

Aerospace Manufacturer Experiences Exponential Growth

Industry

Sheet metal manufacturer

Challenge

Recruiting and retaining quality talent in a highly competitive market

Solution

Choosing the right MES provider, ShopVue

Results

A 20 to 1 return on every invested dollar 25% reduction in overtime hours Millions of dollars saved each year Headquartered in Kent, WA (just outside Seattle), Exotic Metals Forming, a division of Parker Hannifin, specializes in the design and manufacture of complex sheet metal fabrications.

Manufacturing Space Growth Up 450%

The company's manufacturing space has grown from just under 200,000 sq. ft. to over 900,000 sq. ft. spanning seven buildings.

Increase in Equipment

Investment in capital equipment has followed; for example, Exotic now owns and operates more CNC lasers than anyone else in North America.

300% Workforce Growth

During this same period, its workforce has grown from 450 full-time employees to over 1,400, and they are planning to hire another 200 full-time employees.

"We have a world-class, state-of-the-art manufacturing facility, but we had old green screens for the production workers. The shop floor data collection and time and attendance systems were on three different databases and heavily reliant on paper processes. It was archaic and hurting us in recruiting and retention. And, we needed better visibility into our shop floor performance and the real-time ability to manage production."

Jeff Eaton

Challenge

Recruiting & Retaining Quality Talent in a Highly Competitive Market

With explosive growth came several challenges; namely:

An Underdeveloped Workforce

Two-thirds of Exotic employees have worked for the company for less than five years.

A Competitive Talent Market

Exotic operates in a thriving and highly competitive market with Amazon, Google, Microsoft, Blue Origin, and others headquartered nearby. Thus, attracting and retaining bright, highly trained, skilled employees is critical in an industry where manufacturing tolerances are incredibly challenging.

Solution

"Exotic needed a real-time, modular, manufacturing execution system (MES) that would give management better visibility, flexibility, and control, while also giving our team members on the shop floor all the information they need at their fingertips," added Eaton.

Exotic selected ShopVue as its full-suite MES provider, and opted to configure and implement five key modules:

- 1. Comprehensive Time and Attendance
- 2. Shop Activity/Labor, labor-management including employee certifications
- 3. Direct Machine Interface, to connect to and monitor essential resources
- 4. Graphical Sequencing, to effectively schedule the factory
- 5. Management Reporting, for real-time information

Per Eaton, ShopVue stood out as the best solution for Exotic for two reasons. For starters, "ShopVue's experience in manufacturing is exceptional; they know what works, what does not and could deliver a solution that met our demands and very high standards." And secondly, "ShopVue's support is the best of any software company we work with. No other company is even close."

Results

Today, all Exotic shop floor employees, supervisors and management have real-time access into all attendance, labor and performance metrics via ShopVue. The system automatically manages Exotic's policies, and the company has eliminated multiple systems and databases and allowed for the re-allocation of numerous employees. Furthermore, supervisors can control production by dispatching worklists on the fly to machines and operators.

ShopVue helped improve Exotic's operations in two key ways:

Improved Labor Efficiency

Everyone spends less time reporting but has real-time access to more accurate labor data. Every employee uses ShopVue for attendance, and all paper-based processes or custom applications have been eliminated. Daily tasks of managing absences, reviewing, editing and approving time and labor transactions are more straight-forward, timelier, and user-friendly for supervisors.

Additionally, ShopVue offers pragmatic solutions to everyday situations. For example, if an employee forgets their badge, they have real-time access to a list of covering supervisors and their phone numbers, eliminating the production time lost due to an employee wandering from building to building to find a supervisor to assign atemporary badge.

Higher Machine Utilization

Paperless Dispatch eliminates the 'cherry-picking' of work. Operators are presented with a prioritized worklist for the shift, and the Graphical Sequencer enables supervisors to expedite 'hot' orders and quickly adjust the production schedule by machine or work center. Supervisors get instant feedback on parts per hour or per shift, efficiency metrics, and they even get an alert if the machine is 'down' for more than a fixed amount of time.

ShopVue also independently collects machine time and labor time. For example, Exotic has some engineering processes requiring 40 hours of machine time, and only two hours of labor. With ShopVue, Exotic now quickly reports on both metrics.

