PeopleSoft

EnterpriseOne Quality Management 8.9 PeopleBook

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Quality Management Overview

The Quality Management system enables you to record and manage data pertaining to the quality of your products. You can verify that the materials that you produce meet specifications that you define.

This section provides overview information about the quality management process, as well as information about how the Quality Management system operates.

Quality Management Industry Overview

Total quality management (TQM), continuous improvement, quality assurance, and quality systems are phrases that refer to the concept of measuring quality. These phrases are used in a wide variety of industries. Whether a company has an elaborate quality management system or a simple program for collecting data, the goal is the same: meeting or exceeding customers' quality expectations in the most timely and cost-effective manner.

A quality management system involves entering data, analyzing data, and determining whether the product can be moved forward in the procurement, manufacturing, and distribution processes. According to the International Organization for Standardization (ISO), a quality system should include provisions for quality assurance in design, development, production, installation, and servicing. A company can document all of these processes and become certified through an ISO program, but just documenting the process does not mean that the process is successful. Management commitment to the process and to fixing the problems is critical to the success of a quality improvement program.

The Quality Management system is a tool that you can use to support a TQM program. It provides an integrated, yet flexible, solution to collect, verify, and manage the data that you need to meet internal quality standards and support customer requirements.

Industry Environment and Concepts for Quality Management

In a quality management system, materials and products are tested, inspected, and monitored at every step of the manufacturing process.

Companies often establish acceptable standards for raw materials. Inspecting incoming materials verifies that vendors meet their contract specifications and use quality materials. Discovering problems at an early stage in the manufacturing process saves time and money by allowing you to both reject poor-quality materials and avoid delays in production schedules because of flawed materials.

In a quality management system for manufacturing, you collect data to verify the integrity of the process and the equipment. You test the quality of the products at key points in the production cycle. Discontinuing the production of products with poor quality saves time and money. Likewise, continuing to work with poor products results in additional operating costs. These costs are wasted because the product never reaches the customer.

The customer determines the level of quality that is required. Poor quality results in a dissatisfied customer, who then looks for an alternative supplier or product, which ultimately means that your company loses business. Therefore, the ability to obtain and validate information about quality throughout the manufacturing life cycle is critical.

Competitive Advantage Through Quality Management

The following table describes typical problems or issues for quality or engineering managers. The business activator that resolves each problem and the return on investment are included.

Can I specify whether a test is required or optional?	Processing options allow you to specify whether a test is required (mandatory) or optional. By reporting only when required, you reduce labor requirements while maintaining data collection integrity.
How can I create tests that are statistically significant?	A test can have its sample size based on a fixed amount or by a percentage of the quantity in the lot. This flexibility ensures that an accurate number of samples represent the lot that is being processed. This helps to reduce the loss of product by identifying problems at the source. You can reduce labor costs by requiring that data be collected for only the appropriate quantity.
How can I format tests when I create tests?	The data format for a test can be either numeric or alphanumeric. Numeric entries can be tests that use minimum or maximum limits. You can set up user defined code tables to include valid responses for numeric and alphanumeric entries. Using user defined codes for data entry saves time and reduces errors, therefore reducing costly mistakes. User defined code tables help to provide consistency in recording observation (subjective) types of data, which is useful for future troubleshooting.
Can I design a test to analyze only a sample of a lot?	You can design a test in several different ways. For example, you can require that every sample pass the test, that the average of the samples must pass the test, or that the last occurrence of the sample must pass the test.
Can I assign test criteria that allow a sample or lot to pass?	A test can require that a minimum number of the samples must pass. For example, you might decide that if four out of five readings meet the criteria, the material is acceptable. The system facilitates the pass or fail criteria check, which reduces labor input and mistakes that delay the movement of the material.
Can I design a certificate of analysis report based on a customer's requirements to meet ISO 9000 standards?	When defining a test, you can use processing options to specify whether to print a certificate of analysis. For customers who do not need ISO 9000 testing, the data on the report can verify that a quality management program exists.
How can I control revisions to tests, specifications, and preferences?	You can design an approval process for changes and additions to tests, specifications, and preferences. Using Workflow Management, you can set up approval routing to control the changes to quality management tests. An approval process ensures system integrity and meets customer specifications, such as those necessary for ISO 9000 compliance. The approval process reduces the processing time that is required for changes.
How can I most efficiently manage my tests?	By defining specifications, you can group tests for easier access and management, therefore reducing labor costs. Specifications make data entry easier and more intuitive. Specifications also enable you to

	trace test results and ensure data integrity across other systems.
How do I perform data collection and run quality tests at various times throughout the procurement, manufacturing, and distribution processes?	By defining preferences, you can collect data at various times throughout the procurement, manufacturing, and distribution processes. For example, you might define a preference that the system uses to require quality management tests when you receiving materials from vendors. Often, you use these tests to ensure that raw materials are acceptable.
Can I reuse tests?	You can use preferences to design test parameters for a specific customer, customer group, item, item group, and branch/plant. By reusing tests, you can provide consistency in test definitions.
What happens when a sample or lot fails quality testing?	By using lot tracking and lot statuses, you can place a lot at a status that prevents the system from continuing to process the lot when it has failed quality testing.
How do I track samples?	Through a processing option, you can enter input sample numbers manually, or the system can automatically assign sample numbers by using the Next Number Revisions program (P0002). The advantage to using automatic sample numbering is that you ensure data integrity in the system and minimize the amount of time that a sample is held from further processing.
Can I override test results?	Security settings control whether you can override a test status. A sample might fail a test at one point in the process, but can still pass the final quality inspection, provided that you override the results from the portion of the test in which the sample failed. By overriding the test results, you can prevent product shipment delays.
Can I conduct retests on the same sample?	You can enter additional test samples and test results for each test, or you can repeat all tests.

Quality Management System Overview

The J.D. Edwards Quality Management system helps you record and manage data that relates to the material quality of your products. You can record quality test results in a consistent, controlled manner and monitor production processes to ensure product quality.

You can customize the system to meet the specific testing needs of your business by doing the following:

- Setting up quality tests
- Grouping tests into specifications
- Defining which tests to perform on items for a customer
- Defining which customers require a certificate of analysis

At defined points in your business cycle, you collect samples and perform quality tests. Then, you can use the Quality Management system to enter and review the test results for an item. An example of a test result is a 0.20 percent syrup result for a sample of a soft drink being tested for syrup concentration.

Using this system, you can verify whether the material that you produce meets your specifications at different points in your business flow, such as the purchasing, sales order entry, and work order cycles. You can print test results and reports to help you make decisions and take corrective action, if necessary.

By implementing a quality management system that helps you closely monitor product quality, you can accomplish the following:

- Reduce the costs of rework and scrap by making timely decisions about product quality
- Reduce labor costs by minimizing the time spent inspecting material, collecting data, and reworking or repairing defective material
- Reduce service trips by identifying suspect components before shipment
- Reduce material scrap costs by identifying inferior components
- Increase customer satisfaction by improving overall product quality

Quality Management Features

The Quality Management system includes the following features:

Tests

You can set up an unlimited number of tests to perform within your business cycle. For each test, you define the minimum, maximum, and target values and whether the expected test result should be in numeric or alphanumeric format. You can also define the number of samples to take for each test and the sample size.

Examples of tests include dimensional tolerances, color, potency, purity, visual inspection, hardness, and resistance.

Specifications

Specifications enable you to group tests that belong together or should be performed together. Examples include mechanical, visual, and electronic specifications.

Preference Profiles

After you define tests and specifications, you can create a preference profile. A preference profile (also referred to as a preference) determines which tests to perform, and when to perform them, for an item, item group, customer, or customer group. This enables you to customize your product tests, both for your customers and for the items that they order.

For example, use a preference when one customer requires higher tolerances of a test than another customer. You can use preferences to group the appropriate tests and customize them by customer.

Test Results Entry

You can work with tests directly from the Quality Management system, as well as from programs in other systems. After you enter test results, the system evaluates whether the results are within minimum and maximum values and sets each lot status to pass or fail.

You can enter test results during the following steps in the manufacturing and distribution process:

- When entering receipts for items on purchase orders
- When routing receipts for purchase orders and work orders
- When moving items to stock after production is complete
- When entering hours and quantities
- When confirming shipments or packages
- When confirming ECS bulk or package loads
- When entering sales orders
- When reviewing lots

Information Review

As you work with the Quality Management system, you can print tests and specifications by item and branch/plant. You can print test results by lot number and sales order number.

You can use the test result information to print a certificate of analysis (COA) for your customers. The COA includes all of the tests that were performed and the resulting test data for lots that were sold to a customer.

For items that require testing, and for which the item names have changed during reclassification, you can review and trace lots through product records. You can also review nonconforming lots, which are those that have failed quality tests.

Generic Text Entry

As you work with tests, you can enter additional information using generic text. Use generic text to indicate tools, testing equipment, and sampling methods for the following test-related information:

- Item
- Work order routing instruction
- Work order parts list
- Test entry
- Preference profile
- Specification entry
- Test result

System Integration

Quality Management works closely with features in the following systems:

- Inventory Management
- Procurement
- Product Data Management
- Shop Floor Management
- Sales Order Management

Quality Management Tables

The Quality Management system uses the following tables:

Test Definitions Master File (F3701)	Contains test definitions, which consist of the Test ID, description, type of test, minimum and maximum values, target values, and effectivity dates. This table also contains information that indicates whether to print the test on the certificate of analysis and whether to print generic text.
Specifications Definitions Master File (F3702)	Contains the description of the specification and effectivity dates.
Specifications Detail File (F37021)	Contains information about the different tests that are grouped within the specification.
Non-Conforming Material (F3703)	Contains records of failed tests.
Test Results (F3711)	Contains the test results for an item and lot number in inventory or on a work order, purchase order, or sales order.
Test Results Unedited Transaction Table (F3711Z1)	Contains test results uploaded from a Laboratory Information Management (LIM) system.
Certificate of Analysis (COA) Extract (F37900)	Contains test results that print on the certificate of analysis or Product Test report (R37901).
Preference Profile - Quality Management (F40318)	Identifies which tests or specifications are required for an item, item group, customer, or customer group.
Preference Resolution Ledger - Quality Management (F40318R)	Contains historical information about the number of times that a preference has been used on sales orders.

Quality Management System Setup

You can customize the Quality Management system to meet the specific testing needs of your business. After you set up quality tests, you can group the tests into specifications. You can also define which tests to perform on items for a customer and which customers require a certificate of analysis. Before you can use Quality Management, you must set up the following information:

- Branch/Plant constants
- Tests
- Specifications (optional)
- Preference profiles

With the exception of setting up branch/plant constants in Inventory Management, you perform these setup activities in the Quality Management system.

Note

To use the Quality Management system, you need to activate it at the system level and the branch/plant level.

Before You Begin

- ❑ To measure item quality by lot, activate lot control for the items that you want to measure. See *Entering Information for Lots* in the *Inventory Management Guide*.
- ❑ To measure item quality, determine which characteristics to include in the test for each item that you are measuring.

Activating Quality Management

To use the Quality Management system, you must activate it in two different places in the software. First, you must activate it at the system level. After the system as a whole recognizes the Quality Management system, you must specify each branch/plant that you want to include in quality control testing.

► To activate Quality Management at the system level

From the Quality Management Setup menu (G3741), choose Activate Quality Management.

1. On Work With J.D. Edwards ERP System Control, type SY37 in the following field and click Find:
   - Data Item
2. Choose the record that has SY37 as the data item and click Select.
3. On J.D. Edwards ERP System Control - Revisions, click the following option to turn it on, and then click OK:

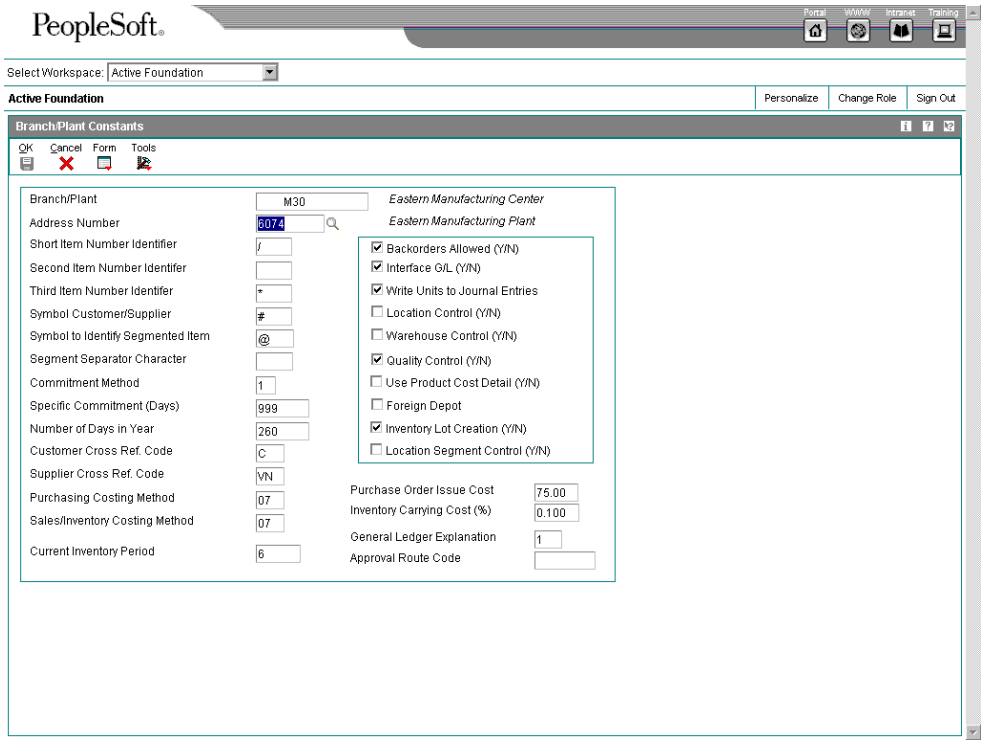
- Yes

4. On Work With J.D. Edwards ERP System Control, click Find.
5. Verify that the Use Module field is set to Yes, and then click Close.

► To activate quality control in the branch/plant constants

From the Inventory Setup menu (G4141), choose Branch/Plant Constants.

1. On Work With Branch/Plant Constants, to locate a specific branch plant, complete the following field and click Find:
   - Branch/Plant
2. Choose the branch/plant and click Select.



3. On Branch/Plant Constants, turn on the following option, and then click OK:
   - Quality Control (Y/N)

Defining Tests

After you activate the Quality Management system, you define the tests to perform for a specific branch/plant or for all branch/plants. For example, you can define a test for syrup concentration levels for a soft drink.

For each test, you provide the following information:

- The test description
- Test effective and expiration dates
- The method for recording results
- The number of test samples
- The method for evaluating results
- The information to print on the certificate of analysis
- Test methods and reference numbers of the American Society of Testing Material (ASTM)

For each test that you set up, you can define whether it is required, optional, or guaranteed. The test type indicates whether you have to enter test results for this test. The following table describes each type of test:

Test Type	Explanation
Required	When you define a test as required, you must enter test results for this test. If the test results indicate failing values, the lot fails and is set to the status that you indicated in the processing options of the Enter Test Results program (P3711). When you do not enter values for a required test, those blank records are considered failing values, and the lot is dispositioned, based on the information in the Accept Quantity or Accept Percentage field for that test.
Optional	When you define a test as optional, you do not have to enter test results for this test. When you do not enter results, the lot does not fail. When you enter failing values for optional tests, however, the lot might fail, based on the information in the Accept Quantity or Accept Percentage field for that test.
Guaranteed	When you define a test as guaranteed, you must enter test results for this test. Guaranteed tests are tests that you certify as being a part of the quality assurance methodology of your organization. You can set the Display/Evaluate Test option in the test definition to not display test results at test results entry, but guaranteed tests always print on certificates of analysis.

You can use generic text to add information or instructions related to a specific test, such as sampling methods to be used. The system automatically copies generic text from tests to preferences. When you enter test results, you can choose a processing option to copy information or instructions from tests or preferences to test results. Preferences enable you to customize tests and specifications for any combination of the following:

- Customer
- Customer group
- Item (product)
- Item group

If you set up alphanumeric test result values, you can set up a user defined code list that contains the alphanumeric results and their corresponding numeric values. The system uses this list to determine whether an alphanumeric test result is within the range of minimum and maximum values.

You can also set up alphanumeric test result values without user defined codes, which allow you to enter free-form test results. For example, you might set up a test to calibrate equipment and then record when the test is performed. In this case, you are not concerned with a test result value.

After you set up tests, you can review and revise them. You can also print a Test Definition report (R37410).

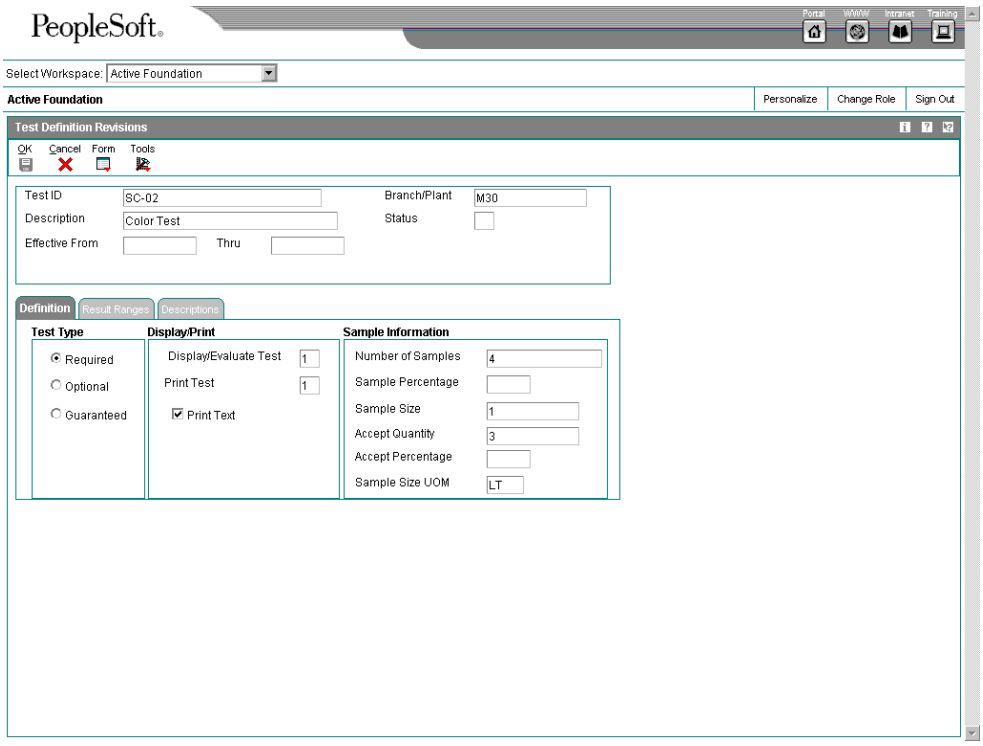
Before You Begin

- To activate workflow and use the approval process, set the processing option for the Test Revisions program (P3701).
- To create historical information, set the processing option for the Test Revisions program to log changes to test definition.

