



ENTERPRISE SOLUTIONS

180 – QUALITY CONTROL PROCESSES

181 - Quality Control

Process Manual

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1. QUALITY AND REGULATORY COMPLIANCE MANAGEMENT PROCESS

This manual describes the standard quality test process for toxicology applied to styles and components.

It also describes the integration of quality tests with the Lab-dipping process.

1.1 Sub-process

1.1.1 Quality control

- Select a test or a test model from the Quality Testing Library and apply it to a product (Styles, Materials, Trims) in the 'Specifications/Quality Tests' menu.
- Record the result of the test
- If the result is rejected, request retest
- Communicate and track test results

1.1.2 Regulatory compliance management

- Select a test or a test model in the Quality Testing Library that corresponds to a group such as 'toxicology' or a regulation such as 'REACH' and apply it to a product (Styles, Materials, Trims) in the 'Specifications/Quality Tests' menu.
- Record the result of the tests
- If the result is rejected, request retest
- Communicate and track test results

1.1.3 Color development: lab dip

- Select a test or a test model from the Quality Testing Library and apply it to a product (Styles, Materials, and Trims) for a development phase for the color in the 'Specifications/Lab-Dip' menu.
- Record the result of the test
- Renew the lab-dip until the tests are successful or by abandoning the color or supplier.

2. QUALITY TEST AND QUALITY TEST TEMPLATE LIBRARIES

The Quality tests and Quality test templates help to manage the quality control and to address the regulation conformity control, especially concerning toxicology.

The Lectra Platform provides many quality test instructions. These are based on standard tests proposed by the major standardization organizations such as the AATC, ASTM or ISO. They cover areas such as color fastness, resistance to abrasion, water repellency, presence of small parts etc.

For standards set by international organizations, each instruction contains the reference to a standard and when possible, the link with the web page that gives the information relating to this standard on the organization's website.

Chemical substances affected by the REACH regulation have been added to the content of this library.

All types of tests (physical, chemical, biological) can now be dealt with in the application.

2.1 Quality tests


The **Quality Test** library can be accessed from the **Instructions** menu.

As standard, the Lectra Platform contains the textile test references published by the major world standardization organizations.

A specific quality test can also be created.

Whenever an item from the instruction menu is opened, a search window, linked to the required instruction type, opens up. Usual functions are available, such as creation, edition, duplication, printing, deletion and version creation.

2.1.1 Creating a quality test

1. Parameters - the following can be entered in the Quality test: minimum/maximum tolerance fields, target, cost and currency. This information can then be overloaded within a group of tests or in the context of a product.
2. Click on  **Create**:
 - From the **Quality Tests – Search** window (in the **Instructions** menu, click on **Quality Tests**)
OR
 - While viewing an existing test.
The creation form is displayed.
3. Fill in a **Technical Code** and/or a **Design Code** and the other fields. It will facilitate searching for tests later on.
 - **Description**: If it exists, indicate the link to the corresponding web page of the standardization organization that created the test
 - **Group**: Select the type of test that needs to be carried out. The group corresponds to the test's main function, for instance Color Fastness, Dimensional Stability...

- **Norm:** Select the standardization organization the quality test belongs to. All major international organizations are referenced in the list.
- **Application Domain:** Select the final application of the test from the list: textile, button, zipper...
- **Target/Threshold:** Enter some text or numerical values that define the expected result
- **Regulation:** Select the regulation(s) or certification(s) the test is linked to, for example: Reach, Cpsia, Oeko-Tex...
- **Contractual Cost:** Indicate the test unit price
- **Contractual cost currency:** Select the currency for the cost
- **Image:** If needed, illustrate with an image or a graphic
- **Instructions:** free comment zone
- **Min.Tol**
Max.Tol: If needed at this level, enter the test tolerance values (min. and max.)

4. Save the new test.

2.1.2 Toxicology and chemical substances

- The chemical substances are present as they are in the standard list of Quality test instructions.
- The chemical substances are also present in the form of test that can detect them.


