High QA Case Study: Chick Machine Co.

The Challenges

- Scaling the shop up from Industry 2.0 to Industry/Quality 4.0
- Meeting OEM and customer quality requirements
- Automating the creation of documents and reporting
- Satisfying customer's document submission requirements

The Solution

Chick Machine selected High QA's Inspection Manager as their all-in-one integrated quality management software solution.

Who is Chick Machine?

Chick Machine, located in a 35,000 square ft facility in Western Pennsylvania, is a single source supplier of precision products with complete in-house machining, surface finishing, and prototyping. With decades of experience working within highly specialized markets and a commitment to continuous improvement, their custom solutions help turn concepts into manufacturable products. To learn more visit https://chickmachine.com.

The Need for a Quality Management Solution

When Bob Petrini, President of Chick Machine, took over the business in 2017, his top priority was to not only maintain the current status-quo, but to exceed it.

As he settled in, Bob quickly realized that one area in particular required attention - the Quality process. Chick Machine had full capability to machine the parts, inspect the parts; but what was lacking was in automation and documentation.

Not only that, but parts were piling up. Bottlenecks were occurring. The team was being overworked, and tougher demands from customers and stringent Aerospace industry requirements, specifically around new product introductions, were making the situation worse.

Looking deeper into the process only uncovered additional problems. Quality documentation (mostly hand-written) was sometimes completed incorrectly and at the wrong time. The work was collected by final quality at the end of the process which equated to many parts having to be re-checked manually. Followed by hundreds of pages of pdf prints to summarize that were not saved and clearly were not customer friendly.
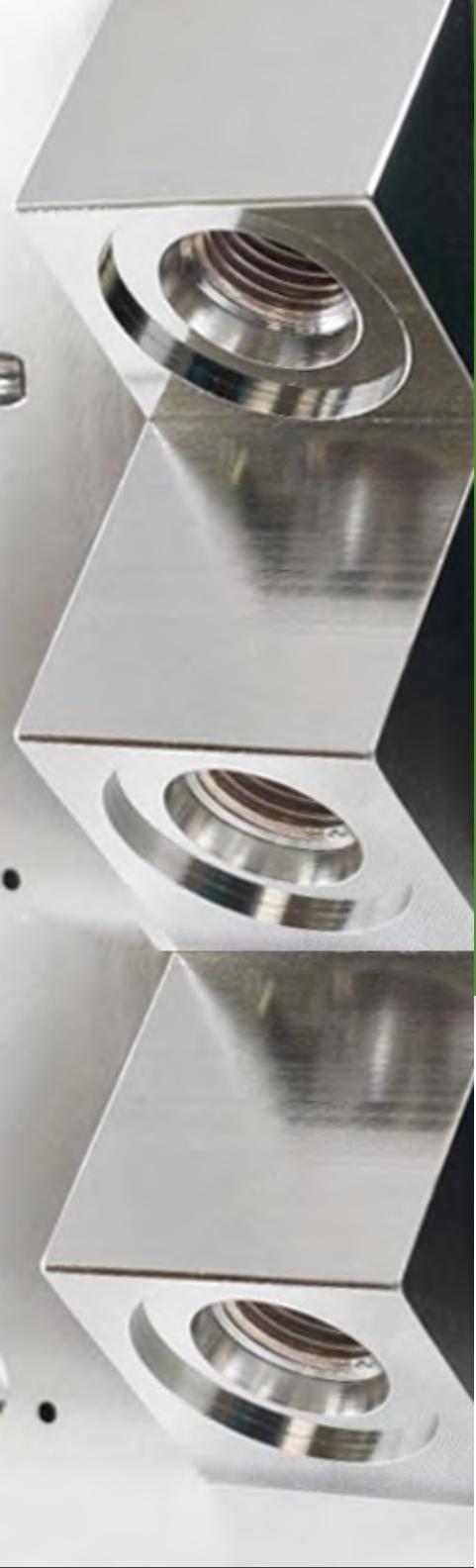
A process change needed to happen and happen fast!

Evaluating Quality Management Solutions

It was time to incorporate the help of a quality management software to automate and document the numerous tasks. With several solutions available on the market, the search began for key differentiators.

The auto-ballooning and automatic bill of characteristics features of High QA's Inspection Manager first caught the attention of Chick's Quality staff. The realization that the High QA solution was also fully integrated and could give immediate feedback - making it very user-friendly, fast and gave the ability to eliminate human errors, were the determining factors to move forward with High QA Inspection Manager.

Jacob Schurer, Quality Manager, at Chick Machine said, "As a Quality & Process Engineer at previous employers, I had seen similar software solutions. The main difference is that those software solutions would auto-balloon and have similar technology but they were still separated and divorced from other processes – such as data aggregation, manufacturing dimensions & tolerances or engineering, APQP etc. This separation made things slow, details would get missed. When I joined Chick Machine, I saw how integrated everything was using High QA, it is a true database solution. We are able to build an advanced quality plan all within High QA."

Listen to Jacob's audio clip here: Q&A: Why should you choose High QA over other products?

Better Quality with High QA

The move to High QA for quality not only gave Chick Machine automation but took the company from a de-centralized process to a centralized process.

Operating in a centralized environment means that they can now make it once – and make it well. Templates and documentation can be stored and re-used and also shared dynamically with team members or customers.

High QA is more than a product for Chick Machine, it is a culture. Every release production order at Chick goes through a High QA planning process that includes ballooned prints, bill of characteristics, verified tolerances, defined methods of measurement and a complete list of in-house gauges. Next is defining the frequency, and the job is released to the floor. Inspection Manager enables the machinist to measure and input the data.

Driving quality to the machine.

"Inspection Manager enables us to drive quality to the machine seamlessly and deliver process control."
                                                                        - Jacob Schurer

"High QA Inspection Manager gives us the ability for higher throughput and better data both for us internally and for our customers."
                                                                        - Bob Petrini

HIGH QA
HIGH QUALITY AUTOMATION

www.highqa.com

info@highqa.com

888-727-1266

The Evolution of Quality for Chick Machine

The Old Way:
Without High QA Inspection Manager

- Bottlenecks
- Lacked inspection planning, control over measurement & data
- Machinists had too much autonomy for how and what to measure
- Measurements kept in islands of data
- No aggregate to identify trends, min & max, and key metrics
- Inconsistent dimension labeling
- Inspection data not always captured in-process (often in final inspection phase)
- Hand-written or Excel
- Not scalable
- Error-prone
- Dimensional reports were a stand-alone project
- No templates to re-use
- De-centralized process

The New Way:
With High QA Inspection Manager

- Automation
- Centralized process
- Scalable
- No time wasted interpreting or cross-referencing
- No hand-written documentation
- No Excel!
- Standardized feature naming
- Large volumes of measurements do not require huge time investments
- No bottlenecks
- Stores all quality plans, data and reports in an integrated centralized database
- Meet AS9102 requirements
- Ability for higher throughput and better data internally & externally
- Happy customers!

Listen to the full Chick Machine Quality 4.0 story in this on-demand webinar:

Quality 4.0 Webinar
March 25, 2021 - YouTube