Volume 4 - Issue 1 - July 2014

The POWER LINE is a
Prima Power Publication

POWER Line

Unveiling New Prima Power Technology... Page 14

CUSTOMER PROFILES • NEW TECHNOLOGY • PRODUCTIVITY • FLEXIBILITY

Servo-Electric Technology Increases Productivity... Page 8

Warming up to Fiber Laser Technology... Page 3

In the Realm of Absolute Quality... Page 10

Also in this issue...

- Tooling Articles
- Tradeshows
- Automation
- Shear Genius
- And Much More...

MANAGEMENT CORNER

What Makes Us Different – "Next to You"

By Ezio Basso, Prima Industrie Managing Director, Prima Power Division

We have recently launched a new advertising campaign focused on a concept that was epitomized in the slogan "Next to you" *(see back cover)*.

This slogan is not simply the product of the creativity of an advertising agency. It is the end result of a long and in-depth research made within our group to give an answer to the following question: "what is our core value, the principle that guides us in our internal activities, as well as in our relationship with our customers and the external world in general?"

The answer to these considerations was: the aspiration to be close to our customers, to be next to them, wherever and whenever they need us.

"Next to you" means understanding our customers' expectations and devoting all our efforts to their satisfaction and, when possible, to their anticipation. It means designing, developing and customizing products having our customers' success in mind. It means creating long-term and valuable collaboration supporting customers across the product life cycle. It means deleting distances that separate us from our customers. It means investing in the opening of new subsidiaries or sales and service centers to be where our customers are, speaking their language, understanding their mindset and their needs. It means using modern online communication technology to be with them also in a virtual way, every time they need us. It also means sharing with them the attention to the environmental impact of what we do and to the future of our planet.

"Next to you" is our essence, the main component of our DNA that cannot be renounced and that makes us different. It was so when we started, more than 35 years ago, and it will be so in the future. It is the purpose that guides our navigation through this rapidly changing world we all work in.

In the Words of Our Customers

This issue of the POWER LINE features several customer profile articles that exemplify the importance of our "Next to you" mantra:

Traulsen, Fort Worth, TX, USA (see page 3). *"The Platino Fiber lasers have helped us reach production levels that we could not have reached without them."*

Systemair, Skinnskatteberg, Sweden (see page 24). *"For half of its corporate existence, Systemair has cooperated with Prima Power in manufacturing technology. The first punching – shearing cell Shear Genius® with automatic stacking was delivered to Systemair Denmark in 1994."*

Flexfab Inc., Anjou, Québec, Canada (see page 8). *"Prima Power has very good client services. The training was also very professional. If we ever have a problem, we can call and we get excellent service."*

Champion Tool Storage, Hood River, OR, USA (see page 26). *"Prima Power has been instrumental in helping us to get the most out of these machines. It really has worked out to be a true manufacturing partnership and friendship. The service has been excellent, and there has been plenty of communication. We are very happy with the customer service. I don't think there is anything we can't get through with the Prima Power team. It is a great asset to have a good team behind you to help figure it out...and the machinery and resources to get you where you need to be."*

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CUSTOMER PROFILE

Refrigeration Company Warms Up To Fiber Laser Technology

Traulsen has earned a premier name in refrigeration for the foodservice market. That reputation is grounded in a long history of delivering products designed and built to the highest possible standards of performance, quality and durability in the industry. These standards for innovation and value were set by its founder, Harry Traulsen, who formed the business in 1938 as Traulsen & Company in Queens, New York. At the time, the company was a producer of bakery fixtures – with a small product line that included refrigerated showcases.

Over the years, Traulsen has consistently expanded its range of top-of-the-line refrigeration for the worldwide food equipment market, with refrigeration offerings that include reach-ins, roll-ins, undercounters, blast chillers, prep tables, dual temperature units, heated cabinets, merchandisers and specialty applications often drawn from customer requests. Traulsen customers include restaurants, institutions, schools, hotels, hospitals, casinos, cruise ships, football stadiums, and other markets.

Traulsen has earned a premier name in refrigeration for the foodservice market. Over the years, the company has consistently expanded its range of top-of-the-line refrigeration for the worldwide food equipment market. Traulsen customers include restaurants, institutions, schools, hotels, hospitals, casinos, cruise ships, football stadiums, and other markets.

Through the past 76 years, the company has experienced acquisitions, corporate buyouts, and many product innovations. Today, Traulsen is a division of ITW, and has 300 employees and has consolidated its operations to a 400,000 square-foot facility in Fort Worth, TX.

Inspecting a sheet processed on one of its Platino Fiber lasers are (from left to right): Keith Spoon, supervisor; Mile Lalic, CNC programmer; and Matt McAleer, manufacturing engineer.

Search for Fiber Laser Technology

According to Rick Gazzola, manufacturing engineer, Traulsen's growing emphasis on the horizontal refrigerator market a few years earlier hastened its search for fiber laser technology. "About eight years ago, we started doing a lot of horizontal refrigerators for undercounters and pizza tops," explains Gazzola. "What we discovered as we did more of these types of products is that they differed from our standard upright rectangle refrigerator. They had a more intricate design. That's when we discovered that we really needed the lasers."

To fabricate its lighter gauge (12-22 gauge) sheet metal products, Traulsen had acquired such equipment as a turret punch press, an early model Shear Genius punch/shear combination machine, a CO2 laser, press brakes, shears, welding machines, and several stamping presses. Two years ago, the company began a search for the latest fiber laser technology to replace some of its older equipment and help meet its growing production needs.

"We are always searching for new ideas to improve efficiency and customer satisfaction and the Platino Fiber lasers are helping us do that."

Continued on page 4

CUSTOMER PROFILE

Refrigeration Company Warms Up To Fiber Laser Technology

Continued from page 3

"We also started to do a lot more 16-gauge material for drawers and tops," adds Keith Spoon, supervisor. "We learned that the "sweet spot" of the fiber laser was lighter gauge material...and that is exactly what we do here."

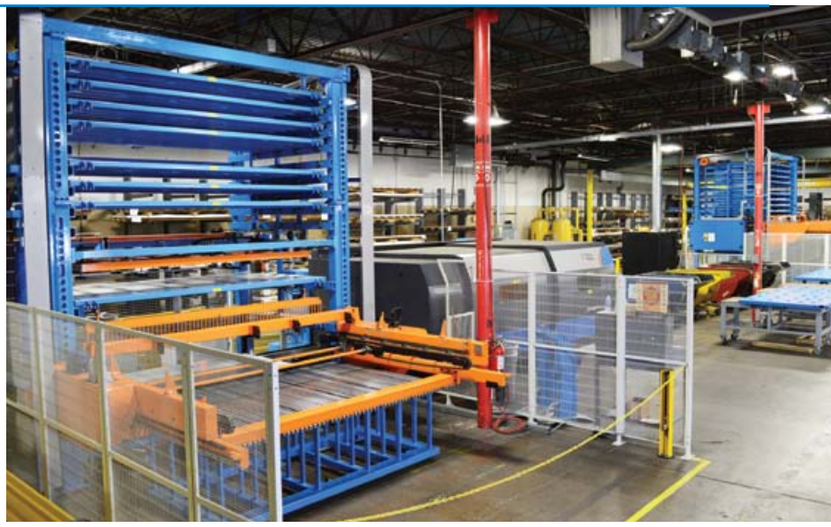
Both Gazzola and Spoon had experience with lasers from previous employers. They ruled out CO2 lasers because of their maintenance issues with resonator rebuilding, mirrors, etc. "Once fiber lasers were available and they eliminated many of those issues, we began our search," continues Spoon. "For our company, CO2 lasers were not an option."

"The speed of the Platino Fiber lasers is amazing."

Prima Power Platino® Fiber Laser

According to Matt McAleer, manufacturing engineer, Traulsen selected six different laser machine builders to submit proposals. "We saw many different machines, visited numerous customers, and we sent parts out for time studies," reflects McAleer. "Once we had the time study results, it made more sense to go with the Prima Power Platino® Fiber because it was considerably faster."

The Platino Fiber 2D laser cutting machine is the perfect balance of innovation and experience. This product combines state-of-the-art efficient and ecological fiber laser technology, with the proven reliability and flexibility of the Platino platform.



Prima Power's Compact 10-shelf TowerServer allows easy loading/unloading for blanks and processed sheets. It has an elevator for loading and unloading the pallets on and off the tower, and features single sheet separating, control systems, and sheet reference. The Platino Fiber is particularly suitable for 24/7 operation, often performed in unattended mode.

Traulsen purchased the Platino Fiber Laser with the 10-shelf tower. The first Platino Fiber Laser was installed in June 2013. A few weeks after delivery, the decision was made to purchase a second Platino Fiber Laser with a 10-shelf tower. The second laser and tower was installed in December 2013.

