

## Batch QC

This screen lets you record the results of QC tests performed on the production batch. You can also perform this action from the *Batch Ticket* screen when the *Show Production QC on Batch Ticket* option is checked on the *Production Setup* screen.

If an item has the *Apply Quality Control to Production* box checked on the *Item Master*, then the production batch of that end item cannot be closed until the batch has passed various QC Item Tests associated with it. Even if QC has not been made mandatory via the *Item Master* screen, quality tests can still be attached to an item via this screen. In such a case, a production batch of that end item can be closed without completing QC or even if the batch fails any of the QC tests.

**Go To: Production → Production → Batch QC.**

Three types of tests can be shown on the *Batch QC* screen:

- Formula Tests, which are QC tests performed on the formula while it is in process, and generally before it is filled out. The result line for formula tests is highlighted in yellow.
- Finished Goods Tests, which are QC tests performed on the finished goods or end items produced from a batch and are highlighted in pink. This is particularly useful for:
  - Items produced in a sterile environment which cannot be tested during production.
  - Items which need additional testing on the finished goods after filling, such as damage to packaging, foreign bodies in filled bottles, etc.
- Raw Material Tests, which are performed on raw materials before they are used in production, if required. The result lines for raw materials are highlighted in gray.



**Prerequisite:** QC tests must be attached to the formula, end items, or materials.

## Batch QC – Dashboard

You can record the results of QC tests performed on the production batch from this dashboard. By default, the system displays all the existing batches maintained for your business/company. You can click on any of the batch record to view its details. By default, this dashboard displays all status batch records.

Batch Number	Description	Batch Type	Formula ID	Item Key	Location	Status
000000000000000	DAVIES QUICK DRY ENAMEL WHITE	M	DV-400-CV			C
000000000000001	AURA HIGH SHEEN LUSTER EMULSION - Pink	M	F-1001			C
000000000000002	AURA HIGH SHEEN LUSTER EMULSION - Pink	M	F-1001			R
000000000000003	AURA HIGH SHEEN LUSTER EMULSION - Pink	M	F-1001			R
000000000000004	Aura Pearl Luxury Emulsion Blue	M	F-1002			R
000000000000005	Aura Pearl Luxury Emulsion Blue	M	F-1002			R
000000000000006	AURA HIGH SHEEN LUSTER EMULSION	M	F-1001			R
000000000000007	ROJO 40 E Red PE5325 - Bulk	F		ROJO 40 E RED PE5	01	R
000000000000008	White Base colour	M	WHITE BASE			R
000000000000009	ROJO 40 E red PE5325 (Bulk)	M	ROJO 40 E RED PE5325			R

The *Batch QC* dashboard contains many elements that occupy 100% of the browser window. Resizing the window would resize the elements to fit. The elements can be rearranged, i.e., docked, resized, grouped, and stacked. The header and the side panel can't be rearranged.

Using the *Action* button from the dashboard you can:

- Print selected records

After you select all the columns of the *Batch QC* dashboard, the middle grid displays the selected columns.

Batch Number	Description	Batch Type	Formula ID	Item Key	Location	Status	Rec User Id	Rec Date
000000000000000	DAVIES QUICK DRY ENAMEL WHITE	M	DV-400-CV			C	A	10/04/19
000000000000001	AURA HIGH SHEEN LUSTER EMULSION - Pink	M	F-1001			C	A	03/18/20
000000000000002	AURA HIGH SHEEN LUSTER EMULSION - Pink	M	F-1001			R	A	03/18/20
000000000000003	AURA HIGH SHEEN LUSTER EMULSION - Pink	M	F-1001			R	A	03/18/20
000000000000004	Aura Pearl Luxury Emulsion Blue	M	F-1002			R	A	03/19/20
000000000000005	Aura Pearl Luxury Emulsion Blue	M	F-1002			R	A	03/19/20
000000000000006	AURA HIGH SHEEN LUSTER EMULSION	M	F-1001			R	A	03/19/20
000000000000007	ROJO 40 E Red PE5325 - Bulk	F		ROJO 40 E RED PE5	01	R	A	04/15/20
000000000000008	White Base colour	M	WHITE BASE			R	A	04/09/20
000000000000009	ROJO 40 E red PE5325 (Bulk)	M	ROJO 40 E RED PE5325			R	A	04/15/20

The *Batch QC* dashboard provides a clear vision of the created records in a read-only mode. You can view the records as per the number of pages provided per page.

