LVD’s Global Perspective

DISCOVERY

issue n°18

LVD takes the mystery out of Industry 4.0

Gicom excels at short set-ups and change-overs

ToolCell press brakes: Set the standard

“Delivering solutions every day”

SARA CAVAZZINI, LVD CUSTOMER SERVICE MANAGER
Dear reader,

LVD takes the mystery out of Industry 4.0. We make it easy to enable the Smart Factory – through integrated software, connected machines and processes.

In Discovery, our CADMAN® Product Manager answers key questions about this industry shift, shares LVD’s perspective, and makes sense of this critical trend to put you on the path to increased production and profits.

As small batches, short lead times and reduced inventories become the standard, fabricators like French customers Sori and AGNP are turning to more capable manufacturing equipment. Read how they’ve invested for success.

We also introduce you to the people behind LVD. This issue spotlights Customer Service Manager Sara Cavazzini and Gino Uzeel, Division Director Press Brakes and Shears.

At LVD, we’re driven to help you make the most of your sheet metal fabrication business. Read on to discover how!

Carl Dewulf
President & Managing Director

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Editorial Note: Let us know what you think of this issue of Discovery. Share your thoughts at marketing@lvd.be or connect with us on social media. For information about products you see in this issue or to find your local LVD contact, head to www.lvdgroup.com.

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Upgrade

Bring your LVD PPEB or Easy-Form press brake into the smart manufacturing age with a NexGen upgrade, a cost-effective way to modernise your press brake and extend its value. NexGen equips your press brake with the latest generation Touch-B controller. Fast and intuitive, Touch-B allows visualisation of more complex parts through 3D graphics and programming with integrated CADMAN-B software. As a result, you can experience up to a 50% increase in bending productivity.

NexGen also provides key safety enhancements to ensure compliance with current standards. This improves machine reliability, provides added cost savings, and helps manage the risk of potential downtime.

Contact your local LVD agent to learn more.

A DIFFERENT KIND OF EXPERIENCE

The new LVD Experience Center (XP Center) is more than just a place to see our latest, most advanced products in action – it’s an entirely new experience. The 2500 m² facility is designed to be a place of discovery, learning, and collaboration. See demonstrations of all our major product lines, interact with our experts, take in a training course, partner with industry colleagues, and experience the LVD brand in new ways. Plan your visit, contact marketing@lvd.be.

Award-winning technology

Our Synchro-Form adaptive bending technology for large profiles is award-winning. Synchro-Form revolutionises the bending of XXL workpieces.

Visit our YouTube channel to see what makes Synchro-Form a game-changer.

Now direct in Mexico

LVD continues to expand its reach and our sales, service and support for you. LVD Strippit Mexico is our newest dedicated sales and service subsidiary. Located in Mexico’s thriving commercial center of Querétaro, LVD Strippit Mexico offers readily-accessible, locally-based sales and technical support for the complete range of LVD laser cutting, punching, bending and software products. The new subsidiary will strengthen our already established operations in Mexico and provide a more active presence in this growing market. Contact LVD Strippit Mexico at ventas@lvdmexico.com.

Management appointments

We’re pleased to announce two key additions to our management team: Stefaan Lips is Global Business Development Director for the LVD Group; Elizabeth Victor is Vice President of Sales & Marketing for LVD Strippit. Both bring solid experience and proven leadership to their roles. Stefaan heads efforts to strategically expand LVD’s global business and continue to build the LVD brand. Elizabeth directs all sales and marketing activity for LVD Strippit in North America, a leading metal fabrication market.

A DIFFERENT KIND OF EXPERIENCE
Gicom sees LVD as the ideal partner. "We are a family business, we adapt quickly, make everything ourselves and fix everything quickly. This is a strength that you can also see at LVD," says Gé Groenenboom, founder of Gicom.

Gicom has grown from the engineering and construction of mushroom growing systems and composting technology to become a large and versatile metalworking company with over 130 employees. All of the systems that the company has developed over time, such as the systems for manure treatment, organic waste, air filtering, herb drying, have become fully-fledged product groups which have enabled Gicom to build up a good reputation in the market. To do so, the company manufactures all of the circuitry, sheet metal and assemblies in-house. "This allows us to adapt quickly and means that the customer has a single point of contact for the complete system. An additional advantage is that we also supply parts for the older generations ourselves and do not rely on suppliers," Gé explains.