► To define tests

From the Quality Management Setup menu (G3741), choose Test Revisions.

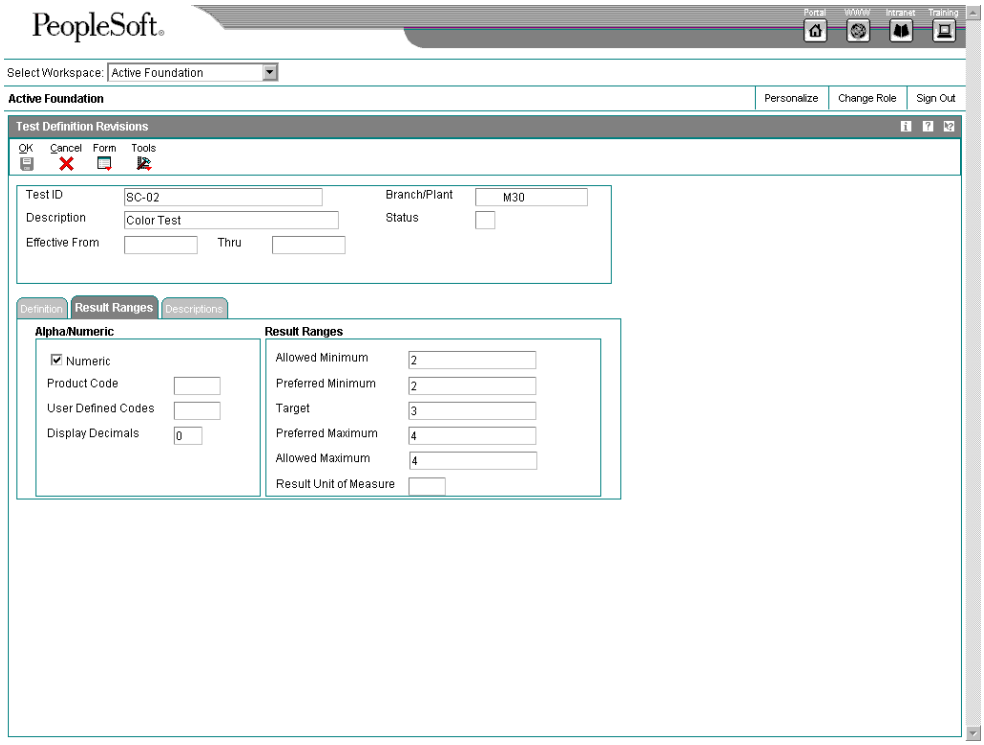
1. On Work With Test Definitions, click Add.



2. On Test Definition Revisions, complete the following fields:
   - Test ID
   - Description
3. Complete the following optional fields:
   - Branch/Plant
   - Effective From
   - Thru

   If you leave the Branch/Plant field blank, the test is valid for all branch/plants.

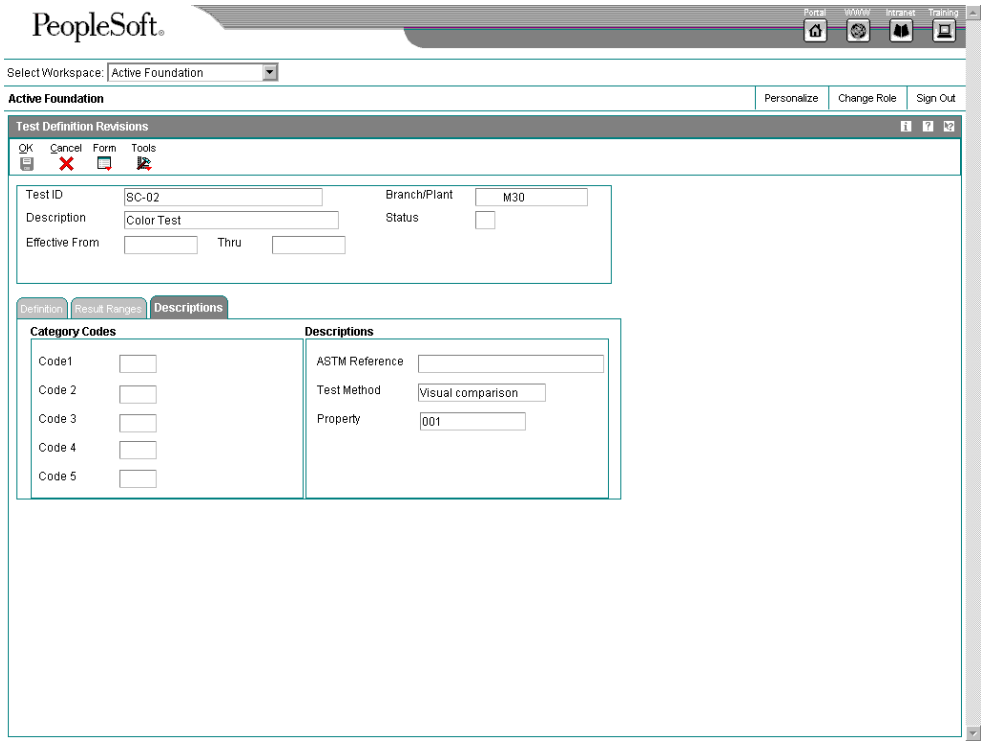
4. Click the Definition tab, and then choose one of the following options to define how to record test results:
    - Required
    - Optional
    - Guaranteed
5. To specify which information appears on the certificate of analysis, complete the following fields:
    - Print Test
    - Display/Evaluate Test
    - Print Text
6. To define information about the sample, complete the following fields:
    - Number of Samples
    - Sample Percentage
    - Sample Size
    - Accept Quantity
    - Accept Percentage
    - Sample Size UOM
7. Click the Result Ranges tab.



8. Complete the following field:
   - Display Decimals
9. Turn on the following option if the value of the result is numeric:
   - Numeric
10. Complete the following optional fields if you did not turn on the Numeric option:
    - Product Code
    - User Defined Codes

    For tests that are alphanumeric (the Numeric option is turned off), you can either enter a user defined code to stipulate testing requirements, or leave the user defined code fields blank and allow users to enter results in free-form text. If you allow free-form text for results, any value in the test result passes.
11. To define information about the sample and how to evaluate it, complete the following fields:
    - Allowed Minimum
    - Target
    - Allowed Maximum
    - Result Unit of Measure

12. Complete the following optional fields:
    - Preferred Minimum
    - Preferred Maximum
13. Click the Descriptions tab.



14. Complete the following fields to categorize tests into groups for reporting purposes:
    - Test Method
    - Property
15. To further categorize tests, complete any of the category code fields.
16. To identify a recommended testing procedure of the American Society of Testing Material, complete the following optional field, which is for information only:
    - ASTM Reference

17. Click OK.

Processing Options for Test Revisions (P3701)

Defaults Tab

This processing option indicates which status a test definition must have for the system to display it.

1. Status

   1 = Pending

   2 = History

   3 = Rejected

   blank = Active/Approved

Use this processing option to specify which test definitions the system displays. Valid values are:

Blank Display only active test definitions.

1 Display only test definitions which are pending approval.

2 Display only historical test definition information.

3 Display only rejected change requests.

Process Tab

This processing option specifies whether the systems stores history information for test definitions.

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1. Log History

   1 = Log History Records

Use this processing option to specify whether the system records the existing test definition before applying modifications. When recording the test definition, the system saves an image as history information. The saved information can be viewed online or in a report by selecting the History option on the Defaults tab in the processing options for Test Revisions (P3701). Valid values are:

Blank Do not record test definition before applying modifications.

---

1 Record test definition before applying modifications.

Workflow Tab

This processing option specifies whether workflow approval processing is activated when you modify test definitions.

1. Workflow

   1 = Activate Workflow

Use this processing option to specify whether to activate workflow approval processing when modifications are made to test definitions. When you activate workflow, the revised test definition must be approved before the test definition is available for use. Valid values are:

Blank Workflow approval is not activated; revised test definition is available for immediate use.

1 Workflow approval is activated; revised test definition is approved before the test definition is available for use.

Entering User Defined Codes

When you set up alphanumeric values for test results, you can set up a user defined code table (37/C1), which contains the alphanumeric results and their corresponding numeric values. The system uses this list to evaluate whether an alphanumeric test result is within the range of minimum and maximum values.

For each user defined code, the second description column contains a numeric value that represents the value of the alphanumeric code. J.D. Edwards recommends that you use whole numbers rather than decimals in the Description-2 field. For example, for an alphanumeric test result of color, you might enter the following values:

- **Clear1** in Description and **1** in Description-2
- **Yellow2** in Description and **2** in Description-2
- **Amber3** in Description and **3** in Description-2

Caution

If you need to use decimals, the second description number must be in the appropriate format for your decimal environment, including the use of separators such as commas or decimals. The number of decimals defined in the Test Revisions program (P3701) must equal the number of decimals in the user defined code list. Changing decimals after you set them up might produce unpredictable results.

Defining Specifications

A specification is a group of tests that are always performed at the same time. As you define a specification, you determine which tests to perform at the same time. If you sequence your tests within a specification, the tests appear in the sequenced order in your test results. Specifications can be unique to a single branch/plant or common for all branch/plants.

An example of a specification is a blending specification for a soft drink, which contains tests for caffeine, color shade, and syrup concentration. These individual tests within the specification pass or fail quality testing, not the specification itself.

Note

You cannot customize tests within a specification. Use preferences when you need to customize tests and specifications.

For each specification, you can define the following:

- Name
- Description
- The tests to include in the specification

After you define specifications, you can review or revise them. You can also print a test specification report.

Note

If you use workflow approval processing, you cannot make changes to records that have a status of pending. Also, any changes that you make do not become effective until they are approved.

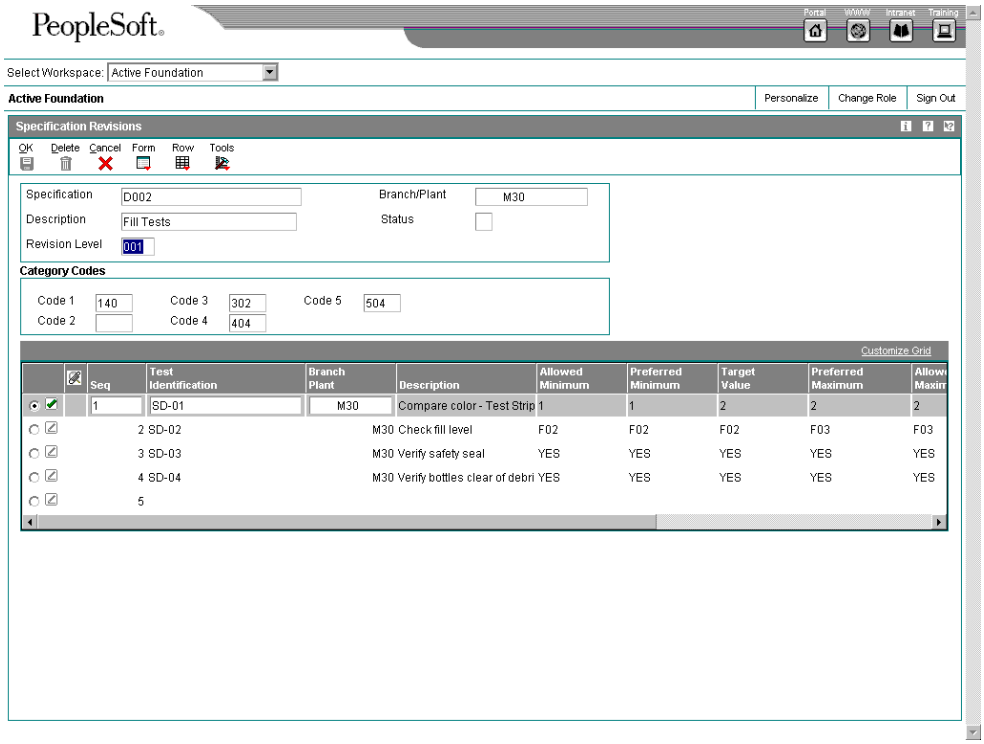
Before You Begin

- ❑ To activate workflow and use the approval process, set the processing option for the Specification Revisions program (P3702) to activate workflow.
- ❑ To create historical information, set the processing option for the Specification Revisions program to log changes to specification definitions.

► **To define specifications**

From the Quality Management Setup menu (G3741), choose Specification Revisions.

1. On Work With Specifications, click Add.



2. On Specification Revisions, complete the following fields:
   - Specification
   - Description
   - Revision Level
3. Complete the following optional field:
   - Branch/Plant

   If you leave the Branch/Plant field blank, the specification is valid for all branches.
4. To categorize specifications into groups, complete any of the category code fields.

Note
Use the category codes in conjunction with the Specifications Report (R37415) to help you manage the specifications that exist for a certain branch/plant, for example. You can set the data selection for the Specifications Report to print only specifications with specific category codes.

5. To sequence and group the tests within a specification, complete the following fields:
   - Seq

- Test Identification
- Branch Plant

6. Click OK.

Processing Options for Specification Revisions (P3702)

Defaults Tab

This processing option specifies which status a specification must have for the system to display it.

---

1. Status

   1 = Pending

   2 = History

   3 = Rejected

   blank = Active/Approved

Use this processing option to specify a status to filter specifications. Valid values are:

1 Display only specifications which are pending approval.

2 Display only historical specification information.

3 Display only rejected change requests.

Blank Display only active specifications will display.

Process Tab

This processing option specifies whether the system stores history information for specifications.

1. Log History

   1 = Log History Records

Use this processing option to specify whether the system logs additions to,modifications of, and deletions of test definitions. When you activate workflow, any addition to, change to, or deletion of a test definition must be approved before the revision is available for use. The system logs these before images as history information, and they can be viewed online or through reports by selecting the history status (status value is 2). Valid values are:

Blank Do not perform logging.

1 Perform logging.

Workflow Tab

This processing option specifies whether workflow approval processing is activated when specifications are modified.

1. Workflow

   1 = Activate Workflow

Use this option to activate workflow approval processing. When you activate workflow, any addition to, change to, or deletion of a test definition must be approved before the revision is available for use. Valid values are:

Blank Workflow approvals are not activated; revisions are available for use immediately.

1 Workflow approvals are activated; revisions must be approved before they are available for use.

Setting Up Preference Profiles

In Quality Management, preference profiles enable you to customize tests and specifications. A specification is a group of tests that are performed at the same time or serve a similar function, for example. You can use a preference profile to customize tests and specifications for any combination of customer, customer group, item, or item group. The system uses preference profiles to determine the testing that should occur for any item, given the types of preference profiles that are defined for it. Preference profiles also provide some limited control of users' access to Quality Management forms because quality testing is performed only for items that have related preferences.

Typically, you create preference profiles when you have consistent business requirements, such as the following:

- Specifications from your customers
- Your company's policies
- Regulatory agency rules

An example of a preference is a customer's test requirements for a specific item when it is received from a supplier. A customer might require a variety of tests or customized tests for this item.

An example of a specification is a blending specification for a soft drink, which contains tests for caffeine, color shade, and syrup concentration. These individual tests within the specification, not the specification itself, pass or fail quality testing.

Working with the Preference Master

Before you begin to define Quality Management preferences, you must set up the preference master record for Quality Management. When you define a hierarchy for a preference type, the hierarchy settings apply throughout the system and cannot be modified for individual branch/plants, for example. The preference type for Quality Management is hard-coded to 18.

The preference hierarchy that you define for Quality Management uses additive preferencing. When you enter test results, the system locates all tests that match the combinations of customer number, customer group, item number, and item group defined in the preference hierarchy. To prevent multiple instances of the same test from being used in the same sample, the system uses only the test listed for the first matching combination of each type.

▶ To set up a quality preference master record

From the Quality Management Setup menu (G3741), choose Preference Master.

1. On Work with Preference Master, enter 18 in the following field, and then click Find.
   - Preference Type
2. Choose the preference and choose Hierarchy from the Row menu.
3. On Preference Hierarchy Revisions, type consecutive numbers at the intersections of rows and columns to define the hierarchy for the preference.
4. Click OK.

Defining Preference Profiles

After you define tests and specifications, you can customize them by setting up preference profiles, referred to as preferences. Depending on how you set up the hierarchy for preference profiles, you can set up preferences for the following:

- A customer
- A customer group
- An item (product)
- An item group
- Any combination of customers and items, or groups of customers and items

You can also limit each preference to a specific branch/plant.

The system hierarchy that you set up determines which preference information appears when you enter test results.

After you define preferences, you can locate them when you revise test results and bills of material. You can also locate preferences when you review branch/plant information for items and when you enter work orders.

