

### **Concurrent Show**

**Published by** 









16 - 21, JUNE, 2022 | BANGALORE, INDIA

Friday, June 17, 2022



Only The Best For You!



We're Laser Focussed on Your Production.



**POWER: 3000-6000W** 

16 - 21 JUNE 2022

HALL - 4, STALL NO A130 & A135, **BIEC, BANGALORE** 





# Adding Quality & Precision to Your Steps!!



### **DIE MOULD REPAIR & WELDING MACHINE**



16 - 21 JUNE 2022 HALL - 4, STALL NO A130 & A135,

BIEC, BANGALORE



IMTEX FORMING OPENS

# **Trusting the Journey**

Optimism loomed large as the prominent veterans of the industry physically gathered to flag off IMTEX FORMING 2022. Their reflections on the recent challenges, the resilience demonstrated by the industry, its current stable state, and the opportunities that await us in the global scheme of things, set an encouraging tone for the event...



Industry veterans inaugurating IMTEX FORMING 2022 with the traditional lamp lighting.

he seventh edition of Indian Machine Tool Manufacturers' Association's (IMTMA) flagship event and South and South East Asia's largest metal exhibition, IMTEX FORMING 2022 & Tooltech 2022 was inaugurated yesterday with the traditional lamp lighting ceremony in the presence of the Guests of Honour Shri Ashwathnarayan CN, Hon'ble Minister of Higher Education, IT & BT, Science and Technology and

Skill Development, Government of Karnataka; Dr K Sivan, Dr. Vikram Sarabhai Distinguished Professor & Former Chairman, ISRO; Ravi Raghavan, President, IMTMA; Rajendra Rajamane, Vice President, IMTMA; PJ Mohanram, Principal Advisor, IMTMA; and Guru Prasath KR, Executive Director – Trade Fairs.

Raghavan, in his Welcome Address, shared his brighter outlook on the state of the industry and the resumption of physical exhibitions, "I am very happy that we are meeting here at IMTEX after a gap of two-and-a-half years since the outbreak of the global pandemic. Seeing and meeting each other face-to-face gives us the confidence that we are moving in a positive direction of renewed business confidence." He pointed out that the Indian machine tool industry is on a recovery path from the pandemic-indu-

ced setbacks, and revealed that its production is to reach around ₹9,500 - 10,000 crore in the year 2022-23. "IMTMA and the industry is working towards improving the domestic market share from 50 percent to 65 percent in the next few years. Order Booking, an indicator of growing consumption, looks satisfactory for FY 2022-23 and the machine tool industry performance

To be continued on 2  $\bigcirc$ 





Continued from 3

is expected to improve further in coming quarters," he added.

Raghavan then urged the participants to visit the AatmaNirbhar Bharat Pavilion and witness the indigenous technologies presented. The pavilion is IMTMA's endeavor to align itself with the nation's aspirations of self-reliance and has been introduced for the first time in IMTEX.

He lauded the Government's efforts in enabling the industry to become globally competitive. He mentioned the machine tool park set up at Vasanthanarasapura Industrial Area in Tumakuru, close to Bengaluru, by the Government of Karnataka with the support from the Ministry of Heavy Industries, Government of India. "This is an excellent opportunity for companies to invest in, make use of its services and facilities, and enhance their potential for growth by several notches."



Dr Ashwathnarayan highlighted the fact that around 50 percent of the machine tool production happens in Karnataka and said that there is a need to scale up the quality of skilled manpower. He stressed that the confluence of IT and manufacturing will make



Karnataka a leader in digital manufacturing technologies.

Dr Sivan reflected on his stint in ISRO and emphasized the machine tool industry's crucial role in manufacturing high-precision and complex parts required by space and strategic sectors. He spoke on INSPACe initiative that promotes private parti-

cipation and urged industries to come forward to participate in ISRO activities like building and launching of satellites. A Comprehensive Report on Indian Metal Forming Machine Tool Industry – 2022, along with the IMTEX FORMING 2022 Exhibition Catalogue, was released at the inauguration.



www.imtex.in











High-speed, Stable-processing fiber laser machine

# LC VALSTER 3015 AJ G



\* Also available for large format processing



**New Hybrid Drive Retrofittable Press Brake** 

HRB 1303





Hall No - 4 **Booth No - B107** 



World's First Dual Servo **Press Brake** 







### Amada (India) Pvt. Ltd. Technical and Vocational Center

No.60, KIADB Bengaluru Aerospace Park, Singahalli Village, Budigere Post, Bangalore, North Taluk - 562 129, India. Ph: 080 - 71100200















