QM in Procurement (QM-PT-RP-PRC)



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Icons

Icon	Meaning
Δ	Caution
	Example
	Note
②	Recommendation
	Syntax

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QM in Procurement (QM-PT-RP-PRC)

QM in Procurement (QM-PT-RP-PRC)

Purpose

This component contains functions that allow you to integrate the tasks of Quality Management with the procurement processes in your company. Using these functions, the Quality department in your company can influence or control the following activities when materials are procured from external suppliers:

- Selecting suitable vendors
- Processing requests for quotations
- Processing purchase orders
- Processing goods receipt inspections

Implementation Considerations

If your company purchases materials from external vendors, you can implement the *QM in Procurement* (QM-PT-RP-PRC) component to support your procurement processes for quality assurance purposes.

Integration

If you want to implement the *QM in Procurement* component, your company must also use the *Purchasing* (MM-PUR) component. If you require functions for processing goods movements, you must also install the *Inventory Management* (MM-IM) component.

You can implement the *QM in Procurement* component as a stand-alone component or together with the *Quality Inspection* (QM-IM) component. As a stand-alone component, you can use all procurement functions except those for processing goods receipt inspections. To process such inspections, you need the *Quality Inspection* component.

Features

Using the functions of the *QM in Procurement* component, you can:

- Manage quality-related information for materials, vendors, and manufacturers in quality info records
- Release or block vendors and manufacturers
- Monitor the QM systems of vendors and manufacturers
- Supply quality documents with requests for quotations and purchase orders
- Evaluate vendors on the basis of quality
- Certify vendors or manufacturers that have QM systems implemented, to reduce the inspection requirement
- Manage and release supply relationships
- Request that quality certificates be submitted with the delivered goods and monitor the receipt of these certificates
- Inspect vendor goods at vendor sites (source inspections)

QM in Procurement (QM-PT-RP-PRC)

- Inspect vendor goods upon receipt (goods receipt inspections)
- Manage the posted goods in inspection stock
- Block the payment of invoices until the goods have been inspected and accepted
- Process goods receipt inspections for manufacturer-specific materials
- Inspect goods that have been externally processed when they are returned in a goods receipt

Overview

Overview

Procurement Activities

The QM component is integrated in crucial phases of the procurement process. It supports the procurement activities by means of functions such as:

- Vendor Evaluation [Page 10]
- Vendor block
- Vendor Release [Page 11] for requests for quotation and purchase orders
- · Assigning technical delivery terms and quality assurance agreements
- Certificate processing
- Status administration of the supply relationships [Page 15]
- Incoming inspections
- Goods receipt inspections

The QM component provides information for processing quotations and purchase orders. For example, you may be unable to place orders for the material from a specific vendor because the vendor is **blocked** for quality reasons.

The vendor may be required to comply with the **technical delivery terms** and the **quality assurance agreements** when a quotation is made. If one of the required documents is not available or not released when a purchase order is opened, the function is blocked.

If technical delivery terms are indicated for a material or if a quality assurance agreement exists for a material-vendor combination, the long text is printed out (without attached application files) when the purchase order is created.

When the **purchase order** is placed, the vendor must be **released** for delivery of the relevant material by the quality department, if this was required. Release of this supply relationship can be restricted to a defined validity period and a maximum delivery quantity.

When the goods are ordered, you can stipulate that a **certificate** is required from the vendor of the material, in addition to compliance with technical delivery terms and quality assurance agreements. If a certificate was not supplied although required, the goods are either posted to blocked stock (if an inspection lot is not generated) or a corresponding status is set in the inspection lot. Receipt of the certificate must be confirmed at the latest when the usage decision is made.

Alternatives to Goods Receipt Inspections

You can deactivate the goods receipt inspection generally for a material-vendor combination event though an inspection is required for the material.

Furthermore, you can perform <u>source inspections [Page 20]</u> instead of or in addition to goods receipt inspections. In such cases, the system monitors the target delivery dates and opens the inspection lot in time for the acceptance date.

Blocking the Invoice

You can prevent an invoice for a material from being paid automatically if:

Overview

- The corresponding goods receipt inspection has not yet been completed
- The usage decision for the goods receipt inspection was "not OK"

In this case, the reason for blocking "I" is set in the invoice.

