|  |  |
| --- | --- |
|  |  |
| Test Script  SAP S/4HANA - 17-09-20 | public |
| Quality Management in Discrete Manufacturing (1E1\_DE) |

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# Purpose

This scope item manages quality inspection in discrete manufacturing processes. Quality inspection activities are relevant during the production process or at goods receipt from production. At goods receipt, the material is posted to quality inspection stock and an inspection lot is created based on an inspection plan. The quality technician records the inspection results and the quality engineer makes a usage decision (acceptance or rejection of the material) and posts the material to unrestricted or blocked stock or to scrap. During the production process, a quality operation within the production order triggers the quality inspection. The quality technician records the inspection results for inspection points. Based on the inspection point valuation, the quality operation is confirmed with the respective yield and scrap amounts and the inspection lot is closed by making a usage decision. In case of rejected characteristics, a defect is automatically recorded.

This document provides a detailed procedure for testing this scope item after solution activation, reflecting the predefined scope of the solution. Each process step, report, or item is covered in its own section, providing the system interactions (test steps) in a table view. Steps that are not in scope of the process but are needed for testing are marked accordingly. Project-specific steps must be added.

# Prerequisites

This section summarizes all the prerequisites for conducting the test in terms of systems, users, master data, organizational data, other test data and business conditions.

## System Access

|  |  |
| --- | --- |
| System | Details |
| System | Accessible via SAP Fiori launchpad. Your system administrator provides you with the URL to access the various apps assigned to your role. |

## Roles

Assign the following business roles to your individual test users. Alternatively, if available, you can create business roles using the following spaces with pages and predefined apps for the SAP Fiori launchpad and assign the business roles to your individual test users.

Note These roles or spaces are examples provided by SAP. You can use them as templates to create your own roles or spaces.

For more information about business roles, refer to Assigning business roles to a user in the [Administration Guide to Implementation of SAP S/4HANA with SAP Best Practices](https://help.sap.com/viewer/S4HANA2020_AdminGuide) .

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name (Role) | ID (Role) | Description (Space) | ID (Space) | Log On |
| Quality Technician | SAP\_BR\_QUALITY\_TECHNICIAN | Quality Inspection | SAP\_BR\_QUALITY\_TECHNICIAN |  |
| Quality Engineer | SAP\_BR\_QUALITY\_ENGINEER | Quality Engineering | SAP\_BR\_QUALITY\_ENGINEER |  |
| Warehouse Clerk | SAP\_BR\_WAREHOUSE\_CLERK | Inventory Processing | SAP\_BR\_WAREHOUSE\_CLERK |  |
| Inventory Manager | SAP\_BR\_INVENTORY\_MANAGER | Inventory Management | SAP\_BR\_INVENTORY\_MANAGER |  |
| Production Engineer - Discrete Manufacturing | SAP\_BR\_PRODN\_ENG\_DISC | Production Engineering - Discrete Manufacturing | SAP\_BR\_PRODN\_ENG\_DISC |  |
| Production Operator - Discrete Manufacturing | SAP\_BR\_PRODN\_OPTR\_DISC | Discrete Manufacturing Execution | SAP\_BR\_PRODN\_OPTR\_DISC |  |
| Production Supervisor - Discrete Manufacturing | SAP\_BR\_PRODN\_SUPERVISOR\_DISC | Discrete Manufacturing Execution Management | SAP\_BR\_PRODN\_SUPERVISOR\_DISC |  |

## Master Data, Organizational Data, and Other Data

The organizational structure and master data of your company is created in your system during activation. The organizational structure reflects the structure of your company. The master data represents materials, customers, and vendors, for example, depending on the operational focus of your company.

Use your own master data or the following sample data to go through the test procedure:

Manufacturing

|  |  |  |  |
| --- | --- | --- | --- |
| Master | Value | Details | Comments |
| Material | SG29 | Semi-Finished Product for discrete manufacturing with Quality Management |  |
| Material | FG129 | Finished Product for discrete manufacturing with Quality Management |  |
| Plant | 1010 | Plant 1 DE |  |
| Storage Location | 101B | Std. storage 2 | For production storage location |

Bill of Material Structure

This overview shows the bill of material structure and the usage of each component.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Material | Level | Material Type | Unit | Characteristic of material |
| FG129 | 0 | FERT | PC | Finished Product for discrete manufacturing with Quality Management |
| RM20 | 1 | ROH | PC | External procured |
| SG29 | 1 | HALB | PC | Semi-Finished Product for discrete manufacturing with Quality Management |
| RM124 | 2 | ROH | PC | External procured |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Material | Level | Material Type | Unit | Characteristic of material |
| QM006 | 0 | FERT | PC | Finished Product for discrete manufacturing with Quality Management |
| RMPI002 | 1 | ROH | PC | External procured |
| RMPI003 | 1 | ROH | PC | External procured |
| RMPI004 | 1 | ROH | PC | External procured |
| RMPI005 | 1 | ROH | PC | External procured |

For more information about creating master data objects, see the following [Master Data Scripts (MDS)](https://support.sap.com/content/dam/SAAP/Sol_Pack/BP_OP_ENTPR/BP_OP_ENTPR_S4HANA2020_7_Master_Data_EN_XX.htm) :

Table 1: Master Data Script Reference

|  |  |
| --- | --- |
| Master Data ID | Description |
| BNR | Create Raw Material ("ROH") |
| BNS | Create Semi-Finished Good ("HALB") |
| BNT | Create Finished Good ("FERT") |
| BNQ | Create Quality Inspection Plan |
| BNY | Create Quality Management Attributes for Material/Product Master |

Note Please follow note [2483795](https://service.sap.com/sap/support/notes/2483795) for activation of automatic defects recording and note [2483796](https://service.sap.com/sap/support/notes/2483796) for activation of attachment service in app Manage Usage Decision.

## Business Conditions

Before this scope item can be tested, the following business condition must be met.

|  |  |
| --- | --- |
| Scope Item | Business Condition |
| BNU - Create Costing Run | Complete all steps in the test script. |
| BNZ - Create New Open MM Posting Period | Complete all steps in the master data script. Posting Period is up to date. |
| 1BM - Make-to-Order Production - Semifinished Goods Planning and Assembly | To run through this scope item, it must be possible to produce materials. |
| BJ5 - Make-to-Stock Production - Discrete Manufacturing | To run through this scope item, it must be possible to produce materials. |
| BNY - Create Quality Management Attributes for Material/Product Master | Complete all steps in the master data script for inspection type 03 and 04. |

# Overview Table

This scope item consists of several process steps provided in the table below.

If your system administrator has enabled spaces and pages on the SAP Fiori launchpad, the homepage will only contain the essential apps for performing the typical tasks of a business role.

You can find all other apps not included on the homepage using the search bar.

If you want to personalize the homepage and include the hidden apps, navigate to your user profile and choose Settings > App Finder .

