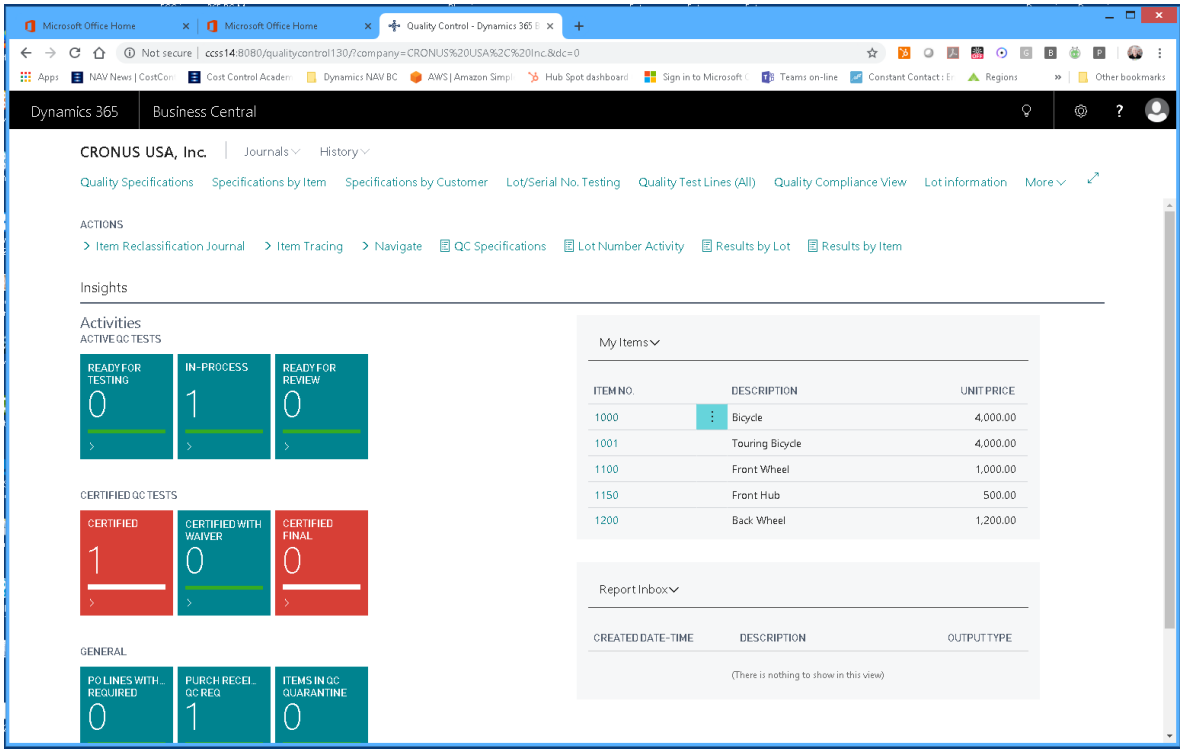
Quality Control
Setup Guide

For Microsoft Dynamics 365 Business Central



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https://www.screencast.com/t/7Ug1fzEr

Application Description

Quality Control is designed for Microsoft Dynamics 365 Business Central.

Quality Control enables Testing of incoming Raw Materials with Lot or Serial Number or Finished Goods with Lot or Serial Numbers placed into Inventory. For each Inventory Item to be tested, you will first set up your Item's Quality Specifications for both Measures and Methods.

Actual Test results will be entered into a test results Page, which enables you to compare your Low and High Limits to the Target Test Results. Non-Conforming test results will be flagged as exceptions.

Quality Control is built around the Item Tracking Granule. Item Tracking enables Lot Number Tracking on either Finished Goods or Raw Materials. (Purchased Items or Produced Items)

Quality Control is designed to enable Customer Specific Specifications on each Item. The Item Specifications will also hold multiple Versions and Effective Dates on each Version. (Similar to a Production Bill of Materials) This way a Customer can notify you of future Specification Requirements prior to your Production Cycles. When a Lot is tested it is tested against your internal specifications. A Certificate of Analysis can be generated after the test is certified.

When Lot items are shipped, it is possible to print a Certificate of Analysis for that specific Lot Number. The Shipment's Certificate of Analysis can be printed showing your company's Specifications or your Customer's Specifications. Any Non-Conformance Lines will be indicated.

Lot Numbers are typically selected by the Customer Service Representatives to assure conformance to a Customer's Specified Quality Measures. The Shipment Document has been modified to display the desired Lot Numbers to pick and ship that meets that Customer's Specifications. A fresh Certificate of Analysis can be generated directly from the Posted Shipment Document at any time.

Actual Test Results can be printed immediately upon completion of a given test, or can be printed in Batch at the end of any time period. All test results are stored in a Testing Results Log for reporting and historical purposes.

Dependencies: Dynamics Item Tracking Granule, Location Codes (Recommended)

What is Quality Control?

Quality control is a process that is used to ensure a certain level of quality in a product or service. It might include whatever actions a business deems necessary to provide for the control and verification of certain characteristics of a product or service. Most often, it involves thoroughly examining and testing the quality of products or the results of services. The basic goal of this process is to ensure that the products or services that are provided meet specific requirements and characteristics, such as being dependable, satisfactory, safe and fiscally sound.

Companies that engage in quality control typically have a team of workers who focus on testing a certain number of products or observing services being done. The products or services that are examined usually are chosen at random. The goal of the quality control team is to identify products or services that do not meet a company's specified standards of quality. If a problem is identified, the job of the quality control team or professional might involve stopping production or service until the problem has been corrected. Depending on the particular service or product as well as the type of problem identified, production or services might not cease entirely.

Usually, it is not the job of the quality control team or professional to correct quality issues. Typically, other individuals are involved in the process of discovering the cause of quality issues and fixing them. After the problems are overcome and the proper quality has been achieved, the product or service continues production or implementation as usual.

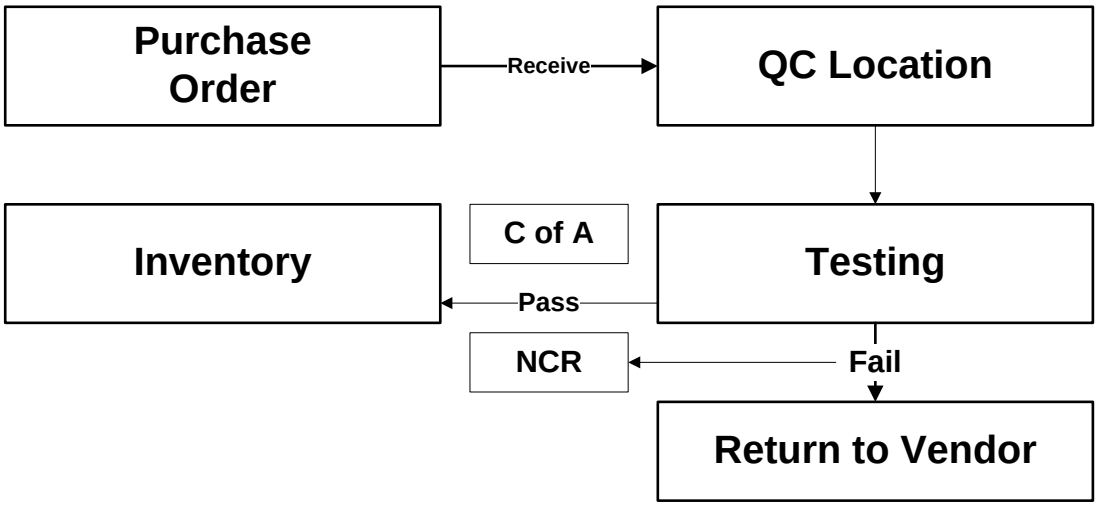
Many types of businesses perform these types of quality checks. Manufacturers of food products, for example, often have employees who test the finished products for taste and other qualities. Clothing manufacturers have workers inspect garments to ensure that they are properly sewn. Service-oriented companies often have representatives who observe the services being performed or who do follow-up checks to ensure that everything was done properly.

Quality control also might involve evaluating people. If a company has employees who don't have adequate skills or training, have trouble understanding directions or are misinformed, the quality of the company's products or services might be diminished. This is especially important for service-oriented companies, because the employees are the product that they provide to customers.

