unrestricted-use stock in the WM stock overview. However, the sample is still in the work center.

Transporting the Sample to the Warehouse

Transporting the Sample to the Warehouse

Use

You now transport the sample from the work center to the high rack storage area, where it is stored with the inspection lot.

Procedure

1. Call up the transaction as follows:

Menu Path	From the Stock Transfer node, choose Create Transfer Order → From Stock List
Transaction Code	LT10

2. Enter the following data:

Field	Data	Description
Storage type	917	Work center

- 3. Choose .
- 4. Select the quantity to be transferred and choose ...
- 5. In the dialog box, enter the following data:

Field	Data	Description
Storage type	001	High rack storage area
Storage section	001	Total area
Confirm immed	Select	

6. Choose **♥**Copy.

The sample is transferred to the main warehouse.

- 7. Choose until the overview tree appears.
- 8. To monitor the warehouse stock, switch to the second session and choose **3**. The sample quantity is now in unrestricted-use stock.

9. Close the second session.

Acceptance Inspections

Acceptance Inspections

Purpose

You learn about the following elements of a quality inspection:

- Inspection lot processing with selection of inspection plans, sample calculations, inspection instructions, usage decisions
- Results recording for the inspection lot, including entry of characteristic values and defect data
- Service entry and appraisal cost determination

The process also provides you with an insight into the following elements of inspection planning:

- Inspection plans and material specifications
- Basic data for inspection planning (inspection characteristics, inspection methods, test equipment)
- Control of inspection types

Prerequisites

This process does not require any data from other processes. It supplements the "QM in Procurement and Storage" process. If you are procuring materials QS8X20, QS8X40 or QS8X60 instead of materials QS6X20 or QS6X60, you can use this process instead of the *receiving inspection* process step. The individual processes can be run separately. We recommend that you first run the process *Acceptance Inspections* (*Simplified*), before running the detailed version.

Process Flow Variants

1. Acceptance Inspections (Simplified) [Page 99]

This process describes inspection lot processing, including the entry of inspection characteristic values, defect data, and appraisal costs.

2. Acceptance Inspections (Detailed) [Page 108]

This process describes inspection lot processing, including the entry of inspection characteristic values, defect data, and appraisal costs.

The process also provides an insight into inspection planning and the controlling of inspection types. Furthermore, you learn about the dynamic modification of sample sizes on the basis of the quality level.

Acceptance Inspection (Simplified)

Acceptance Inspection (Simplified)

Purpose

In this process, you enter the inspection results and inspection activities recorded during inspection lot processing. You enter the following data.

- Inspection characteristic values
- Defects data
- Valuation of the inspection characteristics and usage decision for the inspection lot
- Activities (appraisal costs)

We recommend that you go through this simplified process, before running the extensive version.

Prerequisites

This process does not require any data from other processes. It is a more detailed version of the *QM in Procurement and Inventory Management* process. You can execute the process step *Execute inspection* before the process step *Incoming inspection* if you want to procure material QS8X20 instead of material QS6X20.

Process Flow

You can find the data for this process under [2] [Page 100].

1. Creating an Inspection Lot [Page 101]

You create an inspection lot, on the basis of which you perform the acceptance inspection.

2. Performing the Inspection [Page 102]

You enter the results of the quality inspection for all operations and inspection characteristics. If inspection characteristics are rejected, the system automatically creates defect data records in the background. You can also enter the time required for the mechanical inspection.

3. Making the Usage Decision [Page 106]

You enter the defects data and the time required for the visual inspection. You then make the usage decision.

Result

The inspection results are saved in the system.



Data Used During This Process

Data Used During This Process

Field	Data	Description
Material	QS8X20	Hexagonal head screw M8X20
Inspection lot origin	01	Goods receipt inspection lot
Vendor	1235	K.F.W.London
Purchasing organization	1000	IDES Deutschland

Creating an Inspection Lot

Creating an Inspection Lot

1. Call up the transaction as follows:

Menu Path	$ \begin{array}{l} \textit{Logistics} \rightarrow \textit{Quality Management} \rightarrow \textit{Quality Inspection} \rightarrow \textit{Inspection Lot} \\ \rightarrow \textit{Editing} \rightarrow \textit{Create} \end{array} $
Transaction Code	QA01

2. Enter the following data:

Field	Data
Material	QS8X20
Plant	1000
Inspection lot origin	01

- 3. Choose .
- 4. Make a note of the inspection lot number.
- 5. Enter the following data:

Field	Data
Inspection type	01 (default)
Insp.lot qty	1000
Vendor	1235
Purchasing org.	1000

6. Choose .

In the background, the system assigns the inspection specifications (inspection plan with inspection characteristics) and calculates the sample size for all inspection characteristics according to the quality level.

7. Choose 🖽.

The system confirms the posting.

8. Choose until the overview tree appears.

Performing the Inspection

1. Call up the transaction as follows:

Menu Path	From the Quality Inspection node, choose Inspection Result \rightarrow For Operation \rightarrow Record
Transaction Code	QE01

Results Recording for Operation 0010 Visual Inspection

2. Enter the following data:

Field	Data
Inspection lot	Your number (default)
Operation	10 Visual inspection
Char. filter	All characteristics
Inspector	Your name (default)
Insp.start time	Current time (default)

3. Choose 🖾.

You now see a list of inspection characteristics for the visual inspection. In the *Status* column, you can see the processing status (possible entries help).

4. To select all characteristics, choose ...

Damage to Packaging

1. Double-click on the characteristic *Damage to packaging*.

The detail screen appears. You can see that all 10 packages need to be inspected.

2. Enter the following data:

Field	Data
Nonconf.	1

- 3. Choose 🕝.
- 4. In the dialog box, enter "Viewing window damaged" and choose ♥.
 - (Valuation: rejected) appears in the upper screen area.

The system automatically rejected and closed the characteristic due to the number of nonconforming units.

Missing Quantity

- 1. To call up the entry screen for the characteristic *Missing quantity*, choose (Next char.).
- 2. To generate a description of the inspection method, choose Insp.method. In the dialog box, you see a description of the inspection method.
- 3. Choose **✔** Continue.

4. In the Results screen area, enter the following data:

Field	Data	
Nonconf.	1 (1 package contains too few screws)	
No. defs	1 (1 screw less in the package)	

5. Choose 🛂.

In the dialog box, you see that an automatic valuation is not possible due to the current sampling plan and number of defects. A double sample is planned for this inspection characteristic.

6. In the dialog box, choose \Box (*Extend sample*).

You can see that the inspection scope has increased from 1 to 2. There is no screw missing from the second package.

7. Enter the defect number 1 (new entry) and choose .

The valuation icon

appears in the upper screen area.

The system automatically accepted and closed the characteristic due to the number of defects.

ID of Property Class

- 1. To call up the entry screen for the characteristic *ID of property class (strength)*, choose ...
- 2. To view the ID that meets the standard, choose 🍪 in the *Test Eqpmt* line.

A drawing of the screw head is displayed.

- 3. Exit this screen.
- 4. In the *Code* field of the *Results* screen area, choose the possible entries help. In the *Catalog* selection dialog box that appears, choose code 001*On top of screw head*.
- 5. Choose 💁.

The system automatically valuates the characteristic on the basis of the code and closes the process.

Electroplating

- 1. To call up the entry screen for *Electroplating*, choose ...
- 2. Enter the following data:

Field	Data
Class 3 Dull finish, yellowish brown	9
Class 7 Bright, yellowish brown	1

3. Choose

On the basis of this qualitative classification, the system accepts the characteristic and closes the process.

4. Choose .

The initial screen for results recording appears.

Results Recording for Operation 0020 Mechanical Inspection

1. Enter the following data:

Field	Data
Inspection lot	Defaulted
Operation	20 Mechanical insp.
Characteristic filter	All characteristics (possible entries help)
Inspector	Default
Insp.start time	Current time (default)

2. Choose .

You now see a list of inspection characteristics for the mechanical inspection. In the *Status* column, you can see the processing status (possible entries help).

3. To select all characteristics, choose .

Thread Length L

1. Choose the line with characteristic *thread length I* and double-click on the inspection characteristic short text.

The detail screen appears. Five screws need to be inspected individually.

2. Enter the following measured values:

Field	Data
No.1	20.2
No.2	19.9
No.3	19.7
No.4	20.0
No.5	18.9

3. Choose 🗳.

One of the measured values lies outside the tolerance value, so the system rejects the characteristic and closes the operation.

Brinell Hardness

1. To call up the entry screen for the characteristic *Brinell hardness*, choose . Five screws need to be inspected.

2. Enter the following data:

Field	Data
Class 4	1

Class 5	3
Class 6	1

3. Choose .

The system closes and accepts the characteristic.

4. Choose Histogram.

The distribution frequency of the classes is displayed.

- 5. To close the screen with the histogram, choose $\Box \rightarrow Close \ window$ in the lower screen area.
- 6. Choose Control chart.

The control chart for brinell hardness is displayed.

- 7. To close the screen with the control chart, choose $\Box \rightarrow Close \ window$ in the lower screen area.
- 8. Choose .

Service Entry Sheet

1. Enter the following data:

Field	Data
Setup	0.5 (default)
Machine	0.1
Labor	0.2

The working hours used to perform the mechanical inspection are entered.

Choose ♥.

The system calculates the appraisal costs and saves the inspection results.

3. Choose until the overview tree appears.

Making the Usage Decision

Making the Usage Decision

1. Call up the transaction as follows:

Menu Path	From the Quality Inspection node, choose Inspection Lot $ o$ Usage Decision $ o$ Record
Transaction Code	QA11

2. Enter the following data:

Field	Data
Inspection lot	Your number (default)

3. Choose 🕰.

A list is displayed with the defects data records that the system automatically created during results recording.

4. Choose the Characteristics tab page.

You see a list of all the rejected characteristics.

5. To display all of the inspection characteristics, choose (Other charac. list).

You now see all of the inspection characteristics.

Defects Recording

Recording Defects Data

- 1. Choose the *Defects* tab page.
- 2. To enter a new defect, choose **Defects**.
- 3. Enter 00000071 in the *Report type* field in the dialog box that appears and choose ♥.
- 4. In the *Defect type* field choose the possible entries help. Select the defect code 0011 and choose **♥** *Copy*.
- 5. Select the line with your defect and choose (Detail view).
- 6. In the dialog box, enter the following data:

Field	Data
Description	Tin plating
Activity	QM-S2 0004 (possible entries help)
Text: Activity	B. Dietl informed by telephone
DefectValuation	123

7. Choose ♥.

Activating a Problem Notification

1. Choose **Notification.

The screen for activating quality notifications is displayed.

Making the Usage Decision

2. Enter the following data:

Field	Data
Priority	3
Coding	QM 1 (possible entries help)
Description	Problems with hexagonal head screws
Department responsible	50010100
Coordinator	Your user ID

Choose ♥.

The system activates the quality message.

Defective Quantity

- 2. Choose Defective quantity....
- 3. In the dialog box, choose Defective qty: Proposal.
- To adopt the default entry, choose

Usage Decision

- 1. In the *UD-Code* field, enter code A.
- 2. Choose 🖾.

Service Entry Sheet

1. On the menu bar, choose $Edit \rightarrow Confirm \ activities$.

You can see that no services have been reported for the operation 0010 visual inspection.

- 2. Place your cursor on the line 0010 *Visual inspection* and choose *Enter confirmation*.
- 3. In the *Labor* field, enter 0.1h and choose ♥ twice.

Inspection Lot Completion

1. Choose \blacksquare .

In the dialog box, you are requested to explain why you have accepted the inspection lot although defects have been recorded.

2. Enter a reason, then choose .

The system confirms the posting.

3. Choose until the overview tree appears.

Acceptance Inspection (Detailed)

Purpose

This process describes the planning and processing of quality inspections. You learn about the following aspects of a quality inspection:

- Material-dependent control of different inspection types
- Inspection planning
- Inspection Lot Processing
 - Inspection lot data record
 - Inspection plan selection
 - Samples and dynamic modification
 - Shop papers (sample-drawing instruction and inspection instruction)
 - Entry of inspection characteristic values and defects data
 - Valuation of inspection characteristics and usage decision for the inspection lot
- Entry of performance (appraisal costs)

We recommend that you go through the simplified process for the acceptance inspection, before running this detailed version.

Prerequisites

This process does not require any data from other processes. It is a more detailed version of the QM in Procurement and inventory management process. You can perform this process instead of the partial process *Performing an Acceptance Inspection* by using material QS8X40 or QS8X60 instead of materials QS6X20 or QS6X60.

Process Flow

You can find the data for this process under [2] [Page 110].

1. Creating an Inspection Lot [Page 111]

You create an inspection lot on the basis of which you perform the acceptance inspection. You can skip this step if you are using the process as an enhancement of the *QM in Procurement and Inventory Management* process. In this case, you have already created an inspection lot for material QSXxx but have not made a usage decision.

2. Displaying an Inspection Lot [Page 112]

You display the inspection lot. You can now see the content of the inspection lot data record. You can also see that you can process inspection lots dependent on material in different ways using the control mechanism of the inspection type.

3. Insight into Inspection Planning

If you want an insight into the structure of the inspection plan and how it interacts with the material specification, choose the following steps from the inspection lot display:



Acceptance Inspection (Detailed)

<u>Displaying an Inspection Plan [Page 113]</u> and <u>Displaying the Material Specification [Page 118]</u>.

4. Printing Shop Papers

You print a sample-drawing instruction and an inspection instruction for the inspector as shop papers [Page 119].

5. Entering Inspection Results [Page 120]

When you have performed the inspection based on the shop papers, enter the results of the quality inspection for all operations and inspection characteristics. You can still add other inspection characteristics. If inspection characteristics are rejected, the system automatically creates defect data records in the background. You can also enter the time required for the mechanical inspection.

6. <u>Usage Decision [Page 126]</u>

You enter the defect data and the time required for the visual inspection. You create an overview of the appraisal costs up to this point. You then make the usage decision.

7. Displaying the Quality Level [Page 129]

The system determines inspection stages for the next inspection lot on the basis of the inspection results.



Data Used During This Process

Data Used During This Process

Field	Data	Description
Material	QS8X40	Hexagonal head screw M8X40
Inspection lot origin	01	Goods receipt inspection lot
Vendor	1235	K.F.W.London
Purchasing organization	1000	IDES Deutschland

Creating an Inspection Lot

Creating an Inspection Lot

Use

You create an inspection lot on the basis of which you perform the acceptance inspection.

Procedure

9. Call up the transaction as follows:

Menu Path	
Transaction Code	QA01

10. Enter the following data:

Field	Data
Material	QS8X40
Plant	1000
Inspection lot origin	01

11. Choose 🗳.

12. Enter the following data:

Field	Data
Inspection type	01
Insp.lot qty	1000
Vendor	1235
Purchasing organization	1000

13. Choose 📽.

The system assigns inspection specifications and calculates the sample size.

14. Choose .

The system confirms the posting and assigns a number.

- 15. Make a note of this number.
- 16. Choose until the overview tree appears.

Displaying an Inspection Lot

Displaying an Inspection Lot

1. Call up the transaction as follows:

Menu Path	From the <i>Inspection Lot</i> node, choose <i>Editing</i> \rightarrow <i>Display</i>
Transaction Code	QA03

2. Enter the number of your inspection lot and choose .

If you have to look for the number of the inspection lot, choose the possible entries help for inspection lots for material. If the inspection lot was created during in the process QM in Procurement and Inventory Management, choose the possible entries help for inspection lots for goods movement (material document).

The inspection lot is displayed. You can see how and when your lot was created on the *Data for lot origin* tab page

3. In the Material line, choose & (Display material).

The material master record is displayed.

4. Choose Insp. setup.

The system opens the overview of inspection types and displays detailed information on inspection type 01.

- 5. To familiarize yourself with the possibilities offered by the control mechanism, place your cursor on the checked fields or the fields with an entry, and choose F1.
- 6. To close the display, choose ♥.
- 7. To return to the *Display inspection lot* screen, choose ...
- 8. Choose the *Insp. specifications* tab page.

For an insight into inspection planning, choose the following in the *Assigned specifications* screen area:

M Displaying the Inspection Plan [Page 113]

Displaying the Material Specification [Page 118]

9. To print your sample-drawing instruction, choose *Extras* → *Print* → *Sample draw. Instr.* from the menu bar.

The system reports that the shop papers will be printed after you leave the transaction.

- 10. To print your inspection instruction, choose $Extras \rightarrow Print \rightarrow Insp.instruction$.
- 11. Choose until the overview tree appears.

To display the shop papers ready for printing, choose Display Shop Papers [Page 119].

Displaying an Inspection Plan

Usage

You display an inspection plan and identify its structure. The inspection plan consists of basic data for operations, inspection characteristics, inspection methods, and test equipment.

There are different types of inspection characteristics in the plan. With these inspection characteristics, you can define characteristic types, entry forms, and corresponding standard values as required.

Prerequisites

During the *Displaying an Inspection Lot* process, you chose & *Disp TaskList* on the *Insp.* specifications tab page. The system opens the *Operation Overview* screen in the inspection plan.

Procedure

Planning the Visual Inspection

The operation 0010 *Visual inspection* contains a referenced reference operation set, which can be re-used as a module in other plans. You can see this in the relevant column of the overview table when you scroll to the right.

Test Equipment for the Visual Inspection

1. Select the line containing operation 0010 *Visual inspection* and choose \$\textstyle{2PRT}\$.

The system displays a list of the production resources and tools (PRT) or test equipment for this operation.

Item 0010 is a drawing of the document object type.

Item 0020 is a scales of the object type PRT master record.

2. Select item 0010 in the PRT overview and choose PRT.

The document data for the drawing of the screw head is displayed.

3. In the Originals screen area, double click on the line with the picture entry.

A drawing of the screw head is displayed.

The Fixt everylett appears.

5. Select item 0020 and choose PRT.

The basic data is displayed for the production resources and tools of the scale.

6. Choose C twice.

The system takes you back to the operation overview.

Inspection Characteristics for the Visual Inspection

Damage to Packaging

1. Select operation 0010 Visual inspection and choose Anspection characteristics.

You now see an overview of the inspection characteristics for the visual inspection. The inspection characteristics have different properties, which can be determined using control indicators.

The visual inspection operation only contains qualitative characteristics.

2. Select characteristic 0010 Damage to packaging, and choose Control indicators....

The control indicators are displayed in two dialog boxes. To get an explanation of a set indicator, place your cursor in the field and choose F1.

- 3. To get to the second dialog box, choose ♥.
- 4. To return to the characteristic overview, choose ♥.

Missing Quantity

1. Select characteristic 0020 Missing quantity and choose Control indicators....

You can get explanations for the indicators by using the F1 field help.

- To run through the dialog boxes, choose ♥.
- 3. For the characteristic 0020 Missing quantity, choose [2] (General data details).

The general characteristic data is displayed.

4. In the *Insp. method* field in the *Reference* screen area of the *General data* tab page, choose (Display insp. method).

The system displays the inspection method master record.

- 5. To display a description of the inspection method, choose \blacksquare .
- 6. Choose three times.
- 7. Choose Sample for characteristic 0020.
- 8. On the Sample tab page, choose & (Sampling procedure).

The sampling procedure uses a sampling scheme and valuates according to the number of defects in the sample.

- 9. To get to the second page, choose 🗟.
- 10. Choose Sampling scheme.
- 11. Choose ☑. In the dialog box, choose ✔ Choose.

The sampling plan for a double sample is displayed.

- 12. Choose until the characteristic overview appears.
- 13. For the characteristic 0020 choose (General data details).
- 14. In the master insp. charac. line of the General data tab page, choose &.

The system displays the inspection characteristic master record.

15. In the General information screen area, choose SampleDraw text.

The physical-sample drawing text, that is required because of the double sample, can be displayed in several languages. This text is printed in the sample-drawing instruction.

- 16. Choose ** to close the dialog box.
- 17. Choose until the characteristic overview appears.

ID of Property Class

- 1. Select characteristic 0030 ID of property class and choose Control indicators....
- 2. To return to the characteristic overview, choose ♥.
- 3. For the characteristic 0030 choose [2] (General data details).

You can see that the drawing displayed in the PRT list is assigned to this inspection characteristic as test equipment.

- 4. In the *Master insp. charac*. line of the *General data* tab page, choose & and then choose
- 5. To display an explanation of the inspection method, choose on the Insp. method line and then choose.

The system displays the inspection method long text.

- 6. Choose 😂.
- 7. Choose Documents.
- 8. Double-click on the line with the document.
- 9. In the Originals screen area, double-click on the line with the drawing.

The system displays the drawing. This drawing is used as test equipment for the visual inspection operation and is defined for the inspection characteristic.

- 10. Choose **to** close the dialog box with the drawing.
- 11. Choose and then choose ✓.
- 12. Choose until the characteristic overview appears.

Electroplating

- 1. Select characteristic 0040 *Electroplating* and choose *Control indicators...*.
- Choose ♥.
- 3. Choose Catalogs.
- 4. In the Catalogs tab page, choose 🕄 (Display selected set).

The system displays the selected set of the attributes. You can see which type of electroplating for screws is allowed (green) and not allowed (red).

5. To return to the *Catalogs* tab page, choose **৺**.

The code from the defects catalog, which will be entered in the defects data record if items are rejected, is determined.

6. Choose twice.

The operation overview of the inspection plan appears.

Planning the Mechanical Inspection

In contrast to the visual inspection operation, the mechanical inspection operation consists of individually referenced basic data for test equipment and inspection characteristics.

Inspection Equipment for the Mechanical Inspection

1. Select the line containing operation 0020 *Mechanical inspection* and choose APRT.

The system displays the test equipment list for this operation.

Item 0010 is a caliper gauge of the object type PRT master record.

Item 0020 is a hardness tester of the object type equipment master record.

2. Select item 0010 caliper gauge and choose PRT.

You can see the data in the PRT master record.

- 3. Choose 🕒
- 4. Select item 0020 Hardness tester and choose PRT.

In contrast to the PRT master record, you now see much more detailed information about the equipment master record.

5. Choose until the operation overview appears.

Inspection Characteristics for the Mechanical Inspection

Thread Length L

1. Select operation 0020 and choose Anspection characteristics.

The overview of inspection characteristics for the mechanical inspection appears. The inspection characteristics have different properties, which can be determined using control indicators.

The mechanical inspection operation only contains quantitative characteristics.

- 2. Select characteristic 0010 Thread length L and choose Control indicators....
- 3. To return to the characteristic overview, choose ♥.
- 4. Choose 🔁 Quan. Data

The target value displayed and the tolerances are valid for screws that are 20 mm long, but not for material QS8X40. When determining the inspection specifications for material QS8X40 these values are replaced by the corresponding specifications from the material specification.

You can to define material-specific values in the inspection plan for materials without a material specification as follows:

5. Choose Dependent characteristic specs.

You can see that dependent specifications have been determined for this inspection characteristic for material QS8X60.

6. Select the entry for material QS8X60 and choose 🚨 Quant. Data.

The target value displayed and the tolerances are valid for screws that are 60 mm long.

7. To return to the characteristic overview, choose **C**.

Brinell Hardness

- 1. Select characteristic 0020 Brinell hardness and choose Control indicators....
- 2. To return to the characteristic overview, choose ♥.
- 3. To skip any warning messages that may appear, choose ♥.

Inspection Plan Header, Task Lists, and Task List Groups

Choose Ctwice.

From the operation overview, you can access the details of the inspection plan header.

You can see that the inspection plan is part of the task list group QS01 and has the group counter 2 within this group.

To view documentation on how you can dynamically control the inspection scope dependent on the quality level, place your cursor in the *Dynamic modification level* field on the *Dynamic mod./Inspection points* screen area and choose F1.

You can see that the quality level can be maintained dependent on the material, vendor, and manufacturer in the *Dynamic modification criteria* screen area

Assigning Inspection Plans to Materials

1. Choose Material assignment.

The overview of the assignments of materials and plans within the task list group appears.

The task list assignment can also be valid for a supply relationship – for a material and vendor or manufacturer.

- Choose ♥.
- 3. Choose until the Inspection Lot Display appears.

Displaying the Material Specification

Displaying the Material Specification

Use

The material specification contains a list of inspection characteristics and the corresponding material-related specifications. The specifications in the material specification replace or supplement the specifications from the inspection plan.

Prerequisites

You chose Display material specification on the Inspection specifications tab page during the process for displaying an inspection lot. The Charac. assignments overview of the material specification now appears.

Procedure

Thread Length L

1. Choose in the Thread length L line.

These characteristic specifications take precedence over the inspection plan data for the same characteristic.

Choose ♥.

Tension Test with Test Strength

1. In the *Tension test with test strength* line, choose 🔜.

In the inspection plan, this inspection characteristic supplements the inspection characteristics from the *Mechanical inspection* operation.

2. Choose C.

Displaying Shop Papers

Displaying Shop Papers

1. From the menu bar, choose System \rightarrow Own spool requests.

The system opens a new session and displays an overview of your spool requests.

2. Select script LG01 and then choose ...

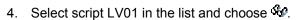
You can now see the sample-drawing instruction. This contains the physical-sample drawing text, partial samples to be created, and the distribution of samples to laboratories.

Partial sample 1 is used for operation 0010 from the inspection plan (visual inspection) and incorporates all 1000 units/10 packs of the inspection lot. The visual inspection takes place at the work center for goods receipt inspection I.

Partial sample 2 is used for operation 0020 from the inspection plan (mechanical inspection) and incorporates 5 units. The mechanical inspection takes place at the work center for goods receipt inspection II.

Partial sample 0 and partial sample 2 are used in operation 0020 for the destructive inspection of the characteristic *Tension test with test strength* that comes from the material specification.

3. To exit the sample-drawing instruction, choose .



The system displays the inspection instruction. You have to scroll through several pages to view the entire inspection instruction.