|  |  |  |  |
| --- | --- | --- | --- |
| Process Step | Business Role | Transaction/App | Expected Results |
| Quality Management in Discrete Manufacturing - Goods Receipt from Production | | | |
| [Make-to-Order Production - Semifinished Goods Planning and Assembly (1BM)](#unique_8) [page ] 11 | See scope item 1BM | See scope item 1BM | See scope item 1BM |
| [Display Inspection Plan for Inspection Characteristics](#unique_9) [page ] 14 | Quality Technician | Display Inspection Plan (QP03) | The Display Inspection Plan: Initial screen displays. |
| [Post Goods Receipt for Production Order](#unique_10) [page ] 15 | Warehouse Clerk | Post Goods Receipt for Production Order (F0843) | Goods movements are posted. |
| [Display Material Stock Before Quality Inspection](#unique_11) [page ] 16 | Warehouse Clerk | Stock - Single Material (F1076) | The Stock - Single Material (F1076) screen displays. |
| [Display Quality Technician Overview (optional)](#unique_12) [page ] 18 | Quality Technician | Quality Technician Overview (F2361) | The Quality Technician Overview (F2361) screen displays. |
| [Display Inspection Methods](#unique_13) [page ] 21 | Quality Technician | Display Inspection Methods (F0311A) | The Inspection Method screen displays. |
| [Display Open Inspection Lot](#unique_14) [page ] 19 | Quality Technician | Manage Inspection Lots (F2343) | The Manange Inspection Lots screen displays. |
| [Record Inspection Results](#unique_15) [page ] 22 | Quality Technician | Record Inspection Results - Hierarchical Worklist (QE51N) | The Results Recording Results screen displays. |
| [Display Quality Engineer Overview (Optional)](#unique_16) [page ] 25 | Quality Engineer | Quality Engineer Overview (F2360) | The Quality Engineer Overview (F2360) screen displays. |
| [Make Usage Decision](#unique_17) [page ] 27 | Quality Engineer | Manage Usage Decisions (F2345) | The Manage Usage Decisions (F2345) screen displays. |
| [Display Material Stock after Quality Inspection](#unique_18) [page ] 30 | Warehouse Clerk | Stock - Single Material (F1076) | The Stock - Single Material screen displays. |
| [Display Inspection Results History (Optional)](#unique_19) [page ] 31 | Quality Engineer | Display Results History (F2428) | The Display Results History (F2428) screen displays. |
| Quality Management in Discrete Manufacturing - Within Production Process | | | |
| [Make-to-Stock Production - Discrete Manufacturing (BJ5)](#unique_20) [page ] 32 | See scope item BJ5 | See scope item BJ5 | See scope item BJ5 |
| [Display Routing for Inspection Characteristics](#unique_21) [page ] 36 | Production Engineer - Discrete Manufacturing | Display Routing (CA03) | The Display Routing: Initial Screen screen displays. |
| [Display Quality Technician Overview (Optional)](#unique_22) [page ] 37 | Quality Technician | Quality Technician Overview (F2361) | The Quality Engineer Overview (F2360) screen displays. |
| [Display Open Inspection Lot](#unique_23) [page ] 38 | Quality Technician | Manage Inspection Lots (F2343) | The Manage Inspection Lots (F2343) screen displays. |
| [Display Inspection Methods](#unique_24) [page ] 39 | Quality Technician | Display Inspection Methods (F0311A) | The Inspection Method screen displays. |
| [Record Inspection Result Before Activation of the Control Chart](#unique_25) [page ] 41 | Quality Technician | Record Inspection Results - Hierarchical Worklist (QE51N) | The Results Recording Worklist screen displays. |
| [Analyze and Activate Control Chart (Optional)](#unique_26) [page ] 44 | Quality Engineer | Manage Control Charts (F2810) |  |
| [Record Inspection Result After Activation of the Control Chart](#unique_27) [page ] 46 | Quality Technician | Record Results for Inspection Points (F2689) | The Record Results for Inspection Points (F2689) screen displays. |
| <#unique_28> | Quality Engineer | Quality Engineer Overview (F2360) | The Quality Engineer Overview (F2360) screen displays. |
| [Make Usage Decision](#unique_29) [page ] 47 | Quality Engineer | Manage Usage Decisions (F2345) | The Manage Usage Decisions (F2345) screen displays. |
| [Confirm Production Order Operation](#unique_30) [page ] 48 | Production Operator - Discrete Manufacturing | Confirm Production Order Operation (CO11N) | The Enter Time Ticket for Product Order screen displays. |
| [Review Production Order](#unique_31) [page ] 50 | Production Supervisor - Discrete Manufacturing | Manage Production Orders (F2336) | The Manage Production Orders screen displays. |
| [Make-to-Stock Production - Discrete Manufacturing (BJ5)](#unique_32) [page ] 52 | See scope item BJ5 | See scope item BJ5 | See scope item BJ5 |
| [Quality Management Within Production Process - Make-to-Stock Production of a Batch Managed Material](#unique_33) [page ] 53 |  |  |  |
| [Create Raw Material Stock](#unique_34) [page ] 54 | Warehouse Clerk | Post Goods Movement (MIGO) | The Post Goods Movement (MIGO) screen displays. |
| [Create and Release Production Order](#unique_35)  [page ] 55 | See scope item BJ5 | See scope item BJ5 | See scope item BJ5 |
| [Goods Issue of Batch-Managed Components via Pick List](#unique_36) [page ] 56 | Production Operator - Discrete Manufacturing | Pick Components for Production Orders (CO27) | The Picking List: Initial Screen displays. |
| [Confirm Production Operations](#unique_37) [page ] 58 | Production Operator - Discrete Manufacturing | Confirm Production Order Operation (CO11N) | The Enter Order and Operation screen displays. |
| [Execute Quality Inspection With Inspection Points](#unique_38) [page ] 60 | Quality Technician | Record Results for Inspection Points (F2689) | The Record Results for Inspection Points screen displays. |
| [Confirm Production Operations](#unique_39) [page ] 62 | Production Operator - Discrete Manufacturing | Confirm Production Order Operation (CO11N) | The Enter Order and Operation screen displays. |
| [Post Goods Receipt for Order](#unique_40) [page ] 62 | Warehouse Clerk | Post Goods Receipt for Production Order (F0843) | The Post Goods Receipt for Order screen displays. |
| [Make Usage Decision](#unique_41) [page ] 63 | Quality Engineer | Manage Usage Decisions (F2345) | The Manage Usage Decisions (F2345) screen displays. |
| [Review Batch Data (Optional)](#unique_42) [page ] 64 | Quality Technician | Manage Batches (F2462) | The Manage Batches screen displays. |

# Test Procedures

This section describes test procedures for each process step that belongs to this scope item.

## Quality Management in Discrete Manufacturing - Goods Receipt from Production

### Make-to-Order Production - Semifinished Goods Planning and Assembly (1BM)

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

In this scope item, the component SG29 must be produced.

|  |  |  |
| --- | --- | --- |
| Master Data | Value | Comments |
| Material | RM124 | Raw material, used in Initial Material Stock step |
| Material | SG29 | Semifinished goods |
| Plant | 1010 |  |

You can follow the simplified procedures described as follows in this document. Or for a complete scenario, you can excecute relevant steps from the Make-to-Order Production - Semifinished Goods Planning and Assembly (1BM) test script, using the master data from this document.

* Create Initial Material Stock
* Create Planned Independent Requirements
* Material Requirements Planning
* Monitor Material Coverage
* Create Production Order
* Release Production Order
* Confirm Production Order for SemiFinished Product

Procedure

The simplified procedures are described as follows.

Create Initial Material Stock

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Inventory Manager. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Manage Stock (F1062). | The Manage Stock (F1062) screen displays. |  |
| 3 | Specify Material and Plant | Make the following entries and choose Enter:   * Material: RM124 * Plant: 1010 | For a detailed materials list, see the Bill of Materials structure list in Master Data, Organizational Data, and Other Data. |  |
| 4 | Select Storage Location | Choose button in column Unrestricted-Use Stock, line Std. storage 2 (101B). | The dialogue box Manage Stock is displayed. |  |
| 5 | Enter Quantity | Make the following entries and choose Post:   * Stock Change: Initial Entry * Quantity: 100 PC * Document Date: <Date> * Posting Date: <Date> | A success message is displayed and stock is increased by the specified amount. |  |
| 6 | Check Material Document (Optional) | Click Material document xxx/yyyy created and review document details. | Document is OK. |  |

Create Production Order and Release Production Order

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On to SAP Fiori launchpad | Log onto the SAP Fiori launchpad as a Production Supervisor - Discrete Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Create Production Order (CO01). | The Production Order Create: Initial Screen displays. |  |
| 3 | Enter the Order Information | Make the following entries and choose Continue:   * Material: SG29 * Production Plant: 1010 | The Production Order Create: Header screen displays. |  |
| 4 | Enter the Order Details | Make the following entries:   * Quantities - Total Qty: for example, 100 PC * Scheduling - Type: <Current Date>   and choose Enter. | A message All chekced materials in order are available appears. Otherwise, please check the initial material stock. |  |
| 5 | Release Order | Choose Release Order. | Releases are carried out. |  |
| 6 | Save | Choose Save and make a note of your production order number. | Order number XXX is saved. |  |