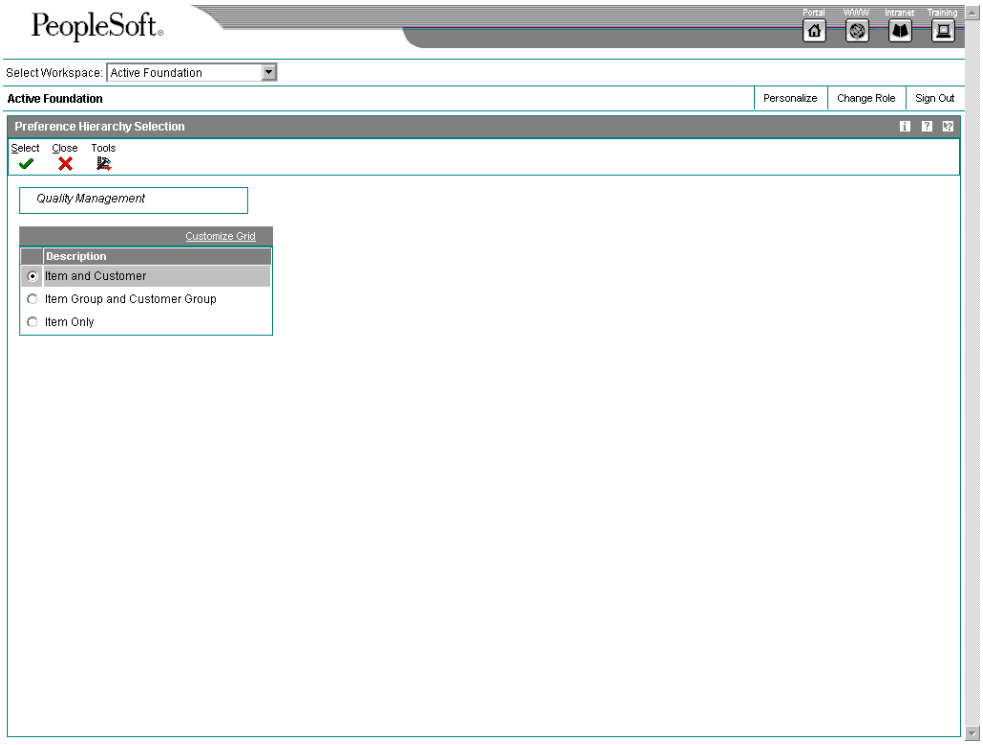
Before You Begin

- ❑ If you define tests and enter test results by customer, set up the customer information in the Address Book.
- ❑ If you define tests and enter test results by item, set up the item numbers in the Item Master (F4101) and Item Branch File (F4102) tables. See *Entering Item Master Information* and *Entering Branch/Plant Information* in the *Inventory Management Guide.*
- ❑ If you define tests and enter test results by customer group or item group, set up the groups. See *Assigning Customers and Items to Groups* in the *Sales Order Management Guide.*
- ❑ Set up the hierarchy for preference profiles. See *Working with the Preference Master and Hierarchy* in the *Sales Order Management Guide.*
- ❑ To activate workflow and use the approval process, set the processing option for the Quality Preference Revisions program (P40318).
- ❑ To create historical information, set the processing option for the Quality Preference Revisions program to log changes to preference profiles.

► To define preference profiles

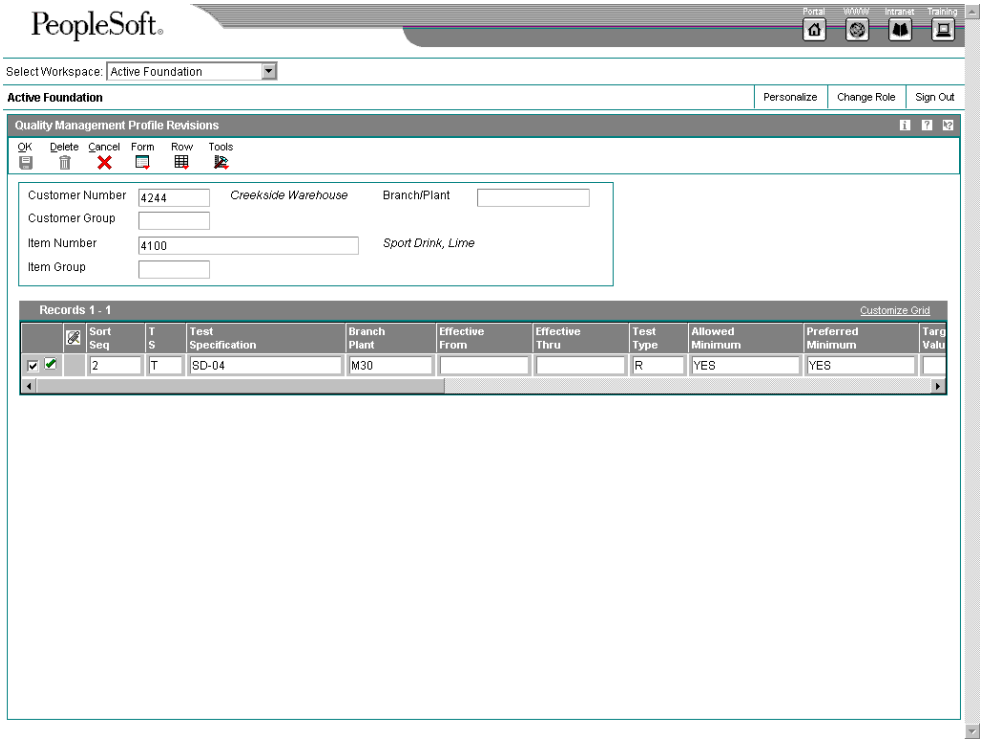
From the Quality Management Setup menu (G3741), choose Quality Preference Revisions.

1. On Work With Quality Management Profile, click Add.



2. On Preference Hierarchy Selection, choose a hierarchy and click Select.

   The hierarchy that you choose determines the fields in the header area that you complete for the preference.



3. On Quality Management Profile Revisions, complete one or all of the following fields, depending on your hierarchy:

    - Customer Number
    - Customer Group
    - Item Number
    - Item Group

4. Complete the following fields to define the tests and specifications that make up the preference:

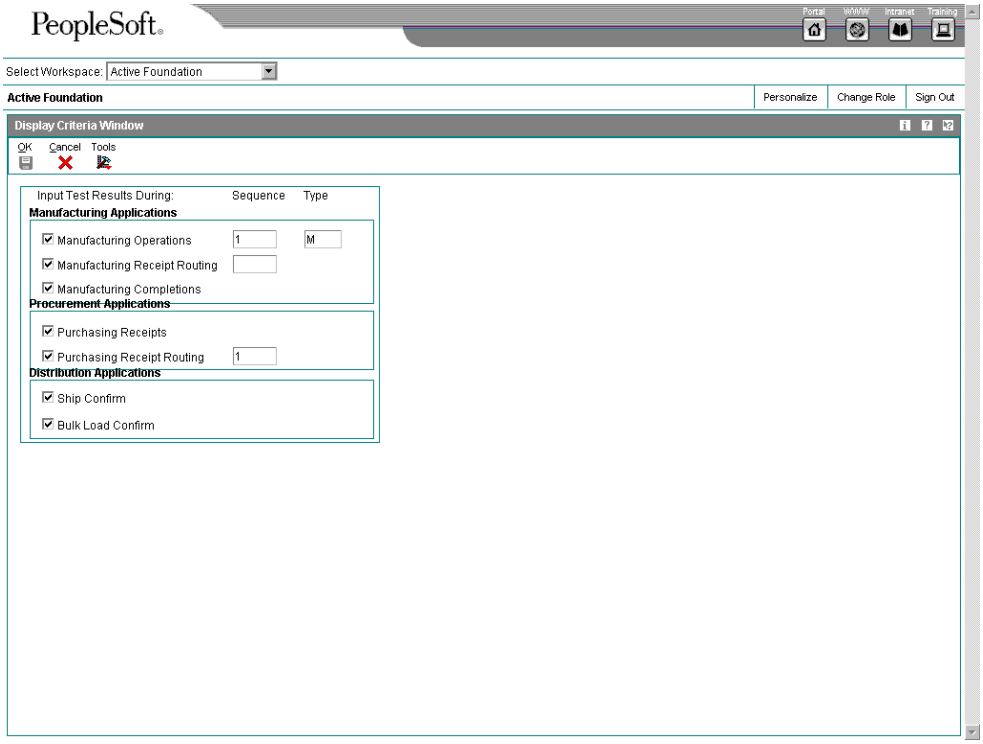
    - Sort Seq
    - T S

      If you enter a test specification value of T, you can override testing and sampling information from the original test definition by completing the appropriate fields. If you override this information, the preference displays the override values. Otherwise, the preference displays the default values.

    - Test Specification
    - Branch/Plant
    - Test Type
    - Allowed Minimum
    - Preferred Minimum
    - Target Value
    - Preferred Maximum
    - Allowed Maximum
    - Result UM
    - Display Dec
    - Property
    - Test Method
    - Number of Samples
    - Sample Percent
    - Accept Quantity

- Accept Percent
- Print Test

5. Choose a row that you completed and then choose Display Criteria from the Row menu.



6. On Display Criteria Window, use the following options to customize the display criteria for the selected row:
   - Manufacturing Operations
   - Manufacturing Receipt Routing
   - Manufacturing Completions
   - Purchasing Receipts
   - Purchasing Receipt Routing
   - Ship Confirm
   - Bulk Load Confirm

   If you do not want to perform quality testing for a particular program, verify that the corresponding option is turned off.

For example, to enter test results during work order inventory completions, verify that the Manufacturing Completions option is turned on. This option activates the Test Results Revisions program (P3711) when you enter a work order completion.

7. Complete the following fields to further define where a test is available for results entry, such as during a specific step in a receipt routing:
   - Sequence
   - Type
8. Click OK.
9. Repeat steps 5 through 8 for each row that you entered on Quality Management Profile Revisions.
10. On Quality Management Profile Revisions, click OK.

Note

If you enter a specification as part of a preference, you can set the display criteria for the entire specification. The display criteria that you set for the specification apply to all the tests that it contains.

Splitting Specifications

After you define a preference, you can split a specification to view its corresponding group of tests. You also might split a specification when you need to override test definition values, which sets the test specification value to T. You cannot override these values when the test specification value is set to S.

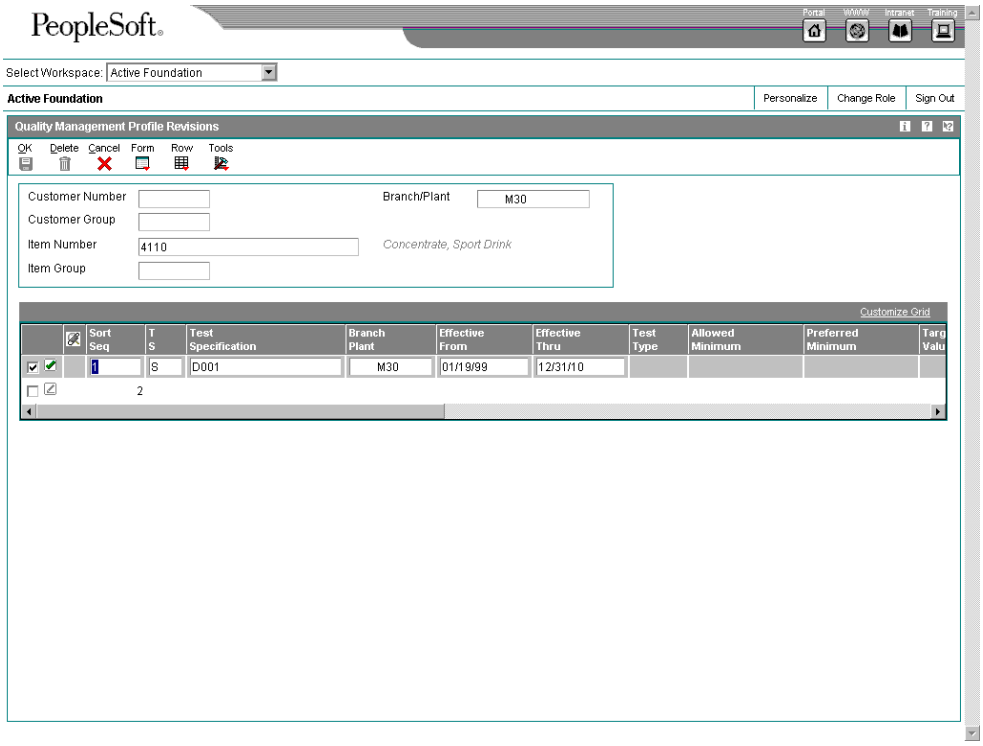
Caution

If you split a specification, you cannot reassemble it. You can split a specification to view its component tests. The specification is not actually split until you click OK on the Quality Management Profile Revisions form. If you need to restore the specification within the preference, you can delete the separate tests within the preference and enter the specification on a new line. Deleting test or specification records in a preference profile does not affect the test master or specification master records.

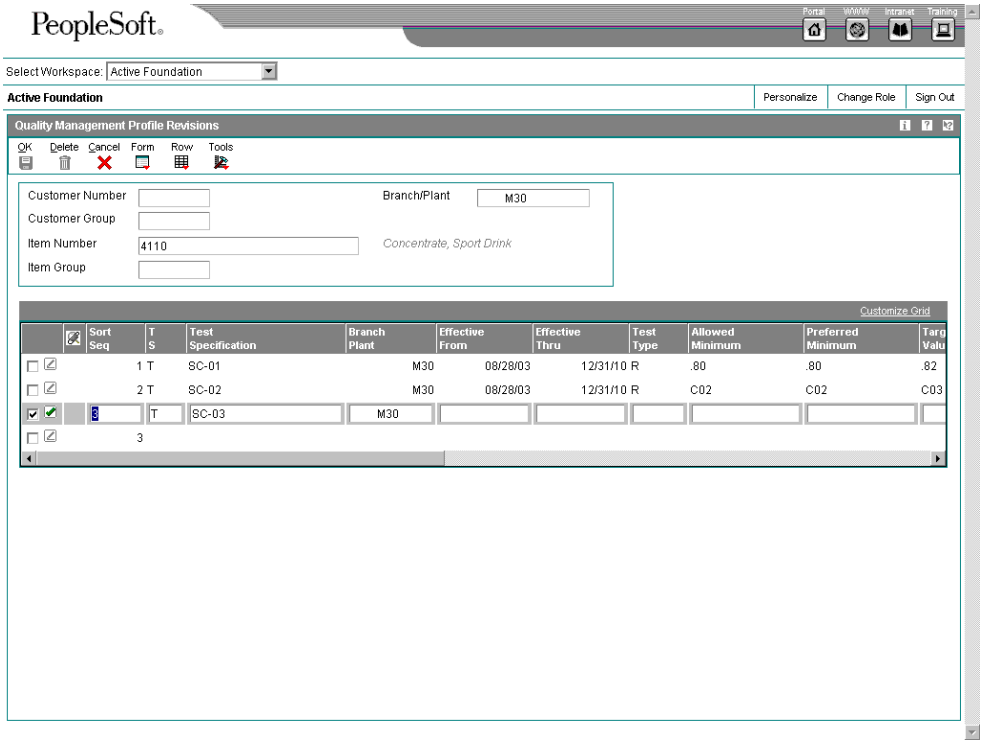
► To split specifications

From the Quality Management Setup menu (G3741), choose Quality Preference Revisions.

1. On Work With Quality Management Profile, complete the following fields and click Find:
   - Customer Number
   - Item Number
2. Choose a specification and click Select.



3. On Quality Management Profile Revisions, choose a record and then choose Split Spec from the Row menu.



4. Review the separate tests for this specification. You can override test definition values if necessary.

Note

If you use workflow approval processing, you cannot make changes to records that have a status of pending. Also, any changes that you make do not become effective until they are approved.

Processing Options for Preference Profile Quality Management (P40318)

Default Tab

This processing option controls which status a preference must have for the system to display it.

1. Status

   1 = Pending

   2 = History

   3 = Rejected

   blank = Active/Approved

Use this processing option to specify a status value to filter quality management preferences. Valid values are:

Blank Only active preferences will display.

1 Only preferences which are pending approval will display.

2 Only historical preference information will display.

3 Only rejected change requests will display. On the browse form, this filter can be changed to display all status values.

Process Tab

This processing option controls whether the systems stores history information for preferences.

1. Log History

   1 = Log History Records

Use this processing option to specify whether to activate logging on adds,changes, and deletions of quality preferences. When you activate logging, the system saves an image of the currently active quality preference before the new changes are applied. These before images are logged as history information, and they can be viewed online, or through reports by selecting the history status (status value is 2). Valid values are:

Blank Do not activate logging.

1 Activate logging.

Workflow Tab

This processing option controls whether workflow approval processing is activated when preferences are modified.

1. Workflow

   1 = Activate Workflow

Use this processing option to activate workflow approval processing. When you activate workflow, any additions, changes or deletions to a quality preference must be approved before the revision is active and available for use. Valid values are:

Blank Workflow approvals are not activated; revisions are available for use immediately.

1 Workflow approvals are activated; revisions must be approved before they are available for use.

Working with Approval Processing

When you need to approve changes to tests, specifications, and preferences, you can activate workflow approval processing and then use the Approvals Workbench program (P37300) to route changes through an automated approval process.

You activate workflow for approval processing by setting the appropriate processing options for the following programs:

- Test Revisions (P3701)
- Specification Revisions (P3702)
- Quality Preference Revisions (P40318)

The Approvals Workbench program is especially useful for streamlining an approval process that involves a large number of changes. The system displays all approval messages for a specific approver, enabling the approver to answer them collectively.

When you activate workflow, changes to any fields trigger the workflow approval process. All revision transactions begin with a status of pending. Designated approvers then review the changes and approve or reject them. For example, you might need to reject changes to the allowed minimum and maximum values for a passing test result, due to customer requirements.

If you reject a revision, the system sends a message to the originator about the rejection. If you approve a revision, the system applies the changes and sends a message to the originator about the approval.

You cannot change pending, rejected, or history records. If you attempt to change a pending record, the system displays a message that an approval is pending.

Note

Revision levels on specifications are for information only.

Before You Begin

- ❑ Set up workflow processing. See *Creating a Workflow Process* in the *J.D. Edwards Workflow Tools Guide*.