You can still pay the invoice manually. To activate the function for blocking the invoice, you must set the identifier for the invoice block in the procurement key of the material.

This function is only meaningful with goods-receipt based invoice verification since, in the case of partial deliveries, the corresponding inspection lot for the partial delivery must be selected (irrespective of other inspection lots for the same purchase order).

See also:

The Quality Information Record [Page 23]

The Vendor Master Record [Page 21]

Customizing Settings for QM in Procurement [Page 31]

Triggering Source Inspections [Ext.]

Activation

Activation

Activating QM in Procurement

You activate quality management for procurement (active) for a material at the client level.

All other **procurement data** is stored in the material master record in the quality management view at **plant level**.

Procurement Data

The procurement data in the material master record controls a wide range of activities that are processed:

- Before the material master record is created (for example creating and maintaining technical delivery terms)
- After the material master record has been created (creating quality information records).

You can use the functions implemented in the QM component for supporting the procurement process as required. The QM functions apply partly to a certain material, a certain vendor and a certain material-vendor combination.

The control data, therefore, are stored partly in the **material master**, the **vendor master** and in an **information record** (info record) for the material-vendor combination (supply relationship).

You create **technical delivery terms** and **quality assurance agreements** in the document management system.

The various procurement objects, such as the procurement keys, document types and keys for certificate processing and delivery blocks, are defined in the **Customizing settings for QM in procurement**.

Graphic: Procurement Data for a Material [Page 14]

See also:

The Quality Information Record [Page 23]

The Vendor Master Record [Page 21]

Customizing Settings for QM in Procurement [Page 31]

Detailed information on how to maintain documents in the Document Management system is provided in *CA - Document Management*.

Vendor Evaluation

Vendor Evaluation

The Materials Management component provides the buyer with information on the delivery reliability and price behavior of the vendor in the vendor evaluation. The QM component provides information on the quality of the goods delivered to date and on the vendor's quality management system (QM system). The QM component manages summarized quality scores for this purpose and updates them automatically for the vendor evaluation.

In some industry sectors, vendors must maintain a quality management system, verify its efficiency - for example as per ISO 9003 - and have it certified by accredited institutions in the form of certificates. The QM component, therefore, enables you to define required QM systems, to note and valuate those systems actually installed by the vendor and to make a comparison when choosing the vendor.

Detailed information on vendor evaluations is provided in MM Vendor Evaluation.

Vendor Release

Vendor Release

The quality department releases a vendor for a certain material. It can also restrict the release to a certain period of time or a certain quantity. If the vendor has serious quality problems, the Q-system can safeguard against this by blocking requests for quotations, purchase orders or goods receipts for certain materials from this vendor.

Inspection Skip for Certified Vendors

Inspection Skip for Certified Vendors

Use

Vendors that have certified QM systems in use may be able to maintain a higher product quality than those without QM systems. In Customizing for *QM in Procurement*, you can waive the requirement for goods receipt inspections when goods are delivered from vendors who have certified QM systems in use. If you waive the inspection requirement:

- The system does not create an inspection lot when goods are procured from these vendors.
- The goods are posted directly to unrestricted-use stock when they are received.

Integration

If you want to define a QM system and be able to control inspection skips, you must maintain various master records:

- You define the requirements for a vendor's QM system in the material master record.
- You specify the vendor's QM system (which is identified in Customizing as a certified system) in the vendor master record or the quality info record. If you enter the QM system in the vendor master record, the inspection skip applies to all of the vendor's materials. If you enter the QM system in the quality info record, the inspection skip only applies to a specific combination of material, vendor, and plant.
- In the quality info record, you can override an inspection skip that has been defined in Customizing. For example, if you want to force inspections for a certain combination of material, vendor, and plant, you can specify this in the corresponding quality info record.

If you want to override inspection skips for several materials or vendors, you can process several quality info records using the function for mass data maintenance.

 You can specify a validity period for the certification of the actual QM system in both the vendor master record and the quality info record. If you specified a validity period and a QM system in both places, the data in quality info record applies

When you maintain a quality info record, you can only enter a certification date if an actual QM system is also specified. If you leave the date field blank, the QM system is valid for an unlimited period of time.