### Display Inspection Plan for Inspection Characteristics

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

In this step, you display the inspection plan that is related to the semifinished goods. The inspection plan defines all inspection characteristics used later in the quality inspection.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Quality Technician. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Display Inspection Plan (QP03). | The Display Inspection Plan: Initial Screen displays. |  |
| 3 | Enter Selection Fields | Make the following entries and choose Continue.  Material: SG29  Plant: 1010 |  |  |
| 4 | Go to Inspection Characteristics Overview Screen | Select the entry for Operation 0010 and choose Inspection Characteristics.  Note If you could not find Inspection Characteristics in your screen, choose More > Inspection Characteristics . | The Display Inspection Plan: Characteristic Overview screen displays. |  |
| 5 | Review the Inspection Characteristics | There are two Master Inspection Characteristics: one is Qualitative – Surface, the other is Quantitative – Length. | You have now reviewed the inspection characteristics for which data has to be maintained later. |  |

### Post Goods Receipt for Production Order

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

In this activity, you post the goods receipt from production after completing a production order. This is required to perform a quality inspection for the assembled material.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Warehouse Clerk. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Post Goods Receipt for Production Order (F0843). | The Post Goods Receipt for Oder screen displays. |  |
| 3 | Enter Process Order | Make the following entries and choose Enter.  Order Number: XXXX (From previous steps) | Screen name adapts after entries are made. |  |
| 4 | Enter Quantity | Make the following entries and choose Enter.  Delivered:for example, 100 PC | Note Note that by default, stock type unrestricted-use is selected. Howerver, as quality inspection at goods receipt from production is set up in the material master of the respective material, the stock will be posted to stock type quality inspection, instead. |  |
| 5 | Post Goods Movement | Choose Post. | A success message containing material document ID is displayed and the goods movement is posted. The material is posted to quality inspection stock. A quality inspection lot with inspection type 04 (Goods receipt inspection from production) is created to check the quality of the assembly.  Make a note of the material document number: \_\_\_\_\_\_\_\_\_\_ |  |

### Display Material Stock Before Quality Inspection

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

In this optional step, a review of the subassembly material stock is done. Due to quality inspection, the material is not available for other processing.

Prerequisite

The goods receipt from production order was posted for the subassembly material directly to quality inspection stock.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Warehouse Clerk. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Stock - Single Material (F1076). | The Stock - Single Material (F1076) screen displays. |  |
| 3 | Enter Material | Make the following entries and choose Enter.  Material: SG29 | Stock for the material is displayed. |  |
| 4 | Check Stock Quantity | Check the Quality Inspection Stock under the plant 1010. |  |  |

### Display Quality Technician Overview (optional)

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

In this optional step, you can display an overview of open inspection lots via the overview page for quality technicians.

Prerequisite

The goods receipt from production order was posted for the subassembly material directly to quality inspection stock.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Quality Technician. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Quality Technician Overview (F2361). | The Quality Technician Overview (F2361) screen displays.  You can get an overview of the inspection lots with open results recording and the inspection lots without an inspection plan. |  |

### Display Open Inspection Lot

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

The inspection lot is used to record the results of the inspection operation. In this optional step, the references to the Goods Receipt and Production Order are verified as well as the sample size used for quality inspection reviewed.

Prerequisite

In this scope item, the inspection lot is created automatically upon goods receipt for the production order.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Quality Technician. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Manage Inspection Lots (F2343). | The Manage Inspection Lots (F2343) screen displays. |  |
| 3 | Filter Fields | Make the following entries and choose Go   * Plant: 1010 * Material: SG29 * Material Document: Obtained from previous step | If Material Document is not displayed in the Filters, choose Adapt Filters. On the popup screen Adapt Filters, find Inventory Management and choose More Filters. Select Material Document and choose OK. Choose Go. |  |
| 4 | Select the Corresponding Inspection Lot | In the inspection lot list, select the inspection lot. |  |  |
| 5 | Check Inspection Lot | In the Origin tab, verify the referenced production order and material document. | The production order number and material document number from which the inspection lot originates are displayed. |  |
| 6 | Check Inspection Lot – Quantities | Under Origin , check the sample size. | The size of the sample for quality inspection is displayed (10% of inspection lot quantity). |  |

### Quality Inspection

Purpose

The assembly undergoes a quality inspection to ensure that it meets the predefined quality requirements.

In this step, the quality technician records the inspection result for the required inspection characteristics. Afterwards, the quality engineer completes the inspection with a usage decision.

Prerequisite

The inspection is processed based on inspection lot. In this scope item, the inspection lot has been created automatically upon goods receipt for the production order.

#### Display Inspection Methods

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

The inspection method is reviewed with attached document.

Prerequisite

The step of BNQ in [Business Conditions](#unique_6) [page ] 7 is completed.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log onto the SAP Fiori Launchpad as a Quality Technician. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Display Inspection Methods (F0311A). | The Inspection Method screen displays. |  |
| 3 | Enter Filter Fields | Make the following entries and choose Go.   * Plant: 1010 * Inspection Method: SURFACE |  |  |
| 4 | Select Inspection Methods | In the Inspection Methods list, click the Inspection Method Surface. | Inspection Method is displayed. |  |
| 5 | Review Inspection Method Details and the attached Document (Optional) | Verify the the General Information.  Under Documents, check the document. |  |  |

#### Record Inspection Results

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

The quality technician executes the quality inspection and records inspection results for the inspection lot.

Procedure

Record Inspection Results for one Inspection Lot

If inspection results shall be recorded for one or only a few inspection lots, execute the following process flow:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log Onto SAP Fiori Launchpad | Log onto the SAP Fiori Launchpad as a Quality Technician. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Record Inspection Results (F1685) | The Results Recording screen displays. |  |
| 3 | Enter Filter Fields | Make the following entries and choose Go.  Plant: 1010  Material: ·SG29  Order: from previous step. | If Order is not displayed in the Filters, please choose Filters. On the popup screen Filters, find Production and choose More Filters . Select Order and choose OK. Choose Go. |  |
| 4 | Select the Corresponding Inspection Lot | In the inspection lot list, select the inspection lot.  Choose Record Muiltiple Results at the bottom right. |  |  |
| 5 | Enter Inspection Result | Depending on the inspection result, select one of the following two options:  Positive Result  Surface: Code Group - Code SURFACE 0020 (Smooth)  Length: Mean Value (CM): : 160  Negative Result  Surface: Code Group - Code SURFACE 0010 (Rough)  Length: Mean Value (CM): : 90 | For the qualitative characteristic (surface) the search help is needed to select a value. For the quantity characteristic (length) a number can be entered directly.  The valuation and close are performed automatically, and the status is set to Valuated.  The default number of inspected objects is calculated based on the sample size reviewed in an earlier step. The number of inspected objects can be manually changed. As well a number of nonconforming objects can be maintained directly in the respective fields for every inspection characteristic. |  |
| 6 | Save Inspection Lot | Choose Save. | The inspection lot is saved. QM Inspection for manufactured goods has been performed and result recorded. |  |

Optional: Process-Optimized Results Recording for Multiple Inspection Lots

If inspection results shall be recorded for several inspection lots at the same time, execute the following process flow.