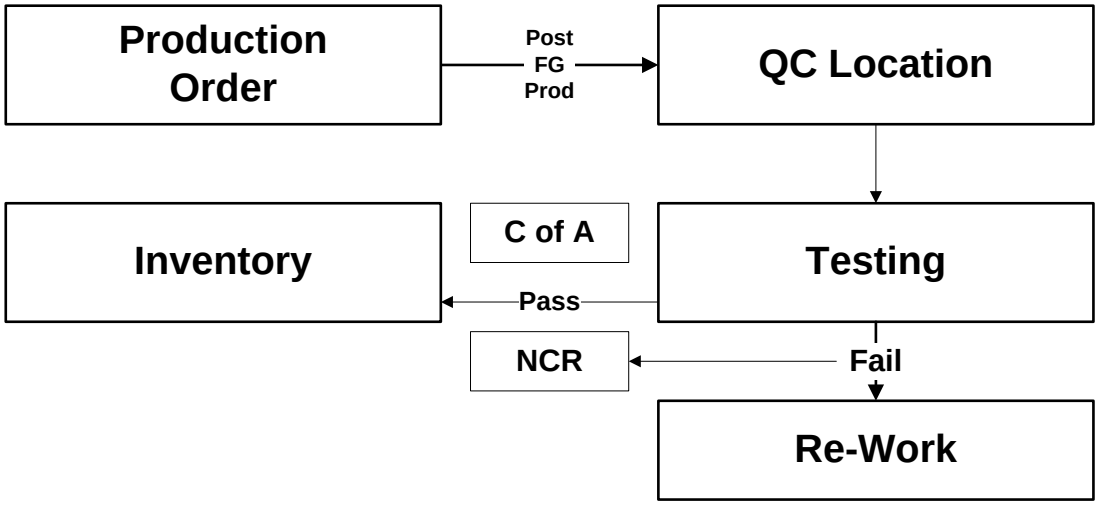
Often, quality control is confused with quality assurance. Though the two are similar, but there are some basic differences. Quality control is concerned with examining the product or service — the end result - and quality assurance is concerned with examining the process that leads to the end result. A company would use quality assurance to ensure that a product is manufactured in the right way, thereby reducing or eliminating potential problems with the quality of the final product.

Quality Control Design

Raw Material Receiving



Finished Good Production



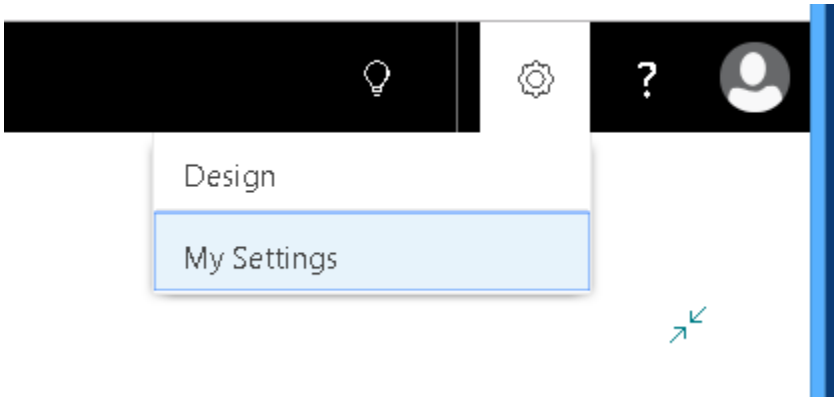
Setup Guide

Quality Control was built using Microsoft Dynamics 365 Business Central's standard development tools. The best source for development instruction would be the Microsoft Dynamics 365 Business Central development guide.

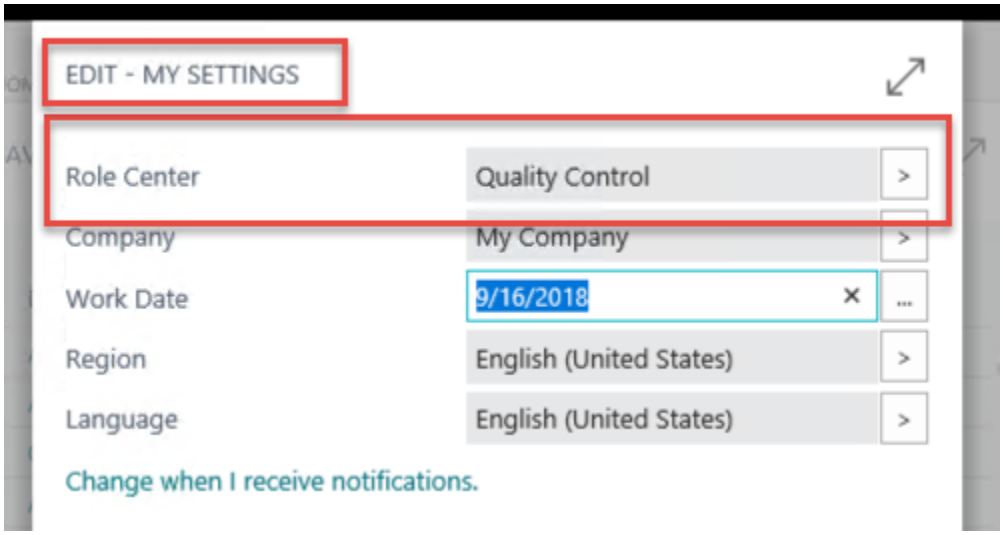
Quality Control has its own Role Center. We recommend you always run Quality Control from its own Role Center. This Role Center gets automatically added to the list of Role Centers when you installed the App or the Extension.

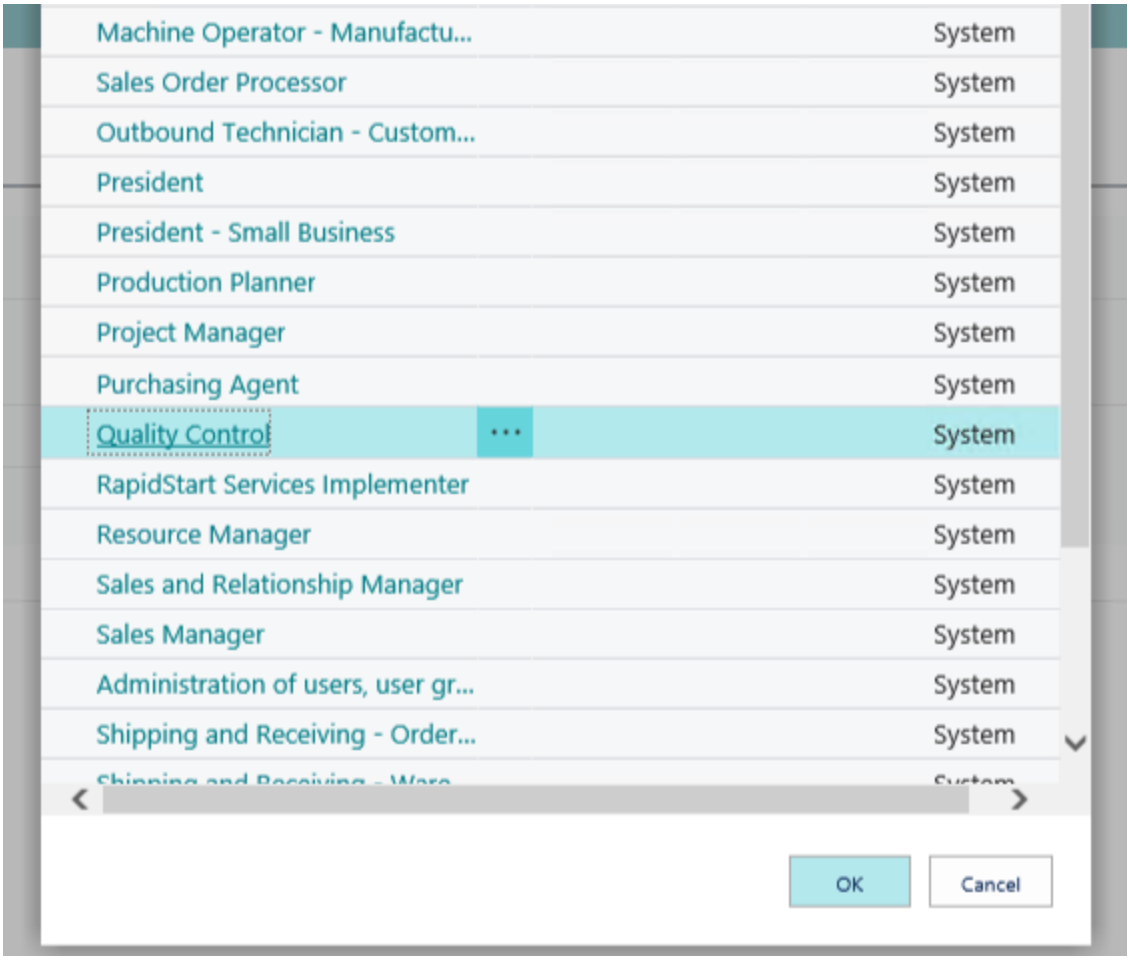
Let's select the QC Role Center:

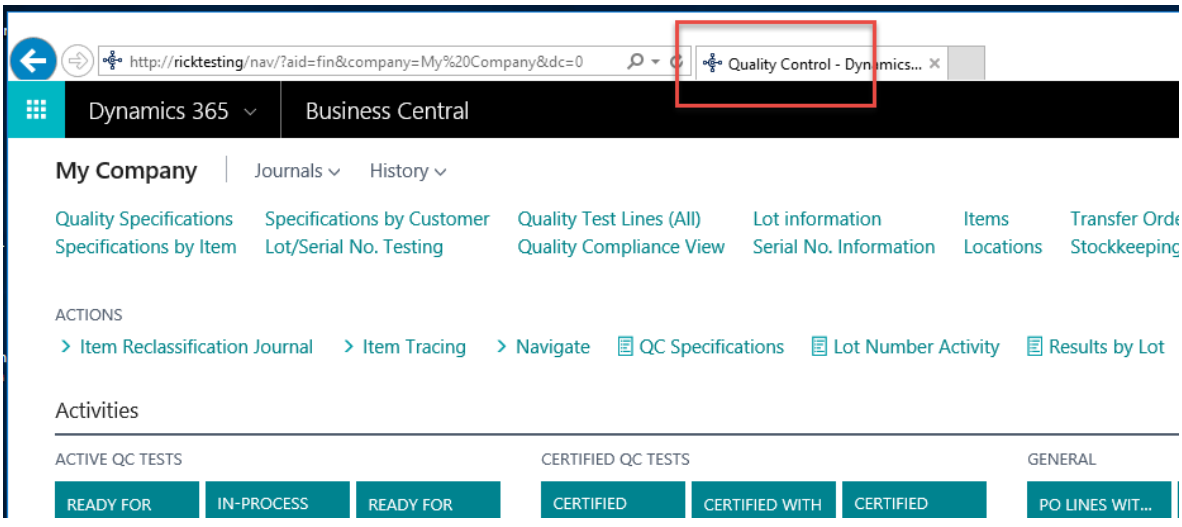
Go to "My Settings"



Use "Edit – My Settings" to select the Quality Control Role Center.

