

A CUT ABOVE

To remain competitive in a global market, you need to offer value and service. HE&M Saw of Pryor, Oklahoma does just that. We spoke with Chief Engineer Maxwell Harris about competition from overseas, the effect of artificial intelligence (AI) on the industry, and what it means to be family-run and owned.

HE&M[®] SAW
 — The saw that cuts straight. —



HE&M Saw - VT120HA-60-CTS

Written by Mark Golombek

HE&M Saw started as an engineering firm in California, specializing in customized machinery. Then, the company began making bar feeds for other companies' band-saws. The owner saw an opportunity to make a better band-saw, and through that process, the company became the HE&M of today.

"We began with a small, half-inch band machine and methodically worked our way into the late seventies and early eighties when we endeavored to make larger equipment. Now we manufacture an eighty-inch by eighty-inch capacity machine," says Maxwell.

Along with this equipment, HE&M makes customized and non-standard machine products. Because it is vertically integrated, HE&M controls the process from start to finish.

Being family-run has allowed it to reinvest and continually strive to be at the forefront of the industry. It is engineering and technology focused, and being American-made is crucial to making quality products. The company also ensures that customers have the necessary support on both the engineering side and with service out in the field.

"Just because a customer gives us a problem to solve, doesn't mean when they receive the equipment, our job ends. That is when our job begins," says Maxwell.

The aim is to make sure the machine is meeting customers' needs and is holding up to the design criteria. Beyond that, HE&M wants to support a machine for fifteen to twenty years.

Unlike many its competitors which import individual components or have gone overseas for band manufacture, HE&M tries to make certain that all its components are designed to be replaceable. Everything is designed for a twenty-year lifespan.

The movement toward more information exchange and automation in manufacturing has been given the name Industry 4.0.

A huge component of Industry 4.0 is about having the data to make business decisions.

"There are two different terms for Industry 4.0. The standard American spelling of it, which talks about data and about making informed decisions. Then there is the Industrie 4.0 with the German spelling of the word that speaks to being fluid and able to operate and run quantities and lot sizes, anywhere from a lot size of one to a lot size of two thousand parts," explains Maxwell. In the German model, the aim is to be able to adjust on the fly to changes in demands.

Industry 4.0 relies on manufacturing standards like MTConnect, which lays out how to retrieve process information from machines. MTConnect is an open source standard for communication and data. It is used today to improve process flow from start to finish, but more importantly, it permits the machine to give information on the current status of the equipment.

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HE&M is starting to see more of the computer-numeric control (CNC) machine manufacturers supply MTConnect and other data gathering techniques allowing people to apply Industry 4.0. HE&M wanted to be the first band-saw manufacturer to supply methods that customers can use to gather data.

"The band-saw may seem like a simple machine, but it is critical because it is the first process for a lot of parts. Due to that, if it



HE&M Saw - H220HA-DC-CTS