The Platino Fiber 2D laser cutting machine is the perfect balance of innovation and experience. This product combines state-of-the-art efficient and ecological fiber laser technology, with the proven reliability and flexibility of the Platino platform. It is the right choice for sheet metal manufacturers looking for a production tool which is:

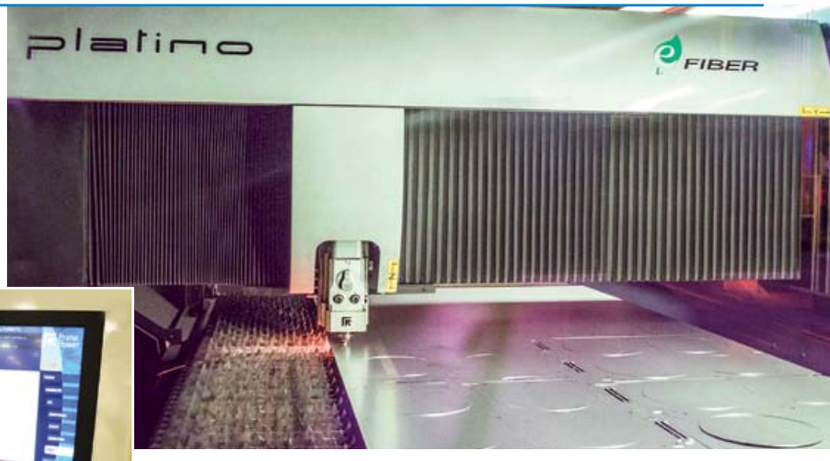
- efficient, providing energy and maintenance savings
- productive, particularly on thin and medium-gauge sheets
- flexible, suitable for a wide range of materials, including highly-reflective metals
- reliable and capable of meeting any production need, with a variety of automation modules
- user-friendly, easy to install, use, and maintain

The Platino Fiber laser can be used to cut a wide range of materials. Fiber lasers are more effective than other laser sources for cutting highly-reflective materials (e.g. aluminum alloys, copper, brass). Platino Fiber cuts varied thicknesses, up to 20 mm of mild steel, with efficiency and quality. Productivity increases particularly with thin and medium-gauge sheet metal.

"With the Platino Fiber lasers we are able to hold very close tolerances. We can cut different shapes and lock them together."

Other features and benefits include:

- Very low power consumption
- No laser gases
- Minimum maintenance and low consumables
- Floor space saving - compact automatic loading, unloading, and storage
- Easy and fast operating interface - fast setup
- Less energy, less waste of material, no laser gases
- Unique machine design using a synthetic granite frame offering the best thermal stability and vibration damping
- Cantilever design for maximum accessibility to the machine
- Protection cabin with roof, fiber-safe windows and fully opening sliding doors: total safety, visibility of the work area and accessibility



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Flexible Automation

Prima Power's Compact 10-shelf TowerServer allows easy loading/unloading for blanks and processed sheets. It has an elevator for loading and unloading the pallets on and off the tower, and features single sheet separating, control systems, and sheet reference.

The Platino Fiber is particularly suitable for 24/7 operation, often performed in unattended mode. It is a fully independent machine, with no need for manual intervention during machine operation. Once the production schedule is programmed, the Platino Fiber laser takes care of the necessary settings, tip replacement, sheet change and storage, etc.

"Prior to purchasing the Platino Fiber lasers, Traulsen outsourced $120,000 of laser cutting work to local job shops. Today, it is all done in-house."

According to Traulsen management, the two Platino Fiber lasers have had a very positive economic impact on the company. "The speed of the Platino Fiber lasers is amazing," says Gazzola. "We used to shear a lot of parts. Since installing the fiber lasers, we took one shear out of operation, and run the second shear just one day per week. The Shear Genius cell was replaced, the old CO2 laser is gone, and the one turret punch press that used to run two shifts 5-6 days per week is now operating just 20 hours/week. Today, our production is so much faster and cleaner. Before we were always doing two operations – now we just send it to the Platino Fiber lasers."

"At this point we are very comfortable with the machines," explains McAleer. "We are adapting our production to the machine and using it better. Instead of using small blanks, we can do so much more using large sheets and nesting various parts."

Higher Quality & Increased Production

"We are also trying to eliminate welding operations on the horizontal products," adds Spoon. "With the Platino Fiber lasers we are able to hold very close tolerances. We can cut different shapes and lock them together."

Prior to purchasing the Platino Fiber lasers, Traulsen outsourced $120,000 of laser cutting work to local job shops. Today, it is all done in-house.

"The Platino Fiber lasers have helped us reach production levels that we could not have reached without them. Our biggest challenge now is to determine what else we can nest without overproducing something."

"Our reaction time is a lot better now," explains Spoon. "We've eliminated setup times and all the time we spent handling parts. The Platino Fiber lasers have helped us reach production levels that we could not have reached without them. Our biggest challenge now is to determine what else we can nest without overproducing something."

Traulsen runs the Platino Fiber lasers two shifts, five days per week. "The quality of our parts, especially on 16 gauge stainless, has greatly improved with the fiber lasers," says Mile Lalic, CNC programmer. "The software is much friendlier. We used to do static nesting, today we are doing dynamic nesting. Our nest efficiencies are also much better."

"The Prima Power lasers have also helped cut our overtime from 15% to 5%."

"The Platino Fiber lasers have also changed the way that we process orders," concludes McAleer. "Our lead times have also shortened dramatically. It used to be, if we needed to make a part, the answer would be, *'You can have it late tomorrow... or maybe two days from now.'* Today, it's a matter of hours, not days. We are always searching for new ideas to improve efficiency and customer satisfaction and the Platino Fiber lasers are helping us do that."

FOCUS ON TOOLING

Wilson Tool Introduces V-Series™ Black Press Brake Dies

By Jeff Paulson, Marketing Manager, Wilson Tool International

For years, press brake fabricators have turned to Wilson V-Series™ press brake dies with rolling inserts to decrease friction and improve performance on certain tough-to-bend applications.

These fabricators had found that using traditional v-dies to create small flanges, small-bend radii, and bends closer to holes often resulted in warping and distortion of the material. But using Wilson V-Series dies eliminated such problems and made it easier to perform those challenging bends.

Recently, Wilson Tool made a number of enhancements to the already popular V-Series line of tooling that greatly improved its performance.

New V-Series™ Black dies are manufactured by Wilson Tool at their facility in White Bear Lake, Minnesota. The previous V-Series tooling had been produced for Wilson Tool by a third-party manufacturer.

The manufacturing change gives Wilson Tool complete control over the quality of the product and results in a number of immediate benefits to the customer.

For instance, all V-Series Black dies are now made of high quality tool steel for longer lasting performance. Wilson Tool is also able to maintain tighter tolerances during manufacturing, resulting in increased bend accuracy. Plus, lead times have been reduced, so customers now receive a better product faster than ever before.

New V-Series Black press brake dies produce clean, crisp bends with no distortion, making them the best solution to produce small flanges, small bend radii, and bends close to holes.

With built-in rotating blades that decrease the friction between the sheet and die, V-Series Black dies make it possible to perform these operations without the warping and distortion caused by traditional v-dies.

These uniquely versatile dies also help reduce setup time and minimize the amount of tooling required by making it possible to bend a wide range of materials using the same die.

Sheet marking is another common problem encountered by press brake fabricators when working with certain materials. The flat surface of V-Series Black dies allow material to glide across while the die shoulder rotates to decrease friction, thus reducing sheet marking.

To virtually eliminate sheet marking on cosmetic materials, such as stainless steel, diamond plate and aluminum, Zip-Mar™ adhesive strips can also be added to the die setup.

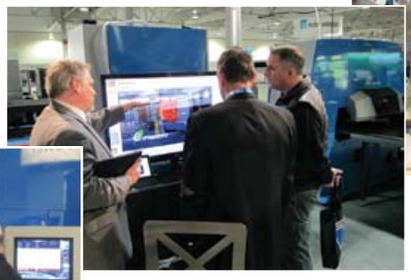
V-Series Black press brake dies from Wilson Tool are available for virtually all major styles of press brake tooling, including American, European and WT Style. Models 1 and 2 are ideal for most tough-to-bend applications, while Model 3 makes it possible to perform tight bends on thick materials.

For more information about how V-Series Black press brake dies can help improve your press brake productivity and the quality of your parts, call the Wilson Tool press brake sales desk at 1.800.445.4518 or visit www.wilsontool.com/bending.

FABTECH Canada Sets Record Attendance

FABTECH Canada, said to be Canada's largest metal forming, fabricating, welding and finishing event, announced that its show last March 18-20 experienced increases in both number of attendees and exhibitors, as well as floor space. The final verified statistics from the event resulted in a total attendance of 6,489 – an 11% increase over the launch event in 2012. The buyer attendance of 4,355 visited almost 300 exhibitors to see live equipment demonstrations, compare products side-by-side, and find cost-saving solutions at product displays spread across 73,630 net square feet of exhibits at The Toronto Congress Centre.

Each day of the show found good crowds of visitors watching the Prima Power Syncrono Fiber Laser, E5x servo-electric turret punch press, and eP servo-electric press brake in operation.



FABTECH Mexico

FABTECH Mexico was held at the Centro Banamex in Mexico City this past November 11-13.

Prima Power exhibited the eP1336 servo-electric press brake. Representing Prima Power were service engineers Miguel Martinez and Reymondo Diaz, applications engineer Joseph Kloeker, and Lutz Ehrlich, sales manager, Mexico. Dealer Danny Mercado, director of Mercado Machinery, and his crew rounded out the trade show team.

The Mexican manufacturing sector continues to grow at a faster pace than has been the case in the last few years. The market has experienced an increase of over 154% in Foreign Direct Investment (FDI) equating to a total of $1.893 billion in the past year. According to Lutz Ehrlich, the FABTECH Mexico show was a success. "Each day the great number of visitors to our booth reflected the economic upswing in Mexico."

CUSTOMER PROFILE

Servo-Electric Technology Increases Productivity for Canadian Manufacturer

Flexfab inc. is a high-quality manufacturer of fully-assembled metal office products such as filing, storage, and tower cabinets. The company was established in 1997 by founder and owner Pierre Tessier and his son Alexandre, engineer. Recently, Pierre's daughter Caroline has joined the company as president.

From its humble beginning in a 5,000 square-foot facility, the company has evolved into a leading manufacturer of standard and custom filing systems. Today, Flexfab operates from a 40,000 square-foot, state-of-the art manufacturing and warehouse facility located in Anjou, Quebec, Canada, with 25 employees.

