Quality Control for Chemical Industries

Delivering on your promise to deliver the highest quality products to your customers

Features

- Establish library of standardized QC tests and sample plans
- Define QC tests for formulas, raw materials, intermediates, and finished goods
- Ensure the step by step completion of QC tests
- Auto assign lot statuses and disposition lots, based upon QC test results
- Analyze QC tests results by item, lot, batch job and vendor

Benefits

- Ensure corporate and customer quality standards are met
- Improve production line performance
- Reduce internal costs incurred by reworked and scrapped finish goods
- Rank vendor performance
- Reduce customer chargebacks

Introduction

Quality Control functionality embedded within BatchMaster Software's modules ensures that strict quality standards set by corporate and demanded by customers are met. By establishing a library of standardized QC tests, one can mandate the inspection of received goods, finished goods and WIP goods, including intermediates, subassemblies and by-products are executed and validated following the same standard operating procedures. Following a closed-loop testing approach, variances can be detected and corrected early to avoid issues later in production and shipping, where one could potentially incur costly chargebacks from valued customers who receive finished goods that do not meet standards.

Quality Control management addresses the assignment of user defined QC statuses and failure codes, and inventory hold and release criteria that affects the allocation and disposition of received and produced inventory based upon the assigned QC status. A specific lot produced in a batch job may be assigned a rework or scrap status in production, which would direct the inventory to a specified work area in the plant. A specific lot received may be assigned a QC hold status, which would direct a sample to QC location, while the balance is stored, but would be unavailable for production until the sample is released from QC Hold.

Key features

QC Tests

A QC test can capture the physical, biological or chemical state of an intermediate, subassembly or finished good. Each QC test has a defined standard or acceptable value, upper and lower out of tolerance values, and sample and recount values. These QC tests are defined then maintained in a QC Test library from which one or more can be applied to received goods, intermediates and finished goods.

Formulas

One or more QC tests from the QC Test Library can be added to intermediates and product formulas. QC managers will have the opportunity to review and approve these during the formula approval process. These QC tests are executed and validated during production.

Packaging Bills of Material

One or more QC tests from the QC Test Library can be assigned to sub-assemblies and finished goods. These QC tests are executed and validated during the fill and assembly stages in production.

QC Testing in Production

Formula and Packaging QC tests can be printed out on a Batch Ticket document or on a separate QC instruction document. Should a lot fail a QC test, changes can be made to their specifications, and the QC test performed again. A batch job cannot be completed unless all QC tests have been performed and the results validated. Should the lot ultimately fail, it will be automatically assigned a specific lot status. Any formula changes and all QC test results during the production process are captured in an audit trail. Specific Formula QC results are included in the COA report.

QC Testing against Inventory

One or more QC tests from the QC Test Library can be defined against received lots of raw materials and in stock lots of intermediate or finished goods. These QC test instructions are included on Receiving and Inventory QC documents, and tests results captured via Inventory QC transactions. When performing a QC inspection of a lot, the entire lot is placed on hold until it has passed QC tests. Should the lot fail the sample inspection, the lot will have a specific lot status automatically assigned.

Sample Inspections

A QC test can be applied to the entire lot quantity or a specific quantity of intermediates or finished goods at the time of receiving or in stock. A sample inspection plan can be defined by a hierarchy of quantity ranges, with a sample count required per range (e.g. inspect 2 samples for 100 units versus 50 samples for 1000 units).

QC Test Results

QC test results are recorded in terms of pass or fail, or a numeric or alphanumeric value on users' desktop or mobile transactions. Test results falling outside the tolerance range are recorded as fail, and to further clarify why a QC test failed, a reason code from a Reason Code library can be applied.

QC Lot Status

When a specific lot fails a QC test, a lot status is automatically assigned to this inventory, such as Rejected, Rework or Scrap, based upon user defined QC test criteria. Whether the lot status is automatically or manually assigned, the disposition of failed lots within the plant can be determined by its lot status. Note that other inventory related operations, such as inventory allocation and batch production, require that inventory to be in a specific lot status in order to be processed.

Certificate of Analysis (COA) Report

Selected QC tests and their results of a given lot of a specific batch job will be included in a COA report. The COA report is generated at the completion of a batch job, and can be customized to meet each customer's documentation requirements.

About BatchMaster Software

BatchMaster Software offers a set of comprehensive, modular financial and manufacturing ERP solutions for formula-based process manufacturers.

For more information, Please visit www.batchmaster.com or email your request to sales@batchmaster.com