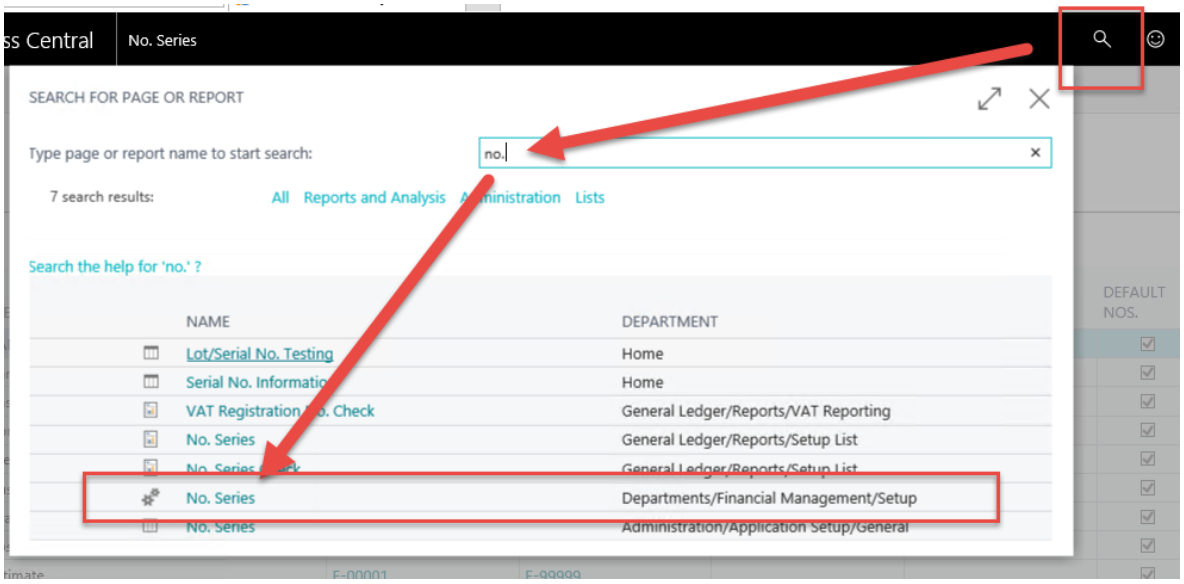



Machine Operator - Manufactu... System
Sales Order Processor System
Outbound Technician - Custom... System
President System
President - Small Business System
Production Planner System
Project Manager System
Purchasing Agent System
Quality Control System
RapidStart Services Implementer System
Resource Manager System
Sales and Relationship Manager System
Sales Manager System
Administration of users, user gr... System
Shipping and Receiving - Order... System
OK
Cancel

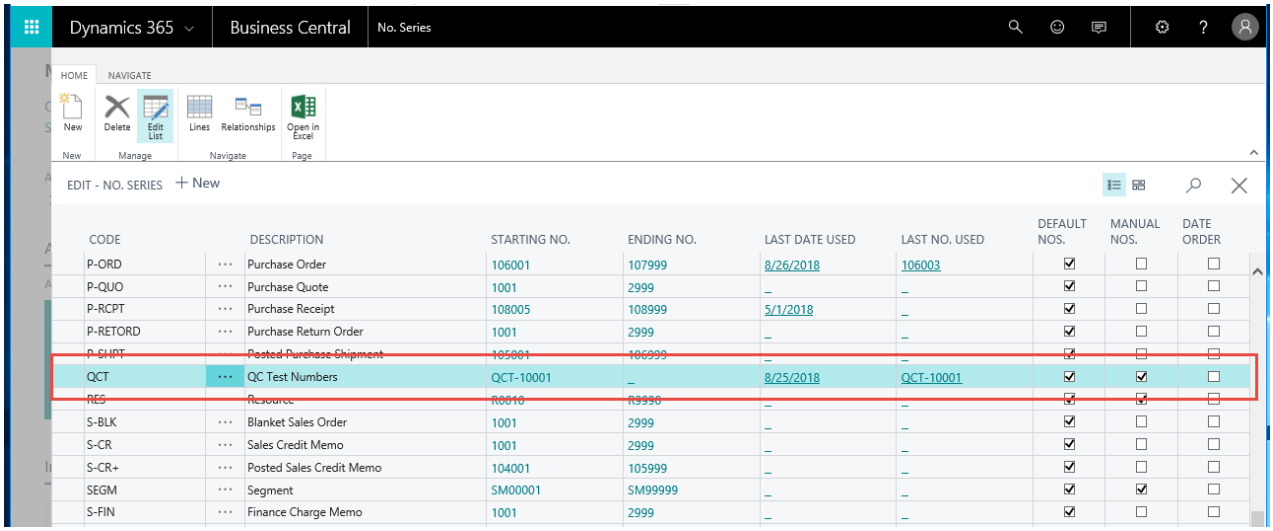

http://ricktesting/nav/?aid=fin&company=My%20Company&dc=0
Quality Control - Dynamics...
Dynamics 365
Business Central
My Company
Journals
History
Quality Specifications
Specifications by Item
Specifications by Customer
Lot/Serial No. Testing
Quality Test Lines (All)
Quality Compliance View
Lot information
Serial No. Information
Items
Locations
ACTIONS
Item Reclassification Journal
Item Tracing
Navigate
QC Specifications
Lot Number Activity
Results by Lot
Activities
ACTIVE QC TESTS
READY FOR
IN-PROCESS
READY FOR
CERTIFIED QC TESTS
CERTIFIED
CERTIFIED WITH
CERTIFIED
GENERAL
PO LINES WIT...

