Robotic Collaboration: Humans + Machines Safely Working Together Fatality File

Alabama auto parts supplier to Kia and Hyundai, staffing agencies face $2.5M in fines after robot fatally crushes young bride-to-be

What Happened

On June 18, 2016, 20-year-old Regina Allen Elsea was working at Ajin USA's auto parts manufacturing plant in Cusseta, Alabama when the assembly line stopped. She and three coworkers entered a robotic station to clear a sensor fault – a task that required them to physically enter the robot's work envelope. The robot restarted abruptly. Regina was crushed to death inside the machine. She died two weeks before her planned wedding day. An administrative law judge upheld the majority of OSHA's citations in February 2023, and the company was ordered to pay $500,000 in fines and $1 million in restitution to her estate after pleading guilty to a willful OSHA violation.

What Went Wrong

OSHA cited Ajin USA for 23 willful, serious and other-than-serious violations, including 19 egregious instance-by-instance willful violations, for failing to utilize energy control procedures to prevent machinery from starting up during maintenance and for allowing workers to enter a robotic cell without de-energizing and securing hazardous stored energy. The company took shortcuts to minimize downtime and maintain production. Two staffing agencies that supplied workers to the plant were also cited. "Failing to lock out equipment causes far too many serious injuries and deaths," said OSHA Regional Administrator Kurt Petermeyer. "In this case, a young woman lost her life because her employer took shortcuts to minimize downtime and maintain production."

The Bottom Line

A robot restarted while a worker was inside it. The procedure to prevent that restart existed. It was not followed. Every time a worker enters a robotic work envelope – to clear a fault, perform maintenance, or investigate a stoppage – that machine must be fully de-energized and locked out before anyone steps inside. A paused robot is not a safe robot.

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