2.2 Quality test templates


The **Quality Test Templates** library can be accessed from the **Instructions Templates** menu.


A group of instructions regroups all the tests that correspond to a precise usage context, e.g. cotton fabrics, polyester fabrics, buttons, zippers, blouses, cotton shirts, cotton/polyester shirts...

As a standard, the Lectra Platform contains groups of instructions that represent different situations that can be encountered in the industry.

2.2.1 Create a Quality test template

1. Click on  **Create**:
 - In the **Quality test template – Search** window (in the **Instructions template** menu, click on **Quality test template**)
OR
 - From the display of existing test templates.
The creation form is displayed.
2. Fill in a **Technical Code** and/or a **Design Code** and the other fields. This will facilitate searching for groups of tests later on.
 - **Group**: Select the main function of the group of tests that need to be carried out here
 - **Country**: Select the country where the product will be used
 - **Final usage**: Indicate the final target of the product here, e.g. infant, junior, furniture
 - **Regulation**: Select the regulation(s) or certification(s) the test is linked to, for example: Reach, Cpsia, Oeko-Tex...
3. In the **Quality Test** zone, select the test to be grouped.

Click on  **Pick** to access the list of available tests.
Use the search fields to narrow down the search results and click on **Search** to display the results.

Check the box beside the test(s) to add to the template and click on  **Pick**.

The various tests are added to the current quality test template.

4. **Modification of some fields**:
On each specification line linked to a quality test, some fields can be overloaded.



The quality tests that are overloaded at the level of the quality template will not be modified in the quality test library.

- **Target/Threshold**: this field is automatically completed with the information contained in the test but it can be modified here to adapt it to the context of the specific test group

- **Complement:** some additional information can be added to the test to adapt it to the context of the test group
- **Method:** some additional information can be added to the test to adapt it to the context of the test group


2.2.2 Toxicology and chemical substances

- The groups of Quality tests address needs in a product context for a regulation. For example, this involves the evaluation of toxicological risks for REACH regulations and for a given composite. As well as a group of tests called 'REACH Svhc Cotton/Linen', there is a list of standard tests to carry out for fabrics made of cotton or linen to evaluate the presence of prohibited substances that have a strong risk of being present on these fibers.

3. QUALITY TESTS AND USE CASES

1. Create a new quality test instance in the Explorer bar and name it.
A new **Quality Test** record opens in the window.
1. Fill out or select the required information
2. You can:
 - Create a new quality test
 - Add an existing quality test(s)
 - Add an existing quality test template(s)

3.1 Creating a new quality test



1. Click on  **Create**.
A new empty test line is added.




The quality test created here in the instance will not be stored in the test library. It will remain specific to the product it is assigned to.

2. Fill in or select the information required for the test identification, production and cost.

3.2 Adding an existing quality test or quality test template

1. Click on  **Pick** to add an existing test.
AND/OR
Click on  **Pick Template** to add an existing quality test template.
2. Use the **Search** fields to narrow down the search.


Check the box beside the test or template to add and click on  **Pick**.
The tests are now available on the instance.

3. **Modification of some fields:**
On each specification line linked to a quality test, some fields can be overloaded, such as **Target/Threshold, Tolerances, Method, Complement** and **Contractual Cost**. These modifications allow the test to be adapted for use in a specific context.



Modifying some fields has no impact on the quality test and template definitions in the libraries.



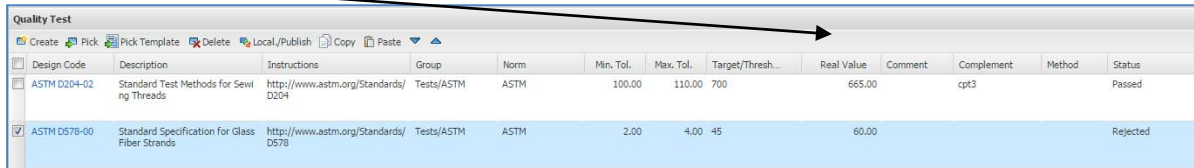
Click on  **Create** to add a blank quality test below those already selected.