Caution Note that this app can only be used for quality inspections with master inspection characteristics. It is not possible to capture inspection results for inspections with plan characteristics.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Quality Technician. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Record Inspection Results in Table Form (F3365). | The Record Inspection Results in Table Form screen displays. |  |
| 3 | Enter Filter Fields | Maintain filter values and choose Go. | A list of inspection lots is displayed. |  |
| 4 | Select Inspection Lots and Inspection Characteristics | Select the inspection lots for which inspection results shall be recorded and choose Record Multiple Results.  In the dialogue box Select Characteristics for Result Recording, select the master inspection characteristics for which inspection results shall be recorded and choose button OK. | The Record Inspection Results in Table Form screen displays.  Note The system creates one table line item per inspection lot operation. Each master inspection characteristic is displayed in a separate column. The valuation of the inspection characteristic is displayed in a separate adjacent column. If a master inspection characteristic is assigned to another inspection operation, the respective table field is grayed out. |  |
| 5 | Show Inspection Details (Optional) | Click one inspection characteristic in the table and choose Show Details. | The side panel opens and detailed inspection data are displayed (e.g. inspection specifications, master inspection characteristic, inspection method, test equipment, and inspection remarks). |  |
| 6 | Show Work Center (Optional) | Choose Settings button in the upper right corner of the table. In the Define Colunm Properties dialogue box, select Work Center and choose OK. | An additional Work Center column is displayed. |  |
| 7 | Enter Inspection Results | Enter inspection results. See above for example data. | For qualitative results, a corresponding value help is provided. Quantitative inspection results can be entered directly.  Depending on the defined valuation mode (check inspection method details), the valuation is either done automatically by the system or must be done manually by the user.  If a inspection result requires an inspection remark (check master inspection characteristic settings), it is not possible to navigate to the next inspection result. Open Details side panel and maintain the inspection remark in section Remarks. |  |
| 8 | Save Inspection Data | Choose Save. | Inspection results are saved and a success message is displayed. |  |

#### Display Quality Engineer Overview (Optional)

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

The inspection is done and the inspection result is recorded. You must decide whether or not to accept the inspection lot depending on the inspection result. As an optional entry point for making this usage decision, you can use the app Quality Engineer Overview (F2360). Furthermore, the Quality Engineer Overview (F2360) app displays inspection lots without an inspection plan (e.g. if automatic assignment of an inspection plan is not set up in the material master or if automatic assignment failed), inspection lots without usage decision, inspection lots ready for usage decision. If negative inspection results are recorded, you can check the detect details in app Quality Engineer Overview (F2360) directed from the app Quality Engineer Overview (F2360) via the cards Inspection Lots with Defects, Top Defective Materials, or Top Defective Codes.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Quality Engineer. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Quality Engineer Overview (F2360). | The Quality Engineer Overview (F2360) screen displays. |  |
| 3 | In Card: Inspection Lots without Inspection Plan choose one entry (optional) |  | Assign missing data and ensure automatic inspection plan determination for further usage. |  |
| 4a | In Card: Select Inspection Lots Without Usage Decision (Optional) | Choose card Inspection Lots Without Usage Decision | You can prosess further as described in [Make Usage Decision](#unique_17) [page ] 27. |  |
| 4b | Select the Corresponding Inspection Lot you have created before (optional) | In the inspection lot list, select the inspection lot. | The Usage Decisions screen displays. Alternative Entry to [Make Usage Decision](#unique_17) [page ] 27. |  |
| 4c | Select one of the Inspection Lot by Results Recording Status (Optional) | Select one of the Inspection Lot by Results Recording Status (Optional) | Alternative Entry to [Make Usage Decision](#unique_17) [page ] 27. |  |
| 5 | Select Card Inspection Lots Ready for Usage Decision (optional) |  | All inspection lots with positive results get collectively an accepted usage decision (e.g. defaulted by A1) when pressing button Make Quick Usage Decision will be renamed soon. |  |
| 6 | In Card: Inpsection Lots with Defects (optional) (Cloud only) | (In case negative inspection results have been recorded) Select one of the inspection lot origins, then you will be directed to app Manage Defects (F2649) automatically. Choose the relevant defect ID to check the details of the defect. | The defect details are displayed. |  |
| 7 | In Card: Top defective materials (optional) (Cloud only) | (In case negative inspection results have been recorded) Select one of the materials inspected, then you will be directed to app Manage Defects (F2649) automatically. Choose the relevant defect ID to check the details of the defect. | The defect details are displayed. |  |
| 8 | In Card: Top defective codes (optional) (Cloud only) | (In case negative inspection results have been recorded) Select one of the defect codes recorded, then you will be directed to app Manage Defects automatically. Choose the relevant defect ID to check the details of the defect. |  |  |

#### Make Usage Decision

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

The inspection is done and the inspection result is recorded. You must decide whether or not to accept the assembly depending on the inspection result. If you do not want to use the Quality Engineer Overview (F2360), you can open the Manage Usage Decisions (F2345) app directly.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log onto SAP Fiori Launchpad | Log onto the SAP Fiori Launchpad as a Quality Engineer. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Manage Usage Decisions (F2345). | The Manage Usage Decisions (F2345) screen displays. |  |
| 3 | Enter Filter Fields | Make the following entries and choose Go:   * Plant: 1010 * Material: SG29 * Usage Decision Made: No * Material Document: Obtained from previous step | If Material Document is not displayed in the Filters, choose Adapt Filters. On the popup screen Adapt Filters, find Inventory Management and choose More Filters. Select Material Document and choose OK. Choose Go. |  |
| 4 | Select the Corresponding Inspection Lot | In the inspection lot list, select the inspection lot. |  |  |
| 5 | Display Defects | Scroll down to the Defects area. Check the details of Defects. | Only available if you have recorded a Negative result. For a surface rejection, there will be a surface defect, for a length rejection, there will be a tolerance defect displayed. |  |
| 6 | Enable Edit | Choose Edit. In the Document section choose Add, select the path and add the document. | For example, you can upload pictures to visualize the defect. |  |
| 7 | Enter UD code | Depending on the inspection result, select one of the following two options via search help and confirm with Choose.  Positive Result  UD code: UD04 A1 (Accepted - unrestricted stock)  Negative Result  UD code: UD04 R1 (Rejected-blocked Stock)  UD code: UD04 R320 Rejected–scrap (complete quantity) | If the dialogue Some required characteristics are still open. Do you want to force inspection completion? appears, choose Yes.  The corresponding stock posting is processed automatically in background for the complete quantity for Usage Decision codes A1, R1, and R320. |  |
| 8 | Modify Stock Posting (Optional) | In the Inspection Lot Stock section, enter the quantities to be posted to different stock types. | Note If you want to scrap a partial quant with UD code R310, you can split the quantity and post to To Unrestricted Use and To Scrap, respectively. It is also possible to transfer the (partial or full) quant to a different material if, for example, inspection results show that the product is of higher/lower quality than initially planned in the production order and the higher/lower quality corresponds to different materials. |  |
| 9 | Save Usage Decision | Choose Save. | The usage decision is made with regard to the manufactured goods. The system automatically triggers the material movements if associated with the usage decision code.  Positive Result: The usage decision made for the inspection is Quality Inspection Passed. A goods movement is posted automatically from quality inspection stock to unrestricted use stock for the assembly SG29.  Negative Result: The usage decision made for the inspection is Quality Inspection Failed. A goods movement is posted automatically from quality inspection stock to blocked stock for the assembly SG29. |  |

### Display Material Stock after Quality Inspection

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

In this optional step, we now verify the material movement done based on the usage decision codes by looking again at the material stock.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log on | Log on to the SAP Fiori Launchpad as a Warehouse Clerk. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Stock - Single Material (F1076). | The Stock - Single Material (F1076) screen displays. |  |
| 3 | Enter Selection Fields | Make the following entries and choose Enter.  Material: SG29 |  |  |
| 4 | Check Stock Quantity | Check the changed quantities of the Quality Inspection Stock, Unrestricted Use Stock (in case of positive usage decision) or Blocked Stock (in case of negative usage decision). | The stock quantities for subassembly material SG29 are updated based on the quality inspection and respective usage decision of the previous steps. |  |

### Display Inspection Results History (Optional)

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

In this optional step, an overview about the history of inspection result is shown. For each Inspection Characteristics are several statistical Values and the development for recorded results are illustrated.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log on | Log on to the SAP Fiori Launchpad as a Quality Engineer. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Display Results History (F2428). | The Results History screen displays. |  |
| 3 | Enter Filter Fields | Make the following entries and choose Go.  Aggregation Level: Master Inspection Characteristic Version |  |  |
| 4 | Select Inspection Characteristic | Select an Inspection Characteristic, for example, Length. | Information is provided about the selected characteristics for process control, for example:   * A diagram displays the development of the recorded results for this characteristic with lower and upper limit. * Statistical Values for Control Chart and Process Capability, for example, Variance. |  |

## Quality Management in Discrete Manufacturing - Within Production Process

### Make-to-Stock Production - Discrete Manufacturing (BJ5)

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

In this scope item, the component FG129 must be produced.

|  |  |  |
| --- | --- | --- |
| Master Data | Value | Comments |
| Material | RM20 | Raw material, used in Create Initial Material Stock step |
| Material | SG29 | Semi-Finished Goods, used in the step: Create Initial Material Stock |
| Material | FG129 | Finished product |
| Plant | 1010 |  |

You can follow the simplified procedures described as follows in this document. Or for a complete scenario, you can excecute relevant steps from the Make-to-Stock Production - Discrete Manufacturing (BJ5) test script, using the master data from this document.