New Turret Punch Press

By late 2012, Flexfab's management decided to replace its old hydraulic turret punch press. According to Alexandre Tessier, the reason for replacing the old turret punch press centered upon the old machine's inability to produce the company's new line of custom products. "The cost of labor is also very high in Montreal," explains Tessier. "In order to compete, we needed to cut labor costs and increase our productivity."

"The primary reason that we chose the Prima Power E6 turret punch press was that the technology was more advanced and user friendly than others machines on the market."

After an extensive research of available models on the market, in January 2013, Flexfab chose the E6 servo-electric turret punch press with LST (load/unload/stacking) from Prima Power. Prima Power introduced its first servo-electric turret punch press in 1998. The new E6 represents the third generation of this series, with a 22 % faster cycle time compared with previous models.

The inherent benefits of servo-electric include energy efficiency, versatility, accuracy, and low maintenance cost. This amounts to superior fabrication capabilities as well as outstanding operational economy.

From left to right: Alexandre Tessier, engineer; Caroline Tessier, president; and Flexfab's founder and owner Pierre Tessier.

Prima Power E Series benefits include:

- Low energy consumption at three power modes: run / stand by / idle. Average power consumption 5 kVA / 4 kW. Power supply connection 15 kVA (3 x 20 A fuse / 400 V)
- Low maintenance cost
- High versatility
- High performance values
- Wide range of options
- Very high productivity in most varied applications

Ease of Operation

Prima Power E technology has properties such as automatic tool length measurement, optimization of stroke length, and easy adjustment of the punching stroke. This all adds up to faster set-ups, ease of operation, and higher capacity.

In addition to loading and unloading, the Prima Power LST also automates component handling. The robot picks components from the machine and stacks them into programmed positions in the palletizing area.

Flexfab likes the upforming and auto-index capabilities of the E6 turret punch press, which allows the company to produce the door hinges in one operation. Prior to purchasing the E6, Flexfab would have to buy the hinges and then weld them onto the door. Now the company can fabricate the hinge onto the door with the E6.

"Before we purchased the Prima Power machines, we produced $300,000 worth of product per month. Now we do $800,000 per month. We more than doubled our production with the Prima Power equipment."

Sophisticated Software

Special attention has been paid to ease of machine setups and efficient programming. The benefits include excellent possibilities for roll forming and for other special tooling. With optional features, the software can be made compatible with standard ERP connections for importing orders and exporting reports. NC Express CNC programming system is a user friendly, integrated, and automated tool for programming the equipment. NC Express accommodates both single-part drafting and tooling or a fully-automated programming system for a large production line.

When Flexfab purchased the E6 turret punch press, the company also purchased two Prima Power eP-1030 servo-electric press brakes. Prima Power has applied a servo-electric drive system on the new eP-Series press brake. It is a fast, accurate, non-hydraulic bending solution.

"The primary reason that we chose the Prima Power E6 turret punch press was that the technology was more advanced and user friendly than other machines on the market," says Alexandre Tessier. "Because of the productivity and efficiencies of the E6, we can now compete with competitors' products imported from China. All of our production is done in Canada. In addition, with the LST automation, we now have "lights out" production capability to minimize the rising labor costs. And the E6 has allowed us to improve the quality of the products."

Other features that Tessier likes on the E6 are its upforming and auto-index capabilities, which allow the company to produce the door hinges in one operation. "Prior to purchasing the E6, we would have to buy the hinges and weld them onto the door," explains Caroline Terrier. "Now we can fabricate the hinge onto the door with the E6, thus eliminating one additional stop of production and no longer a need to purchase the hinges."

Upforming

The E6 also accommodates 60 x 120 sheets. "We can now use full-sized sheets and nest parts, which allows more sheet utilization and produces less scrap," notes Alexandre Tessier. With the LST, the E6 runs unmanned, which helps us reduce our labor costs."

LST

In addition to loading and unloading, the Prima Power LST also automates component handling. The robot picks components from the machine and stacks them into programmed positions in the palletizing area. Further, the LST features an automatic compact skeleton removal function, and the entire working cycle of the machine becomes automatic.

Servo-Electric Press Brakes

When Flexfab purchased the E6 turret punch press, the company also purchased two Prima Power eP-1030 servo-electric press brakes. Prima Power has applied a servo-electric drive system on the new eP-Series press brake. It is a fast, accurate, non-hydraulic bending solution. The innovative machine concept combines productivity, accuracy, flexibility, and reliability with high respect to ecological aspects that the company calls "Green Means®".

"We do many short runs," says Alexandre Tessier. "I like the ability to program our jobs and have it available immediately when we do the job again in five months. The eP-1030 servo-electric press brakes provide us with high-precision bending. From the beginning of the day to the end, the servo-electric press brakes provide the same consistent quality...unlike the hydraulics machines."

Net Result

"The Prima Power machines have met and surpassed our objectives," says Caroline Tessier. "Our labor costs have lowered because both the turret punch press and the press brakes have provided faster setups that are done automatically...and the E6 has *lights out* capability. The time of production is less than before, so we are able to cut our inventory levels. Before we purchased the Prima Power machines, we produced $300,000 worth of product per month. Now we do $800,000 per month. We more than doubled our production with the Prima Power equipment. For us, the Prima Power equipment was a good investment that allowed us to grow to another step and develop a new market."

"The performance of E6 and the eP-1030 brakes have been very good...we have had very few problems," concludes Alexandre Tessier. "Prima Power has very good client services. The training was also very professional. If we ever have a problem, we can call and we get excellent service."

CUSTOMER PROFILE

Experience... In the Realm of Absolute Quality

by Fabrizio Garnero

Fabrizio Barberis, laser sales manager for Prima Power (left) in front of the Syncrono Fiber with Sergio Rizzato, owner.

Visiting the Rizzato company in Camposampiero in the province of Padua has been an elixir for lifting the spirits. Rizzato is a company that specializes in third-party stainless steel processing and is "running" at full speed. Over the years, the company has made technological innovation one of the competitiveness levers on the market...and is a positive sign for optimism.

Since its founding in 1987, Rizzato's goal was to become a market reference – a goal that the company has achieved thanks to wise investments. Over the years, the factory has expanded and the production area has increased with the purchase of new, cutting-edge machinery.

Since Rizzato mainly processes stainless steel sheet in all its grades and variations of surface finishes, it works closely with customers who require absolute quality of details in surface integrity. The company services various sectors, such as catering and vending, medical or household appliances, which by definition use very characteristic parts with a high-quality finish whose aesthetics are carefully monitored throughout every stage of production – from cutting to final welding or installation of the various parts in the assembly.

The Syncrono Fiber installed at Rizzato is connected to the automated and synchronized Night Train Material Management System (MMS), which allows a 24-hours-a-day operation for processing continuity.

Maintaining an efficient and updated machine inventory has always been of prime importance for Rizzato. This is exemplified by the addition of the Prima Power Syncrono Fiber laser cutting system that was recently purchased to replace an outdated and widely-used Finn Power L6 laser cutting system.

From CO2 to Fiber

"For a long time, L6 was the fastest CO2 laser cutting system on the market," explains Fabrizio Barberis, laser sales manager for Prima Power. "The Syncrono Fiber is now the only alternative to such a system. Indeed, it improves its performance through the optimal exploitation of the fiber laser technology. Syncrono Fiber is a productive and fast machine that is the highest performing machine on the market for cutting stainless steel up to a thickness of 2 - 3 mm, which coincides with more than 80% of Rizzato's core business. In this field, it is a machine with matchless performance."

"Syncrono is ideal for this type of processing. It is crucial for us to be extremely fast and flexible with excellent cutting quality."

Urgencies and Complex Cuts by Day...Maximum Production by Night

Fiber technology is renowned for having lower usage costs compared to CO2 lasers, mostly related to energy savings and reduced maintenance. These are issues that carried weight at the time of Rizzato's choice. The Syncrono Fiber presented the potential increase of productivity as well as the advantage of being able to lower the operating costs. It allowed the company to have a lower hourly rate than the competition, with the same quality of the cut, and in some cases even better. "Previously, maintenance was very intense with parts to be replaced and frequent maintenance to the optical path," explains Sergio Rizzato, owner.

The potential of the Syncrono Fiber installed by Rizzato is huge when you consider that it is connected to the automated and synchronized Night Train Material Management System (MMS), which allows a 24-hours-a-day operation for processing continuity, supplying all the connected cutting stations. Three systems are connected to the

Night Train MMS: the Syncrono Fiber laser, a Shear Genius punch/shear combination cell, and a Laser Brilliance punch/laser combination cell. As a result, the work is divided among the four systems in a rational way to exploit the characteristics of the machines according to the type of parts to be manufactured.

The central element of Rizzato's activity is the automated and synchronized Night Train Material Management System.

The Syncrono Fiber is a machine that has thin cuts in its DNA. Moreover, in the specific case of Rizzato, its 2 kW fiber source meets the need of having to cut complex parts, in which it is necessary to make very rapid movements and changes of direction in short strokes.

In the specific case of Rizzato, which works with 100,000 product codes, there are some that allow managing certain types of parts by utilizing the outstanding dynamism of the Syncrono at its best. "There are some gratings in which we make some very small holes that are placed very close to each other," says Rizzato. "Syncrono is ideal for this type of processing. It is crucial for us to be extremely fast and flexible with excellent cutting quality."

