# **Rapid Hawk Solves Ergonomic Challenges For Operators At Manufacturing Facility**



# **QUICK SUMMARY**

#### The Challenge

- Concerned about equipment's poor ergonomic standards causing employee injuries.
- · Complicated scheduling to maintain enough operators for job rotation.
- Dissatisfied with current vendor tool life and customer support.

#### The Solution

• Trialed an Elliott Rapid Hawk, an electrically-driven mechanical tube rolling system.

#### The Results

- Relieves the force of the torgue from operators and fixes all their problems with ergonomics
- · Simplifies scheduling, which saves time and allows managers to focus on other important tasks Improved productivity.
- · Elliott's expanders last longer than Airetool and Elliott's mandrels are not snapping in the tubes.

### The Challenge

The manufacturer with the widest chiller solution and service portfolio in the world was working to overcome some challenges. Their main concern was regarding their employee's health. The operators were using high-powered, pistol-type arip tooling day in and day out. The repetitive use of the equipment contributed to a few employees being diagnosed with carpal tunnel syndrome and led to a few other employees with early symptoms of carpal tunnel syndrome. The Sr Manufacturing and Environmental Engineer, stated, "Obviously the company and myself wanted

employee's health and well-being."

One of the things the manufacturer is doing to avoid any injury to their employees was scheduling enough people to be able to rotate job duties throughout a shift. This helps to make sure operators are doing a minimal amount of repetitive motion work and ensures their health. The scheduler more closely reviewed the staffing needs and operators changed to different jobs throughout the shift.

to make immediate changes to ensure our Lastly, they were also having some challenges with their current vendor, Airetool. They were not satisfied with Airetool's tool life, customer support or responsiveness. The Sr Manufacturing and Environmental Engineer noted that Airetool's Field Service Representative was not up to the standards he was expecting. Also, when the manufacturer had problems with Airetool's mandrels snapping off in the tubes, they were not satisfied with Airetool's responsiveness.



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# The Solution

The manufacturer trialed an Elliott Rapid Hawk, an electrically-driven mechanical tube rolling system, in order to test its ergonomic and productivity improvements on their day-to-day work.

The vessels they fabricate are very difficult to produce. Therefore, the testing and decision-making process required for them to obtain the approval to purchase a Rapid Hawk was very extensive. The process lasted 6 months and included rigorous research, product demos, hydrostatic leak testing, and proven documentation on ergonomic improvement to ensure the Rapid Hawk was the best system for the job.

Service and support is a key component in the solution for them. Dave Bradley, an Elliott Local Representative, assists the Sr Manufacturing and Environmental Engineer with his tube tool needs. He was there throughout the testing, purchase and use of the Rapid Hawk. Dave is frequently on site supporting the manufacturing facility with their application challenges.

## **The Results**

The Sr Manufacturing and Environmental Engineer and the operators are amazed at the difference the Rapid Hawk has made in improving the ergonomics of the rolling process and absorbing the torque from the motor. "The articulated arm of the Rapid Hawk relieved the force of the torque from our operators and fixed all our problems with ergonomics. The operators love it," he stated. They are very favorable toward using the Rapid Hawk and prefer using it over any other method.

Because it is no longer necessary for operators to switch jobs throughout their shift, scheduling has been simplified, saving time and allowing managers to focus on other important tasks.

Both tool life and customer service has been improved. Elliott's expanders lasted longer than Airetool and Elliott's mandrels are not snapping in the tubes. The Sr Manufacturing and Environmental Engineer, stated, "Dave Bradley is fabulous. His responsiveness to our needs and challenges is great for our busy and challenging work. We can say 'We need you now.' and he is typically there the same day."

Elliott's Rapid Hawk, combined with Elliott's high quality tooling and customer service is the right fit for the manufacturing facility and they have purchased a second system. The improvements in ergonomic operation, simplified scheduling, tool life and customer service have helped the Sr Manufacturing and Environmental Engineer, and his team more efficiently meet the needs of their customers.