

LASER CUTTING MACHINES

With a Laser Sharp Vision

Acknowledging that IMTEX FORMING 2024 can substantially contribute to enhancing its brand presence and establishing a robust foothold in the Indian industrial laser market, Laser Technologies is eager to showcase its array of advanced products and technologies aimed at revolutionizing the manufacturing industry.



akesh Agarwal, Director, Laser Technologies Pvt Ltd (LTPL), recognizes that participation in IMTEX FORMING can significantly contribute to the company's business growth on multiple fronts. "The event is a powerhouse for networking as it enables us to forge strong connections with industry leaders and potential collaborators. It also provides a platform to showcase our products to a targeted audience, thereby enhancing our brand presence and establishing a robust foothold in the Indian industrial laser market. It allows us to

demonstrate our latest laser solutions, attracting potential clients and competitors, generating interest, and fostering engagement. It's a valuable source of market insights and customer feedback, empowering us to refine our offerings and stay informed about market trends and preferences," he notes.

"Additionally, IMTEX FORMING facilitates lead generation, competitive analysis, and engagement with government authorities and industry associations, contributing to strategic refinements and advocacy efforts, as well as exploring global partnerships and attracting

international clients, making it an integral part of our business expansion and market positioning strategy within the industrial laser sector," adds Pankti Agarwal, Director, Laser Technologies.

Innovation on display

At the expo, Laser Technologies boasts the largest stall featuring a suite of over 10 industrial cutting, welding, and marking laser machines. It has displayed a diverse range of products that complement its existing offerings, including the CNC Panel Bender with ATC, Dust Collector, Slag Cleaner, Deburring

Machine, and the remarkable 400T/6mtr Bending Machine, all alongside its advanced Laser Cutting machines.

The company's key products taking the spotlight at IMTEX FORMING 2024 include the Laser Tube Cutting Machine TL660, designed meticulously to offer precision and efficiency in tubecutting applications. Alongside, the company is displaying the Laser Sheet Cutting Machine G6025H 20KW, showcasing its high-power capabilities and advanced functionalities that will explain why it is claimed to be an















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Director
Laser Technologies Pvt Ltd

PANKTI AGARWAL

IMTEX FORMING 2024 presents an excellent opportunity for attendees to witness our industrial laser machines in action through live demos and product walk-throughs. Additionally, the team members are available for discussions to address any specific requirements or inquiries.



ideal choice for various sheetcutting requirements.

"Visitors can explore our other innovations including the Laser Tube Cutting Machine R3, Single Bed Laser Cutting Machine 6KW, and Laser Engraving GCC. Our diverse welding solutions catering to various industrial needs is also on display," Pankti adds.

To demonstrate its comprehensive approach to sheet metal processing, bending, and fabrication solutions, the company has featured its Smart Bend 100T/3m, GHBM 400T/6m, and the Panel Bender. "Our Robotic Welding systems highlights how we combine automation with laser tech to boost efficiency and productivity," notes Rakesh.

When asked which of the company's machines or technologies among the range of product displays at IMTEX FORMING 2024 is the most sought-after by the attendees, he shares, "The two standout technologies that have stolen the spotlight are – the TL660 Tube Cutting Machine and the 5-axis Laser Cutting Machine 3015cell."

The TL660's robust four-chucks structure, accommodating large round tube diameters up to 660 mm and supporting heavy loads up to 3000 kg, ensures stable clamping for precise cutting. Its automatic loading and unloading system, coupled with a user-friendly HSG-X Bus Control System, guarantees efficient operation.

With over 50 patterns for welding, its tube splicing technology enhances adaptability across applications. Additionally, the 5-axis Laser Cutting Machine 3015cell by HSG Laser is designed for the precision cutting of intricate 3D workpieces, meeting the demands of various industries with advanced technology and user-friendly features.

Catering varied industries

Laser Technologies' laser solutions serve diverse industries with precision and customization. In manufacturing, its Laser Sheet Cutting Machine meets needs from the electronics to consumer goods industries. Automotive, aerospace, and medical sectors benefit from precision metal cutting for various parts.

"Our Laser Tube Cutting Machine is vital for crafting automotive parts, furniture, bicycles, and outdoor gear. The 3D Laser Cutting Machine aids in automotive prototyping, architectural modeling, and toy making. The Bending Machine supports sheet metal fabrication, automotive needs, and renewable energy structures. Our Laser Welding Machine serves tool and die manufacturing, dental instruments, and aerospace welding," informs Rakesh.

"At IMTEX, we are excited to welcome delegates and visitors from these key industry sectors and beyond to experience firsthand how our laser solutions redefine precision, customization, and efficiency across diverse applications in manufacturing, automotive, aerospace, and several other sectors," he adds.

Building lasting relationships with customers

Laser Technologies prioritizes enduring customer and partner relationships through top-notch service and product quality. "Our industry leadership, marked by pioneering moves like championing fiber laser technology and establishing laser source and head repair centers, reflects our unwavering commitment to complete customer support. Our success stems from the trust and satisfaction of our broad client base, showcasing our relentless pursuit of excellence," asserts Rakesh.

"We take pride in our exceptional team, ensuring expertise in every client interaction and maintaining a

vast inventory for swift solutions and unmatched product availability. Innovation, reliability, and an unwavering dedication to customer satisfaction define our legacy at Laser Technologies," says Pankti. LTPL's participation at IMTEX FORMING 2024 aims to demonstrate its team's strength in providing tailored, cost-effective, and innovative laser solutions that redefine manufacturing standards. To ensure a comprehensive representation, the company has brought over 100 team members to this event, including highly experienced senior executives.

Plans ahead

Rakesh and Pankti discuss their aspirations for the future, focusing on making laser technology more accessible to all. "We are making substantial strides in realizing this vision. Primarily, we are embarking on manufacturing operations in India, aiming not just for production but also introducing 'Laser Gurukul'. This initiative is designed to elevate the skills of individuals nationwide, enabling them to harness the potential of high-end technology," they share.

LTPL's objective with Laser Gurukul is to democratize access to highend technology, offering comprehensive skill development programs that make laser technology more accessible to a broader audience. By combining local manufacturing and skill enhancement programs, the company aims to empower individuals and industries across India, ensuring that the benefits of advanced laser technology are within reach for everyone.