## Batch QC – Edit Mode

The batches on which QC is applicable can be performed from this screen. Click on any of the record to associate the results of QC tests performed on the production batch.

**Batch QC**

Batch Number: 0000000000000000  
Formula ID: DV-400-CV  
Assembly/Intermediate Key:  
Location:

Batch Type: M  
Batch Description: DAVIES QUICK DRY ENAMEL WHITE  
Batch Status: C  
Notes: TSV = 32 PVC = 18.14CALCIGLOSS IP09/2017TP = 0.80 USEAKLS

Buttons: Add Line, Create Sample, Show Samples

Action	Formula or Item	Item Location
⋮	DV-400-CV	Q
⋮	DV-400-CV	Q 02

Context Menu:  
Delete Line  
Show Sample History  
Perform QC Test  
View QC Details

Buttons: Save, Search, Close

### Header Fields:

Batch Number: 0000000000000000  
Formula ID: DV-400-CV  
Assembly/Intermediate Key:  
Location:

Batch Type: M  
Batch Description: DAVIES QUICK DRY ENAMEL WHITE  
Batch Status: C  
Notes: TSV = 32 PVC = 18.14CALCIGLOSS IP09/2017TP = 0.80 USEAKLS

**Batch Number:** This is the batch number of the batch on which QC is to be applied.

**Formula ID:** This is the identification key of the formula used in the production of the above selected batch.

**Assembly/Intermediate Key:** This is the Item Key of the end item produced by this batch.

**Location:** This is the location of the Assembly/Intermediate Key.

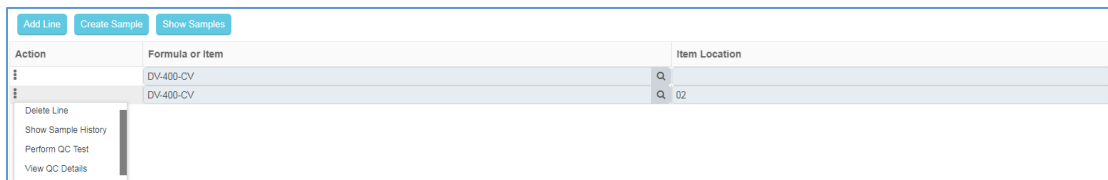
**Batch Type:** This field determines whether the Batch is of Mix, Fill or Assembly type.

**Batch Number Description:** This field displays the description of batch number.

**Batch Status:** This is a system-generated read-only field fetched based on the stage the batch has achieved in the process of production. The status of a Batch can be one of New, Allocated, Cancelled, Hold, Issued, Partially Closed, Closed or Purged.