The inspection instruction in this form example contains all of the specifications from the inspection plan in detail and the sample sizes determined on the basis of the inspection lot data and quality level.

5. To exit the print preview, choose C.

6. Close the second session.

Entering Inspection Results

Usage

You enter the results of the quality inspection for each characteristic. You can now see the effect of the different control indicators, which were introduced in inspection planning.

You extend the inspection to include another inspection characteristic.

Procedure

11. Call the transaction as follows:

Menu Path	From the <i>Quality Inspection</i> node, choose <i>Worklist</i> → <i>Results Recording</i>
Transaction Code	QE51N

12. On the *Material* tab page, enter the following data:

Field	Data
Plant	1000
Insp. lot origin	01
Material	QS8X40
Char. filter	1
Inspector	Your name
Start	Current date and time (possible entries help)

13. Choose 🕒.

The *Results Recording Worklist* screen appears. Documentation explaining the function appears on the left side of the screen.

14. To close this documentation, choose

✓.

A worklist appears containing all of the inspection lots, which satisfy the selection criteria and for which no usage decisions have been made.

The system takes the first inspection lot in the worklist and the first corresponding operation and expands it to characteristic level. Inspection lots, operations, and inspection characteristics appear in different colors depending on whether they have to be processed, do not have to be processed, or have already been processed.

On the right-hand side of the screen, you can see the work area for results recording. The system immediately releases the inspection characteristics for processing that correspond to the first operation 0010 visual inspection.

If the inspection characteristics have summarized results recording, the results can be entered in the work area. Depending on the status or the entry form of an inspection characteristic, you might not be able to enter data in the *Result* field in the work area for results recording. If this occurs, double-click on the line to display the entry template. In the following process, you will always be required to double-click on the characteristic line to enter single screen results recording.

Results Recording for Operation 0010 Visual Inspection

Damage to Packaging

- 1. Double-click on the line with the *Damage to packaging* characteristic.
- 2. Enter the following data:

Field	Data
Nonconf.	1

3. Choose 🛂.

4. In the dialog box, enter the short text "Viewing window damaged" and choose ❤.

Icons appear in the *Valuation* field and worklist, which show that the system automatically valuated and rejected the inspection characteristic.

Missing Quantity

- 1. Double-click the line with the *Missing quantity* characteristic.
- 2. If a dialog box appears, choose Yes.
- 3. To display a description of the inspection method, choose *Insp.method*. In the dialog box, you see a description of the inspection method.
- 4. Choose **♥** Continue.
- 5. In the Results screen area, enter the following data:

Field	Data
Nonconf.	1
No. of defects	1

6. Choose 🖾

In the dialog box, you see that an automatic valuation based on the number of defects is not possible because of the current sampling plan.

A double sample is planned for this inspection characteristic.

7. In the dialog box, choose \square (Extend sample).

You can see that the inspection scope has increased from 1 to 2.

- 8. To show that there is no screw missing from the second package, enter the accumulated number of defects as 1 (new entry).
- 9. Choose 🛂.

Icons appear in the *Valuation* field and worklist, which show that the system automatically valuated and accepted the inspection characteristic.

ID of Property Class

- 1. Double-click on the *ID of property class* characteristic in the worklist.
- 2. To display the ID that corresponds to the standard, choose & (Display PRT).

A drawing of the screw head is displayed.

- 3. Exit this screen.
- 4. In the *Code* field, choose the possible entries help. In the *Catalog Selection* dialog box that appears, choose code 001*On top of screw head*.
- 5. Choose .

Icons appear in the *Valuation* field and worklist, which show that the system automatically valuated and accepted the inspection characteristic.

Electroplating

- 1. Double-click the line with the *Electroplating* characteristic.
- 2. Enter the following data:

Field	Data
Class 1 Dull finish, colorless	9
Class 7 Bright, yellowish brown	1

3. Choose

Icons appear in the *Valuation* field and worklist, which show that the system automatically valuated and rejected the inspection characteristic.

- 4. Choose .
- 5. Then choose 🗐

Results Recording for Operation 0020 Mechanical Inspection

Thread Length L

- 1. To copy operation 0020 into the work area, double-click on the line of this operation on the left side of the screen.
- 2. Double-click the line with the *Thread length L* characteristic.

Five screws need to be inspected individually.

3. Enter the following measured values:

Field Data	
No.1 40.2	
No.2 39.9	
No.3 39.7	
No.4 40.0	
No.5 38.9	

4. Choose

Icons appear in the *Valuation* fields for the measured value and for the inspection characteristic, and in the worklist, which show that the system automatically valuated and rejected the inspection characteristic.

Brinell Hardness

1. Double-click on the line with the *Brinell hardness* characteristic.

Five screws need to be inspected.

2. Assign the measurement results to the following classes:

Field	Data
Class 4	1
Class 5	3
Class 6	1

3. Choose

A control chart is run for this inspection characteristic. Since the control chart has not been activated, the system asks you to valuate the characteristic manually and provides a default.

- 4. Choose Accept.
- 5. Choose Histogram.

The distribution frequency of the classes is displayed in the lower screen area.

6. Choose Control chart.

The control chart for brinell hardness is displayed in the lower screen area. This control chart has two tracks, one for the mean value and one for the standard deviation.

Tension Test with Test Strength

- 1. Double-click on the line with the *Tension test with test strength* characteristic.
- 2. Enter the following data:

Field	Data
Inspected	5

3. Choose 🛂

Icons appear in the Valuation field and worklist, which show that the system automatically valuated and accepted the inspection characteristic.

Wrench Size across Flats (Additional Characteristic)

You think that the wrench size of the screw is not correct. You decide to check this characteristic separately.

1. To display the characteristic overview for the mechanical inspection, choose ...

2. To create an additional characteristic, choose 🕏.

The system asks you to enter an inspection characteristic master record (master inspection characteristic).

3. Enter the following data:

Field	Data
Master insp. charac.	Q-2040

Plant	1000
Version	1

Choose ♥.

A dialog box appears in which you can process inspection specifications from the master record.

5. Enter the following data:

Field	Data
Sampling procedure	FIX1T-0
Sample unit of measure	PC
Base sample quantity	1

6. Choose Copy.

The additional characteristic *Wrench size across flats* appears in the inspection characteristic overview.

7. Double-click on the line with the additional characteristic.

One screw needs to be inspected.

8. Enter the following data:

Field	Data
Mean value	12.95

9. Choose 🖾

Icons appear in the *Valuation* fields for the measured value and for the inspection characteristic, and in the worklist, which show that the system automatically valuated and accepted the inspection characteristic.

10. Choose .

The Record Results dialog box appears.

Service Entry Sheet

1. Enter the following data:

Field	Data
Setup	0.5 (default)
Machine	0.1
Labor	0.2

Choose ♥.

The system calculates the appraisal costs and saves the inspection results.

3. Leave the worklist

You can make the usage decision for the inspection lot from the results recording worklist.

Making the Usage Decision

Making the Usage Decision

Prerequisites

You are still in the worklist for results recording.

Procedure

- 1. Double-click on the line with your inspection lot in the worklist.
- 2. Note the defects data records that the system automatically created during results recording.

Defects Recording

Recording Defects Data

- 1. To enter a new defect, choose **Defects**.
- 2. If necessary, enter 00000071 in the Report type field in the dialog box and choose ♥.
- 3. In the *Defect type* field, choose the possible entries help. Select the defect code 0011 and choose **♥** *Copy*.
- 4. Select the line with your defect and choose [2] (Detail view).
- 5. In the dialog box, enter the following data:

Field	Data
Description	Silvery crust
Activity	QM-S2 0004
Text: Activity	B. Dietl informed by telephone
DefectValuation	321

Choose ♥.

Activating a Problem Notification

1. Choose **Notification.

The screen for activating quality notifications is displayed.

2. Enter the following data:

Field	Data
Priority	3
Coding	QM 1 (possible entries help)
Description	Problems with hexagonal head screws
Department responsible	50010100
Coordinator	Your user ID

Choose ♥.

Making the Usage Decision

The system activates the quality notification.

Choose ♥.

Estimating the Share of Scrap

1. Choose the *Characteristics* tab page.

You can see a list of all rejected characteristics.

2. To display the results of these inspection characteristics again, choose Display charac.

On the basis of the estimated share of scrap for scrap-relevant inspection characteristics, the system has increased the share of scrap in the inspection lot and displays this on the tab page.

Defective Quantity

- 1. Choose Defective quantity....
- 2. In the dialog box, choose Defective qty: Proposal.

The system determines this proposal on the basis of the estimated share of scrap in the inspection lot.

3. To copy this proposal, choose ♥.

Usage Decision

- 1. In the UD-Code field, enter code A.
- 2. Choose .

The system uses the share of scrap to determine a quality score for the inspection lot.

Appraisal Costs

Service Entry Sheet

1. Choose Confirm activities.

You can see that no activities have been confirmed for the operation 0010 visual inspection.

- 2. Place your cursor on the line 0010 confirmation and choose *Enter confirmation*.
- 3. In the *Labor* field, enter 0.1h and choose ♥ twice.

Cost Report

- 1. Choose Extras \rightarrow Costs \rightarrow Activity confirmation.
- 2. To open the list, choose ...

The system displays a list of all of the activities confirmed for this inspection lot and the corresponding costs. The list is sorted according to cost element. The activities that you have just entered are not yet in this list, since they have not been updated yet.

3. Choose to return to the *Usage decision* screen

Making the Usage Decision

- 4. In the dialog box, choose Yes.
- 5. Choose Extras \rightarrow Costs \rightarrow Cost report QM order.

The system displays a list of the calculated costs of the QM order for the material. This list is sorted according to cost elements. The activities that you have just entered are not yet in this list, since they have not been updated yet.

6. To return to the *Usage decision* screen, choose ...



Stock Posting



This step should only be performed if you did not create the inspection lot. You continue with this step if the inspection lot was created as a result of a stock posting, making the inspection lot stock relevant for the duration of the inspection.

Choose the inspection lot stock tab page and enter the quantities to be posted:

Field	Data
To unrestricted use	800
To blocked stock	200

Inspection Lot Completion

1. Choose .

You are requested to explain why you have accepted the inspection lot although defects have been recorded.

2. Enter a reason and choose .

The system confirms the posting.

- 3. Choose until the overview tree appears.
- 4. In the dialog box, choose Yes.

Result

The usage decision has been made. (The stock has been posted.)

A quality notification has been created.

The quality level has been updated.

The activities entered and the resulting appraisal costs have been posted to the QM order.

The inspection lot data has been summarized in the QM Information System

Displaying the Quality Level

Displaying the Quality Level

1. Call up the transaction as follows:

Menu Path	From the <i>Quality Inspection</i> node, choose <i>Quality Level</i> $ ightarrow$ <i>Display</i>
Transaction Code	QDL3

2. Enter the following data:

Field	Data	
Plant	1000	
Material	QS8X40	

3. Choose .

In the dialog box, choose

The Dynamic Modification at Characteristic Level screen appears.

In the upper screen area, you can see that the quality level is maintained dependent on the plant, material, inspection plan, and vendor. In the lower screen area, you can see the inspection characteristics. The inspection scope of these characteristics has been dynamically modified. Which inspection characteristics are missing, and why are they missing?

You can display the dynamic modification rule and dynamic modification history for each inspection characteristic.

5. Choose & (Display dynamic modif. rule) in the Missing quantity line.

The rule is: Skip 10, inspect 1. If the *Reset period* of 30 days has elapsed and no inspection lot has been created, the system sets the quality level back to the start situation.



You can display the dynamic modification rule and then return to the quality level by choosing **C**.

6. Choose (Dynamic mod. history) for one of the inspection characteristics.

The system opens the overview of all quality levels for this inspection characteristic.

- 7. Select a line and choose History.
- 8. Now choose. Then choose Inspection lots (Inspection severities based on lots).

The system displays a graph of all of the inspection stages up to this point.

9. Choose until the overview tree appears.

Quality Notifications as Complaints Against the Vendor

Quality Notifications as Complaints Against the Vendor

Purpose

In this process, you see how a defect determined during quality inspection is analyzed and documented in a quality notification. The corrective tasks include a complaint against the vendor and returns processing.

Prerequisites

This process uses the data from the processes *QM in Procurement and Inventory Management* and *Acceptance Inspection*. However, the process can also be performed independently.



Initial access to this process depends on previous developments and personal requirements. You have the following options:

a) You want to perform the process independently.

Creating a Problem Notification [Page 134]

b) You want to perform the process independently, but base it on the materials management data from the *QM in Procurement and Inventory Management* process.

Problem Notification with Reference to MM Data [Page 136]

c) This process is a continuation of the QM in Procurement and Inventory Management or Acceptance Inspection processes and you want to begin problem processing using the worklist.

Processing Problem Notifications Using the Worklist [Page 139]

d) This process is a continuation of the *QM in Procurement and Inventory Management* or *Acceptance Inspection* processes and you want to begin problem processing using the Workflow function.

Processing Problem Notifications Using Workflow [Page 140]

Process Flow

You can find the data for this process under <a>! Page 133].

6. Creating a new problem notification or processing an existing notification

You make a note of the content and reference data for a problem notification.

- 1.1 Creating a Problem Notification [Page 134] or
- 1.2 Problem Notification with Reference to MM Data [Page 136] or
- 1.3 Processing Problem Notifications Using the Worklist [Page 139] or
- 1.4 Processing Problem Notifications Using Workflow [Page 140]
- 7. Analyzing defects, defining corrective tasks

You describe a defect based on attributes like defect type, defect location, and cause of defect and then perform a quantitative evaluation of the defect. You make a note of the

Quality Notifications as Complaints Against the Vendor

quantities with this defect. You then determine the activities, further tasks, and the responsible departments.

Defects Analysis and Corrective Tasks [Page 141]

8. Using documents to supplement notification

You include a technical drawing as a document for the problem notification.

Assigning a Document [Page 144]

9. Nonconformity costs

You create a QM order as a cost collector for the problem. You enter the expense of the defects analysis in this order and trace the nonconformity costs using the cost report.

Nonconformity Costs [Page 147]

10. Completing the corrective task

You can access processing of the corrective task in the following ways:

5.1 Using the worklist function

Completing Corrective Tasks Using the Worklist [Page 150]

5.2 Using the Workflow function

Completing Corrective Task Using Workflow [Page 151]

11. Dealing with the defective material

You make a note of the defective quantities. You then ensure that the defective quantities are not used by posting them to blocked stock.

Posting to Blocked Stock [Page 152]

- 12. You return the goods to the vendor. You can do this in the following ways:
 - 7.1 Return Delivery with Reference to Existing Purchase Order [Page 155]

The return delivery creates a returns item in the purchase order.

7.2 Return Delivery Without Reference to Existing Purchase Order [Page 159]

The return delivery creates a purchase order for return delivery

Then you send the goods.

Outbound delivery

You then request a credit memo.

Memo request/debit posting

8. You request an 8D report with quality assurance information from the vendor.

8D Report [Page 161]

9. For subsequent acceptance inspections, you change the inspection severity to the initial inspection severity.

Resetting the Quality Level [Page 164]

10. To prepare for your conversation with the vendor, you collect information from the following evaluations:

Quality Notifications as Complaints Against the Vendor

10.1 You take the history and current vendor evaluation from the buyer's negotiation sheet.

Buyer's Negotiation Sheet [Page 165]

- 10.2 You find out if there have been problems with this vendor or material in the past.

 Related Notifications [Page 166]
- 10.3 You investigate what steps have already been taken in relation to this problem. Action Log [Page 167]
- 11. You classify the problem notification as being of external origin and close the notification.

 <u>Completing the Notification [Page 168]</u>

Data Used During This Process

Data Used During This Process

Field	Data	Description
Notification type	F2	Vendor related defect
Vendor	1234	K.F.W. Berlin (German version)
	or 1235	K.F.W. London (English version)
Material	QS6X20	Hexagonal head screw M6X20
Alternative, depends on previous processes	QS6X40	Hexagonal head screw M6X40
	QS8X20	Hexagonal head screw M8X20
	QS8X40	Hexagonal head screw M8X40
Net price	0.10	Price per screw
Plant	1000	Hamburg
Storage location	0002	Finished goods warehouse

Creating a Problem Notification

Creating a Problem Notification

Use

You report a new problem.

Procedure

12. Call up the transaction as follows:

Menu Path	Logistics o Quality Management o Quality Notification o Create	
Transaction Code	QM01	

13. Enter the following data:

Field	Data	Description
Notification type	F2	Vendor quality notification

- 14. Choose Notification.
- 15. In the dialog box, choose ♥.
- 16. Choose the Reference object tab page.
- 17. Enter the following data:

Field	Data
Material	QS6X20
Plant for mat.	1000

18. Choose the Subject tab page and enter the following data:

Field	Data
Coding	QM 1 (possible entries help)
Description	Hexagonal head screw defects
Priority	Medium

On the basis of the priority, the system sets the basic dates *Required start* and *Required end*.

19. Choose the *Processing* tab page and enter the following data:

Field	Data
Vendor	1235
Department responsible	50010100
Coordinator	Your user ID

- 20. Choose 4.
- 21. Make a note of the notification number.
- 22. Choose 4.

Creating a Problem Notification

Problem Notification with Reference to MM Data

Problem Notification with Reference to MM Data

86. Call up the transaction as follows:

Menu Path	Logistics o Quality Management o Quality Notification o Create	
Transaction Code	QM01	

87. Enter the following data:

Field	Data
Notification type	F2

88. Choose .

89. In the dialog box, enter the following data:

Field	Data
Material doc.	Material document number from the QM in Procurement and Inventory Management process
Item	Item from the material document as specified above
Purchasing doc.	Purchasing document number from the QM in Procurement and Inventory Management process
Item	Item from the purchasing document as specified above



You can search for the material document number in the following way: Choose the possible entries help in the *Material doc*. field. Enter your material number and then choose . In the list, double-click on the line with the document you want. The system automatically copies the number. You can follow the same steps to make an entry in the *Item* field.

To find a purchasing document number, see <u>Search Help: Purchasing Document Number [Page 138].</u>

You can also copy this data from a previously processed inspection lot. Call up transaction QA03, choose your inspection lot, and call up the *Data for Inspection Lot Origin* tab page.

90. Choose the Reference object tab page.

The system copied the material and plant for the material from the MM document to the notification.

91. Choose the *Subject* tab page and enter the following data:

Field	Data
Coding	QM 1
Description	Hexagonal head screw defects
Priority	Medium

92. Choose 🛂.

Problem Notification with Reference to MM Data

On the basis of the priority, the system sets the basic dates *Required start* and *Required end*.

93. Choose the *Processing* tab page and enter the following data:

Field	Data
Vendor	1234 or 1235 (copied from the MM document)
Department	50010100
Coordinator	Your user ID

94. Choose .

95. Choose 6.

Search Help: Purchasing Document Number

Search Help: Purchasing Document Number

Usage

This process shows you how to find the number of a purchasing document.

The search begins on the current screen. However, you can generally search using the possible entries help in the relevant field, irrespective of the R/3 screen you are using.

Procedure

- 1. Place your cursor in the *Purchasing doc.* field and choose the possible entries help.
 - In the dialog box, you can choose the type of search help.
- 2. Choose the *Purchasing Documents for Material* tab page. If required, use the scroll arrow to find the tab page.



Alternatively, you could click on the icon to the right of the scroll arrows. This calls up a dialog box, which lists the existing tab pages. Choose the name of the tab page you require. This then appears in the dialog box.

3. Enter the material and specify as many search criteria as possible. You use the data for this process.



You can also use the possible entries help in several fields in the tab pages. You can perform a detailed search.

Choose

The dialog box lists the results of your search.

Select the desired purchasing document number and then choose

The purchasing document number is then automatically entered in the relevant item on the initial screen.

Processing Problem Notifications Using the Worklist

96. Call the transaction as follows:

Menu Path	$Logistics ightarrow Quality \ Management ightarrow Quality \ Notification ightarrow Worklist ightarrow Notification ightarrow Change \ Data$
Transaction Code	QM10

97. Enter the following data:

Field	Data
Notification type	F2

98. Choose .

The list called up by the system contains all outstanding complaints against vendors. These notifications exist, because you created defect data records and thereby activated a notification in the *QM in Procurement and Inventory Management* or *Acceptance Inspection* processes. The traffic light icon shows you if the desired finish date has been exceeded.

99. To process a notification, select the line with the notification, and choose *Notification*.

The data contained in the *Reference object*, *Subject*, and *Processing* tab pages, was created when the notification was activated.

100. Choose the *Reference object* tab page.

The material and plant for the material were copied by the system.

101. Choose the *Subject* tab page and check the following data:

Field	Data
Coding	QM 1
Description	Hexagonal head screw defects
Priority	Medium

On the basis of the priority, the system sets the basic dates *Required start* and *Required end*.

102. Choose the *Processing* tab page and check the following data:

Field	Data
Vendor	1234 or 1235 (copied from the MM document)
Department	50010100
Coordinator	Your user ID

103. Complete any incomplete entries.

104. Choose .

105. Choose until the overview tree appears.

Processing Problem Notifications Using Workflow

Processing Problem Notifications Using Workflow

106. Call the transaction as follows:

Menu Path	From the Office node, choose Workplace
Transaction Code	SBWP

107. Choose $Inbox \rightarrow Workflow \rightarrow Grouped$ according to content type \rightarrow Quality notification.

The system displays a list of all quality notifications for which you are the coordinator.

These notifications exist, because you created defect data records and thereby activated a notification in the *QM in Procurement and Inventory Management* or *Acceptance Inspection* processes.

- 108. Select the line with the notification that you want to process.
- 109. Choose .
- 110. Choose the *Reference object* tab page and check the following data:

Field	Data	
Material	QS6X20 (QS6X40, QS8X20, QS8X40)	
Plant for mat.	1000	

The data contained in the *Reference object*, *Subject*, and *Processing* tab pages, was created when the notification was activated.

111. Choose the *Subject* tab page and check the following data:

Field	Data
Coding	QM 1
Description	Hexagonal head screw defects
Priority	Medium

On the basis of the priority, the system sets the basic dates *Required start* and *Required end*.

112. Choose the *Processing* tab page and check the following data:

Field	Data
Vendor	1234 and 1235 (copied from the MM document)
Department	50010100
Coordinator	Your user ID

- 113. Complete any incomplete entries.
- 114. Choose ...
- 115. Choose 6.

Defects Analysis and Corrective Tasks

Defects Analysis and Corrective Tasks

1. Use the following procedure to call the transaction:

Menu Path	Logistics ightarrow Quality Management ightarrow Quality Notification ightarrow Change
Transaction Code	QM02

- 2. Enter the number of the notification that you last created or processed and choose *Notification*.
- 3. Choose the *Items* tab page.

The system displays an overview of the previously entered defect data records and the defect data records created by the system.

- 4. To add another defect item, place your cursor in the first empty line of the list.
- 5. Choose the possible entries help in the *Defect type* column, and then choose defect type 0007 Manufacturer's mark missing.
- 6. The system adds a new line. Select this line and choose (Detail view) in the lower screen area.
- 7. Enter the following data:

Field	Data
Text	Groove not deep enough
No. of defects	10
DefectValuation	200
Defect class	Major defect B (possible entries help)
DefQty (exter.)	10
Notification required	Notify internal expert (possible entries help)

8. Choose Copy.

The overview of the defect items appears.

- 9. Select the item you processed last and choose the *Causes* tab page.
- 10. Choose the possible entries help in the *CauseCode* text column and copy code *43 Production machine* from the list of cause codes.
- 11. Choose and enter the following text as the defect cause:

"The machining tool is worn down or damaged"

- 12. Choose 🕒.
- 13. To document the steps you have taken as a result of this defect, choose the *Activities* tab page.
- 14. In the *ActivityCode text* column, choose the possible entries help.
- 15. In the dialog box, open the QM-S2 node and choose 0007 Info to internal expert.
- 16. Enter the following data:

Defects Analysis and Corrective Tasks

Field	Data
Start	Current date (possible entries help)
Time	Current time (possible entries help)

- 17. To determine which corrective tasks have to be performed by the departments responsible, choose the *Tasks* tab page.
- 18. Enter the following data:

Field	Data	Description
Task code text	QM-S2 0005 (possible entries help)	Corrective task in the warehouse
Task text	Perform screening inspection	

- 19. The system adds a new line. Select this line and choose (Detail view).
- 20. In the dialog box, choose **1** in the *Task code* line.

The system proposes an appropriate long text for the task.

21. To copy this proposal, choose Copy Text.

The system copies the proposed text.

22. Choose and add the following to the existent text:

"Bring these goods to receiving inspection immediately."



The system is preset so that you can supplement the text with additional information if required. However, the original text cannot be changed. Every addition to the text is saved in the system when the user ID is entered.

- 23. Choose 🕒.
- 24. In the dialog box, enter the following data:

Field	Data	
User responsible	Your user ID	
Planned start	Next working day (possible entries help)	
Planned finish	Working day after next (possible entries help)	

25. To release the task for processing, choose 🎤 (Release) in the dialog box.

The F1 help for the *Follow-up action* field shows you that automatic system functions can be linked to a task code.

26. Choose Copy.

The overview of the tasks for the defect item appears.

You have assigned a corrective task to the defect item. On the corresponding tab page, you can see that general tasks and activities can be assigned to the notification header.

27. Choose .

Defects Analysis and Corrective Tasks



While processing the quality notification, you became familiar with certain tab pages, screen areas, and fields. These interface elements can be set in Customizing, depending on the notification type. The user can structure the contents of the notifications (the meaning of the input fields) and entry screens (the tab pages and the arrangement of screen areas).

28. Choose 4.

Assigning a Document

Assigning a Document

1. Call up the transaction as follows:

Menu Path	Logistics o Quality Management o Quality Notification o Change
Transaction Code	QM02

- 2. On the initial screen, enter the number of the notification you last processed and choose *Notification*.
- 3. Choose the Subject tab page.