What is certain is that the characteristics of the Syncrono Fiber have predominantly modified the previous division of work with great benefits for Rizzato. "Today we are totally flexible to the point that during the day we send all the rush jobs and the most particular processing to the Syncrono, and at night, with unmanned operation, we fully exploit its reliable productivity, queuing the most significant batches from the quantities standpoint," says Rizzato. "The Syncrono and the Night Train MMS are connected with a new generation system for enhanced performance, especially for the machine feeding time."

Ideal for the Most Complex Cuts

The Syncrono Fiber is a machine that has thin cuts in its DNA. Moreover, in the specific case of Rizzato, its 2 kW fiber source meets the need of having to cut complex parts, which require making very rapid movements and changes of direction in short strokes.
A key feature of the Syncrono is the adoption of a parallel kinematics structure with the cutting head capable of reaching 6g accelerations and a numerical control which allows it to reach very high speeds even with very complicated trajectories.

Micrometric Precision and Complete Mastery of the Process

Like the Syncrono Fiber, the Prima Power Fast Bend servo-electric panel bender has been observed closely during our visit at Rizzato. The company had an array of hydraulic bending presses of different tonnage. Rizzato confirmed its policy of wise and targeted investments by opting for a servo-electric bender to complete its bending department whose role is strategic, considering the nature of the parts produced.

Continued on page 12

CUSTOMER PROFILE

Experience... In the Realm of Absolute Quality

Continued from page 11

"We have a well-equipped and cutting-edge bending department," says Rizzato. "This puts us in a position to have complete mastery of the bending process, which perhaps even more than cutting, affects the final quality of our parts. Despite the large machine inventory, we decided to invest in a panel bender, since we consider it the natural completion of our department."

It is the machine that was missing. The other three automatic systems are connected to the Night Train, including a Shear Genius punch/shear combination cell.

A key feature of Syncrono is the adoption of a parallel kinematics structure with the cutting head capable of reaching 6g accelerations and a numerical control which allows it to reach very high speeds even with very complicated trajectories.

The Fast Bend is a servo-electric machine, and therefore very accurate and more economical than hydraulic bending machines. Both the tooling step and the entire bending cycle are automatic. With the Fast Bend it is not necessary to have an experienced bending operator.

"In the more than 100,000 product codes that we manage," Rizzato continues, "there are some small batches that are continuously repetitive. This leads us to days in which it is necessary to retool the bending machine "N" times to achieve those "N" codes of 30/40 pieces each, with obvious timing and cost problems. The Fast Bend is a machine designed to meet this kind of need. It has the capability to simply recall the program, and, in a very short time, is able to bend with micrometric precision and without any risk of damaging the part surface. With the Fast Bend, the same parts we produce today can be produced again in three days with no additional setup times."

Servo-Electric Bending

In addition, there is the advantage of a servo-electric machine, which is very accurate and more economical than hydraulic bending machines. Both the tooling step and the entire bending cycle are automatic. This means that it is not necessary to have an experienced bending operator for the Fast Bend. With the traditional press brake, the operator must guide the piece and be very skilled in following the machine with the correct timing to prevent spoiling the bend. "This is essential for manufacturers like us who process a great amount of stainless steel, where the aesthetics of the parts are very important," says Rizzato. "With the Fast Bend, this problem does not exist, as the panel remains on the table and always moves on the same plane."

"The Fast Bend is a machine designed to meet this kind of need. It has the capability to simply recall the program, and, in a very short time, is able to bend with micrometric precision and without any risk of damaging the part surface."

"What is certain," concludes Rizzato, "is that in order have that extra edge in today's market, it is necessary to make the appropriate choices on specific systems that allow quick setups and unmanned operation, with the latest technology."

This article was translated, edited, and reprinted from the February 2014 issue of Deformazione.

FOCUS ON TOOLING

Mate's Versadie™ Optimizes Slitting Operations

By John Galich, Marketing Manager, Mate Precision Tooling

Parting and slitting are among the most common operations performed by sheet metal fabricators. Slitting tools directly impact part quality and the cost of downstream processes and need to survive partial hits, high-speed operation, different material types and thicknesses without failure. When maximum sheet usage is required, clamp clearing dies are necessary to punch as close to the clamps as possible to reduce material cost and waste. All in all, having a robust, long-lived slitting solution will make a positive contribution to your bottom line and improve your punching processes all the time.

Mate's new Versadie™ takes clamp clearing slitting operations to a new level with several unique design features starting with the replaceable die inserts. Versadie's insert design allows for the greatest lengths currently available in the industry, accommodating lengths up to 4.560"(115.82 mm) for E Stations and 3.560"(90.42 mm) for D Stations. Similarly, the inserts also allow widths up to 0.509"(12.93 mm) in both stations. With its tighter tolerances of the insert to the holder, Versadie has superior overall quality.

For superior performance and longevity, Versadie's slitting die insert is made from MPM82 tool steel. Designed for use in high performance tooling systems, MPM82 is a high speed, particle metallurgy steel intended to provide high value and exceptional versatility, making for stronger dies that can withstand the most demanding slitting operations. In addition, MPM82 steel offers:

- Sharper edges on the die opening
- Increased machine uptime
- Reduced overall tooling costs
- Lower overall production costs

The insert features Mate's SlugFree® design as standard to eliminate slug pulling. Mate's Slug Free dies are designed with an opening that has a constriction point below the surface, preventing the slug to return. Once the slug is separated from the punch, it is free to fall away from the sheet. For punching thinner sheet metal where the recommended die clearance is less the 0.008"(0,20mm), Mate Slug Free Light™ is also available as an option.

The die body is made from S7 shock resistant tool steel. For maximum longevity, the die body allows shimming after the insert is sharpened during routine maintenance. What's more, there's no need for expensive, special shims either; simply use standard thick turret die shims.

For the ultimate in slitting and parting operations, combine Versadie with Mate's UltraTEC® fully guided clamp clearing slitting tool, available in D and E stations. Slitting and parting applications require tools to pierce cleanly and accurately while overcoming side loads and twisting pressures. The UltraTEC fully guided clamp clearing slitting tool overcomes these pressures by guiding the punch point. By squarely and tightly controlling the punch point at sheet contact, the punch can accurately pierce the hole, even when punching partial hits.

For more information about Mate tooling systems for Prima Power punch presses, please visit mate.com.

OPEN HOUSE

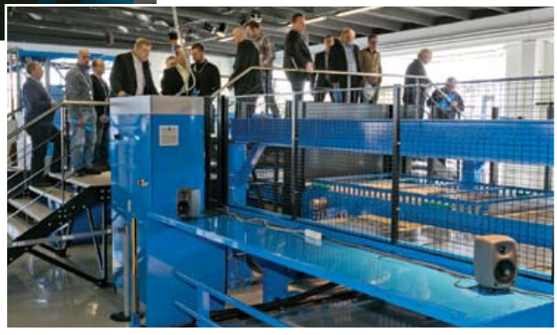
Prima Power Technology Showcase in Finland

A wide selection of the latest Prima Power Technology was on display in Kauhava, Finland, where a three-day open house event was arranged on April 1-3. Visitors could witness the capabilities of Prima Power technology from punch presses, laser cutting machines, integrated manufacturing cells, to a complete flexible manufacturing system. Continuous Prima Power focus on product development was reflected in new, innovative solutions.

More than 600 visitors from 30 countries, including Australia and New Zealand attended the Prima Power Technology Showcase held in Kauhava, Finland, on April 1-3.

In all, there were over 600 visitors from a total of 30 countries, including Australia and New Zealand. The event clearly proved that technology brings people together, despite geographical distances.

Demonstrations were run continuously both at the Kauhava main production facility and the close by Technology Center. "Visitors were especially pleased with the abundant availability of product and responsible experts to answer their questions, unlike many of the trade show exhibitions," says Aki Ojanen, vice president, sales & marketing. "The feedback we received during this event encourages us to continue these events. We may be far away for many visitors, but not one person said the days set aside for this visit were not worthwhile."



The new technology introduced at the Technology Showcase included:

New Punching – Shearing Cell for 2,500 mm x 1,250 mm Sheet Size

A significant Prima Power product has been launched in a new, attractively-priced Shear Genius® punching – shearing cell for sheet sizes up to 2,500 mm x 1,250 mm.

In the new SGe5, Prima Power includes all the inherent benefits of servo-electric technology and integrated right-angle shearing making it the younger brother of the Shear Genius® SGe6 series in every respect. The benefits include fast and reliable punching and shearing, high component quality, edges without burrs, saving in material and reliable automatic handling of sheared parts. Extra work due to micro joints and sheet skeletons is eliminated. Power supply requirement as well as energy consumption and maintenance costs are remarkably low.

Thanks to servo-electric technology, roll forming capabilities are also advanced. Low noise level is a further benefit.

Integrated right-angle shearing saves 10%-15% raw material compared to stand-alone machines, lowering material cost which may amount up to 60% of total component cost. Fixed costs can be lowered and productivity increased at the same time. At best, when fabricating rectangular parts, the material can be completely utilized.

The SGe5 is not just an automatic, integrated cell. When the manufacturing task requires only punching and forming, the machine can be operated just as a high-performance turret punch press.

A Single Programming Solution

For automatic programming, Prima Power developed the NC Express® Lite system for both versatile punching and shearing, offering more capabilities at lower cost for machinery which is mainly operated without integrated storage. The system supports loading and sorting. If automatic stacking is required, a more extensive Prima Power programming solution is needed, but also the basic SGe5 solution can be upgraded to include stacking.

There is little need to program at the machine due to the large number of tools available thanks to the turret design.

New Capabilities in Automatic COMBO Storage

New capabilities have been developed in the Prima Power COMBO range and automatic storages. A special gripper is now available which makes it possible to load single sheets at a time from the storage to the machine. Thus, the storage crane has a dual function: handling sheet stacks on cassettes and loading individual sheets with the gripper.