### AATMANIRBHAR BHARAT

# **Leveraging Technology**

As an MSME, Chennai Metco has catapulted itself to a certain level through sheer hard use of technology. Here's knowing its offerings that contribute to making India self-reliant.



ne of the leading manufacturers of metallography equipment and consumables, Chennai Metco Pvt Ltd is one of the participants in the AatmaNirbhar Pavilion at IMTEX FORMING 2022, an initiative by IMTMA to showcase the nation's strengths in manufacturing. The company is displaying a Robotic Grinder/Polisher and a high-precision 3-Axis Automatic Cutting machine. The robotic grinder/polisher is a step towards Industry 4.0.

### One with the Vision

Renganathan C, CEO, Chennai Metco, is delighted to be part of the Aatmanirbhar Bharat pavilion. Importantly, IMTEX attracts decision-makers from the manufacturing sector. He looks forward to meeting automotive, auto components, aerospace, defense, metal processing, and general engineering companies. He takes pride that the cutting machines offered by his company

are designed for slicing all types of materials with ease. For metallography equipment Baincut HSS, the cutting capacity is up to 40 mm dia, and rotating vise can increase cutting depth re-circulation coolant system automatic Y-movement (longitudinal) variable speed system 100-4000 rpm.

Ask him about the new draft policies for industrial, e-commerce, logistics, and the single-window clearance systems (SWCs) being run by state governments, and he says, "Honestlv. I don't have much experience in this, but some central initiatives like GST and simplified customs procedures have indeed helped us."

### **Need to Rise**

Chennai Metco finds itself on the same page with the Ministry of Commerce and Industry, that's stressing the adoption of technology to help increase capacities and improve the quality of products with zero defects. Renganathan C says, "Adoption of new technology is necessary. As things are moving fast on the technology front, the government is keen to help industries stay updated and modernized. China is known to be giving a big thrust in this area as also other countries. India cannot afford to lag, and industries are re-aligning to meet this challenge. The government's intervention in identifying the gap and supporting the industry is welcome."

As an MSME, Chennai Metco realizes the need for accessing the right available technology to improve its business. "We are cooperating with leading tech institutions on this front. Our company is also now working with IIT Madras, and AMTTF supported by the Department of Heavy Industries, on a few tech-intensive projects. Thanks to this initiative, we have launched many new products with demanding technology infusion. All of us are aware of the reality of disruptive technologies like electric vehicles,



>> The interesting trend is our export volumes are increasing at a faster pace. It is difficult to stop imports as the world is highly interconnected. However, for cost-saving and long-term supply security, we are indigenizing step by step. Our exports are ten times more than imports.

> Renganathan C CEO Chennai Metco Pvt Ltd

Industry 4.0, additive manufacturing, etc. I foresee a need to support MSMEs in their adaptation to the changes imminent in the industry." Staying ahead of the curve also means increasing capacity. "The interesting trend is that our export volumes are increasing at a faster pace. It is difficult to stop imports as the world is highly interconnected. However, for cost-saving and long-term supply security, we are indigenizing step by step. Our exports are ten times more than imports," he adds.



.... Share your success stories on PRODUCTIVITY | TECHNOLOGY | INNOVATION Win Cash Awards upto



**IMTMA - ACE MICROMATIC** Productivity Championship Awards 2022

**National Productivity Summit 2022** 

18 - 19 November 2022, Bangalore No Entry Fee! **Multiple Entries are Welcome!** 

**RUSH YOUR ENTRIES NOW!** 

Пертт

AWARDS SPONSOR

**Productivity Champions of Yesteryears** 

Mahindra & Mahindra • Hero Motocorp • SKF • Maruti Suzuki • Tata Motors • Bajaj Auto • TVS Motors • Bosch • Godrej & Boyce • Toyota Kirloskar Auto Parts • Titan Industries • UCAL Fuel Systems • ACE Designers • Delphi TVS • BHEL • HAL • Tata Steel • BEL • Rane TRW • L&T MHPS • Cummins • Adler Mediequip • Associated Plasmatron and many more...