You get an overview of the documents linked to the notification in the *Linked documents* screen area. You may need to use the scroll bar to find the *Linked documents* screen area.

4. Enter the following data:

Field	Data
Туре	DRW
Document	QS_02
Dpt	000
Vs	00

- 5. Choose & (Display originals).
- 6. You may be required to choose a frontend type.

The system displays the assigned document (drawing of the screw head).

- 7. Close the screen with the drawing.
- 8. Choose .
- 9. Choose 6.

Nonconformity Costs

Creating a QM Order

1. Call up the transaction as follows:

Menu Path	Logistics o Quality Management o Quality Notification o Change	
Transaction Code	QM02	

- 2. On the initial screen, enter the number of the notification you last processed and choose *Notification*.
- 3. Choose Order.

After the notification data has been saved, the system creates a QM order as a cost collector for the nonconformity costs and assigns this to the notification. In the order you can, for example, enter material withdrawals from the warehouse or error correction services. You can evaluate them later using controlling functions.

- 4. Choose \blacksquare .
- 5. Choose Notification.
- 6. Choose Notification \rightarrow Functions \rightarrow Order \rightarrow Display.
- 7. Make a note of the order number for the QM order.
- 8. Choose until the overview tree appears.

Entering Nonconformity Costs

Use

You now enter the expenses for the defects analysis. An employee from cost center 4280 worked on defects analysis for 2 hours. The nonconformity costs are collected and periodically evaluated in cost center 4400.

Procedure

1. Call up the transaction as follows:

Menu Path	From the Quality Notification node, choose Costs \rightarrow Actual Postings \rightarrow Activity Allocation \rightarrow Record
Transaction Code	KB21N

- 2. If necessary, enter the company code 1000 in the dialog box and choose ♥.
- 3. Enter the following data:

Field	Data
Scrn variant	Order
Sender CCtr	4280
SAtyTyp	1421

Nonconformity Costs

Rec. order	Number of your QM order	
Total quantity	2	
UM	Н	
Text	Expenses for defect analysis	

- 4. Choose 🖳
- 5. Choose until the overview tree appears.

Cost Report

1. Call up the transaction as follows:

Menu Path	From the Quality Notification node, choose Change	
Transaction Code	QM02	

- 2. Enter the number of the notification you processed last and choose Notification.
- 3. Choose Environment \rightarrow Cost report QM order.

The system displays the summarized cost report. You can expand the line items in the list and then you can display the associated individual documents.

4. Choose until the overview tree appears.

Settling a QM Order

Prerequisites

Your QM order has NOT been settled automatically. If your QM order has been settled automatically, the system issues a notification. Continue with the *Cost report of the cost center*.

Procedure

1. Call up the transaction as follows:

Menu Path	From the Quality Notification node, choose Costs \rightarrow Actual Postings \rightarrow Settlement \rightarrow Individual Settlement	
Transaction Code	KO88	

2. Enter the following data:

Field	Data	
Order	Number of your QM order	
Settlement period	Current period	
Fiscal year	Current year (default)	
Test run	Deselect	

- 3. Choose .
- 4. Choose until the overview tree appears.

Nonconformity Costs

Cost Report of the Cost Center

Use

If automatic order settlement is activated, the accumulated costs of the QM order are sent straight to the quality assurance cost center 4400. You can display all of the cost actual postings that were settled by this cost center.

Procedure

1. Call up the transaction as follows:

Menu Path	Accounting \rightarrow Controlling \rightarrow Cost Center Accounting \rightarrow Information System \rightarrow Reports for Cost Center Accounting \rightarrow Line Items \rightarrow Cost Centers: Actual Line Items
Transaction Code	KSB1

- 2. Choose Extras \rightarrow Set controlling area.
- 3. Enter the following data:

Field	Data
Controlling area	1000

- Choose ♥.
- 5. Enter the following data:

Field	Data
Cost center	4400

6. Choose 🕒.

The system displays a list of all cost documents including costs and services.

7. To display the source document, select the line and choose **Document**.

You see the settlement document created during service entry.

8. Select the document line item and choose \square .

The detail screen for service entry appears.

- Choose
- 10. Choose 4 until the overview tree appears.
- 11. In the dialog box, choose Yes.

Completing Corrective Tasks Using the Worklist

Completing Corrective Tasks Using the Worklist

1. Use the following procedure to call the transaction:

Menu Path	From the Quality Notification node, choose Worklist $ o$ Task $ o$ Change Data	
Transaction Code	QM12	

The selection screen for notifications with outstanding tasks appears.

2. Keep the selection parameters proposed by the system and choose ...

The tasks to be processed appear in the list. From this list, you can process the tasks, notification, and QM order.

3. Select the task *Perform screening inspection*, and then choose *Prask*.

The task detail screen appears.

4. Choose 2.

The system displays the long text for the task.

5. Add the following information to the long text:

"The screening inspection has been performed. The nonconforming units are now in the quality department."

- 6. Choose 🕒.
- 7. In the dialog box, choose ...

The system records that you have finished processing the task.



If you would like to learn how to process tasks using Workflow functions, terminate the process now and do not save.

8. Choose .

During the screening inspection of the warehouse stock, you found another 10 hexagonal head screws on which the manufacturer identification is illegible. You make a note of this in the notification.

9. Select your notification and choose *Notification* from the worklist.

The notification screen appears.

- 10. Choose the *Subject* tab page and in the *Quantities* screen area, increase the quantities in the *Ref. Quantity*, *Complaint quantity*, and *Def.Qty* (exter.) fields by 10.
- 11. Choose .
- 12. Choose until the overview tree appears.

Completing Corrective Tasks Using Workflow

Completing Corrective Tasks Using Workflow

1. Call up the transaction as follows:

Menu Path	Office → Workplace
Transaction Code	SBWP

- 2. Choose $Inbox \rightarrow Workflow \rightarrow Grouped$ according to content type.
- 3. Choose Tasks.

The tasks to be processed appear in the list.

4. Select the previously created task *Perform screening inspection* and choose . The task detail screen appears.

5. Choose .

The system records that you have finished processing the task.

- 6. Choose .
- 7. Choose **♥** Complete work item.

During the screening inspection of the warehouse stock, you found another 10 Hexagonal head screws on which the manufacturer identification is illegible. You make a note of this in the notification.

- 8. Choose 🕒.
- 9. Call up the transaction SBWP again.
- 10. Choose $Inbox \rightarrow Workflow \rightarrow Grouped$ according to content type.
- 11. Choose Quality notification.

The notifications to be processed appear in the list.

12. Select the previously processed notification and choose ...

The notification screen appears.

- 13. Choose the *Subject* tab page and in the *Quantities* screen area, increase the quantities in the *Ref. quantity*, *Complaint quantity*, and *DefQty* (exter.) fields by 10.
- 14. Choose 🖳
- 15. Choose until the overview tree appears.

Posting to Blocked Stock

Posting to Blocked Stock

Use

When inspecting warehouse stock, you found another 10 Hexagonal head screws on which the manufacturer identification is illegible. You post this quantity to blocked stock.

You only use the functions in the action box for this purpose and for further processing of complaints against the vendor.

Procedure

Stock Posting

1. Call up the transaction as follows:

Menu Path	Logistics ightarrow Quality Management ightarrow Quality Notification ightarrow Change	
Transaction Code	QM02	

- 2. On the initial screen, enter the number of your previously processed notification and choose *Notification*.
- 3. From the action box, choose the $\blacksquare Transfer post$. Unrestr. $\rightarrow blckd$ function.
- 4. Enter the following data:

3		
Field	Data	
Document date	Current date (default)	
Complaint quantity	10	
Movement type	344 (default)	
Plant	1000	
Storage location	0002	
Doc. printout	Select	

The system prints an accompanying sheet for the blocked stock, because you selected the *Document printout* field.

- Choose
- 6. Choose \blacksquare .

The screen for processing notifications appears.

- 7. If necessary, enter a printer in the *Print* dialog box and choose $\stackrel{\square}{=}$.
- 8. Choose C until the overview tree appears.

Printing an Accompanying Sheet

1. From the menu bar, choose $System \rightarrow Own spool requests$.

The system opens a new session and displays an overview of your spool requests.

Select the last script you created and choose .



Posting to Blocked Stock

The system displays the print preview for the accompanying sheet for the blocked stock.

3. Choose until the overview tree appears.

Displaying Blocked Stock

1. In a second session, call up the transaction as follows:

Menu Path	$\begin{tabular}{ll} Logistics \rightarrow Materials Management \rightarrow Inventory Management \rightarrow Environment \rightarrow Stock \rightarrow Stock Overview \end{tabular}$	
Transaction Code	MMBE	

2. Enter the material number from your problem notification and choose Φ .

The system displays the overview of unrestricted-use stock and inspection stock for every plant and storage location.

- 3. Call up a list of all stock types by double clicking on a stock line.
- 4. Use the scroll bar until you can see Blocked.
- 5. Switch sessions.



You can now use this session to check stock movements at all times.

Return Delivery with Reference to Existing Purchase Order

Return Delivery with Reference to Existing Purchase Order

Use

You return some of the blocked material to the vendor.

The invoice has to be changed because of this return delivery. This takes place automatically, because you have agreed to automatic invoice processing (ERS).

The returns are then prepared for sending and delivered.

You then display a credit memo.

Prerequisites

The system proposes this process if the quality notification was created with reference to a purchase order (initial variant b, c, or d), or if you have assigned a purchasing document.



If this is not the case, the system proposes the <u>Return Delivery Without Reference to Existing Purchase Order [Page 159]</u> process. For this process to run successfully, you first have to assign a purchasing document. See <u>Assigning a Purchasing Document [Page 158]</u>.

Procedure

Creating a Return Delivery

1. Call up the transaction as follows:

Menu Path	Logistics o Quality Management o Quality Notification o Change
Transaction Code	QM02

- 2. On the initial screen, enter the number of the notification you last processed and choose *Notification*.
- 3. In the action box, choose the **Create return delivery function.
- 4. Enter the following data:

Field	Data
Document date	Current year (default)
Plant	1000 (default)
Stock type	S
Reason for movement	0001
Storage location	0002
Quantity to be returned	10
Return delivery with reference to original purchase order	Select

Return Delivery with Reference to Existing Purchase Order

Choose ♥.

The system saves the notification data, then creates a return item in the purchase order and prepares the return delivery. The screen for processing notifications appears.

6. In the dialog box, choose Yes.

Document Flow Graph

- 1. Choose Notification.
- 2. Choose Document flow.

In the document flow graph which now appears in the lower screen area, you can see all document flow linked to the quality notification. An enlargement of the segment appears in the upper screen area, where you can double-click to call up displays of the individual documents.

- 3. Make a note of the outbound delivery document or delivery note number.
- 4. Choose until you return to the notification screen.

Goods Issue

1. In the action box, choose A Change outbound delivery.

The system exits the quality notification.

- 2. In the dialog box, choose Yes.
- 3. If necessary, enter the number of the outbound delivery document and choose ...

- 4. Select the delivery item and choose the *Picking* tab page.
- 5. Enter the following data:

Field	Data
Pick quantity	10 (= delivery quantity)

6. Choose Post goods issue.

The system posts the goods issue and switches back to notification processing.

7. Switch to the second session with the stock overview and choose **1**.



You can see that the blocked stock and the on-order stock have been corrected in accordance with the return delivery.

8. Switch sessions.

Invoice Correction

1. Call up the transaction as follows:

Menu Path	Logistics ightarrow Materials Management ightarrow Logistics Invoice Verification ightarrow Automatic Settlement ightarrow Evaluated Receipt Settlement (ERS)	
Transaction Code	MRRL	

2. Enter the following data:

	. •
Field	Data

Return Delivery with Reference to Existing Purchase Order

Company code	1000
Plant	1000
Vendor	1234 to 1235
Test run	Select

3. Choose .

The system displays the list of the goods receipt items that can be automatically posted.

4. Double-click on the purchasing document in the item line.

The system displays the purchase order for this item.

5. Click on the purchase order item and choose the *Purchase order history* tab page.

You can see that there was a goods receipt of 1000 units and a return delivery of 10 units for this purchase order item. The invoice amount is to be reduced by 10 DM because of the returns.

- 6. Choose Ctwice.
- 7. Deselect the Test run field.
- 8. Repeat steps 1 to 5.

In the purchase order history, you can now see that the invoice receipt is performed automatically and the returns are taken into consideration. The balance is cleared. A special returns invoice is not required. You send a self-billing document to the vendor.

9. Choose until the overview tree appears.

Credit Memo

1. Call up the transaction as follows:

Menu Path	$\begin{tabular}{ll} Logistics \rightarrow Materials Management \rightarrow Logistics Invoice Verification \rightarrow Further Processing \rightarrow Output \\ \end{tabular}$	
Transaction Code	MR90	

- 2. Copy the proposals.
- 3. Choose D.

The system displays the list of the messages from invoice verification.

4. Select the relevant item and choose (View).

The system displays the self-billing document for this item. The return delivery is recorded in the self-billing document.

5. Choose 🙆.

Assigning a Purchasing Document

Assigning a Purchasing Document

Use

You create a link between the quality notification and a purchasing document so that you can, for example, create a return delivery with reference to a purchase order at a later date.

Prerequisites

No purchasing document has been assigned to the notification.

Procedure

1. Call up the transaction as follows:

Menu Path	Logistics o Quality Management o Quality Notification o Change
Transaction Code	QM02

- 2. On the initial screen, enter the number of your notification and choose *Notification*.
- 3. In the action box, choose Assign purchasing document.

The system proposes certain selection criteria based on the reference objects in the notification.

4. Choose .

The system displays the list of the *Purchasing documents for the material*.

- 5. Select your purchasing document and choose Adopt selected.
- 6. Choose \(\begin{aligned} \Boxed{\text{.}} \end{aligned} \)
- 7. Choose until the overview tree appears.

Return Delivery Without Reference to Existing Purchase Order

Return Delivery Without Reference to Existing Purchase Order

Use

You return some of the blocked material to the vendor. You **can** perform this process if the quality notification has no reference to a purchase order.

Prerequisites

You need to have enough material in blocked stock. If you previously created a return delivery with reference to a purchase order, you need to check the blocked stock in the second session. If necessary, repeat the Posting to Blocked Stock [Page 152] process.

The system proposes this process flow if you chose <u>Initial variant a</u>. If you chose initial variant b, c, or d, or if you assigned a purchasing document, the system proposes the *Return Delivery with Reference to a Purchase Order* process. However, you can manually choose a return delivery without reference to a purchase order.

Procedure

Creating a Return Delivery

1. Call up the transaction as follows:

Menu Path	$Logistics ightarrow ext{Quality Management} ightarrow ext{Quality Notification} ightarrow ext{Change}$
Transaction Code	QM02

- 2. On the initial screen, enter the number of the notification you last processed and choose *Notification*.
- 3. In the action box, choose the Create return delivery function.
- 4. Enter the following data:

Field	Data
Document date	Current date (default)
Plant	1000 (default)
Stock type	S
Reason for movement	0001
Storage loc	0002
Rejected quantity	10

5. Deselect Return del. with ref. to original pOrder and choose ♥.

Another dialog box appears in which you can prepare a separate purchase order for a return delivery.

6. Enter the following data:

Return Delivery Without Reference to Existing Purchase Order

Order type	NB (default)
Purchase order date	Current date (default)
Company code	1000 (default)
Purch. organization	1000 (default)
Purchasing group	001 (default)
Delivery date	Current date (default)
Plant	1000 (default)
Stor. loc	0002 (default)
Bill recipient	1235
Net price	0.1 EUR
Payment terms	ZB01
Tax code	V1
Shipping point	1000 (default)

Choose ♥.

The system has created a purchase order for a return delivery and prepares the delivery.

- 8. Select your purchase order for a return delivery and choose 📴.
- 9. Choose C.

Document Flow Graph

- 1. Choose Notification.
- 2. Choose Document flow.

In the document flow graph which appears in the lower screen area, you can see all document flow linked to the quality notification. An enlargement of the segment appears in the upper screen area, where you can double-click to display the individual documents.

- 3. Call up the purchase order display by double-clicking on the document display.
- 4. Select the purchase order item and choose litem detail.

 In the Returns item field, you can see that you are dealing with a return delivery.
- 5. Choose until the overview tree appears.

8D Report

8D Report

Requesting an 8D Report

1. Call up the transaction as follows:

Menu Path	$ ext{Logistics} ightarrow ext{Quality Management} ightarrow ext{Quality Notification} ightarrow ext{Change}$
Transaction Code	QM02

- 2. On the initial screen, enter the number of the notification you last processed and choose *Notification*.
- 3. In the action box, choose Request 8D report.
- 4. On the *Print* screen, enter the ID of a printer in the *Output device* field that can print proportional font.



If there is no suitable printer maintained in the system, use printer LP01. This printer is always available, but it does not print proportional font. Therefore, its printout of the 8D report is not so well-formatted, but it is comprehensible.

5. Choose Print preview.

The system displays the 8D report form, which already contains several entries. There are 8 points in the form to be dealt with by the vendor.

- 6. Choose to return to the *Notification* screen.
- 7. Choose the *Tasks* tab page.
- 8. Choose Request 8D report again and choose Print.

The system displays the list of all tasks that have been initiated because of this quality notification. This includes the last request for an 8D report using a function in the action box.

9. Select the Request 8D report task and choose 🔜 in the lower screen area.

The task detail screen appears.

10. In the lower *Task* area, choose (Status detail).

You can see that the task has the status Task completed.

- 11. Choose **C**, and then *Copy* to return to the *Notification* screen.
- 12. Choose 🖽.
- 13. Choose until the overview tree appears.

Completing an 8D Report

Use

After some time, the vendor has found a solution for the problem. The vendor now documents the tasks for quality assurance on the form and sends the paper back with the desired explanation. You can now close this problem.

8D Report

Procedure

1. Call up the transaction as follows:

Menu Path	From the Quality Notification node, choose Change
Transaction Code	QM02

- 2. On the initial screen, enter the number of the notification you last processed and choose *Notification*.
- 3. Choose the Tasks tab page.

The system displays the list of all tasks that have been initiated because of this quality notification. This includes the last request for an 8D report using a function in the action box.

- 4. Select the Request 8D report task and choose .
- 5. Choose .
- 6. Choose until the overview tree appears.

Resetting the Quality Level

Resetting the Quality Level

1. Call up the transaction as follows:

Menu Path	From the Quality Notification node, choose Change
Transaction Code	QM02

- 2. On the initial screen, enter the number of the notification you last processed and choose *Notification*.
- 3. In the action box, choose the **Reset quality level** function.
- 4. Select the line with your vendor and choose ♥.

You can only perform this task once. This is why the function is now inactive in the action box.

5. Choose the *Tasks* tab page.

The system displays the list of all tasks that have been initiated because of this quality notification.

6. Select the line with the *Reset quality level* task and choose are in the same line.

The system displays the text for the task. The system makes a note of the keys for the quality level. These keys are used to reset the quality level to the initial situation.

- 7. Choose to return to the *Notification* screen.
- 8. Choose until the overview tree appears.

Buyer's Negotiation Sheet

Buyer's Negotiation Sheet

1. Call up the transaction as follows:

Menu Path	Logistics o Quality Management o Quality Notification o Display
Transaction Code	QM03

- 2. On the initial screen, enter number of the notification you last processed and choose *Notification*.
- 3. Choose $Environment \rightarrow Buyer$'s negotiation sheet.

The system displays the buyer's negotiation sheet. The buyer's negotiation sheet is a list of vendor key figures. This list includes:

Terms of payment

PO quantities and values according to time

Vendor evaluation – key figures for price, quality, delivery reliability, and service.

4. Choose until the overview tree appears.

Related Notifications

Related Notifications

1. Call up the transaction as follows:

Menu Path	Logistics o Quality Management o Quality Notification o Display
Transaction Code	QM03

- 2. On the initial screen, enter the number of the notification you last processed and choose *Notification*.
- 3. Choose the Reference object tab page.

You may be able to see the Related notifications button on the tab page. This button only appears if there are already quality notifications saved in the system for the reference objects material and vendor.

4. Choose ■ Related notifications.

The system opens the detail screen for related notifications. On this screen you can see the statistics of all outstanding and completed quality notifications with reference to material, vendor, and the material/vendor supply relationship.

5. Choose (All notifications) for any one of the statistics.

The system displays the list of all quality notifications for the relevant reference object. The notification you have open is not included.

6. Select one of the lines and choose ♥.

The header of the selected notification appears and you can now navigate within that notification, for example, to view the defect items and tasks that have already been completed.

7. Choose and close the dialog boxes until the overview tree appears.

Action Log

Action Log

1. Call up the transaction as follows:

Menu Path	Logistics o Quality Management o Quality Notification o Display
Transaction Code	QM03

- 2. On the initial screen, enter the number of the notification you last processed and choose *Notification*.
- 3. Choose Action log.

The system displays a list of the most significant changes in the quality notification and associated subobjects. This list is ordered according to date and time.

- Choose
- 5. Choose until the overview tree appears.

Completing the Notification

Completing the Notification

1. Call up the transaction as follows:

Menu Path	Logistics ightarrow Quality Management ightarrow Quality Notification ightarrow Change
Transaction Code	QM02

- 2. On the initial screen, enter the number of the notification you last processed and choose *Notification*.
- 3. Choose (Complete).

A dialog box appears, in which you must specify whether the problem was caused internally or externally.

4. Accept the External origin proposal.

The quality problem was caused by the vendor, so the problem notification goes into the vendor evaluation.

- To complete and save the notification, choose
- 6. Choose 😂.



The notification can no longer be changed, only displayed.

Reversal

1. If you accidentally completed the notification before it was necessary, call up the following transaction:

Menu Path	Logistics ightarrow Quality Management ightarrow Quality Notification ightarrow Change	
Transaction Code	QM02	

- 2. On the initial screen, enter the number of the notification you last processed and choose *Notification*.
- 3. Choose Notification \rightarrow Functions \rightarrow Put in process.

Now you can make changes to the notification.

Quality Control

Quality Control

Purpose

You learn about the following quality control methods:

- 1. Vendor evaluation
- 2. Quality scores from quality inspections and quality notifications
- 3. Control charts

The dynamic modification of the inspection scope – another quality control method – is demonstrated in the Acceptance Inspection (detailed) [Page 108] process.

Prerequisites

The data required for this process is already in the system. You can supplement this data by performing other processes relating to Quality Management in Materials Management [Page 12].

Process Flow

1. Vendor Evaluation [Page 170]

You learn about the traditional vendor evaluation method, which is performed according to certain criteria. Quality is one of the criteria, which is automatically calculated by the system. Price behavior and scheduling are also automatically calculated. The above can be set according to type and weighting. The quality criterion contains several subcriteria, which are automatically evaluated.

2. Quality Scores [Page 176]

You learn how to valuate the summarized quality scores in the QM Information System.

3. Quality Control Charts [Page 198]

You learn how data can be displayed in control charts. You also learn about process capability indices, Western Electric Rules, and the calculation of control limits.

Vendor Evaluation

Vendor Evaluation

Purpose

The buyer and quality planner use the key figures from the vendor evaluation to determine the suitability of a vendor. If there is more than one vendor to choose from, you can compare them and select one on the basis of the vendor evaluation.

Prerequisites

The data required for this process is already in the system. This data was entered during the processes *QM in Procurement, Acceptance Inspection,* and *Quality Notifications as Complaints Against the Vendor.*

Process Flow

You can find the data for this process under [2] [Page 195].

- 1. Evaluating a Vendor [Page 172]
- 2. Re-evaluation [Page 173]
- 3. Evaluation Log [Page 174]
- 4. Comparing Evaluations [Page 175]

Data Used During This Process

Data Used During This Process

Field	Data	Description
Purchasing organization	1000	IDES Deutschland
Vendor	1234	K.F.W. London
		(German version)
	or 1235	K.F.W. London
		(English version)
Material	QS6X20	Hexagonal head screw M6X20

Evaluating a Vendor

Evaluating a Vendor

1. Call up the transaction as follows:

Menu Path	Logistics ightarrow Materials Management ightarrow Purchasing ightarrow Master Data ightarrow Vendor Evaluation ightarrow Maintain	
Transaction Code ME61		

2. Enter the following data:

Field	Data
Purch. organization	1000
Vendor	1235

3. Choose .

You can see the main criteria used to evaluate vendors.

4. Remain on this screen.

Re-Evaluation

Re-Evaluation

1. On the *Maintain Vendor Evaluation: Overview of Main Criteria* screen, enter the following data:

Field	Data	Description
Weighting key	01	Equal weighting

2. From the menu bar, choose $Edit \rightarrow Auto.new\ evaluation$.

The system displays the current evaluation for all automatically determined main criteria.

3. Select the main criterion 02 Quality and choose a.

You can see which subcriteria are evaluated within the main criterion *Quality*. The system displays the current evaluation for all automatically determined subcriteria.

4. Choose Goto → Graphic.

The system displays a tree structure to show you how the overall evaluation consists of evaluations of main and subcriteria.

5. Choose C to exit this view.

The screen with the subcriteria appears.

6. Remain on this screen.

Evaluation Log

Evaluation Log

1. Choose $Goto \rightarrow Log per main criter$.

The log for the automatically set main criterion *Quality* is displayed. The system lists all materials whose procurement transactions contributed to the evaluation.

2. Place your cursor on the line containing material QS6X20 and choose *Detailed information*.

In the detailed log, you can see that the data relating to material QS6X20 originated in the goods receipt inspection process.

3. Place your cursor on the line containing material QS6X20 and choose *Display insp. lots*.

In the dialog box, you can see which inspection lots and their quality scores were used for calculating the subcriterion *goods receipt inspections*.



You can display the usage decision and all other data for the inspection lot by double-clicking on the relevant line.