The system checks whether the QM system is still valid and it issues an error or warning message as follows:

When you maintain a:	The following message is issued
Outline agreement	Warning
Scheduling agreement	Warning
Request for quotation	Warning
Purchase order	Error
Delivery schedule	Error

If a QM system is specified in both the vendor master and the quality info record, the system uses the QM system and the "valid to" date from the more detailed level (that is, the quality info record).

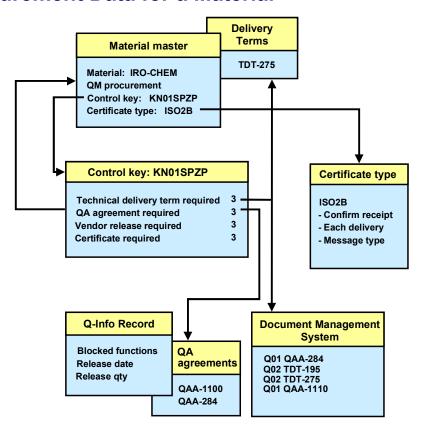
Inspection Skip for Certified Vendors

Prerequisites

In Customizing for *QM in Procurement (Define QM systems*), you must set the indicator *Certified QM system* for the QM system that is presently in use.

Procurement Data for a Material

Procurement Data for a Material



Status of the Supply Relationships

Status of the Supply Relationships

The QM component monitors the **release of supply relationships in stages**. You can define certain statuses such as **model series**, **preliminary series or production series** through which the deliveries of a material from a certain vendor must pass in sequence. The system then generates inspection lots with an inspection type that matches the **next** status of the supply relationship and it updates the statuses automatically on the basis of the usage decision. When the last status is reached, the system uses the **inspection type 01** for all further goods receipts.

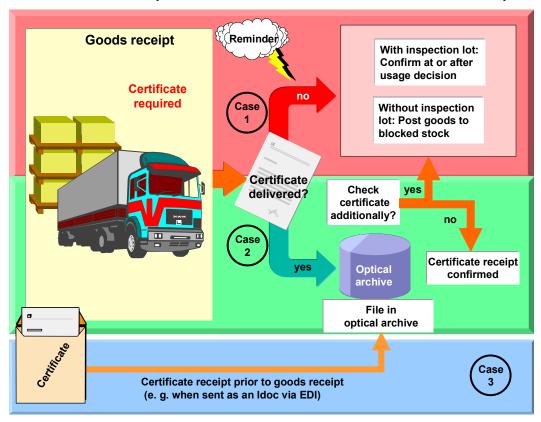
If a release inspection is currently active, goods receipt postings for the same material-vendor combination cannot be made at the same time.

Quality Certificate for Goods Receipt

Quality Certificate for Goods Receipt

Use

When you procure goods from a vendor, you can request that the vendor submit a quality certificate with the shipment of goods (in addition to meeting the requirements specified in the technical delivery terms and quality assurance agreement). If you request a quality certificate, you can monitor the receipt of the certificate independently of the goods receipt posting, regardless of whether an inspection lot is created or not. The certificate can be filed in the optical archive. If a certificate is yet to be delivered, a reminder can be created automatically.



Case 3 The graphic refers to the inbox for a quality certificate in PDF format. For more information, see the:

- EDI documentation EDI Inbox for a Quality Certificate in PDF Format [Ext.]
- EDI documentation EDI Inbox for Quality Certificates with Data Access [Ext.]
- ArchiveLink documentation Storing Incoming Certificates (QM-CA) [Ext.]

The inbox for quality certificates as IDocs with data transfer to an inspection lot is described below in the section "Features".

Integration

This function is integrated with the ArchiveLink and the SAP Business Workflow component.

Use

Prerequisites

In Customizing for QM in Procurement, the following conditions must be met:

- A QM control key with indicator Certificate required is set
- A certificate type has been defined and the indicator for enhanced certificate processing is set
- A number range for the certificate receipt is defined

In the material master, the following conditions must be met:

- QM in procurement is active
- A control key with certificate requirement is set
- A certificate type is specified

Features

This function covers the following scenarios for processing a certificate:

Certificate is received before the goods receipt

The receipt of the certificate is recorded with reference to the purchase order. You choose the transaction to record a certificate receipt, and enter the purchase order number, the purchase order item and, if known, the delivery number.