SHEET METAL PROCESSING MACHINES

# **Turning Imaginations into Reality**

Salvagnini is demonstrating its innovative spirit and its key role in the development of sheet metal machine tools.



alvagnini has positioned itself as the ideal partner for future-oriented companies. The Group, with its consultative approach and ability to propose tailor-made solutions, shares its experience and knowledge with its customers that helps them control and optimize production, which are the keystones to efficiency and productivity.

Puneet Sharma, Director, Salvagnini Group, says, "We work with the businesses of the future to turn their imaginations into reality. The new production model promoted by the digital factory or Industry 4.0 will be the new standard by which machine tool

manufacturers will be judged at IMTEX 2022 "

Salvagnini designs, builds, and sells flexible systems and machines for processing sheet metal: punching machines, panel benders, press brakes, fiber laser cutting machines, FMS lines, automatic store towers, and software.

### Showcasing Uniqueness

At IMTEX, the company has installed a PX panel bender, one of its most successful models, in configuration with a range of options, including some innovations that are unique to the market, such as Lean Generation, Direct drive, Universal bending tool,

MAC3.0, Zero second change over time. There's more: Salvagnini's software specialists are offering live demonstrations of the STREAM programming suite and LINKS, the IoT solution updated with some new and powerful functions for remote system control and analysis. It is launching the new concepts of P-Robot and the new laser punch combi S1. Each solution offered by Salvagnini shows the capacity of each system to manage the information collected in the field in the best possible way so that it can react to this input in real-time, thus qualifying as an inherently smart machine and making the use and functionalities simpler and easier. Obviously, it is looking to introduce its new panel bender technology and new laser punch combi machine S1. It sees expansion plans in the doors, kitchen, furniture, and elevator industries.

### **Moving with the Times**

Ask Sharma about how he tackled the pandemic, and he says, "Crisis brings opportunities to rethink and adapt to new challenges, and we saw more customers investing in automation and moving away from dependence on skilled manpower.



>> Customers want to automate not only blanking but bending as well. So every single system must be able to collect, process, manage and correct information associated with the specific process it is involved with.

> Puneet Sharma Director Salvagnini Machinery India Pvt Ltd

Customers want to automate not only blanking but bending as well. So every single system must be able to collect, process, manage and correct information associated with the specific process it is involved with."

### **AUTOMATED PLASMA CUTTING**

# **Doing it Smartly**

The Smart Focus Series is ideal for plasma cutting up to 100 mm for mild steel, stainless steel, and aluminum.

ith just a few settings, the plasma cutting units of the Smart Focus series from

Kjellberg Finsterwalde achieve excellent results in the cutting range from 1 to 100 mm and now additional with N2 plasma cutting

up to 80 mm for stainless steel. Even under challenging conditions, the highest cutting quality and speed are realized. The company, thus, uses its proven cutting technologies, for example, Contour Cut for cutting mild steel. Small contours, narrow webs, and holes with a diameter to material thickness ratio of 1:1 can be cut in excellent quality. Contour Cut Speed allows the cutting of contours

with a speed that is up to 50 percent faster. Newly developed gas supply units are available for the Smart Focus series, either manual or fully automated. With these, the achieves the hest cutting results with the highest, reproducible quality. The plasma torches PerCut 2000 and PerCut 4000 have been improved as well. They provide precise cuts and the highest cutting speeds.Their unique cooling system guarantees the longest consumable life and reduces the gas consumption and costs per cutting metre.



Kjellberg Finsterwalde Plasma Und Maschinen GmbH

www.kjellberg.de Hall 4. Booth B112



# IPG Revolutionizes E-Mobility

### EV BATTERY PACK MANUFACTURING

IPG SOLUTION: Complete integrated systems that handle, fixture, weld, test and assemble battery packs

# CELLS TO MODULES TO PACKS

- Robotic component handling with barcode tracking
- Individual cell testing and module fixturing
- Busbars welded and assembled with cells
- Modules tested and reworked as needed
- Aluminum or steel enclosures welded into battery packs

# LASER WELDING AND MONITORING

- >10 cells processed per second
- AMB lasers eliminate spatter with on-the-fly precision beam tuning
- Scan heads for consistent, reliable, high-quality cell to busbar welds
- Wobble welding for high-speed battery enclosure welding
- Inline process monitoring for real-time quality assurance to reduce defects