- 4. Close this dialog box.
- 5. Choose until the screen with the subcriteria appears.
- 6. Choose .

The vendor evaluation is fixed until the next re-evaluation.

7. Choose C until the overview tree appears.

Comparing Evaluations

Comparing Evaluations

Use

You now check if the evaluation of a vendor for a particular material differs from the general evaluation of that vendor.

Procedure

1. Call up the transaction as follows:

Menu Path	ath From the Vendor Evaluation node, choose Compare Evaluation	
Transaction Code	ME64	

2. Enter the following data:

Field	Data
Vendor	1235
Purchasing organization	1000
Material	QS6X20

3. Choose .

The system now displays a comparison of the evaluations for all main and subcriteria in two columns. The left column contains general evaluations for all materials. In the right column, there are evaluations for material QS8X20.

4. Choose 4 until the overview tree appears.

Quality Scores

Quality Scores

Purpose

The system calculates pre-defined key figures from the movement data of inspection lots, inspection characteristics, defects, and quality notifications. The system then summarizes them in the QM Information System according to criteria, such as, vendor, material, and period.

You learn how to analyze quality scores. You can use the following to do this:

- Drilldown of key figures according to different criteria
- Pareto analysis and other analyses
- · Graphical display of key figures and analyses
- Early Warning System

Process Flow

You can find the data for this process under [? [Page 191].

1. Quality Scores for Inspection Lots [Page 178]

You display an overview of the predefined key figures for an inspection lot. You can drilldown these key figures according to different criteria. You also familiarize yourself with the Early Warning System, which is based on key figures.

2. Quality Scores for Inspection Lots [Page 184]

You learn about general key figures for inspection characteristics and special key figures for quantitative inspection characteristics.

3. Quality Scores for Defects [Page 190]

You familiarize yourself with the key figures that are summarized from the defect data records and perform a Pareto analysis on this data. You display this information as a three-dimensional graphic and you can adapt this display using different options.

4. Key Figures for Quality Notifications [Page 194]

You learn about statistics for problem notifications and corrective tasks. This demonstrates how useful it is to be able to switch from summarized data to original documents.

Data Used During This Process

Data Used During This Process

Field	Data	Description
Vendor	1234	K.F.W.Berlin
	1235	K.F.W.London (English version)
Material	QS6X20 to QS8X60	Hexagonal head screws M6x20 to M8X60

Quality Scores for Inspection Lots

Quality Scores for Inspection Lots

Purpose

You analyze the key figures for the inspection lot that are summarized in the QM Information System.

Process Flow

You can find the data for this process under <a>! Page 191].

- 1. Overview: Key Figures [Page 180]
- 2. <u>Drilldown of Key Figures [Page 181]</u>
- 3. Early Warning System for Key Figures (Exception Analysis) [Page 183]

Data Used During This Process

Data Used During This Process

Field	Data	Description
Vendor	1234	K.F.W.Berlin
	1235	K.F.W.London (English version)
Material	QS6X20 to QS8X60	Hexagonal head screws M6x20 to M8X60

Overview: Key Figures

Overview: Key Figures

Use

You create an overview of the summarized key figures.

Procedure

1. Call up the transaction as follows:

Menu Path	Logistics → Quality Management → Quality Control → Key Figures → Vendor → Inspection Lots → Overview	
Transaction Code MCVA		

2. Enter the following data:

Field	Data
Vendor	1234 to 1235
Material	QS6X20 to QS8X60
Plant	1000
Analysis period	Default

3. Choose .

The system displays the list of the most important key figures for the inspection lots. However, there are many other key figures saved in the system.

4. To display all available key figures, place your cursor on one of the lines in the basic list and choose *Extras* → *All key figures* from the menu bar.

A dialog box appears with an alphabetical list of all 38 key figures.

- Choose
 ✓ to close the dialog box.
- 6. Remain on this screen.

Drilldown of Key Figures

Use

In the drilldown, you classify the summarized key figures according to several criteria (drilldown characteristics). You can define the drilldown (sequence of the drilldown characteristics).

Procedure

- 1. To display the drilldown in the standard system, place your cursor on a line in the basic list and choose *Extras* → *Display standard drilldown*.
- Choose ♥.
- 3. Double-click in the first column of the Goods receipt insp list.

In the first drilldown step, the system classifies according to vendor. You can see that the two vendors have different key figures.



You can breakdown all of the drilldown characteristics in the standard by doubleclicking on the first column of the list at each drilldown level.

You can display all of the key figures related to the drilldown characteristic in the first column by double-clicking on one of the key figure columns.

4. Double-click on the vendor with the lowest average quality score.

You can see that a particular material contributed to this low quality score.

5. Double-click on this material.

You can see in which month the quality score was at its lowest.

6. Double-click on this month.

You can see which plant determined this low quality score.



If you try to breakdown the key figures even further, by double-clicking on the plant, the system informs you that you have reached the end of the standard breakdown. However, you can display the original data for these inspection lots.

- 7. Place your cursor on the list line, and choose Extras \rightarrow Inspection lots.
- 8. In the list of inspection lots, place your cursor on the inspection lot with the lowest quality score and choose **Choose.

You now see why this inspection lot was valuated so poorly.

You can access all of the data concerning this inspection lot from the *Display Usage Decision* screen.

- 9. Choose until the *Vendor Analysis Overview: Lots: Selection* screen appears.
- 10. In the dialog box, choose No.
- 11. Remain on this screen.

Drilldown of Key Figures

Early Warning System for Key Figures (Exception Analysis)

Early Warning System for Key Figures (Exception Analysis)

Use

If you have defined exception conditions, the system automatically alerts you to possible irregularities.

Procedure

1. On the Vendor Analysis Overview Based on Lots screen, enter the following data:

Field	Data
Vendor	1234 to 1235
Material	QS6X20 to QS8X60
Plant	1000
Analysis period	
Exception	Q < 80 (possible entries help)

- 2. Choose .
- 3. To skip any warning messages that may appear, choose .

You can now see the basic list with the average quality score for the lots and with the key figures divided into 5 key figure classes. The drilldown characteristics, key figures, and exception conditions are defined as exceptions. You can display the exception definition.

4. Choose Extras → Display exception.

The system displays the key figures in the exception. You can now navigate according to the conditions, drilldown characteristics, and the subsequent processing triggered by the exception.

- 5. Choose .
- 6. Breakdown the basic list in the same way as described in the section <u>Drilldown of Key Figures [Page 181]</u>.

All of the lines in the list, which contain an inspection lot with a quality score of < 80 in summarized form are displayed in the color specified in the exception definition.

- Choose until the overview tree appears.
- 8. In the dialog box, choose No.

Quality Scores for Inspection Characteristics

Quality Scores for Inspection Characteristics

Purpose

You analyze the key figures for the inspection characteristic that were summarized in the QM Information System.

Process Flow

You can find the data for this process under <a>! Page 191].

- 1. General Key Figures for Inspection Characteristics [Page 186]
- 2. Drilldown of Key Figures [Page 187]
- 3. Key Figures for Quantitative Inspection Characteristics [Page 188]
- 4. Graphical Display [Page 189]

Data Used During This Process

Data Used During This Process

Field	Data	Description
Vendor	1234	K.F.W.Berlin
	1235	K.F.W.London (English version)
Material	QS6X20 to QS8X60	Hexagonal head screws M6x20 to M8X60

General Key Figures for Inspection Characteristics

General Key Figures for Inspection Characteristics

Usage

You create an overview of the summarized key figures.

Procedure

1. Call the transaction as follows:

Menu Path	$Logistics ightarrow Quality \ Management ightarrow Quality \ Control ightarrow Key \ Figures ightarrow Vendor ightarrow Inspection \ Characteristics ightarrow General$
Transaction Code	MCVB

2. Enter the following data:

Field	Data
Vendor	1234 to 1235
Material	QS6X20 to QS8X60
Analysis period	Default

3. Choose .

The system now displays the most important key figures for inspection characteristics in a basic list that is structured according to vendor. However, there are other key figures saved in the system.

4. To display all available key figures, place your cursor on one of the lines in the basic list and choose *Extras* → *All key figures*.

A dialog box appears with an alphabetical list of all 10 key figures.

Choose ♥ to close the dialog box.

Drilldown of Key Figures

Drilldown of Key Figures

Usage

In the drilldown, you classify the summarized key figures according to several criteria (drilldown characteristics). You can define the drilldown (sequence of the drilldown characteristics).

Procedure

- 1. To display the standard drilldown, place your cursor on a line in the basic list and choose *Extras* → *Display standard drilldown*.
- Choose ♥.
- 3. In the line with the largest sample size, double-click in the first column.



You can breakdown all of the drilldown characteristics in the standard by doubleclicking on the first column of the list at each drilldown level.

You can display all of the key figures related to the drilldown characteristic in the first column by double-clicking on one of the key figure columns.

4. Classify one of vendors according to material, work center, master inspection characteristic, inspection characteristic, plant, and month in several drilldown steps.

If you try to breakdown the key figures even further by double-clicking on the month, the system informs you that you have come to the end of the standard breakdown.

- Choose until the overview tree appears.
- 6. In the dialog box, choose No.

Key Figures for Quantitative Inspection Characteristics

Key Figures for Quantitative Inspection Characteristics Usage

You create an overview of the summarized key figures.

Procedure

1. Call the transaction as follows:

Menu Path	From the <i>Quality Control</i> node, choose <i>Key Figures</i> → <i>Vendor</i> → <i>Inspection Characteristics</i> → <i>Quantitative</i>
Transaction Code	MCVD

2. Enter the following data:

Field	Data
Vendor	1234 to 1235
Material	QS6X20 to QS8X60
Analysis period	Default

3. Choose 🕒

The system now displays the most important key figures for inspection characteristics in a basic list that is structured according to vendor. However, there are other key figures saved in the system.

4. To display all available key figures, place your cursor on one of the lines of the basic list and choose *Extras* → *All key figures*.

A dialog box appears with an alphabetical list of all 17 key figures.

Choose ♥ to close the dialog box.

The value *** is displayed in several columns. This occurs if a logical entry is not possible on a higher aggregate level, for example, if the inspection characteristics have different units of measure.

6. Drilldown to the master inspection characteristic level.

You can see the key figures for the two master inspection characteristics *Thread length I* and *Brinell hardness*. The value *** no longer appears.

7. Do not leave this screen.

Graphical Display

Graphical Display

1. Choose L.

A dialog box appears in which you can choose the key figures that are to be displayed in your graphic.

2. Enter the following data:

Field	Data
c _{pk} valuet	Select
c _{pk} value	Select
Remaining fields	Deselect

The system displays the key figures for both master inspection characteristics in a three-dimensional graph.

- Choose ♥.
- 4. Choose C to exit this view.
- 5. Choose until the overview tree appears.
- 6. In the dialog box, choose No.

Quality Scores for Defects

Quality Scores for Defects

Purpose

You analyze the key figures that were summarized from the defect data in the QM Information System.

Process Flow

You can find the data for this process under [[Page 191].

Key Figures for Defects [Page 192]

Data Used During This Process

Data Used During This Process

Field	Data	Description
Vendor	1234	K.F.W.Berlin
	1235	K.F.W.London (English version)
Material	QS6X20 to QS8X60	Hexagonal head screws M6x20 to M8X60

Key Figures for Defects

Key Figures for Defects

1. Call up the transaction as follows:

Menu Path	$Logistics ightarrow Quality \ Management ightarrow Quality \ Control ightarrow Key \ Figures ightarrow Material ightarrow Defects$
Transaction Code	MCXX

2. Enter the following data:

Field	Data
Material	QS6X20 to QS8X60
Analysis period	Default

3. Choose 🕒.

The system displays a basic list with the key figures for defects, structured according to report type.

- 4. To adjust the column width for the drilldown characteristics, choose Settings → Column width → Characteristic.
- 5. In the dialog box, enter the following data:

Field	Data
Column width	40

- 6. Choose ♥.
- 7. Place your cursor on the report type with the most problem items and choose *View* → *Drilldown by* → *Problem code*.

The report type you chose is displayed. You can perform a Pareto analysis for the defect types (problems) using this data.

8. Place your cursor in the *Total def. val.* Column and choose $\overline{\P}$.

The list is sorted according to the severity of the defects. The most serious defect type has the highest defect valuation total.

- 9. To display the data in a graphic, choose ...
- 10. In the dialog box, enter the following data:

Field	Data
Problem frequency	Select
Total defect val.	Select
Remaining fields	Deselect

- 11. Choose ♥.
- 12. In the dialog box, choose ♥.

The system displays the two key figures in a three-dimensional graph.

Key Figures for Defects

13. Choose Overview.



You can now use the pushbuttons to view different Pareto analysis displays on the graphic screen.

- 14. Close the screen with the graph and choose until the overview tree appears.
- 15. In the dialog box, choose No.

Key Figures for Quality Notifications

Key Figures for Quality Notifications

Purpose

You analyze the quality notification related key figures summarized in the QM Information System.

Process Flow

You can find the data for this process under [Page 191].

Key Figures for Notifications [Page 196]

Data Used During This Process

Data Used During This Process

Field	Data	Description
Purchasing organization	1000	IDES Deutschland
Vendor	1234	K.F.W. London
		(German version)
	or 1235	K.F.W. London
		(English version)
Material	QS6X20	Hexagonal head screw M6X20

Key Figures for Notifications

Key Figures for Notifications

1. Call up the transaction as follows:

Menu Path	Logistics → Quality Management → Quality Control → Key Figures → Vendor → Notifications → Overview
Transaction Code	MCVZ

2. Enter the following data:

Field	Data
Vendor	1234 to 1235
Material	QS6X20 to QS8X60
Notification type	F2
Plant	1000
Analysis period	Default

3. Choose .

The system now displays the overview list of the statistics from all defect notifications and tasks. The key figures are classified according to the processing status of the notifications and tasks.

- 4. To adjust the column width for the drilldown characteristics, choose *Settings* → *Column width* → *Characteristic*.
- 5. In the dialog box, enter the following data:

Field	Data
Column width	40

- Choose ♥.
- 7. Place your cursor on one of the lines and choose $View \rightarrow Drill\ down\ by \rightarrow Material$.
- 8. Place your cursor in the *Total no. of notifications* line, and choose $\overline{\Psi}$.

You can see which materials caused the most defect notifications and tasks.

- 9. Choose 15.
- 10. In the dialog box, enter the following data:

Field	Data
Total no. of notifications	Select
Total no. of tasks	Select
Remaining fields	Deselect

11. Choose ♥.

The system displays the required data in a three-dimensional graph. You can adjust this display to suit your own requirements.

Key Figures for Notifications

- 12. On the screen with the graph, choose *Options* \rightarrow 3D options to try out some other options.
- 13. To quit the graph, choose .

The system switches back to the drilldown according to materials.

- 14. To look at the original documents, place your cursor on one of the list lines, and choose *Extras* → *Q notifications*.
- 15. Select one of the lines, and choose

 Choose.

 The system displays the Q notification you selected.
- 16. Choose 🗘.
- 17. Close the dialog box, and choose until the overview tree appears.
- 18. In the dialog box, choose No.

Control Charts

Control Charts

Purpose

You learn about statistical process control using a control chart $(\bar{x} - s)$.

Process Flow

You can find the data for this process under <a>! [Page 199].

- 1. Control Chart, Process Capability, and Western Electric Rules [Page 200]
- 2. Control Limits [Page 202]

Data Used During This Process

Data Used During This Process

Field	Data
Plant	1000
Master insp. charac.	Q-2020

Control Chart, Process Capability, and Western Electric Rules

Control Chart, Process Capability, and Western Electric Rules

Usage

1. Call up the transaction as follows:

Menu Path	Logistics \rightarrow Quality Management \rightarrow Quality Control \rightarrow Evaluations of Original Documents \rightarrow Control Chart \rightarrow For Master Inspection Characteristic
Transaction Code	QGC3

2. Enter the following data:

Field	Data
Plant	1000
Master insp. charac.	Q-2020
Status of control charts	3 (Active)
Created on	From 01.01.2000 until current date

In the lower screen area, the system suggests that the control charts be checked with regard to the "Western Electric Rules". Accept the proposals.

3. Choose .

The system now displays the list of active control charts for the master inspection characteristic.

- 4. To adjust the column width, choose Setting \rightarrow Columns \rightarrow Optimize width.
- 5. Select the line with control chart 805 and choose (Call control chart).

In the lower screen area, the two tracks of the \overline{x} -s control chart – mean values and standard deviations - appear. These are displayed using the event axis with the inspection lot numbers. The mean values and control limits have already been calculated by the system because of the initial run.



You can expand the width of the two control charts by clicking on them and dragging.



You can adjust the graphic display by double clicking on one of the elements, for example, the center line, and choosing one of the options in the *Format Data Series* dialog box.

6. To display the most relevant indicators for valuating process capability, choose (Display statistical values).

The system displays the key figures for the valuation of process capability.

To close the display, choose

Control Chart, Process Capability, and Western Electric Rules

8. To check the Western Electric Rules, choose .

The system displays a list of all limit violations. In the relevant column of the list, you can see which rule has been violated.

- 9. To adjust the column width, choose Setting \rightarrow Columns \rightarrow Optimize width.
- 10. Double-click on a line.

The system gives you detailed information about the limit violation.

- 11. Choose ♥.
- 12. Choose until you return to the Control Charts for a Master Inspection Characteristic screen.

Control Limits

Control Limits

Use

This process shows you how to calculate the control limits.

Prerequisites

To demonstrate how control limits are calculated, you need to use a control chart that is in preprocessing (status 1).

You change the status of the control chart from 3 (active) to 1.

Procedure

1. Enter the following data:

Field	Data
Plant	1000
Master insp. charac.	Q-2020
Status of control charts	1
Created on	From 01.01.2000 until current date

The control chart now has status 1.

2. Choose .

The system now displays the list of active control charts for the master inspection characteristic.

3. Select the line with control chart *806*, or, if necessary, a line with another available control chart, and choose .

No mean values or control limits are entered in the control charts now displayed by the system.

4. In the screen area with the control chart, choose (Calculate control limits).

The system copies the relevant lines into the control chart.

5. Choose 2.

You can see the calculated mean values, warning limits, and action limits of the two control chart tracks. (You cannot manually enter control limits due to the system settings.)

- 6. Choose ♥.
- 7. Choose until the overview tree appears.
- 8. In the dialog box, choose No.

Quality Management of Batches

Quality Management of Batches

Purpose

These processes show you how to inspect, classify, and monitor materials that are managed in batches.

Prerequisites

The data required for this process is already available in the system.

The processes in this process flow can be performed independently of each other. However, we recommend that you perform the processes in the given order.

Process Flow

1. Quality Inspection

This process shows you how to classify materials managed in batches (<u>Classifying</u> Materials [Page 204]).

The specifications from the material classification are used as standard values for the quality inspection (Material Specification [Page 209]).

The inspection results are used in the classifying batches [Page 213] process.

2. Source Inspection [Page 218]

You periodically inspect the stored batch. When the batch reaches its shelf life expiration date, you can post the warehouse stock to blocked stock.

3. Recurring Inspection [Page 230]

You periodically inspect the stored batch.

4. Quality Certificate [Page 239]

You print a certificate with the batch values.

Material Classification

Material Classification

Purpose

You learn how to classify materials that are handled in batches. The basis for this process is the definition of a batch class with class characteristics. A batch can be classified using characteristic values.

Process Flow

You can find the data for this process under [2] [Page 205].

1. Displaying a Batch Class and Class Characteristics [Page 206]

You display a batch class. When you display a batch class, you can also see the class characteristics and their value ranges.

2. Displaying a Material Classification [Page 207]

You display the classification data for a material that is managed in batches. You can see that the value ranges of the class characteristics can be individually defined for each material.

3. <u>Displaying a Batch Classification [Page 208]</u>

You display the classification data, that is, the valuation of a specific batch.

Result

You now understand how a material that is managed in batches is classified.

Data Used During This Process

Data Used During This Process

Field	Data	Description
Class	QS001	
Class type	023	Batch
Material	QS8X30	Hexagonal head screw M8X30

Displaying a Batch Class and Class Characteristics

Displaying a Batch Class and Class Characteristics

Procedure

17. Call up the transaction as follows:

Menu Path	$\textit{Logistics} \rightarrow \textit{Quality Management} \rightarrow \textit{Quality Planning} \rightarrow \textit{Basic Data} \rightarrow \textit{Class Characteristic} \rightarrow \textit{Class Management}$
Transaction Code	CL02

18. Enter the following data:

Field	Data
Class	QS001
Class type	023

19. Choose 🖾.

The basic data for the class hexagonal head screws appears.

20. Choose the *Keywords* tab page.

You can see a list of the keywords according to which you can search for the class.

21. Choose the Characteristics tab page.

You can now see a list of the characteristics associated with this class.

22. Select the line with the quantitative *Threaded length* characteristic and choose *Disp. vals.*

The system displays the value range determined when defining the class characteristic for threaded length

- 23. Choose 😂.
- 24. Select the line with the qualitative Electroplating characteristic and choose Disp. vals.

When defining the class characteristic, a selected set from the characteristic attribute catalog was determined as the value set.

25. For the Selected set field, choose &.

The system displays the value set contained in the selected set.

- 26. Choose ♥.
- 27. Choose until the overview tree appears.

Displaying a Material Classification

Displaying a Material Classification

1. Call up the transaction as follows:

Menu Path	$Logistics ightarrow Quality \ Management ightarrow Quality \ Planning ightarrow Logistics \ Master \ Data ightarrow Material ightarrow Display$
Transaction Code	MM03

2. Enter the following data:

Field	Data
Material	QS8X30

3. Choose 🕰.

The system asks you to select a view.

- 4. Select the General Plant Data / Storage 1 view and choose ♥.
- 5. In the dialog box, choose ♥.

The storage view appears, and you can see that the Batch management indicator is set.

- 6. To scroll to the left in the view tab pages, choose ◀.
- 7. Choose the Classification tab page.

In the *Assignments* screen area, you can see that the material is part of batch class QS001 (hexagonal head screws).

In the *Values* screen area, you can see that the threaded length for the hexagonal head screw M8X30 is restricted to a value range of 29.0 to 31.0 mm, while a value range of 9.0 to 99.0 mm was determined for the whole class of the class characteristic.

8. Choose until the overview tree appears.

Displaying a Batch Classification

Displaying a Batch Classification

1. Call up the transaction as follows:

Menu Path	$Logistics ightarrow Quality \ Management ightarrow Quality \ Planning ightarrow Logistics \ Master \ Data ightarrow Batch ightarrow Display$
Transaction Code	MSC3N

2. Enter the following data:

Field	Data
Material	QS8X30
Batch	1

3. Choose 🕰.

The basic data screen for the batch appears.

4. Choose the *Classification* tab page.

The class characteristics of the batch have specific values or value ranges which reflect the quality of the batch.

5. Choose the Material data tab page.

You can see the specifications from the material master record.

6. Choose until the overview tree appears.

Material Specification

Material Specification

Purpose

You use characteristic values from the material classification as specifications for a quality inspection. The basis for this is the material specification in which the class characteristics have links to the inspection characteristics.

Process Flow

1. Creating an Inspection Lot for a Batch Specification [Page 210]

You create an inspection lot and a new batch.

2. Displaying an Inspection Specification [Page 211]

You display the material specification assigned to the inspection lot. The inspection characteristics in the material specification contain links to class characteristics from the material classification.

Creating an Inspection Lot for a Batch Specification

Creating an Inspection Lot for a Batch Specification

23. Call up the transaction as follows:

Menu Path	$ \begin{array}{l} \textit{Logistics} \rightarrow \textit{Quality Management} \rightarrow \textit{Quality Inspection} \rightarrow \textit{Inspection Lot} \\ \rightarrow \textit{Processing} \rightarrow \textit{Create} \end{array} $
Transaction Code	QA01

24. Enter the following data:

Field	Data
Material	QS8X30
Plant	1000
Inspection lot origin	05

25. Choose 📽.

26. Enter the following data:

Field	Data
Batch	2
Insp.lot qty	1000

27. Choose 🖾.



If this is the first time you are performing this process, the batch that you have entered has not yet been created. In this case the system asks you if you want the batch to be created. In the dialog box, choose *Yes*.

You can also define the batch later, for example, when you are making the usage decision.

The system now prepares the quality inspection by selecting the inspection specifications and performing the sample calculation.

28. Choose 🖽.

Displaying Inspection Specifications

Displaying Inspection Specifications

1. Call the transaction as follows:

Menu Path	$ \begin{array}{l} \textit{Logistics} \rightarrow \textit{Quality Management} \rightarrow \textit{Quality Inspection} \rightarrow \textit{Inspection Lot} \\ \rightarrow \textit{Processing} \rightarrow \textit{Display} \end{array} $
Transaction Code	QA03

2. Enter the following data:

Field	Data
Inspection lot number	The system proposes the number of the inspection lot you last created

- 3. Choose 2.
- 4. In the Material line, choose (Display material).

The quality management view of the material master record appears.

5. Choose Insp. setup.

In the inspection type overview, you can see detailed information about inspection type 01.

6. Double-click on inspection type 05.

You can see that an inspection with a material specification is selected for this inspection type.



For more information, use the F1 help.

- 7. To return to the display of the inspection lot, choose ✓ and then choose ℂ.
- 8. Choose the *Insp. specifications* tab page and then choose & (Display material specification).

The characteristic assignment screen of the material specification appears. You can see that two inspection characteristics (each linked to a class characteristic with the same name) have been entered.

- 9. In the line with the quantitative inspection characteristic *Threaded length*, choose (a) (Detail).

 On the details screen, you can see the tolerance range of 29.0 mm to 31.0 mm from the material specification.
- 10. In the line with the inspection characteristic *Threaded length*, choose (Display inspection characteristic).

The General data screen for the inspection characteristic appears.