Certificate is received with the goods receipt

In goods receipt posting, certificate receipt can be monitored:

- If you confirm the receipt of the certificate, the status Certificate received is set. If an
 inspection lot is created and no additional certificate check is required, the lot status
 CROK (certificate receipt confirmed) is set.
- If you don't confirm the receipt, the status Certificate requested is set. If an inspection lot is created, the lot status CTCM (certificate confirmation missing) is set.
- Certificate for a purchase order item received after the goods receipt (no inspection lot created)

You choose the transaction to change a certificate receipt, and enter the purchase order number, the purchase order item and, if known, the delivery number for which you want to confirm the receipt of the certificate.

 Certificate for a purchase order item received after the goods receipt (inspection lot created)

If a certificate for a purchase order item is received after the good receipt, there are two possibilities:

- Confirmation with the usage decision
- Confirmation by using the transaction to change a certificate receipt.

You enter either the purchase order number and purchase order item, or the material document number and material document for which you want to confirm the receipt of the certificate.

Use

- Certificate for a purchase order item received when the usage decision is made for an inspection lot
 - You confirm the receipt of the certificate as described under "Certificate for a purchase order item received after the goods receipt (no inspection lot created)"
- Processing a reminder for missing certificates

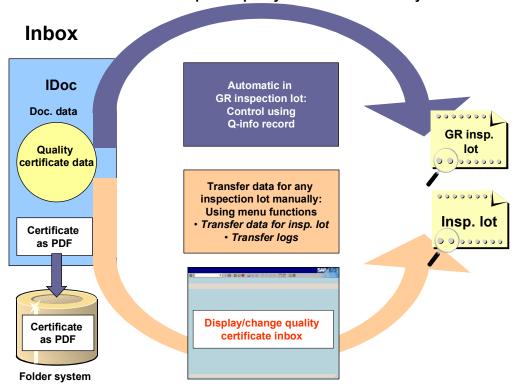
You can display a list of certificates, which are yet to come, based on the status of the certificate receipt. A reminder can be processed once the date of the goods receipt plus reminder period is over. From this list, you can choose the items for which you want to print a reminder. The reminder will be created on a SAPscript form.

 At the receipt of an electronic quality certificate as an IDoc with reference to delivery: Transfer of inspection results for the certificate to a GR inspection lot or another inspection lot (for example, source inspection)

If you receive an electronic quality certificate as an IDoc with reference to delivery, the data can be automatically transferred to an inspection lot for goods receipt using a background workflow. The prerequisite for this is that the IDoc has been received and the goods receipt has been posted.

If you want to manually transfer data to another inspection lot (for example, a source inspection lot), you can use the menu function *Enter data for inspection lot* in the transaction for displaying or changing the certificate record. You can access the transfer log using *Transfer log*.

A: Electronic certificate receipt of a quality certificate for delivery



Use

For more information see the:

- EDI documentation EDI Inbox for Quality Certificates with Data Access [Ext.]
- Workflow documentation <u>Data Transfer from an IDoc to an Inspection Lot [Ext.]</u>

Activities

To call up the transactions for a certificate receipt, you choose $Logistics \rightarrow Quality \ management \rightarrow Quality \ certificates \rightarrow Receipt.$

Source Inspection

Source Inspection

Use

Source inspections are performed upon request and with the participation of the customer or sold-to party. A source inspection can performed by the receiver of the service, the vendor in the presence of the receiver or by a person or third party (for example, a surveyor) appointed by him.

Inspection lots for source inspections that reference a purchasing document can be created with or without specifying a (vendor) batch (*Inspect without batch* indicator in worklist for source inspections).

- If you did **not specify** a (vendor) batch, the system creates the inspection lot for batch number ", ,". If the batch is later specified in the purchase order at a later time, the system **does not create** a new inspection lot for the source inspection. In the Customizing settings for the *QM in Procurement* control key, you can specify whether or not a new inspection lot should be created during a goods receipt (*GR control/Batch*).
- If you specified a (vendor) batch, the system creates an inspection lot for this batch. If the
 batch is later specified in the purchase order, the system creates a new inspection lot for the
 source inspection or goods receipt.