**ELECTRIC MOTORS** 

### **LEARN MORE**





# Applications

### **VISIT US:**

IMTEX 2022
HALL # 4 BOOTH # C101
VENUE - BIEC, BENGALURU
DATES - JUNE 16 - 21, 2022

# **EV** Battery Welding Solutions

# ADJUSTABLE MODE BEAM (AMB) LASERS

- Spatter reduction on EV batteries for improved reliability and safety
- Superior welding quality of challenging dissimilar materials
- Faster, more uniform high-speed welding



# HIGH POWER SCAN HEADS

- Consistent, precise,
   high-speed welding of
   cells to bus bars
- High strength welds with no seal damage
- Consistent penetration depth



### **INLINE WELD MONITORING**

- In-weld real-time monitoring and control for optimal battery welds
- Eliminates the need for destructive testing
- Reduces scrap and increases overall throughput
- Identifies problems before processing begins

















FIBER LASER CUTTING SYSTEMS

# **Evolving with the Times**

Feature-loaded VECTOR is part of the SLTL Group's trademark Brahmastra Laser Cutting series and is designed to help the modern-day manufacturer achieve optimum control on the production, both qualitative and quantitative.



he company has now developed a technologically transformed Laser Cutting System, VECTOR, which is sustainable by design, robust by structure, and productive by technology. It offers 50 percent more energy savings than other laser cutting technologies. The state-ofthe-art fume suction technology exceeds the fume suction method by removing more than 90 percent of fumes from the laser cut environment, thus making VECTOR a highly efficient model for the metal cutting process.

The system is equipped with SLTL's in-house developed software, making it the most robust machine in the market. The optimized nesting software has a more significant role in reducing material wastage and working time. Features like Common Cut, Dream Sequence, Late Cut, and Corner Loop provide the

most efficient planning for the profile. It brings in most of the utility features. Smart software and hardware integration makes this system support fabricators with never-before-imagined tools. Safety has been enhanced with light curtains, hermetically sealed cabinets (lp55), and door interlocks. Laser safety windows keep the laser radiation intact inside the machine during the marking processes.

The components are machined straight out of the Group's world-class fab shop. The system structure can be customized to support the power output of 15 kW. The drive system in VECTOR allows the machine to achieve maximum acceleration. This allows the system to move between the cutting spots instantly. The machine with high-power capability and faster drive systems allows faster-cutting speed even over thicker materials.

DIGITAL MANUFACTURING – 3D PRINTING

### **Giving Shape to Ideas**

Vishwastratis LLP shows how innovative thinking can put companies on the growth path.

he company started by Brijesh Amin, in 2020, is an expansion of Vishwa 3D Printing Services. With additive manufacturing, Vishwastratis LLP has found its calling.

### **Dyeing to Printing**

Participating in IMTEX FORMING 2022 for the first time, Amin says, "We are looking forward to our participation and are showcasing our services and the quality of the 3D

Haror

The pandemic has been a mixed bag year with little profit margins due to an increase in raw material prices. We are now looking forward to some sunshine days next quarter.

Brijesh Amin Director Vishwastratis LLP

printed products we offer." The company's focus is to support startups in the field of aerospace,

defence, drone technology, EVs, and conventional automotive and product development companies.

### TRAINING PROGRAMMES IN DESIGN THROUGH MANUFACTURING



Online Instructor led Webinars & Training programs using the latest video conferencing tools to enable real-time training from anywhere in the world and connect with a Subject Matter Expert.

### **OFFLINE / F2F TRAINING PROGRAMS**

Short Term Programmes (Duration 1-5 days)

For working professionals in industries and Faculty from Engineering colleges.

Programmes available under Design, Productivity, Quality, Automation, Maintenance, Metal Forming, Emerging Technology and CNC Machining series.



Customised training program can be developed and delivered in online mode or offline mode at the company premises.



For further details and registration, please contact:
Ph: +91 9886331231
E - Mail : training@imtma.in
www.imtmatraining.com | www.imtmaelearn.in















PRESS BRAKES

# **Keeping Up with Customer Needs**

AV Srinivasan, CEO, Meiban Engineering Technologies, is pleased to participate in IMTEX and meet its target customers from industries including Elevators, Control Panels, Kitchen Equipment, HVAC, Telecom, and Job Shops.

evealing how the company plans to leverage the most from IMTEX FORMING 2022, AV Srinivasan, CEO, Meiban Engineering Technologies Pvt Ltd, says, "This is the first physical exhibition after IMTEX 2020. We believe IMTEX 2022 will give us a great platform to showcase our new technologies and meet our users and potential

customers. Many of the customers have also been waiting to have one-to-one interaction and look at the new technologies available."

