



Higher order

All-electric technology gives fabricators energy efficiency, higher speeds and greater accuracy while reducing costs

Declining costs and versatile new technologies in hardware and software are making it easier for more job shops and manufacturers to embrace IoT and IIoT—even those with legacy equipment. Boschert USA took a different approach when it introduced a new line of servo-electric press brakes in late 2019.

“When you look at a press brake, what are the issues?” says Boschert USA President Greg Hoesly. The Butler, Wisconsin-based company is the exclusive North American importer for Boschert-Gizelis as well as Boschert

GmbH of Germany and other European builders with products that include profile benders, horizontal ram benders and sheet metal fabrication tools.

Going green

“People want to reduce costs, use less electricity, gain higher speeds and greater accuracy,” says Hoesly. “At the end of the day, people want more uptime and more productivity. The ElectroBend is a big step in that direction.”

The all-electric press brake is the latest “coordinate” on a trajectory that began with the manually operated cornice

brake patented in 1882 and has evolved into mechanical, hydromechanical and hydraulic models.

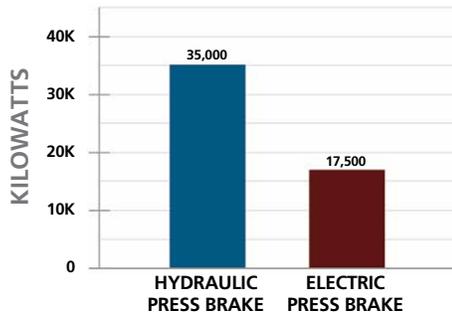
“A major feature about electric press brakes is that they are much more environmentally friendly than hydraulic machines,” Hoesly says.

A conventional press brake uses motors that rotate continuously and circulate oil via a pump to produce the hydraulic power needed to perform bending.

“With an electric press brake, an operator doesn’t have to worry about what to do when the oil loses viscosity,” Hoesly continues. “There are no leaks. A job shop

YEARLY ENERGY CONSUMPTION

12 HOURS/DAY, 5 DAYS/WEEK



Source: Boschert USA

doesn't have to take up real estate buying and stocking oil. And disposal of used oil can be costly because no one wants it."

Although electric press brakes provide a cleaner, safer working environment, Hoesly notes that a higher price tag for the green technology was a hurdle Boschert-Gizelis wanted to overcome with the ElectroBend.

The price is right

"We've heard job shops say, 'Electric is cool but hydraulic can get me there for 30 percent less,'" Hoesly says. "We were able to tell people, 'Here's the technology you have been looking for at a cost point that is more comfortable.'"

Boschert sold an ElectroBend 5-axis 110-ton, 10-ft. press brake at Fabtech to a Chicago-based manufacturer. "They had a lot of legacy equipment," says Hoesly. "It was a huge change for them. They told us 'We're not used to making a good part the first time.' They saw an immediate hike in their productivity."

The 5-axis designation means an operator can control stroke and back gauge four different ways. Operational and maintenance costs on the ElectroBend are low, but ram speeds outperform other press brake models on the market. Up to 50 percent more energy efficient than a hydraulic press brake, the ElectroBend's cycle times are up to 35 percent faster. The machine's rigid O-frame ensures minimum deformation even at full load.

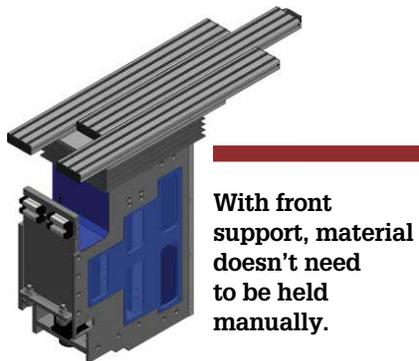
Lazarsafe RapidBend patented technology allows tools to close in high speed until the punch reaches the material surface. The ElectroBend's servo motors can change direction almost instantly, reducing cycle time for each bend. Two windings inside the motor—one for high

“ ElectroBend is the technology job shops have [sought] at a cost point that is more comfortable. ”

Greg Hoesly, Boschert USA



1. The front support system provides easy horizontal adjustment across a front rail.
2. Heavy-duty geared servo drive operates the back gauge and delivers multi-access accuracy.
3. The front support provides perfect alignment with tooling and back gauge.
4. Heavy-duty geared servo drive provides accuracy, rigidity and low maintenance.



torque at low rpm needed to bend material and one for high rpm with low torque for the non-bending movement of the ram—make cycle times faster.

In keeping with a digitized landscape, an app allows fabricators to monitor the ElectroBend remotely. Information is collected in an SQML database, which can be accessed by a company's ERP system for real-time intel.

Tailor-made

"We also provide service and support re-

motely, but we understand that while this type of connectivity can be more efficient with less down time, there is also a need to be vigilant in regard to cybersecurity," Hoesly says. "We're working closely with customers around the world to meet their needs while protecting their internet access."

Boschert relies on its experience and engineering know-how to stay a step ahead of the marketplace. "We've been importing European machinery for more than four decades," he says. "We don't have cookie-cutter models. We provide tailored solutions. Expensive doesn't mean better technology. We think we offer the whole package."

And Boschert isn't resting on its laurels with its new ElectroBend line. "We can't generate enough tonnage yet to totally get rid of hydraulic machines, but we're working on it," says Hoesly. **FFJ**

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