11. Choose Quant. Data.

You can see the tolerance range of 29.5 mm to 30.5 mm for the inspection characteristic. The values from the material classification take precedence over these specifications, because the material specification contains a link to the class characteristic.

12. Choose ♥.

Displaying Inspection Specifications

13. Choose until the overview tree appears.

Batch Classification

Batch Classification

Purpose

You learn how to enter inspection characteristic values for a batch. The batch is then classified according to these inspection results.

Prerequisites

This process uses data from the material specification process.

Process Flow

You can find the data for this process under <a>! Page 214].

1. Entering Inspection Results [Page 215]

You enter the data for one quantitative and one qualitative characteristic and make the usage decision.

2. Displaying a Batch Classification [Page 217]

You display the batch that was inspected using the inspection lot. The values of the class characteristics stem from the quality inspection.

Result

The batch is classified.



Data Used During this Process

Data Used During this Process

Field	Data	Description
Material	QS8X30	Hexagonal head screws M8X30
Inspection lot origin	05	Other goods receipt
Plant	1000	Hamburg

Entering Inspection Results

Entering Inspection Results

29. Call up the transaction as follows:

Menu Path	Logistics o Quality Management o Quality Inspection o Worklist o Results Recording
Transaction Code	QE51N

30. Enter the following data:

Field	Data
Plant	1000
Insp. lot origin	05
Material	QS8X30

31. Choose 🕒.

The worklist for results recording appears in the left screen area. The inspection lot you created earlier is included in this worklist. You may have to further expand the inspection operation and the inspection characteristics for this lot. A table containing the inspection characteristic overview with entry fields appears in the right screen area.

- 32. Enter the Result 30.1 mm for the Threaded length quantitative inspection characteristic.
- 33. For the *Electroplating* qualitative inspection characteristic, choose the *Result* 'Code C Dull finish, yellowish brown' using the possible entries help.
- 34. Choose .

The inspection results are saved in the database. However, the batch is not yet classified.

35. In the worklist, double-click the line with the inspection lot number.

The screen on which you enter the usage decision appears.



You can now determine the batch, since you can now enter data in the *Batch* field and know the inspection results.

36. Using the possible entries help, enter the following data:

Field	Data
UD Code	Code A
Shelf life expiration date	Today's date +2 months

37. Choose Batch condition.

The system proposes the *Released* batch condition.

38. To adopt the proposal, choose ♥.

The system saves the usage decision and copies the inspection characteristic values into batch classification.



Entering Inspection Results

- 39. Choose .
- 40. Choose **Q** until the overview tree appears.

Displaying a Batch Classification

Displaying a Batch Classification

41. Call up the transaction as follows:

Menu Path	$Logistics ightarrow Quality \ Management ightarrow Quality \ Planning ightarrow Logistics \ Master \ Data ightarrow Batch ightarrow Display$
Transaction Code	MSC3N

42. Enter the following data:

Field	Data
Material	QS8X30
Batch	2
Plant	1000

43. Choose 🕰.

The tab page with basic data about the batch appears. You can see that the value in the *Shelf life expiration date* field is the same as the value you entered when you made the usage decision.

You can also see that the batch has been posted to *Unrestricted stock*.

44. Choose the Material data tab page.

This tab page contains the specifications from the material classification.

45. Choose the *Classification* tab page.

You can see that the batch is classified according to the results of the quality inspection.

46. Choose until the overview tree appears.

Source Inspection

Source Inspection

Purpose

In this process you perform a source inspection on goods you have ordered. You classify the prepared batch before goods receipt.

Process Flow

You can find the data for this process under [2] [Page 219].

1. Creating a Purchase Order [Page 220]

You order the goods and specify a delivery date.

2. Creating the Source Inspection Lot [Page 222]

You monitor the planned delivery dates and you create an inspection lot data record before the inbound delivery arrives.

3. Creating a Batch [Page 224]

The vendor prepares the goods. It is a new batch. You create a batch data record.

4. Performing the Source Inspection [Page 225]

You enter the inspection results and make the usage decision.

- 5. <u>Displaying the Batch Classification [Page 227]</u>
- 6. Posting a Goods Receipt [Page 228]

You post goods receipts for the delivered batch.

7. Displaying Stock [Page 229]

Result

A new batch has been classified according to the results of the source inspection. This new batch is stored in various storage locations.

Data Used During This Process

Data Used During This Process

Field	Data	Description
Vendor	1234	K.F.W. Berlin (German version)
	1235	K.F.W. London (English version)
Purchasing organization	1000	IDES Deutschland
Purchasing group	001	Dietl, B.
Company code	1000	IDES AG
Material	QS8X35	Hexagonal head screws M8X35
Plant	1000	Hamburg
Storage location	0001	Material storage
	0002	Finished goods warehouse

Creating a Purchase Order

Creating a Purchase Order

116. Call up the transaction as follows:

Menu Path	$Logistics o Materials \ Management o Purchasing o Purchase \ Order o Create o Vendor/Supplying \ Plant \ Known$
Transaction Code	ME21N

Documentation explaining the function appears on the left side of the screen.

117. To hide this documentation, choose **Z** *Close*.

The system now stores this setting for your user ID.

To activate the documentation at any time, choose **Help**.

118. Enter the following data:

Field	Data	Description
₩ field	Standard PO	
Vendor	1234	K.F.W. Berlin (German version)
	1235	K.F.W. London (English version)
Invoice date	Today's date (defaulted)	

- 119. Choose **2**.
- 120. If required, you can expand the area for the item header data, by choosing Theader.
- 121. On the Org. Data tab page, enter the following data:

Field	Data	Description
Purchasing org.	1000	IDES Deutschland
Purch. group	001	Dietl, B.
Company code	1000	IDES AG

- 122. Choose **②**.
- 123. If required, you can expand the item overview area, by choosing Titem overview.
- 124. Enter the following data:

Field	Data
Material	QS8X35
PO quantity	1000
C (Category of delivery date)	D (Day format)
Delivery date	Today's date +7 days (possible entries help)
Net price	0.10
Plant	1000

Creating a Purchase Order

125. Choose .



It is possible that the material already has an info record, which overwrites the amount you have entered. If required, correct the net price and choose .

- 126. If required, you can expand the item detail area, by choosing **1** *Item details*.
- 127. On the *Invoice* tab page, in the *Tax code* field, enter *V1 (Input tax Domestic 15%)*.
- 128. Choose ...



The system confirms the posting and assigns a purchase order number. Make a note of this number.

129. Choose until the overview tree appears.

Creating a Source Inspection Lot

Creating a Source Inspection Lot

17. Call up the transaction as follows:

Menu Path	$Logistics ightarrow Quality \ Management ightarrow Quality \ Inspection ightarrow Worklist ightarrow Inspection \ Lot \ Creation ightarrow Source \ Inspection ightarrow Trigger \ Manually.$
Transaction Code	Q107

18. Enter the following data:

Field	Data
Vendor	1234 (German)
	1235 (English)
Material	QS8X35
Plant	1000
Opening period (D)	30 (default)

19. Choose 🗣.

The system displays a worklist for the source inspections that have yet to be processed.

- 20. Select your purchasing document, then choose Insp. lot.
- 21. Choose .

The source inspection lot has been created, so the purchasing document disappears from the list.

22. Choose 6 twice.

Printing the Inspection Instruction

1. To display your inspection lot, call up the following transaction:

Menu Path	From the Quality Inspection node, choose Inspection Lot \rightarrow Processing \rightarrow Display
Transaction Code	QA03

You can identify the displayed inspection lot using the purchasing document number.

- 3. Make a note of the number of the inspection lot.
- 4. Choose \square *Inspection instruction*.
- 5. To quit the transaction, choose ...
- 6. Choose System → Own spool requests.

The system opens a second session and an overview of your spool requests is displayed.

7. Select script LV01 and choose &.

Creating a Source Inspection Lot

The system displays the inspection instruction.

8. Close the session.

Creating a Batch

Creating a Batch

23. Call up the transaction as follows:

Menu Path	From the Quality Management node, choose Quality Planning \rightarrow Logistics Master Data \rightarrow Batch \rightarrow Create	
Transaction Code	MSC1N	

24. Enter the following data:

Field	Data
Material	QS8X35
Batch	3
Plant	1000

25. Choose 🗳.

26. Enter the following data:

Field	Data
Date of production	Current date (possible entries help)
Shelf life expiration date	Today's date + 1 year
Next inspection	Today's date + 1 month

27. Choose .

The batch data record has been created. The batch has not been classified and there is no stock for this batch.

28. Choose 🙆.

Performing the Source Inspection

Performing the Source Inspection

15. Call up the transaction as follows:

Menu Path	From the <i>Quality Inspection</i> node, choose <i>Worklist</i> → <i>Results Recording</i>	
Transaction Code	QE51N	

16. On the *Material* tab page, enter the following data:

Field	Data
Plant	1000
Inspection lot origin	01
Material	QS8X35
Char. filter	1
Inspector	Your name
Start	Current date and time (possible entries help)

17. Choose .

The source inspection lot appears in the worklist. The system immediately makes the inspection characteristics available for processing in the right screen area.

Entering Results

1. In the *Threaded length* line, enter the following data:

Field	Data
Result	35.1

2. In the *Electroplating* line, enter the following data using the possible entries help:

Field	Data
Result	L Polished, yellowish brown

3. Choose .

The system accepts the inspection characteristic results and results entry is complete.

4. Choose .

You are still in the worklist for results recording.

Making the Usage Decision

1. Double-click on the line with your inspection lot in the worklist.

The Record Usage Decision screen appears.

- 2. In the *Batch* field, enter the value 3 and choose ...
- 3. In the UD-Code field, enter code A.
- 4. Choose .



Performing the Source Inspection

The system classifies the batch according to the inspection results and saves the usage decision.

- 5. Choose until the overview tree appears.
- 6. In the dialog box, choose Yes.

Displaying the Batch Classification

Displaying the Batch Classification

1. Call up the transaction as follows:

Menu Path	From the Quality Management node, choose Quality Planning \rightarrow Logistics Master Data \rightarrow Batch \rightarrow Display	
Transaction Code MSC3N		

2. Enter the following data:

Field	Data
Material	QS8X35
Batch	3
Plant	1000

- 3. Choose .
- 4. Choose the *Classification* tab page.

You can see that the batch was classified according to the inspection results.

Apart from the inspection characteristics, the following class characteristics and values also appear:

Field	Data
Quality score	100
Usage Decision	A (acceptance)

These are general class characteristics. Values can be assigned to them independent of a material specification.

5. Choose until the overview tree appears.

Posting the Goods Receipt

Posting the Goods Receipt

40. Call up the transaction as follows:

Menu Path	Logistics $ o$ Materials Management $ o$ Inventory Management $ o$ Goods Movement	
Transaction Code	MIGO	

41. Enter the following data:

Field	Data
Purchase order	Your purchase order number

42. Choose 📽.

The system copies the header data of the purchase order into the header data area of the goods receipt document.

The purchase order item is copied into the item overview.

- 43. To distribute the items amongst several storage locations, select the item and choose (Distribute quantity).
- 44. If the *Tip* dialog box appears, choose ♥.
- 45. In the dialog box, enter the following data:

Field	Data
Quantity in unit of entry (item line 1)	600
Storage location	0001
Batch	3
Quantity in unit of entry (item line 2)	400
Storage location	0002
Batch	3

- 46. Choose Adopt.
- 47. Select the indicator OK for your items in the item overview.



If the OK indicator is not active in the item overview, close the item detail area or set the *Item OK* indicator in the lower part of the item detail area.

- 48. Choose Post.
- 49. Choose until the overview tree appears.

Displaying Stock

Displaying Stock

15. Call up the transaction as follows:

Menu Path	From the <i>Inventory Management</i> node, choose $Environment \rightarrow Stock \rightarrow Stock Overview.$	
Transaction Code	MMBE	

16. Enter the following data:

Field	Data
Material	QS8X35
Plant	1000
Storage location	Empty
Batch	Empty
Display version	1

17. Choose .

You now see the stocks, subdivided by company code, plant, storage location, and batch.

18. Choose until the overview tree appears.

Recurring Inspection

Recurring Inspection

Purpose

A batch in storage is periodically inspected.

Prerequisites

You use the batch that you created in the Source Inspection process.

Process Flow

You can find the data for this process under [2] [Page 231].

1. Control of the Recurring Inspection [Page 232]

You define the period of time for the recurring inspection of a material and the precise time for the recurring inspection of a batch.

2. Triggering a Recurring Inspection [Page 234]

You monitor batch deadlines and create inspection lot data records for the recurring inspection for each batch and storage location. Until the inspection is completed, the batch is posted to *Restricted-use* stock.

3. <u>Inspection Lot Processing [Page 235]</u>

You enter the inspection results and make a usage decision for partial stock. Batch deadlines and classification are updated.

4. Long-Term Inspection [Page 237]

For another unit of partial stock, you enter the inspection results for the characteristics that are not subject to a long-term inspection and make the usage decision. The batch is classified according to the inspected characteristics. You then add the results for the characteristics that are subject to a long-term inspection and complete the inspection. The system reclassifies the batch, taking into account the results of the long-term inspection.

Result

The partial stocks of the batch were monitored and reclassified using a periodically recurring inspection.

Data Used During This Process

Data Used During This Process

Field	Data	Description
Material	QS8X35	Hexagonal head screws M8X35
Plant	1000	Hamburg

Control of the Recurring Inspection

Control of the Recurring Inspection

Controlling in the Material Master Record

1. Call up the transaction as follows:

Menu Path	$Logistics ightarrow Quality \ Management ightarrow Quality \ Planning ightarrow Logistics \ Master \ Data ightarrow Material ightarrow Display$	
Transaction Code	MM03	

2. Enter the following data:

Field	Data
Material	QS8X35

3. Choose 🛂.

The system asks you to select a view.

4. Select the Quality Management view and choose ♥.

The system requires you to enter an organizational level.

5. Enter the following data:

Field	Data
Plant	1000

Choose <

The *Quality Management* view appears and you can see that the inspection interval is set to 90 days. For more information use the F1 help.

7. Choose until the overview tree appears.

Controlling in the Batch Data Record

1. Call up the transaction as follows:

Menu Path	From the <i>Logistics Master Data</i> node, choose $\textit{Batch} \rightarrow \textit{Change}$
Transaction Code	MSC2N

2. Enter the following data:

Field	Data
Material	QS8X35
Batch	3
Plant	1000

3. Choose 🕰.

The Basic data 1 tab page for the batch appears.

4. Check the following entries and add any that are missing:

Control of the Recurring Inspection

Field	Data
Date of production	Today's date -1 month (possible entries help)
Shelf life expiration date	Today's date + 1 year
Next inspection	Today's date + 1 month

5. Choose .

The batch data record has been modified.

6. Choose until the overview tree appears.

Triggering a Recurring Inspection

Triggering a Recurring Inspection

28. Call up the transaction as follows:

Menu Path	From the Quality Management node, choose Quality Inspection \rightarrow Worklist \rightarrow Inspection Lot Creation \rightarrow Deadline Monitoring \rightarrow Trigger Manually
Transaction Code	QA07

29. Enter the following data:

Field	Data
Material	QS8X35
Plant	1000
Batch	3

30. In the *Additional goods movement at time of recurring inspection* screen area, enter the following data:

Field	Data
Initial run in days	99
Block batch at lot creation	Set

31. Choose and then choose Execute.

The system now displays the log of the steps that were performed in the background during the process.

32. Expand the log.

You can see that two inspection lots (one per storage location) were created and that the batch was posted to *Restricted-use* stock.



Instead of blocking the batch at lot creation, you could also have marked the partial stocks as being *In quality inspection*.

Instead of performing stock changes at inspection lot creation, you could also have made stock changes depend on the fact that the deadline for the recurring inspection has already been exceeded.

33. Choose until the overview tree appears.

Inspection Lot Processing

47. Call up the transaction as follows:

Menu Path	From the <i>Quality Inspection</i> node, choose <i>Worklist</i> \rightarrow <i>Variants for Results Recording</i> \rightarrow <i>For All Inspection Lots</i>	
Transaction Code	QE72	

48. Enter the following data:

Field	Data
Plant	1000
Inspection lot origin	09
Material	QS8X35

49. Choose 🕒.

The worklist for results recording appears containing both of your previously created inspection lots.

50. Choose and then choose .

An overview of the inspection lots and inspection characteristics appears in matrix form, with the inspection lots on the horizontal axis and the inspection characteristics on the vertical axis.



The inspection characteristic *Electroplating* is a long-term characteristic which means that its values are determined using a long-term inspection. You therefore only enter the results for the inspection characteristic *threaded length* and make usage decisions for the inspection lots in advance. You only enter results for the long-term characteristic after the long-term inspection has been completed and then you post the inspection completion.

51. Enter the following data for the inspection characteristic *threaded length*:

Field	Data
Result (first inspection lot)	34.9
Result (second inspection lot)	35.1

52. Choose and then choose

The system uses icons to show that the values you entered have been accepted.

- 53. Choose until the inspection lot overview appears.
- 54. Select the first inspection lot and choose *Usage decision (UD)*.

The system warns you that the long-term characteristic *Electroplating* is still open.

- 55. Choose Batch status.
- 56. Change the batch status from *restricted-use* stock to *unrestricted-use* stock and choose ♥.



Inspection Lot Processing

57. Enter the following data:

Field	Data
UD Code	A2 (possible entries help)

58. Choose .

The usage decision is saved to the database. The batch is classified.

- 59. Choose until the inspection lot overview appears.
- 60. Select the second inspection lot and choose *Usage decision*.
- 61. Repeat steps 9 to 12 for the second inspection lot.
- 62. Choose until the overview tree appears.

Long-Term Inspection

Long-Term Inspection

Entering Results

63. Call up the transaction as follows:

Menu Path	From the Variants for Results Recording node, choose For All Inspection lots	
Transaction Code	QE72	

64. Enter the following data:

Field	Data
Plant	1000
Insp. lot origin	09
Material QS8X	
With long-term inspections	set

65. Choose 🕒

The worklist for results recording appears containing both of your previously processed inspection lots.

- 66. Choose and then choose .
- 67. In the dialog box, choose Yes.

An overview of the inspection lots and the long-term characteristic *Electroplating* appears in matrix form, with the inspection lots on the horizontal axis and the long-term characteristic *Electroplating* on the vertical axis.

68. Enter the following data for the *Electroplating* characteristic:

Field	Data
Result (first inspection characteristic)	G bright, yellowish brown (possible entries help)
Result (second inspection characteristic)	L Polished, yellowish brown (possible entries help)

69. Choose and then choose

The system uses icons to show that the values you have entered have been accepted.

- 70. Choose C until the inspection lot overview appears.
- 71. Select the first inspection lot and choose Usage decision (UD).

You can change the usage decision data on the basis of the results for the long-term inspection.

- 72. Change the quality score of the inspection lot from 100 to 95.
- 73. Choose Complete inspection.
- 74. Choose .

The usage decision is saved to the database. The batch is reclassified.

Display Batch Values

- 75. Choose until the inspection lot overview appears.
- 76. Select the second inspection lot and choose *Usage decision (UD)*.
- 77. Change the quality score of the inspection lot from 100 to 90.
- 78. Choose Complete inspection.
- 79. Choose .

The usage decision is saved to the database and the batch is reclassified.

80. Choose until the overview tree appears.

Display Batch Values

34. Call up the transaction as follows:

Menu Path	$Logistics ightarrow Quality \ Management ightarrow Quality \ Planning ightarrow Logistics \ Master \ Data ightarrow Batch ightarrow Display$	
Transaction Code	MSC3N	

35. Enter the following data:

Field	Data
Material	QS8X35
Batch	3

36. Choose 🕝.

The Basic data 1 tab page for the batch appears.

37. Choose the *Classification* tab page.

The class characteristics of the batch have the values determined for the last inspection lot.

38. Choose until the overview tree appears.

Quality Certificates

Quality Certificates

Purpose

You create a quality certificate to certify the batch values.

Prerequisites

The data required for steps 1 and 2 of the process has already been created. Step 3 of the process uses data from the source inspection or recurring inspection processes.

Process Flow

1. Creating a Certificate [Page 240]

You print a certificate, which certifies the values used to classify a batch.

2. Creating a Certificate Profile [Page 241]

You create your own certificate profile and assign it to the material.

3. Creating a Certificate According to own Profile [Page 244]

You print a certificate according to your own profile.

Creating a Certificate

Creating a Certificate

81. Call the transaction as follows:

Menu Path	Logistics $ o$ Quality Management $ o$ Quality Certificates $ o$ Outgoing $ o$ Certificate Creation $ o$ For Batch	
Transaction Code	QC22	

82. Enter the following data:

Field	Data
Material	QS8X30
Batch	1
Sending plant	1000

- 83. Choose Choose recipient.
- 84. In the dialog box, choose *User-definable address* and choose ♥.
- 85. Enter your own address and choose ♥.
- 86. Choose 🗣.
- 87. In the dialog box, enter the following data:

Field	Data
Output device	LP01

88. Choose Print preview.

The system calls up the quality certificate in the print preview. The certificate has a letter header, information about the material and the batch, and the batch characteristics *Threaded length* and *Electroplating* with values from batch classification.

89. Choose until the overview tree appears.

Cert. Profile

Cert. Profile

Use

In this step of the process, you copy the certificate profile used in the previous process and change the data.

Procedure

Creation of a Certificate Profile

90. Call the transaction as follows:

Menu Path	Logistics o Quality Management o Quality Certificates o Outgoing o Certificate Profile o Create	
Transaction Code	QC01	

91. Enter the following data:

Field	Data
Cert. Profile	QS02
CertificateType	E31B (possible entries help)

92. In the Copy model screen area, enter the following data:

Field	Data
Cert. profile	QS01
CertificateType	E31B (possible entries help)
Version	1 (possible entries help)

93. Choose 🛂.

The system copies the data from the copy model.



If the certificate profile QS02 has already been created, choose a variance key, for example, QS03... .

In the Assigned layout set screen area, you can see that the form QM_QCERT_01 is used for this certificate profile. This form determines the layout of the quality certificate.

- 94. To define the content of the certificate, choose **Characteristics.
- 95. Select item 10 Threaded length and choose 🔜
- 96. In the Insp. spec. origin field, use the possible entries help to select Batch specification.

The tolerance range for threaded length is output on the certificate.

For the electroplating characteristic, you do not want to include the value from batch classification. You want the result of the last quality inspection to appear on the certificate.

Cert. Profile

- 97. Choose ♥.
- 98. Select item 20 *Electroplating* and choose (*Delete line*).
- 99. Enter the following data instead of the deleted item:

Field	Data
No.	20
Category	Master inspection characteristic (possible entries help)
Plant	1000
Master insp. charac.	Q-0020

100. Choose 🖾.

The system proposes suitable values for the remaining fields on the basis of the information you entered.



You can view these proposals individually by choosing . Return to the characteristic data screen.

101. In the next line enter the following data:

Field	Data
No.	30
Category	Class characteristic
Characteristic name	LOBM_UDCODE

102. Choose 🖾.

The system proposes suitable values for the remaining fields on the basis of the information you entered.

The usage decision in the batch classification from the last quality inspection will now appear in the certificate.

- 103. Select item 30 and choose Q.
- 104. In the Short text origin field, use the possible entries help to select Certif. profile char.
- 105. In the texts screen area, choose *Further texts*.
- 106. Enter the following data:

Field	Data
Language	EN
Short text	Usage decision

- 107. Choose **✓** until the *Characteristic Data* screen appears.
- 108. Choose (Release profile).
- 109. Choose .

Cert. Profile

110. Choose until the overview tree appears.

Assignment of the Certificate Profile

1. Call the transaction as follows:

Menu Path	$Logistics ightarrow Quality \ Management ightarrow Quality \ Certificates ightarrow Outgoing ightarrow Certificate \ Profile ightarrow Assignment ightarrow Create$	
Transaction Code	QC15	

- 2. Choose *Material*, and then choose ♥.
- 3. Enter the following data:

Field	Data
Material	QS8X35
Profile	QS02

4. Choose .

The system saves the assignment. The certificate profile can now be used for the material.

Creating a Certificate According to Own Profile

Creating a Certificate According to Own Profile

111. Call the transaction as follows:

Menu Path	$Logistics ightarrow Quality \ Management ightarrow Quality \ Certificates ightarrow Outgoing ightarrow Certificate \ Creation ightarrow For \ Batch$
Transaction Code	QC22

112. Enter the following data:

Field	Data
Material	QS8X35
Batch	3
Sending plant	1000

- 113. Choose Choose recipient.
- 114. In the dialog box, choose *User-definable address* and choose **√**.
- 115. Enter your own address and choose ♥.
- 116. Choose .
- 117. In the dialog box, enter the following data:

Field	Data
Output device	LP01

118. Choose @ Print preview.

The system calls up the quality certificate in the print preview. The certificate contains the letter header, information about the material and the batch, and the batch characteristics *Threaded length*, *Electroplating*, and *Usage decision*.

The texts of the characteristics originate in the class characteristic, the master inspection characteristic, and the certificate profile.

The values of the characteristics come from batch classification and inspection results.

119. Choose until the overview tree appears.

Quality Management in Sales and Distribution

Purpose

You learn about the functions of the R/3 application component QM when integrated with Sales and Distribution.

Process Flow

You can find the data for this process under <a>! Page <a>[Page <a>[Page <a>[Page].

1. Control Functions in Quality Management [Page 248]

You can define quality documents that are valid for a certain supply relationship (for example, quality assurance agreements and terms of delivery) with reference to specific materials and customers in the system. You can also define with reference to these materials and customers whether a quality inspection should be performed for a delivery.

2. Creating a Sales Order [Page 249]

You create a sales order for a delivery of samples. You can take the appropriate precautions to fulfill the quality documents valid for the supply relationship and additional quality requirements for the customer.