### **Products Showcased**

The company is displaying its AC Servo Press Brake BB6020 for the first time in India along with its best-seller machine Muratec 20-tonne high-end AC Servo

2048TS. The former is oil-free and best suitable for medium to high volume and high precision parts. "We expect the expo to give us an opportunity to meet with our target industry customers and understand their needs after the pandemic," he adds.

Turret Punch Press Motorum

"Online shows and webinars certainly gave us an edge to meet with our customers and showcase our products without actually traveling. We could also do online demonstration of our machines. However, customers do not get to see various technologies from different manufacturers in a single place. They also would like to have a touch and feel of the technologies/machines they are looking at. We seriously think this physical show will help us grow better," he adds further.

This IMTEX, the company is looking forward to customers from Elevators, Control Panels, Kitchen Equipment, HVAC, Telecom, Job Shops, and suprise industries



whe believe IMTEX 2022 will give us a great platform to showcase our new technologies and meet our users and potential customers. Many of the customers have also been waiting to have one-to-one interaction and look at the new technologies available.

AV Srinivasan CEO Meiban Engineering Technologies Pvt Ltd



TUBE POLISHING MACHINES

### **For Round Tubes**

Valgro India has successfully designed and developed the Valgro Hyzer Planetary Head Tube Polishing machine for the first time in India.



uto feed Valgro Hyzer
Planetary Tube Grinding
machine does not spin
the tubes during the

process, ensuring operator safety and eliminating the possibility of barber poling. Planetary systems do not require perfectly round tubes and can instead process oval or irregularly shaped tubes. Most importantly, they can grind bent tubes. Because of its unique design, this machine is noiseless, vibration-free, and simple to operate even by inexperienced operators.

The Valgro Round Tube and Pipe Polishing Machine polishes the surface of a stainless-steel round pipe. The pipe is automatically fed into the machine and removed from the inspection table after passing through the polishing heads.

This one-of-a-kind machine successfully combines straight

and round tubes at no extra cost. Valgro Hyzer Planetary Head Tube Polishing machine is ideal for smoothing the surface of the round, oval, and elliptical tubes. It is also suitable for matt, satin, and mirror finishes and is available in models ranging from 10 mm to 50 mm OD and 50 mm to 100 OD.

### **Features**

The pipe belt sander comes standard with two abrasive belts and an automatic pipe sander with a feeding system. The machine has a manual pipe clamping adjustment. It does not need to turn the material on an auto feeder system. An optional coolant system is included to extend the belt life. Technical

advantages include minimal tube vibration, even at long lengths. During the polishing operation, the tube does not spin. abrasive belts around the tube, which is safe. Quick abrasive belts can be changed in under a minute. Unlike other conventional systems, Planetary System's soft contact with abrasive belts produces extremely low heat on the tube surface. The machine was intended to finish straight or bent tubes automatically (manually). The auto feeding system transports straight tubes through the finishing station safely and automatically, allowing consistent and high-productive tube polishing quality.









CNC AND MILLING MACHINES

# **Setting New Standards**

Ahmedabad-based Sharda Engineers has proven its competency in India and overseas with products from reliable global brands that it represents.



Engineers has expertise in CNC and milling machines. The company specializes in CNC fiber laser cutting machines; used turret punch presses; CNC/ NC press brakes (from 30 tonne to 3000 tonne); CNC/NC shearing machines (3 mm to 40 mm); CNC gas and plasma cutting machines; mechanical power presses (C frame, ring frame, H frame - single point and double point) of all types; hydraulic presses; tooling for turret punch presses and press brakes; blades for

shearing machines; servicing and maintenance of sheet metal machines, annual maintenance contracts using genuine spare parts; sheet and plate rolling machines (3 rolls and 4 rolls); hydraulic iron worker; and CNC hydraulic pipe bending machines. The company represents all of the above machines from global brands.

### **Efforts to Stand Out**

Sharad Avasthi, Proprietor, Sharda Engineers, says, "IMTEX FORMING is still the largest exhibition in this field. Currently, we have tube laser cutting machines and welding machines in the market. With this exhibition, we hope to get noticed in the market by all potential customers and related market segments. We have been coming to IMTEX since 1995."