Delivery
"Because we produced all the sheet metal in-house, and had a large machine pool for doing so at an early stage, companies from the region soon came to us for supplies. Now supplies determine a large part of our turnover. And that share continues to grow because we respond quickly, deliver on time and the customer can rely on our high quality. Another reason is that from the beginning we have invested in machines, which allow us to process sheets of up to 6 m in length in aluminium, steel and stainless steel," Gé stresses.
A family-run business

“My desire was to also keep everything I had built up within the family. A family business is able to adapt more quickly because you don’t have to hold elaborate meetings which means it can respond to situations and take decisions rapidly.”

Last year his son and daughter joined the business and now Gé is able to focus on where the company will be in five years. Monique Groenenboom is now responsible for the day-to-day business in Biddinghuizen and his son Harry focuses on the manure-processing systems and marina-related activities.

LVD dominates the machine pool

Until two years ago, Gicom had two CO2 laser cutting machines and six LVD press brakes. The continuation of the family business also meant work was done immediately on upgrading the machinery. This led to investments in the latest LVD Phoenix 6020 6 kW fiber laser for sheets up to 6 x 2 meters and an LVD ToolCell Plus press brake. They are both the first models of their kind to be delivered in the Benelux region. “The new fiber laser cuts through 1 mm aluminum sheets at 80 m/min. Since we process a lot of aluminium with lengths of up to 6 m, that represents a huge improvement in efficiency for us. That’s why we decided within six weeks of delivery to replace a CO2 laser cutting machine with a second Phoenix FL 6020 6 kW,” says an enthusiastic Gé.

A large inventory of press brake tools

Gicom also wanted to purchase an LVD ToolCell for their press brake department. ‘Automatic tool changing on the ToolCell is a perfect solution for us, because we often need to switch tools which means we have to retool heavy punches and dies. The problem was that we have a large number of high tools, which did not fit on the ToolCell. Mathijs Wijn, Sales Manager at LVD: ‘That’s why we developed the ToolCell 220/40 Plus, with a working open height up to 670 mm, which accepts 231 mm punches and 130 mm dies. Gicom is the first customer to have an LVD ToolCell Plus with automatic tool changing for high tools and a second machine is now on order.’

‘First part right’

Gicom are experiencing increasing demand for delivery of single units and small production runs. ‘That means you spend more time on changing tools, calling up programs, setting up stoppers and such. Automatic tool changing on the ToolCell is already a major factor that yields benefits. However, with single parts you want to avoid test bends for measuring and correcting the bend angle.’ The bent part should be 100% right straight away – first part right. Mathijs Wijn: ‘The ToolCell is equipped for this purpose with the patented Easy-Form® Laser adaptive bending system. Easy-Form performs an in-process measurement which ensures that the desired bend angle is achieved immediately.’

CADMAN-B

Offline programming from the job preparation stage is also another important condition for ensuring that the operator can start immediately. Mathijs Wijn: ‘Otherwise the press brake spends all that time waiting until the operator has programmed the product.’ LVD does this using its own CADMAN-B software. First, it carries out a feasibility test on the job preparation, in which the plate layout is calculated. In other words, the bending allowances have already been compensated for directly in the unfolded part. Then the press brake program is ready and the unfolded part can be loaded into the controller for the laser. “This means that initially programming a job onto the press brake controller so that we can determine the correction for the bending angle and the plate layout is eliminated,” Mathijs explains.

Doing business with LVD since 2004

Gicom has been doing business with LVD for 13 years. Gé: ‘These are technically advanced machines. In addition, LVD is a family business and you can see that from the fact that it responds quickly and develops as much as possible in house, just like us. On both sides, that has resulted in a long-term relationship. It is a family business, where you are not a number and can always be in direct contact because of the short lines of communication.”

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Profile

Company: Gicom
Website: www.gicom.nl
Since: 1984
Works with: mild steel, stainless steel, aluminum, hardox, ...
Industry: Composting systems, sheet metalworking
Equipped with:
• 2 Phoenix FL 6020 6 kW
• 2 ToolCell 220 ton Plus
• 1 PPEC press brake
• 4 Easy-Form press brakes
Software: CADMAN-B, CADMAN-L, CADMAN-JOB, Touch-B, Touch-L control

LEADERS
Industry 4.0 has arrived, but what does this mean for your business? We asked our expert, CADMAN Product Manager, Kurt Debbaut, who travels around the world giving presentations about the Smart Factory, for his insights on the subject.

Industry 4.0, Big Data, Smart Factory: What does it all mean?