The new capability adds flexibility and production speed, as material flows are fast and material changes can be made at short intervals. Also, loading of material into the storage is fast as sheet stacks are loaded.

The COMBO can be integrated with one or more machines and cells either using the standard connection, in which material stacks are loaded to the machine, or the fast sheet-at-a-time connection when special response times are required to meet production targets.

ZAPHIRO® with Loading – Stacking Robot

The LST loading and stacking robot, previously available only for the PLATINO® laser cutting machine, can now be connected to the high-end ZAPHIRO®. ZAPHIRO® features a 4 or 5 kW CO2 laser source. With linear motors, positioning speeds up to 240 m/min. is achieved (X/Y). Work area is for sheet size 3,000 mm x 1,500 mm. And, precision is one of the highest in the market, with positioning accuracy and repeatability of 0.03 mm.

The LST eliminates manual separation of cut parts from the skeleton and, therefore, reduces manual operations, increases part quality, and reaches a higher level of productivity with unmanned operations. The robot picks the parts directly from the cutting head one by one, and they are accurately stacked on tables or wagons, or sorted into boxes.

Parts up to 200 kg in weight can be picked and also very small parts when their geometry is suitable.

The RALC (robot assisted last cut) option ensures reliable picking. The part is held by the robot when it is separated from the sheet, and thus the sticking of even intricate components is prevented.

New Developments in PSBB Flexible Manufacturing System

Prima Power's compact FMS solution PSBB (punching – shearing – buffering – bending) with its added versatility was demonstrated. The variety of applications and markets where PSBB gives superior performances is proven by recent deliveries to Germany, Brazil, Russia, and India.

PSBB is based on a Shear Genius® punching – shearing cell, an automatic Express Bender bending cell, both servo-electric, and dynamic management of material flow and buffering as required by the application.

Continued on page 16

OPEN HOUSE

Prima Power Technology Showcase in Finland

Continued from page 15

Always the Optimal Operation Mode

Exceptional system flexibility derives from versatility of work stages and the availability of several operating modes. With buffering and the operating modes, maximum production efficiency can always be ensured despite the difference in cycle times of different work stages. Operation possibilities, which can be used simultaneously, are:

- Direct, material flow from Shear Genius® to bending cell
- Use of the whole stacking area for buffering in direct connection
- Simultaneous stacking on tables/wagons and retrieval of components from tables/wagons to bending cell
- Use of the whole stacking area in unattended operation

Picking and Stacking Robot PSR

The picking and stacking robot PSR has a major role in system flexibility. It allows re-organization and optimization of production flow between Shear Genius® and the Express Bender Cell, and thus nesting can be optimized for the right-angle shear.

With the robot, parts can be added to production flow via storage connections, or from other cells with wagon connection. In this way, the utilization ratio of the bending cell can be considerably increased. Using the large buffering area and with flexible process control even demanding kit production can be organized for outstanding efficiency.

Flexible Import of Material

Raw material can be loaded from wagons, the system can be integrated with a cut-to-length line, and flat components can be brought from outside the system for automatic bending.

Tulus® Power Processing

Tulus® Power Processing is a Prima Power software solution for controlling the whole production process from order management, programming and machine time scheduling all the way to the finished product and reporting. It communicates with the enterprise resource planning system and, at the same time, operates as a manufacturing execution system. Tulus® Power Processing makes the production process transparent, because the status of the production and the work stages of each part is always known.

During the Technology Days, the versatile features of Tulus® Power Processing were demonstrated. In the created production environment, the entire production chain was controlled from part preparation to the finished product and reporting. The visitors were able to follow the process with their smart phones.

The components of the product were manufactured on the Prima Power PSBB production line and assembled manually in the Tulus® Terminal work center. The demonstration was authentic and even included a situation where a part was damaged during the process. In such a case, the software automatically places a new order if there are no ready parts in storage.

The product was treated as a single-production order. Thus, the entire product assembly was structured, nested, and manufactured together. The parts were routed to different work stages, and comprehensive production reports were generated.

FOCUS ON TOOLING

CNC-Deephardening® It's Wila Technology To The Core!

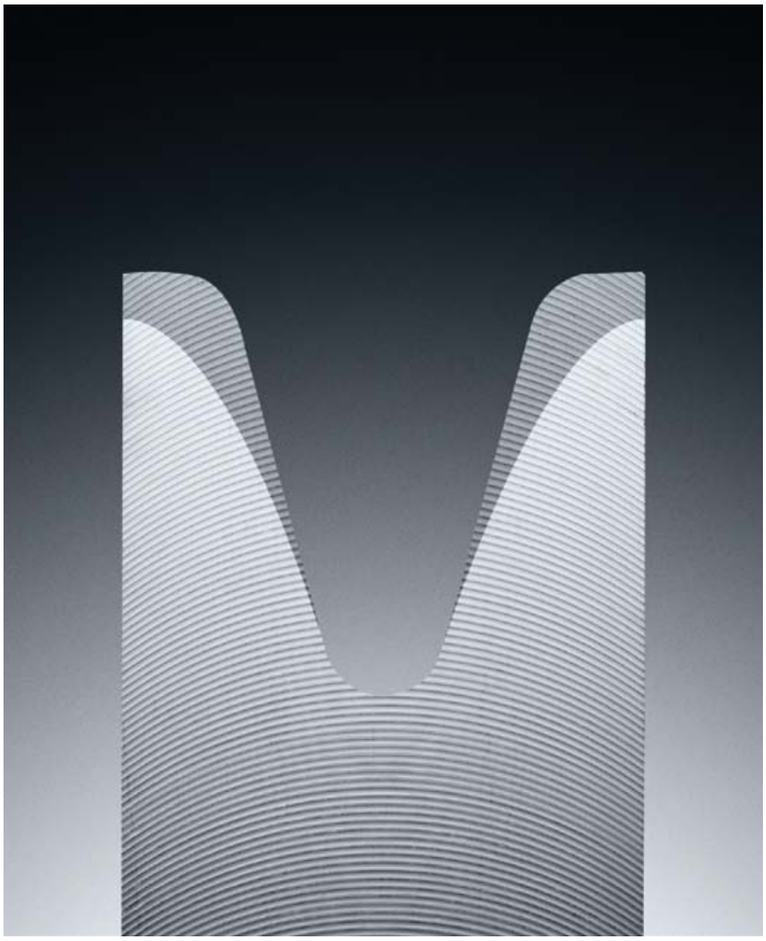
By David Bishop, Business Development Manager, Wila USA

When it comes to durability, press brake tooling has come a very long way in recent years. With many of today's press brakes being capable of ram position repeatability of +/-.0004" (0.01mm) and in some cases even less, it is imperative that the tooling be at least as accurate and not have any flaws that would compromise machine performance. While accuracy is very important, the durability of the working surfaces that engage the material is equally important. This will determine not only the longevity of the tooling but also how long it will remain accurate.

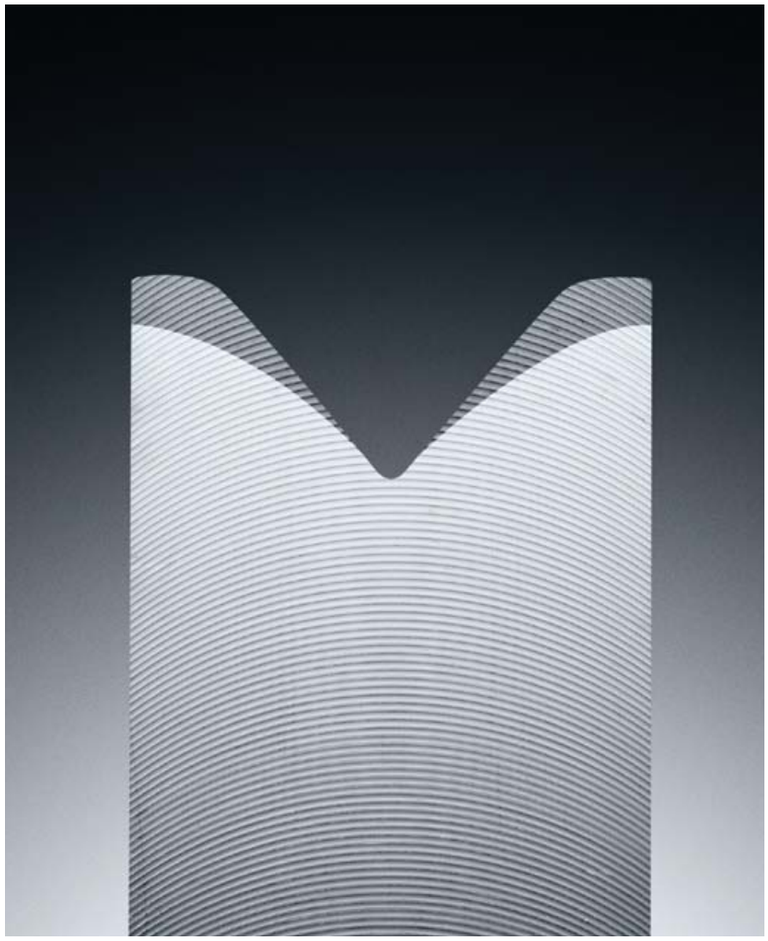
At Wila, our premium New Standard and American Tooling Systems start with a custom engineered chrome molybdenum steel that we actually co-developed. This steel provides exceptional strength, ductility, and deep hardening characteristics. All blanks are initially hardened to HRC-30 at the core, which provides an extremely strong base to maximize tonnage capacity while retaining the ductility of the steel. This prevents our tooling from fragmenting or exploding when exposed to excessive tonnage levels to provide maximum operator safety.