Setup

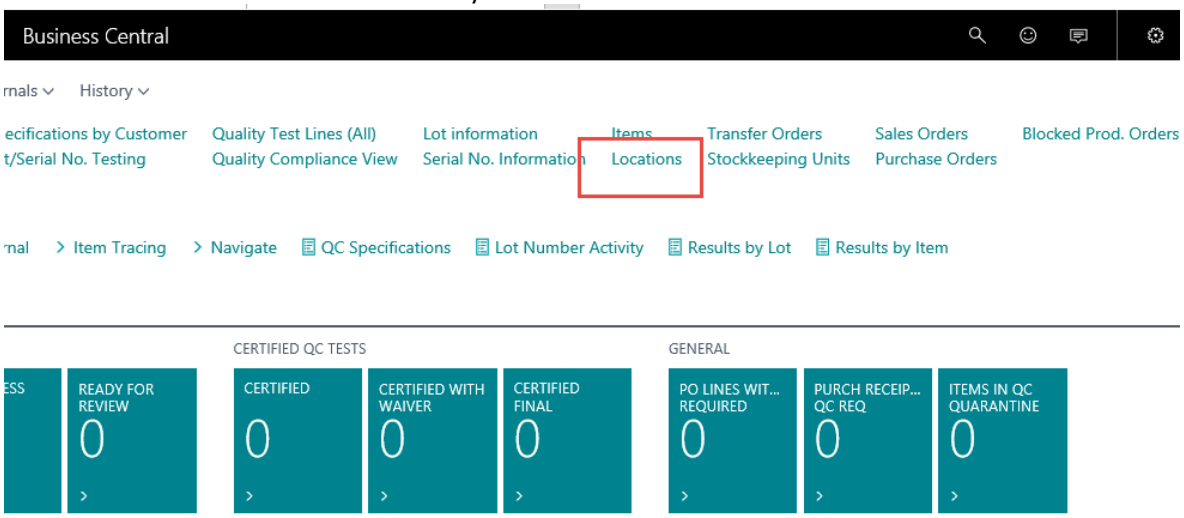
1. Setup a QC Test Number Series

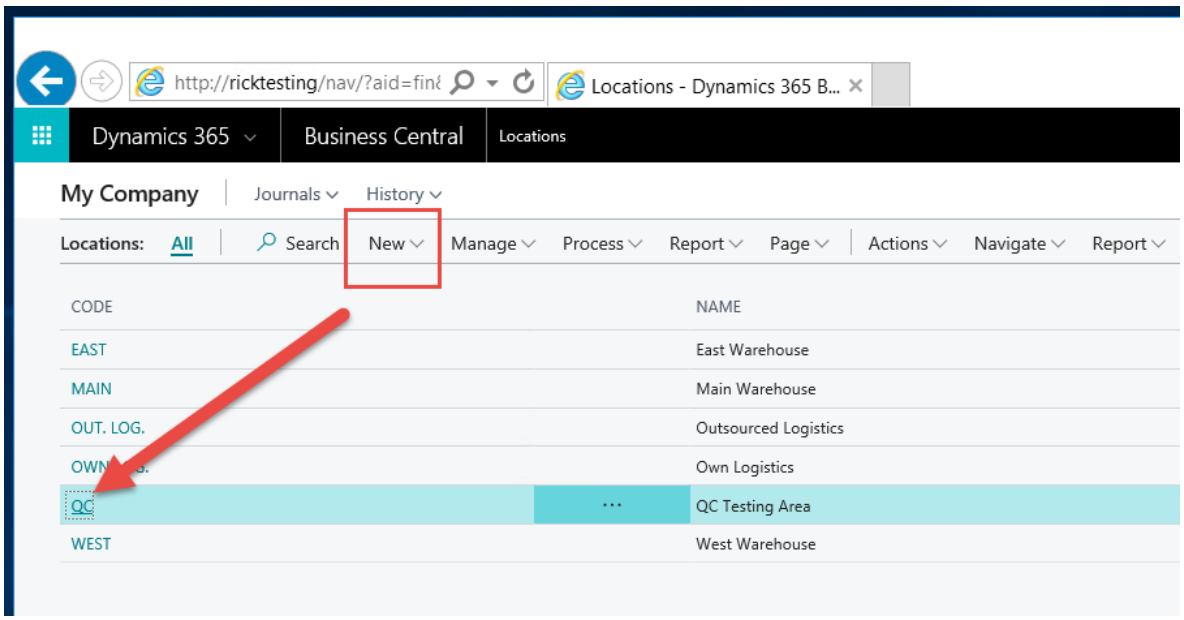


Add in a No. Series Code QCT for the QC Test No. Series
IE: QCT-10001 is Quality Control Test 10001
(Don't put an Ending Number)
(See use in the QC Setup)



2. Add in QC Location Code for the Default QC Location Code (see use in the QC Workflow Guide)

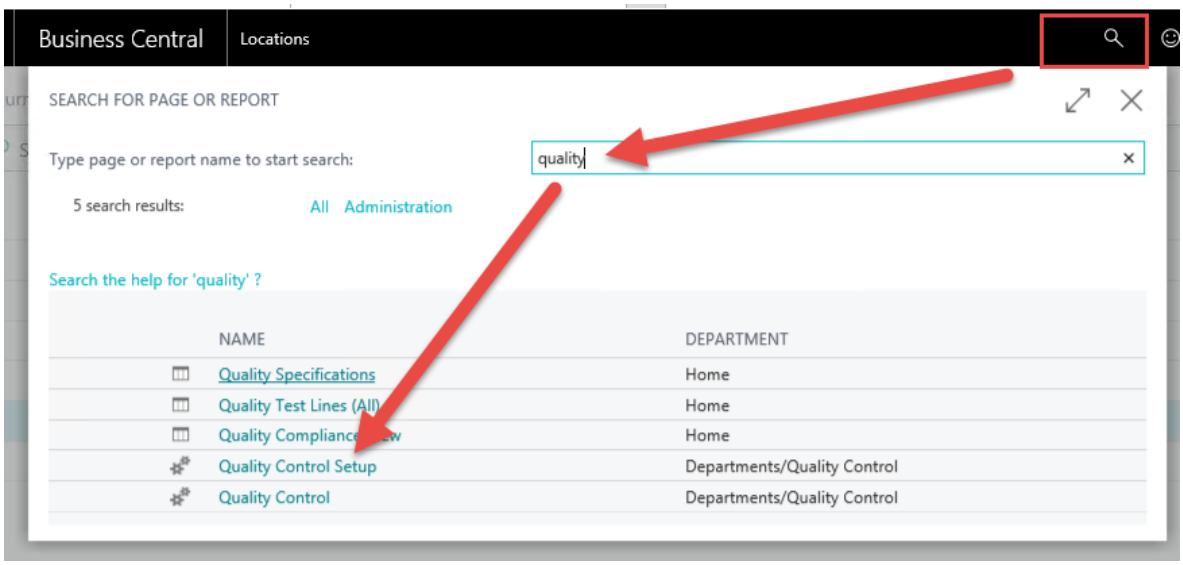




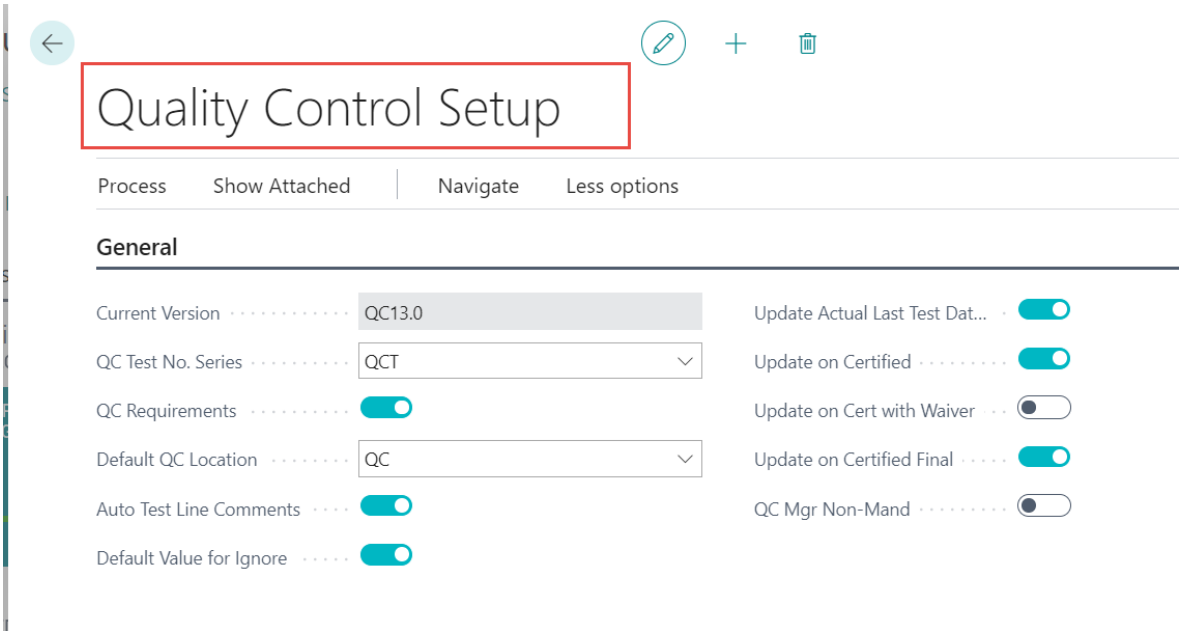
Setup – Continued

Dynamics 365 pre-requisite: "Item Tracking" Granule. Since Quality Control is built on the premise of doing testing on "LOTS", it is required that you have purchased the "Item Tracking" Granule that enables Lot Number and Serial Number Tracking. This document will not cover training on that Granule. Contact your local Vendor for "Item Tracking" training. We will build new concepts on top of your knowledge of "Item Tracking".

1. The Quality Control Setup needs to be completed:



When you received your Extension you should have access to the Setup Card.



QC Test No. Series: Specifies the Test No. Series.

QC Requirements: Yes = QC Required on Purchase Order.

Default QC Location: Set Default QC LOC Code. Typically, “QC”

Auto Test Line Comments: Auto Insert Test Line Comments. IE: Change Test from 5.0 to 5.1.

Default Value of Ignore: Set the Ignore Value on New Test Lines.

Update Actual Last Test Dates: Update the Header Test Date if an Test Line Date is changed.

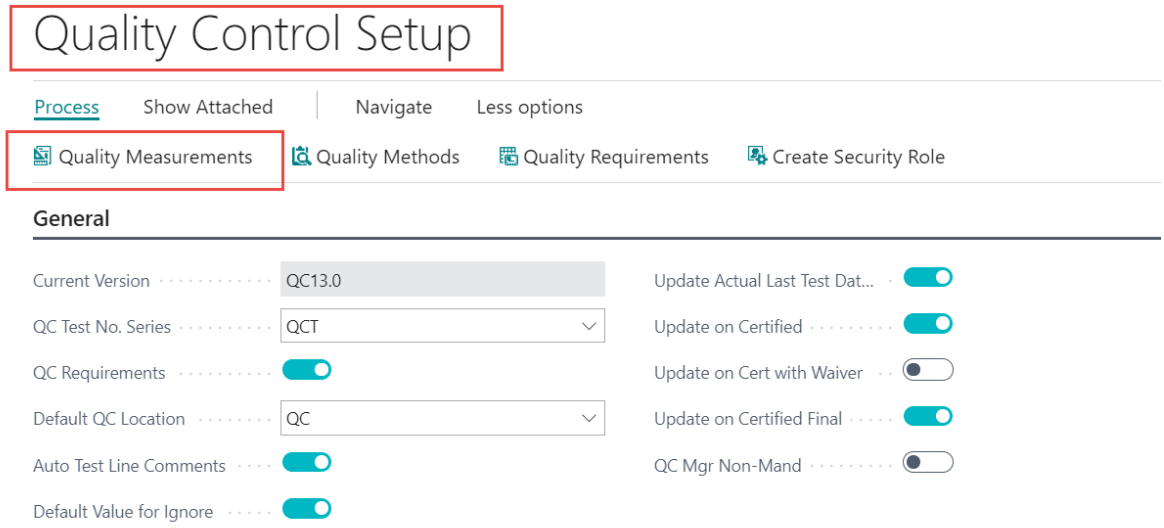
Update on Certified: Do you want the Last Test Date to be updated on “Certified”?