Revising Tests, Specifications, and Preferences

You can revise tests, specifications, and preferences after they are set up. Note the following considerations:

- If you do not activate workflow processing, any changes that you make are effective immediately.
- If you activate workflow processing, changes are not effective until they have completed the workflow process. You can change only active records when no pending approvals are in progress.
- If you activate logging, the system saves history records for all changes. You do not need to activate workflow in order to log history information.

This procedure assumes that you are using workflow processing.

Before You Begin

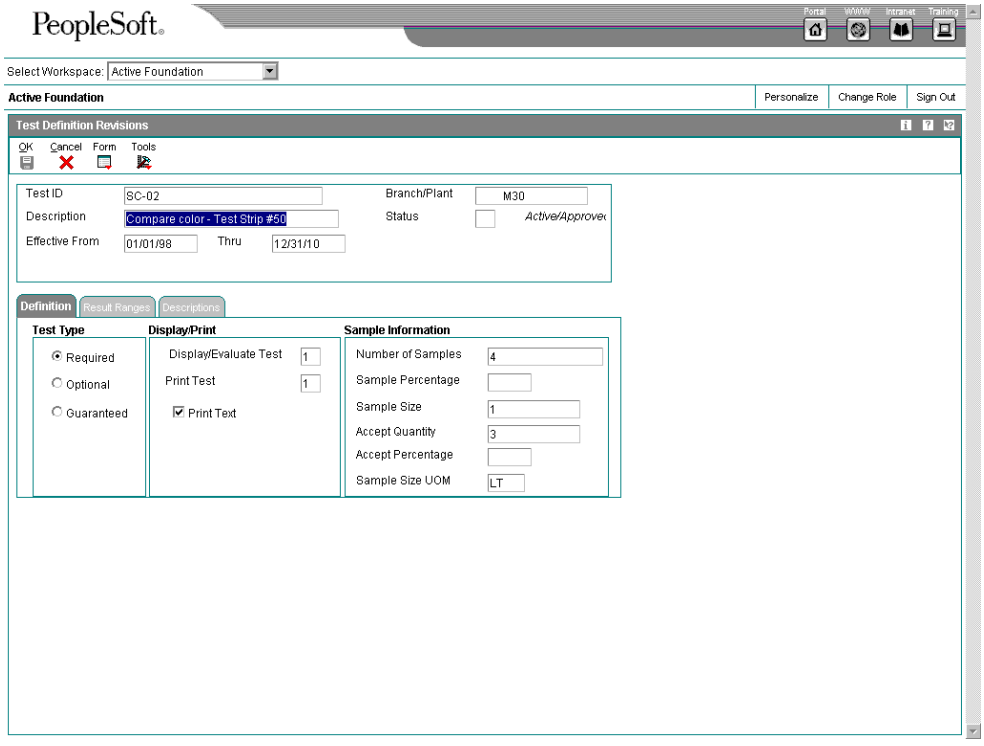
- ❑ Review the processing options for the following programs to ensure that workflow processing is activated:
  - Test Revisions (P3701).
  - Specification Revisions (P3702).
  - Quality Preference Revisions (P40318).

► To revise tests, specifications, or preferences

From the Quality Management Setup menu (G3741), choose Test Revisions.

The steps for revising tests, specifications, and preferences are basically the same. This procedure provides the steps for revising tests as an example.

1. On Work With Test Definitions, to locate the test that you want to revise, complete any of the following fields and click Find:
   - Test ID
   - Branch/Plant
2. Choose the appropriate test and click Select.



3. On Test Definition Revisions, revise the test information as necessary and click OK.

   When the workflow processing option is active, clicking OK initiates the approval process.

Approving Revisions

After you revise a test, specification, or preference, the system sends approval messages to the members of the distribution list. The Quality Management Approvals program (P37300) can be used to approve or reject the revisions.

You can approve or reject multiple revision requests without having to access the approval form for each request. After it is approved or rejected, the revision requests no longer appear on the Approvals Workbench.

Note

You can also use the Employee Work Center in the Workflow Management system to approve or reject Quality Management revisions.

Before You Begin

- In Workflow Management, set up distribution lists for approvers of changes to tests, specifications, and preferences.
- Ask your system administrator to assign permissions to the Approver field in the Approvals Workbench program (P37300).

► To approve revisions

From the Quality Management Setup menu (G3741), choose Approvals Workbench.

The steps for approving tests, specifications, and preferences are basically the same. This procedure provides the steps for approving a test revision request, as an example.

1. On Quality Management Approvals Workbench, to review pending approvals, complete the following fields and click Find:
   - Approver
   - Test Approvals
2. Before you approve a test revision request, you can review the following additional information:
   - To view the details of a requested test revision, choose the record and then choose View Request from the Row menu.
   - To view the original test definition, choose the record and then choose View Original from the Row menu.
3. To approve a test revision, choose the appropriate test and choose Approve from the Row menu.

   The system removes the approved test revision from the list of revisions that are pending approval. After all required members of the distribution list approve the test revision, the system converts the status of the request from pending to active and sends a message to the originator of the request. If you log revisions, the system also creates a history record.
4. To reject a test revision, choose the appropriate test and choose Reject from the Row menu.

You should also enter text explaining why you rejected the test revision request.

If a required member of the distribution list rejects the test revision request, the system converts the status of the request from Pending to Rejected and sends a message to the originator of the rejected request.

Reviewing Tests and Specifications

You can use the Test/Specification Where Used program (P37202) to identify which preference profiles contain a specific test or specification for quality testing. You can also use this program to review or revise preference profiles, specifications, or tests.

► To review tests and specifications

From the Quality Management Setup menu (G3741), choose Test/Specification Where Used.

1. On Test/Specification Where Used, to locate a test or specification, complete the following fields:

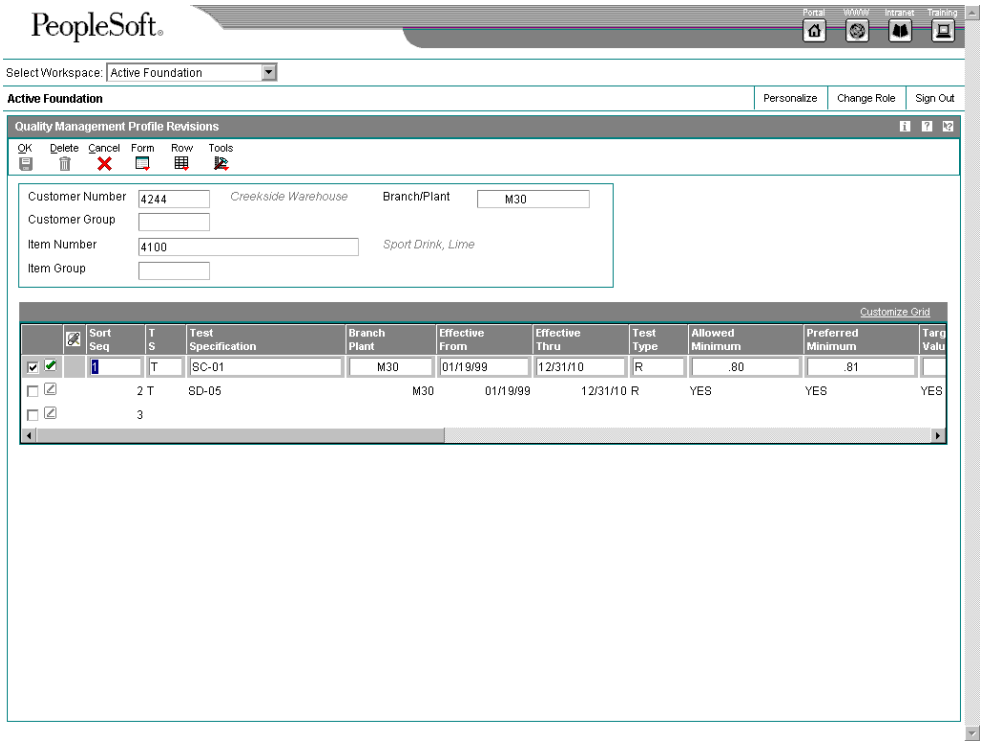
   - Branch Plant
   - Test Specification

   You can review a specific test or specification for all of your branch/plants by typing * in the Branch/Plant field. You can review all tests and specifications by typing * in the Test/Specification field.

2. To indicate a test or specification, click one of the following options:

   - Test
   - Specification

3. Click Find.
4. Choose the appropriate test or specification, and then choose Preferences from the Row menu.



5. On Quality Management Profile Revisions, review or change the preference information.
6. If you need to make other changes, choose the record that you want to change, and then choose an option from the Row menu.
7. Click OK.

Setting Up Inclusion Rules for Test Results Tracing

To trace test results, you must set up inclusion rules. Inclusion rules are user defined codes. When you trace test results for a specific lot, these codes enable you to limit the item ledger transactions that the system processes. You can review which lots are within a parent lot and all tests for the parent lot as well as the individual lots. Tracing helps you find test results for components of an assembled item or for an item that has been reclassified.

The system traces a lot by associating corresponding transactions, such as receipts, issues, completions, and sales orders. If you do not include the documents in the inclusion rules, the system stops tracing the lot. For example, if you do not include the work order completion document type in inclusion rules, the system stops tracing at the work order completion transaction.

Setting Up Customer Billing Instructions for Quality Management

If you use the J.D. Edwards Sales Order Management system, you must use customer billing instructions to indicate whether customers should receive a certificate of analysis. You can

set up the customer billing instructions to automatically generate a certificate of analysis for a particular customer when shipments are confirmed.

A certificate of analysis is a document that lists the tests and test results for item lots sold to a customer.

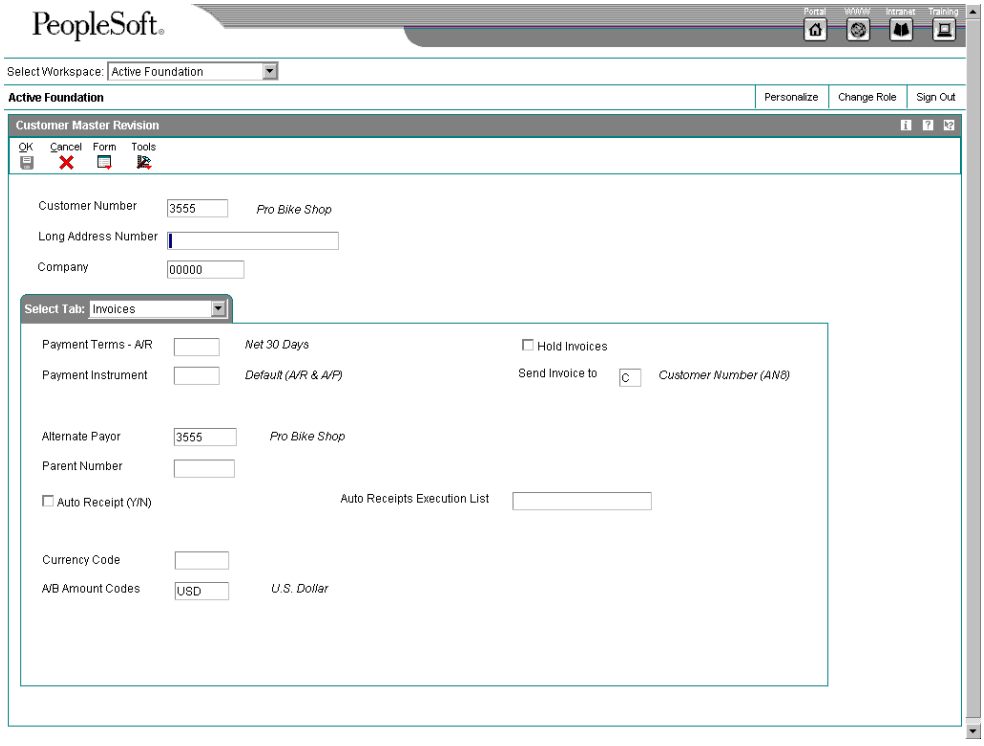
Before You Begin

- To control which tests print on the certificate of analysis, ensure that you have set up tests with the appropriate print test values.

▶ To set up customer billing instructions for Quality Management

From the Customer Revisions menu (G4221), choose Customer Billing Instructions.

1. On Work With Customer Master, to locate a specific customer, complete the following fields and click Find:
   - Alpha Name
   - Search Type
2. Choose the appropriate customer and click Select.



3. On Customer Master Revision, choose Billing Information from the Form menu.
4. On Billing Information, on the Billing Page 1 tab, click the following option to turn it on:
   - Certificate Of Analysis Print

5. Click OK.
6. On Customer Master Revision, click OK.

Test Results Processing

After you set up the Quality Management system, you collect samples and perform quality tests at the points in your business cycle that you defined in a preference profile. Then, you enter and review the test results for an item. An example of a test result is a 0.20 percent syrup result for a sample of a soft drink that you are testing for syrup concentration.

You can process test results from within the Quality Management system. You can also access Quality Management from other systems when you perform the following tasks:

- Enter a receipt for an item on a purchase order
- Track the movement of a received item at any operation sequence during purchasing receipts routing
- Track completions at operations during the manufacturing process
- Complete the item after the manufacturing process and move it into stock (manufacturing receipts routing)
- Confirm shipments

The following programs access Quality Management information:

Shop Floor Management	• Manufacturing Work Order Processing (P48013) • Work Order Completions (P31114) • Super Backflush (P31123) • Work Order Time Entry (P311221)
Procurement	• PO Receipts (P4312) • Receipt Routing Movement and Disposition (P43250)
Sales Order Management	• Shipment Confirmation (P4205)

Working with Test Results

You collect test results after you measure the quality of an item characteristic. For example, a caffeine test for a soft drink includes taking a sample of the item and measuring for caffeine levels.

After you collect and enter test results at various points in your business cycle, you process the results. The system compares the results to the minimum and maximum values and the acceptable quantity or percentage that you previously defined for the test. Based on how many samples pass or fail, the system evaluates the lot to determine whether it passes or fails quality inspection. The system then sets the lot status to the value that you defined in the processing option for failed lot status.

Test Results Entry Format

You can enter test results in preference format, order number format, or compartment format. The format that you use depends on how you set the Results Entry Format processing option for the Enter Test Results program (P3711). The system uses header information to choose tests and samples through preference profiles. The test results format that you use might

depend on the activity that you are processing. Each format requires different information. The following tables describes each format:

Preference format	You enter test results for a purchase order, work order, or sales order quantity. You can also enter test results for existing or newly-created lots in inventory.
Order number format	You enter test results that are a part of an activity required to procure, manufacture, sell, or transport materials. When you use this format, you access the Enter Test Results program (P3711) through another program such as PO Receipts (P4312), Shipment Confirmation (P4205), or Work Order Completions (P31114).
Compartment number format	You enter test results as part of a load confirmation within the Transportation Management system. You enter test results that must be entered for compartmentalized load during load confirm, according to the setup of the load type and quality preferences. You can set up test results for packaged or bulk items.

Lot Status

The lot status indicates whether a lot is on hold or available for shipping. For example, to fill a sales order, you might need to search for a tested lot that meets a customer's specifications. When a lot passes quality inspection and meets the specifications, it is available for shipment to that customer.

The lot status depends on the processing option settings for failed and passed lots, as follows:

- You can set processing options for failed and passed lot status, so that the system prevents the lots from being sold or shipped until the testing is finished and the lots pass inspection.
- You can set a processing option to hold the lot as soon as it is brought into inventory, regardless of whether it passed quality testing or has not yet been tested. For example, you might use a lot status of Q to indicate that the lot quantity has not been tested. In a purchasing scenario, the lot status, along with a defined business process, prevents untested lots from being used by manufacturing. After you test the lot of purchased materials, you might change its status to F, to indicate that it failed inspection, or blank, to indicate that it passed inspection and is available. Alternatively, you might define a business process to indicate that another lot status represents material that can be used. You should be aware, however, that only blank lot statuses are considered available.

If you do not set processing options for failed and passed lot status, the system allows all lots to be sold or shipped. Any program that selects items from inventory can choose the lots because the system considers them to be available.

The system allows free-form entry of test results for tests that have the following characteristics:

- Appears in alphanumeric format (the Numeric option on the Test Definition Revisions form is turned off)
- Is not set up with a user defined code list

For tests that are not set up with a user defined code list, the lot passes when any value other than Blank appears in the test result.

Sample Numbering

The Quality Management system provides a unique numbering system for samples when you enter test results. To track test results to a specific sample, you can set up the system to use Next Numbers to assign sample numbers. You can also override a system-assigned number. If you do not set the processing option for sample numbering, you must enter a sample number for each test result.

If you need retest the sample, you can either assign an existing sample number or a new sample number to the new test results, depending on whether you collected a new sample. If you retest the original sample, you can assign a duplicate sample number for the test.

If you load external test results from a third party system, the Quality Management system assigns unique sample numbers only if they have not been provided by the inbound data.

Note

Do not confuse the sample number with the number of samples. The sample number identifies a group of tests within the same sample, such as 50002. The number of samples indicates how many samples to take for a test, such as 3.

System Integration

Depending on how you set up preference profiles, you can access the Test Results Revisions form (W3711B) from any of the following programs:

- Work Order Completions (P31114)
- Work Order Time Entry (P311221)
- Completions Workbench (P3119)
- Shipment Confirmation (P4205)
- PO Receipts (P4312)
- Receipt Routing Movement and Disposition (P43250)

The following table explains how you can use test results with various program functions:

Work Order Entry	When you create a work order, you can: • Use Quality Preference Revisions (P40318) to maintain tests for the parent item • Enter generic text to indicate when to test materials and which test to use
Work Order Completions	When you enter work order completions, including quantity completed and quantity scrapped, you can: • Access the Test Revisions program (P3701) for any parent work order items that require testing upon completion • Review work order generic text • Set processing options for default lot, work order, and operation status

Super Backflush When you backflush labor and material for a work order, you can:

- Access the Enter Test Results program (P3711) for any parent items that require testing
- Review generic text for the parent item and operations

Work Order Time Entry When you charge actual hours and quantities to a work order, you can:

- Access the Enter Test Results program for completed items that require testing
- Review generic text for the parent item
- Set processing options for work order status and operation status

Bill Revisions When you maintain bills of material, you can:

- Enter generic text to indicate the various tests to perform on an item
- Use the Quality Preference Revisions program to maintain tests for the parent item

PO Receipts When you receive items, you can access the Enter Test Results program for items that require testing.