LIVE DEMOS

Laser Tube Cutting Machine TL660
 Laser Sheet Cutting Machine G6025H 20KW
 5-Axis Laser Cutting Machine 3015 cell
 Panel Bender













NDUSTRY DELEGATES







"A Very Well-Organized **IMTMA Show**"

Our organization boasts a 50-year legacy with chapters spanning across major cities in India, forming a fraternity of plant engineers. Our primary objective is knowledge sharing. In addition to the usual machinery like presses and forming machines, the event has featured other highly innovative products, including an electrical press which avoids the use of a hydraulic system - a type of product that piques our interest. The exhibition also features numerous robotic machines. promising faster and safer production processes. I commend IMTMA for organizing it well.

"A Valuable **Experience**"

Given the limited developments in the steel fabrication field over the past two years, my purpose in attending has been to explore the latest forming technologies now available in India. I have come across some innovative solutions that could be considered for our company's future development plans. I found new types of joining machines quite intriguing. The advantage of coming to IMTEX FORMING 2024 is the convenience of finding everything under one roof - both domestic and international offerings. I have also explored areas that could potentially enhance our assembly line. It has been a valuable experience for me.

"A Highly Useful and **Informative Show**"

I am employed in the quality control field and heard about several stalls focused on IoT. Hence, I attended to gain insights into Industry 4.0. Currently, our reporting processes demand significant time, and we are working on implementing systems to streamline them. This not only aims to reduce time spent but also ensures more prompt data updates. The event is highly organized which has made it easy for us to locate the stalls that matter to us. Overall, IMTEX FORMING 2024 has turned out to be a highly useful and informative show.

"IMTEX Shows are **Advancing**"

This year at IMTEX FORMING we are exploring forming technologies. Over the years, the field has evolved which is evident by the array of technologies displayed in this edition. The footfall is high compared to the last Forming exhibition. There is a greater presence of laser cutting technology vendors at the exhibition, and there are also new welding technologies on display. As far as exhibition management is concerned, this time a significant amount of segmentation has been implemented that facilitates targeted access to stalls. IMTEX shows are certainly advancing.



Batliboi Ltd. **Machine Tool Group**

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Concurrent Show







ADJUSTABLE MODE BEAM LASERS

IPG Photonics' YLS-AMB

PG Photonics' YLS-AMB Adjustable Mode Beam Lasers improproductivity in cutting, welding, and additive manufacturing by independent programmable adjustment of the beam mode to any combination

of a small-spot high-intensity bright core or a larger ring-shaped beam. In welding, AMB lasers spatter, cracking, eliminate and porosity at the highest welding speeds unattainable by other methods.

YLS-AMB lasers deliver the highest total power with the widest range of beam mode parameters on the market, including single mode core and high peak power option, and are fitted with either direct output or integrated beam

couplers and beam switches.

Benefits of AMB Lasers

Virtually eliminate spatter: Spatter-free welding minimizes contamination by molten metal

> High-welding speed: AMB reduces spatter by 90 percent or more while increasing welding speed

> Superior weld quality: Reduced

IPG Photonics (India) Pvt Ltd www.ipgphotonics.com Hall & Stall: 4/B-110

spatter is an indication of highquality welding.

Key features include direct output with a fixed process fiber, automatic switching between different optimal BPPs, the option for high peak power, easy process optimization and automation, a range of compact industrial cabinets, a cost-effective solution complex tasks, wall plug efficiency up to 45 percent, and the highest total output power available in the market.

Direct output YLS-AMB lasers are fitted with fixed output processing fiber. Direct output YLS-AMB lasers provide on-the-fly beam mode adjustment without external free-space optics such as optical switches, zoom process heads and other peripherals.



MANUFACTURING SOFTWARE

VPSS 4ie for Intelligent **Manufacturing**



Source: IPG Photonics (India) Pvt Ltd

4i*€*



Easy

Environmental

Efficiency

Evolution

PSS 4ie is a 4D sheet metal engineering system that promotes smart factories in customer factories. Innovative was added to the VPSS 3i product concept of Intelligent, Interactive and Integrated.

Furthermore, it has been renewed as VPSS 4ie under the banner of Easy (easy operation), Efficiency, Environmental and Evolution.

This advanced system seamlessly integrates with Amada's machinery, offering a comprehensive suite of tools for efficient programming and control. The VPSS 4ie brings automation and intelligence to the forefront, streamlining processes and enhancing overall productivity.

With its user-friendly interface, the VPSS 4ie empowers operators with intuitive controls, enabling them to effortlessly manage tasks such as job programming, nesting, and toolpath optimization. One standout feature is its advanced nesting capabilities, optimizing material usage and reducing waste to enhance sustainability.

In conclusion, Amada's VPSS 4ie software sets a new standard for intelligent manufacturing, promising a future where technology seamlessly aligns with production needs. SD

Amada (India) Pvt Ltd www.amadaindia.co.in Hall & Stall: 5/B-105









23 - 29 January 2025, Bengaluru

















TUBE FORMING

Overcoming Challenges in Tube Forming



ube forming refers to the process of transforming a flat sheet of metal into a closed tube shape. In contrast, tube bending involves working with an already enclosed tube, which needs to be bent into its final configuration. Both tube forming and tube bending are integral metal forming processes.

In the production of stainless steel tubes from strips, there is a risk of

encountering 'cold welds' on the forming rolls, which can harm the surface of the steel tubes. When working with a semi-circular forming roll to shape a flat steel strip into a tube, variations in tangential speeds across the tube's surface lead to sliding between the forming roll, calibration roll, and the stainless steel sheet.

To counter the cold-welding effect and differences in roll speeds, it is crucial to select materials with excellent sliding properties for the forming rolls. AMPCO METAL offers a wide range of materials that meet the most stringent requirements. For instance, the patented alloy AMPCO®25 provides numerous benefits, particularly for welding rolls, forming (breakdown), and calibration (sizing) rolls.

Moreover, as the number of forming stations increases, the plastic deformation is absorbed more gradually, reducing stress in the material. This is especially significant in ensuring dimensional tolerance requirements during assembly. AMPCO METAL stands as a reliable source of material to address these challenges effectively.