The batch is displayed in the inspection lot.

If the inspection lot for the source inspection is rejected for goods receipt item, the Customizing settings for the *QM in procurement* control key determines whether:

- · A goods receipt posting is not possible or
- A quality notification is not created and a new inspection lot is created

For more information, see Triggering Source Inspection [Ext.].

The Vendor Master Record

The Vendor Master Record

The vendor master contains information about the vendors a company uses. This information is contained in individual vendor master records. In addition to the name and address of a vendor, the vendor master record also contains the vendor number and information about the currency and terms of payment that apply to the vendor.

In certain cases, you may want block the procurement of goods from a certain vendor (for example, if he delivers poor-quality products). You can block a vendor for quality reasons in two places:

In the vendor master record

The vendor block applies to all materials and plants

In the Q-info record

The vendor block applies to a specific material and plant

How is the Vendor Master Record Used?

For procurement and purchasing functions, the system first checks the vendor master record to determine if the vendor is blocked from these functions. If the vendor is not blocked, the system checks the parameters in the Q-info record, if necessary. The settings in the Q-info record are **only** checked if a vendor release or quality assurance agreement is specified in the material master record via the control key for QM in procurement.

You **cannot** continue with the procurement function if the vendor is blocked in either the vendor master record or in the Q-info record.

See also:

Blocking a Vendor [Page 22]

The Quality Information Record [Page 23]

MM - Purchasing

Blocking a Vendor

Blocking a Vendor

- Choose Logistics → Quality management → Quality planning → Logistics master data → Vendor → Block.
- 2. Enter the desired vendor and purchasing organization.

The initial screen for blocking/unblocking a vendor appears.

- 3. In the screen block *Block for quality reasons*, enter the code for the block (for example, block purchase order, block request for quotation and purchase order, or block request for quotation, purchase order and goods receipt).
- 4. Save the changes to the vendor master record.

A confirmation message is displayed and the initial screen reappears.

Unblocking a Vendor

To **unblock** the vendor, perform the same steps as described above. In the *Block for quality reasons* screen (see step 3), delete the blocking code and save the changes to the vendor master record.

Quality Information Record

Quality Information Record

Definition

If a quality assurance agreement or a vendor release is required for a material, you must create a quality information record (quality info record). The quality info record determines how the material can be processed further.

Use

When a quotation or purchase order is created, the system checks whether a quality info record is required and available for the combination of material and vendor.

The system also checks whether the vendor and material-vendor combination is blocked or released for quotations, purchase orders and/or goods receipt. The execution of this check depends on the setting of the *QM in procurement* control key in the material master.

The quality info record displays a vendor block specified in the vendor master, the vendor's QM system, and the lock date.

You can also specify a status profile for <u>releasing the supply relationships [Page 15]</u> and the QM system of the material-vendor combination in the quality info record. You can also decide whether you want to deactivate the goods receipt inspection or perform a goods receipt inspection and/or <u>source inspection [Page 20]</u>.

See also:

Creating a Quality Information Record [Page 24]

Creating a Quality Information Record

Creating a Quality Information Record

Use

You normally create a quality info record **after** you have maintained the QM-specific data in the material master. A vendor master record must also be available.

Procedure

Choose Logistics → Quality management → Quality planning → Logistics master data
 → Quality info record: Procurement → Create.

The initial screen for the quality info record appears.

2. Since you maintain a quality info record for a combination of material and vendor at the plant level, enter a material, vendor, and plant and then choose *Enter*.

You can use another quality info record as a copy model to create the record. To do this, enter the data for the existing quality info record in the *Copy model* block of the initial screen.

- 3. On the data screen, you enter:
 - Status Profile for Releasing Supply Relationships [Page 26]
 - Release Criteria for Procurement Functions [Page 27]
 - Information [Page 28] about the function(s) that should be blocked
 - Quality Assurance Agreement [Page 29]
 - Vendor's QM system

If the vendor has a QM system, you can enter a description of this system for this material.