* Create Initial Material Stock
* Create Planned Independent Requirements
* Material Requirements Planning
* Monitor Material Coverage
* Create Production Order
* Release Production Order
* Confirm Production Order for SemiFinished Product

Procedure

The simplified procedures are described as follows.

Create Initial Material Stock (for RM20 and SG29)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Inventory Manager. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Manage Stock (F1062). | The Manage Stock screen displays. |  |
| 3 | Specify Material and Plant | Make the following entries and choose Enter:   * Material: RM20 or SG29 * Plant: 1010 |  |  |
| 4 | Select Storage Location | Choose button in column Unrestricted-Use Stock, line Std. storage 2 (101B). | The Manage Stock pop-up is displayed. |  |
| 5 | Enter Quantity | Make the following entries and choose Post:   * Stock Change: Initial Entry * Quantity: 100 PC * Document Date: <Date> * Posting Date: <Date> | A success message is displayed and stock is increased by the specified amount. |  |
| 6 | Check Material Document (Optional) | Click Material document xxx/yyyy created and review document details. | Document is O.K. |  |

Create Production Order and Release Production Order

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On to SAP Fiori Launchpad | Log onto the SAP Fiori Launchpad as a Production Supervisor - Discrete Manufacturing. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Create Production Order (CO01). | The Production Order Create: Initial screen displays. |  |
| 3 | Enter the Order Information | Make the following entries:   * Material: FG129 * Production Plant: 1010   and choose Enter. | The Production Order Create: Header screen displays. |  |
| 4 | Enter the Order Details | Make the following entries and choose Enter:   * Quantities - Total Qty: for example, 100 PC * Scheduling - Type: <Current Date> | A message All chekced materials in order are available appears. Otherwise, please check the initial material stock. |  |
| 5 | Release Order | Choose Release Order. | Releases are carried out. |  |
| 6 | Save | Choose Save and make a note of your production order number. | Order number XXX is saved. |  |

Confirming Assembly Activities (Finished Goods) for operation 0010.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log on to SAP Fiori Launchpad | Log on to the SAP Fiori Launchpad as a Production Operator - Discrete Manufacturing. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Confirm Production Order Operation (CO11N). | The Enter Order and Operation screen displays. |  |
| 3 | Enter Production Order and Operation | On the Enter Order and Operation screen, make the following entries and choose Enter:  Order: The order number you noted for the material Finished Good MTS (FG129)  Operation: 0010 |  |  |
| 4 | Enter Fields in Quantities Section | In Quantities section, make the following entries:  Yield: <Enter the amount you want to Confirm>  Scrap: <Enter the amount you want to Scrap>  Rework: <Enter the amount you want to Rework>  Reason for Variance: <Enter the variance reason if required, for example, 0001> |  |  |
| 5 | Save your entries | Click Post and Complete to make final confirmation for this operation. | Confirmation has been created. |  |

Result

A production order for material FG129 was created that contains an operation (0020) for quality inspection.

### Display Routing for Inspection Characteristics

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

An inspection during production is triggered by the release of a production order. When you save the production order, an inspection lot is generated for operation 0020. An inspection lot for an inspection during production is not stock relevant.

In this step we review the automatically created inspection point for operation 0020 as well as the inspection characteristics which will have to be maintained in the Quality inspection step.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Production Engineer - Discrete Manufacturing. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Display Routing (CA03). | The Display Routing: Initial Screen displays. |  |
| 3 | Enter Selection Fields | Make the following entries and choose Continue.  Material: FG129  Plant: 1010 |  |  |
| 4 | Review the Inspection Points Setting | Double-click Operation 0020.  Scroll down to the Quality Management: Inspection Points section.  After reviewing, choose Back. | A Time-related inspection point is defined for this operation in the routing. |  |
| 5 | Review the Inspection Characteristics | Select Operation 0020 and choose Inspection Characteristics.  There are three Master Inspection Characteristics: One is Qualitative – Surface  The others are Quantitative - Length and Diameter | If Inspection Characteristics is not displayed, choose More. In the dialogue box, find Inspection Characteristics. |  |

### Display Quality Technician Overview (Optional)

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

In this optional step, you can display an overview of open inspection lots via the overview page for quality technicians.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a　Quality Technician. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Quality Technician Overview (F2361). | The Quality Technician Overview (F2361) screen displays.  You can get an overview of the inspection lots with open results recording and the inspection lots without an inspection plan. |  |

### Display Open Inspection Lot

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log onto the SAP Fiori Launchpad as a Quality Technician. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Manage Inspection Lots (F2343). | The Manage Inspection Lots (F2343) screen displays. |  |
| 3 | Enter Filter Fields | Make the following entries and choose Go.   * Plant: 1010 * Material: FG129 * Inspection Lot Status: Open |  |  |
| 4 | Select the Corresponding Inspection Lot | In the inspection lot list, select the inspection lot with column Production Order equals to the Production Order: XXX (from previous step). | The Production Order number assigned with Inspection Lot.  If the Production Order column does not appear, please choose the button Settings. In the View Settings dialog box, select Production Order and choose OK. |  |
| 5 | Check Inspection Lot | Under Origin, check the sample size. | A sample size of 1 is automatically assigned per time interval of the inspection point. |  |

### Quality Inspection

#### Display Inspection Methods

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

The inspection method is reviewed with attached document.

Prerequisite

The step of BNQ in Business Conditions is completed.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Quality Technician. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Display Inspection Methods (F0311A). | The Inspection Method screen displays. |  |
| 3 | Enter Filter Fields | Make the following entries and choose Go.   * Plant: 1010 * Inspection Method: SURFACE |  |  |
| 4 | Select Inspection Methods | In the Inspection Methods list, click the Inspection Method Surface. | Inspection Method is displayed. |  |
| 5 | Check Inspection Method and the Attached Document | Verify the the General Information.  Under Documents, check the document. |  |  |

#### Record Inspection Result Before Activation of the Control Chart

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

In this step, you perform the inspection and record the result to decide if you can go on with the next operation of the production order. The result is recorded in the inspection lot according to the defined inspection parameters in the routing.

The master inspection characteristic diameter is valuated leveraging a SPC control chart. If the control chart has not been activated, yet, the user must valuate the characteristic manually. After activation of the control chart, the respective characteristic is automatically valuated by the system according to the control charts action limits.

As it is currently not possible to specify the control charts limits manually, a minimal amount of data points must have been collected before the card can be activated.