Receipt Routing When you review the location of goods within the receipts routing process and move them to another operation, you can access the Enter Test Results program for items that require testing.

Sales Order Entry When you enter sales orders, you can use the Item Search program (P41200) to select the lot that meets the quality criteria for the customer and item that appear on the sales order.

Choosing Tests for Results Entry

You can enter test results for an item and lot from the Quality Management system menu or from many programs within the Manufacturing and Distribution systems. If you access the Enter Test Results program (P3711) from another Manufacturing or Distribution program, the system completes the test header information. The system uses the order header information and defined preference profiles to choose the correct set of tests for results entry.

Before You Begin

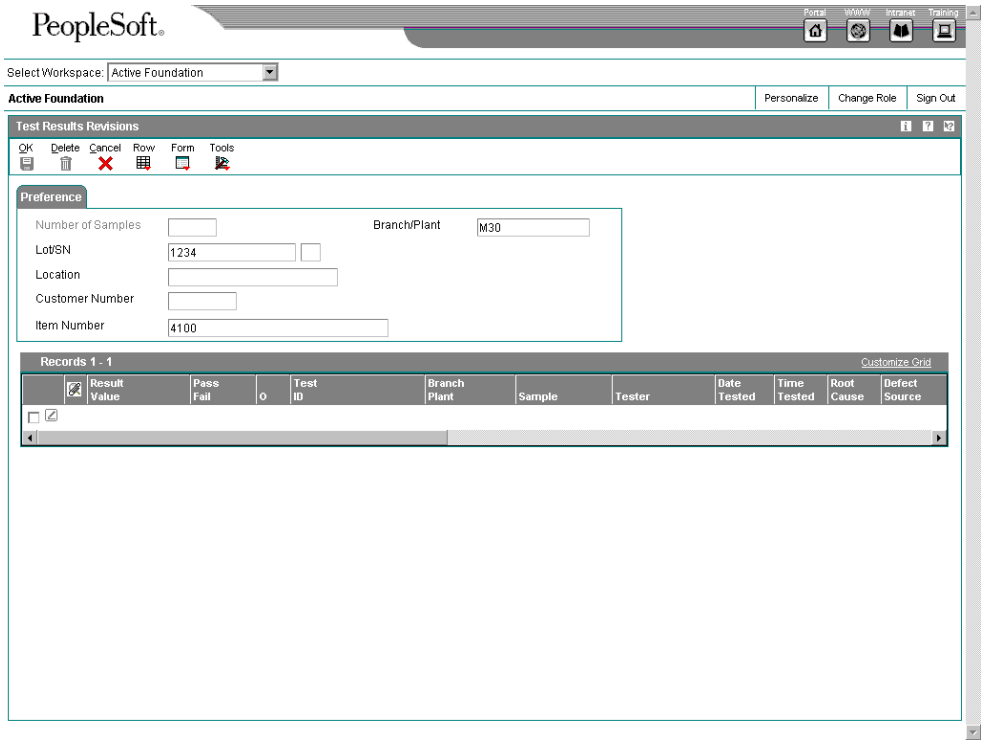
- ❑ Set the following processing options for the Enter Test Results program (P3711):
  - Results Entry Format
  - Activate System Sample Numbering
  - Test Results Search
  - Status for a Failed Lot
  - Status for a Passing Lot
- ❑ For test results entry at manufacturing work order completions, ensure that the Manufacturing Completions option on the Display Criteria Window form (W40318D) is turned on for at least one test in the preference profile. Turning on this option

ensures that the Enter Test Results after Completion option on the Work Order Completions Detail form is turned on and that the Enter Test Results program is automatically called when you enter a work order quantity.

► To choose tests in preference format

From the Quality Management Daily Operations menu (G3711), choose Enter Test Results.

1. On Work With Test Results, click Add.



2. On Test Results Revisions, complete the following fields:
   - Branch/Plant
   - Item Number
   - Lot/SN

     If you set Allow Duplicate Lots to 2 on the System Constants form of the Branch/Plant Constants program (P41001), the Item Number field is required.
3. Complete the following optional fields:
   - Location
   - Customer Number
4. Choose Preference from the Form menu.
5. Complete the following fields and then click OK.

- Result Value
- Test ID
- Sample
- Tester
- Date Tested
- Time Tested

▶ To choose tests in order number format

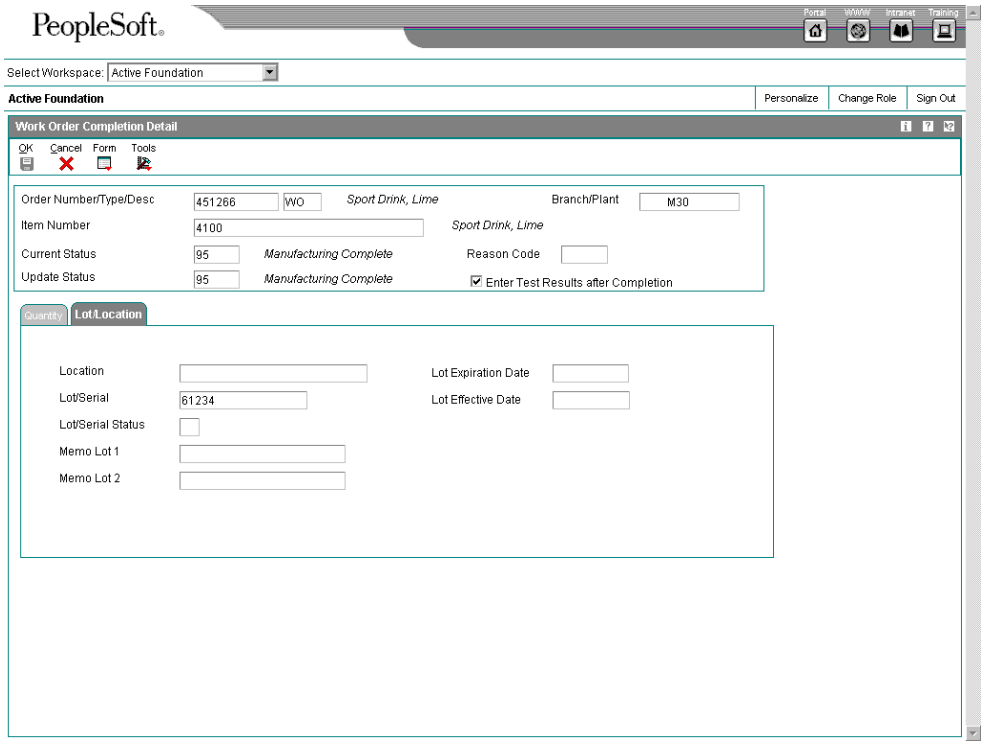
From the Daily Order Reporting - Discrete menu (G3112), choose Full Completion.

Note

When you add test results for the first time in order number format, you cannot use the Enter Test Results menu option. Instead, you must access the Test Results Revisions form from an order processing program such as PO Receipts (P4312), Shipment Confirmation (P4205), or Work Order Completions (P31114). This enables the system to select the appropriate tests from the preference profiles.

This procedure uses a work order completion as an example.

1. On Work With Work Order Completions, enter the item number in the following field, and then click Find:
   - 2nd Item Number
2. Choose the work order for which you want to enter results and choose Revisions from the Row menu.



3. On Work Order Completion Detail, complete the following field:

   - Quantity Completed

4. Click the Lot/Location tab and complete the following optional field:

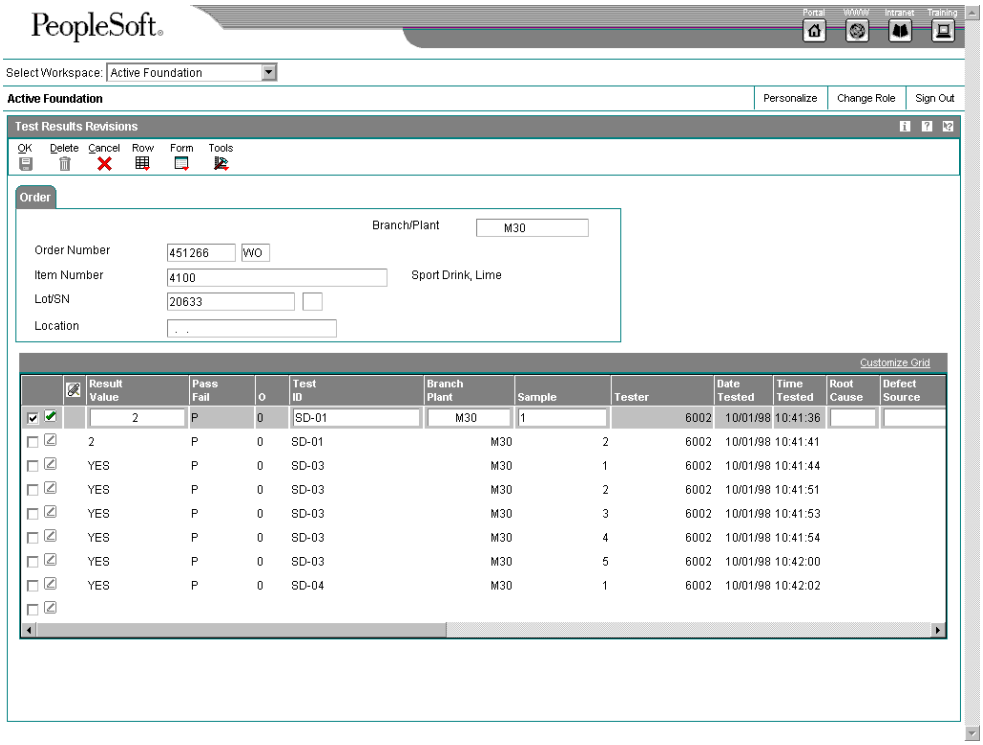
   - Lot/Serial

   For items that are lot-controlled, the system enters the lot number automatically, according to the Lot Process Type setting in the Item Branch File table (F4102).

5. Click OK.

6. The Test Results Revisions form appears.

   For lot-controlled items, the lot number that the system generated for the order quantity appears disabled in the header.



7. On Test Results Revisions, complete the following fields:
   - Result Value
   - Test ID
   - Sample
   - Tester
   - Date Tested
   - Time Tested
8. Click OK.

See Also

- *Entering Test Results* in the *Quality Management Guide* for more detailed information about entering test results

Entering Test Results

As you enter test results, the system processes them to determine whether the results that you collected pass the tests that you defined. The system compares the test results with minimum and maximum values. It then sets the value in the Pass/Fail field accordingly for each test, based on the value that you defined for the test using the Display/Evaluate Test field on the Test Definition Revisions form (W3701A).

The system evaluates each individual sample, and then it evaluates the status of the entire set of tests in order to determine lot status. As the system evaluates the lot, it reads a test and then retrieves the value in the Display/Evaluate Test field to determine how to evaluate that test.

The following are valid values for the Display/Evaluate Test field:

1 All Samples. All samples must pass, unless you have defined an accept quantity or accept percentage that is less than the total number of samples. If the Accept Quantity and Accept Percentage fields are blank, the system assumes all samples of the test must pass in order for the test to pass. For testing that occurs for government-regulated materials, you might expect that all samples must pass certain minimum criteria.

You can use the optional Accept Quantity and Accept Percentage fields only when the value 1 appears in the Display/Evaluate Test field.

2 Average of All Samples. The system adds all sample results for the test and calculates an average. The average value must be within the minimum and maximum values that you defined for the test. Otherwise, the entire test fails. You might use this evaluation method for a manufacturing process in which a certain percentage of nonconforming materials is standard, such as circuit board production.

3 Last Occurrence. The system retrieves the last sample that you entered for the test and determines whether that sample passed. If so, the entire test passes. You might use this evaluation method for a manufacturing process in which ingredients are added to a mixture over time and quality sampling occurs in a similar fashion. If the last sample of the mixture shows that the source material is within tolerances, the product can be shipped.

The evaluation process uses the value that you enter in the Accept Quantity field on the Test Definition Revisions form as the number of samples that must pass a test. For example, suppose that you have four samples of the color test and you enter 2 in the Accept Quantity field. In this case, only two color samples must pass in order for color to pass quality inspection for a test.

The evaluation process uses the value that you enter in the Accept Percentage field on the Test Definition Revisions form as the percentage of samples that must pass within a test. For example, suppose that you have 10 samples of the color test and you enter 50 in the Accept Percentage field. In this case, only five color samples must pass in order for color to pass quality inspection for a test.

When all of the tests within a lot have a passing value, the system sets the lot status to the value that you entered in the Status for a Passing Lot processing option for the Enter Test Results program (P3711).

When any test within a lot fails (based on all samples, average, or last occurrence), the system sets the lot status to the value that you defined in the Status for a Failed Lot processing option for the Enter Test Results program. All failed test results appear highlighted on forms that show test results, including the Test Results Revisions and all inquiry forms.

It is possible to override the Pass/Fail value to force the lot to pass. However, you should secure this function so that all users can review the status, but only users with proper authority can change the status.

Related Tasks

Evaluating tests during Bulk Load Confirm	The test type that you specify in the Test Revisions program (P3701) determines whether you enter test results during the Bulk Load Confirm process. If a test is required, the Bulk Load Confirm process stops until you enter passing test results. If a test is optional, a warning message appears, but you can complete the Bulk Load Confirm process. If a test is guaranteed, you can complete the Bulk Load Confirm process, and no warning message appears.
Creating nonconforming records	When you enter test results, you can also write failed tests to the Non-Conforming Material table (F3703). Use the Nonconforming Product program (P3703) to view these records.

▶ To enter test results

From the Quality Management Daily Operations menu (G3711), choose Enter Test Results.

1. On Work With Test Results, click Find.
2. Choose a record and click Select.
3. On Test Results Revisions, complete the following fields:
   - Result Value
   - Test ID
4. If you did not set the processing option for system-assigned sample numbers, enter a sample number for the test result in the following field:
   - Sample
5. Complete the following optional fields:
   - Tester
   - Date Tested
   - Time Tested

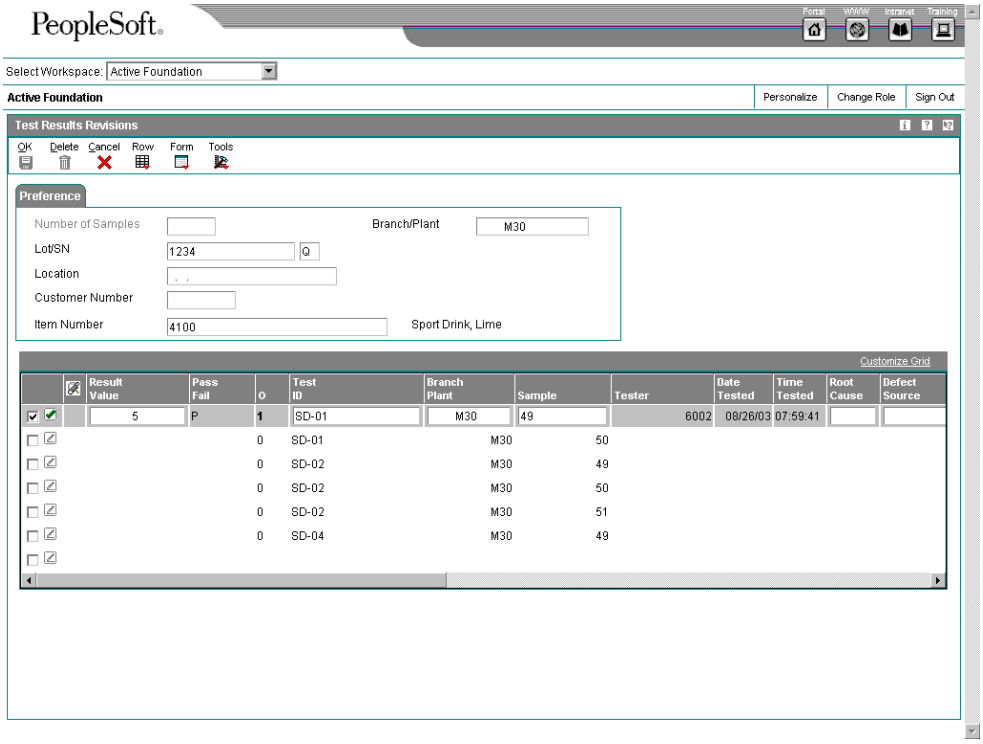
   You can complete these fields only when the processing options are set up to allow you to update this information. You can override the default values for the date and time.
6. Repeat steps 3 through 5 for each test result.

   The Result Value field appears highlighted until you enter a result, or if the test failed. You are not required to enter all results at the same time. However, until you enter test results for all samples of a required test, testing is incomplete and the lot will fail.

   If you need to enter new tests, you can do so at any time on the blank lines.
7. After you have entered all test results, click OK.

If the system displays warning messages because of failed or empty test results, click OK repeatedly until all messages are cleared. When you do not enter text results for required tests, the system views the results as failing results.

The system evaluates each individual test and assigns a pass or fail code. The system then updates the lot status as passing or failing, based on the processing options.



8. Verify the test results for the lot that you just entered.

   You can revise any test results, if necessary.

Entering Text for Test Results

After you enter test results, you can enter informative text for those test results, such as a description of the measuring equipment that you used. If you turn on the Print Text option on the Test Definition Revisions form, the system displays this text on the certificate of analysis.

The system automatically copies text from tests to preferences. In addition, you can set a processing option to copy text from tests or preferences to test results.

Overriding Test Status

After you enter test results, you can override the pass or fail value of each individual test. If a lot fails, for example, because a test was faulty due to malfunctioning equipment or improper testing procedure, you might need to override a failing value to make the lot available for use.

