



Left and opposite: LVD's busy stand at Blechexpo/Schweisstec in Stuttgart, Germany, from 7-10 November 2023.

ISMR SAYS: "LVD's Group Marketing Director, Matt Fowles, discusses new technology launches, sheet metal market trends and challenges."

FEEDING THE FLOW

At this November's Blechexpo/Schweisstec trade show in Germany, LVD Group launched a new panel bending range as well as new laser cutting technology and software.

LVD is a leading manufacturer of sheet-metalworking equipment including laser-cutting systems, punch presses, press-brakes, guillotine shears and automation systems, integrated to and supported by its CADMAN® software suite. LVD Industry-4.0-ready products and technology are geared towards smart manufacturing.

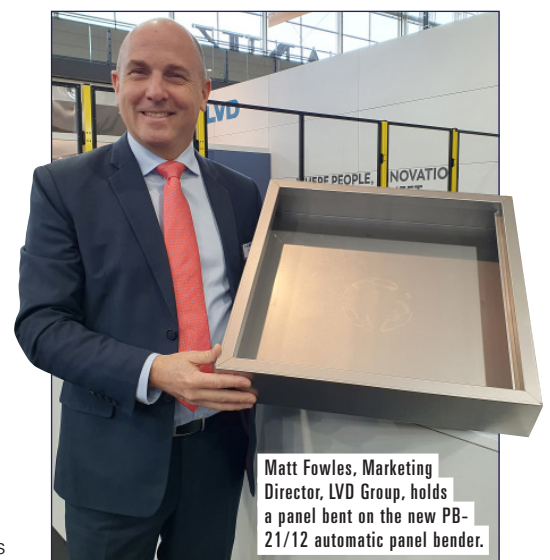
With its global headquarters in Gullegem, Belgium, LVD Group operates production facilities in Belgium; the U.S.; Italy; Slovakia and China. It has dedicated offices, and over 1000 employees, as well as direct representation in 47 countries. The family-owned business has, for the sixth consecutive year, been named one of 'Belgium's Best Managed Companies' by Deloitte Private, Econopolis and KU Leuven. The designation recognizes privately-owned Belgian firms that

translate a clear strategy, strong capabilities and employee engagement into strong financial results.

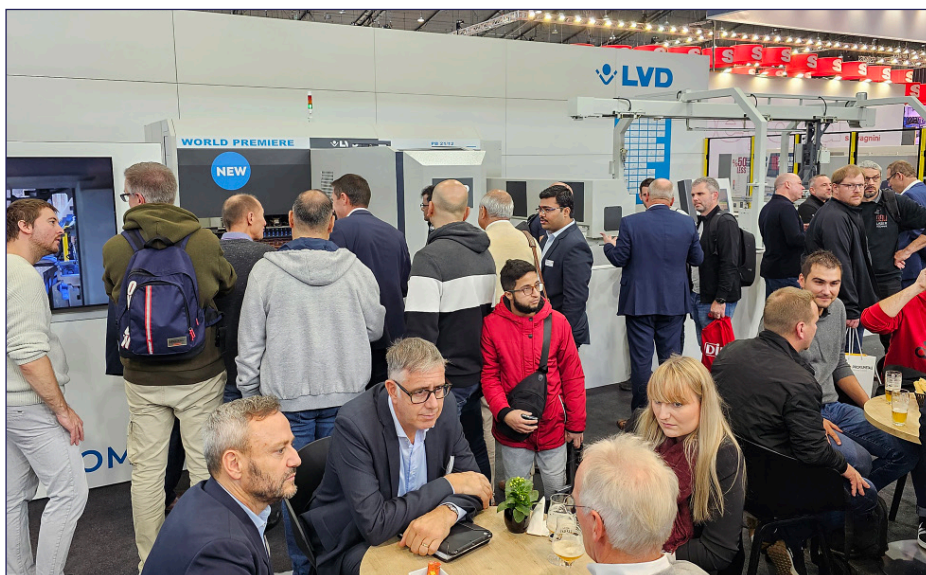
At this November's Blechexpo/Schweisstec trade show in Stuttgart, Germany, LVD Group introduced a host of new technology and software launches. ISMR caught up with LVD's Group Marketing Director, Matt Fowles, on its booth at the exhibition to discuss these new developments and gauge his views on sheet metal market trends, processes and challenges.

Launch of panel bending range

A major news announcement at LVD's booth was the addition of panel benders to its



Matt Fowles, Marketing Director, LVD Group, holds a panel bent on the new PB-21/12 automatic panel bender.



businesses," LVD's Group Marketing Director, Matt Fowles, told *ISMR* at the exhibition.

