

21. Crushed

A **54-year-old** Japanese employee of a subcontractor died when he was caught between a conveyor line and a gripper on a gantry crane. The victim was working on an automated machine making adjustments while installing and programming the software for the new machine. All safety guards were in place but the victim bypassed the guards to install the machine. Part of the machine was a robotic arm (gantry gripper) which was designed to pick up the manufactured part off a pallet on a conveyor when the pallet reached a specific sensor. The victim began adjusting the machine using a dry-run mode which allows the machine to run full cycles without product or a pallet being in the machine. All interlocks were bypassed and the doors to the machine were open. He attempted to adjust the air line for the pallet sensor which, when activated, causes the gantry gripper to cycle. The gantry gripper was in the “home” position directly above where a pallet would normally be if one were present. While adjusting the air line, he accidentally engaged the sensor causing the gantry to act as if a pallet were in place and cycle to pick up a part from the conveyor. The victim was pinned and crushed between the gantry and the conveyor. The injuries were fatal.

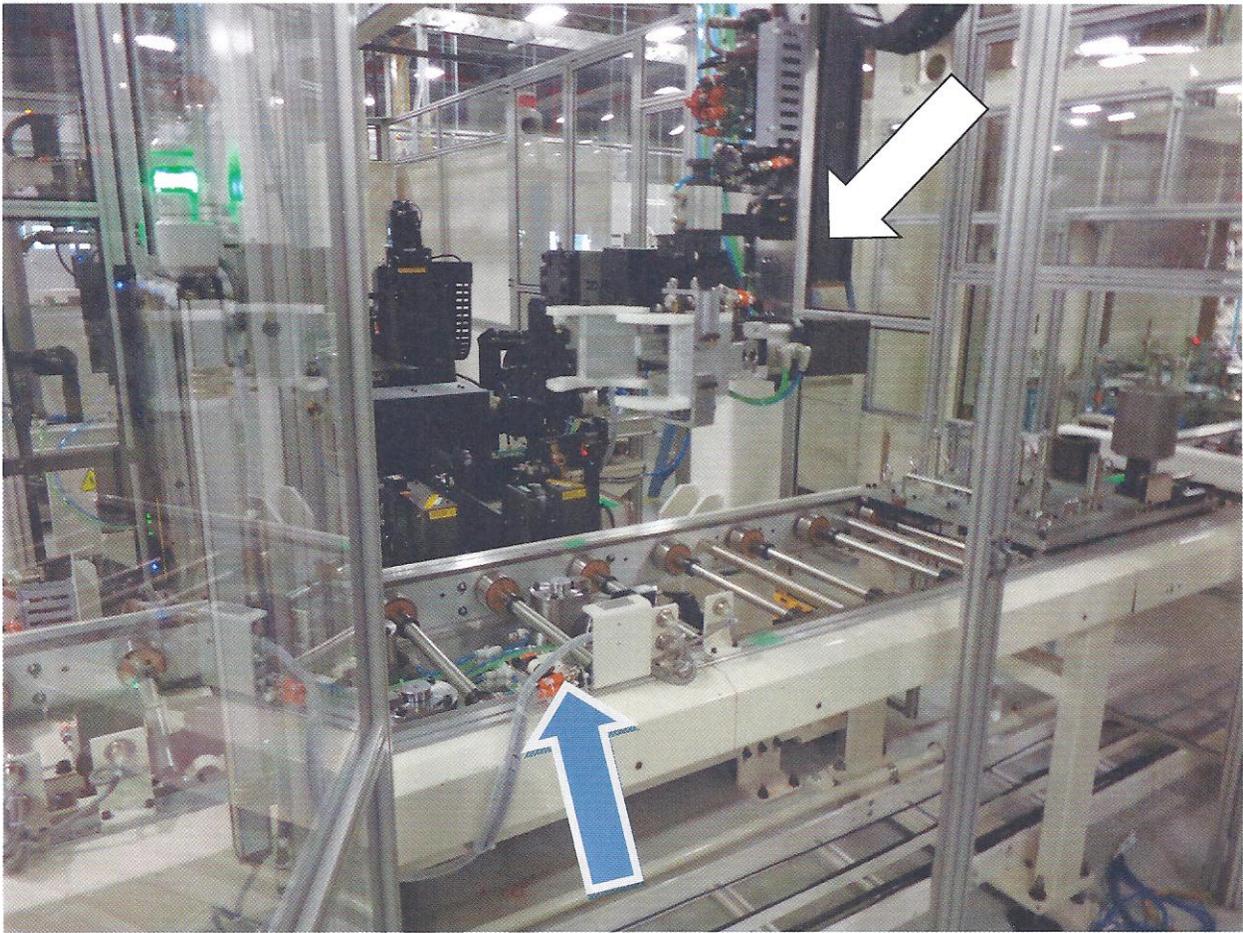
Citations as Originally Issued

A complete inspection was conducted of the worksite. Thus, some of the items cited may not directly relate to the fatality

Citation 1

Item 1a 1910.147(c)(1)	The employer did not establish a program consisting of an energy control procedure and employee training to ensure that before any employee performed any servicing or maintenance on a machine or equipment where the unexpected energizing, start up, or release of stored energy could occur and cause injury, the machine would be isolated and rendered inoperative.
Item 1b 1910.147(c)(4)(i)	Procedures were not developed, documented, and utilized for control of potentially hazardous energy.
Item 1c 1910.147(c)(7)(i)	The employer did not provide adequate training to ensure that the purpose and function of the energy control program was understood by employees.
Item 2 1910.147(d)(4)(i)	Lockout or tagout devices were not affixed to each energy isolating device by authorized employees.

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The white arrow indicated the gantry by which the employee was crushed. The blue arrow indicated the location of the pallet sensor and where the employee was working when he was pinned.