# CNC Innovations, LLC

**Innovation** Driving Quality and Productivity

# Assembly And Inspection Tracker

Reduce Human Error

Fast-Track Operator Training

Ensure Process
Controls

Qualify Inspection Results

> Secure User Login

> Certify Part Acceptance

Maintain Full Audit Trails



Certify the Results



Torque to Spec



Hone Surfaces



View the Process



Verify Materials

#### PRODUCT SUMMARY

Assembly and Inspection Tracker is a component of CNC Innovations' family of Scripted Manufacturing solutions. It is designed to reduce human error and certify finish results by assisting production personnel in the execution of complex assembly and inspection processes. It can be configured to provide step-by-step assembly instructions or measurement criteria, all supplemented by up-to-date documents or videos. Completed tasks become part of the quality and audit trail associated with each operation. Additional add-on options allow for dynamic interaction with machines or automated inspection devices.

#### **REDUCE ERRORS**

As production or inspection methods become more complex, so does the likelihood of error. This is especially true for jobs that occur infrequently, or when the manufacturing process combines multiple resource vendors and, of course, when unskilled trainees are cycled through multiple shift changes.

To prevent errors and needless re-verification of completed tasks, Assembly and Inspection Tracker provides you a system of checks and balances that leads users through each step of a process. Whether the task involves assembly methods or complex inspection operations, each step can offer instructions, monitor status, record measurement results, and finally, save the information in a permanent quality and audit trail. When you control the process you control the outcome.

#### **FAST-TRACK to TRAINING**

Typically manufacturing operations take a bottom-up approach to develop qualified personnel. This means that employees start training on simpler jobs and begin a learning curve that may span several months or years. Assembly Tracker will fast-track training with step-by-step instructions tethered to diagrams, drawings, pictures or videos, and when each activity is measured against pre-defined criteria using go, no-go results, the entire process, and not the person, takes charge of certifying reproducible manufacturing standards.

#### **ENSURE PROCESS CONTROLS**

Assembly and Inspection Tracker consists of two modules. The first is a configuration program accessible only by authorized engineering personnel. This is where engineers and production managers define the operations, instructions, diagrams, and measurement criteria for each phase of the assembly or inspection process.

The second module is the user and tracking program. It is here where assemblers or technicians sign in and are presented with the pre-defined process methods. Additionally, bar coding and serial number tracking allows new users to begin operations precisely where previous operations ended. This is extremely valuable during shift changes, partial builds, or when non-conforming parts alter the build cycle.

To round out the system, automated inspection reports are tagged with user ID, as well as, date and time stamps for each completed sequence in the assembly or inspection process.

#### **QUALIFY INSPECTION RESULTS**

When used as an inspection tool, Assembly and Inspection Tracker will provide step-by-step notes, measurement values and verification prompts. Essential documents can also be tagged as "required" viewing. Measured values can be compared to preset Min/Max criteria to ensure compliance within specified dimensions. Should measured results fall outside the range of acceptable values, they are flagged and become a part of the inspection report.



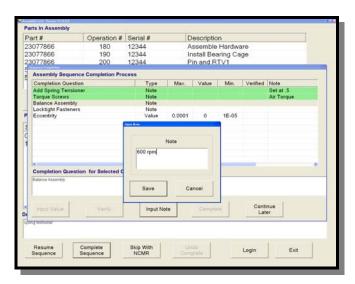
Ask about our optional add-on modules to automate readings from digital gauges and hand tools.

# **SECURE USER LOGIN**

To limit access to only authorized personnel, both the engineering and tracking module require a secure user login. At the assembly level every completed operation is tagged with the user's ID number. Additionally, to provide for minor/normal deviations, the technician may request a Non Conforming Materials Review (NCMR) to authorize or skip a particular section. Since the NCMR also requires a secure sign-off it guarantees that all operations will meet a minimum quality standard while keeping production and work flow from stagnating.

# **CERTIFY PART ACCEPTANCE**

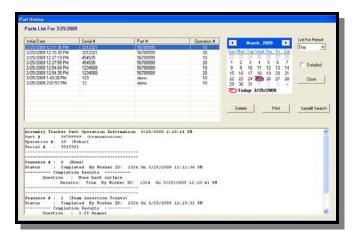
As individual parts are completed the technician has the option to print a hardcopy report that serves as a "build" or "inspection" certificate. The report is date and time stamped along with the worker ID number for every operation and sequence, as well as, all notes, verifications and measurements as recorded at each level of the process.



Never again overlook a single operation

## MAINTAIN FULL AUDIT TRAILS

Historic reports/documents are as essential to a job as the original sales order. For this reason, all reports are automatically archived in history for long term storage and easy retrieval. Completed jobs are listed by year, month or day and may be reviewed and printed from within the "secure" engineering module.



Easy Document Retrieval

## **SYSTEM REQUIREMENTS**

- Microsoft Data Access Components V2.8 or later
- Microsoft .Net Frameworks V1.1
- PC Workstation (Windows 2000 or above)
   Network Connection with shared folder
- Touch Screen Monitor (Recommended)
- Screen Resolution 1280 x 1024 or better
- Serial Bar Code Reader (Optional)