

Success Story: Haeger, Inc.

Market Served:
Hardware insertion

"Haeger has relied on the engineering and cylinder production team at Eaton's White City, Oregon, plant for nearly 20 years. Our requirement for zero leakage on the rod end seal is absolute, and the Eaton team has developed the manufacturing and testing capabilities to consistently meet and exceed our expectations, no matter what cylinder configuration is required."

Thomas C. (T.C.) Boster, Haeger senior manufacturing engineer

Eaton Cylinders Are No Pushover on Haeger Machinery

Location:

Oakdale, California

Segment:

Manufacturing: hardware insertion

Challenge:

Numerous cylinder requirements, including a sealing system with zero leakage

Solution:

Custom cylinder expertise of Eaton's White City, Oregon, plant

Results:

Eaton cylinders are standard

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Background

For over 20 years, Eaton hydraulic cylinders have been staples at Haeger, Inc. of Oakdale, California. They are critical components on Haeger machines and tooling systems that insert all types and sizes of self-clinching fasteners.

Whether it's used to insert a nut into a battery terminal or standoffs into electronic boards for LCD televisions, each Haeger hardware insertion machine is equipped with a robust Eaton cylinder. The highly customized cylinder pushes nuts, studs, or standoffs into place with literally tons of ram force.

Challenge

Haeger's business has evolved over the past two decades as customers require "pick and push" machinery with more automation and more complex processors to increase throughput, decrease

setup time, improve quality, or achieve other benefits.

Among its innovations is a unique safety sensor that is attached to the end of the cylinder rod. In the event that an operator's hands or fingers come in contact with the sensor, the machine immediately retracts, preventing any injuries.

Eaton's John Kostyal, area sales manager, and the Sacramento, California, branch of Berendsen Fluid Power, an Eaton products distributor, have been Haeger's go-to cylinder experts when its ever-evolving hardware insertion machines call for new cylinder requirements. Such was the case when the safety sensor came into play, Kostyal says.

"The cylinder required a special rod end on which to mount the sensor, as well as a sealing system to meet the customer's zero-leakage requirement. Other requirements included a double rod end, a non-rotating rod, threaded tail rod to

ensure a positive stop, and an extended tie-rod mount."

Solution

Kostyal immediately joined forces with engineers at Eaton's White City, Oregon, plant, which specializes in custom cylinder production. Soon an NFPA tie-rod cylinder was on the drawing board that would offer 3,000-psi performance and meet Haeger's size requirements.

Results

Following testing to ensure the cylinder design met 24/7 performance requirements, Haeger endorsed the cylinder for its hardware insertion machines.

Reliable performance has made Eaton cylinders standard at Haeger, says Thomas C. (T.C.) Boster, senior manufacturing engineer at Haeger.

"Haeger has relied on the engineering and cylinder production team at Eaton's White City, Oregon, plant for nearly 20 years," Boster says.

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Custom Eaton NFPA tie-rod cylinders provide the force to enable Haeger hardware insertion machines to push fasteners into place.

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