Update on Cert with Waiver: Do you want the Last Test Date to be updated on “Cert with Waiver”?

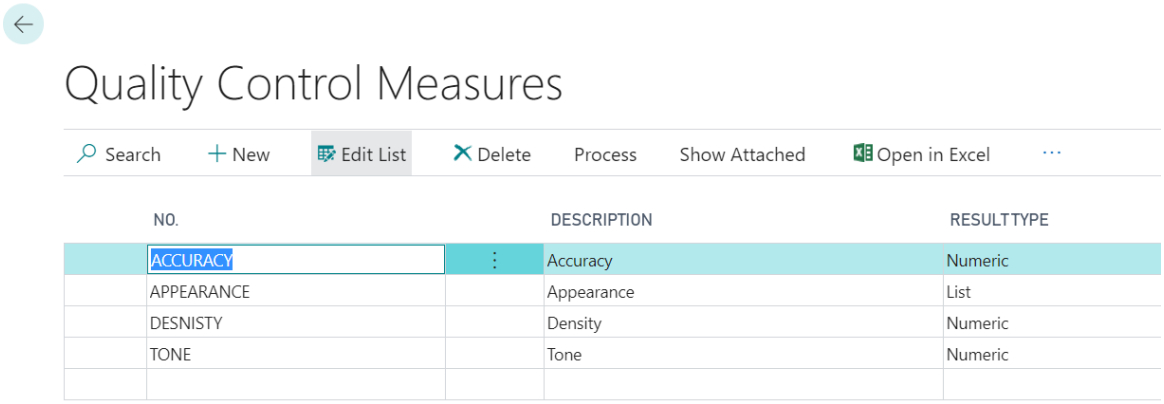
Update on Certified Final: Do you want the Last Test Date to be updated on “Certified Final”?

Only QC Mgr Get Non-Mandatory Tests: If yes, only “QC Managers” will receive non-mandatory test results.

2. Next, setup your **Quality Measures Descriptions. Here is a sample.**

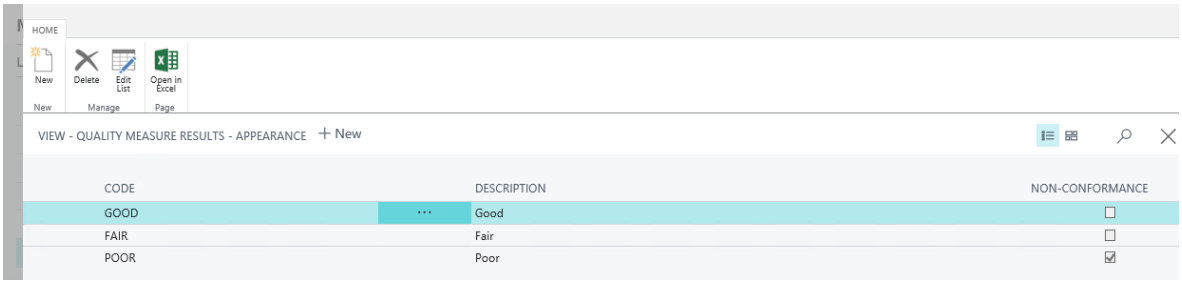


Here are some examples:

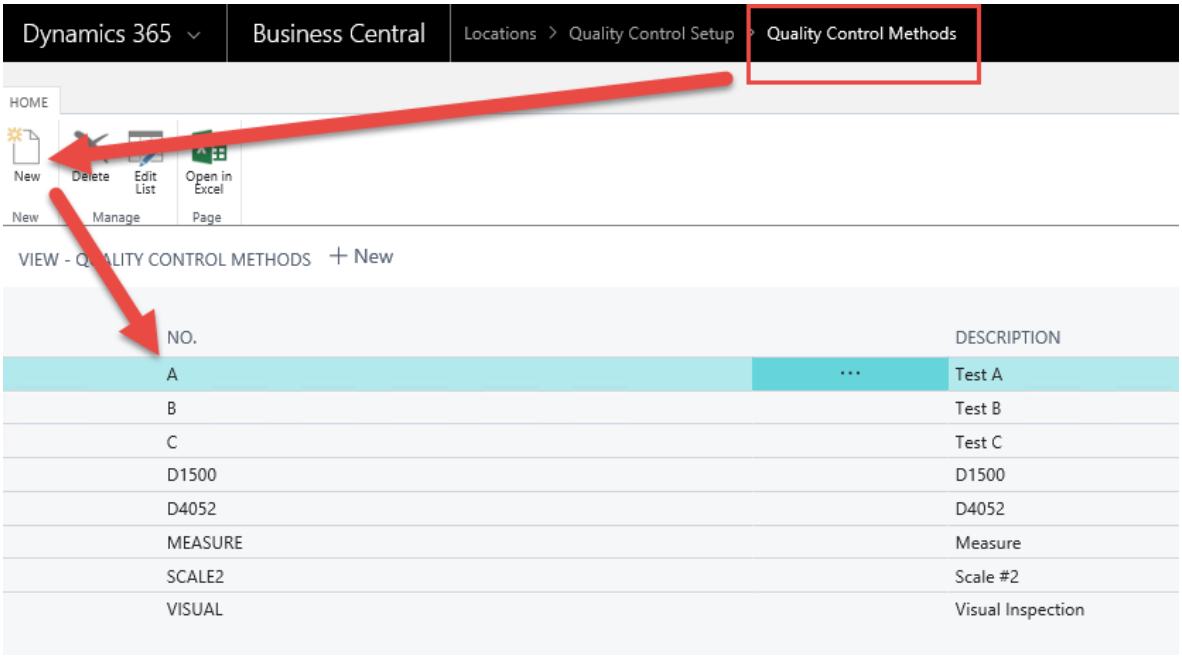


Notice that Quality Measurers can have results recorded in two different ways as a numeric value or a value selected from a list. For instance the Quality Control Measurement of APPEARANCE has a result select list : PERFECT, POOR, DAMAGED. Only PERFECT and POOR qualify for passing inspection.

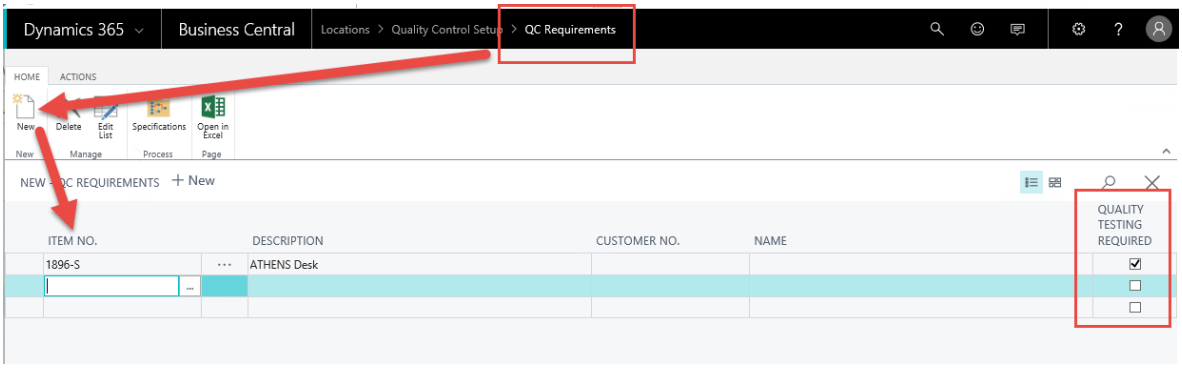
Here is an example for a LIST:



3. Next set up your testing **Quality Methods** and Descriptions. Here is a sample.



4. **“QC Requirements” to show on Purchase Order Lines. (Optional)**



This is for the Purchase Order Lines:

In this Procedure we additionally add code to see if QC Requirements is checked.
This is just an indication to proceed with the QC Requirement code on the PO Line.

