

# A Quick-Ship Prototype/Fabrication Plan

Flexibility, speed, accuracy and energy efficiency to boot—this Illinois OEM upgrades its inhouse metal-fabrication capabilities on the backs of new servo-electric punching and bending equipment.

Jamco Products Inc., South Beloit, IL, manufactures fully welded, heavy-duty industrial-grade products—carts, cabinets, workbenches, work tables and safety cabinets covering most material-handling needs. The firm fabricates more than 500 standard models, and offers customized products, from steel and stainless steel.

Founded in 1996 in Rockford, IL, Jamco originally built a line of industrial forklift attachments, and then evolved into building industrial carts. Business has boomed, exemplified by seven facility expansions during the past 14 years. Each year the company has averaged 20 to 30 percent growth.

Today, 100 Jamco employees manufacture its products from three facilities (160,000 sq. ft. total) in the South Beloit area.

According to Jason Redmon, vice president, engineering, deliveries historically throughout the industry for these products had been four to six weeks.

“Jamco brought to the industry what we call a quick-ship program,” Redmon says, “where customers can order any one of the models from our catalog with different configurations. There are thousands of SKUs in the catalog—customers can order any one of these SKUs in small quantities and we will

build and ship it in five days.”

Jamco fabricates mostly carbon steel and some stainless steel for its products, focusing its efforts on manufacturing the heaviest-duty products in the market. Says Redmon:

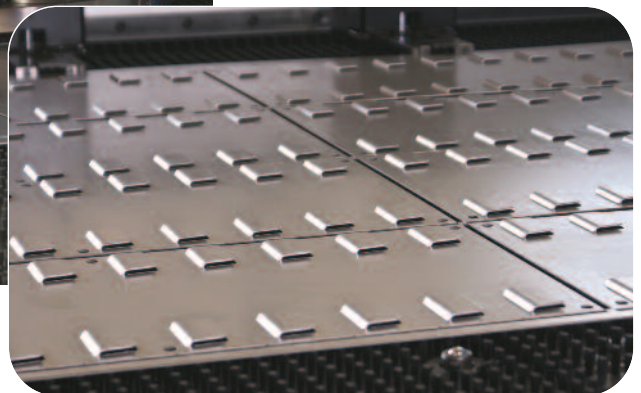
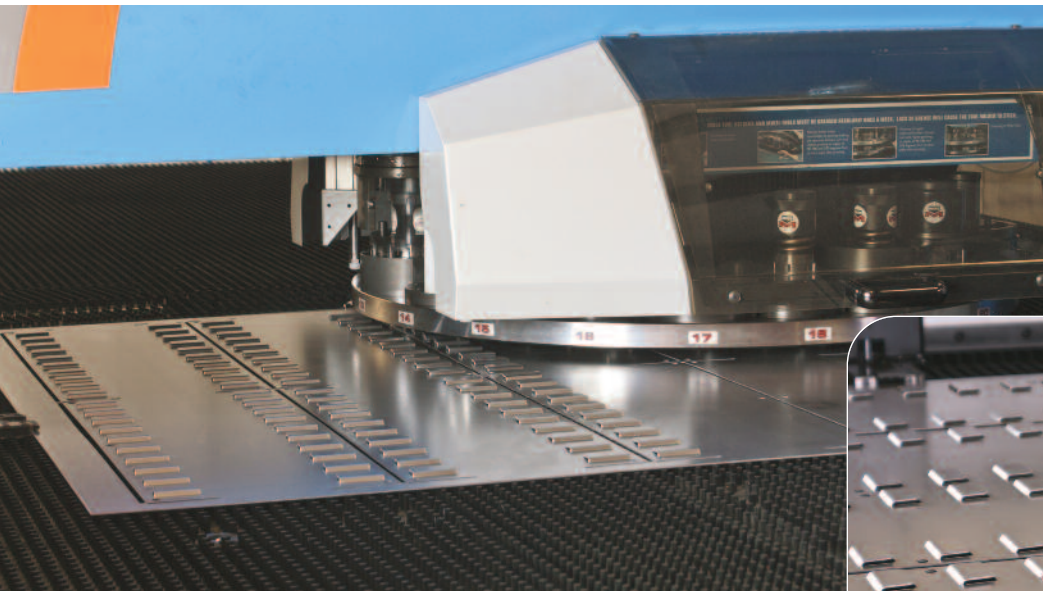
“Our angles are 50-percent thicker than those used by our competitors, and we use 12-gauge steel for our trays, 40 percent thicker the competitors’ 14-gauge trays.