**Notes:** The user may enter any information, instructions, points to remember, to-dos or description here.

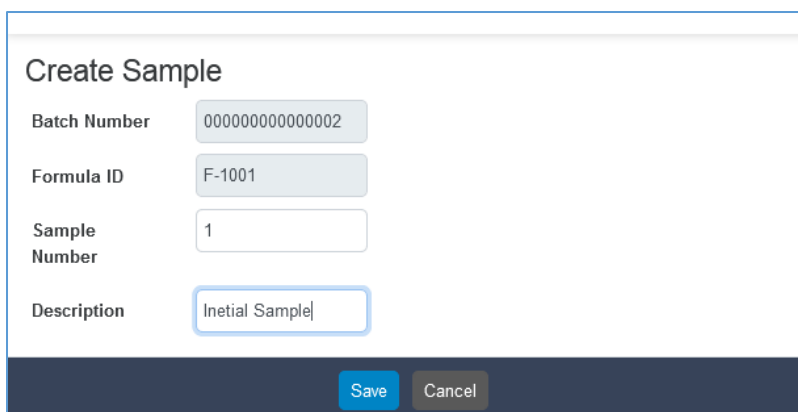
**Grid Fields:**



Action	Formula or Item	Item Location
	DV400-CV	Q
	DV400-CV	Q 02

**Add Line Button:** Click this button to insert a new line in the grid.

**Create Sample:** Samples on which QC is to be performed can be created via this screen. Clicking this button opens *Create Sample* window where a Sample number and the description can be entered. Clicking the *Save* button on the 'Create Sample' window creates a sample comprising of the tests and the results as displayed at the *Perform QC Test* screen. These samples may be used for reference while conducting QC for a Batch; this can be done by using the *Show Samples* button.



### Create Sample

Batch Number: 0000000000000002

Formula ID: F-1001

Sample Number: 1

Description: Initial Sample

**Save** **Cancel**

**Show Samples:** Clicking this button displays *Show Samples* window where the list of samples are displayed. The associated tests can be fetched and displayed in the lower grid by clicking on the *Fetch Test* option under the *Action* field.

Show Samples

Sample Number	Description	Batch Number	Formula Key	Action
1	Initial Sample	0000000000000002	F-1001	<div> <div></div> <div>Fetch Test</div> <div>Delete Line</div> </div>

Select	TestID	Description	ResultType	ResultAlpha	ResultNumeric	TestedBy	TestedDate	TestStatus	TestType	TargetAlpha	TargetNumeric	NumRangeHigh	NumRangeLow
No records yet created.													

OK

**More Action**  The following options are available under this section:

- **Delete Line:** Clicking this button deletes the highlighted Raw Material lines.
- **Show Sample History:** Clicking this button opens a *Sample history for Formula* window where the list of samples created for the selected formula/Item line is displayed.

Sample History for Formula

Batch Number	Sample Number
0000000000000002	
000000000000002AA	

- **Perform QC Test:** Clicking this button displays *Perform QC Test* window where you can enter test results.

Perform QC Test

TestID	Description	ResultType	ResultAlpha	ResultNumeric	TestedBy	TestedDate	TestStatus	TestType	TargetAlpha	TargetNumeric	NumRangeHigh	NumRangeLow
VISC	VISCOUSIT	P		0.0...				P	0	0.0000000	0.0000000	0.0000000
VOC	VOC	P		0.0...				P	0	0.0000000	0.0000000	0.0000000
COLC	COLOR	P		0.0...				P	0	0.0000000	0.0000000	0.0000000

Add Line
 Print Blank Insp. Sheet
Inspection Result Sheet
Initiate Retest

**Perform QC Test screen fields:**

**TestID:** This field specifies the ID of the test to be applied on the selected row. When a batch is created, the relevant Test ID's are automatically inserted according to the settings under the 'Automatically insert QC Tests for the following' frame on the Production Setup screen.

**Description:** This is the description of this QC Test shown under the Test ID.

**ResultType:** This field determines the type of the result as one of Pass/fail, Numeric or alphanumeric.

**ResultAlpha:** This field stores the alphanumeric result of the QC Test. The Result value can be entered here for each of the tests irrespective of its 'ResultType'. In order to decide the acceptability of the production of this batch, if the 'TestType' is 'Alphanumeric', the result-value entered here is compared with the value at the 'Target Alpha' field. The result value should exactly be the same as the target value. The value at the 'TargetAlpha' field is the targeted value to be achieved for this QC test. However, the user may manually pass or fail the test irrespective of the test-result by selecting the Passed/Failed option at the 'TestStatus' field.

When a batch is created, this value is defaulted for the various Test IDs if the "Transfer QC Targets to Results" field is set to "Yes" at the *Production Setup* screen.

**ResultNumeric:** This field stores the numeric result of this QC Test. The Result value can be entered here for each of the tests irrespective of its 'ResultType'. In order to decide the acceptability of the production of this batch, if the 'TestType' is 'Numeric', the result-value entered here is compared with the value at the 'TargetNumeric' field. The result value should fall within the target range as specified by the 'NumRangeHigh' and 'NumRangeLow' fields. The value at the 'TargetNumeric' field is the targeted value to be achieved for this QC test. However, the user may manually pass or fail the test irrespective of the test-result by selecting the Passed/Failed option at the 'TestStatus' field.