"We see panel bending as a natural addition to our product range and the next step to offering a one-stop shop to our customers. Over the last few years, we have added more automation products for laser and punching, as well as more tube laser cutting. Customers want more throughput, handling and automation capability. We see panel bending as a natural progression, as some of the unique features of our panel bending technology fit with the way that users need to process material these days. A good example of this is offline referencing of the blank, rather than in-machine referencing, to keep throughput and process flow steady," he added.

The automated PB 21/12 on LVD's stand can process a panel of up to 2.1m long x 12.5m wide in up to 1.6mm material thickness. This model features a combination of automated loading, with semi-automatic offloading, in the demonstration shown to *ISMR*. The combination of multiple input stations gives users the flexibility to maintain throughput for a higher mix of parts. On the output station, an automatic out-feed from the bending zone enabled users to retrieve parts manually (also available as an automatic option) to illustrate the flexible and customised approach adopted by LVD.

Laser cutting and software

A major news announcement at LVD's booth was the addition of panel benders to its portfolio of flexible solutions for sheet-metal processing

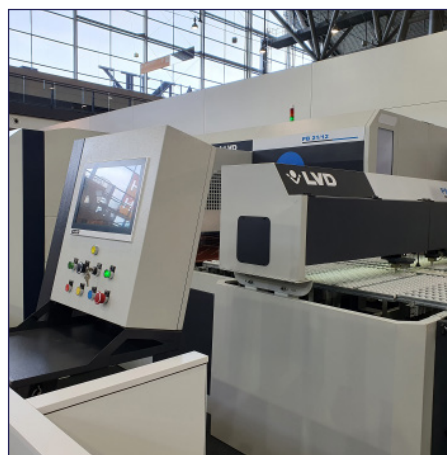
portfolio of flexible solutions for sheet-metal processing. Its new product line offers a range of servo-driven, customisable panel-bending equipment, including high-speed panel-bending systems. LVD launched the new line at Blechexpo/Schweisstec with the unveiling of the PB 21/12 automatic panel bending machine (which it demonstrated to *ISMR*).

Panel bending technology can process large and complex geometries quickly and efficiently with high productivity in medium to high volumes. It is suitable for producing large electrical cabinets; panels and cabinet components; shelving; clean rooms; steel furniture; architectural building panels; photovoltaic components; trailer side panels; lighting

as well as other industrial equipment panels featuring complex geometries with radius bends, short side lengths and narrow profiles.

LVD will initially offer three models of panel benders: PB 21/12, PB 25/12 and PB 32/12 to handle panel sizes of up to 3200mm x 1250mm. On its stand at Blechexpo/Schweisstec, it showcased an automated PB 21/12 system. The panel benders can be customised to expand capacity and performance. A universal set of folding blades enables the processing of a wide range of profiles and bends. Most profiles can be formed using a single set of tooling.

"We are very excited to introduce our panel bending technology to the marketplace. It has attracted huge interest here at the show and is a natural complement to the very wide range of press brakes that we make. The technology also fits well with our strategy of adding value to our customers'

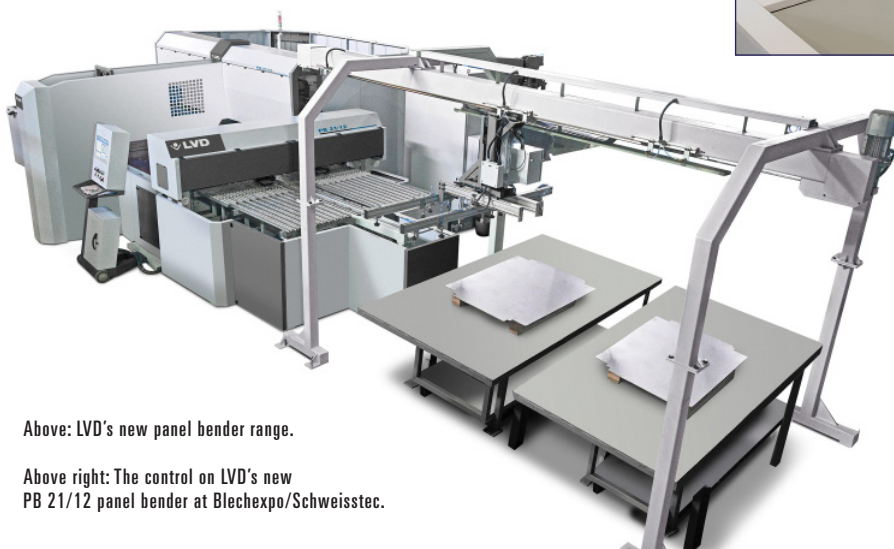


Another new addition at the Blechexpo/Schweisstec exhibition was LVD's large-format Phoenix FL-6525 laser cutting machine with bevel cutting head, as well as new CADMAN®-FLOW software for optimised material process flow.