- 4. You can also specify whether the goods receipt inspection should be deactivated or whether a goods receipt inspection and/or a <u>source inspection [Page 20]</u> should be performed. For this purpose, choose the *Insp. control* tab and then enter the following data:
 - If you want to perform an source inspection in addition to a goods receipt inspection, enter an inspection type for the source inspection and a lead time in days.
 - If you do **not** want to perform a goods receipt inspection even though the settings in the material master specify such an inspection, set the *No inspection* indicator for the *Insp.* control field.
 - If you want to perform an source inspection instead of a goods receipt inspection, set the Source insp. - no GR indicator.

If this indicator is set, the system does not create an inspection lot for a goods receipt if a source inspection is performed. If a source inspection is not performed, the system creates an inspection lot for the goods receipt.

5. Save the data.

Creating a Quality Information Record

Status Profile for Releasing Supply Relationships

Status Profile for Releasing Supply Relationships

Use

In addition to releasing the date and quantity, you can also use a **status profile** to release a vendor for a material (for a revision level if necessary). This status profile contains several release stages such as "model series", "preliminary series" and so on. The various release stages are defined in the Customizing settings for a status profile. Each of these stages can be assigned a different inspection type (and therefore a different inspection plan).

When an goods receipt inspection lot is created - provided that a status profile is stored in the quality information record - the system checks whether the last release stage has been reached (usually release for production series delivery). The procedure from here on depends on the result of this check.

If the last release stage:

- Has been reached, the inspection processing procedure is performed as usual.
- Has not been reached, an inspection lot is opened for the next release stage.

If an inspection lot of this type is being processed, the goods receipts are ordered in a strict sequence for the same material-vendor combination. The next goods receipt for the same combination cannot be processed until the active inspection has been completed.

Release Criteria for Procurement Functions

Release Criteria for Procurement Functions

You must enter the date until the material-vendor combination is available for procurement functions, such as quotations and purchase orders. Until this date is reached, quotations and purchase orders can be accepted and entered in the system for the material-vendor combination.

You can also stipulate that the material-vendor combination be available until the ordered quantity reaches the specified amount. If you set this indicator (*Release qty active*), you must also enter the ordered quantity limit.

The system totals the ordered quantity in the ordered quantity field of the Q-info record when a purchase order is released. When the ordered quantity exceeds the release quantity, no further purchase orders are allowed for the material-vendor combination.

You can reset the ordered quantity manually by choosing $Edit \rightarrow Reset$ ordered qty from the menu bar. The system issues a warning message. When you confirm the message by choosing ENTER, the system sets the ordered quantity to 0 and resets the date to the current date.

Blocking Information

Blocking Information

Use

In the last section of the screen, you can enter a code for the activity or activities that should be blocked. You can block a quotation, purchase order, goods receipt or all functions. You can also enter a reason for the block. As a result, the material-vendor combination is blocked from the activity or activities until you remove the block.

You enter blocking information if you want to prevent temporarily a certain function from being executed for a material-vendor combination as a result of a deterioration in the quality of the material.

Quality Assurance Agreement

Quality Assurance Agreement

Definition

If a quality assurance agreement is required by the procurement key set for the material, you can enter one by choosing the *Quality agreement* tab. You can then enter the data to select the quality assurance agreement that is stored in the document management system.

- Document type (default: Q01)
- Document identifier
- Identifier for the relevant section of the document
- Version of the document

If you do not specify a quality assurance agreement when you create a quality info record (even though one is required based the settings in Customizing and in the material master), the system issues a warning message. You can, however, continue processing.

For more information on how to create documents in the document management system, refer to the documentation *CA - Document Management*.

Inspection Status in Material Document

Inspection Status in Material Document

Use

In the material document for a goods receipt, you can determine the inspection status for the goods receipt on the basis of an indicator (for example, whether or not the goods receipt caused an inspection lot to be created). If an inspection lot was not created, the indicator specifies the reason for this. If the system created an inspection lot, you can branch from the material document to display the inspection lot data.