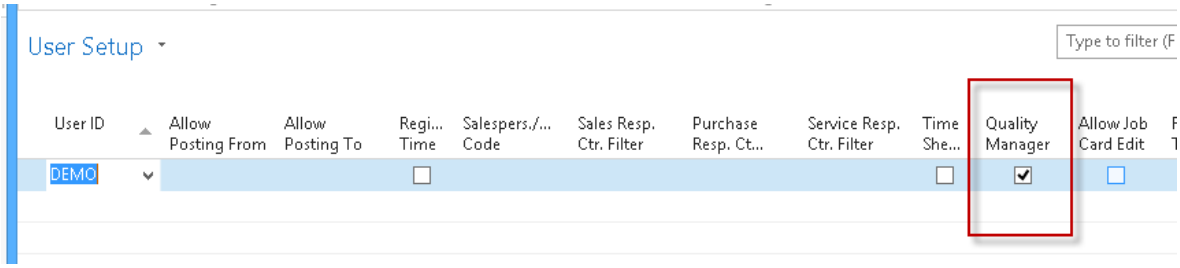
If you have “any” items that will have required QC then this QC Setup field needs to be checked.

When you are setting up the QC Specifications the QC Requirements table is found on the Setup menu button.

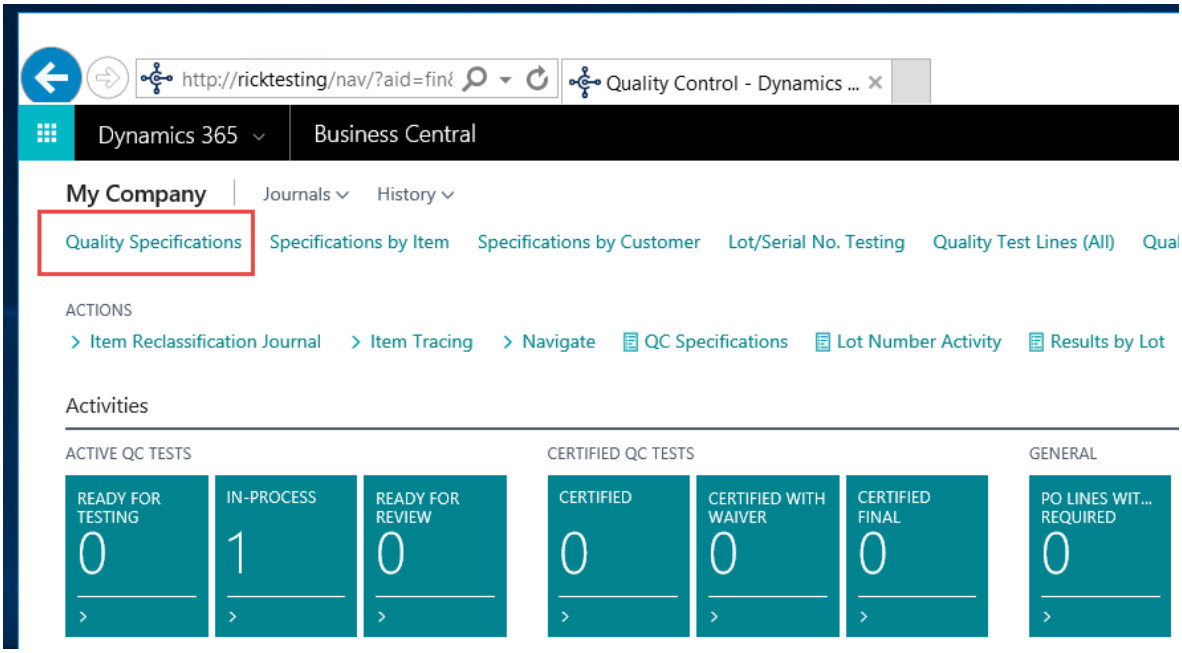
5. **Quality Manager**

   If you have a “Quality Manager” and “Quality Testers”, you may want to utilize the Test Assignment option with the Test Status field.

   You must first setup your user “Quality Manager” as the “Quality Manager” in the User Setup Window:



6. **Setup Item's Quality Specifications:**



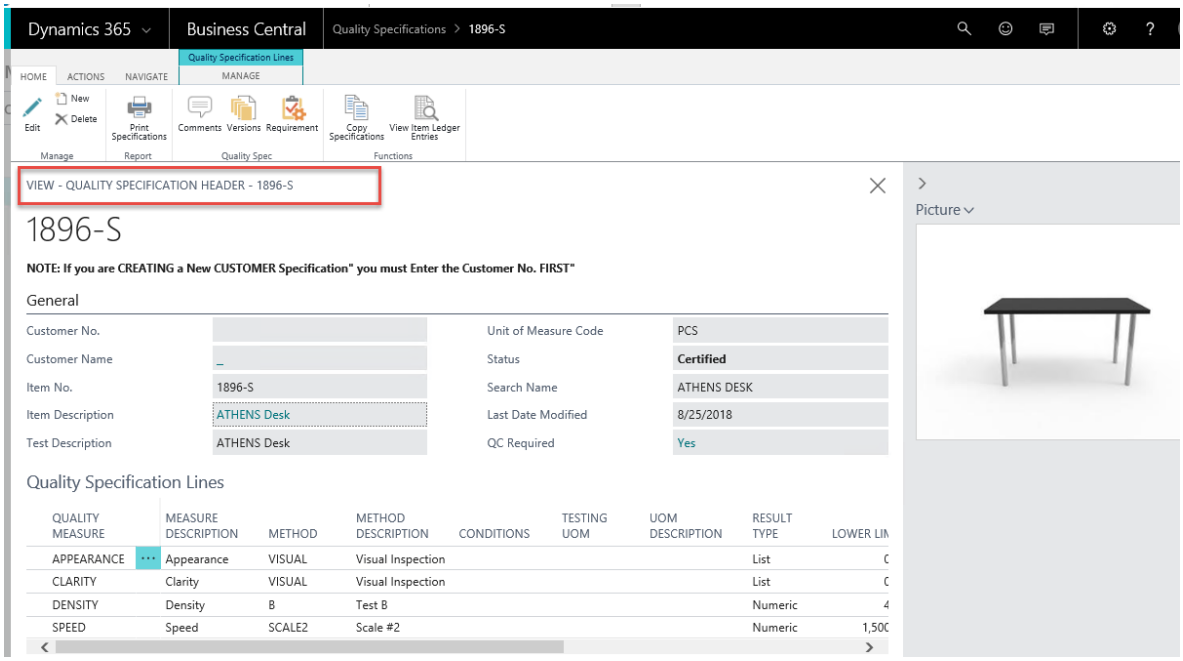
The last step, and most challenging, is to setup your Item's QC Specifications. This could be any of the following:

Your companies Specifications
Your customer's Specifications

Multiple Versions within each.
Multiple Types per Specification.

First setup "your" Company's standards per Inventory Item that you intend to do LOT Tracking with. (QC Specification) Each Spec Sheet will have a Header Section and Lines Section.

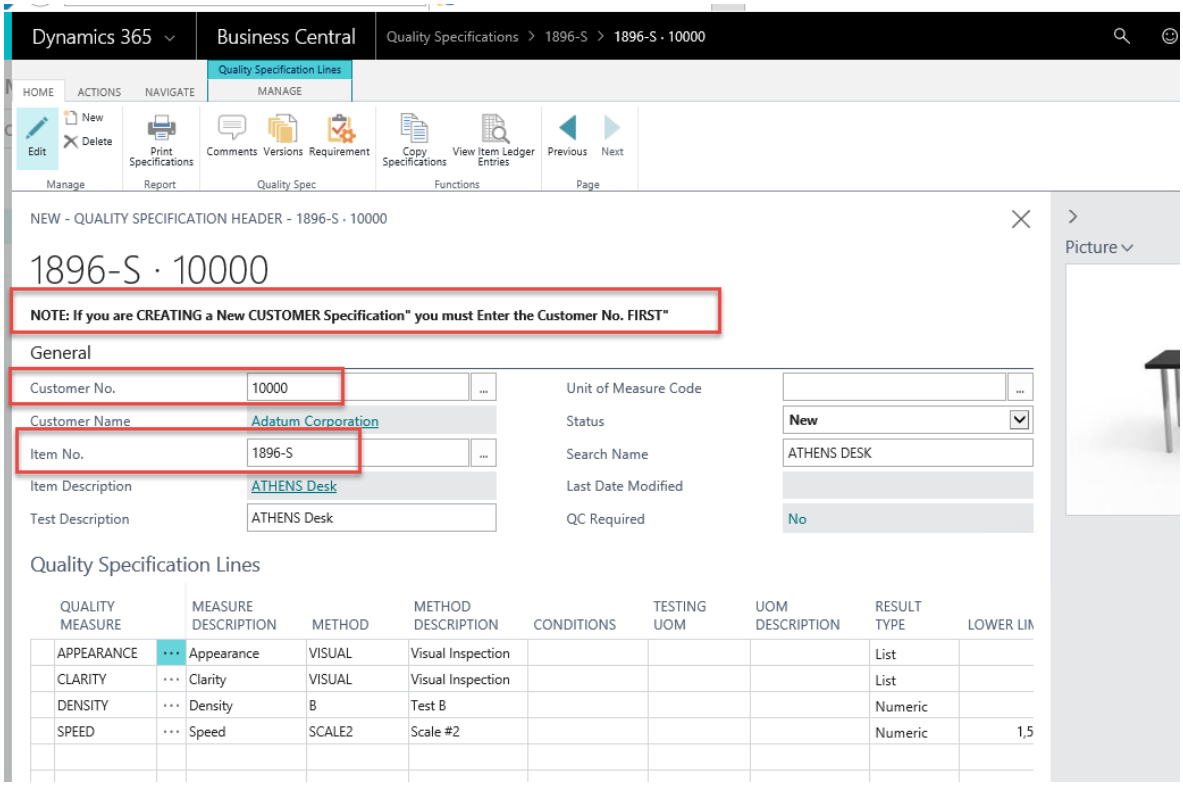
Here is an example of the Specification Screen:



This sample is for Item No.: 1896-S – ATHENS Desk

See if you can find this item in your Sample Database. It will need to be in Status = "Under Development" to be able to add the Quality Measure Line items. These are the Lines that help us establish the Lower and Upper Limits of each test. You will see soon how we will pull this information into our Testing area.