Our carts can take a tremendous amount of abuse and still keep rolling.”

## Modernizing Fabrication

Traditionally, Jamco stamped a majority of its products with unitized type tooling. “We always outsourced laser-cutting and turret-punch press work,” explains Redmon, “a substantial amount of work.”

Everything changed when, in October 2012, Myers Industries acquired Jamco and pledged to modernize its manufacturing



*Installed at Jamco in February 2013, the E6x combines energy savings and ergonomics with accuracy and productivity. It can process full 60- by 120-in. sheets (maximum thickness is 0.315 in.) without repositioning, and features a 19-ton (US) ram force.*



*Jamco replaced its aging hydraulic press brakes with the Prima servo-electric brake, increasing its ability to efficiently form complex parts. It's achieving tighter tolerances, which improves fitup and makes it easier for welders to assemble the formed parts.*



area. “We also wanted to reduce costs by manufacturing the outsourced products inhouse,” says Redmon.

In search of punching technology, “we looked at several different machine builders,” Redmon continues, “and visited their customers’ shops to see the machines in operation. That research provided me with an appreciation of servo-electric punching technology, and led us to purchase, late in 2012, a servo-electric turret punch press (a Prima Power E6x).”

Installed in February 2013, the E6x combines energy savings and ergonomics with accuracy and productivity. The machine’s control and user interface software, says Redmon, with touchscreen panel, ensure fast setup and convenient operation. It can process full 60- by 120-in. sheets (maximum thickness is 0.315 in.) without repositioning, and features a 19-ton (U.S.) ram force. Maximum punch diameter is 3.5 in.; punch speed peaks at 700 hits/min. with 1 mm between holes.

Other features include accurate punching movement ( $\pm 0.004$ -in. hole-location deviation) and excellent forming and marking ability; fully programmable punching speed, upper and lower limit of stroke; and programmable clamp setting.

### Cost Savings

“We produce a tremendous amount of louvers for hanging bins, etc., all of

which we were outsourcing to local vendors,” explains Redmon. “The E6x allows us to produce all of the louvers inhouse, saving us nearly \$1 million.

“It also allows us to decrease our prototyping time,” he continues. “Traditionally, to bring a new product to market took us 6 to 10 weeks of prototyping time. Now we can turn those parts around the next day.

“The E6x also gives us flexibility in how we choose to manage our inventory,” adds Redmon. “We’ve reduced our inventory from three months’ worth down to three weeks’ worth.”

### Bring on the Servo-Electric Brake

Just six months after purchasing its servo-electric turret punch press, Jamco added a servo-electric press brake to its equipment arsenal—a Prima Power eP model. The eP-series press brake, part of Prima’s “Green Means” eco-friendly concept for sustainable manufacturing, delivers sustainability, manufacturing efficiency and productivity, say company officials. It also means greater versatility compared to hydraulic press brakes, with reduced power consumption and maintenance costs. The net result, says Redmon: the ability to form higher-

quality sheetmetal parts at an overall lower cost.

“We had very old hydraulic press brakes,” Redmon says. “Purchasing the eP press brake increased our productivity and flexibility, and our ability to efficiently form complex parts.

“For example,” he continues, “some of our stainless-steel cabinets have some unique top and bottom trays. Thanks to the press brake’s capabilities, we now can bend these parts inhouse. The press brake gives us flexibility in how we bend complex shapes, and increases the speed at which we can bend. We’re also achieving tighter tolerances, which improves fitup and makes it easier for our welders, which translates into higher productivity.

“Our new servo-electric equipment has brought Jamco into the 21st century,” concludes Redmon. “The turret punch press and press brake have increased our productivity, flexibility and accuracy, helping to bring Jamco to the next level.”

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*Article provided by Prima Power North America, Arlington Heights, IL: 847/952-6550, [www.prima-na.com](http://www.prima-na.com).*