Further into manufacturing, we apply our proprietary CNC-Deephardening® process to the working surfaces. At this stage heat is applied to the steel via an electric current that runs through a copper electrode. The application of heat, scan time, and the cooling process are computer controlled to very tight tolerances to guarantee uniform hardness over the full length of the tooling regardless of the shape. This results in a hardness of HRC 56-60 to a maximum depth of .197" (5.0mm). As a result, when used properly, it is common for Wila Tooling to be in new or like new condition for as long as ten years after being put into service.

By treating every aspect of our tooling from the surface to the core, our customers can count on Wila to provide the toughest most durable press brake tooling available, and rest assured that even in the most demanding applications, it will provide maximum operator safety.



CNC-Deephardened area of Wila Acute Angle New Standard Die



CNC-Deephardened area of Wila 86 Degree New Standard Die

CUSTOMER PROFILE

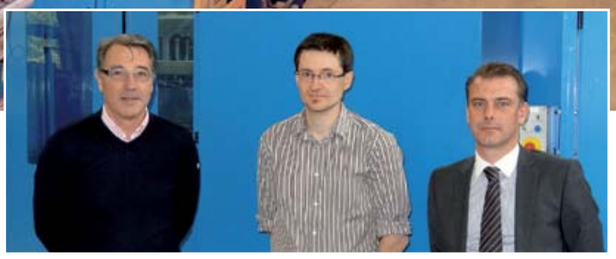
Flexibility & Modularity with Prima Power at Giennoise de Chaudronnerie

The development of a precision sheet metal facility requires investments in modular and scalable hardware for automated handling machines and systems for storage. That's the vision of Pierre Laurent who founded and has made Giennoise de Chaudronnerie a partner with many major customers in various sectors, including construction finishing work, capital goods, and the automotive industry.

Laurent created his company in 1977 to specialize in hot-rolled fabrication, mainly for mechanically-welded structures and steel work. In 1990, his company entered the area of sheet metal fabrication – punching and bending – in order to support his customers who were transitioning from frames to structural work.

In 1996, his first investment in the new area was the TP-300 turret punch press from Finn-Power (now Prima Power) which serviced the company until recently. "The amount of this acquisition was greater than the entire turnover of the company," Laurent remembers.

Overview of the Prima Power machines and the Night Train Material Management System in the background.



From left to right: Pierre Laurent and Sylvain Huteau of Giennoise de Chaudronnerie and Prima Power's Christophe Berquet.

The investment in equipment continued with the purchase of a Shear Genius punch/shear combination cell, the first sold in France. This was followed by a second punch/shear combination cell to keep up with growing demand. "We soon realized that we had to move to new facilities that were more conducive to connecting the two machines to a Prima Power's Night Train Material Management System (MMS), our central automated material handling system," explains Laurent.

Simplifying material flow and increasing productivity were not the only issues taken into account. Other company goals, including improving operator safety, were also pursued. Pierre Laurent remembers: "Before the warehouse storage was created, a stack of laminates fell from a forklift near an operator, and the result could have been serious. This strengthened my resolve to fix this."

Laurent recognizes that he had the great benefit of starting with a clean slate, and could arrange the factory in an optimal manner. The move to the company's current location took place three years later. At the same time, Pierre Laurent decided to replace the first SG6 with a Shear Brilliance, a larger punch/shear combination machine featuring linear drives. In 2008, the Night Train MMS was extended at the same time as the building.

"The primary reason that we chose the Prima Power E6 turret punch press was that the technology was more advanced and user friendly than others machines on the market."

In 2012, two additional acquisitions were made: The Prima Power LPe8f, a punch/laser combination machine featuring servo-electric punching and fiber laser cutting, and the SGe6, a servo-electric punch/shear combination machine for 1500 x 3000 mm sheet metal that replaced the second SG6. Both the LPe8f and the SGe6 are equipped with automated sorting and stacking features.

The Backbone of the Factory

The factory is divided by the Night Train MMS along its length with a separation of the punching, laser cutting, and bending activities. The Night Train manages both the sheet metal and work in process (WIP). This is the largest Night Train installed in the French market, measuring a length of 80 meters with 426 cassettes. This provides greater flexibility for storage and handling many different types and thicknesses of sheet metal, as well as WIP.

When the operators select the types of sheet metal they need for a certain job, the Night Train automatically delivers the correct material to the machine. Each machine is considered as a cell, and the Night Train is the slave to different cells.

"We don't just deliver storage," explains Christophe Berquet, sales director for Prima Power France. "The software portion of the Night Train is also important, with integrated stock management and the machine working queue."

When the raw material arrives, the operators only need to record the material and the thickness, and the Night Train automatically stores it in a free location for later retrieval without additional human intervention. Sheet metal deliveries, which are denser and therefore heavier, are stored at the bottom of the Night Train, while the lighter WIP is stored higher.

When the operators select the types of sheet metal they need for a certain job, the Night Train automatically delivers the correct material to the machine. Each machine is considered as a cell, and the Night Train is the slave to different cells. "We've progressed from the time when we had to move sheet pallets which took 10 to 30 minutes for each move," reflects Lauren.

"This replaces operations that provide no added value, such as storing items, surplus production, and inefficient rework operations," says Berquet. "At the same time, it reduces waste, factory floor space, and material storage. It also simplifies organizational tasks."

Automation's Effect on Human Resources

From his experience, Laurent recognizes that: "Automation provokes two types of fears for operators: the fear that they could lose their jobs, and the anxiety of knowing how to master a complex tool. In first case, we need to understand that automation does not take jobs from employees, rather it relieves the staff of difficult jobs. As a result, it is necessary, especially with a technological leap, to keep the staff informed of the upstream changes to show them that these new things increase the value of the work."

The Laser/Punch Combination

"I decided to use the punch/shear machines for thicknesses up to 3 mm," says Laurent. "Today, suppliers offer galvanized sheet metal up to 5 mm which we use for manufacturing. A traditional C02 laser can cut this type of sheet metal, with higher returns than those obtained through the use of a punching machine. Considering that in 2012, fiber technology first entered the market, I chose to invest in a machine which retains the flexibility of punching for standard holes, and offers the complete capability of cutting contours on parts that are more complex. The punch / laser combination machine LPe8f we bought in 2012 perfectly meets our expectations."

The LPe8f combination machine makes nesting easier, and allows a savings of 10% of material over traditional punching machines. These savings are significant when considering raw materials costs to overall margins.

"As our customers' partner, we are clearly able to provide technical advice from the time that they design their products," adds Laurent. "In addition, very short manufacturing times permit a same-day delivery for an order placed in the morning."

According to Laurent, a certain number of customers believe that the constraints weighing on manufacturing in France are difficult, and that it would make more sense to manufacture abroad. Nevertheless, thanks to its constant investment in machines and automation, Giennoise de Chaudronnerie was able to return production to France which had left the country in recent years. "Our sales forecasts demonstrate that in many cases we are capable of offering better quality at equivalent prices with more flexibility and faster delivery times," concludes Laurent.

This article was translated, edited, and reprinted from the Nov/Dec issue of MetalIndustries. ©Pressedition | www.machine-outil.com

CUSTOMER PROFILE

Servo-Electric Equipment Increases Productivity, Flexibility, and Accuracy

Jamco Products Inc., South Beloit, IL, is a leading manufacturer of fully-welded, heavy-duty, industrial-grade products. The company's lines of carts, cabinets, workbenches, work tables, and safety cabinets offer a line of products that covers most material handling needs. With over 500 standard models and the ability to customize products, Jamco provides one of the industry's largest selections of industrial grade steel and stainless steel products for material handling companies nationwide.

Jamco was founded in 1996 in a small facility in Rockford, IL. The company originally built a line of industrial forklift attachments, but soon began building industrial carts. And business boomed with seven expansions over the past 14 years. And each year, the company has averaged 20-30% growth. Today, 100 Jamco employees manufacture its products from three facilities (160,000 square feet) in the South Beloit area.

According to Jason Redmon, vice president, engineering, historically deliveries throughout the industry for these products was 4-6 weeks. "Jamco brought to the industry what is called a "quick ship" program where you can order any one of the models from our catalog with different configurations. There are thousands of SKUs in our catalog. Our customers can order any one of these SKUs in small quantities and we will build it and ship it in five days."

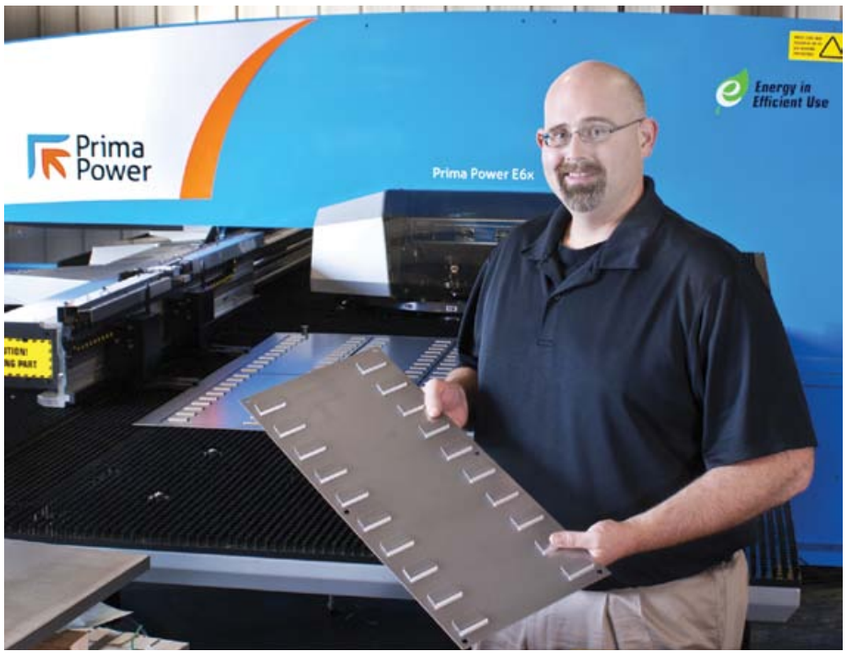
Jamco fabricates mostly carbon steel and some stainless steel for its products. "What is unique about Jamco is that the company manufactures the heaviest-duty products in this market," says Redmon. "For example, our angles have 50% more steel than any of our competitors. We use 12-gauge steel in our trays which is 40% more steel than the competitors' 14 gauge. The net result is that all four wheels on the Jamco are going to stay on the ground. Our carts will take a tremendous amount of abuse and still keep rolling."