The term ‘Industry 4.0’ stands for the fourth industrial revolution. Industry 4.0 involves automation and data exchange. In sheet metalworking, it’s collecting ‘big data’ from machines that are digitally connected to each other. Both machine data and data stored offline are gathered in a centralised database. This data along with real-time feedback from the machines, gives us the intelligence to make more informed decisions about manufacturing. It’s this dynamic state that enables the ‘Smart Factory.’

How is LVD helping companies benefit from Industry 4.0?

LVD realised the importance of data exchange between equipment and software years ago – well before Industry 4.0 had a name. For years, our machine controls and software have been designed to be ‘social’ and feed their information (status, performance, results) to a central database. Today, the culture of small batches, short delivery times, and increasingly complex parts makes this way of working a necessity. Combining orders to make more efficient use of material and improving internal logistics is a must. We use our experience in this area to help take the mystery out of Industry 4.0 for our customers. We analyse their active business processes and apply QRM (Quick Response Manufacturing) to them. We consider what CADMAN and press brake tooling, calculates the correct unfolding, internal radius and bending sequence and how and where the operator should place the tooling, among other things. This allows you to reduce setup on the machine to zero.

What advice can you give to a shop that wants to get started?

Industry 4.0 requires a different way of thinking and it’s crucial to be receptive to this new mind-set. No matter the size of your operation, the principles of Industry 4.0 can add value to your business and alleviate stress on the production floor, but management and production staff need to be open to and support this change. Initial steps should be manageable and can be small – like introducing offline CAM software. One thing I always tell companies is that Industry 4.0 will not make your operators obsolete – it will make better use of them.

What are some key steps to take?

While the operator is programming at the machine, the machine stands idle. So, a critical first step is to introduce offline software. Our CADMAN software for work preparation enables you to both nest parts and create cutting programs in 2D and bend in 3D. CADMAN-B bending software is currently the most powerful tool on the market for creating bending solutions. Just drop in a 3D drawing and the software does the rest. CADMAN-B suggests the offline programming, we start by using the same names for the tools and materials. This allows us to link all machines to the centralised database and CADMAN-JOB.

The second step is to organize your fabrication shop to improve flow with the help of CADMAN-JOB. This software tool works in real-time to examine every order and even filters and bundles orders. It also clearly controls and displays the various process steps for both 2D and 3D operations.

The third step is to connect CADMAN-JOB to an ERP system, so that information is automatically sent from the central ordering system to the shop floor. A key feature of CADMAN-JOB is that it allows you to go through the status of every order and it feeds production data back to the ERP system. You can make accurate post-calculations and more accurate precalculations for subsequent projects.

Are there any obstacles to overcome before getting started?

Getting started is much less daunting than you might imagine. In most cases, companies already have the hardware, such as the server and PC infrastructure. One potential obstacle is that a client may already have other machines running on its own local database. The local database is often “polluted” because each operator has used his or her own naming system. To fine-tune
Sori reinforces its position

Today is an important day for Hervé Valliet, the dynamic managing director of Sori, a French company situated near Grenoble. He has come to LVD to receive his punching machine: the Strippit PX-1520, with FA-P automation. Hervé: “This investment will allow us to achieve our goals in terms of diversification, innovation and service.”

The organisation specialist
Sori offers a broad range of storage systems for the professional user: this includes toolboxes, workshop trolleys, as well as professional in-vehicle equipment. “You can compare us to a kitchen manufacturer,” Hervé says with a smile. “If you are looking for this type of equipment, we ensure an optimal space distribution.” Sori also produces store displays, and more recently, metal designer furniture.

Key strengths
“Flexibility and speed,” Hervé confirms. “Our customers now require high versatility and small-volume production. If you want to service the market properly, you have to adapt your company and your means of production, otherwise you lose ground. When I took over my father’s company, I decided to develop the range and focus only on the professional market. We have become a strong brand and collaborate with a network of professional retailers. In doing so, we also maintain our position as one of the industry’s last French independent manufacturers.”

The French market is Sori’s main market, and this provides security during less busy periods. Exports experience off-peak and peak times. In the 80s, Sori achieved 22% of its turnover abroad, but it has highly decreased during the economic crisis. Nevertheless, Hervé Valliet feels confident about the future: “Now, exports account for 30% of our turnover, we even ship to Japan.”

“Flexibility and speed”
Why choose LVD
Products don’t change that much but the manufacturing process does: it’s faster, with smaller series. This is possible only if you use the right machines. This is the third LVD punching machine bought by Sori. “Our old Delta punch press has been working for already 20 years. We’ve produced many parts with this one, it has proved its reliability.”