Features

The *GR status* indicator in the material document shows the status of the goods receipt inspection. The following statuses are possible:

- Inspection active (inspection lot created)
- QM system certified in quality info record (no inspection lot created)
- QM system certified for vendor/manufacturer (no inspection lot created)
- Indicator No inspection active in quality info record (no inspection lot created)
- Source inspection instead of goods receipt inspection active in quality info record (no inspection lot created)
- Inspection lot already created from previous document

Activities

You can display the material document for a goods receipt as follows:

- In the *Materials Management* component, use the functions of inventory management to display the material document. Select an item in the material document and choose *Goto* → *Details for item* to display the goods receipt status.
- In the Quality Management component, use the functions for quality inspections to display
 the inspection lot. In the inspection lot, you can display the material document by choosing
 Goto → Material documents.

Customizing Settings for QM in Procurement

The following settings can be made in the Customizing application in order to use the quality management functions in procurement:

Keys for material procurement

These keys define the conditions for quality management in procurement. They contain control indicators that determine, among other things, whether the following are necessary:

- Technical delivery terms
- Quality assurance agreement
- Vendor release
- Quality certificate
- Documentation
- Invoice block
- · Keys for certificate processing

Keys are defined for processing quality certificates and are stored in the material master record. These keys stipulate that a certificate be requested from the vendor for every purchase order item. The keys can also be used to determine

- Whether the system checks that a certificate has already been received for the purchase order item during goods receipt
- Whether a certificate must be provided for a purchase order item with every goods receipt
- The notification type generated by the system if the required certificate is not present
- Keys for vendor blocks

Keys are defined in the Customizing application for blocking supply relationships. Depending on whether the block applies to all or only some of the materials from a vendor, a blocking key is stored in the vendor master or in the Q-info record for the "material * vendor" combination.

The key controls blocking of the following transactions:

- Request for quotation
- Purchase order
- Goods receipt
- Document types

There are two types of system support for exchanging Q documents with vendors:

- Technical delivery terms (document type Q02):
- Quality assurance agreements (document type Q01):

These documents are used during the procurement operations, that is for requests for quotation and purchase orders, and are sent to the vendor.

Customizing Settings for QM in Procurement

The standard R/3 System contains fixed settings for these document types, such as:

- Changes to a document cause a new version to be created in the system.
- The status sequence of the document is suitably defined.

QM systems

Verification requirements with regard to the QM system of the vendor [Ext.] are defined.

You store the actual QM system in the **vendor master record** at the client level or in the **Q-info** record for the material-vendor combination at the plant level.

During procurement (requests for quotations and purchase order), the system checks whether the QM system of the vendor fulfills the requirements defined for the material.

Status of the supply relationships

Status profiles are defined for the supply relationships. An inspection type is assigned to each status contained in the profile.

You can stipulate that deliveries of materials from a vendor must pass through several statuses, for example

- Model series
- Preliminary series delivery
- Production series delivery

These statuses can be assigned **different inspection types** with corresponding plan usages. The system will then select inspection plans to match the status of the supply relationship.

Manufacturer Part Number Processing in QM

Purpose

The *Materials Management* (MM) component supports the procurement of manufacturer-specific parts or materials from different vendors. If you implement the functions for manufacturer part number (MPN) processing, you can also process goods receipt inspections for manufacturer-specific parts or materials in the *Quality Management* (QM) component.

For example, you can:

- Block or release a request to deliver manufacturer-specific parts or materials in a quality info record
- Waive the inspection requirement for manufacturer-specific parts or materials (provided the vendor and manufacturer have certified QM systems in use)
- Use manufacturer-specific inspection plans to inspect the manufacturer parts or materials In addition, the system can:
- Copy the manufacturer data in the inspection lot record, physical sample record, and quality notification
- Dynamically modify the inspection scope on the basis of the manufacturer (<u>Dynamic modification criteria [Ext.]</u>)

Prerequisites

You can only process manufacturer parts in QM if the following activities have been performed in *Materials Management*:

- Profiles for manufacturer part numbers have been defined in Customizing for Materials
 Management (Purchasing → Material Master → Define manufacturer part profile). The QM
 Processing for MPN indicator has been set in these profiles.
- The profiles have been assigned to the corresponding company-internal materials (purchasing view in the material master).
- Material master records have been created for the manufacturer parts or materials and assigned to the company-internal materials.
- Manufacturer master records have been created (For more information, see <u>Manufacturer</u> <u>Part Number [Ext.]</u>)

In QM, you must perform the appropriate activities below, depending on which MPN processing functions you intend to use:

Blocking/releasing manufacturer parts

If the Quality department requires a quality assurance agreement or specifies the release of the manufacturer parts, you must create corresponding quality info records that reference the manufacturer part numbers.