Role of AMPCO[®]25 in tube forming

Selecting the right material for tube forming rolls is crucial to ensure extended service life and optimal productivity. Not all materials are equally suitable for this purpose. For forming rolls, AMPCO®25 stands out as an ideal tooling material, offering a favorable combination of good sliding properties, high hardness, and low elongation, all of which are vital characteristics for forming rolls. Welding rolls, on the other hand, require specific properties, which can vary depending on the welding technique. Specifically, AMPCO®25 remains a strong choice for welding rolls.

AMPCO METAL's expert material plays a pivotal role in addressing this challenge and enhancing the reliability of welding rolls, forming rolls, and calibration rolls. Furthermore, the versatility of AMPCO®25 as a tooling material, with its balance of sliding properties, hardness, and low elongation, reinforces its role in optimizing productivity and extending the service life of tube forming rolls. AMPCO METAL continues to be a dependable source for meeting the rigorous demands of the metalworking industry.

THERMAL CUTTING SOLUTIONS

For Enhanced Hall & Stall: 5/A-110 Productivity and Precision

LEMENT 400 is the pioneer of Messer Cutting Systems India's new platform solution. As a highly flexible all-rounder, it embodies everything it stands for safe, efficient, suitable for automation, versatile, and upgradable with hardware and software from a single source. It combines the company's entire experience from more than 120 years in the field of thermal cutting.

Bevel-U

With the specially developed Bevel-U, precise and repeatable bevel parts can be produced. Edge shapes such as I, V, Y, and K are possible for a subsequent welding process of the workpieces.

The actual cutting angles depend on the material type, thickness, and bevel type such as AS or DS. The bevel angle can be changed on the fly during the laser cutting process. Consistent quality after nozzle changes is ensured by an automatic test and calibration



www.messer-cutting.com Hall & Stall: 5/A-110

Messer Cutting Systems India Pvt Ltd

protection for cutting head safeguard.

Benefits of Element Machine *Increased productivity:* High acceleration and positioning speeds of the machine;

routine. There is also magnetic collision

Improved cutting quality: Selected premium components and smooth, vibration-free tool path movements, thanks to helical rack and pinion drive systems;

Increased safety: Compliance with all applicable standards and specifications, e.g., using a moving light barrier;

Efficient operation: Floor-mounted rails for clearing and unloading of parts leads to time savings;

Improved user experience: The new, easy-to-operate Global Connect CNC control equipped with 18.5 in. touchscreen helps to save paper and provides a clear overview of all production data in digital form.

The ELEMENT 400 is the company's multitalent for all common cutting and additional processes, for serial tasks in continuous operation and special tasks with a focus on perfect cuts.

Apart from the high level of productivity and precision, this solution offers customized configuration options and updates, enabling one to respond to future requirements.

FASTENERS SECTIONING MACHINES

Chennai Metco's Fasteners Sectioning Machine

ne of the leading manufacturers of Metallography Equipment and its consumables, Chennai Metco has been a global player supplying machines and consumables related to metallography and petrography worldwide since its inception in 2000.

The company offers a complete set-up for metallography

and petrography lab ranging from sectioning, mounting, grinding, polishing, hardness testing, and microscopy.

Among its comprehensive range of offerings, Chennai Metco also provides an array of fasteners cutting machines including necessary fixtures. Irrespective of the size of the fasteners, fasteners need to be sectioned to study the internal quality, thread laps, surface changes, etc.



Chennai Metco Pvt Ltd www.chennaimetco.com Hall & Stall: 3/C-116 source: Chennai Metco Pvt Ltd











PLASMA CUTTING

Kjellberg Finsterwalde

Smart Focus Series by Kjellberg



s one of the longest-established manufacturers of plasma cutting techniques in the market, Kjellberg has always endeavored to further develop and perfect proven technologies. One of the results is the plasma series Smart Focus for the mechanized plasma cutting from 1 to 100 mm with a maximum cutting current of 400 A. The power sources are developed and manufactured in Germany.

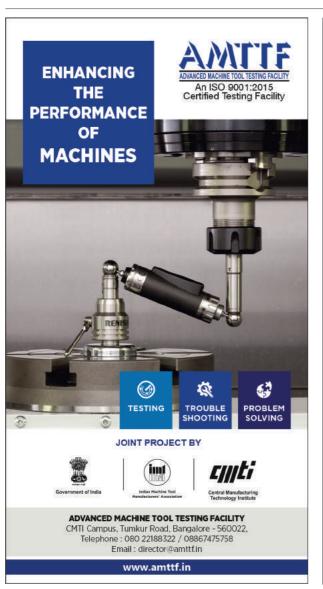
Only a few settings suffice to achieve excellent cut results with these systems even under the most demanding conditions and, thus, they meet the high standards of the customers. The patented Contour Cut and Contour Cut Speed technologies will continue to be used to cut contours, webs, and holes exact-

ly and quickly. For cutting stainless steel, Kjellberg continues to rely on the unique Ar/H2 technology where single gases can be mixed for each specific job.

For optimum control of the gases, the plasma power sources of the Smart Focus series are equipped with either manual (for all materials) or automatic gas controls (with variants suitable only for mild steel and for all materials). The cutting speeds are considerably higher compared to competitive products and reduce the costs per cutting meter. The torches PerCut 2000 and 4000 also contribute to the profitability of the cutting process. They guarantee a long lifetime of the consumables and their intelligent liquid cooling system reduces the gas consumption.

Kjellberg Finsterwalde Plasma und Maschinen GmbH www.kjellberg.de Hall & Stall: 4/B-118





TROLLEYS & BUGGIES

ROLLBLOC Trolleys & Buggies

üthle ROLLBLOC free-moving trolleys and buggies are designed to facilitate the movement of both lightweight and heavy dies or press tools within the manufacturing facility. The sophisticated systems with environment-friendly electric drive allow maneuvering and ease of positioning. Tools are protected considering safety norms and they can be changed safely in the shortest possible time.

Features:

- Reduced Set-up Time: ROLLBLOC Trolleys and Buggies significantly reduce setup times by minimizing manual adjustments. The precision positioning enables accurate placement of the die on the table.
- Compact and Maneuverable Design: Güthle has designed the ROLLBLOC trolley to be compact and easily maneuverable in tight spaces. This ensures that the trolley can navigate efficiently within the manufacturing environment.
- Quick and Safe Tool Transfer: Güthle design allows for easy loading and unloading
 of press tools and dies onto the trolley. It comes with hydraulic height adjustable features to accommodate different sizes of dies or molds and the sturdy construction ensures the safe tool transfer.
- Training and Support: The company provides comprehensive training for operators and ensures there is ongoing support for troubleshooting and optimizing the trolley's performance.
- The free-moving trolley system not only facilitates quick and safe die changes but also contributes to overall improvements in machine productivity and workers' safety.