“Of course, we have known LVD for a long time, and it’s always a pleasure to collaborate. I have known some of the partners for years, and this builds confidence; you know who you are dealing with!”

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Gino Uzeel is a busy man. As Director of the Press Brakes and Shears division at LVD in Belgium, he works with a large team for administration and production. An exciting and versatile role, as it turns out, requiring both technical and people skills.

In 2012 I was appointed as Director of the Press Brakes and Shears Division, a large, diverse team dedicated to the preparation and production of each bending machine that goes out the door.

**Helicopter planning**

Part of my team ensures the smooth operation of the administration: launching machines, reviewing stock listings, making purchases, entering orders from the subsidiaries, providing development and orders for press brake tools, work station analysis, short-term engineering, software development and hot-line support.

The employees on the shop floor are almost all technically trained and carry out each stage of the assembly. They are proactive and solve most problems themselves. During the weekly division meeting, I review the pending cases with production and logistics to see whether we are on track, where should we intervene, ...

This helicopter plan is then worked out in detail by the assembly manager and the team leaders.

I also follow communications with our global manufacturing facilities. We discuss the orders via Skype and set priorities. Full loads are sent back and forth each week between LVD and our manufacturing facilities with parts, subassemblies or complete machines.

**Production manager or team leader?**

One does not exclude the other. As a production manager, you have to keep an eye on the objectives in terms of delivery time and quality, while as a team leader you will want to make sure that everyone is feeling good and is performing as well as possible. Communication is very important in both cases. Of course, not everything always goes according to plan, but that keeps it interesting.

Getting the machine ready in time - where we depend in part on our suppliers - while maintaining maximum quality with the available people and space, is the biggest challenge and sometimes the schedule has to be revised. With the good team that we have and the smooth cooperation with the other divisions, everything usually turns out well.

LVD is a pioneer in the field of press brakes, new products are doing tremendously well on the market, the ToolCell, the Synchro-Form, ... I am sure that we have many fine years ahead of us.

**The opportunity to grow**

At LVD you have the opportunity to grow or to change your role, that I noticed soon when I started working here after my studies as an industrial engineer, first as a press brake startup technician and later as a prevention advisor, facility, assembly and logistics manager.

The other thing close to my heart is my annual appointment at the rehabilitation center in Kortrijk. Dressed as Saint Nicholas (a Belgian tradition), I visit the deaf and hearing-impaired children on the sixth of December. I myself grew up in a family where both my parents and my brother were deaf and can perfectly use sign language. It feels good to make those kids happy, because they find it fantastic that Saint Nicholas speaks their language!

**Outside LVD**

Previously I took part in cycling competitions, but now I enjoy a Sunday ride with the club. I like to go with my family to Spain, we have made friends there in the meantime and my wife and I have learned Spanish to make us feel more at home.
Dynaxo was established in the town of Wronki, Poland, in 1980 by Stanislaw Nowak. The family firm is now run by Stanislaw’s son Pawel Nowak and his wife Malgorzta Brzóska-Nowak.

The company’s main business is as a subcontract manufacturer making components and assemblies based on sheet metal and profiles. Recently, Dynaxo has invested in an LVD Lynx fiber laser to help it cut lead times and bring an innovative new product to market, a gas-fired ceramic hob. This looks like a conventional electric ceramic hob, but is heated by gas burners under the glass.

Dynaxo’s Technical Director, Grzegorz Król, explains: “If you are using solar or wind power, or relying on a generator, you probably won’t have enough wattage to run an electric cooker. This provides an attractive, modern alternative that is easy to clean compared to a traditional gas hob. It is also safer than an electric hob and healthier than an induction hob.”

Fifty percent of the funding for the new laser came in the form of an EU grant to support the introduction of the new product. To qualify for this, the order for the new machine had to go to open tender.

“We determined exactly what parameters we needed on the machine, including the type of resonator, its power, the working area, accuracy and machine footprint – as well as price, components and subassemblies. We can even help our partners to redesign their products to reduce the cost and make them easier to manufacture,” says Grzegorz.

“It is very easy to learn – it is intuitive.”

Nowadays, the company produces 900 different parts for more than 25 clients. Having the two punch presses, and now two lasers, gives Dynaxo a lot of flexibility over how it makes a component.

Says Grzegorz: “When we quote for a job we obviously base this on the most cost-effective production route. If there is forming involved then you have to use the punch press, but there is a lot of work that can go on either. So if there is a lot of work, we can move parts from punch to laser and vice versa to make the most of our capacity.”

