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Casting a Solution for **FOOTBALL?**



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Metalcaster Reduces Equipment Downtime With Safety Mat

To protect employees operating its molding machine, Atek Metal Technologies, Eden Prairie, Minnesota, used a steel plate that sat on 4-in. springs designed to shut down the machine when an employee stepped on the plate. That plate would compress the springs onto four limit switches wired to a safety mat control unit, which would stop the molding machine immediately. However, over time the steel plates became warped and the springs would stick, forcing employees to adjust the limit switches after compression in order to make the molding machine run again.

“Consistency was a problem with the old system,” said Joel Stravers, maintenance supervisor, Atek Metal Technologies. “We lost valuable time constantly adjusting the limit switches so they would create contact with the plate and get the machine running again.”

Safety was a major concern for the aluminum permanent mold casting company. If a worker stepped on the steel plate, but the

switch didn’t engage, the worker could be seriously injured.

“We were fortunate to never have an employee injured by the molding machine, but we knew we needed a safer option,” Stravers said.

In late 2015, the company turned to Atek Access Technologies for its Larco industrial safety mat and safety controller. Larco industrial safety mats require 5-10 lbs. for activation in normal foot traffic. If an operator steps on the Larco mat, the control unit signals the molding machine to stop, even if it is in the middle of the cycle.

If the operator steps off the mat, they can press the reset button and then the start button to engage the machine. If they’re standing on the mat and manually try to start the machine, the machine will not start, reducing the risk of injury.

“We looked into using light curtains and lasers, as well as other types of limit switches, but none gave us the flexibility and durability that the Larco industrial safety mat does,” Stravers said. “The Larco mat

holds up to the heat, dust and dirt in the foundry.”

Since installing the Larco industrial safety mat, Atek Metal Technologies has realized numerous benefits.

“We’ve been able to dramatically reduce equipment downtime, saving valuable maintenance hours,” Stravers said.

ATEK Metal Technologies has also enhanced employee safety at the molding machine point-of-operation. If an employee is standing on the Larco mat, the machine will not run, reducing the risk of injury.

“Our main goal was to improve safety, and the Larco industrial mat provides the consistency we were missing,” Stravers said. “Thanks to the durability of the Larco mat, our employees never have to worry about the molding machine engaging while they’re standing on the mat.”

ATEK Metal Technologies plans to install 22 additional Larco industrial safety mats on its 11 other molding machines in 2016. **MC**



Atek Metal Technologies produces aluminum castings via the permanent mold process.



Atek Metal Technologies replaced steel pads utilizing spring triggers (left) with Larco safety mats designed to activate under 5 to 10 lbs. of pressure.