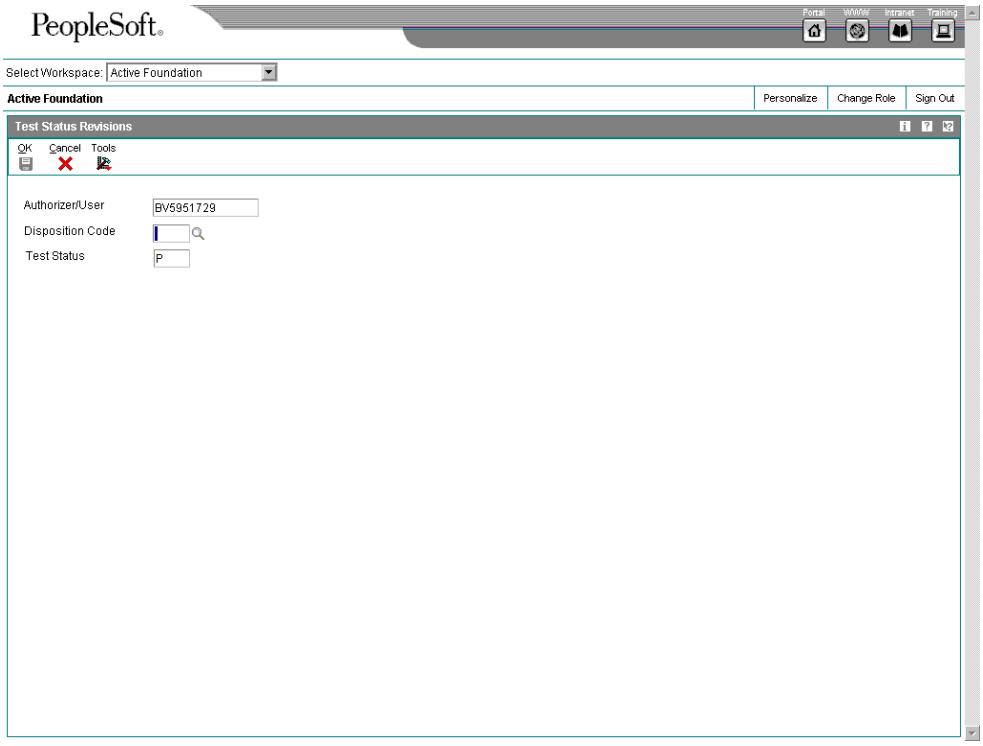
If you override test results, these overridden test results appear on printed Certificates of Analysis as *on-spec data*, that is, passing values. Thus, the customer does not know that the results were changed from their original status. Users of the Quality Management system, however, can see that results were overridden because the system enters 1 in the Test Override field (data item TOVR) in the Enter Test Results (P3711) or Test Results Workbench program (P37203).

You should secure this function so that all users can review the status, but only users with proper authority can change the status.

► To override test status

From the Quality Management Daily Operations menu (G3711), choose Enter Test Results.

1. On Work With Test Results, to locate an item for which you have entered test results, complete any of the following fields and click Find:
   - Branch Plant
   - Order Number
   - Or Ty
   - Item Number
   - Customer Number
   - Lot/SN
   - Location
2. Choose the appropriate set of tests and click Select.
3. On Test Results Revisions, choose the record for which you want to override the test status, and choose Override Status from the Row menu.



4. On Test Status Revisions, complete the following fields and click OK:

   - Disposition Code
   - Test Status

   The system updates the value in the Test Override field on Test Results Revisions.

5. On Test Results Revisions, choose Attachments from the Row menu.
6. On Media Object Viewer, click the Text button.
7. Type a memo describing why you changed the status of the test, and then click Save.

Creating New Samples

You can enter test results for a different number of samples than you originally set up. The procedures differ, depending on whether you are entering test results for the first time or you are entering results after retesting.

Overriding the Number of Samples for First-Time Tests

You can override the number of samples defined for each test in the Quality Preference Revisions program (P4318) and the Test Revisions program (P3701). To do so, you must set the processing option to display the Number of Samples field.

Note

You can use this feature only when you are entering test results for the first time for a specific item or lot. If you are entering additional test results, use the New Sample option.

Before You Begin

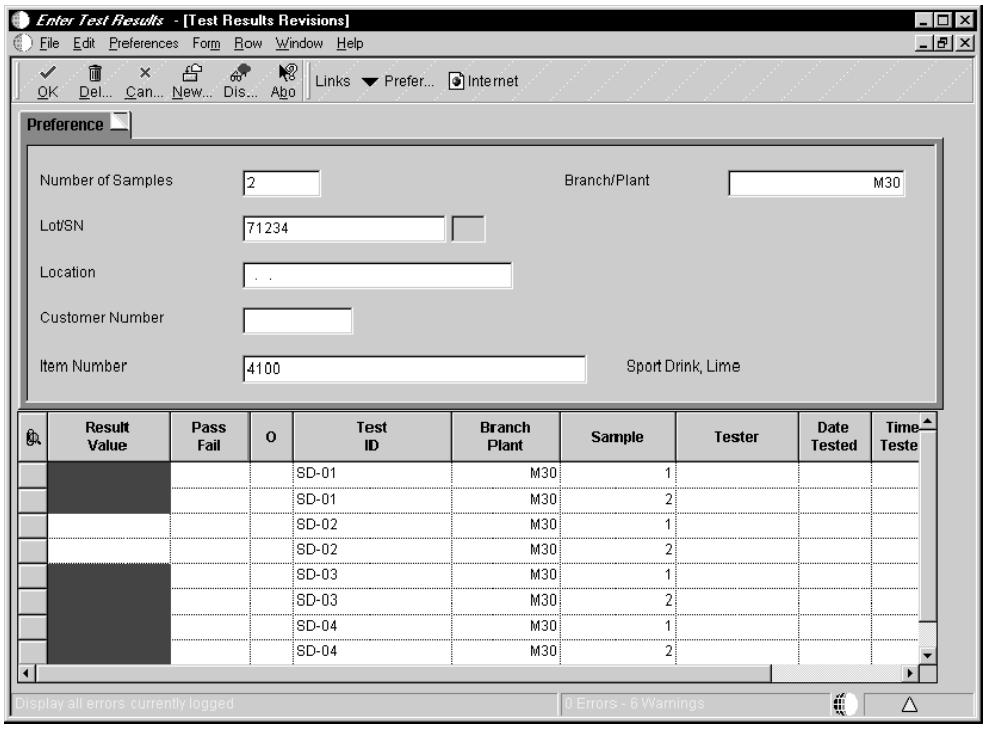
- Set the processing option to display the Number of Samples field.

▶ To override the number of samples for first-time tests

From the Quality Management Daily Operations menu (G3711), choose Enter Test Results.

1. On Work With Test Results, click Add.
2. On Test Results Revisions, complete the following fields:
   - Branch/Plant
   - Lot/SN
   - Item Number
3. Enter the number of samples that you need in the following field:
   - Number of Samples
4. Complete the following optional fields:
   - Location
   - Customer Number
5. Choose Preference from the Form menu.

   The system creates samples for each test based on the number of samples that you entered.



6. If there are samples that you do not need, choose those samples and click Delete.
7. Click OK.

Creating Additional Samples for Retesting

After you perform a quality test on an item's sample and record the results, you can create additional samples for retesting purposes without having to create a new lot.

The New Sample option creates one new sample for each test within the preference. The New Sample option does not create a new sample based upon the number of samples information in the related preference.

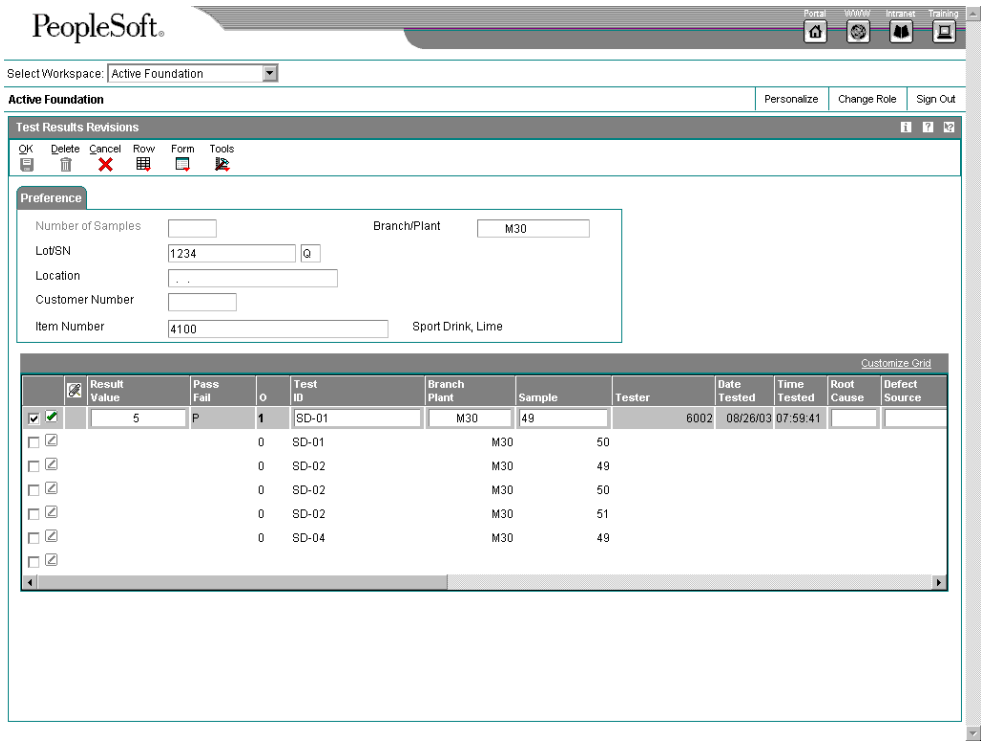
► To create additional samples for retesting

From the Quality Management Daily Operations menu (G3711), choose Enter Test Results.

1. On Work With Test Results, to locate an item for which you have entered test results, complete any of the following fields and click Find:
   - Branch Plant
   - Order Number
   - Or Ty
   - Item Number

- Customer Number
- Lot/SN
- Location

2. Choose the appropriate set of test results and click Select.



3. On Test Results Revisions, choose New Sample from the Form menu.

   The system creates one new sample for *each* test.

   You can also use the Copy Test option on the Row menu to create one new sample for *one* test.

4. If you need additional new samples, repeat steps 2 and 3.
5. If you do not need to enter test results for a particular new sample, choose that sample and click Delete.
6. Click OK.

Processing Options for Enter Test Results (P3711)

Test Results Tab

These processing options specify how the system formats, displays, and records test results.

1. Results Entry Format

Blank or 1 = Preference

2 = Order

3 = Compartment

Use this processing option to specify the format for entering test results.

Valid values are:

1 Use the Preference format, which organizes test results by branch/plant and customer number or item number.

2 Use the Order number format, which organizes test results by work order, sales order, or purchase order numbers.

3 Use the Compartment format, which organizes test results by load number and planning depot.

Blank Use the Preference format.

2. Default Tester

Use this processing option to specify the default address book number for the tester. If you leave this processing option blank, you must manually enter the tester's address book number for each test.

3. Minimum and Maximum Parameters

1 = Use Preferred

Blank = Use Allowed

Use this processing option to specify the range of acceptable values to measure quality. Valid values are:

1 Use preferred minimum and maximum parameters. These are the lowest and highest values for a preferred test result. Preferred values must be within the range of minimum and maximum allowed values. Use preferred values to measure quality to a more precise specification than is requested by a customer.

Blank Use allowed minimum and maximum parameters. These are the lowest and highest values for a passing test result.

4. Number of Samples

1 = Display for input

Blank = Do not display

Use this processing option to display the Number of Samples field on the Test Results Revisions form. You can then use that field to override the number of samples set up in the preference profile or the Test Definitions Master table (F3701). Valid values are:

1

Display the Number of Samples field for input.

Blank

Do not display the Number of Samples field.

5. Copy Generic Text

1 = Copy from Test Master

2 = Copy from Quality Preferences

Blank = Do not copy

Use this processing option to specify whether the system copies information and instructions from tests or preferences to the test results. For example, generic text added through the Test Revisions program (P3701) or the Preference Profiles Inquiry by Customer/Item program (P40300) can list sampling methods for a specific or customized test. Valid values are:

1

Copy generic text added through the Test Revisions program.

2

Copy generic text added through the Preference Profiles Inquiry by Customer/Item program.

Blank

Do not copy generic text.

6. Test Results Search

1 = Search by lot

Blank = Preference for new results

Use this processing option to specify that the system search for a duplicate lot number before creating new test results. You prevent duplicate testing when the system searches for test results by lot number first rather than by document number only. If the search finds no duplicate lot number, new test results can be created. If you leave this processing option blank, the system uses the preference profile to create a new set of tests for a document number. Valid values are:

1

Search for existing test results by lot number.

Blank

Do not search for existing test results by lot number.

7. Record Nonconforming Product

    1 = Yes

    Blank = No

Use this processing option to specify whether the system records items that have not passed quality testing. When a test fails, the system can assign a defect number and record the failure in the Non-Conforming Material table (F3703). You can then review all failed lots and assign corrective actions. Valid values are:

1

Record failed tests in table F3703.

Blank

Do not record failed tests.

8. Activate System Sample Numbering

   1 = The system will assign

   Blank = The system will not assign

Use this processing option to specify whether the system assigns sample numbers automatically when you enter test results. If you leave this processing option blank, you must manually enter a sample number for each test result. Valid values are:

1

Assign sample numbers automatically.

Blank

Do not assign sample numbers automatically.

Security Tab

These processing options allow you to secure certain test information so that it cannot be altered.

1. Protect Date and Time

   1 = Yes

   Blank = No

Use this processing option to protect the date and time of tests. Valid values are:

1 Protect date and time of test.

Blank Do not protect date and time of test.

2. Protect Tester's ID

1 = Yes

Blank = No

Use this processing option to protect the address book number of the tester.

Valid values are:

1 Protect tester's address book number.

Blank Do not protect tester's address book number.

Lot Status Tab

These processing options control lot availability and lot status update.

1. Status for a Failed Lot

Use this processing option to specify the status code for lots that have failed quality testing. Lots with this status cannot be shipped or sold. If you leave this processing option blank, the system allows failed lots to be shipped or sold. Lot status codes are user defined codes (41/L).

2. Status for a Passing Lot

Use this processing option to specify the status code for lots that have passed quality testing, but should not be available immediately to ship or sell. For example, a passing lot might be held if additional approvals are necessary. If you leave this processing option blank, the system allows passing lots to be shipped or sold.

3. Lot Status Update

1 = Update all lot locations

2 = Display Location Lot

window

Blank = Update Lot Master only

Use this processing option to specify how the system updates the status of lots. Valid values are:

1

Update the status for all lot locations. The status of a lot will be updated throughout inventory.

2

Display the Location Lot Status Change window to update the status for specific lot locations.

Blank

Update only the status for the lot master if additional testing or approvals are needed before updating the status of lots in inventory.

Versions Tab

These processing options allow you to enter versions for Test Results reports. Versions control how programs display information. If you leave these processing options blank, the program uses version ZJDE0001.

1. Certificate of Analysis (R37900)

Use this processing option to specify which version of the Certificate of Analysis (COA) Extract program (R37900) to use for printing the tests and test results for lots sold to a customer. If you leave this processing option blank, the system uses version ZJDE0001.

2. Product Test Report (R37901)

Use this processing option to specify the version of the Product Test Report Extract program (R37901) to use for printing test results. You use the report to review test results for a work order, purchase order, or lot number. If you leave this processing option blank, the system uses version ZJDE0001.

3. Trace Test Results (P37201)

Use this processing option to specify which version of the Trace Test Results program (P37201) to use for reviewing the test results for an assembled item and its components or for an item that has been reclassified. If you leave this processing option blank, the system uses version ZJDE0001.

4. Test Revisions (P3701)

Use this processing option to specify the version of the Test Revisions program (P3701) you want to use. The version specifies the default status and whether the system uses workflow and logs history records. If you leave this processing option blank, the system uses version ZJDE0001.

5. Exit to Preferences (P40318)

Use this processing option to specify the version of the Preference Profile Quality Management program (P40318) you want to use. You use this program to create profiles for designating groups of tests or specifications for any combination of customer, customer group, item (product), or item (product) group. If you leave this processing option blank, the system uses version ZJDE0001.

Reviewing Test Results

The test results contain important information that can help you closely monitor product quality. You can review test results to help you do the following:

- Make timely decisions about product quality to reduce the high costs of rework and scrap
- Reduce labor costs by minimizing the time spent inspecting material, collecting data, and reworking or repairing defective material
- Reduce service trips and material scrap costs by identifying inferior components before shipment
- Improve overall product quality and customer satisfaction

See Also

- *Additional Order Processing During Ship Confirm* in the *Sales Order Management Guide* for information about searching for tested lots for sales orders

Working with External Test Results

From the Quality Management Interoperability menu (G37311), choose Batch Test Results.

You can load external test results from a laboratory information management (LIM) system into the Quality Management system. After you have loaded external test results to a workfile, use the Batch Test Results program (R3711Z1I) to edit the test results by comparing them to existing test definitions, branch/plants, and results that have passed or failed. This program reads the workfile, edits the results, and writes records to the Test Results table (F3711).

The Batch Test Results program also prints either a report that includes all of the records in the Test Results table, or an exception report that includes any errors that the system encountered.

Reviewing Test Results by Lot Number

As you work with lots in your Inventory Management and Sales Order Management systems, you can locate test results by lot number to determine which lots have passed or failed quality testing.

The manner in which the Test Results Inquiry program (P37204) displays information depends on how you access it, as follows:

- When you access Test Results Inquiry from Inventory Management using the Lot Availability (P41280) or Lot Master Revision program (P4108), you see test results exactly as they were input.
- When you access Test Results Inquiry from the Sales Order Entry program (P4210) using the Item Search Returns Quantity program (P40ITM2), the system performs an online evaluation for the selected lot. The system uses the customer number from the Sales Order Entry program to select tests using preference profiles. The system then uses those tests to reevaluate the lot. Although the lot might pass inspection according to manufacturing specifications, it might fail inspection according to customer specifications.