Prerequisite

The inspection is processed based on inspection lot. In this scope item, the inspection lot is automatically created upon release of the production order.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Quality Technician. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Record Inspection Results - Hierarchical Worklist (QE51N). | The Results Recording Worklist screen displays.  Note The app Record Results for Inspection Points (F2689) can be used as an alternative to capture inspection results for inspection points. However, manual valuation of an inspection characteristic with an inactive SPC card is only possible using the Record Inspection Results - Hierarchical Worklist (QE51N) app. |  |
| 3 | Enter Selection Fields | Make the following entries and choose Execute.  Plant： 1010  Insp. Lot Origin： 03  Material: FG129 | The Results Records: Characteristic Overview screen displays.  If Order is not displayed in the Filters, please choose Filters. On the popup screen Filters, find Production and choose More Filters . Select Order and choose OK. Choose Go. |  |
| 4 | Select the Corresponding Inspection Lot | On the left pane, expand the corresponding inspection lot which you want to record a result. | If a dialogue appears asking to save, choose Cancel. |  |
| 5 | Choose the First Inspection Point | Choose the first inspection point Date/Time which is under the activity 0020 Final work and quality inspection Work Center Work for machine/person. | When the work center is selected, the cursor jumps automatically to the result. |  |
| 6 | Enter Inspection Result for the First Inspection Point | Depending on the inspection result, select one of the following two options and then confirm with Choose.   * Positive Result   + Surface – Result: 0020 (Smooth)   + Length – Result: 170   + Diameter – Result: 20.0, 20.3, 20.1, 19.8, 19.9   Manual Valuation: accept   * Negative Result   + Surface – Result: 0010 (Rough)   + Length – Result: 90   + Diameter – Result: 20.9, 21.0, 20.0, 21.1, 21.3   Manual Valuation: reject | For the qualitative characteristic surface the search help is needed to select a value.  For the quantitative characteristic length a number can be entered directly.  For the quantitative characteristic diameter five independent values need to be input and the system will calculate the mean value. |  |
| 7 | Close the First Inspection Point | Choose Enter. | The valuation and close are performed automatically for characteristics surface and length. Characteristic diameter must be valuated manually until there is an active control chart.  . The status is set to 5 Processing is completed. |  |
| 8 | Save the First Inspection Point | Choose Save.  Optional: Confirm produced quantity, e.g. 25 pc | The first inspection point is saved. |  |
| 9 | Create the Next Inspection Point | Choose Next Inspection (Shortest Interval 30 Min) which is under the activity 0020 Final work and quality inspection Work Center Work for machine/person with a click. | The next inspection point is created with current Date/Time.  Normally, the next inspection point is created after 30 minutes. |  |
| 10 | Enter Inspection Result for the Next Inspection Point | Depending on the inspection result, select one of the following two options:   * Positive Result: see above * Negative Result: see above | For the qualitative characteristic surface the search help is needed to select a value.  For the quantitative characteristic length a number can be entered directly.  For the quantitative characteristic diameter five independent values need to be input and the system will calculate the mean value.  Note If you want to use the function of control chart, please repeat this step to have enough data for the system to calculate the warnings and control limits. |  |
| 11 | Close the Next Inspection Point | Choose Enter. | The valuation and close are performed automatically for characteristics surface and length. Characteristic diameter must be valuated manually until there is an active control chart.  The status is set to 5 Processing is completed. |  |
| 12 | Save the Next Inspection Point | Choose Save.  Optional: Confirm produced quantity, e.g. 25 pc | The next inspection point is saved. Quality Inspection for in-process control is performed and the result is recorded. |  |

#### Analyze and Activate Control Chart (Optional)

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

You can display the control chart in graphical and tabular form. If you have collected enough data that describes the statistical variation of your manufacturing process, you can execute this step to activate a control chart. After activating a control chart, the corresponding inspection characteristics will be valuated against this control chart.

Prerequisite

For your control chart, enough (valid, e.g. statistically reliable) data must be available for the system to calculate warning and control limits.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori launchpad as a Quality Engineer. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open app Manage Control Charts (F2810). |  |  |
| 3 | Enter Selection Fields | Make the following entries and choose Go.   * Plant: 1010 * Master Insp. Charac: Diameter * Material: FG129 |  |  |
| 4 | Check visual filters (optional) | Switch visual filter from compact filter to get different filters, for example, Quality control chart by work center. |  |  |
| 5 | Check number of deviations (optional) | In the Chart View, the number of deviations per time is displayed. Adapt visualization to analyze data. |  |  |
| 6 | Select the corresponding control chart | In the Table View, select a control chart. | The control charts page displays. |  |
| 7 | Display and Analyze Control Chart Data | In the header, time progression of recorded results and statistical information are displayed.  In the chart part, a respective graph with all the inspection results recorded is displayed.  Statistical Information, Bill of Operations, Characteristic are also available for analysis. |  |  |
| 8 | Activate Control Chart | In the header, choose Calculate and Activate. | Control chart is active and can therefore be used for automatic valuation of inspection characteristics. |  |
| 9 | Deactivate Control Chart (Optional) | If a control chart has become obsolete, it can be deactivated. Select the respective line item in the list table and choose Complete. | Control chart is deactivated.  Note Execute this step only when this control chart is obsolete. |  |

#### Record Inspection Result After Activation of the Control Chart

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

You perform the inspection and record the result to decide if you can go on with the next operation of the production order. The result is recorded in the inspection lot according to the defined inspection parameters in the routing.

Prerequisite

The inspection is processed based on inspection lot. In this scope item, the inspection lot is automatically created upon release of the production order.

Procedure

Record inspection results as described in chapter Record Inspection Result Before Activation of the Control Chart. As characteristic diameter is now automatically valuated leveraging a SPC control chart, the manual valuation described above is not necessary here.

#### Make Usage Decision

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

The inspection is done and the inspection result is recorded. You must inform the Production Operator – Discrete Manufacturing of the inspection results to confirm the operation 0020 in the production order and to go on with the next processing step.

After recording of the inspection result by the quality technician, the quality engineer can now make a usage decision .

Note You can use the Trigger Automatic Usage Decision for Production report (which is included in the Quality Engineer role) to make an automatic usage decision.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log onto the SAP Fiori launchpad as a Quality Engineer. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Manage Usage Decisions (F2345). | The Manage Usage Decisions (F2345) screen displays. |  |
| 3 | Enter Filter Fields | Make the following entries and choose Go.   * Plant: 1010 * Material: FG129 * Usage Decision Made: No |  |  |
| 4 | Click the Corresponding Inspection Lot | In the inspection lot list, select the inspection lot with column Order equals to the Production Order: XXXX (From previous step). | If the Order column does not appear, please choose the Settings button. In the View Settings dialog box, select Order and choose OK. |  |
| 5 | Review of Inspection Points | Select the tab Inspection Points, and review the detailed inspection results recorded previously. (From previous step – Create Production Order for Final Assembly) |  |  |
| 6 | Display Defects | Scroll down to the Defects area. Check the details of Defects. | Only available you have recoreded a Negative result. |  |
| 7 | Enter UD code | Choose Edit and select the tab Usage Decision. The UD code you select depends on the Inspection Result, please select one of the following two options:  Positive Result  UD code: UD03 A (Accepted)  Negative Result  UD code: UD03 R (Rejected) |  |  |
| 8 | Save Usage Decision | Choose Save. | Usage decision has been made for in process control inspection lot.  Following a positive usage decision, you can now confirm the operation of the production order and perform the next operation of the production order. |  |

### Confirm Production Order Operation

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On to SAP Fiori launchpad | Log onto the SAP Fiori launchpad as a Production Operator - Discrete Manufacturing. | The SAP Fiori launchpad displays. |  |
| 2 | Access the App | Open Confirm Production Order Operation (CO11N). | The Enter Time Ticket for Product Order screen displays. |  |
| 3 | Enter Time Ticket | On the Enter Time Ticket for Production Order screen, make the following entries:  Order: XXXX (From previous steps)  Operation: 0020  Confirm your entries with Enter. |  |  |
| 4 | Enter Confirmation Data | Make the following entries:  Confirm. type: Final confirmation  Yield:Quantity of prod. order less scrap  Scrap: Quantity of products that did not successfully pass the quality inspection  Confirm your entries with Enter. |  |  |
| 5 | Save | Choose Save. |  |  |