The company has prestigious brands like JQ laser, Afab Tooling, BLM Group, and DeraTech. At IMTEX, it would prefer to showcase live videos with customer testimonials. "Our focus is on three chuck machines which have a major advantage of zero wastage," said Avasthi.

While the company is not launching any new brands, in the earlier instance when the event was scheduled in January 2022, it had planned to bring a sold machine (350 chuck dia / 2 kw / 6 mt long tubes) to showcase. However, due to cancellation, the machine was then transported to Ahmedabad from Chennai port.

Avasthi is keen to meet people from the furniture industry, job shops, retail showrooms, fitness equipment, building sheds, panel manufacturers, and sheet metal components.



>> We have been coming to IMTEX since 1995. At this edition, we are keen to meet people from the furniture industry, job shops, retail showrooms, fitness equipment, building sheds, panel manufacturers, and sheet metal components.

Sharad Avasthi Proprietor Sharda Engineers

What the proprietor finds heartening is that it has had many repeat orders in the past few months due to the products' reliability and sustainability.

### MARKING TECHNOLOGIES

# Pin Marking Machine with Touch Screen Controller

MarknStamp claims MNS-HTC to be the most powerful pin marking machine with an inbuilt touch screen controller.

NS-HTC comes with a robust construction with high-capacity motors and guides for deeper markings. All electronics built inside the marking head save floor space. The MNS-HTC pin marking machines are available as 2- and 4-axis versions in both Electric and Pneumatic working. The Standard 2-axis marking heads, coupled with a manual or motorized Z stand and a true interpolated Rotary axis, are available, especially for the Electric markers.

The Electric markers also have an optional Auto-Sensing attachment that can be used with the motorized Z stand to mark different height components.

With unlimited storage capacity, the machine has a display with a 7-inch. A Resistive Touch Screen Display is built into the marking head. With regard to 2D Barcodes, Data matrix and QRCode Marking are possible. The machine promises secure working; one can lock the designer mode with a password and use the production

mode for trouble-free working. The machine has the ability to connect a Barcode Scanner to the RS232 port and mark the scanned data directly. Intelligent parsing of scanned data is built into the machine. It can directly print marking data to barcode labels from a barcode printer connected to the RS232 port. Any bus Converter Device for ProfiNET or Profibus Connectivity over RS485 Modbus can be used for industrial communication.



Stamp 'It Robotai & Solutions Pvt Ltd www.marknstamp.com Hall 2A, Booth C117









FIBER LASER CUTTING MACHINE

# **Ready to Bounce Back**

A highly optimistic Niraj Seth, President, AMADA India Pvt Ltd, is already witnessing the signs of business revival and wishes the industry to get back to the pre-pandemic stage soon.



he last two years have been a setback for the entire manufacturing industry. The worst being over, the fraternity has converged now at IMTEX to make up for the lost time and leverage the platform to the fullest. "This is the first extensive exhibition happening after the lockdowns. Looking at the current uptrend, we expect serious buyers at IMTEX 2022. Though the last two years were not great for business, we are already looking at the positive signs of business revival," remarks Niraj Seth, President, AMADA India Pvt Ltd.

He believes that there is a need to keep working on a hybrid model of exhibitions. "Although online webinars became hugely popular due to their unique advantages of connecting many customers at a time without any threat of being exposed to the virus, customers lack the confidence and still want the touch and feel of the product," he shares. "AMADA India also adapted to online webinars for education and maintenance and even launched our new products online. However, after the lockdown was lifted, we welcomed the customers at our Technical Center," he adds.

## Launch of a New Fiber Laser

The latest Valster-AJ series from AMADA provides continuous highquality and stable processing of thin and thick materials without a cutting lens change or manual setup. It comes with: State-of-the-art beam control technology; Laser integration system to aid in stable processing;



>> Apart from the new Fiber Laser, we are also introducing the world's first Dual Servo Press (DSP) drive Press Brake EG4010. This machine offers high accuracy at 0.001 mm and productivity up to 2.2 times higher than a conventional machine.

Niraj Seth President AMADA India Pvt Ltd

and New AMNC 3i plus controller to improve machine controllability.