4. RECORDING THE RESULTS OF THE TEST

When the results of the tests are returned, they should be entered into the same **Quality Test instance**.

The target/threshold values and real values are entered and compared with the tolerances. If all tests are within tolerance, the test may be approved. If, however a result is out of tolerance, a retest may be requested, before the test is approved or completely rejected.

The **Status** shows that the test has been passed or rejected.

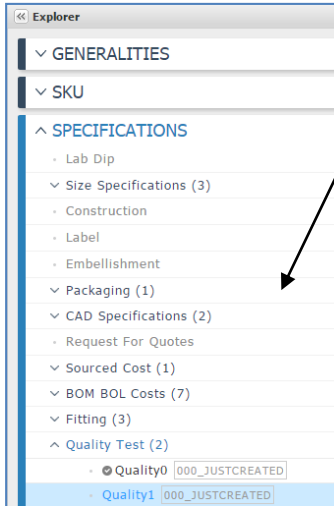


Design Code	Description	Instructions	Group	Norm	Min. Tol.	Max. Tol.	Target/Thresh...	Real Value	Comment	Complement	Method	Status
<input type="checkbox"/>	ASTM D204-02	Standard Test Methods for Sewing Threads	http://www.astm.org/Standards/D204	Tests/ASTM	ASTM	100.00	110.00	700	655.00		cpt3	Passed
<input checked="" type="checkbox"/>	ASTM D578-00	Standard Specification for Glass Fiber Strands	http://www.astm.org/Standards/D578	Tests/ASTM	ASTM	2.00	4.00	45	60.00			Rejected

5. REQUESTING RETEST

If the test has not provided the required result, it is necessary to request a retest.

The retest should be started by creating a new **Quality Test instance**.



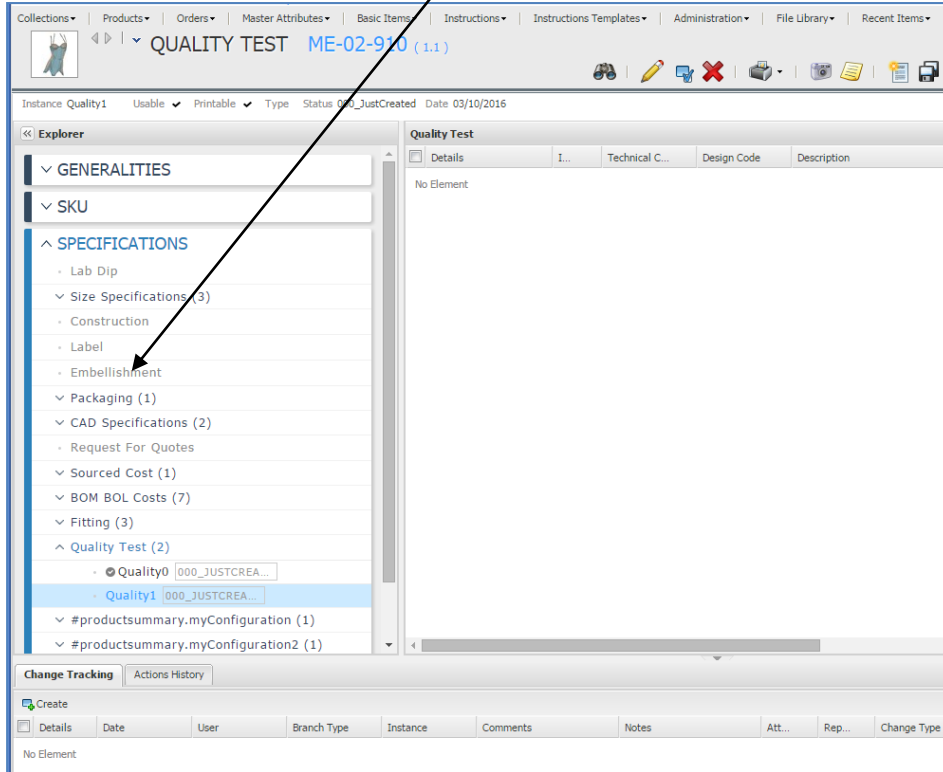
This should only contain the failed test, which needs to be repeated.