### Review Production Order

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

After the release or confirm of finished goods orders is performed, the production supervisor could display and check the order using the app Monitor Production Orders for the Finished Good MTS FG129.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log on | Log on to the SAP Fiori Launchpad as a Production Supervisor - Discrete Manufacturing. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Manage Production Orders (F2336) | The Manage Production Orders (F2336) screen displays. |  |
| 3 | Select Production Order | On the Manage Production Orders (F2336) screen, make the following entries:  To check Default Area of Responsibilities (supervisor), select the user (from the top left corner):  App Settings > Area of Responsibility Production Supervisor . Check only this entry is displayed.  1010  MTS DI - Valuated (YB1)  Click Adapt Filters to display more selection filter. Click More filters under Material and Plant. Check the checkbox for Material and Plant and click Go. Click OK. Material and Material fields are then added to filter bar.  Material: FG129  Plant: 1010  Click Go to execute. | Selected order displays. |  |
| 4 | Check detailed operations status | Check detailed information for selected production operations.  Issue:   1. Empty if there is no issue for production order. 2. Delay or Missing Components / PRT issue or Quantity Deviation / Quality Issue information shows if relevant issue exists.   Components:  Material, total quantity and Issued / open quantity information for order components displays  Order Schedule:  Detailed operation information with relevant work center, confirmed quantity, start and end time displays.  Work Center Schedule:  The relevant order that covering the same work center capacity (operation is partially confirmed) displayed.  Operations not Started:  The relevant order that would cover the same work center capacity (operation is released) displayed.  Confirmation:  Detailed confirmation information with Yield, Scrap, Rework quantity displays if confirmation executed.  Inspection:  Detailed inspection lots information displays if existed | Detailed operations status displays. |  |

### Make-to-Stock Production - Discrete Manufacturing (BJ5)

Procedure

To execute this activity, process the following steps using the master data from this document (see also table below):

|  |  |  |
| --- | --- | --- |
| Master data | Value | Comments |
| Production Order | XXX | From previous steps |
| Operation Number | 0030 | Last Operation Number |
| Material | FG129 | Finished product |
| Plant | 1010 |  |

Steps to process from scope item Make-to-Stock Production - Discrete Manufacturing(BJ5)

Final Confirmation of Production (Finished Goods)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log on | Log on to the SAP Fiori Launchpad as a Production Operator - Discrete Manufacturing. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Confirm Production Order Operation (CO11N). | The Perform Work screen displays. |  |
| 3 | Enter Production Order and Operation | On the Perform Work screen, make the following entries and choose Enter:  Order: XXX (from previous steps)  Operation: 0030 |  |  |
| 4 | Enter Fields in Quantities Section | In Quantities section, make the following entries:  Yield: <Enter the amount you want to Confirm>  Scrap: <Enter the amount you want to Scrap> |  |  |
| 5 | Save your entries | Click Post and Complete to make final confirmation for this operation. | Confirmation has been created. |  |

Posting Goods Receipt for Production Order

Execute step Post Goods Receipt for Production Order of process variant Quality Management in Discrete Manufacturing - Goods Receipt from Production with the following parameters:

* Order Number: XXXX (From previous steps)

Resut

The production order was finally confirmed and goods receipt posted.

## Quality Management Within Production Process - Make-to-Stock Production of a Batch Managed Material

Purpose

In this process, the batch-managed semi-finished product QM006 (e.g. bottled blue ink) is produced. The routing contains a quality-inspection operation with inspection points in order to monitor the quality during the production process.

### Create Raw Material Stock

Purpose

In a real business case, the materials are usually purchased from external suppliers. In that case, process is covered by the standard purchasing or subcontracting processes. For the purpose of this test, we post initial stock directly to the Issue Storage Location.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as Warehouse Clerk. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Post Goods Movement (MIGO). | Screen name adapts according to entries. |  |
| 3 | Choose Goods Receipt - Other | Make the following entries and choose Enter:  Action: Goods Receipt  Reference: Other  Movement Type: 561 | Screen name after entries are made. |  |
| 4 | Specify Material | In the Material tab, make the following entries:  Material: RMPI002 | Ensure that detail data is expanded. |  |
| 5 | Specify Quantity | In the Quantity tab, make the following entries:  Qty in Unit of Entry: For example, 1000 |  |  |
| 6 | Specify Plant and Storage Location | In the Where tab, make the following entries:  Plant: 1010  Storage location: 101B |  |  |
| 7 | Check Item | Press Enter, and ensure Item OK is selected. |  |  |
| 8 | Add Other Materials | Choose Next Item, then repeat the steps 4 to 7 for the following materials:  Material: RMPI003  Material: RMPI004  Material: RMPI005 |  |  |
| 9 | Post Goods Movement | Choose Post. | Material document XXX posted.  Materials are available in stock. |  |

### Create and Release Production Order

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

For demo purposes, we directly create a production order without a planned production order. For a more comprehensive process, please review scope item BJ5 or 2UG.

Procedure

The example data is set up such that the production order is released automatically (check production scheduling profile YB0005 on tab Work Scheduling in the material master) before the batch is created on the Goods Receipt tab of the Production Order. Therefore, the inspection lot might not contain the batch number as the lot is created automatically at release of the order. The user has the following options:

1. Manually maintain the inspection lot ID in app Manage Inspection Lots or Record Usage Decision.

2. Assign a different production scheduling profile in the material master that does not automatically release the order (e.g. YB0001)

3. Change settings of production scheduling profile YB0005 in SSC-UI so that the order is not automatically released.

Refer to test prodecure Quality Management in Discrete Manufacturing - Within Production Process, step Make-to-Stock Production - Discrete Manufacturing (BJ5), procedure Create Production Order and Release Production Order with the following data:

* Material: QM006
* Production Plant: 1010
* Quantities - Total Qty: 100 kg
* Scheduling - Type: Current Date
* Make sure that a new batch has been created on tab Goods Receipt of the production order.
* Note Order ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Note Batch Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

### Goods Issue of Batch-Managed Components via Pick List

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

The withdrawal of the raw materials is used for the order. This withdrawal can be done by using the picking list or doing a manual goods issue.

Note If the material is set for backflush (in material master or resource), the withdrawing is done automatically after you confirm the operation or the whole order. Backflushing should not be used for batch-managed components (to ensure that the physically picked and consumed batch is the same as the recorded batch).

Prerequisites

Ensure that sufficient material is present on stock. If not enough stock is present, execute Create Raw Material Stock in the preliminary steps of this scope item.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Production Operator - Discrete Manufacturing. | The SAP Fiori Launchpad displays. |  |
| 2 | Access App | Open Pick Components for Production Orders (CO27). | The Picking List: Initial Screen displays. |  |
| 3 | Enter Restriction and Execute | Make the following entries and choose Execute:  Profile: 000002  Production Order: <XXXX> (from previous steps)  Plant: 1010 | The Order Information System: Detail List of Components screen displays. |  |
| 4 | Picking Raw Materials | Select the relevant reservations and choose the upper left Picking. | The Picking list screen displays. On this screen, a list of all the selected reservations is displayed. |  |
| 5 | Batch Determination | Some materials are management by batch (for example RMPI002, RMPI003, RMPI004, and RMPI005). Select corresponding line item(s) and choose Batch Determination. | The Batch Determination MM: Select Batches screen displays. |  |
| 6 | Enter Detail | Make the following entries and Choose Copy.  Split quantity: <Quantity>. | Back to Picking list screen.  If multiple line items were selected in step 5, the Picking list screen is displayed after completion of the last line item. |  |
| 7 | Post | Choose Post to post the goods movements. | The goods movements have been posted. |  |

### Confirm Production Operations

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

In the process industry, GR and GI postings are usually done immediately during the physical movements of the materials to ensure batch traceability and data consistency. Order confirmations with backflush are done at shift end or day end. The sum of the GI and GR quantity for the given order is then recorded within the confirmation and scrap quantities (optional). The time ticket confirmation allows recording either the default times for machine and labor usage, or record actual times for major deviations.