No inspections

To waive the inspection requirement for manufacturer-specific parts or materials, both the manufacturer and the vendor must have a certified QM system in use.

Manufacturer Part Number Processing in QM

Selection of manufacturer-specific inspection plans

If you want the system to automatically select a manufacturer-specific inspection plan when an inspection lot is created, you must assign the manufacturer to the corresponding inspection plans (which are already assigned to the company-internal materials).

· Dynamic modification on the basis of manufacturer

If you want to include the manufacturer as an additional dynamic modification criterion, you must specify this in the inspection plan (see dynamic modification criteria at header or characteristic level of the plan).

Process Flow

- 1. The purchasing department in a company receives a purchase requisition to procure a material from a specific manufacturer.
- 2. Purchasing converts the purchase requisition into a purchase order. Before the system creates the purchase order, it checks whether the QM procurement key for the company-internal material in the material master specifies a delivery release:
 - If a delivery release is specified, the system checks whether a corresponding quality info record exists for the material/vendor combination and whether it has been released. If the indicator *QM Processing for MPN* is set in the control profile, the system searches for a quality info record for the vendor/manufacturer part combination. The system only creates the purchase order if the quality info record is released.
 - If a delivery release is not specified, the system creates the purchase order immediately.
- 3. After a purchase order has been created, the vendor delivers the goods. The system responds in one of the following ways:

It creates an inspection lot for a goods receipt inspection and:	It does not create an inspection lot because:
Calculates the sample sizes	The vendor and manufacturer have a certified QM system in use. No inspection processing activities take place in QM.
Selects a manufacturer-specific inspection plan	
Prints the shop papers (inspection instruction and sample drawing instruction)	
Copies the manufacturer data into the inspection lot record	
Updates the material, vendor, and manufacturer-specific quality level (if the dynamic modification rule specifies dynamic modification upon lot creation)	

- 4. If the system creates an inspection lot for the goods receipt, you inspect the manufacturer parts and record the inspection results.
- 5. You make the usage decision and stock postings for the inspection lot.

Manufacturer Part Number Processing in QM

The system updates the material, vendor, and manufacturer-specific quality level (if the dynamic modification rule specifies dynamic modification when you make the usage decision).

External Processing in QM

External Processing in QM

Purpose

During production, you may want certain operations in a routing to be processed externally by another contractor. In such cases, the system can create a purchase requisition for such an operation automatically on the basis of a production order. Your purchasing department converts these purchase requisitions into purchase orders. When a goods receipt is received for a purchase order, the system automatically creates an inspection lot so you can inspect the externally-processed goods.

Prerequisites

To activate the functions for external processing in QM:

- You must make sure that the operation control key in the production order specifies external processing.
- You must activate a goods receipt inspection for the operations to be processed externally by:
 - Specifying an inspection type (inspection lot origin 01) in the routing (external processing data for the operation)
 - Activating this inspection type in the material master of the final product



If you want to process more than one operation externally, you can specify different inspection types for each operation.

Process Flow

1. A production order is created in the *Production Planning* (PP) component. The system copies the planning data from the routing into the production order.



If necessary, you can still change the inspection type for the goods receipt for external processing in the production order.

- 2. When the production order is released, the system creates purchase requisitions in the *Materials Management* (MM) component for the operations that will be processed externally.
- 3. Each purchase requisition is converted to a purchase order.



The MM component initially uses the material key "0" for the operations that will be processed externally.

- 4. When a goods receipt is received for a purchase order, the system checks whether:
 - An inspection type is specified in the operation contained in the production order
 - This inspection type is active in the material master of the final product

External Processing in QM

5. If both conditions specified in step 4 are met, the system creates an inspection lot for the final product specified in the production order (that is, the material key "0" is replaced by the material key specified in the production order).



The inspection lot is not stock relevant.

6. You inspect the externally processed material in a goods receipt inspection.