3. Picking Outbound Deliveries [Page 251]

You select the batches from the warehouse stock that meet the quality requirement. Every batch has a partial lot that must be inspected again before goods issue.

4. Performing Quality Inspections [Page 253]

The specifications for batch selection also apply to the quality inspection. You enter the inspection results and make the usage decisions for the partial lots.

5. Creating Quality Certificates [Page 255]

You create a quality certificate for a delivery and thereby confirm the results of the quality inspection.

6. Posting a Goods Issue [Page 256]

After a successful quality inspection, the goods issue can be posted and the material delivered.

7. Creating a Billing Document and Displaying an Invoice [Page 257]

You create an invoice and display its print preview.

8. Posting Customer Returns to Returns Stock [Page 258]

The customer chooses one of the samples and returns the other. You post the material to returns stock.

9. Performing a Visual Inspection [Page 259]

You visually inspect the returned goods and return them to the warehouse (<u>Making a Transfer Posting of Returns to Unrestricted-Use Stock [Page 260]</u>).

Quality Management in Sales and Distribution

Data for This Example

Data for This Example

Field	Data	Description
Customer	1235	K.F.W. London
Sales organization	1000	Frankfurt, Germany
Material	QS8X30	Hexagonal head screw M8X30
Distribution channel	10	Final customer sales
Division	00	Cross-division
Delivering plant	1000	Hamburg

Control Functions in Quality Management

Control Functions in Quality Management

1. Call up the transaction as follows:

Menu Path	$Logistics ightarrow Quality \ Management ightarrow Quality \ Planning ightarrow Logistics \ Master \ Data ightarrow Quality \ Info \ Record: \ SD ightarrow Display$	
Transaction Code	QV53	

2. Enter the following data:

Field	Data
Customer	1235
Sales organization	1000

3. Choose 🖾.

The system displays a list of all material-related info records for this customer and sales organization.

4. Select the line with material QS8X30 and choose Info record details.

In the dialog box, you can see that:

- a. A quality inspection must be performed before every delivery
- b. A special type of quality inspection is planned for sample deliveries (delivery category *M*)
- c. Quality documents are valid for this supply relationship
- d. A text has been defined
- 5. Choose Documents.

You can see the:

- a. Quality assurance agreement Sample delivery with insp. certificate
- b. Term of delivery Deviation only with written permission
- 6. Place your cursor on one of the lines and choose (*Display*).
- 7. To display the detailed contents of this document, choose (Display long text) on the tab page Document data.
- 8. Choose ♀ and then ✔ to return to the dialog box *Display QM Control Data in SD.*
- 9. In the screen area Additional information, choose \mathbb{Z} (Long txt).

You can see that a warning has been entered.

10. Choose and until the overview tree appears.

Creating a Sales Order

Creating a Sales Order

1. Call up the transaction as follows:

Menu Path	Logistics ightarrow Sales ightarrow Sales ightarrow Order ightarrow Create
Transaction Code	VA01

2. Enter the following data:

Field	Data
Order Type	OR (standard order)
Sales organization	1000
Distribution channel	10
Division	00

3. Choose .

4. Enter the following data:

Field	Data
Sold-to party	1235
Purch. order no.	0
Deliver.plant	1000

5. Choose .

Using the master data specifications and system settings, the system proposes entries for some of the other fields, for example, the requested delivery date.

In the *Delivery block* field, you can enter a block key that, for example, makes the outbound delivery dependent on the agreement of the Quality Management department. Do not make an entry in this field.

- 6. Choose $Goto \rightarrow Header \rightarrow Sales$.
- 7. Enter the following data on the Sales tab page:

Field	Data
Usage	Sample (possible entries help)

8. To return to the item overview, choose .

9. Enter the following data in the line for the first item:

Field	Data
Material	QS8X30
Order quantity	20

10. Choose .

11. Select your item and choose 4 (Display item details).

Creating a Sales Order

- 12. Choose the *Texts* tab page.
- 13. In the screen area *Txt ty.*, double-click on *Purchase Order Text*.
- 14. In the screen area on the right, enter the following text:

 The screw should not be longer than 30mm (nominal length).
- 15. Choose 🕒.
- 16. Choose \blacksquare and make a note of the number for the standard order.
- 17. Choose C until the overview tree appears.

In the Exit Order Processing dialog box choose No.

Picking Outbound Deliveries

Picking Outbound Deliveries

1. Call up the transaction as follows:

Menu Path	From the Sales and Distribution node, choose Shipping and Transportation \rightarrow Outbound Delivery \rightarrow Create \rightarrow Single Document \rightarrow With Reference to Sales Order
Transaction Code	VL01N

2. Enter the following data:

Field	Data
Shipping point	1000
Selection date	Today's date + 1 month (possible entries help)
Order number	Number of standard order

3. Choose .

The system performs batch determination in the background.

The Delivery Create: Overview screen appears.

- 4. To allow the customer to access samples from several suitable batches, select the item that was copied from the order, and choose Batch split item.
- 5. On the Batch split tab page, place your cursor in the item section and choose (New) Batch determin.

Automatic batch determination is set so that the system first proposes those batches for selection that are available in the warehouse.

- 6. Choose Selection criteria and then (Create).
- 7. To confirm possible information messages, choose ♥.

The system proposes all characteristics according to which the batches are classified.

8. Enter the following data in accordance to the purchase order text:

Field	Data
Threaded length	29.0 – 30.0 mm

9. Choose 😂.

The system only proposes the two batches for selection that meet the selection criteria.

- 10. Enter the quantity 10 in the field *Split quantity* for every batch proposed.
- 11. Choose Copy.

The system created a split item with delivery quantity 10 for every batch selected and the corresponding partial lots for the quality inspection.

- 12. Select the split items and choose (Batch split item details).
- 13. Make a note of the numbers of the inspection lot and partial lots that are displayed in the screen area *Quality Inspection*.

Picking Outbound Deliveries

14. Choose Ctwice.

The Delivery Create: Overview screen appears.

- 15. Choose the *Picking* tab page.
- 16. Select your item and choose [4] (Mult. batch indicator) in the column Mult. batch indicator.

You can see that the delivery item has been split into two sub-items.

17. Enter the following data in both lines for the sub-items:

Field	Data
Picking quantity	10

- 18. Choose and make a note of the delivery number.
- 19. Choose C until the overview tree appears.

Performing Quality Inspections

Performing Quality Inspections

1. Call up the transaction as follows:

Menu Path	From the Quality Management node, choose Quality Inspection \rightarrow Worklist \rightarrow Results Recording.
Transaction Code	QE51N

2. Enter the following data:

Field	Data
Plant	1000
Insp. lot origin	10
Material	QS8X30
Inspector	Your name

3. Choose .

The Results Recording Worklist screen appears.

In the left of the screen, a worklist appears with all the inspection lots and partial lots for which no usage decisions have been made.

4. Choose

to hide any documentation that may have appeared.

■ The second of the se

Results Recording

1. In the screen area on the right, enter the following data for the first partial lot (batch A):

Inspection characteristic Threaded length	
Field	Data
Result	29.7
Inspection characteristic Electroplating	
Field	Data
Result	C Dull Finish, Yellowish Brown (possible entries help)

- 2. To complete results recording for the first partial lot, choose $\ensuremath{\mathfrak{Q}}$ and then $\ensuremath{\blacksquare}$.
- 3. Expand the second partial lot in the worklist and double-click on the line *Inspection According to Specification*.
- 4. Enter the following data for the second partial lot (batch C):

Inspection characteristic Threaded length	
Field	Data
Result	29.9
Inspection characteristic Electroplating	

Performing Quality Inspections

Field	Data
Result	G Bright, Yellowish Brown (possible entries help)

5. To complete results recording for the second partial lot, choose $\ensuremath{\mathfrak{Q}}$ and $\ensuremath{\blacksquare}$.

Usage Decision

- 1. Double-click on the inspection lot line in the worklist.
 - The Record Usage Decision: Characteristic Overview screen appears.
- 2. Choose Partial lots...
- 3. Select both partial lots on the *Record Usage Decision: Characteristic Overview* screen and choose Find UD code.
- 4. From the selection list, choose the usage decision *A Acceptance Without Further Action* for both partial lots and then choose ♥.
- 5. To make the same usage decision for the complete lot, choose *A Acceptance Without Further Action* (possible entries help) in the *UD code* field.
- 6. To save the usage decisions for both partial lots and the complete lot, choose \blacksquare .
- 7. Choose until the overview tree appears.
- 8. In the dialog box, choose Yes.

Creating Quality Certificates

Creating Quality Certificates

1. Call up the transaction as follows:

Menu Path	From the Quality Management node, choose Quality Certificates \rightarrow Outgoing \rightarrow Certificate Creation \rightarrow For Delivery.
Transaction Code	QC20

2. Enter the following data:

Field	Data
Output type	LQCA
Processing mode	1 (or 2 if a repeat print)
Delivery	Your delivery number

3. Choose 🗣.

The Output from Deliveries screen appears.

- 4. Select the output for your delivery and choose (*Print preview*).
- 5. Choose Print preview.

The certificate is displayed. It contains the batch values that were determined during the outgoing inspection.

6. Choose until the overview tree appears.



If you also want to display the delivery note, repeat this process and choose output type LD00 (instead of LQCA).

Posting the Goods Issue

Posting the Goods Issue

1. Call up the transaction as follows:

Menu Path	From the Shipping and Transportation node, choose Outbound Delivery \to Change \to Single Document
Transaction Code	VL02N

2. Enter the following data:

Field	Data
Outbound delivery	Your delivery number

- 3. Choose 🖾.
- 4. Choose Post goods issue.
- 5. Choose until the overview tree appears.

Creating a Billing Document and Displaying an Invoice

Creating a Billing Document and Displaying an Invoice

1. Call up the transaction as follows:

Menu Path	From the Sales and Distribution node, choose Billing \rightarrow Billing Document \rightarrow Create
Transaction Code	VF01

2. Enter the following data:

Field	Data
Document	Your delivery number

- 3. Choose 🖾.
- 4. Choose \blacksquare and make a note of the document number.
- 5. Choose until the overview tree appears.
- 6. To display the invoice, call up the transaction as follows:

Menu Path	From the Billing Document node, choose Display
Transaction Code	VF03

7. Enter the following data:

Field	Data	
Billing document	Your billing document number	

8. Choose Billing document \rightarrow Issue output to \rightarrow Screen.

The system proposes the output type RD00 and printer LP01 in two subsequent dialog boxes.

9. Choose **✓** Execute.

The print preview of the invoice is displayed.

Since it is only a sample delivery of little value, you decide not to send the invoice for the moment.

10. Choose until the overview tree appears.

Posting Customer Returns to Returns Stock

Posting Customer Returns to Returns Stock

1. Call up the transaction as follows:

Menu Path	$Logistics ightarrow Materials \ Management ightarrow Inventory \ Management ightarrow Goods \ Movement ightarrow Goods \ Receipt ightarrow Other$
Transaction Code	MB1C

2. Enter the following data:

Field	Data	
Movement type	451 (Returns from customer)	
Plant	1000	
Storage loc.	0002	

- 3. Choose .
- 4. Enter the following data:

Field	Data
Customer	1235
Material	QS8X30
Quantity	10
Batch	С

- 5. Choose .
- 6. Choose to skip any warning messages that may appear.
- 7. Choose 🗎 and make a note of the number of the posting document.
- 8. Choose until the overview tree appears.

You can use the stock overview (<u>Displaying Stock [Page 37]</u>) to check that the returned goods are now in returns stock.

Performing a Visual Inspection

Performing a Visual Inspection

1. Call up the transaction as follows:

Menu Path	Logistics → Quality Management → Quality Inspection → Worklist → Inspection Lot Completion → Inspection Lots Without Usage Decision
Transaction Code	QVM3

2. Enter the following data:

Field	Data
Plant	1000
Insp.lot origin	06
Material	QS8X30

3. Choose .

A list appears that contains inspection lots for which no usage decision has been made.

- 4. Select the newest inspection lot and choose & Inspection lot.
- 5. To check that the inspection lot is from the return delivery posting, check the material document number.
- 6. To display the inspection plan that is valid for the inspection lot, choose the tab page *Insp.* specifications and choose & (Display TaskList).

If required, you can also print an inspection instruction when you display the inspection lot

- 7. Choose until the list of inspection lots appears.
- 8. If necessary, select the inspection lot again and choose (Complete inspection).

The Record Usage Decision: Defect Overview screen appears.

You have performed a visual inspection and have not determined any defects.

- 9. In the *UD-Code* field, use the possible entries help to enter the UD code A.
- 10. Choose .

The system displays the follow-up action MANUAL (Trigger follow-up actions manually).



Normally, if you accept the goods, the follow-up action *Transfer posting from returns stock to unrestricted-use stock* is automatically triggered.

11. Choose .

12. Choose until the overview tree appears.

Making a Transfer Posting of Returns to Unrestricted-Use Stock

Making a Transfer Posting of Returns to Unrestricted-Use Stock

1. Call up the transaction as follows:

Menu Path	$Logistics ightarrow \mathit{Materials}\ \mathit{Management} ightarrow \mathit{Inventory}\ \mathit{Management} ightarrow \mathit{Goods}\ \mathit{Movement} ightarrow \mathit{Transfer}\ \mathit{Posting}$
Transaction Code	MB1B

2. Enter the following data:

Field	Data
Movement type	453 (Transfer posting to own stock from returns from customer)
Plant	1000
Storage location	0002

- 3. Choose 🕰.
- 4. Enter the following data:

Field	Data
Material	QS8X30
Quantity	10
Batch	С

- 5. Choose 🖾
- 6. Choose to skip any warning messages that may appear.
- 7. Choose 🖽.

You can use the stock overview to check that the returned goods are now in unrestricted-use stock. Call up a second session for this.

Sample Management

Sample Management

Sample Management for a Subsequent Inspection [Page 262]
Sample Management at Goods Receipt Inspection [Page 270]

Sample Management for a Subsequent Inspection

Sample Management for a Subsequent Inspection

Purpose

A subsequent inspection for a material takes place in quality control. You manually create an inspection lot. Several samples are taken. A sample-drawing procedure determines the quantity, type, and scope of the samples. You can determine whether the drawing of the sample must be confirmed, and if it must be released.

Each individual sample is numbered and managed using its own data record. The results of the quality inspection are entered with reference to the sample number and linked to the sample.

You can find more information about this process under [1] [Page 263].

Process Flow

You can find the data for this process under [Page 264].

- 1. Creating an Inspection Lot [Page 265]
- 2. <u>Displaying an Inspection Lot with Physical Samples [Page 266]</u>
- 3. Recording Results for the Physical Sample [Page 267]
- 4. Making the Usage Decision for the Inspection Lot [Page 269]

Additional Process Information

Additional Process Information

You manually create an inspection lot for the subsequent inspection of material 300-130 in this process. The system automatically creates a sample-drawing instruction with several physical samples. The assigned sample-drawing procedure supports sample determination according to the number of containers using a sampling scheme. The number of primary samples to be drawn increases depending on the number of containers specified in the inspection lot. Mixed samples are not planned. The samples also do not need to be released manually. The system automatically sets the status.

You enter the results in the inspection lot using the sample number. You can then make the usage decision for the inspection lot.

Data Used During This Process

Data Used During This Process

Field	Data	Description
Material	300-130	Pyridene
Plant	1100	Berlin
Storage location	0001	Outbound delivery warehouse
Vendor	1000	Blacks AG
Purch. organization.	1000	Purchasing organization
Number of containers	6	CAN
Work centers	L001	Laboratory, chemical analysis
	L002	Laboratory, quality control
Master inspection characteristic	8-110	Color
	9-115	Purity
	9-116	Boiling point
Sampling procedure	SMPL0001	For samples (quantitative)
Sampling procedure	SMPL0002	For samples (qualitative)
Sampling scheme in the sample-drawing procedure	SL1	For samples (without valuation parameters)
Sample-drawing procedure	S1000	Without confirmation requirement

Creating an Inspection Lot

Creating an Inspection Lot

1. Call up the transaction as follows:

Menu Path	$ \begin{array}{l} \textit{Logistics} \rightarrow \textit{Quality Management} \rightarrow \textit{Quality Inspection} \rightarrow \textit{Inspection Lot} \\ \rightarrow \textit{Editing} \rightarrow \textit{Create} \end{array} $
Transaction Code	QA01

2. Enter the following data:

Field	Data	Description
Material	300-130	Pyridene
Plant	1100	Berlin
Inspection lot origin	01	Goods receipt

- 3. Choose 🛂.
- 4. Enter the following data:

Field	Data	Description
Batch	C3	Pyridene
Insp.lot qty	120	Kg
No. containers (1st field)	6	
No. containers (2nd field)	CAN	CAN
Vendor	1000	C.E.B. Berlin
Purchasing org.	1000	IDES Deutschland

5. Choose 📽.

The system issues a message to confirm the transaction.



To print the sample-drawing instruction, choose \(\begin{align*} \begin{align*} Sample drawing instruction. \end{align*} \)

6. Choose 🖳

The system confirms the posting and assigns a number.

- 7. Make a note of this number.
- 8. Choose C.

Displaying an Inspection Lot with Physical Samples

Displaying an Inspection Lot with Physical Samples

1. Call up the transaction as follows:

Menu Path	From the Quality Management node, choose Quality Inspection \rightarrow Inspection Lot \rightarrow Editing \rightarrow Display
Transaction Code	QA03

2. Enter the following data:

Field	Data
Inspection lot number	Inspection lot number (default)



If required, you can search for the number using the possible entries help.

- 3. Choose
- 4. To display the lot origin, inspection quantities, and inspection specifications data, choose the relevant tab pages.
- 5. Choose & Samples.

In the dialog box, you see the numbers, status (in this case, status *REL*., since there is no confirmation requirement in the sample-drawing procedure), and the size of each sample.

6. Choose one of the sample numbers for your material.

The system displays the corresponding physical-sample record.

In the physical-sample record, you can see data for the physical-sample drawing, the sample detail information (sample type, container type, sample quantity, valid sample-drawing procedure), the inspection lot data, and the storage data for the physical sample (not available at this point).

- 7. Choose until you return to the Sample Overview for Physical-Sample Drawing dialog box.
- 8. Choose 3.
- 9. To display the sample-drawing instruction, choose $System \rightarrow Services \rightarrow Output \ controller$. The system generates a new session.
- 10. Choose .
- 11. Select the number of your spool request and choose &.

You can now see the sample-drawing instruction.

- 12. Close the second session.
- 13. Choose until the overview tree appears.

Recording Results for the Physical Sample

Recording Results for the Physical Sample

1. Call up the transaction as follows:

Menu Path	From the Quality Inspection node, choose Worklist \rightarrow Results Recording
Transaction Code	QE51N

This takes you to the results recording screen. There is documentation explaining the function on the left side of the screen.

2. To hide this documentation, choose **III** Close.



The system now stores this setting for your user ID.

To display the documentation at any time, choose 11.

- 3. Choose the Physical sample tab page in the right screen area.
- 4. Enter the following data:

Field	Data
Only lots for physical samples	Select

5. Choose 🕒.

On the left side of the screen, you can now see an overview tree for the inspection lots, inspection operations, and physical samples.

The system immediately copies the characteristic overview of the first physical sample into the work area on the right side of the screen.

- 6. If necessary, place your cursor on the XXXXX 300-130 1000 line (XXXX is the number of your inspection lot), and choose . Then click on the line with the first physical sample.
- 7. On the right screen area, enter the following data:

Field	Data	Description
Purity - Result	99	%
Boiling point - Result	117	°C

- 8. Choose
- 9. Choose
- 10. In the dialog box, choose ♥.

The system now valuates and closes the characteristics.

- 11. To call up the characteristic overview of the second sample, click on the sample number in the structure tree.
- 12. Repeat steps 7 to 10 for the second sample.

Recording Results for the Physical Sample



The system automatically closes the "Purity" and "Boiling point" characteristics. Operation 0010 is complete.

- 13. To open the structure completely, select 0020 Color test... in the structure tree and choose
- 14. To call up the color test for your first sample, double-click on the characteristic *0010 Color* in the structure tree.
- 15. If a dialog box appears, choose No.
- 16. In the right screen area, enter the following data:

Field	Data	Description
Code	40	Cloudy



For qualitative characteristics, use the possible entries help to select the code you require from the catalog. Direct entry is not possible.

17. Choose 🖾.

The characteristic is now closed.

- 18. Choose 🖽.
- 19. In the dialog box, choose ♥.
- 20. Repeat steps 13 to 16 for the second physical sample.
- 21. Remain on this screen.

Making the Usage Decision for the Inspection Lot

Making the Usage Decision for the Inspection Lot

- 1. In the overview tree of the *Results recording* worklist, double-click on the line with your inspection lot number.
- 2. In the *UD code* field, use the possible entries help to select *Code A Accept (without further action)*.
- 3. Choose .
- 4. Choose .
- 5. If a dialog box appears, choose Yes.

The system confirms that the usage decision has been saved.

- 6. Choose until the overview tree appears.
- 7. In the dialog box, choose Yes.

Sample Management at Goods Receipt Inspection

Sample Management at Goods Receipt Inspection

Purpose

A material has been purchased and passes through quality control. Several samples are taken. This can be done either manually or automatically. A sample-drawing procedure determines the quantity, type, and scope of the samples. You can also determine whether or not the sampling has to be confirmed.

Each individual sample is numbered and administered using its own data record. The results of the quality inspection are entered with reference to the sample number and thereby linked to the sample.

You can find more information about this process under <a> [Page 271].

Process Flow

You can find the data for this process under <a>! Page 273].

- 1. Goods Receipt for P.O. and Preparation of Quality Controls [Page 274]
- 2. Display of Physical Samples and Specifications in Inspection Lot [Page 284]
- 3. Printing and Displaying Sample-Drawing Instructions [Page 285]
- 4. Displaying a Physical-Sample Drawing and Releasing Samples [Page 286]
- 5. Entering Results of the Pooled Sample (Work Center Worklist) [Page 287]
- 6. Making the Usage Decision for the Inspection Lot [Page 289]
- 7. Determining the Storage Location of the Physical Samples [Page 290]

Additional Process Information

Additional Process Information

A goods receipt for material 300-130 is posted in this example. A goods receipt inspection is planned in QM. The system automatically creates an inspection lot with several physical samples. The assigned sample-drawing procedure supports sample determination according to the number of containers with 2 primary samples and a pooled sample. There is a confirmation requirement for the withdrawal of samples (you have to release the generated samples before you can record results for the samples).

After the samples have been released, the pooled sample is distributed between laboratories 001 and 002 and is prepared for inspection. A worklist for the work center is created to record the results for the pooled sample. At results recording, all physical samples are completed and valuated. You can then make the usage decision for the inspection lot.

In addition to the standard settings, the following settings are also maintained in Customizing.

1. Call up the transaction as follows:

Menu Path	$Tools \rightarrow AcceleratedSAP \rightarrow Customizing \rightarrow Edit Project$
Transaction Code	SPRO

- 2. Choose & SAP Reference IMG.
- 3. From the Quality Management node, choose Basic Settings.
- 4. Choose 🏵 for Maintain Settings at Plant Level.
- 5. Select plant 1100 and choose 3.
- 6. Choose until the Customizing: Execute Project screen appears. From the Quality Management node, choose Quality Inspection → Open Inspection Lot.
- 7. Choose in the Maintain Inspection Types line.
- 8. Select inspection type 01 and choose 3.
- 9. Choose until the Customizing: Execute Project screen appears. From the Quality Management node, choose Quality Inspection → Sample Management.
- 10. Choose bin the Define Physical-Sample Locations line.
- 11. If necessary, enter 1100 in the *Plant* field in the dialog box and choose
 ✓.

 Storage locations *PS005* and *PS010* have been defined for the plant 1100.
- 12. Choose 😋
- 13. Choose (a) in the Define Physical-Sample Container line.

The container type is R00001.

- 14. Choose until the *Customizing: Execute Project* screen appears. From the *Quality Management* node, choose *Quality Inspection* → *Sample Management*.
- 15. Choose in the Define Number Range line.
- 16. In the dialog box, place your cursor on the line *Number Ranges for Physical-Samples* and choose **Choose**.

On the Number range for physical samples screen, choose &Intervals.

Additional Process Information

The number range for samples has been defined as follows: Year 9999, 000100000000 to 000199999999.

- 17. Choose C twice.
- 18. In the Choose activity dialog box, place your cursor on the line Number Ranges for Physical-Sample Drawing and choose \$\square\$ Choose.
- 19. Choose Intervals.

The number range for the physical-sample drawing is defined as being from 1 to 99999999999.

- 20. Choose and in the dialog box, choose ...
- From the Quality Management node, choose Quality Planning → Inspection Planning → General.
- 22. Choose \$\Pi\$ in the Define Identifier for Inspection Points line.

The inspection point user field combination 905 has been created and proposals for evaluation of the inspection point have been maintained.

23. Select User field combination 905 and choose ...

You can see the following settings on the tab pages: Selection Quantity SAMPLE - Proposal at Goods Receipt Code 100, Code Group SMP00001 – Proposal for Rejection Code 200, Code group SMP00001.

24. Choose until the overview tree appears.

Data Used During this Process

Data Used During this Process

Field	Data	Description
Material	300-130	Pyridine
Plant	1100	Berlin
Storage location	0001	Outbound delivery warehouse
Vendor	1006	Blacks AG
Purch. organization	1000	IDES Deutschland
Purch. group	800	Zuse, K.
PO quantity	1000	KG
Number of containers	50 / CAN	CAN
Work centers	L001	Laboratory, chemical analysis
	L002	Laboratory, quality control
Master inspection characteristic	8-110	Color
	9-115	Purity
	9-116	Boiling point
Sampling procedure	SMPL0001	For samples (quantitative)
Sampling procedure	SMPL0002	For samples (qualitative)
Physical-sample drawing procedure	S2000	Without confirmation requirement
Order type	NB	Standard PO

Goods Receipt for P.O. and Preparation of Quality Controls

Goods Receipt for P.O. and Preparation of Quality Controls

Prerequisites



To successfully run through the script, you have to create the purchase order and post the goods receipt.