Group	Min. Tol.	Max. Tol.	Target ...	Real Val...	Associated Comment
Water Absorbtion	5.00	8.00			

The task of recording the results is then repeated until the material either passes or is completely rejected.

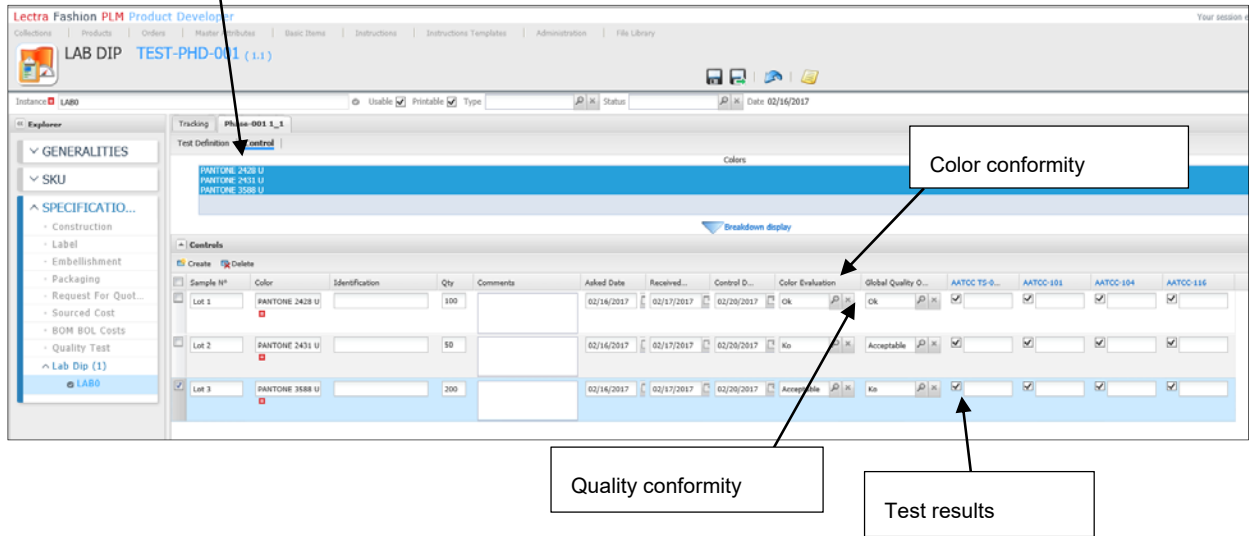
6. COMMUNICATING AND TRACKING TEST RESULTS

For each **Quality Test Instance**, the Change Tracking and Notification facility is used to record activities.



7.3.1 Control

For each **color**, the dates and overall results need to be followed in terms of the **color conformity**, **quality conformity**, and the **results for each test** previously defined are obtained:



Sample N°	Color	Identification	Qty	Comments	Asked Date	Received...	Control D...	Color Evaluation	Global Quality O...	AATCC TS-0...	AATCC-101	AATCC-104	AATCC-116
Lot 1	PANTONE 2428 U		100		02/16/2017	02/17/2017	02/20/2017	OK	OK	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Lot 2	PANTONE 2431 U		50		02/16/2017	02/17/2017	02/20/2017	Ke	Acceptable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Lot 3	PANTONE 3588 U		200		02/16/2017	02/17/2017	02/20/2017	Acceptable	Ke	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>