Güthle Pressenspannen GmbH www.guethle-swt.de Hall & Stall: 4/ B-125









Concurrent Show







UCIMU-SISTEMI PER PRODURRE www.ucimu.it Hall & Stall: 4/A-148

UCIMU-SISTEMI PER PRODURRE

Fogether We Can

ccording to Barbara Colombo, President, UCIMU-SISTEMI PER PRODURRE. Italian Machine Tool, Robot and Automation Systems Manufacturers Association, IMTEX FORMING & Tooltech 2024 is an ideal opportunity for Italian machine tool builders who are interested in increasing their activity in one of the most vibrant markets in the international scenario.

Focus on digitalization

With the elevated level of digitalization and focus on green manufacturing, the Italian production sector has gained a strategic advantage as it is capable of providing users and customers in every part of the world with the best performances in terms of productivity and efficiency of industrial plants, higher safety of machines and processes, appropriate exploitation of resources in compliance with eco-sustainability, reduced incidents of problems

connected with anomalies and machine downtime. "I believe that these technologies and innovative approaches could serve as valuable assets for Indian users," points out Colombo.

Over 15 Italian companies are participating in the event, either directly or as part of the ITC network project, which aims to promote Italian companies associated with it.

United in growth

To support the growth of the Indian market by Italian companies in the machine tools and plastic machinery sectors, the associa-UCIMU-SISTEMI PER PRODURRE and AMAPLAST have initiated the 'Market Development Platform - Network Of Enterprises' project that has led to the establishment of ITC (Italian Technology Center). ITC aims to support the internationalization of companies within the area by maintaining a **BARBARA COLOMBO President UCIMU-SISTEMI PER PRODURRE**

IMTEX FORMING & Tooltech 2024 is an ideal opportunity for Italian machine tool builders who are interested in increasing their activity in one of the most vibrant markets in the international scenario.



constant market presence, facilitated by the ITC Indian team.

Regarding the trade dynamics between Italy and India in the machine tool sector for 2022-2023, India emerged as the ninthlargest destination market for Italian products in the sector during the first nine months of 2023, ranking second in Asia. The sale of 'Made in Italy' products in the sector amounted to €78.5 million during this period, representing a significant increase of 63.7 percent compared to the corresponding period in the previous year. Conversely, Italy imported Indian machine tools amounting to €3.8 million during the first nine months of 2023

AUTOMATED ASSEMBLY SOLUTIONS

Comprehensive

Intech Automation

ntech Automation Pvt Ltd is a one-stop solution

provider of end-to-end automation solutions by inte-

grating high-speed, non-contact Laser Markers to

create permanent labeling, Fully autonomous robots

for high-volume and repetitive processes, Machine vision Cameras for visual inspections, and IIOT

Solutions to monitor machines and processes in

real-time as well as to ensure optimal performance to

Solutions from

improve production.

SHEET METAL SOLUTIONS

AC Servo Motorum 3048TG with 8-Station Tapping

uratec M-3048TG, the new 30-tonne machine, comes with 2-piece design wherein the press frame is isolated from the table base, resulting in higher quality parts and longer life of ball screws. This machine comes with In-Line punch drive, where the servo motor is parallel to press frame, resulting in greater rigidity, less stress, and long tool life. The wide table base, which has twin ball screws on the Y axis, is controlled by synchronized servo motors, provides accuracy and stability during high-speed movements such as Scheduling function, processing graphic function, expanded 'Tool Library', Tool Management, Machine Control functions, Turret Monitor Function and Tool

ource: Meiban Engineering Technolo



Process integration

Muratec presents the latest in Process Integration for Sheet Metal components. The machine comes with Downward Form Protection, Programmable Positioning Work Holders, Work Pull Out Detection sensors, 8-Station Tapping Unit, and V-Axis for Deburring.

The machine can do Punching, Forming, Beading, Deburring, Tapping, Scribing, and All-in-one setting, thereby eliminating many post-process operations.

The machine can be offered in both 4 X 8 and 5 X 8 sheet configurations.



Intech Automation Pvt Ltd www.intechchennai.com / www.intechautomation.in Hall & Stall: 2A/B-118

The New 300kN Solution Latest Technology from the Inventor of the Servo Turret Punch Press













IMTEX FORMING 2024 ANNOUNCEMENTS

SIL and BYSTRONIC JOIN FORCES



Suresh Indu Lasers Pvt Ltd silasers.com Hall & Stall: 5/B-110

uresh Indu Lasers (SIL) Pvt Ltd and Bystronic Group have announced their collaboration at IMTEX FORMING 2024. Suresh Indu Lasers is the clientcentric manufacturer and exporter of Laser Cutting and Engraving Machines and Bystronic Group is a globally leading technology company in the area of sheet metal processing. The two highly acclaimed companies have come together to evolve into a formidable force that can redefine manufacturing standards.



(Second from right) R Shekar, National Secretary, Indian Institute of Plant Engineer felicitating Rajendra S Rajamane, President, Indian Machine Tool Manufacturers' Association at IMTEX FORMING 2024.

Trade delegation from Bangalore Chamber of Commerce (BCCI) visited IMTEX FORMING 2024 Show.





ACADEMIA PROGRESS

Celebrating Student Excellence

In a momentous celebration at IMTEX FORMING 2024, the i2 Academia Square witnessed the acknowledgment of outstanding students, marking an inspiring chapter in IMTMA's commitment to nurturing future talent.



SASTRA Deemed to be University, Thanjavur, was awarded the First Prize of ₹50,000 for "Development of Trimming Die Using Bound Powder Extrusion Process".



KLS Gogte Institute of Technology, Belagavi, was awarded the Second Prize of ₹25,000 for "Development of Steel Foams Manufactured from Machining Waste for Automobile Crash Protection"



Chennai Institute of Technology, Chennai, was awarded the Third Prize of ₹15,000 for "Repairing of Damaged Die by Wire Arc Additive Manufacturing"



Amrita Vishwa Vidvapeetham, Amritapuri, was awarded the 1st Consolation Prize of ₹5,000 for "Humanoid Mobile Robots for Multipurpose Societal Applications".