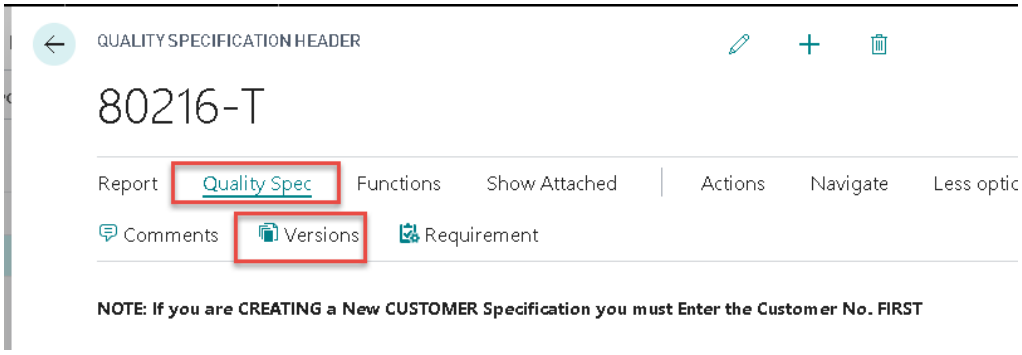
Below you will find a second Quality Specification that is specific to a Customer's Specifications. The only real difference is that both the Item No. and Customer No. have been identified, but the limits could be unique to that Customer.

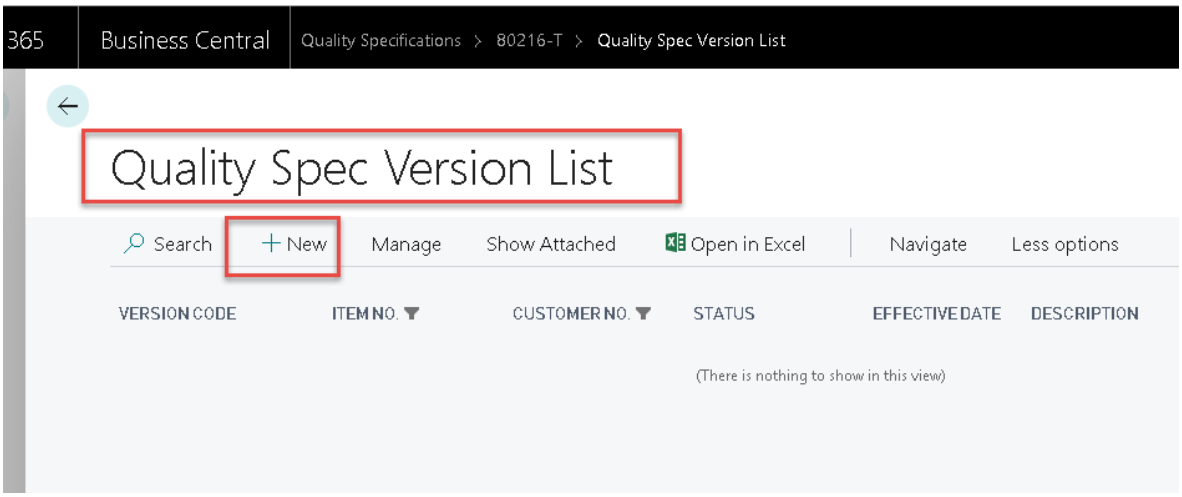


Notice also the “Active Version” is displayed. Each Specification can have multiple versions with the most current being the Active Version. This is controlled by the “Effective Date” on the Spec Version Card.

We you are satisfied with your entries, **change the status to “Certified”**

To make additional changes, put the status into “Under Development”.





You can access the Spec Versions from the Quality Spec Menu Button shown above.

The Version Window looks almost identical, but it has an “Effective Date” field and Version Code field added.

These versions will be used later during the Order Entry process to help identify which LOT Numbers are in compliance with the Customer’s desired specification. (Not your testing specification)

Note: To be usable the Version must have the “Effective Date” and be “Certified” as shown above.

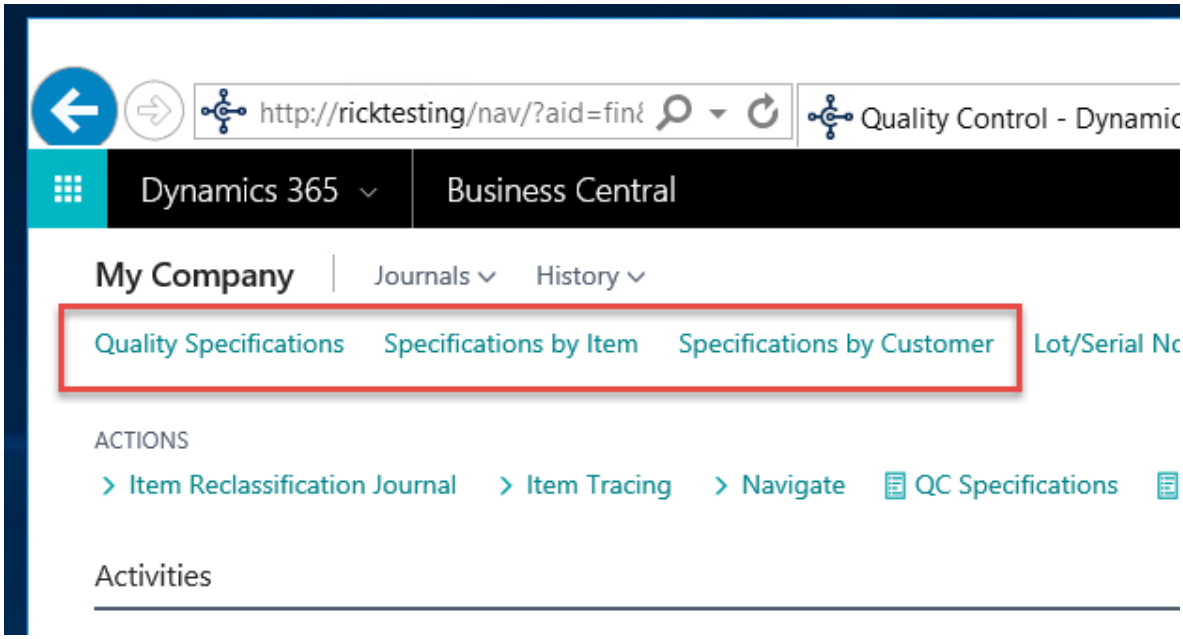
Notice that each Header or Version can have “Comments”.

Notice that each Quality Line can have “Comments.”

Notice that there is a “Copy” Function to copy Quality Lines from the Header or other Versions. Then edit the Lower and Upper Limits as needed for this version. Last step is to “Certify” the Version.

Printing of Specifications is only done from the Header Specification. There is a print button provided, and if there are sub-Versions they will be printed as well.

We provide 3 ways of accessing the Quality Specification Window:



1. From the Quality Control Menu, Quality Specifications.

2. From the Quality Control Menu, Specifications by Item

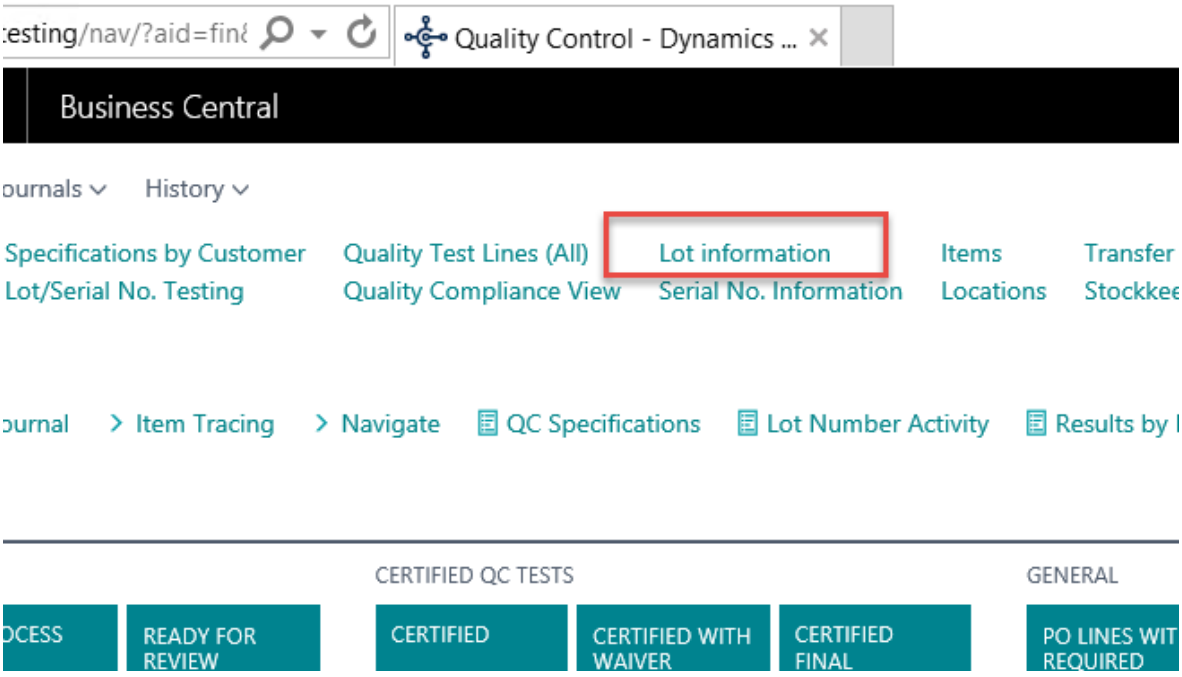
This enables you to select the Item Number that you want to Add/Change/or Delete the specifications to. Use the "QC Specs" button shown above to access the Spec Card.

