Quality Control

Introduction:

Quality Control Add On is developed for Microsoft Navision Version 3.7 / 4.0 – an Integrated Business Solution, to meet the needs of Purchase (In bound Quality) and Work In Progress (WIP) Quality related functions and activities for Statistical Analysis of Industrial Process and Engineering Enterprises.

"**In Bound QC**" Add-On provides interface to create Specifications, Sampling plans. Inspection Data Sheets are generated automatically based on the Specifications and Sampling Size and Inspection Reports are generated automatically with details of Accepted Quantity and Rejected Quantity etc. This module is integrated with the existing Purchase module and the inventory management.

"**WIP Quality Control**" Add-On provides interface to define Characteristics, Inspection Groups, create Specifications, and Sampling plans for any defined production process output sub assembly (as defined by the routing in quality). Inspection Data Sheets are generated from the Production Order line, based on the Specifications and Sampling Size assigned to the defined item whether it is a finished Item or Sub Assembly. Inspection Reports are generated automatically with details of Accepted Quantity, Rejected Quantity, and Rework quantity etc.

This module is integrated with the existing Manufacturing module, Inventory management, and the Warehouse Management.

The system yields Statistical Analysis of the data collected, and draws inferences, which help in controlling process for better productivity, Study of Process Capabilities etc. The system generates several graphs to make a detailed Statistical Analysis.

The Salient features include:
- Defining Characteristics.
- Defining Inspection Groups.
- Defining Specifications.
- Preparing Sampling Plans.
- Defining Sub Assemblies
- Creation of Inspection Data Sheets.
- Generation of Inspection Reports.
- Defining Intermediate output of production process as Sub Assembly.
- Tracking of Inspection Data Sheets, Inspection Reports from Purchase orders, Receipt Notes.
- Tracking of Inspection Data Sheets, Inspection Reports from Production Order lines.
- Vendor Rating (quality)

Process Benefits
- Availability of real time information on Inventory & production output
- Better control on the process
- Improved customer satisfaction

Technical Specifications:
Microsoft Navision Version 3.70/ 4.0
SQL Server 2000
Navision native Database

Microsoft
Business
Solutions

Defining Inspection Groups:

The different types of testing departments are defined as Inspection Groups in the QC application. These Inspection Groups are defined to segregate the testing departments of Characteristics for acceptance or rejection of the production process output. Unlimited Inspection Groups can be defined in the system.

Example: Organic lab, Inorganic lab, Mechanical Testing lab

Defining Sampling Plan:

The sampling plans are used in QC application to define the amount of sample to be drawn for specific production output/Purchase consignment size. These samples to be drawn will be defined at the item/Sub assembly and item characteristics level. Sampling plans can be defined as per the industrial standards.

Defining Specifications:

The Specifications are defined by grouping the required inspecting characteristics of an Item and Sub Assembly. Here in the definition of Specification itself the Characteristics, Sampling plan, and Inspection Group will be interlinked together to define a Specification. Unlimited Specifications can be defined in the system.

Defining Intermediate Output as an Sub Assembly:

Sub-Assembly can be defined as a substance produced in an operation, which is a part of the total process before obtaining the finished product. The defined Sub-Assembly can be defined in the routing and specification as an output of a routing operation. The last operation of the routing will have a prior quality acceptance check before posting the operational output into the Inventory from output journal.

Inspection Data Sheet / Report:

- Captures Details of Production Orders and their production lines/Purchase receipts.
- Inspection Datasheets are created based on the number of Inspection Groups in the Specification.
- Numbers of lines in the inspection data sheets are generated automatically based on the Sample size to capture the inspection results in the Inspection Datasheets.
- Inspection Reports are generated automatically based on the inspection results.

Quality Vendor Rating:

Quality Vendor rating is the rating of Vendor, which can be compared to analyse between all vendors at Item level. This means combination of Vendor-Item is evaluated. There can be many factors to evaluate vendor rating, but the focus in the quality module is to evaluate the vendor with quality related activities.

Inspection Receipt:

Inspection receipt will be created automatically. In the inspection receipt the consolidated results of Quantity Accepted, Quantity Accepted Under Deviation, Quantity Under Rework, and Quantity Rejected can be entered and posted. Inspection can be done for the rework quantity for "In bound" as well as In Process.