When a batch is created, this value is defaulted for the various Test IDs if the "Transfer QC Targets to Results" field is set to "Yes" at the Production Setup screen.

**Tested By:** This field specifies the name of the person who has performed the QC tests.

**Tested Date:** This field stores the date on which the QC tests were performed.

**Test Status:** This field stores the status of this test. The status can be one of the following:

- **Not-Tested:** The test has not been performed yet.

- **Passed:** The end item or the formula has passed this test.
- **Failed:** The item or the formula has failed this test.

**Test Type:** This is the type of the test. The value of this field can be one of the following:

- Pass/Fail Value
- Numeric Value
- Alphanumeric Value

**TargetAlpha:** For an Alphanumeric Type of test, this is the target value to be achieved for this test. When a batch is created, this value is defaulted for the various Test IDs if the "Transfer QC Targets to Results" field is set to "Yes" at the Production Setup screen.

**TargetNumeric:** For a Numeric Type of test, this is the targeted value to be achieved for this test. When a batch is created, this value is defaulted for the various Test IDs if the "Transfer QC Targets to Results" field is set to "Yes" at the Production Setup screen.

**NumRangeHigh:** For a Numeric Type of test, this is the upper limit of the acceptable range of values for this test. When a batch is created, this value is defaulted for the various Test IDs if the "Transfer QC Targets to Results" field is set to "Yes" at the Production Setup screen.

**NumRangeLow:** For a Numeric Type of test, this is the lower limit of the acceptable range of values for this test. When a batch is created, this value is defaulted for the various Test IDs if the "Transfer QC Targets to Results" field is set to "Yes" at the Production Setup screen.

**Add Line button:** Click this button to add a new line in the grid field.

**Print Blank Insp. Sheet button:** Clicking this button prints a Blank Inspection Sheet where the user may enter the test results.

**Inspection Result Sheet button:** Clicking this button prints the Inspection Result Sheet that contains the details of the tests that have been performed and the results produced thereof.

**Initiate Retest button:** Clicking this button opens a popup window where a Sample Set can be entered. This Sample Set Number must be present (typically in the last column) on the *Perform QC Test* screen. Clicking OK on the popup window inserts new rows in the *Perform*

QC Test screen having the same Test ID's as the ones present on the selected Sample Set number.

Each time a production batch is tested, a new Sample Set is created so as to keep track of the results of each test.

Retesting of a Production Batch is undertaken when changes are made to a Batch. If the samples pass the retesting, any prior failures are ignored. This allows operators to adjust their production batch until it passes the Production QC tests. Retesting can be done with multiple tests that constitute a Sample Set. Tests belonging to a prior Sample Set may be copied for retesting; this will automatically create a new Sample Set. Specific tests may further be added to this Sample Set or deleted from this Sample Set as needed. For specific tests in this Sample Set, the Test IDs may also be changed.

- **View QC Details:** Clicking the 'View QC Details' button pops up a window displaying the QC results (obtained for prior production batches). The details are displayed for prior batches that were created using the same formula or to produce the same end item. These results are shown independent of whether or not any sample was created from the prior batches. Purged batches are also included.

View QC Details												
Batch Number						Formula Key				Action		
0000000000000002						F-1004				⋮		
00000000000002AA						F-1004				⋮		
Select	TestID	Description	ResultType	ResultAlpha	ResultNumeric	TestedBy	TestedDate	TestStatus	TestType	TargetAlpha	TargetNumeric	NumRangeHigh
1	VISCOUSITY	VISCOUSITY	Pass/Fail Value		0		1899-12-30T00:00:00		Pass/Fail Value	0	0	0
2	VOC	VOC	Pass/Fail Value		0		1899-12-30T00:00:00		Pass/Fail Value	0	0	0
3	COLOR	COLOR	Pass/Fail Value		0		1899-12-30T00:00:00		Pass/Fail Value	0	0	0

**View QC Details fields:**

**Batch Number:** This is the batch number of the batch on which QC is to be applied.

**Formula Key:** This is the identification key of the formula used in the production of the above selected batch.

**Action:** The following option is available under this section:



- **Fetch Test:** Clicking this option displays test details associated with the formula in the lower grid.