Indian Institute of Technology Bombay was awarded the 2nd Consolation Prize of ₹5,000 for "Sheet Metal Forming and Solid State Recycling Shopfloor Scrap"

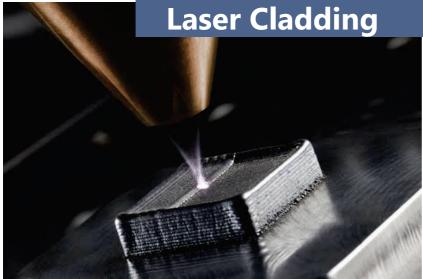


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NEW LAUNCH – 3D PRINTER

STPL 3D Unveils 3D Printing Portfolio



STPL 3D/Sahajanand Technologies Pvt Ltd www.stpl3d.com Hall & Stall: 1B/B-114

s India's largest manufacturer of 3D printers, STPL 3D, a division of Sahajanand Technologies Pvt Ltd, continues to lead with innovation, offering a diverse range of solutions in FDM (Fused Deposition Maudling), (Stereolithography), and

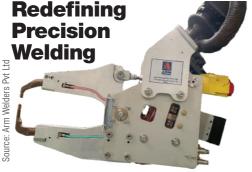
now, SLS (Selective Laser Sintering) technologies.

The centerpiece of this momentous launch is 'India's First SLS 3D Printer'. With a 2-tonne weight, an expansive build volume of 500 x 500 x 500 mm, and powered by a 100 W/CO₂ laser, the robust construction ensures stability, and the Win10, PC-based control system offers seamless operation. The addition of USB 2.0 access and a power require-

ment of 11 KW further solidifies its position as a game-changer in the additive manufacturing arena.

The Printer introduces an inbuilt part-cleaning chamber that eliminates the need for external intervention in the post-printing process. This innovation not only enhances efficiency but also streamlines workflows. In addition to the SLS marvel, STPL 3D unveils further advancements in FDM (Fused Deposition Maudling) and SLA (Stereolithography) technologies.

SERVO ROBOTIC GUNS



rafted with aeronautical-grade aluminum alloy, the Servo Robotic Gun from Arm Welders combines lightweight agility with unparalleled durability, ensuring seamless performance across diverse industrial environments.

Its key features include:

- Lightweight agility: Specialized aluminum alloy guarantees effortless maneuverability
- Reliability: With convenient access for maintenance and a robust design, the Servo Robotic Gun ensures hasslefree and cost-effective operations, boasting an impres-

sive Mean Time Between Failures (MTBF) of 10 million cycles minimum.

- Symmetric efficiency: Innovative opening system and dual-side plate design minimize maintenance costs and eliminate downtimes.
- Precision and power: High-capacity MFDC transformer ensures flawless, high current welding even with challenging materials.
- High-precision force delivery: Integrated servo motors and ball screw types enable seamless integration with various setups for precise welding operations and precise welding forces, enabling high-quality weld spots.
- Consistent production quality: Ensures uniform and high-quality welds, enhancing customer satisfaction and low-cost ownership of the equipment.
- Increased productivity: Facilitates faster and efficient welding, meeting market demands and maximizing profitability for the customer
- Reduced dependency: Reduces the need for extensive manual intervention, enhances operational efficiency, and cost
- Optimized maintenance: IoT capabilities enable real-time monitoring and predictive maintenance, ensuring minimal downtime and optimal performance.

Arm Welders Pvt Ltd www.armwelders.com Hall & Stall: 3A/B-101

IMTEX FORMING 2024 VISITORS

"The Event Ensures **Convenience for Visitors**"

Coming from a metrological research background, our purpose is to explore metrology machinery at the event. Carl Zeiss has prominently featured the options we were seeking. IMTEX FORMING 2024 has surpassed our expecta-



tions by presenting a comprehensive range of mechanical and production-related machinery for the industry to source from a single place, making it extremely convenient and beneficial for visitors.

"Array of Innovative **Technologies at IMTEX FORMING 2024"**

We currently operate various types of press machines. As our existing machines are aging, it was the perfect time to visit IMTEX FORMING 2024 and explore the latest technologies in this field. I have come across several innovative technologies and have



compared machines from both Indian and foreign companies, gathering diverse information from the show. The plan now is to carefully analyze and select the most suitable machine that aligns with our requirements.

"IMTEX FORMING 2024. a Valuable Visit"

This is my first visit to IMTEX FORMING, and I find the exhibition to be at par with international standards. My objective in visiting the event is to identify top companies whose products could be useful to us in the future, particularly in the area of presses. I am keen on exploring the



latest machinery equipped with advanced technologies, both from India and abroad. Many renowned press manufacturers are showcasing their products here, making it a valuable visit. Compared to my experiences at other machine tools exhibitions, this event is on a large scale, providing a superior opportunity to compare the products available in the market today.



Would you like to be crowned a

Productivity Champion?











COMPACT DRIVE TECHNOLOGY

ELM72xx from Beckhoff Improving Workshop



he ELM72xx EtherCAT Terminals offer high performance and functionality in the field of compact drive technology from Beckhoff. In addition to the ability to execute rotational movements in this small form factor in connection with the AM8100 servomotors, it is now also possible to perform translatory movements with the AA3100 electric cylinders and the AL8100 linear motors.

As full-fledged servo drives in a robust metal housing, and with up to 16 A output current (leff) at a power supply voltage of 48 V DC, the ELM72xx EtherCAT Terminals expand the Beckhoff portfolio of compact drive technology in terminal format. What's more, they also include all the latest technological features along with increased performance and functionality when compared to the FL versions. The latter include the convenient connector front end, an integrated absolute value interface, One Cable Technology (OCT), and the STO/SS1 and TwinSAFE Logic safety functions.