The new Phoenix FL-6525 offers versatility and

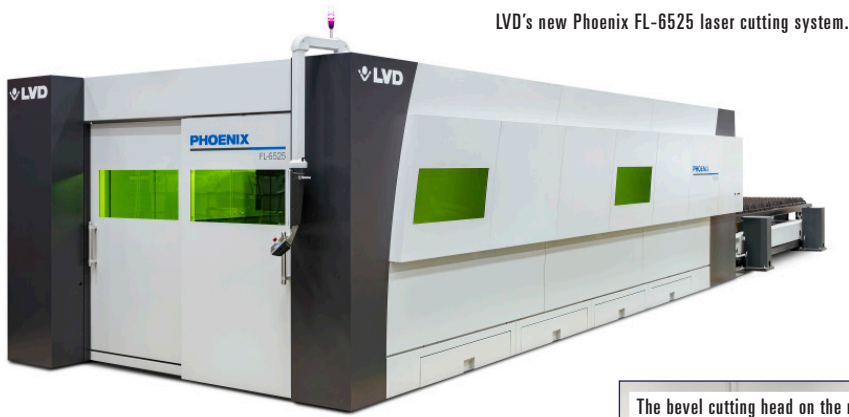
capacity with a large cutting range up to 6510 x 2600mm and a bevel cutting option. Its large-format configuration is designed for cutting oversized sheets in thin to thick materials. The bevel cutting head provides precise control of the angle and depth of the bevel to cut intricate contours or for weld-prep operations. Phoenix FL-6525 is available with 6-, 10-, 12- or 20kW laser power. The bevel cutting option is available for 10- and 12kW systems. The Phoenix FL-6525 at Blechexpo/Schweisstec featured a 12kW laser source with bevel head.

"Our Taurus model allowed users to punch up to 40m long parts with an edge bevelling feature. However, we also saw that there



Above: LVD's new panel bender range.

Above right: The control on LVD's new PB 21/12 panel bender at Blechexpo/Schweisstec.



LVD's new Phoenix FL-6525 laser cutting system.



Phoenix laser-cut parts on display at Blechexpo/Schweisstec 2023 in Germany.



The bevel cutting head on the new Phoenix FL-6525 machine.

was a distinct market for users with a slightly smaller footprint machine. The Phoenix FL-6525 machine therefore has a 6.5m long sheet size capacity, with a 2.5m width capacity with bevel cutting (2.1m) feature. It means that manufacturers can buy a bevelling machine at a lower price point. Bevelling on the machine saves a secondary process, adding value to the part," explained Matt Fowles.

CADMAN-FLOW is a single point of entry to LVD's complete software suite: software for Smart Drawing Importing; laser cutting; punching; bending; robotic bending and Manufacturing Execution Systems (MES). Via one entry, users can import and verify parts and assemblies; create smarter CAM programs; import production orders; reduce tooling set-ups and retrieve production information from the touch controls. This improves the speed and flexibility of the process flow from a 3D file to machine code to final product.

"At the core of CADMAN-FLOW is the new CADMAN-B v9, the next generation of our CAM software. CADMAN-B v9 calculates bending solutions faster and more efficiently than ever before, even optimising and reducing tool changes to maximize throughput," said Matt Fowles. "CADMAN-FLOW is the 'mission control' portal for all our CADMAN software products. Process flow, or 'art to part', is the big picture for manufacturers. Software underpins all our sheet metal processes, particularly in an environment of skills

shortages. We are investing heavily in new software solutions as we see this as pivotal to what we do," he added.

New global initiatives

"LVD is a family-owned business managed by the second and third generations of the founding families, Lefebvre, Van Neste and Dewulf. We operate independently and can dynamically adapt our strategic direction, which gives us the agility to change and evolve rapidly. This is fundamental to our company culture and our future," Matt Fowles told *ISM*.

This progressive culture has sparked various new initiatives at LVD which have helped to increase the Group's international reach.

"Post-COVID, we are very proud that, this year, we have got back to doing a lot more of our live events at our facility in Belgium. We are also exhibiting at more trade shows such as FABTECH Chicago; MTA Hanoi; LAMIERA and Blechexpo/Schweisstec. Our Experience Centres around the world are also doing well," said Matt Fowles.

"We are very happy with the success of our Innovation Tour (a 40-ft truck toured the United States over two years, bringing LVD technology directly to customers).

We received valuable feedback from customers who were pleased that staff in their shops could interact directly with our technology, rather than just managers seeing it at trade shows. We used social media marketing to promote the tour. It's about being flexible and adapting to local market characteristics.

So, for example, we have also run meetings such as 'Tech Events' hosted by our customers who are using LVD technology," he continued.