#### **Lower Grid Fields:**

**Test ID:** This field determines the ID of the tests to be applied on the selected row. When a batch is created, the relevant Test ID's are automatically inserted according to the settings under the 'Automatically insert QC Tests for the following' frame on the Production Setup screen.

**Description:** This is the description of this QC Test shown under the Test ID.

**Result Type:** This field determines the type of the result as one of Pass/fail, Numeric or alphanumeric.

**ResultAlpha:** This field stores the alphanumeric result of the QC Test. The Result value can be entered here for each of the tests irrespective of its 'ResultType'. In order to decide the acceptability of the production of this batch, if the 'TestType' is 'Alphanumeric', the result-value entered here is compared with the value at the 'Target Alpha' field. The result value should exactly be the same as the target value. The value at the 'TargetAlpha' field is the targeted value to be achieved for this QC test. However, the user may manually pass or fail the test irrespective of the test-result by selecting the Passed/Failed option at the 'TestStatus' field.

When a batch is created, this value is defaulted for the various Test IDs if the "Transfer QC Targets to Results" field is set to "Yes" at the Production Setup screen.

**ResultNumeric:** This field stores the numeric result of this QC Test. The Result value can be entered here for each of the tests irrespective of its 'ResultType'. In order to decide the acceptability of the production of this batch, if the 'TestType' is 'Numeric', the result-value entered here is compared with the value at the 'TargetNumeric' field. The result value should fall within the target range as specified by the 'NumRangeHigh' and 'NumRangeLow' fields. The value at the 'TargetNumeric' field is the targeted value to be achieved for this QC test. However, the user may manually pass or fail the test irrespective of the test-result by selecting the Passed/Failed option at the 'TestStatus' field.

When a batch is created, this value is defaulted for the various Test IDs if the "Transfer QC Targets to Results" field is set to "Yes" at the Production Setup screen.

**TestedBy:** This field specifies the name of the person who has performed the QC tests.

**TestedDate:** This field stores the date on which the QC tests were performed.

**Test Status:** This field stores the status of this test. The status can be one of the following:

- **Not-Tested:** The test has not been performed yet.
- **Passed:** The end item or the formula has passed this test.
- **Failed:** The item or the formula has failed this test.

**TestType:** This is the type of the test. The value of this field can be one of the following:

- Pass/Fail Value
- Numeric Value
- Alphanumeric Value

**TargetAlpha:** For an Alphanumeric Type of test, this is the target value to be achieved for this test. When a batch is created, this value is defaulted for the various Test IDs if the "Transfer QC Targets to Results" field is set to "Yes" at the Production Setup screen.

**TargetNumeric:** For a Numeric Type of test, this is the targeted value to be achieved for this test. When a batch is created, this value is defaulted for the various Test IDs if the "Transfer QC Targets to Results" field is set to "Yes" at the Production Setup screen.

**NumRangeHigh:** For a Numeric Type of test, this is the upper limit of the acceptable range of values for this test. When a batch is created, this value is defaulted for the various Test IDs if the "Transfer QC Targets to Results" field is set to "Yes" at the Production Setup screen.

**NumRangeLow:** For a Numeric Type of test, this is the lower limit of the acceptable range of values for this test. When a batch is created, this value is defaulted for the various Test IDs if the "Transfer QC Targets to Results" field is set to "Yes" at the Production Setup screen.

**Formula or Item:** This column lists the Formula (being used by this Batch) and the end items being produced by this Batch.