"The E6x allowed us to produce all the louvers in-house, saving us nearly $1-million."

Modernizing its Fabrication

Traditionally, Jamco stamped a majority of its products with unitized type tooling. "We always outsourced our laser and turret punch press work," explains Redmon. "There is a substantial amount of work that we would outsource to local vendors. In October, 2012, the Myers Industries, Inc. purchased Jamco, and wanted to modernize our manufacturing area. We also wanted to reduce costs by manufacturing the outsourced products in-house."

Jamco found the punching solution they sought for many months. "We looked at several different machine builders, and visited their customers' shops to see the machines in operation," says Redmon. "But I really loved the servo-electric punching. We purchased a Prima Power E6x servo-electric turret punch press in late 2012, and it was installed in February 2013."



Jason Remon, vice president, engineering, inspects a part fabricated on the Prima Power E6x servo-electric turret punch press.

Prima Power's new E6x offers state-of-the art in servo-electric punching technology in a flexible and affordable package. The genius of servo-electric punching is how it combines energy savings and ergonomics with superb accuracy and productivity. Prima Power's new machine control and user interface software with touch screen panel ensure fast setup and convenient operation.

With the new E6x by Prima Power, modern servo-electric punching productivity is now within easy reach. The E6x has the ability to process full 1,500 x 3,000 sheets and allows a greater range of work accepted and makes nesting of the part more efficient and economical.

Other features of the E6x include:

- Accurate punching movement – excellent forming and marking capability
- Fully programmable punching speed, upper and lower limit of stroke
- Programmable Clamp Setting
- Rigid O-frame design
- Touch screen and Tulus Lite user interface

Cost Savings

"We produce a tremendous amount of louvers for hangings bins, etc., that was all being outsourced to local vendors," explains Redmon. "The E6x allowed us to produce all the louvers in-house, saving us nearly $1-million. The E6x also allows us to decrease our prototyping time. Traditionally, to bring a new product to market would take us 6-10 weeks of prototyping time. Today, we can turn those parts around the next day. We were sold on the servo-electric design and speed of the E6x. The machine was also competitively priced, and we liked the

fact of the proximity of the service technicians. The E6x also gave us flexibility in how we choose to manage our inventory. We can reduce our inventory from three months to three weeks."

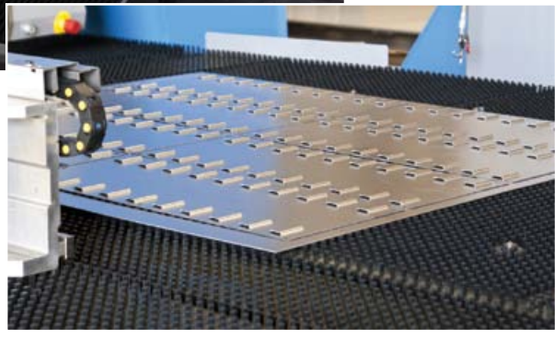
"The Prima Power equipment has brought Jamco into the 21st century."

Servo-Electric Press Brake

Approximately six months after purchasing the servo-electric turret punch press, Jamco added a Prima Power eP servo-electric press brake to its equipment arsenal. Prima Power has applied a servo-electric drive system on the new eP-Series press brake. It is a fast, accurate, non-hydraulic bending solution. The innovative machine concept combines productivity, accuracy, flexibility and reliability with high respect to ecological aspects that the company calls "Green Means®." The concept both sustainability, manufacturing efficiency, and productivity. It also means greater versatility, lower power consumption, less maintenance, and no oil to purchase or to get rid of. In addition, easy programming and outstanding accuracy eliminate waste production. The net result is the ability to form higher-quality sheet metal parts at a lower cost.

Approximately six months after purchasing the servo-electric turret punch press, Jamco added a Prima Power eP servo-electric press brake to its equipment arsenal. The new brake increased Jamco's productivity and flexibility in what the company could bend.

"We had very old hydraulic press brakes," explains Redmon. "Purchasing the eP press brake gave us increased productivity and increased flexibility in what we can bend. We can now bend the more complex parts. For example, some of our stainless steel cabinets have some unique top and bottom trays...and we can now bend these parts in-house. The Prima Power eP press brake gave us flexibility in how we were going to bend product, where we could bend product, and the speed in which we could bend it. We now achieve tighter tolerances with the eP press brake. The tighter you can make your parts, the easier it is for the welders...which translates into higher productivity."



The E6x turret punch press has the ability to process full 1,500 x 3,000 sheets and allows a greater range of work accepted and makes nesting of the part more efficient and economical. The E6x also gave Jamco flexibility in how the company managed its inventory. It has reduced Jamco's inventory from three months to three weeks.

"We now achieve tighter tolerances with the eP press brake."

Impact of Prima Power Equipment

"The Prima Power equipment has brought Jamco into the 21st century," concludes Redmon. "The servo-electric turret punch press and press brake have increased our productivity, flexibility, and accuracy. Prima Power has helped bring Jamco to the next level."

TRADE SHOW

LAMIERA 2014

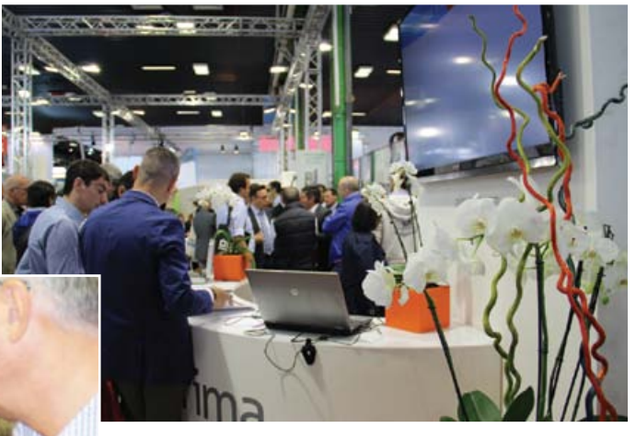
The seventeenth edition of LAMIERA took place in Bologna, Italy on May 14-17.

As the second consumer market in Europe, LAMIERA Italy can boast one of the most qualified exhibitions dedicated to the metal forming machine tool industry, and to the technologies developed for the processing of sheet metal.

This exhibition takes place every two years and has always been a point of reference for the end users of the main outlet sectors: from general mechanics to metallurgy, from machine tools to automotive, from household appliances to building, from the food and packaging sectors to energy and aerospace.

This year Prima Power gave a full overview of its wide product portfolio, exhibiting a 2D laser Platino with sorting system LST, a servo-electric panel bender FBe5, a servo-electric punching machine combined with a right-angle shear SGe6 and a servo-electric press brake eP-0520.

Our booth attracted a lot of interested visitors each day, giving us a good feedback regarding the potential investments in new equipment for the next six months on the domestic market.



FinnTec 2014

Finntec, the biennial technology showcase for Finnish metalworking industries, was arranged in Helsinki on May 6-8. As the Finnish economy has been suffering from sluggish demand in most European countries, the total number of visitors to the exhibition did not reach the level of previous years. However, Aki Ojanen, vice president, sales and marketing, was pleased with the attention paid to Prima Power.

"Quite a few of our customers said beforehand that after the April Technology Days in Kauhava, they would simply skip Finntec this year," explains Ojanen. "But there where many visitors to the stand who despite our long and very strong presence in the country do not know our offering all that well, and we were able to impress them with our solutions.

"We have of course been proponents of automation for a very long time, and remain so, but we also want to solve applications where less automation is needed. The SGe5 is a good example, and so is the Fast Bend. With everything really demanding being fully automatic, the simple material handling needed is manual."

CUSTOMER PROFILE

Systemair – Twenty Years with Shear Genius®

Celebrating 40 years of industrial activity this year, the Sweden-based Systemair is one of the leading ventilation companies in the world. Systemair has operations in 45 countries, 4,100 employees, and annual sales in excess of 500 million euro. The company is listed on the NASDAQ OMX Nordic Exchange and headed by Gerald Engström, one of the founders and group CEO. The Group heads for further expansion through organic growth as well as acquisitions.

Systemair manufactures and markets high-quality ventilation products. The portfolio comprises a wide range of energy efficient fans, air handling units, air distribution products, chillers, air curtains and heating products. The extensive product range has been and is a key element in the Systemair success story.

In 2011, Systemair was looking for possibilities to replace the first Shear Genius® units and to refurbish the existing Night Train system. Prima Power, with its Sweden based dealer Din Maskin AB, was able to propose the newly-introduced fully servo-electric SG.

Systemair and Prima Power

For half of its corporate existence, Systemair has cooperated with Prima Power in manufacturing technology. "The first punching – shearing cell Shear Genius® with automatic stacking was delivered to Systemair Denmark (previously Danvent A/S) in 1994," remembers Johnny Nielsen, production development at Systemair.