You can find more information about this process under i [Page 276].

Process Flow

You can find the data for this process under [Page 275].

- 1. Creating a Purchase Order [Page 277]
- 2. Posting the Goods Receipt for the Purchase Order [Page 279]
- 3. Entering the Invoice [Page 281]

Result

The inspection lot is automatically created, the inspection plan is assigned, and the inspection scope is calculated when you post the goods receipt. Quality controls are generated in the background.

Data Used During This Process

Data Used During This Process

Field	Data	Description
Vendor	1006	Blacks AG
Order type	NB	Standard PO
Purchasing organization	1000	IDES AG
Purchasing group	800	
Plant	1100	Berlin
Storage location	0001	Material stores
Material	300-130	

Additional Process Information

Additional Process Information

This process demonstrates a one-time order. A material procurement could also be the result of a process chain triggered by materials planning. There are various other types of purchase orders and outline agreements in the Purchasing application. This process reduces procurement to only the most fundamental steps of external materials procurement in the R/3 System. To do this, we use the basic form of a purchase order document, the standard purchase order. The settings in the material master record ensure that a goods receipt is automatically posted to the inspection stock and that an inspection lot is generated.

Creating a Purchase Order

Creating a Purchase Order

1. Call up the transaction as follows:

Menu Path	Logistics $ o$ Materials Management $ o$ Purchasing $ o$ Purchase Order $ o$ Create $ o$ Vendor/Supplying Plant Known
Transaction Code	ME21N

2. Enter the following data:

Field	Data
찉	Standard PO
Vendor	1006
Document date	Today's date

- 3. Choose 🖾.
- 4. To open the item header area, choose Header.
- 5. On the *Org.data* tab page, enter the following data:

Field	Data
Purchasing org.	1000
Purchasing group	800
Company code	1000

- 6. To open the item overview area, choose \Box *Item overview*.
- 7. Enter the following data:

Field	Data
Material	300-130
PO quantity	1000
C (Category of delivery date)	D
Delivery date	Today's date + 1 month
Net price	Any price
Plant	1100
Storage location	0001

8. Choose .



It is possible that the material already has an info record, which overwrites the amount you have just entered.

Creating a Purchase Order

9. Choose .



The system confirms the posting and assigns a purchase order number. Make a note of this number.

10. Choose until the overview tree appears.

Posting the Goods Receipt for the Purchase Order

Posting the Goods Receipt for the Purchase Order

1. Call up the transaction as follows:

Menu Path	$\textit{Logistics} o \textit{Materials Management} o \textit{Inventory Management} o \textit{Goods} \\ \textit{Movement} o \textit{Goods Movement}$	
Transaction Code	MIGO	

2. Enter the following data:

Field	Data
Purchase order	Your PO number

3. Choose 🛂

The system copies the header data of the purchase order into the header data area of the GR document.

The purchase order items are transferred to the item overview.

The PO number you entered appears in the *Current purchase order* field, and the *PO number* field is once again ready to accept input.

If you click on individual items, the system displays an item data screen (allowing you to change the incoming quantity, for example).

4. In the header data area of the *General* tab page, enter the following data:

Field	Data
Document date	Today's date
Posting date	Today's date

- 5. Select your item, then choose the *Where* tab page at the bottom of the screen to check your organization data.
- 6. On the *Where* tab page, enter the following data:

Field	Data
Movement type	101
Plant	1100
Storage location	0001

7. On the *Quantity* tab page, enter the following data:

Field	Data
Number of containers	50 CAN

8. Choose 🛂.

9. In the item overview area, select *OK* for your item.

If the *OK* indicator in the item overview area is not active, either close the item detail area or select *Item OK* at the bottom of the item detail area.

10. Choose Post.



Posting the Goods Receipt for the Purchase Order



The system confirms the posting and assigns a material document number. Make a note of this number.

You have thus increased the warehouse stock and generated an inspection lot.

11. Choose until the overview tree appears.

Entering the Invoice

Entering the Invoice

1. Call up the transaction as follows:

Menu Path	From the <i>Purchase Order</i> node, choose <i>Follow-On Functions</i> → <i>Logistics Invoice Verification</i> .
Transaction Code	MIRO, MRBR

2. Choose $Edit \rightarrow Switch company code$.

In the dialog box, the system displays the company code that is currently active for invoice verification. This is the company code last used by the user.

3. If necessary, enter the following data:

Field	Data
Company code	1000

- Choose ♥.
- 5. In the field directly above and to the left of the item overview, use the input help to choose *Purchase order/scheduling agreement* (if it does not already appear as the default text).

You can also use this activity to enter invoices with reference to a delivery note, for example. The system proposes the value last entered by the user in each case.

6. On the Basic Data tab page, in the header data area, enter the following data:

Field	Data
Invoice date	Today's date
Posting date	Today's date
Tax amount, right-hand field	VN (Domestic input tax 16%)
To the right of the <i>Purchase order/scheduling agreement</i> input field	Your PO number

7. Choose 🖾.



In the item overview, the system displays the purchase order data, as well as the net amount in the balance field that is required to calculate the gross amount. The traffic light for the *Balance* field is red.

The value of the goods delivered plus tax (in Europe, VAT) is normally entered on the invoice sent to you by the vendor. In this process, we simulate this procedure and determine the invoice amount ourselves.

8. Enter the following data:

Field	Data
Calculate tax	Select



Entering the Invoice

When you activate *Calculate tax* the system displays the gross amount in the balance field. The corresponding tax portion appears in the *Tax amount* field.

If you have selected the tax code *No tax procedure*, or *A/PSales tax exempt*, the *Tax amount* field contains the value 0. In this case, the *Balance* field contains the net amount.

9. Enter the following data:

Field	Data
Amount	Gross amount determined
•	Select

10. Choose 🛂.



When you confirm your entries, the traffic light to the left of the *Balance* field changes to green.

In this example, we assume that the invoiced amount equals the calculated amount.

11. Choose 🗏.

The system confirms the posting and assigns an invoice document number. Make a note of this number.



The invoice is initially blocked for payment. Possible reasons include variances (settlement date too early, for example), or sporadic "control blocks". From a logistics perspective, the procurement process has been successfully completed. You can now display and change the blocking reasons.

- 12. Choose until the overview tree appears.
- 13. From the *Materials Management* node, choose *Logistics Invoice Verification* → *Further Processing* → *Release Blocked Invoices*.

14. Enter the following data:

Field	Europe	
Company code	1000	
Invoice document	Your invoice document number	

15. Choose 🗣.

You can display the blocking reasons on the right-hand side of the table. If required, use the scroll bar. The blocking reasons for your item are highlighted with *X*. To display the full descriptions, position your cursor on the column header.

Possible reasons for blocking an invoice include:

Column	Description
--------	-------------

Entering the Invoice

Qua (Blocking reason: Quality)	Quality variance
Qty (Blocking reason: Quantity)	Quantity variance
Prc (Blocking reason: Price)	Price variance
Dte (Blocking reason: Date)	Delivery date variance

- 16. If you want to release your invoice, select the blocking reason for your item, then choose Blocking reason.
- 17. Choose Bave changes.

In the status bar, the system confirms that the invoice has been released.

18. Choose until the overview tree appears.

Display of Physical Samples and Specifications in Inspection Lot

Display of Physical Samples and Specifications in Inspection Lot

1. Call up the transaction as follows:

Menu Path	$ \begin{array}{l} \textit{Logistics} \rightarrow \textit{Quality Management} \rightarrow \textit{Quality Inspection} \rightarrow \textit{Inspection Lot} \\ \rightarrow \textit{Processing} \rightarrow \textit{Display} \end{array} $
Transaction Code	QA03

2. Enter your inspection lot number:

The system proposes the number of the inspection lot you last created



If required, you can search for the inspection lot number using the <u>Finding an Inspection Lot [Ext.]</u> search help.

3. Choose 🖾

The inspection lot is displayed.

- 4. Make a note of this inspection lot number.
- 5. Choose the Inspection lot quantities tab page.
- 6. Choose the Insp. specifications tab page.
- 7. To display an overview of the generated physical samples, choose $Goto \rightarrow Physical Samples$.

You can see the following information in the dialog box:

- •The number of each individual sample.
- •The status of the samples is *Open* (due to the confirmation requirement in the sample-drawing procedure).
- •The scope of each individual sample.
- 8. Choose

 ✓.
- 9. Do not leave this screen.

Printing and Displaying Sample-Drawing Instructions

Printing and Displaying Sample-Drawing Instructions

1. Choose Extras → Print → Sample-Drawing Instruction and then choose Extras → Print → Inspection Instruction.

The documents will be printed when you leave the transaction.

- 2. To quit the transaction for displaying the inspection lot, choose .
- 3. Choose System → Own Spool Requests.

The system opens a new session and displays an overview of your spool requests.

4. Select script LG01 and then choose &.

You can now see the sample-drawing instruction. This contains the physical-sample drawing text, partial samples to be created, and the distribution of samples to laboratories.

- 5. To exit the sample-drawing instruction, choose ...
- 6. Select script LV01 in the list and choose .

The system displays the inspection instruction. You have to scroll through several pages to view the entire inspection instruction.

7. Close the second session.

Displaying a Physical-Sample Drawing and Releasing Samples

Displaying a Physical-Sample Drawing and Releasing Samples

1. Call the transaction as follows:

Menu Path	From the <i>Quality Inspection</i> node, choose <i>Sample Management</i> \rightarrow <i>Physical-Sample Drawing</i> \rightarrow <i>Edit</i>	
Transaction Code	QPR4	

The system displays the entry screen for the processing of the physical-sample drawing. The first physical-sample drawing number is already in the input field.



If required, you can search for the physical-sample drawing number using the <u>Search Help: Finding a Physical-Sample Drawing [Ext.]</u> search help.

2. Choose 🛂.

The system displays all of the physical samples associated with the physical-sample drawing.

3. Select all samples and choose Release.

A dialog box appears in which you can enter text.

4. Choose ♥.

The system leaves the transaction and the previously selected samples are released and saved.

5. Choose 🖾.

The system displays all of the physical samples with a changed status associated with the physical-sample drawing.

6. Choose C until the overview tree appears.

Entering Results of the Pooled Sample (Work Center Worklist)

Entering Results of the Pooled Sample (Work Center Worklist)

1. Call the transaction as follows:

Menu Path	From the <i>Quality Inspection</i> node, choose <i>Worklist</i> → <i>Results Recording</i>
Transaction Code	QE51N

2. On the *Material* tab page, enter the following data:

Field	Data	Description
Plant	1100	Berlin
Insp. lot origin	01	Goods receipt
Material	300-130	Pyridine

3. Choose 🕒.

A worklist containing all inspection lots corresponding to the selection criteria appears in the left screen area.

On the right-hand side of the screen, you can see the work area for results recording.

4. If the structure is not fully expanded, select your inspection lot in the left screen area and choose

You can see that the number of the pooled sample is carried along in the upper screen area.



Make a note of this number.

- 5. Call up the first characteristic 0010 Purity of the first inspection lot by double-clicking on it.
- 6. In the work area, enter the following data:

Field	Data
xdiagonal	99

- 7. To open the next characteristic, choose .
- 8. Enter the following data:

Field	Data
xdiagonal	117

9. Choose 🖽

When you are completing results recording for the physical sample, a dialog box appears in which you can valuate the sample.

10. To confirm the valuation proposal for the physical sample, choose ♥.



Entering Results of the Pooled Sample (Work Center Worklist)



On the basis of the Customizing settings, the characteristics are automatically assigned the status *Completed*. It is possible that the specifications from the Customizing settings of the client may be overwritten due to the parameter values of your user master record.

- 11. Click on the 0010 Color characteristic.
- 12. Using the possible entries help, enter the following data:

Field	Data	Description
Code	40	dull

For qualitative characteristics, use the possible entries help to select the code you require from the catalog.

- 13. Choose 🖽.
- 14. Choose ♥.
- 15. Choose until the overview tree appears.
- 16. In the dialog box, choose Yes.

Making the Usage Decision for the Inspection Lot

Making the Usage Decision for the Inspection Lot

1. Call the transaction as follows:

Menu Path	From the Quality Inspection node, choose Inspection Lot $ o$ Usage Decision $ o$ Record
Transaction Code	QA11

2. Enter the following data:

Field	Data
Inspection lot number	Your inspection lot number

- 3. Choose 📽.
- 4. Use the possible entries help to select Code A2 Accept in the UD Code field.
- 5. Choose .
- 6. Choose .

The inspection lot has been accepted and the inspection lot quantity is posted to unrestricted-use stock in the background.

7. Choose until the overview tree appears.

Determining the Storage Location of the Physical Samples

Determining the Storage Location of the Physical Samples

1. Call the transaction as follows:

Menu Path	From the Quality Inspection node, choose Sample Management $ ightarrow$ Physical Sample $ ightarrow$ Change
Transaction Code	QPR2

2. Enter the number of the pooled sample and choose *Physical-sample storage*.



If required, you can search for the physical-sample number using <u>Search Help:</u> <u>Finding a Physical-Sample Drawing [Ext.]</u>.

- 3. Choose 🕰.
- 4. Enter the following data:

Field	Data	Description
Storage location	PS005	Sample storage 005
Infotext	Any	
Store until	Today's date 1 year	

- 5. Choose .
- 6. Choose until the overview tree appears.

Calibration of Measurement Instruments (PM/QM)

Calibration of Measurement Instruments (PM/QM)

Purpose

In this process, you create an equipment master record for a measurement instrument. When you schedule a maintenance plan, you create a maintenance order and an inspection lot for the calibration of the measurement instrument. Your measurement results are recorded in the inspection lot. The system proposes the status "unrestricted-use" for the measuring instrument because the test results lie within the tolerance range. You can accept this proposal when entering the usage decision.

Process Flow

You can find the data for this process under <a>! Page 292].

- 1. Creating the Maintenance Plan [Page 294]
- 2. Assigning and Displaying the Task List [Page 296]
- 3. Scheduling the Maintenance Plan [Page 297]
- 4. <u>Displaying the Calibration Order and Inspection Lot [Page 298]</u>
- 5. Entering Characteristic Values [Page 299]
- 6. Entering the Usage Decision [Page 301]

Data for This Example

Data for This Example

Field	Data	Description
Strategy	В	Key date scheduling
Description	Calibrate multimeter	
Equipment	10003540	Multimeter, analog
Planning Plant	1000	Plant - Hamburg
Planner group	102	Hr. Wenzel
Order type	PM06	Calibration order
Main work center	5001	Electrical maintenance
Business area	7000	Electronic products
Call horizon (%)	90	
Scheduling period	365	
Cycle start	One month before today's date	
Task list type	A	General task list
Group	30	
Group counter	1	
Insp. lot origin	14	Plant maintenance
Mean value	-0,4	Result value for the characteristic Variance from zero.
	100,2	Result value for the characteristic Display at end of scale.
UD Code	A1	Usage decision code: Usable with standard follow-up action
Actual work	0,5	Time required for the first operation
Final confirmation	Select	Indicator for final confirmation of the first operation
Actual work	1,0	Time required for the second operation
Final confirmation	Select	Indicator for final confirmation of the second operation
Actual work	No entry	Time for the third operation equals zero, because the measuring instrument now functions correctly
Final confirmation	Select	Indicator for final confirmation of the third operation
Settlement period	Current month	

Data for This Example

Test run	Deselect	
----------	----------	--

Creating the Maintenance Plan

Creating the Maintenance Plan

Use

We have already created an analog measuring instrument as a piece of equipment. This needs to be checked every 30 days. You now create a maintenance plan for this purpose.

Procedure

1. Use the following procedure to call the transaction:

Menu Path	$\begin{tabular}{ll} Logistics \rightarrow Plant Maintenance \rightarrow Preventive Maintenance \rightarrow \\ Maintenance Planning \rightarrow Maintenance Plans \rightarrow Create \rightarrow Strategy Plan \\ \end{tabular}$
Transaction Code	IP42

2. Enter the following data:

Field	Data	Description
Maint. plan cat.	Plant maintenance	
Strategy	В	Key date scheduling

3. Choose 🖾.

The Create Maintenance Plan: Strategy plan screen appears.

4. Enter the following data:

Field	Data	Description
Maintenance plan text	Calibrate multimeter	
Equipment	10003540	Multimeter, analog
Order type	PM06	Calibration order

- 5. Choose 🕰.
- 6. Choose the Maintenance plan scheduling parameters tab page.
- 7. Enter the following data:

Field	Data	Description
Call horizon (%)	90	Determines when the PM order should be generated for the maintenance call.
Scheduling period	365	The scheduling period during which the system generates maintenance calls.
Start of cycle	One month before today's date	The system generates a maintenance order from the maintenance plan every 30 days, so you set the cycle start one month in the past. This ensures that an order is available after scheduling.

8. Choose 🖾

Creating the Maintenance Plan

9. Do not leave this screen.

Assigning and Displaying the Task List

Assigning and Displaying the Task List

Use

You now assign a maintenance task list to the maintenance plan.

Procedure

1. Enter the following data:

Field	Data
Cat	Α
TL group	30
GrpCr	1

- 2. Choose .
- 3. Choose &.

You now see the operations for the task list.

4. Choose 4 Header.

The Display General Task List: Header General View screen appears.

- 5. Choose 2.
- 6. Choose .

You can see the number of your maintenance plan in the status bar. Make a note of your maintenance plan number.

7. Choose 2 to return to the overview tree.

Scheduling the Maintenance Plan

Scheduling the Maintenance Plan

Use

To ensure that a maintenance order is generated at regular intervals, you need to schedule individual maintenance plan calls.

Procedure

1. Use the following procedure to call the transaction:

Menu Path	From the <i>Maintenance Planning</i> node, choose <i>Scheduling for Maintenance Plans</i> → <i>Schedule</i>
Transaction Code	IP10

The system defaults the number of the last maintenance plan you processed.

- 2. Choose .
- 3. Choose Start.

In the *Start of cycle* field, you see the date you entered while maintaining the scheduling parameters. In this case, one month ago today.

4. Choose ♥.

The first scheduled call has the status New start, save to call.



When you save the maintenance plan scheduling, the system generates the first maintenance order.

- 5. Choose 🖽.
- 6. Choose 2.

Displaying the Calibration Order and the Inspection Lot

Displaying the Calibration Order and the Inspection Lot Use

The maintenance plan now generates a maintenance order every 30 days. You already created the first calibration order by setting the start date one month in the past. The system released the calibration order immediately. This immediate release generates an inspection lot.

Procedure

1. Use the following procedure to call the transaction:

Menu Path	From the Plant Maintenance node, choose Maintenance Processing \rightarrow Order \rightarrow Order List \rightarrow Display.
Transaction Code	IW39

2. Enter the following data:

Field	Data	Description
In process	Select	
Period	1 month before today's date	
to	Today's date	

3. Choose .



If there are already several orders *In process*, the *Display PM Orders: List of Orders* screen appears. In this list, select your order *Calibrate multimeter*, then choose *Order*.

If there is only one order satisfying your selection criteria, the *Display Calibration Order* \rightarrow *Central Header* screen appears.

Note the order number.

4. Choose 🥨

In the *Inspection lot* field, you see the number of the inspection lot. Note the number.

5. On the *Display Usage Decision: Characteristic Overview* screen, choose .



You now see the two characteristics to be checked: The characteristic *Variance from zero* and characteristic *Display at end of scale*.

6. Choose 4 until the overview tree appears.

Entering Characteristic Values

Entering Characteristic Values

Use

You enter the measurement values for the quality characteristics.

Procedure

1. Use the following procedure to call the transaction:

Menu Path	$Logistics ightarrow Quality \; Management ightarrow Quality \; Inspection ightarrow Work \; List ightarrow Results \; Recording$	
Transaction Code	QE51N	

2. Enter the following data:

Field	Data	Description
Insp. lot origin	14	Plant maintenance

- 3. Choose .
- 4. Select the characteristics 0010 Variance from zero and 0020 Display at end of scale, then choose ...

In the *Record Results for 000001: Characteristic Single Screen* you see the target value, the upper limit and the lower limit.

The status is 0 Can be processed.

5. Enter the following data:

Field	Data	Description
Mean value	-0,4	The mean average of valid measurement values. In this case, however, only enter one measurement value.

6. Choose 🖾.

In the status bar, the system informs you that *Characteristic 10 has been closed: Valuation accepted.*

The status of the characteristic is now 5 Processing is closed.

- 7. Choose ▶.
- 8. Enter the following data:

Field	Data	Description
Mean value	100,2	

9. Choose 🕰

In the status bar, the system informs you that *Characteristic 20 has been closed:* Valuation accepted.

10. Choose 😂.

Entering Characteristic Values

On the *Record Results: Characteristic Overview* screen, you see a green checkmark in the *Valuation* column, and that the *Accept* indicator has been selected.

11. Choose .

In the *Valuation* dialog box, you see that the equipment is rated as *Usable with standard follow-up action*.

- 12. Choose ♥.
- 13. Choose to return to the overview tree.
- 14. In the dialog box, choose Yes.

Entering the Usage Decision

Entering the Usage Decision

1. Use the following procedure to call the transaction:

Menu Path	From the Quality Inspection node, choose Inspection Lot \rightarrow Usage Decision \rightarrow Record
Transaction Code	QA11

- 2. Choose Lots w/o UD.
- 3. Enter the following data:

Field	Data	Description
Insp. lot origin	14	Plant maintenance
Plant	1000	Plant - Hamburg

4. Choose 🕒.

The system displays a list of inspection lots.

5. Select your inspection lot number, then choose .

The Record Usage Decision: Characteristic Overview screen appears.

6. Choose .

In the *Nonconforming* column, you see that zero sample units do not conform to the standard. In the *Share of scrap* column, you see that the percentage of units not conforming to the standard is also zero.

7. Enter the following data:

Field	Data	Description	
UD Code	A1/14	Usable with standard follow-up action	

8. Choose 💇.

The values of the other fields are updated.

9. Choose .

Choose ♥ to skip the information dialog box.

Your inspection lot is still displayed.

10. Choose 🗐.

The screen is refreshed. The number of your inspection lot is no longer displayed, because you have recorded the usage decision.



You have now determined that the multimeter can continue to be used as a measuring instrument.

11. Choose 🕰.

Entering the Usage Decision

Returns and Repair Processing

Returns and Repair Processing

Purpose

The service department of the IDES AG receives a repair request from a customer. The customer sends the defect piece of equipment to our company. This equipment is then checked technically and subsequently we process the repair. After completion of the repair, the piece of equipment is delivered to the customer. The repair will then be invoiced.

You can find more information about this process under i [Page 304].

Process Flow

You can find the data for this process under [Page 307].

- 1. Activating the QM Check [Page 308]
- 2. Creating the Service Notification and the Repair Request [Page 310]
- 3. Posting the Goods Receipt of a Piece of Equipment to be Repaired [Page 312]
- 4. Processing the Technical Check [Page 314]
- 5. <u>Displaying the Repair Request and the Service Order [Page 315]</u>
- 6. Editing the Service Order [Page 316]
- 7. Processing and confirming the Service Order [Page 317]
- 8. Technically Completing the Service Order [Page 320]
- 9. Delivering the Repaired Piece of Equipment [Page 322]
- 10. Creating the Billing Request [Page 323]
- 11. Invoicing the Repair Request [Page 324]
- 12. Settling and Completing the Service Order [Page 325]
- 13. Analyzing the Result of the Repair request [Page 327]
- 14. Deactivating the QM Check [Page 328]

Additional Process Information

Additional Process Information

The following information is directed towards IDES users with a customizing background knowledge of the application components SD and CS. Its objectives are to explain the determination of the item categories in the repair request as well as the control of the repair scheme. The text uses the concrete IDES demo. Therefore it is advised to read it after completing the process chain.

Sales Document RAS (Repair Service)

The repairs processing of the present IDES process is based on the sales document RAS. In this type of sales document, the material number of the service product is leading. The service product is coupled to data that is used for the automatic creation of the service order when starting the repair.

The data transferred to the service order via the service product can be seen in the system as follows:

 $Logistics \rightarrow Customer\ Service \rightarrow Service\ Processing \rightarrow Environment \rightarrow Sales\ and\ distribution \rightarrow Billing\ Document \rightarrow Service\ Products.$

Repair Maintenance Request Item (IRRS)

When creating the repair request using the sales document RAS, the system creates a repair maintenance request item with the item category IRRS. This repair maintenance request item administers the expenses and revenues of the repair as well as the sales order stock of the pieces of equipment to be repaired. The item category is determined via the item category group of the service products SM-PCREP due to the following system settings:

Sales document RAS + item category group $LEIS \rightarrow IRRS$.

The item category IRRS controls that the repair is invoiced according to the expenses caused by the repair. (form of billing = 02). The repair maintenance request item itself is not relevant for billing (billing relevance = blank). The rules for the billing according to expenses are determined via the Dynamic item processor profile that is assigned to the item category (DPP profile = 00000002). In the item category, we also embodied the repair scheme 0001 that controls which repair operations can be processed at a specific time within repairs processing:

(see ${}^{\&}SAP$ Reference IMG \rightarrow Sales and distribution \rightarrow Sales \rightarrow Sales Document \rightarrow Sales document Item \rightarrow Assign item category or Define item category).

Returns Item (IRRE)

When creating the repair maintenance request item the *repairs receipt* should take place at the same time. Repair scheme 0001 is defined so that the operation *Returns* (101) is possible as well at the same time. Due to the default characteristic set for this operation within the scheme, the system automatically generates the returns item. One can set default characteristics for operations that are not linked to completion confirmations of inspection lots or service orders:

The item category determination takes place in connection with the item category group of the equipment material R-1001: sales document *RAS* + item category group *NORM* + usage *R101* + item category of the main item *IRRS* → IRRE.