He adds that it is difficult to attract skilled employees in a small town like Wronki, so the Touch-L touch-screen control on the Lynx is a major plus. “It is very easy to learn – it is intuitive.”

“We have managed to grow from 100 people a year ago to 125 now. We can attract staff because we are not like a big organisation. In a big company the worker is just a number, but in our company, you are a human being.”

As well as the new Lynx, Dynaxo has two punch presses, two 3 m press brakes, a small Dyna-Press electric press brake and a Sirius CO2 laser from LVD.

In 2001 Dynaxo decided to move its focus from the high-volume segment to smaller series of higher value products, which was when it made its first investments in laser and CNC press brakes. In 2006 the company bought an LVD punch press and press brake. The Sirius laser followed some years after to replace a machine from another manufacturer.

“We are more than just a laser and punch subcontractor, we have a complete subcontract service that can offer anything up to quite complex
GLOBAL REACH

Mexico
Emyasa, manufacturer of manual air pumps and grease guns, recently pumped up its production by investing in an Easy-Form 135/30 press brake. The precision press brake with Easy-Form® Laser adaptive bending system helps keep its manufacturing as well as its subcontracting business thriving.

Chile
The fastest market delivery and guaranteed quality, that’s what Provi-Metal promises customers who turn to it for quality cutting and bending. The company specialises in delivering solutions for a range of metalworking projects. It’s able to do so thanks to advanced production equipment, including two PPEB 320/30 press brakes in tandem, a 220-ton LVD press brake, two Orion Plus 3015 lasers and LVD shears.

Brazil
Casale Equipamentos serves the Brazilian agribusiness market with harvesters, mixers, spreaders and more. Dedicated to making cattle ranching more sustainable and profitable, the company invests in the latest manufacturing technology. Casale recently purchased a heavy-duty PPEB-H 400-ton press brake with T1, T2 sheet supports and Easy-Form® Laser to efficiently handle its large bending needs.

Italy
Farid Industrie a leading manufacturer of waste compacting machines, offers a product range that has no equal in Europe, ranging from satellite vehicles to mini-compactors, traditional and automatic compactors and street sweepers. A custom PPEB-H 400-ton press brake is used to bend heavy-duty components for the complete product family.

UK
LVD customer KTwo has grown its manufacturing capacity with the installation of a Phoenix 4020 6 kW fiber laser and a second Easy-Form press brake. The builder of agricultural machines is able to produce smaller batches economically, improve lead times and increase its flexibility with LVD machinery and software.

Poland
EBA is not afraid of challenges. The contract manufacturer handles engineered-to-order production, executing on average more than 50 prototypes a month. LVD bending equipment – two Easy-Form press brakes and a new Dyna-Press 40/15 Plus press brake – coupled with CADMAN® software keeps the company flexible and capable.

Serbia
As demand for its high-quality boilers for solid and liquid fuels continues to heat up, Radijator inženjering employs modern production equipment to build its heating units, including an Easy-Form 220/30 Plus press brake for precision bending.

New Zealand
A contemporary, sophisticated style is the hallmark of an Escea fireplace. Renowned for its design, high heat output, efficiency and world-class technology, Escea relies on an Electra 3 kW laser and Dyna-Press 24/12 Plus press brake both powered by CADMAN® software to keep its product quality high and its brand hot.
LVD makes tube manufacturing easy with the flexibility and efficiency of the TL 2665 and TL 2450 tube laser cutting systems. Here’s what users are saying:

Firing up production

Hearth & Home Technologies forms and cuts tubing for the fireplaces it manufactures. Tube laser technology offers more cutting capabilities, speeds the product design cycle and allows the company to manage a greater variety of designs. H&H has reduced the burner introduction component of new fireplace design from weeks to days. It can produce sample parts faster, which shortens the new product development process and time to market.

“With the tube laser, we can prototype in a day or two,” says H&H engineer, Nate Harnly.

The tube laser also gives H&H more control of part quality and design features. “We’re measuring features more closely and can quickly adjust for any quality issues we see,” explains Nate.

This flexibility helps speed changes or enhancements to critical features such as heat output, flame appearance and flame activity. “We can more quickly arrive at the fit, form and function the customer desires,” Nate offers.

Freedom to create

Elite Laser, a full-service fab shop handling projects for hobbyists to aerospace manufacturers, uses its eight years of tube laser cutting experience to offer customers creative solutions for design and to cost-effectively manufacture those designs.