The new AA3100 electric cylinder series designed for the ELM72xx for the extra-low voltage range from 24 to 48 V DC extends the range of applications of Beckhoff

electric cylinders to include compact drive technology. This makes them ideal as direct drives for linear applications, particularly with high process forces. It also means that virtually the same forces as in the AA3000 series are now also available for 48 V applications, without compromising functionality or robustness. The two available flange sizes offer a peak force of 2,650 to 12,000 N and a maximum speed of 0.12 to 0.56 m/s, depending on the lead. The new AL8100 linear motors also enable the highly dynamic, modular linear technology from Beckhoff to be used in the field of compact drive technology. They are available with a width of 50 mm (AL812x) and are optimally matched to the ELM72xx. In addition to their wide availability and flexibility, the fact that the motors are developed and produced in Germany guarantees a consistently high level of manufacturing quality, which, in turn, ensures that durable and highly reliable applications can be executed with linear motor technology.

Beckhoff Automation Pvt Ltd www.beckhoff.com Hall & Stall: 5/C-122 PRODUCTION MANAGEMENT SOFTWARE

Improving Workshop Management Through Digitalization



alvagnini's commitment to digitalization and Industry 4.0 underscores a paradigm shift in the industrial landscape. Moving beyond customer expectations of machining quality, the company now places paramount importance on services, reactivity, process efficiency, and lead time reduction. At the heart of this transformation is OPS, a modular production management software continuously developed since 1993. OPS seamlessly integrates with the factory ERP system, receiving real-time production lists and providing programmers and operators with updated information. This automation extends beyond traditional concepts, ensuring heightened reactivity, efficiency, and flexibility by eliminating low-value manual activities.

Salvagnini's deployment of OPS Shop Floor Control, complemented by the PDD touch monitor, further exemplifies its commitment to digital transformation. OPS Shop Floor Control streamlines operations and PDD simplifies post-laser cutting tasks for operators. This tactile interface reduces errors by furnishing operators with vital information at their fingertips. Salvagnini's approach encapsulates the principles of Industry 4.0, where interconnected systems and user-friendly interfaces converge to create a responsive and adaptive manufacturing ecosystem. Its journey signifies not just technical advancements but a holistic embrace of technology to empower the workforce and optimize industrial processes for enhanced customer satisfaction.

Salvagnini Machinery India Pvt Ltd www.salvagninigroup.com/en-INT Hall & Stall: 5/B-101

ROBOTS

FANUC's M-800iA/60

FANUC India Pvt Ltd www.fanucindia.com Hall & Stall: 5/B-113

ANUC M-800iA/60 robot boasts a transformative power and features the groundbreaking iRCalibration Signature technology, tailored for sectors demanding unparalleled precision such as laser cutting, aerospace, dispensing, and material removal industries.

This cutting-edge solution seamlessly combines exceptional precision

Source: FANUC India Port Ltd



with production speed, owing to its highly rigid and robust construction. M-800iA/60 claims to excel in motion performance, especially in narrow corners, making it the prime choice for sectors where high-accuracy applications, such as 3D laser cutting, are imperative.

THREAD AND SPLINE ROLLING MACHINES

Being On a Roll

TE Industries Pvt Ltd is known for manufacturing high-precision Thread and Spline rolling machines that are used widely in the Automotive and Fastener industries. The company is exhibiting its world-class CNC Vertical Rack Rolling Machine model MRR 610 and a wide range of Thread Rolling machines.

All its products are meant for high precision to meet the intricate requirements of the customers. Automation, Lean manufacturing, TPM, Industry 4.0, and IoT, etc are additionally offered to be prepared for future digital technology.



MTE Industries Pvt Ltd www.mteindustries.com Hall & Stall: 5/C-133













PUNCH PRESSES

Being Alpha

MJ Trading www.mjtrading.co.in Hall & Stall: 5/A-113

he TP Alpha Matic 5 is an entry-level automatic punch press, ideal for the production of switchgears, armored doors, ventilation elements, etc. It offers a balance between cuttingedge technology and an affordable price, characterized by its compact automation, low consumption, and flexible performance.

It utilizes TECNOPUNCH technology with rotating tools (auto-indexing), allowing rotation from 0° to 360° and reducing the number of required tools and sheet metal waste. The TP Alpha Matic 5 features the smart turret system, a compact and versatile automatic tool changer with 5 auto-indexing stations, with station setup in 12 seconds and tool change during program execution in 3



seconds. It represents a junction between single-punch and highproduction automatic machines.

The servo-electric FANUC motor, free of hydraulic oil, delivers

high performance with low energy consumption.

With advanced CNC functionalities, extensive connectivity, teleassistance, and readiness for Industry 4.0

integration, the TP Alpha Matic 5 represents an advanced solution for modern production needs. The company also has a thick turret with up to 52 stations.

MACHINE LOANS

Machine Loans from Electronica Finance

lectronica Finance Ltd (EFL)
stands as an innovator in the
machine finance sector, offering specialized machine



loans tailored to meet the unique needs of businesses. EFL's machine loans go beyond traditional financing by serving as a calculated instrument for businesses looking to diversify their assets. Beyond providing mere funding, our financing options empower enterprises to invest in physical assets, nurturing long-term stability and growth.

With an impressive legacy spanning three decades, EFL is recognized as a frontrunner in providing essential capital for the

acquisition of new equipment or the expansion of operations.

Key features of EFL's machine loans: The repayment period extends up to 3-5 years; Competitive and attractive interest rates; Financing available for both new and pre-owned machines; No requirement for collaterals; Convenient doorstep service; and Swift loan approval within 3 working days.

With RBI registration, Electronica Finance Ltd has a well-known

track record, having financed over 35,000 businesses and 50,000 machines.

EFL's commitment to empowering businesses extends beyond machine loans, as they also offer other financial solutions such as Working Capital loans on used machines, Loans against property and Rooftop solar loans. In essence, Electronica Finance is your strategic partner, providing complete financial solutions to drive your business forward.

HEAVY-DUTY PLATE ROLL MANUFACTURING

Davi's Innovative Solutions

avi stands as the unrivaled leader in heavy-duty plate roll manufacturing, renowned for their unmatched expertise, precision engineering, and commitment to delivering the highest quality machinery in the industry. The options for heavy-duty applications are:

MAV, 3-roll with variable axis, mostly dedicated to the Oil & Gas sector, especially for the fabrication of boilers and pressure vessels. MAV

has a symmetrically balanced load on the top roll, which has various



positive consequences: most compact machine, minimum offset

of the rolls, cylinder close to the plate, perfectly balanced forces, and no stress on the frames.

