VelocityEHS®

Customer Success Story

Small Changes Yield Huge Safety Improvements

Hitachi's incidence of neck and back injuries plummeted by 95% – as did costs to the company.

HITACHI

A Large Manufacturer with Overstretched Health and Safety Personnel

Hitachi Energy, a major manufacturer in the power industry, produces electrical equipment and provides electrification solutions across the globe.

Like many manufacturing businesses, Hitachi Energy has long had measures in place to help mitigate health and safety risks within its factories. The company performs routine physical demands analyses for front-line workers, for example, and it employs teams that specialize in ergonomics as well as health and safety professionals to oversee job site safety.

However, like many manufacturers, Hitachi Energy has long struggled to scale safety operations to meet the needs of its expansive workforce and complex production processes. "We are just one small team serving a 13-acre facility," notes Megan Sommerer, Health Integration Specialist, TR North America, at Hitachi Energy's plant in Jefferson City, Missouri. "We can only do so much when we do it manually."

Sommerer, who is also a registered nurse, adds that the ergonomic specialist who supports her site can only devote four hours a week to the location—hardly enough to optimize ergonomics strategy and investments using a manual, hands-on approach.

"We were meeting basic requirements, but we needed more focus," she says. "As a team, we decided we needed to develop our ergonomic program further."

Scaling Ergonomic Safety Investments

Recognizing this challenge, Sommerer and her team set out in the early 2020s to develop a strategy that would maximize the impact of ergonomic safety protections at Hitachi's Jefferson City location. Their goal was to identify which ergonomic challenges posed the greatest risk to workers and the company, then implement process changes that would deliver the largest benefit with the least investment of time, money and resources.

To that end, they began researching software platforms that can automatically collect and analyze ergonomic data in the workplace. A priority was to find a solution that could accommodate Hitachi Energy's broad range of workplace safety needs, while also scaling over time to help manage safety practices not just at the Jefferson City plant, but across their North America portfolio and, eventually, the globe.

"We knew we didn't want to settle for a solution we'd grow out of," Sommerer said. "It's important to know which problem you are trying to solve, then choose the right tool to solve it."

After evaluating different options, the team selected VelocityEHS Industrial Ergonomics software, which they fully rolled out in 2023.

Small Investments Deliver Major Safety Boosts

VelocityEHS helped Hitachi's Jefferson City plant analyze workplace safety incidents and determine which process changes would yield the greatest improvements. But actually implementing changes required participation from other stakeholders. "I'm a nurse—I can't change engineering processes on my own," Sommerer says.

For that reason, Sommerer assembled a committee of engineers, machine operators and safety professionals to help tackle the challenge. Collaboratively, the group planned and deployed changes on the factory floor to reduce risk, with a focus on making small, simple modifications that would yield large results.

For instance, the committee learned that operators were using a custom metal hole punch they had made because they couldn't source cable terminals from a supplier in the appropriate size. Originally, operators applied the heavy punch manually, placing substantial strain on their arms and backs. With guidance from the committee Sommerer created, the punch was modified to operate hydraulically. This small change, which cost about $1,000 to implement, reduced risks associated with operating the punch by 83.4 percent, according to data tracked by the ergonomics team.

Similarly, the team redesigned operator workstations based on insights gleaned through VelocityEHS. For example, operators who needed to reach inside transformers during the manufacturing process received redesigned lifts that placed them slightly closer to the parts they worked on, reducing back and neck strain.

Keeping Workers Safety and Costs In Check

The improvements that the committee implemented following Hitachi's adoption of VelocityEHS substantially reduced the incidence of shoulder and lower back injuries by nearly 95%. Costs associated with these injuries also plummeted. Within two years of the platform's adoption, the total cost of injuries in this category had fallen to a tiny fraction of previous levels.

The changes proved so successful that Hitachi Energy rolled out VelocityEHS Industrial Ergonomics software and the changes recommended by the Jefferson City ergonomics committee to the company's seven other North American manufacturing sites. It now has plans to bring them to plants in Europe and South America as well.

In addition, the company aims to place VelocityEHS directly in the hands of operators—something that was not possible previously because most operators lacked computer access on the job site. By allowing front-line workers to interact directly with safety data, Sommerer and her colleagues hope to scale safety processes even further—and to empower more staff members to identify and act on opportunities for improving workplace safety.

Call Us Today
Toll Free: 1.866.919.7922
Or visit us online at: www.EHS.com

VelocityEHS — Let's Drive the World Forward, Together.