After a production operation is completed, the production operator confirms the production operation in the system so that the next operation can be started. He reports quantities (e.g. yield, scrap, rework) and times (e.g. machine preparation time, labor time, etc.).

Prodecure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Production Operator - Discrete Manufacturing. | The SAP Fiori Launchpad displays. |  |
| 2 | Access the App | Open Confirm Production Order Operation (CO11N). | The Enter Time Ticket for Production Order screen displays. |  |
| 3 | Enter Order and Operation | Make the following entries and choose Go:  Order: <Order ID>  Operation: 0010 |  |  |
| 4 | Check Quantities and Post Confirmation | On the Quantities tab, enter quantities:   * Yield: <enter the amount you want to confirm>   If the actual quantity is not equal to the planned quantity, make respective entries:   * Scrap: <enter the amount you want to scrap> * Reason for variance: <Select an entry>   ChoosePost and Complete.  Optional: Review/change data on tab Activities before posting:   * Machine: <enter the setup time you want to confirm for this operation> * Labor: <enter the setup time you want to confirm for this operation> | Production order operation is confirmed and completed. |  |
| 5 | Check Material Movements (Optional) | In Material Movements section, check the material list. | The system shows you an overview table of all materials for which the withdrawing is done automatically with the confirmation of the operation.  The material RMPI001 is set for backflush (in material master) so that the withdrawing is done automatically after you confirm the operation. |  |
| 6 | Post Confirmation | Choose Post and Complete, execute steps 3 - 5 for operation 0020 of the same production order. | Production order operation is confirmed and completed. |  |

### Execute Quality Inspection With Inspection Points

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

In this step, the quality technician performs the quality inspection and records the inspection result(s) in order to decide whether the next operation of the production order can be executed. The result is recorded in the inspection lot according to the defined inspection parameters in the routing. Here, time-based inspection points are used for result recording. Leveraging inspection points, you can have several inspections and can record multiple sets of characteristic results for a single operation. Each inspection point is valuated separately with a coded valuation.

Prerequisite

The inspection is processed based on inspection lot. In this scope item, the inspection lot is automatically created upon release of the production order.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Quality Technician. | The SAP Fiori Launchpad displays. |  |
| 2 | Access App | Open Record Results for Inspection Points (F2689). | The Record Results for Inspection Points screen displays. |  |
| 3 | Execute Search | If not already shown, expand search header, make the following entries and choose Go:  Order: <Order ID> | Order is displayed in the result list. |  |
| 4 | Open Inspection Points | Click on the line item of the search result. | A list of inspection points is displayed. If inspection point data have not been captured, the default for the first inspection point is displayed. |  |
| 5 | Create New Inspection Point | Click the pencil icon to create a new inspection point | Record Results for Inspection Points screen is displayed. |  |
| 6 | Maintain Inspection Results | Maintain the following inspection results (either positive or negative):  a) Positive Result   * Visual Inspection: QUAL01 – OK * Absorption Maximum: 450 nm * Valuation: Accepted (A)   b) Negative Result   * Visual Inspection: QUAL01 – NOK * Absorption Maximum: 440 nm * Valuation: Rejected (R)   Choose Save. | Inspection point data is saved and the system displays the list of inspection points. |  |
| 7 | Create New Inspection Point and Maintain Inspection Results (Optional) | Create a new inspection point as described in step 5 and maintain inspection results as described in step 6. | Further inspection points with inspection results are captured. |  |

### Confirm Production Operations

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Procedure

Confirm production operations 0030 and 0040 as described in chapter Confirm Production Operations.

### Post Goods Receipt for Order

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Context

The purpose of this activity is to post the goods receipt for the production order. You may post goods receipt for the total quantity or partial quantities if the production has not finished, yet. In the latter case, the partially completed production operations should be confirmed without the final completion status until production is completed.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Warehouse Clerk. | The SAP Fiori Launchpad displays. |  |
| 2 | Access App | Open Post Goods Receipt for Production Order (F0843). | The Post Goods Receipt for Order screen displays. |  |
| 3 | Enter Details | On the Post Goods Receipt for Order screen, make the following entries and choose Enter:  Order: XXXX (from previous steps) | Pre-settings might be changed by other processes. Check if the value in the Action field is Goods Receipt and the value in the Reference field should be Order. If not, maintain the same. |  |
| 4 | Select the Item | In Items section, select the item. | The Goods Receipt Item screen displays. |  |
| 5 | Input Production Date | In Production and Shelf Life Expiration Date section, make the following entries and choose Apply:  Production Date: <Current Date> | The Goods Receipt screen displays. |  |
| 6 | Post | Choose Post. | Goods receipt for production order has been done. |  |

### Make Usage Decision

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Purpose

In order to close the inspection lot, the quality engineer makes a usage decision. As the inspection lot of origin 03 is not stock-relevant, there is no follow-up action assigned to the usage decision code that triggers a goods movement.

Procedure

Refer to test prodecure Quality Management in Discrete Manufacturing - Within Production Process, step Quality Inspection – Make Usage Decision and make either a positive or negative usage decision (depending on the inspection results).

### Review Batch Data (Optional)

Test Administration

Customer project: Fill in the project-specific parts.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | <X.XX> | Tester Name |  | Testing Date | Enter a test date. |
| Business Role(s) |  | | | | |
| Responsibility | <State the Service Provider, Customer or Joint Service Provider and Customer> | | | Duration | Enter a duration. |

Prerequisite

In order to transfer inspection results to batch characteristics, the inspection lot must contain the batch number. Please make sure that the prerequisites mentioned in chapter Create and Release Production Order are fulfilled.

Purpose

The batch class YB\_QM is assigned to the batch-managed material QM006. The batch class contains characteristics for information related to the usage decision (usage decision code and quality score) as well as inspection characteristics. In this step, the batch classification of the produced batch is displayed.

By transferring inspection results to classification data, the data can be used for example in a batch-search strategy to find products with specified characteristics.

Procedure

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Step # | Test Step Name | Instruction | Expected Result | Pass / Fail / Comment |
| 1 | Log On | Log on to the SAP Fiori Launchpad as a Quality Technician. | The SAP Fiori Launchpad displays. |  |
| 2 | Access App | Open Manage Batches (F2462). | The Manage Batches screen displays. |  |
| 3 | Execute Search | Maintain the following search fields and choose Go:   * Material: QM006 * Batch: <Batch Number> (Obtained at order creation) * Plant: 1010 | Search result displays. |  |
| 4 | Navigate to Batch Details | Choose the line item of the respective batch by clicking the triangle displayed on the right. | Batch details are displayed on screen Batch. |  |
| 5 | Review Data | Review tabs:   * General Information displays the manufacturing date entered during goods receipt * Classification displays the classification data of the batch. The fields Quality Score Usage Decision and Usage Decision are automatically populated with the usage decision data. The fields QM: Absorption Maximum and QM: OK / Not OK are populated at the valuation of an inspection point. If multiple inspection points have been captured, data originates from the last inspection point. | Batch information is reviewed. |  |

# Appendix

## Succeeding Processes

After completing the activities in this test script, you can continue testing the following business processes:

|  |  |
| --- | --- |
| Process | Business Condition |
| BEI - Period-End Closing - Plant (Optional) | Complete the following activities:   * Perform the period end financial accounting activities for the plant. These are executed collectively as a part of month-end closing, and can only be executed once a month. |
| BMC - Core Inventory Management | Complete the following activities:   * Perform the selected step you want to perform for the Blocked stock. |

Typographic Conventions

|  |  |
| --- | --- |
| Type Style | Description |
| Example | Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options.  Textual cross-references to other documents. |
| Example | Emphasized words or expressions. |
| EXAMPLE | Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE. |
| Example | Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools. |
| Example | Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation. |
| <Example> | Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system. |
| EXAMPLE | Keys on the keyboard, for example, F2 or ENTER. |

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