MCB, 4-roll, with dedicated solutions and accessories for the manufacture of Wind Energy Towers and Foundations. MCB

machines are equipped with a range of accessories, including vertical and lateral positioning capabilities, which allow for precise and efficient manufacturing. These accessories ensure that the fabrication process is not only highly accurate but also adaptable to the unique requirements of each product. Davi also has a set of different feeding systems that adapt to various necessities.

Davi Promau S.r.l. www.davi.com Hall & Stall: 4/A-152











FIBER LASER CUTTING SYSTEMS

Exploring Excellence with Infinity F1

LTL Group, a pioneer in Fiber Laser Cutting Systems, has unveiled the groundbreaking 'Infinity F1' fiber laser cutting machine. This technologically advanced system boasts an all-new in-house developed software upgrade known as IMPACT, seamlessly integrated with IoT i.e. sltl dynamix, catering to the unique demands of the Metal Cutting industry.

This exceptional machine is engineered for precision metal cutting. At the same time, its cutting-edge software empowers real-time optimization of the entire production process, facilitating data collection and generating operational and performance insights, ultimately boosting productivity. It excels in cutting various materials, including MS, SS, Aluminum, Brass, Copper,

Sahajanand Laser Technology Ltd (SLTL Group) www.sltl.com Hall & Stall: 5/B-106

Inconel, specialty alloys, and coated and textured metal sheets. The Infinity F1 caters to the highend market, offering a power range from 3 kW to 30 kW. Enriched with premium features, it consistently delivers precise cuts; its smart hardware and software ensure impressive cutting speeds without compromising output quality. Moreover, the inclusion of Material Engineering, 3 Stage Piercing, Anti Collision Mechanism, Dynamic Fume Suction, Smart Gas Selection, and Wi-Fi connectivity elevates these machines, making them intelligent and easily manageable. Their adaptability allows for effortless customization, empowering businesses to optimize productivity and efficiency.

All-new Infinity F1 is rapidly emerging as the industry's preferred choice, thanks to its refined

design and cutting-edge software 5 framework. This system transforms factories into smarter facilities by delivering remarkable cut quality and integrating features that reduce production costs while maximizing output. The system features SLTL's in-house developed software, enhancing the user experience, providing intuitive control, and unlocking a world of capabilities.

SERVO PRESSES

Chin Fong Servo Presses Innovation from NIKO Tools

hin Fong's Straight-Sided Single Crank Intelligent Servo Press perfectly combines the benefits of a traditional mechanical press with a digital servo control system. With the ST1 Servo Press, the user can easily adjust the speed and position of the slide to solve stamping challenges such as varying materials that are difficult to form, processing high-precision composite materials and stamping complex product shapes. With these capabilities, the company can offer solutions to difficulties faced in traditional manufacturing processes.



WELDING MACHINES

igital Inverter Constant Current Pulse TIG DC Welding Machine from NIKO Tools has the following features:

HF inverter frequency makes the current output more stable and the welding seam smoother. Stable small current output makes welding easier. The arc stiffness is enhanced and the current is more concentrated.

Models include AWO T200P CCID 200Amps (0.1-0.30 mm); AWO T300P CCID300Amps (0.1-4.50 and **AWO** T400p CCID400Amps (0.1-6.00 mm).

Widely used in Petrochemicals, Pressure Vessels, Electric Power,

Construction, stainless products, and other industries, its other features include Digital IGBT inverter control technology, a small current of 2A, stable arc striking with arc starting success signal, and five sets of welding parameter storage functions. The interface configuration is complete and can be directly equipped with a robot or a special machine. The high frequency could reach 500 Hz. There is also a strong ability to resist external interference.

NIKO Tools www.nikoarc.in Hall & Stall: 3A/A-109













CO, LASER SOURCES

Luxinar Debuts Cutting-Edge Laser Technology

eading laser manufacturer Luxinar is proud to exhibit its sealed CO2 laser sources and support its Indian agent LaseCo Technologies for the first time during IMTEX FORMING 2024

Luxinar specializes in manufacturing CO₂ laser sources for industries worldwide, including automotive, electronics, e-mobility, glass, packaging, and textiles. Its CO₂ lasers, at wavelengths of 10.6, 10.25, and 9.3 microns, find extensive applications for ablating, cutting, drilling, marking, and scribing, on materials such as glass, metals, paper, plastics, and wood.

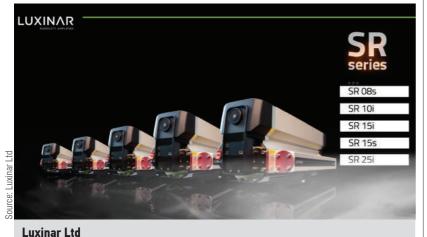
The SR 15i on display

At IMTEX FORMING 2024, Luxinar is showcasing the SR 15i, with an output power of up to 175W from its established SR series of sealed CO₂ laser sources with the following key features:

• Wavelengths of 10.6 µm, 10.25 µm, and 9.3 µm to process a wide range of materials from textiles to plastics • IP66 rating for harsh industrial environments • Integrated and field replaceable RF power supplies for reduced production downtime . Compact, lightweight laser sources for easy integration into laser-based processing machines • Simple diagnostics for clear status indication • Minimum shipment power 20 percent higher than rated power for an extended laser lifetime and a reduced cost of ownership.

The SR series of sealed CO₂ laser sources have a power range of up to 250W and hermetic sealing to ensure high protection against water and dust ingress. The units have a straightforward DC

power supply connection, an easy-to-understand control interface, and the same output beam position to allow for power upgrades with minimal design changes.



www.luxinar.com LaseCo Technologies www.laseco.in Hall & Booth: 5/B-134 CNC PRESS BRAKES AND SHEARS

Customizing Solutions for Workshop Challenges



s a world leader in sheet metal working machines, HACO offers a complete range of reliable, highprecision machines and software that goes with it

With over 58 years of experience in building solutions for its customers and a wide range of sheet metal machinery, HACO can offer both standard and custom solutions for workshop challenges.

HACO INDIA offers CNC Press Brakes, Tandems, Tridems, NC/ CNC Hydraulic Shears, and Iron Workers.

HACO's CNC press brakes are cost-effective and low maintenance and the capacities vary from 40 to 2,000 tonne.