“The tube laser makes short work of cutting virtually any tube size with little or no cleanup,” says Elite Laser’s owner, Jeremy Kegher. “We save a significant amount of labour hours in what is typically a very time-consuming process.”

The production of tubular structures is handled in a single operation, which shortens lead time and reduces the cost per part.

“With the tube laser, we can prototype in a day or two.”

Operating lean

For Rockford Process Control, a job shop that makes products for recreational use such as utility vehicles, four-wheelers, ATVs and motorcycles, tubular structures are part of everyday production. RPC handles tubes of 6 m long in 19 mm up to 41 mm rounds and 25 mm by 50 mm rectangular configurations, producing suspension and steering components and the like.

Tube laser technology has streamlined RPC’s production. Tube cutting was a seven-step process that involved sawing the tube to length, setting up a forming die in a press, forming, trimming the ends using a sawing operation and working in batches. Now, RPC produces tubes to need and is working toward creating a set cut schedule for standard parts to further lean its process.

“We’ve eliminated a huge amount of tooling, reduced production time, reduced work in process inventory,” says Rick Williams, manufacturing process engineer at RPC. “We don’t need to have two weeks worth of stock made ahead of time. Now, in some cases we can cut a week’s worth of parts in just three to four hours.”

The speed of laser cutting and the clean, reliable cuts it produces means RPC knows what to expect from day to day.

“We get more reliable fit up for welding,” explains Rick. “With mechanical coping and machining there were issues with the ends of the tubes becoming distorted, but with laser cutting you have no distortion – the part is the same every time.”

Find out how tube laser cutting can benefit you at lvdgroup.com.

What makes LVD tube lasers unique?

• Standard 7-position magazine loader for short runs, small batches and part kitting
• Optional bundle feeder for high volume production
• Combination of magazine loader and bundle feeder satisfies high-volume production and high-diversity needs
• Seam detection option uses two cameras to eliminate false seam readings
• Integrated CADMAN-T software
• Easy to operate for any level of user
• Simple, reliable machine design
• More value for the investment – cost-effective tube and pipe cutting
Making connections

Sara started her career at LVD in 2004 as a Service Engineer, working as a CADMAN® software applications specialist. In 2013, she was promoted to Customer Service Manager, a role that connected her mechanical training, software experience, passion for teamwork and problem solving.

“I’m a mechanical engineer. LVD offered the opportunity to combine mechanical and technical skills with software and programming, and to have direct contact with the customer. I found this a really interesting mix.”

For Sara, having a leadership position in a male-dominated field is no matter. Hard work is what pays off.

“Customers need to know they can trust you. If you build a relationship on hard work, mutual respect and cooperation, it doesn’t matter if you are male or female. I was lucky to find in LVD an organisation that made this possible for me. From the beginning, I felt I was treated without difference.”

Team dynamics

Sara’s service group supports Italy and the Balkan Peninsula, two very different regions.

“I believe strongly in teamwork. We’ve made quite a few changes to build up our team, to react quickly and be more responsive. Every region is different and it’s important to recognise that. As an international company, we need local technicians who speak the language, are located near the customer and can have direct contact with them.

“The most important thing is that we don’t lose direct contact with the customer. We have to listen to and learn from our customers because the market is constantly and quickly changing and so are our customers’ needs.”

Machine and software maintenance programs are key because they support ongoing interaction.

“Preventive maintenance is so important. We can keep problems from shutting down production. Also, continuous contact helps us know the customer, build a relationship, and not just be there in an emergency situation.”

Mission possible

Despite being a very organised person, Sara has learned that flexibility is paramount. “I try to have a plan every day – that’s how I like to work. Every morning our service team meets and together we define our tasks. But, priorities change quickly in this job, so we are constantly adapting.”

Having recently added service planning and hotline support for laser products in response to the growth in fiber laser sales, Sara’s days are more changeable than ever. Still, the mission is never impossible. Last year, LVD Italy was one of the LVD Group’s top sales and service subsidiaries.

“It’s not an easy job, but I like it. It’s very satisfying when you can solve a problem for a customer.

“I’m quite proud of our success and to be able to apply my ideas and way of working to our service group.”

In addition to a high demand for fiber laser technology, there is also growth brought by the next industrial revolution, Industry 4.0.

“Industry 4.0 is very important, especially in Italy where the market is made of small companies with strong business sense. It’s changing how we work. The customer is starting to understand that software is central to the future. It’s where the new development is happening. Everything has to be linked; production has to be monitored. From the service aspect, we are ready for this change.”