3. From the Quality Control Menu, Specifications by Customer.

You will be presented a List of Customers who actually have Quality Specifications. From the "QC Specs" menu you can access their Specification Card(s). Notice the Sub-Form shows all the Customer's Items Specifications.

Use the "Item Specifications" to view that Customer's specific specifications.

7. **Lot Number Information**

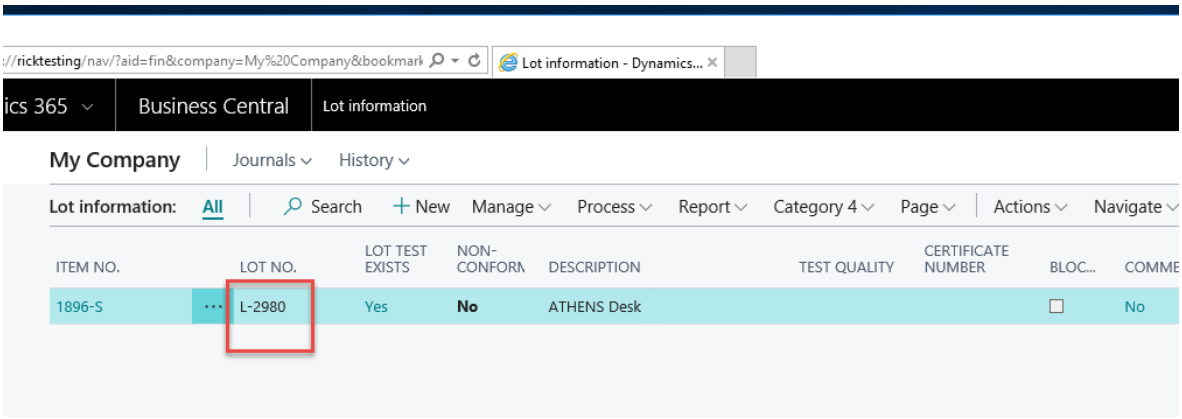


This is really not a setup area, but rather an automatically populated LOT MASTER Card. Each time you produce a new Finished Good Item and assign a LOT Number to the Production, this Card will be automatically updated. OR Each time you "Receive" an item into Inventory AND assign a LOT Number to the received item a Lot Number Information card will be set up.

Note: If you receive multiple times the SAME Lot Number there will only be one Lot Master. (One Card per Lot Number.)

Since the Quality Control Granule is built on testing of LOTS, this card will indicate with the "Lot Test Exists" indicator whether this LOT Number has been tested or not.

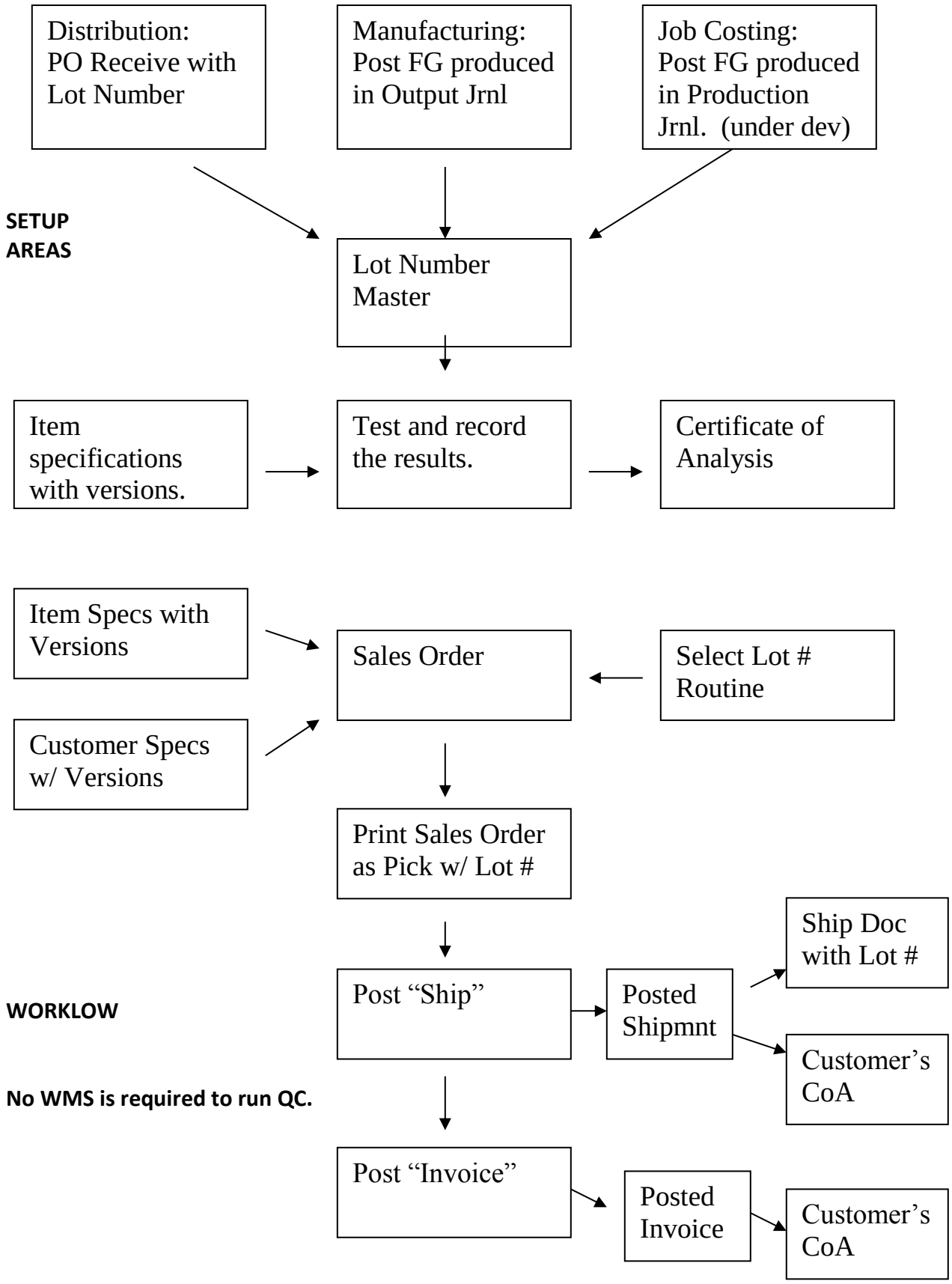
Options from the Lot No. menu:



You can access the associated “Item Tracking Entries”.

You can access Lot No. comments.

You can access any tests that have been performed on this Lot No. If it has not been tested yet, you can start a new test from the “Testing” menu choice.


Distribution: PO Receive with Lot Number
Manufacturing: Post FG produced in Output Jrnl
Job Costing: Post FG produced in Production Jrnl. (under dev)
SETUP AREAS
Lot Number Master
Item specifications with versions.
Test and record the results.
Certificate of Analysis
Item Specs with Versions
Customer Specs w/ Versions
Sales Order
Select Lot # Routine
Print Sales Order as Pick w/ Lot #
WORKLOW
Post "Ship"
Posted Shipmnt
Ship Doc with Lot #
Customer's CoA
No WMS is required to run QC.
Post "Invoice"
Posted Invoice
Customer's CoA

Security

Now Automatic Permissions with Microsoft Dynamics 365 Business Central!

Support

Congratulations on your purchase of Quality Control! We couldn't be more thrilled for you. Soon, you will be on your way to enjoying and utilizing the features and functionality of this product.

Cost Control Software sincerely appreciates your trust in our products.

Should you have any questions or comments regarding our product, we encourage you to contact us.

Cost Control Software provides many add-on products that may be just the solution you were looking for. Ask for a Catalog of our products. You may also check out our website to see available add-on products as well.

Visit: http://costcontrolsoftware.com/quality-control/ for more information.

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