SynchroMaster: The Synchro-Master is an entry level press brake with basic execution for operation with European Standard Tooling. It has an attractive

price/quality ratio. Equipped with the user-friendly ATS-595 CNC control system, it features angle programming capabilities.

Pressmaster: It is a top-level press brake with high-end specifications and execution. It features enhanced daylight opening and extended beam stroke provide greater flexibility for bending. Increased beam and back gauge speeds enhance high productivity. It features an innovative 2D Touch Easy Bend graphical control and accurate bending characteristics. Optional integration of advanced safety equipment is also available.

Tandem & Tridem: The company builds custom designed press brakes. It also designs tandem and even tridem press brakes to bend very long sheets, e.g.: Railway equipment's or modular buildings bases.

HACO Machinery Pvt Ltd www.haco.com Hall & Stall: 4/B-112

TAPPING MACHINES

Tapping the Potential

he 'AXIOS' brand stands as a renowned Tapping Machines manufacturer based in Rajkot, Gujarat, with over 50 years of extensive experience in the machine tools industry. Operating from a cutting-edge manufacturing facility of 5,000 sq mt, the company boasts a dynamic engi-

neering team known for its innovative design and the creation of new products.

With half a century of presence in the market and a footprint across four continents and over 50 countries, it is proud to be the industry benchmark, with over 10,000 machines operating successfully. **Prakash Engitech Pvt Ltd** www.prakashmachines.com Hall & Stall: 2A/A-121

Prakash Engitech Pvt Ltd specializes in manufacturing a diverse range of machinery, including tapping machines, CNC drilling machines, NC drilling machines, radial drilling machines, and pillar drilling machines. These machines are used for drilling and tapping of a wide variety of metals.















3D PRINTING SOLUTIONS

For Complex, Mission-Critical Parts

arto Electro, a pioneering distributor since 2003, offers a diverse range of 3D printers from reputable global brands. These cutting-edge technologies cater to various industries, including Automotive, Casting, Dies & Molds, Jigs & Fixtures, Mechanical Industrial, Jewelry, Dental, and critical applications in Space, Defence, and Aerospace.

Velo 3D expertise

Velo 3D from the USA specializes in Direct Metal Laser Sintering (DMLS) technology, representing a next-generation metal additive manufacturing solution.

company's support-free technology allows users to create the most intricate parts without compromising quality or requiring extensive post-processing.

Velo 3D's fully integrated metal additive manufacturing solution is ideal for building complex, missioncritical parts in industries such as Automotive, Oil & Gas, Education, and Research.

Sarto Electro's commitment to offering unique, high-end technologies, including Stereolithography (SLA), Digital Light Processing (DLP), Bio-Medical, Metal Printing, and Sand Printing, positions it as a comprehensive solution provider for Manufacturing industries. Its wide range of products and collaborations with industry leaders make it a go-to choice for

Sarto Electro Equipment's Pvt Ltd www.sartoelectro.com Hall & Stall: 5A/C-107



MACHINE PRODUCTION MONITORING SYSTEMS

Enhancing Production

hattingBirds Pvt Ltd claims that any manufacturer with a manual/semi-automatic/CNC machine can increase their production by using its machine production monitoring system. The company's hardware/software solution works well with any established ERP. Usually training in any new software would require a big learning curve, but with the advantage of Digital Twin technology, which the company provides as a package, the collected and processed data can be viewed and monitored via a 3D model of the factory layout.

ChattingBirds also provides operator/employee productivity monitoring with a Bluetooth-based ID card, which it has named 'Find your Sakthi'. When both machine and operator production tracking is implemented, the manager of the factory is provided with Machine OEE, Operator OEE, **ChattingBirds Pvt Ltd** www.chattingbirds.com Hall & Stall: 5/C-119

DIGITAL TRANSFORMATION OF YOUR OPERATIONAL PLANNING

24 HOUR RENTAL MODEL

STARTED



Rejection Pareto Analysis, and Downtime Pareto Analysis. This will help the management to plan for better operational planning.

Nidec Press and Automation (Nemoin Press and Automation) www.nemoinpresses.com Hall & Stall: 5/A-120



STAMPING PRESSES

High-Speed Stamping

emoin Press and Automation Pvt Ltd serves as the exclusive agent and representative for NIDEC brands within the Indian market. NIDEC KYORI, headquartered in Kyoto, Japan, stands as a pre-eminent high-speed press manufacturer, boasting an annual production capacity exceeding 600 machines. The comprehensive product line offered by NIDEC spans presses ranges from 10 tonne to 4,500 tonne and features renowned sub-brands such as MINSTER, KYORI, and ARISA. In the realm of high-speed stamping press, KYORI delivers a range of machines from 10 to 300 tonne. NIDEC KYORI's state-ofthe-art facilities in Kyoto, Japan and Pingu, China produce machines for the global market, characterized by industry-leading lead times and economies of scale. Nemoin Press and Automation Pvt Ltd, in its commitment to addressing the requirements of the high-speed stamping industry in India, facilitates access to NIDEC's products through its well-established sales network. NIDEC KYORI's globally acclaimed ANEX, SS, and VX series machines are specifically tailored for connector manufacturing. ANEX operates as a link motion press with a fixed stroke, VX employs a link motion with a variable stroke, and SS utilizes a crank motion press. The KYORI Presses cover a tonnage range from 10 tonne to 300 tonne, catering to diverse applications such as hybrid scenarios in connectors, motors, and general stamping applications. SD

ChattingBirds Pvt Ltd

Source: Sarto Electro Equipment's Pvt Ltd



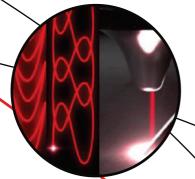


AWARD WINNING TECHNOLOGY

Ground Breaking Applications for Laser Processing



High-speed, Stable-processing fiber laser machine



Revolutionary beam control

Beam pattern manipulation

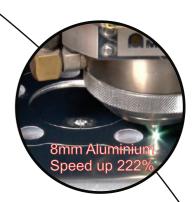
& Kerf width control



Co2 type quality

50% cut surface improvement vs conventional solid state lasers

WENTS 3015 AJ e



TECHNOLOGY

_ocus

BEAM

CONTROL

Lower cost-per-part

Higher productivity with less power and lower investment









Amada (India) Pvt. Ltd Technical and Vocational Center

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