This also includes live events. In February, LVD's XXL two-day event saw over 60 customers take a customer visit tour through Belgium and The

Netherlands, showcasing the capabilities of LVD XXL technology in live action. From **20-22 June 2023**, LVD also hosted a new edition of its **International Tech days**, bringing together representatives of over 100 companies from 19 countries to its Experience Centre in Wevelgem, Belgium. With training sessions, machine demonstrations and customer visits, it was a celebration of innovation and collaboration.

The Group also ramped up its digital marketing presence in response to COVID-19 lockdowns. It ran 109 webinars over 18 months in 13 topics and three languages. This resulted in over 5000 new registrations and 2700 attendees.

“High-mix production and increasing part complexity mean smarter software”

Markets and trends

"Business has been good this year, although we have, of course, been affected by global events such as interest rate hikes; inflation; the crisis in Ukraine etc. Luckily, manufacturing business confidence is still high and order intake has been very healthy for us. Emerging new markets, such as Vietnam, are doing very well and we have been at exhibitions there this year (in Ho Chi Minh City and Hanoi). We also ran a customer Tech Day in Vietnam," highlighted Matt Fowles.



Sébastien van Neste, Michèle Dewulf and Sylvain Lefebvre, LVD's third generation of owners.

LVD's D-Cell.



“We view the future with cautious optimism, bearing in mind what we see in the market. However, we do see more people focusing on machines and software that add value to their business. So, the real question for manufacturers is ‘what are the implications of not investing?’”, he continued.

He highlighted the challenges of labour, and skilled labour, shortages as well as increased labour costs in developing markets which are affecting manufacturer margins and moving more towards automation. He also pointed to growth in established marketplaces, such as North America, where he sees higher interest in software, robotics and automation to manage sheet metalworking processes. LVD Group showcased its new D-Cell robotised bending solution at the recent FABTECH exhibition in Chicago.

“We also see high product mix, short lead times and increased part complexity as core market challenges. Our solutions help manufacturers to cope in this environment. For example, next year we will launch more automation products and robotised bending, laser cutting and punching solutions as well as more software solutions. The new CADMAN software version comes to market next year,” outlined Matt Fowles.

“More and more markets are focusing on

software so that is key for us. We believe that more intelligence needs to go into the software, which we have done with CADMAN-FLOW. One of its USPs is its ability to optimise or significantly reduce the number of tool changes for customers to make parts in batch production. It’s all about throughput and flexibility. High-mix production and increasing part complexity mean smarter software and more intelligence, intuition and competence in software control,” he added.

Sustainability in focus

LVD has embraced sustainability and energy efficiency in its products, processes and operations. It uses variable flow pump systems on its bending systems and frequency converters on its lasers to promote energy efficiency. H&L systems on its punching machines enable ‘fast flow, low pressure’ or ‘higher tonnage, lower flow’ options.

Programmes like its NexGen upgrade extend the useful life of LVD press brakes, delivering as much as a 50 per cent increase in machine productivity. The Group promotes the reduction of waste and encourages environmentally sound practices in its production facilities including the use of solar panels; the application of water-based paint and the reduction of electricity, water and heating oil by 30-50 per cent.

However, sustainability in manufacturing is about much more than that, as Matt Fowles pointed out to *ISMR*

“Sustainability is not just about power consumption; it is also about the resources/efforts that are used to make the part. Around 90% of the process of making parts is non-



LVD Vietnam technical seminar earlier this year.



LVD Tech Days.

machine-related time. That is a real eye-opener. In fact, the big sustainability picture means that software has a huge part to play in a sustainable approach

to manufacturing,” he told *ISMR*.

“If you can make a 10% impact on the overall cycle time of making parts, using less overhead and fewer resources more efficiently, then that is a more sustainable approach to manufacturing. It is important not to just focus on the nuts and bolts (such as laser machine power etc.) but also to think about the efficiency of the overall process. The increase in digitalisation has also had a significant impact on sustainability,” he explained.

LVD will continue to provide solutions to help manufacturers cope with high product mixes, short lead times, labour shortages and increased part complexity.

“We are adaptable and work to a counter-cyclical strategy to protect us from downturns or changes in particular regions and markets. The key is to keep supporting our customers by bringing new value-added solutions and creating opportunities,” concluded Matt Fowles. ■



www.lvdgroup.com



LVD's Touch-i4 industrial tablet computer collects real-time machine data with an intuitive touch interface.

EDITOR'S NOTE

To watch the video of the new PB21/12 panel bender in operation, see www.youtube.com/watch?v=Xe2_nTvUVM&t=15s

Early next year, the LVD Group will be exhibiting at SteelFab in UAE; IMTEX in India; TechniShow in Netherlands; STOM in Poland and Tolexpo/Global Industrie in France.