"Part quality is one good factor of integrated punching and shearing. We get good edge quality for our assembly."

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Recently and Now

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Major steps toward higher automation levels and further utilization of integrated shear technology were taken in Sweden five years later on the replacement of several stand-alone machines by Night Train FMS® featuring Shear Genius® cells. At the time, they still bore the FINN-POWER brand. Over the following years, close cooperation continued with new investments, machine transfers, service and training.

Systemair manufactures and markets high-quality ventilation products.

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More Shear Genius® installations have been made since in Group factories, and Jonny Nielsen lists some further reasons for staying true to the concept.

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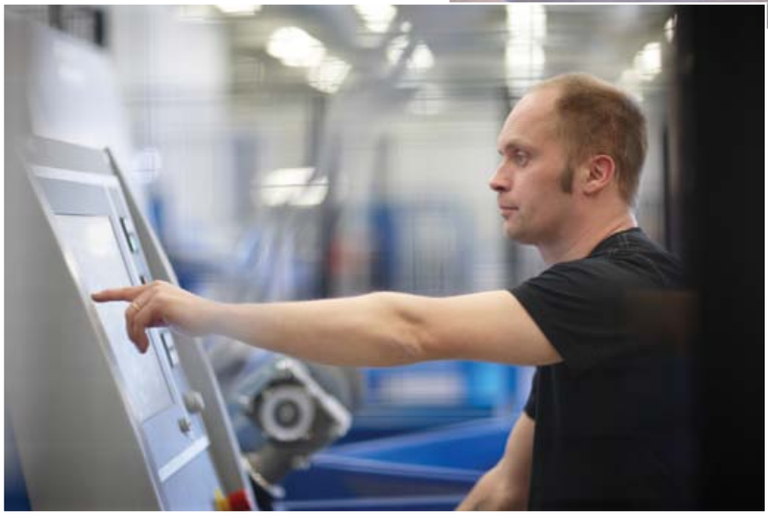
Over the years, close cooperation between Systemair and Prima Power continued with new investments, machine transfers, service and training.

"We need stand-alone and system capacity and the SG's give us both," explains Nielsen. "Environmental issues are important, and coming down from the earlier 3 x 32 kW to 3 x 5 kW is also good for the electricity bill. Servo-electric machines have proven reliable, and since there is no hydraulic unit, static background noise is much lower."



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Single CAM Solution

In the past, Systemair used two parallel CAM systems, the Prima Power NC Express and a generic product; now focus is toward NC Express. According to Nielsen, "It is of course slightly different from generic CAM solution and takes some learning, but it gives us many benefits, such as nesting for coil and auto-destruct of skeletons. Operators no longer have to handle skeletons, now it's a simple matter of emptying bins when needed."

CUSTOMER PROFILE

Maximizing the Bend

A leading manufacturer of high-quality tool boxes reduces setup times while dramatically increasing quality with Prima Power press brakes.

Garin Buckles began his career in fabrication as an apprentice at the age of 15. In 2006, he realized his dream of starting his own product line in Oregon. Champion Tool Storage's humble beginning began in a garage, while Buckles retained his full-time job to cover expenses and worked after-hours and weekends to get his fledgling company off the ground.

In 2007, Champion obtained its first large order from a division of Snap-On's military group, with Buckles subcontracting the manufacturing while he managed all the engineering and financing. By 2008, Buckles was able to leave his full-time job. The company was in its first 2,000-square-foot facility, and he began adding employees and accumulating equipment. "We were having some issues with our subcontractor," Buckles recalls. "There was writing on the wall that we needed to bring production in-house to control our own destiny and not be bound by our subcontractors. At that point, I had purchased more equipment. I would do all the design and the flat patterns and then ship parts to local fabricators for laser cutting and forming. I would then have the parts shipped back to Champion and I would do the welding, finishing, and packaging."

The eP-1030 servo-electric press brake was the first new machine Gavin Buckles ever purchased. A second Prima Power press brake was installed in December 2013.

Meanwhile, Buckles kept accumulating more equipment. He purchased basic machines – an 8-foot CNC press brake, more welding capability, etc., all the while, striving to meet deadlines and grow his company. "I had a short amount of time between testing, approval, and production," he recalls with a grin.

"It really has worked out to be a true manufacturing partnership and friendship. The service has been excellent, and there has been plenty of communication."

Buckles purchased his present building in Hood River, OR, in 2009. "I purchased used machinery as much as possible to save money. I hired some employees – a good number of the people that I hired in 2009 are still with me today. And we went for it. We finally started to produce the complete product line, as well as our military contracts at our facility." Today, Champion has expanded to 40 employees in a facility of 20,000 square feet, with another three acres available for expansion.

By 2011, Buckles determined that his company was ready to invest in modern bending technology. "We had an old 8-foot and 4-foot CNC press brake," reflects Buckles, "and we were doing an unbelievable amount of production for these machines. I didn't want to be tied to having somebody allocated to bending/forming that had the traditional press brake knowledge and training. You are very tied to that person's performance as well as their traditional press brake knowledge. If they don't feel like performing one day, then parts don't come out as quickly as needed. So I wanted something that would allow us to expand our horizons...our capabilities...our quality...and speed. That was a big factor for us."

Buckles shopped around and researched the latest bending technology that was on the market. "We narrowed it down to three machine builders. I discovered Prima Power through a trade magazine, and I talked to one of Prima Power's salesmen, Mike Robertson, who is very knowledgeable about bending and press brakes. We talked quite a bit and compared the other machines. Ultimately, we chose the servo-electric eP-1030 from Prima Power as our press brake of choice. We purchased the machine in July 2012. It was the first machine that we ever purchased brand new."

Prima Power eP-1030 Servo-Electric Press Brake

"The eP-1030 lends itself to very easy operation," explains Buckles. "It allowed us to train one of our lead operators in our powder coating department, who had an interest in learning to operate the press brake. We cross-train a lot of our people."

Ease of Programming

Buckles is impressed with the ease of programming with the Prima Power press brakes.

The eP-series utilizes the Prima Industrie Group's expertise in control technology and features the Prima Electro Open Control. For maximum processing speed, this MSWindows-based control has two separate processors: one for real-time operations and one for bending application tasks.

An operator-friendly 17" Touch Screen user interface leads to a significant improvement of data input rates and a considerable reduction in programming time. 2D graphical programming with automatic bending sequencing will assist in making even first-time operators productive.

AutoPOL Off-line Programming

AutoPOL is an easy-to-use and effective tool for off-line programming of Prima-power eP-Brakes. Sophisticated bending simulation makes it possible to shorten setup times and ensure that the bending task can be performed. 3D models can be created with AutoPOL's designer program or they can be imported in 2D and 3D-format from practically any CAD program. AutoPOL's bend allowance algorithm also takes into account bending tools to obtain correct radii and thus correct unfolding dimensions.

"The nice thing about this whole program with that machine is it allowed us to do the programming in the office with the AutoPol feature," explains Buckles. "With our 3D solid model, it is extremely accurate. We download it to the machines, the operator will scan it and pull up the part number, and that gives them the setup sheet. The operator does not need to figure out tool lengths, what tools to use, or the bend sequence...all of that is done off-line. So when we pull programs from the server to the machine, it's extremely quick. It took our setup times from 20 – 30 minutes down to five minutes. Investing in the quick-change tools and hydraulic top clamp, allowed us to achieve the setup times we were looking for."

"For almost a solid year, we ran that eP-1030 two shifts a day, 10 hours/shift, five days a week. I could not have achieved the next step without those two eP-1030 press brakes."

Faster Speed

Buckles is also pleased with the speed of the Prima Power press brakes. "In addition, the speed is unbelievable compared to the traditional press brake. The stroke length is huge for us because we do a lot of parts that are too deep for our traditional hydraulic machine. The bed length was also an important feature for us. This allowed us to use the entire 10 feet of the bed with 3 or 4 stages, and the operator to handle the part just one time. That saved a lot of time, which obviously increased production and profitability on those parts.

"Another huge factor is that we no longer make setup parts since purchasing the eP-1030," continues Buckles. "99% of the time we never cut extra parts. We cut exactly what we need from punching and laser, and when it comes to forming, every part is a good part. So the days of making setup parts are gone. The setup time is reduced dramatically, and the part quality is through the roof."

Champion Tool Storage is a leading manufacturer of high-quality tool boxes.

Champion purchased a second eP-1030 that was installed in December 2013. "We needed more capacity," says Buckles. "For almost a solid year, we ran that eP-1030 two shifts a day, 10 hours/shift, five days a week. We will see a growth spurt again later this year with new contract manufacturing customers coming on board. I could not have achieved the next step without those two eP-1030 press brakes. So when we needed more capacity, the second Prima Power press brake was an easy decision."

A Team Effort

Champion processes 150,000 pounds of material each month – almost all of it goes through the Prima Power press brakes. "The tolerances that the press brakes hold are incredible," says Buckles. "We can bank on it every time. If we have to go down to +/- .005" we can easily do it. It doesn't take 5 to 10 parts to achieve this...we just need one part. It all goes back to proper setup. Prima Power has been instrumental in helping us figure out how to get the most out of these machines. To be honest, when Prima Power first told me that they were going to act as a manufacturing partner with us...I was skeptical. I thought that it was just a good sales line. However, it really has worked out to be a true manufacturing partnership and friendship. The service has been excellent, and there has been plenty of communication. We are very happy with the customer service. I don't think there is anything we can't get through with the Prima Power team. It is a great asset to have a good team behind you to help figure it out...and the machinery and resources to get you where you need to be."

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