Called to care

Having a caring nature is important in what can be a 24/7 job.

“Preventative maintenance is so important.”

“When I first came into this position, it was really hard to find free time, but I’ve learned that it’s important. I play sports to relax. My real passion is to travel. Though I travel a lot for work, traveling off hours is different. I like to go to faraway places. I’ve enjoyed Africa, India and Nepal.”

Recently, Sara spent two weeks in Ghana, Africa, helping out in a children’s orphanage with an Onlus (non-profit) organisation – taking care of more than 100 young people from six months to 20 years old.

“It was a wonderful experience; something that changes the way you see life.”
In the brave new digital world, Materiam is helping customers realise their designs. The young Mexico City-based company uses flexible manufacturing processes and digital technology to make it easier, faster, more convenient and affordable for clients to materialise their ideas – from prototypes to large-batch production.

Company founder and President, Alfonso Tames, explains: “We are a digital fabrication arm and help anyone from artists, small- to medium-businesses, and large OEMs materialise their projects. We take digital assets and using digitally-driven CNC fabrication processes convert them into material things in the most efficient manner possible.”

Customers upload their design files to Materiam’s web portal, match their needs to the company’s many services, which include CNC bending, cutting, and 5- and 7-axis machining, and Materiam does the rest.

Precision processes
Making advanced fabrication possible is LVD’s Lynx fiber laser coupled with a 300-ton Easy-Form® press brake and CADMAN® software.

The Easy-Form® Laser real-time bend angle measurement system and CADMAN software eliminate long setups and trial-and-error bending.

The press brake uses LVD’s latest generation Touch controller which connects to the CADMAN database.

“We need a lot of flexibility to move from one job to the next. CADMAN helps us unfold a complex part and calculate all the material needed in the bending process and it generates a file so we can cut the part on our laser. That’s very important for us because when every print is different, you need software that can quickly unbend a part, send the cutting file to the machine and work it all out.”

Materiam purchased the press brake first and was so pleased with its level of technology, turned to LVD for its laser. The Lynx fiber laser makes easy work of the many prototypes Materiam handles.

“The laser excels at small batch production because of its flexibility and fiber laser speed, and the quality is great,” says Alfonso.

“So, prototyping first in laser is a smart way to validate a design.

“Plus, as production cycles are getting shorter, designs are changing over more frequently. Our customers need to prototype and produce very fast. They are also doing customised production. Part of their designs are more customised to the needs of their clients and the laser’s flexible manufacturing fills that need.”

The press brake uses LVD’s latest generation Touch controller which connects to the CADMAN database.

“Universal advantage
With its LVD equipment, Alfonso wanted to create a workshop that can serve a broad base.

“We invested in more universal processes because more people are looking for these services,” he says. “In the sheet metal process, we are covered with the LVD solutions.”

For those who don’t have fabrication capabilities in house, can’t afford advanced fabrication processes, don’t have the space for fab machinery, don’t have the volume of work to justify the equipment, or just don’t want excess capability that impacts cash flow, Materiam is a game changer. This is especially true for its Mexican customers.

“It’s difficult for a small shop in Mexico to access better technology, more advanced equipment,” adds Alfonso. “For people to have this ability, to have this facility to help them realise their project, is very important.”

And, digital assets can be stored for repeat jobs.

“If you’re an industrial designer and are making a table that needs to be laser cut and bent, you upload all the parts you need to build the table. Then, when a client places an order, you can log on to our platform and order the parts for the tables. Your projects are uploaded and ready to fabricate on demand.”

Moving it forward
Materiam is part of a higher goal for Alfonso. The industrial engineer is driven to moving Mexico forward by creating opportunities.

“Our mission is to democratise innovation and productivity in Mexico by offering students, entrepreneurs and businesses advanced technologies for digital production,” he says. “We give them access to top-of-the-line, world-class resources so that the infrastructure is not an obstacle to the idea.”

At the intersection of virtual and physical, Materiam stands poised to help customers bridge the digital divide and bring their ideas to life.

“Making advanced fabrication possible is LVD’s Lynx fiber laser coupled with a 300-ton Easy-Form® press brake and CADMAN® software.”
TOOLCELL & TOOLCELL PLUS

Setting the standard

As bending departments are challenged with small batches, a high product mix and increased part complexity, LVD offers a solution: ToolCell, and now, ToolCell Plus.