Additional Process Information

The usage is composed of the operation number and starts with an R.

Repair Item (IRRP)

Within the framework of the technical check, the system processes a write-off of the equipment materials of the stock in quality inspection. The equipment can either be posted to the blocked stock or the unrestricted-use stock or can be scrapped. The system derives a key from each respective goods movement (01 = repair; 02 = not to be repaired/delivered; 03 = scrapped). In combination with the time *start of repair* that has been reached by the end of the completion of the technical check, the system determines the next operation via this key in the repair scheme of the repairs processing and proposes it in the repair request. In the displayed IDES process, the system makes a posting to the blocked (i.e. to be repaired) stock. From here, the system derives the key 01. The time *start of repair* earmarked the operation 102 (repair) for this key. As we did not set the characteristic "manual" (manual processing not necessary) for this operation, the system automatically creates another sub-item in the repair request. The item category IRRP is determined via the following entry in the item category assignment:

Sales document RAS + item category group LEIS + usage R102 + item category of main item $IRRS \rightarrow IRRP$.

The system derives the schedule line category CD (without delivery) from the item category IRRP:

(see $\mbox{\em SAP}$ Reference IMG \rightarrow Sales and distribution \rightarrow Sales \rightarrow Sales Document \rightarrow Schedule Lines \rightarrow Define Schedule Line Categories or \rightarrow Assign Schedule Line Categories).

The requirement type SERP (maintenance service) is not – as usually – derived from the strategy group of the material but directly from the operation:

Item category IRRP + availability indicator Blank → requirements type SERP / source 1:

(see $\mbox{\ensuremath{\ensu$

The requirements class 204 is assigned to requirements type SERP. This requirements class controls, due to assembly type 2 and the assigned order type, SM03 (service order/repairs processing) that the system generates a service order of this order type by taking the repair item of the sales and distribution document:

(see $\mbox{$^{\circ}$}\mbox{$^{\circ}$

Delivery Item (IRAL)

We coupled the technical completion of the service order to the time *Repair confirmation*. All equipment in our demo have been posted from the blocked stock into the unrestricted-use stock beforehand. The system derives the key 04 (repaired/to be delivered) from this type of goods movement. For this combination of time and key, the repair scheme intended the operation *Delivery* (103). As we did not set the characteristic "manual" (manual processing not necessary) for this operation, the system automatically creates another sub-item in the repair request:

Sales Document RAS + item category group NORM + Usage R103 + item category of the main item $IRRS \rightarrow IRAL$.

Additional Process Information

Billing Item (IRIN)

When creating the billing request on basis of the service order, the cost information of the order is converted into sub-items for the repair maintenance request item.

Items created due to the Dynamic item for the material consumption and the working hours are assigned to the item category determination with usage SEIN:

Sales document RAS + item category group NORM or LEIS + Usage SEIN + item category of the main item IRRS \rightarrow IRIN.

The items of item category IRIN are billed order-related. The pricing is active but not statistical.

Data used during this Process

Data used during this Process

Field	Data	Description
Material	R-1001	Personal Computer
Order type	RAS	Repair Service
Sales organization	1000	Sales Germany
Distribution channel	14	Service
Division	00	Cross-division
Sold-to party	1177	Customer
Material	R-1150	spare part
Material	R-1111	spare part
Delivery type	LR	Returns delivery
Shipping point	1200	shipping point in plant 1200
Plant	1200	Plant
Storage location	0001	storage location in plant 1200
Warehouse number	012	warehouse Lean WM
Controlling area	1000	Controlling area Europe

Activating the QM Check

Activating the QM Check

Use

A pre-requisite for executing this process is the activation of QM inspection type 05 (inspection for other goods receipt) in the material master of used material R-1001. This is done within this step.



So that the run of other IDES processes using material R-1001 is not impaired, it is important to process *Deactivating the QM Check* even if you finish it early. If you set up a stock in quality inspection already, due to the goods receipt of the equipment to be repaired, it is necessary to execute the process step *Processing the Technical Check* as well. Here, the stock in quality inspection is reduced. A deactivation of the inspection is only possible if the system contains no stock in quality inspection.

Procedure

1. Call up the transaction as follows:

Menu Path	$\label{eq:Logistics} \begin{tabular}{ll} Logistics \rightarrow Quality planning \rightarrow Logistics Master \\ Data \rightarrow Material \rightarrow Change \\ \end{tabular}$	
Transaction Code	MM02	

2. Enter the following data:

Field	Data
Material	R-1001

- 3. Choose Select view(s).
- 4. Enter the following data:

Field	Data
Quality Management	Select

- 5. Choose ♥.
- 6. In the dialog box, enter the following data:

Field	Data
Plant	1200

- 7. Choose ♥.
- 8. Choose Insp. setup.
- 9. Enter the following data:

Field	Data
Active (in the line inspType 05)	Select

10. Choose ✓.

Activating the QM Check

- 11. Choose .
- 12. Choose C until the overview tree appears.

Creating the Service Notification and the Repair Request

Creating the Service Notification and the Repair Request

Use

The customer notifies the breakdown of three pieces of equipment and the service department dispatches this equipment for repair. You receive the malfunction message and enter a Repair request in the system.

Procedure

1. Call up the transaction as follows:

Menu Path	$\textit{Logistics} \rightarrow \textit{Customer Service} \rightarrow \textit{Service Processing} \rightarrow \textit{Notification} \rightarrow \textit{Create (General)}$	
Transaction Code IW51, IW53, VA03		

2. Enter the following data:

Field	Data
Notification type	S4



This type of notification enables the entry of a material number as reference object.

- 3. Choose 🖾.
- 4. Note the notification number.
- 5. Enter the following data:

Field	Data
Sold-to party	1177
Material	R-1001
Description (in the block Subject)	R-1001: Returns and Repair

- 6. Choose 🕰.
- 7. In the action box, choose Create repair order.
- 8. Enter the following data:

Field	Data
Order type	RAS
Sales org.	1000
Distr channel	14
Division	00
Sold-to party	1177 (default)
PO number	Notification number (default)

Creating the Service Notification and the Repair Request

PO date	Current date
Material	R-1001 (default)
Order quantity	3

- 9. Choose Anotification and order.
- 10. Choose Service notification → Display.
- 11. Enter the following data:

Field	Data
Notification number	Noted Notification number

- 12. Choose Notification.
- 13. To display the *Document flow*, choose ...
- 14. Position your cursor on the line for the sales order and choose & Display document.



The notification number has been transferred to the repair request as the order number. In the item displayed, you can see the detailed data of the repair request of the customer. The defect personal computers are listed as equipment material in this repair maintenance request item.

15. Select the item and then select Repairs.

The system proposes a returns for the piece of equipment to be repaired as the next operation within the repairs processing (see characteristic *Returns* in the block *Overview of repair request*). The business decision to process the proposed returns operation has been made by the system automatically (see *RepStatus*).

- 16. Choose 😂.
- 17. Choose $Edit \rightarrow Display\ criteria \rightarrow All\ items.$

Due to the decision made to process the returns operation, the system created a subitem for the repair maintenance request item. It contains the necessary information for the creation of the returns delivery.

- 18. Note the Repair request number given in the Repairs/ Service field.
- 19. Choose until the overview tree appears.

Posting the Goods Receipt of a Piece of Equipment to be Repaired

Posting the Goods Receipt of a Piece of Equipment to be Repaired

Use

The pieces of equipment to be repaired are delivered. In the returns delivery, enter the serial numbers of the devices. They are posted to the non-valuated stock as sales order stock using the number of the Repair requests. At the same time, the system creates an inspection lot on the basis of which the technical check of the devices will take place.

Procedure

1. Call up the transaction as follows:

Menu Path	From the Service Processing node, choose Order \rightarrow Customer Repair \rightarrow Returns Delivery	
Transaction Code VRRE, VL01		

2. Enter the following data:

Field	Data
Repair request	Noted number of the repair request
Delivery type	LR
Shipping point/ recei	1200

- 3. Choose 🛂
- 4. Select the item and choose *Item* \rightarrow *Serial numbers*.
- 5. Choose ...
- 6. Enter the following data:

Field	Data
Period from	Default
Partner (first field)	Sold-to party (possible entries button)
Partner (second field)	1177

7. Choose 🤄

The system lists all serial numbers of material R-1001 that were delivered to customer.

- 8. Select three entries for serial numbers.
- 9. Choose ✓.
- 10. In the dialog box, choose 🖋.

The System lists the selected serial numbers.

- 11. Choose V.
- 12. Choose $Edit \rightarrow Post goods issue$.

Posting the Goods Receipt of a Piece of Equipment to be Repaired



In the case of returns, the function done before posts a goods receipt.

- 13. Note the delivery number.
- 14. Choose until the overview tree appears.

Processing the Technical Check

Processing the Technical Check

Use

After the goods receipt has been posted, execute a technical check of the devices, based on the goods receipt posting of the inspection lot created. In the framework of this check, you will decide what operations are necessary in the further run of the repairs processing.

Procedure

1. Call up the transaction as follows:

Menu Path	From the Service Processing node, choose Order $ o$ Inspection Processing $ o$ Usage Decision $ o$ Enter
Transaction Code	QA11

- 2. Choose .
- 3. Enter the following data:

Field	Data
UD Code (Usage decision Code)	Α

- 4. Choose the *Inspection lot stock* tab page.
- 5. Enter the following data:

Field	Data
To blocked / Repair	3



The technical check made clear that all devices send by the customer by the customer, can be repaired. Therefore, you post 3 pieces of equipment from the stock in quality inspection into a blocked repair stock.

- 6. Choose Serial numbers.
- 7. To confirm possible warning messages, choose .

You can see that the serial numbers of the devices have been transferred to the inspection lot.

- 8. Choose ♥.
- 9. Choose 🖽.
- 10. Choose C until the overview tree appears.

Displaying the Repair Request and the Service Order

Displaying the Repair Request and the Service Order

Use

From the transfer posting of the checked devices the blocked repair stock, the system derives a new operation *Repair* in the order. The decision to execute this operation has been made automatically due to the settings in the repair scheme, the repairs processing is controlled by. The execution of the repair is done with the help of a service order.

Procedure

1. Call up the transaction as follows:

Menu Path	From the Service Processing node, choose Order \rightarrow Customer Repair \rightarrow Display
Transaction Code	VA03

2. Enter the following data:

Field	Data
Order	Noted number of the Repair request

- 3. Choose 🖾.
- 4. Choose $Edit \rightarrow Display\ criteria \rightarrow All\ items$.

Due to the result of the technical check, the system created a new sub-item in the repair request (10200). This repair item is coupled to a service order that has also been created automatically by the system.

5. Select the first item and choose Repairs.

The result of the technical check has been send to the repair request screen. The decision to execute this operation has been made automatically. (see field *RepStatus*). The repair item mentioned above and the service order are the result of this decision. The *Overview for Repair Request* not only displays the *Returns* but also a new operation *Repair*.

6. Choose SM Order.

Based on the service order, the devices are repaired. Specifications such as sold-to party, equipment and service product are taken from the repair request.

- 7. Note the number of the service order (in the field *Order* in the first line).
- 8. Choose until the overview tree appears.

Editing the Service Order

Editing the Service Order

Use

In this step you determine the materials necessary for the repair and also plan the working hours necessary. In the service order, the system calculates the planning costs with this entries.

Procedure

1. Call up the transaction as follows:

Menu Path	From the Service Processing node, choose Order \rightarrow Service Order \rightarrow Change.
Transaction Code	IW32

2. Enter the following data:

Field	Data
Order	Noted number of the service order

- 3. Choose 📽.
- 4. Choose The Operations tab page.
- 5. Enter the following data:

Field	Data
Work (in the line for operation 0010)	2

- 6. Choose the Components tab page.
- 7. Enter the following data:

Field	Data
Component (in the line of item number 0010)	R-1150
Reqmts.qty. (in the line of item number 0010)	2
Component (in the line of item number 0020)	R-1111
Reqmts.qty. (in the line of item number 0020)	1

- 8. Choose .
- 9. Choose until the overview tree appears.

Processing and confirming the Service Order

Processing and confirming the Service Order

Use

Playing the role of a service technician, you take the materials necessary for the repair. After completing the repair, you confirm the working hours. You post the repaired devices from the blocked stock into the unrestricted-use sales order stock.

Procedure

1. Call up the transaction as follows:

Menu Path	From the Service Processing node, choose Confirmation \rightarrow Goods Movement \rightarrow Goods Movement
Transaction Code	MB11

- 2. Choose To oder...
- 3. Enter the following data:

Field	Data
Order	Noted number of the service number

- 4. Choose 🗓.
- 5. If necessary, enter the stroage location 0001 and choose ♥.
- 6. Choose .
- 7. Choose 🕒
- 8. Call up the transaction as follows:

Menu Path	From the Service Processing node, choose Confirmation \rightarrow Entry \rightarrow Individual Confirmation (Time)
Transaction Code	IW41

9. Enter the following data:

Field	Data
Order	Noted number of the service order

- 10. Choose 🕰.
- 11. Enter the following data:

Field	Data
Actual work	2 (default)

- 12. Choose 🗒
- 13. Choose until the overview tree appears.
- 14. Call up the transaction as follows:

Processing and confirming the Service Order

Menu Path	From the Service Processing node, choose Confirmation \rightarrow Goods Movement \rightarrow Goods Movement	
Transaction Code	MB11	

15. Enter the following data:

Field	Data
Document Date	Current date
Posting date	Current date
Movement type	343
Special stock	E
Plant	1200
Storage location	0001



The movement type 343 and the special stock characteristic trigger a stock transfer of the quantity entered from the blocked stock to the unrestricted-use stock of the respective order.

16. Choose 🕰.

17. Enter the following data:

Field	Data
Order	Noted number of the repair request
Item number (in the line Sales Order)	10000
Material (1. line)	R-1001
Quantity	3

- 18. Choose 🥝.
- 19. Choose III.

The system displays the serial number selection.

20. Choose 🕒.

The system lists the serial number that are in the blocked stock of the repair request.

- 21. Choose .
- 22. Choose 🗹.
- 23. In the dialog box, choose ♥.
- 24. Choose .
- 25. Choose C until the overview tree appears.

Processing and confirming the Service Order

Technically Completing the Service Order

Technically Completing the Service Order

Use

In the service order, you register the completion of the repair. The result is documented on the repair request screen.

Procedure

1. Call up the transaction as follows:

Menu Path	From the Service Processing node, choose Order \rightarrow Service Order \rightarrow Change.
Transaction Code	IW32

2. Enter the following data:

Field	Data
Order	Noted number of the service order

- 3. Choose 🖾
- 4. Choose .



You posted all devices to the unrestricted-use sales order stock. Thus the system proposes the delivery of the repaired equipment to the customer as the next step. Due to the pre-setting in the repair scheme that is controlled via the schedule, the system automatically creates the sub-item necessary for this operation in the repair request.

- 5. Choose Continue.
- 6. In the dialog box, choose ♥.
- 7. Choose Order → Display.
- 8. Enter the following data:

Field	Data
Order	Noted number of the service order

- 9. Choose 🕰.
- 10. To see the document flow, choose .
- 11. Position your cursor on the line of the sales Order and choose & Display document.
- 12. Choose $Edit \rightarrow Display\ criteria \rightarrow All\ Items$.

The item with the number 10300 was created automatically by the system on completing the service order technically. Based on this item, the delivery of the repaired devices to the customer takes place.

13. Choose until the overview tree appears.

Technically Completing the Service Order

Delivering the Repaired Piece of Equipment

Delivering the Repaired Piece of Equipment

1. Call up the transaction as follows:

Menu Path	From the <i>Order</i> node, choose <i>Customer Repair</i> \rightarrow <i>Shipping</i> \rightarrow <i>Outbound Delivery</i> \rightarrow <i>Create</i> \rightarrow <i>Single Document</i> \rightarrow <i>With Reference to Sales Order.</i>
Transaction Code	VL10N

2. Enter the following data:

Field	Data
Shipping point	1200
Selection date	Current date
Order	Noted number of the repair request

- 3. Choose .
- 4. Choose Subsequent functions \rightarrow Create transfer order.
- 5. In the dialog box, choose Yes.
- 6. Enter the following data:

Field	Data
Warehouse number	012
Plant	1200
delivery	Default
Select items	Select (default)
Foreground/background	Background
Adopt pick quantity	2

7. Choose 🕰.



Due to the entry in the field *Adopt pick quantity* the system posts the goods issue directly with this function.

8. Choose until the overview tree appears.

Creating the Billing Request

Creating the Billing Request

Use

By entering the service order, you create a billing request. With it, the system creates new items in the repair request based on the cost data of the service order. These items are the basis for a later invoice.

Procedure

1. Enter the following data:

Menu Path	From the Service Processing node, choose Completion \rightarrow Billing Request \rightarrow Process Individually	
Transaction Code	DP90	

2. Enter the following data:

Field	Data
Sales document	Noted number of the service order
Posting date to	Default

- 3. Choose Expenses.
- 4. Choose Billing Request.
- 5. In the dialog box, choose \square Yes.

Due to the settings entered before, the system displays the repair request.

- 6. Choose $Edit \rightarrow Display\ criteria \rightarrow All\ Items$.
- 7. To display the items with the numbers 10400 to 10600, shift the screen area using the scroll bar, if necessary.

When creating the billing request, the system also created the listed items with the numbers 10400 to 10600. They are transferred to the invoice. These items evaluate the consumed materials or the working hours done. The calculation takes place using service prices entered in the system beforehand.

- 8. Choose 🗒.
- 9. Choose until the overview tree appears.

Invoicing the Repair Request

Invoicing the Repair Request

1. Call up the transaction as follows:

Menu Path	From the Service Processing node, choose Completion \rightarrow Billing Document \rightarrow Create.
Transaction Code	VF01

2. Enter the following data:

Field	Data
Document	Noted number of the repair request

3. Choose .

The system displays the billing items overview.

- 4. Choose .
- 5. Choose until the overview tree appears.

Settling and Completing the Service Order

Settling and Completing the Service Order

Use

The following function settles the costs of the service order to the repair request. As there will be no further costs, you will also do the business completion for the service order.

Procedure

1. Call up the transaction as follows:

Menu Path	From the <i>Completion</i> node, choose <i>Order Settlement</i> → <i>Settle Individually</i>
Transaction Code	KO88

2. If the Set controlling area dialog box appears, enter the following data and choose ♥:

Field	Data
Controlling area	1000

3. Enter the following data:

Field	Data
Order	Noted number of the SM order
Settlement period	Current month three-digit (e. g. 010 for October)
Fiscal year	Current year
Test run	Deselect

- 4. Choose .
- 5. Choose until the overview tree appears.
- 6. Call up the transaction as follows:

Menu Path From the Service Processing node, choose $Order o Service Order$ Change.	
Transaction Code	IW32

7. Enter the following data:

Field	Data	
Order	Noted number of the service order	

- 8. Choose 🖾.
- 9. Choose $Order \rightarrow Functions \rightarrow Complete \rightarrow Complete$ (business).
- 10. Choose until the overview tree appears.

Settling and Completing the Service Order

Analyzing the Result of the Repair request

Analyzing the Result of the Repair request

Use

The billing request triggered the update of revenues and the service order settlement triggered an update of costs of the main item in the repair request. You display the result of the repair.

Procedure

1. Call up the transaction as follows:

Menu Path	From the <i>Order</i> node, choose <i>Customer Repair</i> \rightarrow <i>Display</i> .	
Transaction Code	VA03	

2. Enter the following data:

Field	Data
Order	Noted number of the repair request

- 3. Choose .
- 4. Select the first item and choose *Environment* → *Cost report*.

The report lists the costs and revenues of the repair. The repair was processed with gains. For the period-end closing, the system finally settles the repair request within the profitability analysis.

5. Choose until the overview tree appears.

Deactivating the QM Check

Deactivating the QM Check

Use

So that other IDES processes using material R-1001 are not restricted, you will deactivate the QM inspection for this material once again.

Procedure

1. Call up the transaction as follows:

Menu Path	Logistics $ o$ Quality Management $ o$ Quality Planning $ o$ Logistics Master Data $ o$ Material $ o$ Change.
Transaction Code	MM02

2. Enter the following data:

Field	Data	
Material	R-1001	

- 3. Choose Select view(s).
- 4. Enter the following data:

Field	Data
Quality Management	Select

- 5. Choose ♥.
- 6. Enter the following data:

Field	Data
Plant	1200

- 7. Choose ♥.
- 8. Choose Insp.setup.
- 9. Enter the following data:

Field	Data
Active (in the line of InspType 05)	Deselect

- 10. Choose ♥.
- 11. Choose
- 12. Choose until the overview tree appears.

Internet Processes

Internet Processes

Output of a Quality Certificate on the Internet [Page 330]
Entry of a Quality Notification on the Internet [Page 335]

Output of a Quality Certificate on the Internet

Output of a Quality Certificate on the Internet

Purpose

Customers often require a quality certificate for a particular batch. This Internet scenario describes how this document can be ordered and received within seconds using the Internet.

You can find more information about this process under [1] [Page 331].

Prerequisites

To run this process, your IDES system must have a connection to an Internet **T**ransaction **S**erver (ITS).

A certificate template exists for this internet output. This template must be assigned to the related object (material/customer or material or material group) in the R/3 System.

Process Flow

You can find the data for this process under [2] [Page 332]

Output of a Quality Certificate on the Internet [Page 333]

Additional Process Information

Additional Process Information

This component enables customers to issue themselves the quality certificate for whichever batch of a product they require. The values are taken from the batch specification. The certificate is issued in the language defined in the customer master record You can use USER EXITs to restrict batch selection for the customer.

The certificate is issued in PDF Format and can be displayed with the Acrobat Reader from ADOBE.

Data Used During This Process

Data Used During This Process

Field	Europe	North America
Login	7777	Internet user
Password	welcome	
Product group	CHEMICALS	Material group
Search string	Paint*	Short text, generic
Material short text	Paint, 1 liter can	Material with template allocation
Batches	C1, C2, C3, C7	Batches with certificate

Output of a Quality Certificate on the Internet

- 1. Switch to your Internet Browser (for example, Netscape Navigator or Microsoft Internet Explorer).
- 2. Call up the IDES Home Page and choose the language you require.



If you do not know the address of the *IDES Home Page*, contact your system administrator.

- 3. Choose Business Customers.
- On the Business Customers screen, choose Customer Service → Quality Certificate.
 The Quality Certificates screen appears.
- 5. Enter the following data:

Field	Data
Your customer number	7777
Password	welcome

- 6. Choose Login.
- 7. Enter the following data:

Field	Data
Product group	Chemicals
Search string	Paint*

8. Choose Find.

In the results screen area, a list of materials and the batches associated with these materials appears.

9. Choose one of the following batches to see the corresponding quality certificate.

Product	Batch
Paint, 1 liter can	C1
	C2
	С3
	C7



If Acrobat Reader is not installed as a standard viewer for file types .pdf, a dialog box appears from the Internet Explorer. Confirm that you want to open the file with a program from your computer. From the list select ACROREAD. The Acrobat Reader displays the certificate on the screen as defined in the R/3 System.

If you can not make a connection between the Internet Explorer and the Acrobat Reader, choose <u>Saving Certificates [Ext.]</u>.



Output of a Quality Certificate on the Internet



Close the Acrobat Reader.

10. Choose Exit.

You return to the *IDES Homepage*.

Entry of a Quality Notification Using the Internet

Entry of a Quality Notification Using the Internet

Purpose

Quality notifications can be created, for example, as a result of customer complaints. You can now create quality notifications on the Internet. Small sales departments and the external sales force will benefit from this in particular. This process shows you how to enter a notification on the Internet.

You can find more information about this process under i [Page 336].

Prerequisites

You can only run this process, if your IDES system has a connection to an Internet **T**ransaction **S**erver (ITS).

Process Flow

You can find the data for this process under <a>! Page <a>[Page <a>[Page].

Entering the Quality Notification on the Internet [Page 338]

Additional Process Information

Additional Process Information

If a problem occurs with a product, complaints or information about the problem should be quickly and easily circulated within the company. This quality notification created on the Internet appears online in the R/3 System for further processing.

Prerequisites

You must create an Internet user with the relevant authorization in your R/3 System for people creating notifications.

If you want to allow notifications to be created for a material on the Internet, a quality information record must exist for the corresponding material and customer.

Data Used During This Process

Data Used During This Process

Field	Entry	Description
Contact person number	129	Internet user
Password	welcome	
Material	AM2-750-A (etc.)	Material group

Entering the Quality Notification on the Internet

Entering the Quality Notification on the Internet

- 1. Switch to your Internet Browser (for example, Netscape Navigator or Microsoft Internet Explorer).
- 2. Call up the IDES Home Page and choose the language you require.



If you do not know the address of the *IDES Home Page*, contact your system administrator.

- 3. Choose Business Customers.
- On the Business Customers screen, choose Customer Services → Quality Notification.
 The Quality Notification screen appears.
- 5. Enter the following data:

Field	Data
Contact person number	129
Password	welcome

6. Choose Create Notification.

The system lists the materials for which you can create a notification.

- 7. Select a material using the possible entries help.
- 8. Choose Problem Description.
- 9. Enter the following data:

Field	Data
Defects	###Select a defect using the possible entries help###
Defect location	###Select a defect location using the possible entries help###
Description	###Any###

10. Choose Send.

The system now displays your notification number and the information you have entered.

- 11. To display an overview of the accumulated notifications and their processing status, choose *Notification List*.
- 12. Choose Back.
- 13. Choose E Exit.

This takes you back to the *IDES Homepage*.