  If the customer number is blank, the system uses the item number from the Sales Order Entry program to select tests.

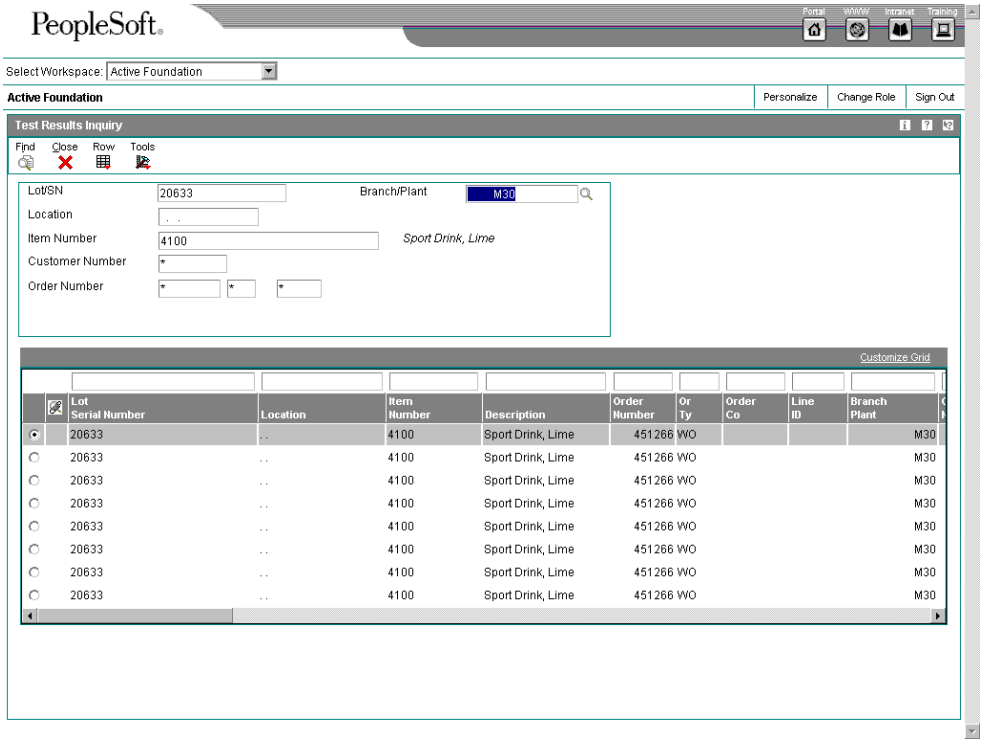
When you enter a sales order, you can do the following:

- Use Test ID and test ranges to filter for items that meet your customer's requirements on Selection Criteria Window
- Locate items based on the Allowed Minimum or Allowed Maximum fields
- Determine whether the lots that you review in the Item Search Returns Quantity program meet the customer or manufacturing specifications
- Add lots to the sales order that meet your customer's requirements
- Access the Test Results Inquiry program from Item Search Returns Quantity program to view test results for an item, lot, and customer so that you can determine whether the lot meets customer specifications

► To review test results by lot number

From the Lot Control menu (G4113), choose Lot Availability.

1. On Work With Lot Availability, to locate an item for which you have entered test results, complete any of the following fields and click Find:
   - Branch/ Plant
   - Lot/Serial
   - Item Number
2. To determine whether a lot has passed quality inspection, review the following field:
   - Lot Status
3. Choose an item and choose Test Results from the Row menu.



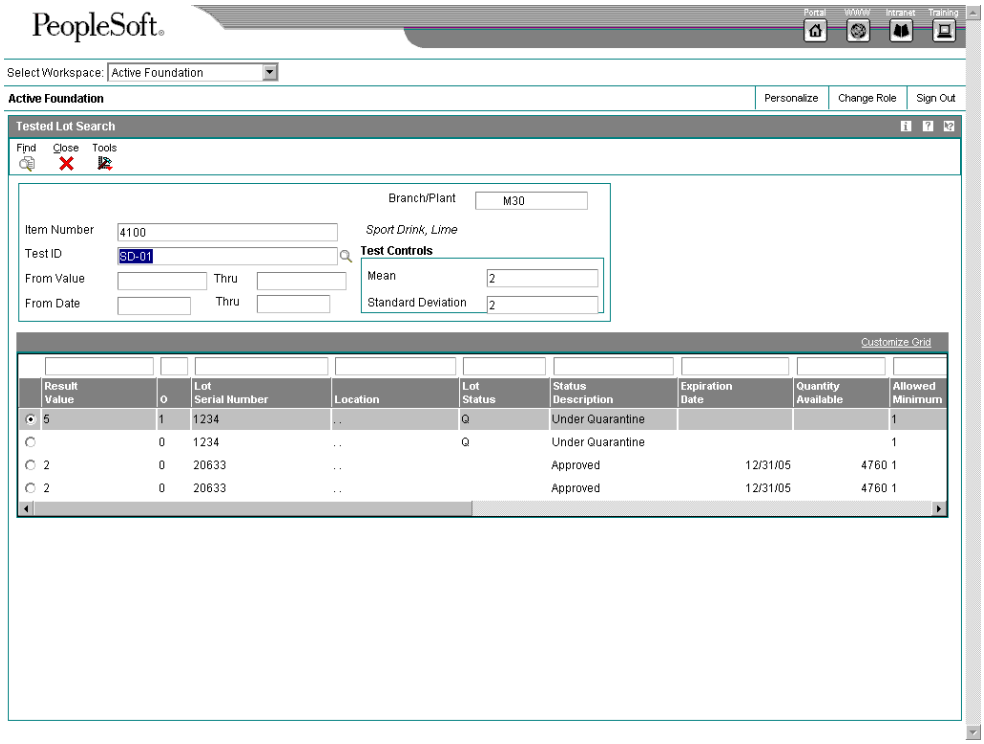
4. On Test Results Inquiry, review the following field to determine whether a test was overridden:
   - Test Ovrr

Locating Test Results by Item Number and Test ID

You can use the Tested Lot Search program (P37200) to find the items in inventory that meet specific test ranges.

► To locate test results by item number and test ID

From the Quality Management Daily Operations menu (G3711), choose Tested Lot Search.



1. On Tested Lot Search, to locate a specific item and lot, complete the following fields and click Find:
   - Branch/Plant
   - Item Number
   - Test ID
   - From Value
   - Thru

   If you leave the From Value and Thru fields blank, the system displays all test results.

2. Review the following fields:
   - Result Value
   - O
   - Lot Status
   - Expiration Date

- Quantity Available

Tracing Test Results

Use the Trace Test Results program (P37201) to find test results for components of an assembled item or for an item that has been reclassified. You can review the history of a lot that was purchased, consumed in production, and, finally, sold as part of a parent product.

You use this program to trace test results for lot-controlled items. To locate test results, you must enter a lot number in the header of the Work with Trace Results form.

▶ To trace test results

From the Quality Management Daily Operations menu (G3711), choose Trace Test Results.

1. On Work With Trace Test Results, to review lots associated at lower levels, choose Multi Level from the View menu.
2. To locate a specific item and lot, complete the following fields and click Find:
   - Branch/Plant
   - Lot/SN
   - Item Number
3. Review the following fields:
   - Test ID
   - Test Description
   - Result Value
   - Pass Fail
   - Date Tested
   - Time Tested

Managing Failed Lots

For items that have not passed test evaluation in the Enter Test Results program (P3711), use the Nonconforming Product program (P3703) to review all failed lots and assign a corrective action.

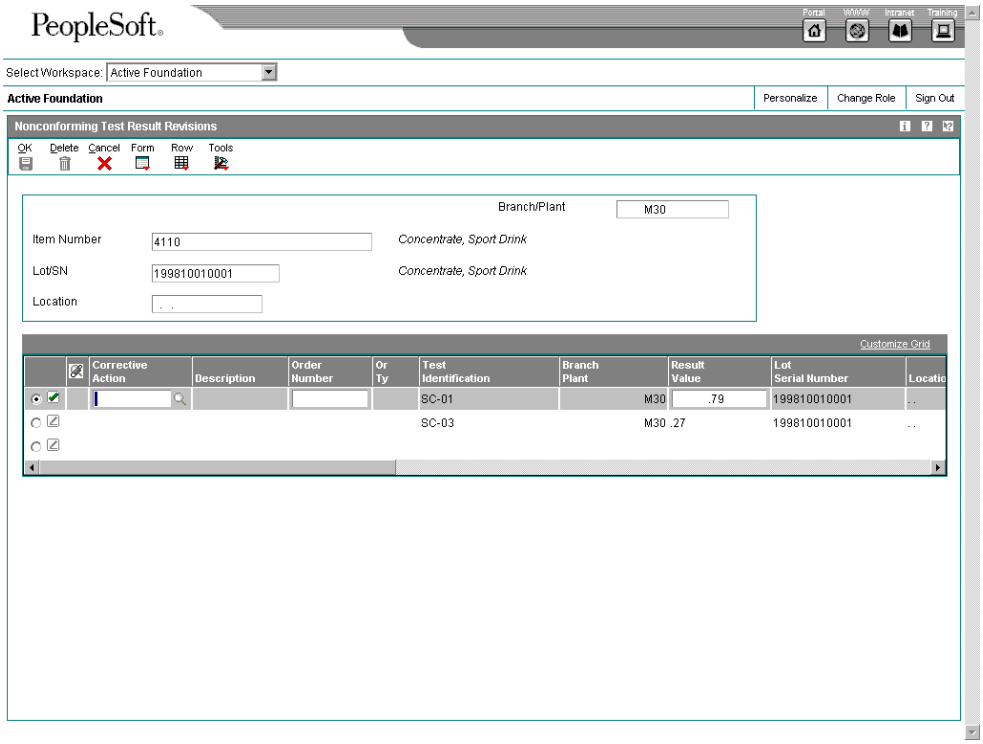
Before You Begin

- ❑ Set the processing option for the Enter Test Results program (P3711) to write failed tests to the Non-Conforming Material table (F3703).

► To manage failed lots

From the Quality Management Daily Operations menu (G3711), choose Nonconforming Product.

1. On Work With Nonconforming Test Results, to locate a specific item and lot, complete the following fields and click Find:
   - Branch Plant
   - Item Number
   - Lot/SN
   - Location
2. Choose a record and click Select.



3. On Nonconforming Test Result Revisions, review the value ranges for test results and the following fields:
   - Description
   - Result Value
   - Date Tested
   - Time Tested

- Target Value

4. To enter rework orders for a failed lot, complete the following fields:

   - Corrective Action

   - Order Number

   These fields do not generate rework orders. Rather, you use them to document any corrective action to be taken and to reference the associated work order, which must already be a record in the Work Order Master File table (F4801).

5. Click OK.

Reviewing Tested Lots by Preference Profile

With the Test Results Workbench program (P37203), you can review test results for all lots that you tested using a particular preference profile. For example, when customers complain about the taste of a beverage, a customer service representative might use the Test Results Workbench program to review beverage lot numbers and the tests were run for them.

To review test results, you first enter the preference information in the header area. The system then chooses a test or group of tests according to this preference profile and locates all corresponding lots that have test results. You can then further filter the results by entering information in the header, such as a lot number, order number, or transportation load number.

► To review tested lots by preference profile

From the Quality Management Daily Operations menu (G3711), choose Test Results Workbench.

1. On Test Results Workbench, complete the following fields:

   - Branch/Plant

   - Item Number

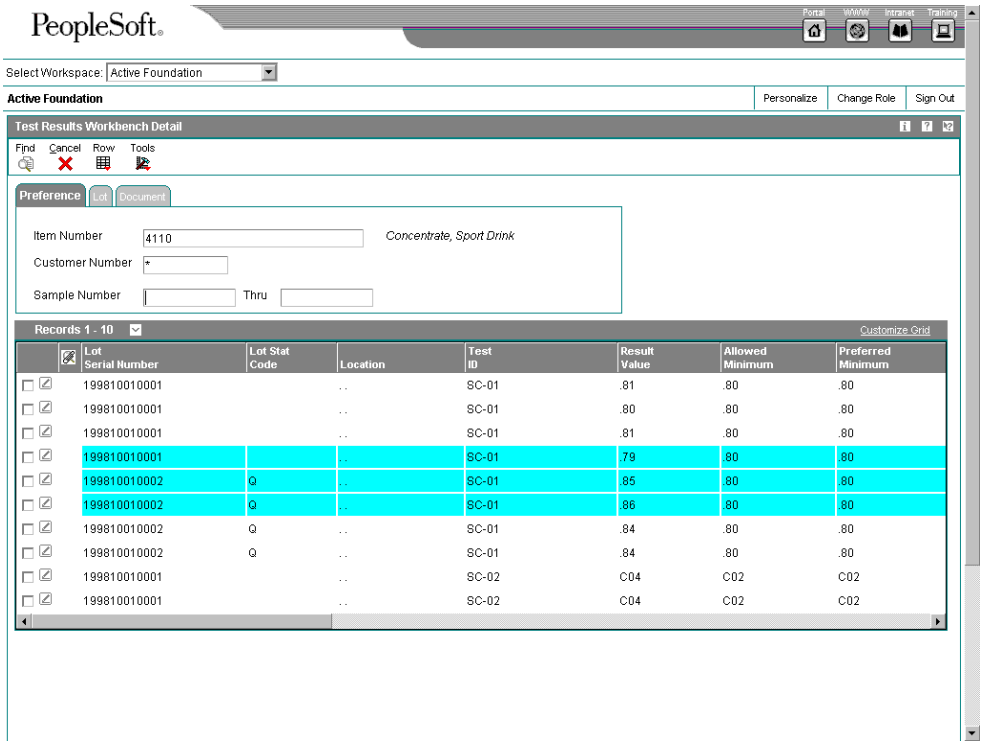
2. Complete the following optional field and click Find:

   - Customer Number

3. To choose one or more records, double-click each record until a check mark appears to the left of the record.

   To choose all rows, do not double-click any record.

4. Choose Result Detail from the Form menu.



5. On Test Results Workbench Detail, review the test results.

   If you need to enter more information to narrow your search, you can use the fields on the Preference, Lot, and Document tabs.

Interoperability

To fully cover the information requirements of an enterprise, companies sometimes use products from different software and hardware providers. Interoperability between different products is important to successfully implementing the enterprise solution. Full interoperability between different systems results in a flow of data between the systems that is seamless to the user. The interoperability function provides an interface that facilitates exchanging transactions, both inbound and outbound, with external systems.

External systems send data to the interface tables, either using an external program or using flat files and the Inbound Flat File Conversion program (R47002C). The sending party is responsible for conforming to format and other requirements for the interface tables. You run a transaction process (a batch program) that validates the data, updates valid data to the J.D. Edwards application tables, and sends action messages to the Employee Work Center about any invalid data.

You use an inquiry function to interactively review the invalid data for correctness, and then run the transaction process again. You repeat this process as often as necessary.

You set a processing option to specify the transaction type for the outbound transaction. The system uses the master business function for the type of transaction, creates a copy of the transaction, and places it in the interface table from which external systems can access it.

You use the purge function to remove obsolete and unnecessary data from interface tables. Your system is more efficient when you keep these tables as small as possible.

Setting Up for Interoperability Transactions

External systems can use a variety of methods to send data to the interoperability interface tables. One method is to write the data to a flat file. If you use this method, the system converts the flat file to the interface table. In order for the system to convert data from the flat file to the interface table, you must identify the transaction, which includes the following information:

- Transaction type, which is a unique description to identify the transaction
- Whether the transaction is inbound or outbound
- Record type, the data that is imported or exported
- The application, the source or destination of the transaction

You can set a processing option to start the transaction process automatically when the conversion completes successfully. The transaction process copies the data from the interface tables to the application tables, from which J.D. Edwards ERP applications can access the data.

Before You Begin

- ❑ Ensure that the flat file is a comma-delimited ASCII text (flat) file to which the workstation has read and write access.
- ❑ Ensure that the data conforms to the required format. See *Converting Data from Flat Files into EDI Interface Tables* in the *Data Interface for Electronic Data Interchange Guide* for requirements.

Reviewing Record Types

When you set up flat file cross-reference information, you must specify the record types. Record types indicate the sort of information that is exchanged between J.D. Edwards ERP and external systems, such as addresses, header or detail transactions, text, or additional information.

You can review hard-coded record types in the user defined code table (00/RD). The system uses these codes to identify the forms from which the system stores information for outbound documents and to which the system stores information for inbound documents.

Setting Up Transaction Types

In order to identify the transactions that the system uses in the flat-file cross reference, you can add codes, or transaction types, to the user defined code table (00/TT). After you set up the transaction type, you use the transaction type to identify whether the information exchange is inbound or outbound, and to identify the corresponding applications and versions. You must set up transaction types prior to defining data export controls and flat file cross-reference information.

Setting Up Data Export Controls

You define the export information for outbound transactions only. To set up data export controls properly, you must indicate the transaction, document type, batch application or function, and version from which the external system retrieves information from the interface tables.

You can define export controls based on either of the following:

Function Name and Library	You can specify a vendor-specific function name and library to identify the external custom program that accesses the J.D. Edwards ERP interface tables.
UBE or batch processor	You can specify a vendor-specific outbound batch processor that accesses the J.D. Edwards ERP interface tables.

► To set up data export controls

From the Sales Interoperability menu (G42A313), choose Data Export Controls.

1. On Work With Data Export Controls, click Add.
2. On Data Export Control Revisions, enter a specific transaction type in the following field:
   - Transaction
3. Enter Order Type in the following field:
   - Order Type
4. Enter a specific application or function in either of the following fields:

- UBE Name
- Function Name

You can define data export control for either a vendor-specific batch process or function. If you enter information in fields for vendor-specific batch processors or functions, the system uses the batch process.