An industry first
In 2012, LVD launched the revolutionary ToolCell automatic tooling changing press brake. Its market arrival was timely, meeting the demand of processing a high variety of parts in small quantities and increasing bending throughput by dramatically reducing setup time through automatic tool changing.

No time is lost searching for tools or positioning tooling sets.

With installations across the globe, ToolCell sets the standard in automatic tool changing press brakes:

- Automatic tool loading/unloading maximises bending productivity by freeing the operator to perform other tasks. ToolCell can increase throughput as much as 50%, depending on the application.
- An integrated tooling stadium keeps a comprehensive selection of tools in the machine and at the ready. The press brake’s backgauge efficiently loads and unloads tools. No time is lost searching for tools or positioning tooling sets.
- Touch-B touchscreen control is icon-driven and intuitive to operate.
- LVD’s Easy-Form® Laser adaptive bending system provides in-process angle control to ensure consistently high bending accuracy.
- CADMAN®-B programming software combined with CADMAN-JOB for shop floor management streamline production flow for higher output.

More versatility with ToolCell Plus
To be able to bend parts with higher flanges, LVD developed ToolCell Plus with an extended open height and stroke along with a new series of high tools – 231 mm punches and 130 mm dies. The new Plus models bring more versatility to the table. They can handle bend lengths of 3 and 4 m and have 220 tons of bending force.

Learn more about the ToolCell solution at www.lvdgroup.com.
ALWAYS AIMING HIGHER

The AGNP company, founded in 2011 in Nassandres, France, is constantly evolving. This family-owned company, where father and son work together, started with a machining center, and then added various sheet metal processing machines: press brakes, laser, punching machines... which led to the doubling of their production space, now at 2000 square meters.

AGNP’s core business ranges from the production of prototypes to mass production using laser or water jet cutting, folding, metalworking: in short, all the metalworking related professions. Since they purchased a press brake in March 2014, they developed a very close partnership with LVD. In September 2016, they installed a new fiber laser cutting machine: Phoenix FL 3015 6 kW.

The Phoenix FL shows outstanding versatility. The machine is suitable to cut stainless steel, aluminum, copper and all types of standard steel in various thicknesses.

Nick De Hoef, co-founder of AGNP, was the first one to operate the fiber laser: “I intended to use it before the other members of the company, in order to discover all the possibilities that the machine has to offer. The touch screen offered a fast and user-friendly control. Three days of training were enough.”

Nick doesn’t regret this purchase: “We were able to increase our productivity in an impressive way, while maintaining a very high level of quality. Cutting times have been reduced to a minimum. Regarding our customers, we’ve reached unbeatable price levels, while offering optimised delivery times.”

AGNP serves various industrial sectors: the food and pharmaceutical industries, construction, agricultural machinery, the railway industry and all the outsourcing sectors of the great West region of France and the Paris area. “Thanks to this machine, we are capable of entering new markets in terms of volume. Our biggest order consisted of a batch of 500,000 pieces.”

For older CO₂ lasers, the power consumption was around 90 kW/h. Thanks to fiber laser technology, the energy bill has decreased to one third, with a total installed capacity of 28.65 kW/h, which makes this investment even more profitable.
OSMA, based in Osnabrück, Germany, manufactures lifts for everything from hotels, shopping centers and hospitals to corporate headquarters and housing construction. The big issues facing OSMA are space and cabin weight. Developers and architects don’t want to devote valuable floor space to lift shafts as every cubic meter of building volume costs a lot of money. The lighter the cabin is, the less drive power it needs, so the motors can be smaller, which in turn saves space and energy.

Using sheet metal instead of sectional steel constructions offers significant advantages as it can be formed according to load profile, so that the cross section is strongest where necessary. Unnecessary material is eliminated, thus removing unnecessary weight. Since setting up a dedicated sheet metal facility in 2007, OSMA has invested in two Easy-Form 220/40 press brakes and a 4 kW Electra FL 3015 fiber laser along with the CADMAN suite software.
TAKE THE LEAD
IN INDUSTRY 4.0-READY TECHNOLOGY WITH

NexGen is a cost-effective way to bring your LVD PPEB or Easy-Form® press brake into the smart manufacturing age, extend its value and service life. A complete control and safety upgrade, NexGen:

- Lowers your risk of downtime
- Makes your machine Industry 4.0 compatible
- Increases press brake productivity up to 50%
- Offers key safety and service enhancements

Discover all the benefits of NexGen. Visit lvdgroup.com to find the LVD Service contact near you.

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