**Item Location:** This is the Location associated with the end item displayed at the 'Formula Or Item' field.

**Save:** Click this button to save the record.


**Close:** Click this button to close the *Batch QC* screen.


## Transfer to Batch QC


1. Open the *Batch Ticket* dashboard. Select the batch on which you wish to perform QC test.
2. The details of the selected batch are defaulted to various tabs of the screen. You can also move directly to the batch on the *Batch Ticket* screen using the special button available on the *Batch Entry* screen.
3. Within *Batch Ticket*, select the material lines that you wish to QC test before they are used in production.

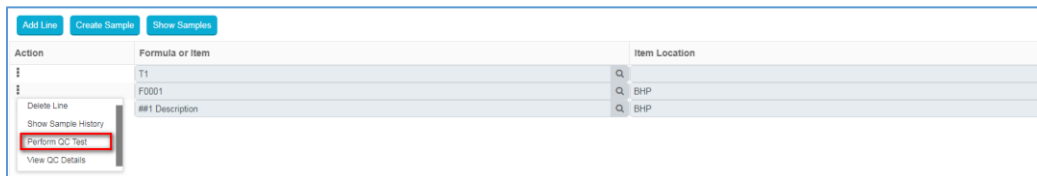


**Prerequisite:** The *Item Master* record for the material must be flagged to require Production QC.

4. Click on the  *Transfer to Batch QC* button to transfer the selected items to QC.
5. Eventually, the system displays following confirmation message.


 Updated Successfully

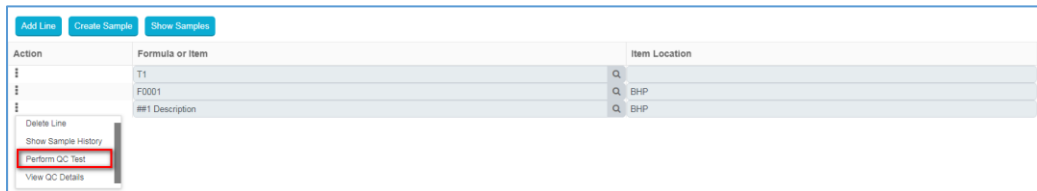
6. Save the Batch Ticket record. Unless you do, the Item QC tests will not appear on the *Batch QC* screen.
7. Open the *Batch QC* dashboard.
8. Click on the same batch number which you have transferred to Batch QC for performing QC test.
9. The tests for the items will now appear on the *Batch QC* screen, or on the *QC* tab of the *Batch Ticket* if you have allowed it to appear on the *Batch Ticket* screen.
10. Enter the test results for the material tests using the *Perform QC Test* option available under *More Action*  in the grid and click *OK* button.



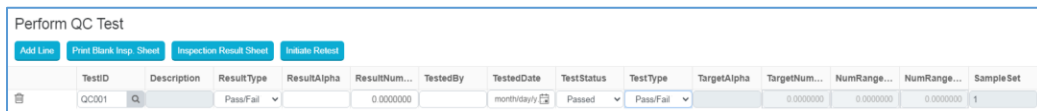
11. Click the *Save* button to save your changes.

## Performing Batch QC

1. Open the *Batch QC* dashboard.
2. Select the batch on which QC is to be performed.
3. The formula and the end items associated with the batch are displayed in the grid.
4. Add more tests, if required, using the *Add Line* button at the bottom of the screen.
5. Click on the More Options  icon and select *Perform QC Test* option.



6. The system displays *Perform QC Test* screen. Enter the *ResultType*, result values, the name of the person who performed QC in the *TestedBy* field, the date on which QC was performed, *Test Type*, and *TestStatus* in their respective fields. If the *TestType* is *Numeric Value* and a value within the range is entered, the *TestStatus* would automatically default to *Passed*. If the value entered is outside the allowable range, the *Test Status* would automatically default to *Failed*. Double-clicking in the *Tested Date* field will default today's date.



7. If one or more QC tests fail inspection and you wish to re-test, click the *Initiate Retest* button to add a new set of QC Test lines to the grid.
8. Click on the OK button to finish the Formula/Item QC Test.
9. If new samples are to be created, click the *Create Sample* button on the Batch QC screen.
10. Click the *Save* button to save the record.