5. If you specified the vendor-specific batch process, enter a specific version of UBE in the following field:
   - Version
6. If you specified a vendor-specific function, enter a specific function library and location in the following fields:
   - Function Library
7. Enter 1 or 0 in the following fields and click OK:
   - Execute For Add
   - Execute For Upd
   - Execute For Del
   - Ext DB Exp Mode
   - Launch Immediately
   - Execute For Inq
   - Flat File Exp Mode
   - Ext API Exp Mode

Setting Up the Flat File Cross-Reference

Before you can convert a flat file, you must provide a cross-reference from the flat file fields to the interface table fields. When you exchange data between this system and an external system, you use flat file cross-reference information for the following conditions:

- For inbound transactions for which the external system cannot write data to the interface tables in the required format for this system. In this case, the external system can write the data to a specific flat file for each transaction and record type.
- For outbound transactions for which this system cannot write data to the interface tables in the format that is required by the external system. In this case, this system can write the data to a specific flat file for each transaction and record type.

See Also

- *Converting Data from Flat Files into EDI Interface Tables* in the *Data Interface for Electronic Data Interchange Guide* for more information about this process. The

process for setting up flat file cross-references for Interoperability is identical to that for EDI interface tables.

Before You Begin

- On the appropriate drives on your computer or network, set up the folders for the flat files.

► To set up the flat file cross-reference

Use one of the following navigations:

From the Forecast Interoperability menu (G36301), choose Flat File Cross-Reference.

From the Sales Interoperability menu (G42A313), choose Flat File Cross Reference.

From the Inventory Interoperability menu (G41313), choose Flat File Cross-Reference.

From the Product Data Interoperability menu (G30311), choose Flat File Cross-Reference.

From the Purchasing Interoperability menu (G43A313), choose Flat File Cross-Reference.

From the Shop Floor Management Interoperability menu (G31311), choose Flat File Cross-Reference.

1. On Work With Flat File Cross-Reference, click Add.
2. On Flat File Cross-Reference, to specify the transaction type, such as receipts, complete the following field:
   - Transaction
3. To indicate whether this transaction type is Inbound (1), or Outbound (2), complete the following field:
   - Direction Indicator
4. To indicate the information source, complete the following field:
   - Record Type
5. Enter the specific file name in the following field:
   - File Name

   The file name refers to the application table from which the system exchanges information, as defined by the record type.
6. Click OK.

Running the Conversion Program

Use one of the following navigations:

From the Forecast Interoperability menu (G36301), choose Inbound Flat File Conversions

From the Inventory Interoperability menu (G41313), choose Inbound Flat File Conversion.

From the Product Data Interoperability menu (G30311), choose the applicable Inbound Flat File Conversion.

From the Purchasing Interoperability menu (G43A313), choose Inbound Flat File Conversion.

From the Shop Floor Management Interoperability menu (G31311), choose the applicable Inbound XX Flat File Conversion, where XX is the process that the conversion completes, such as Inbound Completion Flat File Conversion.

You use the Inbound Flat File Conversion program (R47002C) to import flat files into J.D. Edwards interface tables. You can create a separate version of the Inbound Flat File Conversion program for each interface table. This program recognizes both the flat file from which it reads and the record types (UDC 00/RD) within the flat file. Each flat file contains records of differing lengths, based on the interface table record to which they correspond. The Inbound Flat File Conversion program uses the Flat File Cross-Reference Table (F47002) to convert the flat file into the interface tables. Table F47002 indicates to the conversion program which flat file to read from, based on the transaction type that you are receiving.

The conversion program reads each record in the flat file and maps the record data into each field of the interface tables, based on the text qualifiers and field delimiters that are specified in the flat file.

The conversion program inserts the field data as one complete record in the interface table. If the conversion program encounters an error while converting data, it withholds the data in error and continues processing the conversion. If the data is successfully converted, the system automatically starts the transaction process for that interface table, provided that you set the processing options in the conversion program to do so.

Processing Options for Inbound Flat File Conversion (R47002C)

Transaction

1. Enter the transaction to process.

Separators

1. Enter the field delimiter.

2. Enter the text qualifier.

Process

1. Enter the inbound processor to run after successful completion of the conversion.

2. Enter the version for the inbound processor. If left blank, XJDE0001 will be used.

Receiving Transactions

When receiving data, the system stores the unedited data sent from the external system in interface tables. For outbound transactions, the system writes data to the interface tables. The data is then sent to an external system. With this method, unedited transactions do not affect application tables. The next step is to run the appropriate transaction process to edit the transactions and update the appropriate application tables.

In order to be received into the interface tables, data from an external system must conform to the minimum field requirements specified for the interface table.

The receiving transaction process performs the following tasks:

- Validates the data in the interface table to ensure that data is correct and conforms to the format defined for the application table system.
- Updates the associated application table with validated data.
- Produces a report that lists invalid transactions and sends an action message for each invalid transaction to the Work Center.
- Marks, in the interface tables, those transactions that have been successfully updated to the application tables.

If the report indicates errors, access the Work Center from the Workflow Management menu (G02) and review the messages in the message center. Then use the associated inquiry function to review and revise the transactions and rerun the transaction process.

Note

When you run the Inbound Flat File Conversion program (R47002C) and it completes successfully, the system automatically starts the transaction process if specified in the processing option for the conversion.

Reviewing and Revising Interoperability Transactions

Running an inbound transaction process often identifies one or more invalid inbound transactions in the interface table. When an error occurs, the system sends an error message to the employee, indicating the transaction number for the transaction in error. You can review and revise unedited sales transactions.

Use the inquiry menu selections to add, change, or delete transactions containing errors. Then run the appropriate transaction process again. Continue to make corrections and rerun the transaction process until the program runs without errors.

You can use the processing log to review inbound and outbound transactions.

► To review and revise interoperability transactions

From the Quality Management Interoperability menu (G37311), choose Test Results Transactions Revisions.

1. On Work With Test Results Transaction Records, to limit the search to specific transactions, complete the following fields:

- User ID
- Batch Number
- Transaction Number

2. Click Find.
3. Choose the transaction to review and revise and click Select.
4. On Unedited Detail Transaction Revisions, review and revise as needed, and click OK.
5. On Work With Test Results Transaction Records, if applicable, choose Revisions from the Row menu to review or change additional detail information, and click OK when finished.

After you correct the errors identified by the inbound transaction process, run the transaction process again. If other errors are identified, correct them and run the transaction process again.

Reviewing the Processing Log

You can use the processing log to review whether the system has processed inbound and outbound transactions. With the processing log, you can review whether a vendor-specific transaction has been successfully processed. The processing log contains key information from the Data Export Control table (F0047) about the interoperability transaction, such as the transaction type, order type, sequence number, batch process or function, and corresponding version. The system creates a record for every transaction that is processed.

The information in the processing log is for review only and can not be changed in either the processing log or in the system's applications.

Sending Transactions

You might send transactions that you create or change in the Quality Management system to an external system. For example, if your organization sends order acknowledgements to customers, you can use Interoperability transactions to convey order and price information.

The default outbound transaction is a copy of a data transaction after you created or changed it (an after image). With interoperability features, you can also send a copy of each transaction as it was before you changed it (a before image). Creating and sending before images requires additional processing time. To control the type of image, you set a processing option in the application programs that create transactions.

You can send transactions to an external system using either of the following interoperability methods:

Batch extraction processor

When you run an extraction process, the application retrieves data from the J.D. Edwards application tables for the transaction and copies the data to the interface tables. The system then generates an audit report that lists the processed documents.

Batch and subsystem process

All outbound master business functions used to create transactions have processing options that control the interoperability transaction. For batch and subsystem processing, you set up the processing options in the appropriate business function version for interoperability and then specify that application and version in the data export controls.

Before You Begin

- Define the data export controls for the type of outbound transaction. The system uses data export controls to determine the batch programs or business processes that third parties supply for use in processing transactions. See *Setting Up Data Export Controls* in the *Interoperability Guide*.

Purging Interoperability Transaction Records

From the Quality Management Advanced Operations menu (G3731), choose Purge of Test Results Transactions.

When data becomes obsolete or you need more disk space, you can use a purge program to remove data from interface files, in this case test results transactions.

Quality Management Reports

The Quality Management system provides a variety of reports that contain information about how you have defined tests, specifications, and preferences, as well as the results of quality testing.

Printing Setup Reports

Use setup reports to review information about how you have defined tests, specifications, and preferences. Note that the name of the preference report is Item Test Specifications report (R37420).

Printing the Test Definition Report

From the Quality Management Setup menu (G3741), choose Test Definition Report.

The Test Definition report (R37410) includes all of the tests for a branch/plant that you choose. Use this information to review and maintain quality tests for all of your products.

Processing Options for Test Definition Report (R37410)

Workflow

Enter the test status for selecting test definitions.

1 = Pending
2 = History
3 = Rejected
blank = Active/Approved

Enter the as of date for selecting test definitions.

Printing the Specifications Report

From the Quality Management Setup menu (G3741), choose Specifications Report.

The Specifications report (R37415) includes all of the test specifications for a branch/plant that you choose. Use this information to review and maintain quality specifications within your business.

Processing Options for Specifications Report (R37415)

Defaults

1. Enter the specification status for selecting specification definitions.

1 = Pending
2 = History
3 = Rejected
blank = Active/Approved

2. Enter the as of date.

Printing the Item Test Specifications Report

From the Quality Management Setup menu (G3741), choose Item Test Specifications.

The Item Test Specifications report (R37420) includes all test specifications by customer, customer group, item, or item group for the branch/plant that you choose. Use this information to maintain and review preference profiles within your business. This report is sometimes called the preference report.

Processing Options for Item Test Specifications (R37420)

Print

Enter '1' to print all the tests included in a particular specification. If left blank only the specification will print on the report.
Workflow

Enter the test/specification status for selecting test/specification definitions.

1 = Pending
2 = History
3 = Rejected
blank = Active/Approved

Enter the as of date for selecting test/specification definitions.

Printing Test Results Reports

Use test results reports to print Certificates of Analysis, to review the results of quality testing, and to print worksheets.

Printing the Test Results Worksheet

From the Daily Order Preparation – Discrete menu (G3111), choose Order Processing.

You can generate the Test Results Worksheet report (R37470) when you run the Order Processing program (R31410) for manufacturing work orders. To generate the Test Results Worksheet report, you must specify a valid version of the report in the processing options for the Order Processing program.

The Test Results Worksheet report, also referred to as the Manufacturing Specifications report, generates a test results worksheet that production personnel can use to track quality testing values that they will enter into the system at a later time.

The report provides the minimum and maximum values for the work order that is to be sampled. The preference for the minimum and maximum values can be based on the work order or the customer. To use a customer's testing requirements, the work order header must contain the related customer's address book number. The system automatically updates the customer address book number from a sales order with line type W (work order), or you can enter it manually on the work order header.

Processing Options for Test Results Worksheet (R37470)

Print

1. Enter '1' to print the Preferred Minimum and Maximum. If left blank the Allowed Minimum and Maximum will print.

Preference

1. Enter '1' to preference for tests based on a related sales order. If left blank, preferencing will be based only on the manufactured item.

Text

1. Choose from the following to print Generic Text:
1 = Print Generic Text from Test Revisions (P3701).
2 = Print Generic Text from Preference Profiles (P40300).
If left blank, text will not print.

Printing the Certificate of Analysis - Extract Report

From the Quality Management Daily Operations menu (G3711), choose Certificate of Analysis - Extract.

You use the Certificate of Analysis - Extract report (R37900) to print a certificate of analysis, which lists all of the tests performed and the test results for lots sold to a customer. You print a certificate of analysis when a customer requires additional reporting.

Based on data that you select, the system searches for test results for the related sales order information. If you set the processing option for trace processing, the system searches for multilevel test results for each lot that it locates. The system then prints all test results for each lot.

The system can print the certificate of analysis in multiple languages, depending on how you set the appropriate processing option.

Note

You can set processing options in the Shipment Confirmation program (P4205) to print the certificate of analysis automatically.

Before You Begin

- Determine which tests and generic text to print on the certificate of analysis.
- Determine which customers should receive a certificate of analysis.
- Determine the type of transaction records to use for tracing lots.

Processing Options for Certificate of Analysis - Extract (R37900)

Defaults Tab

These processing options control the address that appears on the certificate of analysis, as well as the override Next Status code on sales orders. To override the Next Status code, the system uses values that you have set up in a user defined code table (40/AT).

1. Address Type

   1 = Ship to Address

   2 = Sold to Address

   3 = Parent Address

   Blank = Ship to Address

Use this processing option specify which address to print on the Certificate of Analysis. Valid values are:

1 Print the ship to address.

2 Print the sold to address.

3 Print the parent address.

Blank Ship to address

2. Next Status

Use this processing option to override the Next Status code if you need to indicate on a sales order that you printed a Certificate of Analysis.

Enter a value from your user defined table to override the Next Status code.

If you leave this processing option blank (default), the Next Status code is not overridden.

Extract Tab

This processing option controls whether you can reprint certificates of analysis without rerunning the Certificates of Analysis - Extract report.

1. Extract Table

   1 = Do not clear table

   Blank = Clear table

Use this processing option to specify whether to save history information in the Certificate of Analysis extract table so that you can reprint certificates without needing to rerun them. For example, you might need to reprint a Certificate of Analysis that was lost in the mail for a customer who requires the certificate in order to accept product. Valid values are:

1 Do not clear the Certificate of Analysis extract table (save history information), to allow reprints.

Blank Clear the Certificate of Analysis extract table each time the report is run.

Trace Tab

This processing option controls whether you trace test results.

1. Trace

1 = Trace Single - Level

2 = Trace Multi - Level

Blank = Do not Trace

Use this processing option to control whether the system traces test results for lots. You can find test results for an assembled item, the components of the assembled item, or for an item that has been reclassified. Valid values are:

1 Trace single level test results by lot.

2 Trace multilevel test results by lot.

Blank Do not trace test results.

If you do not trace test results, you must enter test results for sales orders that are at Ship Confirm status in order to generate a Certificate of Analysis.

Preference Tab

This processing option controls whether the system uses preference profiles to print test results on the certificate of analysis.

1. Preference

1 = Preference Test Results

Blank = Do not Preference

Use this processing option to control whether the system uses preference profiles to print test results on the Certificate of Analysis. Valid values are:

1 Use preference profiles to print test results on the Certificate of Analysis. The system reevaluates test results for Pass/Fail codes based on the minimum and maximum values in preference profiles.

Blank Do not use preference profiles to print test results. The system prints tests results on the Certificate of Analysis without reevaluating them for Pass/Fail codes.

Print Tab

These processing options control the version of the Certificate of Analysis - Extract report to print and the ability to reprint certificates of analysis without rerunning the report. Versions control how programs display information.

1. Certificate of Analysis (R37460)

Blank, version ZJDE0001 will be used

Use this processing option to print a Certificate of Analysis, which lists all of the tests performed and their results for lots sold to a customer.

Enter the version of the Certificate of Analysis to print. If you leave this processing option blank, the program uses the ZJDE0001 version.

3. User Defined Version

Use this processing option to specify the version of your customized Certificate of Analysis to print. This processing option is required if you are using a customized certificate. Otherwise, leave this processing option blank.

Enter the version of your customized certificate to print.

2. User Defined Program

Use this processing option to print a Certificate of Analysis that you have designed, instead of using R37460.

Enter the name of your customized Certificate of Analysis. If you leave this processing option blank, the program uses R37460.

4. Language to Print

Blank = Default language

1 = Customer's language

Use this processing option to specify the language in which to print the Certificate of Analysis. Valid values are:

Blank Print the Certificate of Analysis in the default language.

1 Print the Certificate of Analysis in the customer's preferred language.

Printing the Product Test Report

From the Quality Management Daily Operations menu (G3711), choose Product Test Report.

Use the Product Test Report (R37901) to review all test results for a work order, purchase order, or lot number that you choose. Use this information to review quality information for your orders.

Although this report is intended for internal use, you can print test results in a certificate of analysis format without a sales order. For example, you might print certificates of analysis for inventory that will be placed in stock and sold later to unknown clients. In this case, you package the certificates with the items prior to placing them in stock and before you sell them.

Based on data that you select, the system searches for test results for the related order information. If you set the processing option for trace processing, the system searches for multilevel test results for each lot that it locates. The system prints all test results for each lot.

Processing Options for Product Test Report (R37901)

Extract Tab

This processing option controls whether you can reprint certificates of analysis without rerunning the Certificate of Analysis - Extract report (R37900).

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1. Retain Extracted Information

   Blank = Clear table

   1 = Do not clear table

Use this processing option to retain information that the system extracts from the Certificate of Analysis (COA) table (F37900) so that you can reprint reports without having to rerun them. For example, you might need to reprint a Product Test report that was lost in the mail for a customer who requires the report to accept the product. Valid values are:

Blank Do not retain extracted information. The system clears the extract table each time a report is run.

1 Retain extracted information. The system does not clear the extract table each time a report is run.

Trace Tab

This processing option controls whether you trace test results.

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1. Trace Test Results

   Blank = Do not Trace

   1 = Trace Single - Level

   2 = Trace Multi - Level

Use this processing option to specify the level of tracing for the test results for lots. This processing option traces test results for an assembled item, the components of the assembled item, or a reclassified item. Valid values are:

Blank The system does not trace test results.

1 The system performs a single-level trace.

2 The system performs a multi-level trace.

If you do not trace test results, you must enter test results for sales orders at the ship confirm status to generate a product test report.

Print Tab

You use this processing option to provide a name and version, if you want to run a customized report.

1. User Defined Report

Use this processing option to specify the name of the customized report that you want to print. If you leave this field blank, the system prints the standard Product Test Report (R37450).

2. User Defined Version

Use this processing option to specify the name of the customized report that you want to print. If you leave this field blank, the system prints the standard Product Test Report (R37450).

Version Tab

This processing option indicates the version that you run for the report.

1. Product Test Report (R37450)

   Blank, version ZJDE0001 will be used

Use this processing option to specify the version of the Product Test report (R37450). If you leave this field blank, the system uses version ZJDE0001.