A key highlight of the new Valster-AJ is the addition of the all-new Laser Integration System (LIS). The LIS includes two important features: • i-optics sensor – which can diagnose and monitor the

protection glass condition; and • i-process Monitoring – a state-ofthe-art cutting and pierce monitoring system equipped with a spectrometer to analyze cutting and piercing process and detect when the cutting quality deteriorates.

The Valster-AJ series is also equipped with the latest gen AMNC 3i Plus controller which can further enhance the machine controllability and reduce process time by optimizing the head movement. Together with new features such as process cost visualization and joint amount editing function and an 8-station automatic nozzle changer, Valster-AJ series ensures that the machine setup is reduced to a minimum.

"Apart from the new Fiber Laser, we are also introducing the world's first Dual Servo Press (DSP) drive Press Brake EG4010. This machine offers high accuracy at 0.001 mm and productivity up to 2.2 times higher than a conventional machine," shares Seth.

NC, with a built-in CAM and ergonomic design, results in intelligent and comfortable processing, which shortens lead time and facilitates easy operation.

### **Setting New Standard**

The VENTIS 3015 AJ fiber laser achieves virtually dross-free cutting of a variety of materials and thicknesses, including stainless steel and aluminum.

VENTIS utilizes AMADA's revolutionary Locus Beam Control (LBC), the

world's first to achieve infinite locus patterns, ensuring optimum fiber laser beam shape control for each specific cutting application. LBC technology achieves unprecedented high-speed and high-quality cutting, up to 3 times faster than a conventional fiber laser.

AMADA has also developed a high-brightness fiber laser oscillator to maintain the optimal quality of the high-energy density laser beam. The combination of LBC technology and a high-brightness oscillator sets a new world standard for fiber laser cutting speed and quality.

### The ENSIS Technology

Seth helps us understand the AMADA's proprietary fiber laser technology to process both thin and thick materials without a cutting lens change or manual setup. "The technology is basically changing your beam shape to achieve high-speed cutting for thinner sheets and good cutting finish with the fastest piercing time on thick material, ultimately reducing your product cycle time and running cost," he informs.

The 3kW, 6kW, 9kW, and 12kW fiber engines incorporate AMADA's ENSIS Technology that optimizes the laser mode and Beam Parameter Product (BPP) based on the material thickness being processed. The ENSIS Series achieves high-speed cutting in thin material, a key capability of fiber technology, and the ability to process thick plates efficiently.













LASER CONSUMABLES AND SPARES

### **Innovations Galore**

Check out the comprehensive range of laser optics, nozzles, nozzle holders, and accessories from Laser Technologies.

**Laser Technologies Pvt Ltd** www.lasertechnologies.co.in Hall 4, Booth A130

aser Technologies offers more than 3,000 part numbers – one of the largest inventories anywhere – including OEM quality laser optics, nozzles, nozzle holders, and accessories. All are precision-manufactured, and come with a 100 percent satisfaction guarantee.



The company offers nozzles for all major CO<sub>2</sub> and fiber laser cutting systems and continually updates its product offerings. The nozzles have Hypertherm-certified manufacturing quality and guaranteed OEM compatibility. The extensive product line includes ceramics and nozzle holders. They are value-priced, and come as standard and chrome plated. They are

available for contact and noncontact height regulation systems.

### Lenses

Laser Technologies partner with world leaders in  $\mathrm{CO}_2$  and fiber laser optics, offering a complete line of focusing lenses, including standard and low absorption coatings. They are OEM-approved and made with the highest quality raw materials. They come in standard and low absorption, and mounted and nonmounted types. The lenses have Protective windows, Lens housings, and are available in standard focal lengths.

### **Accessories**

The company's full line of laser accessories includes Standard maintenance items, Filters, Optics cleaning supplies, Breakaway plates, Brushes, Roller balls, Armored sensor cables, and Regulators.



DIE LOADING ARMS

Laser Technologies Pvt Ltd

# **ROLLBLOC Die Loading Arms**

For safe and reliable machine setup with fork-lift truck or crane.

OLLBLOC die loading arms extend the press table to create space for quick, safe and reliable die transfer for dies weighing up to 5 kN to 100 kN that are transported with the aid of a crane or stacker truck or forklift. The needle-bearing-mounted load-carrying rollers of the ROLLBLOC die loading arms ensure smooth, linear movement of the die from and onto the press bed.

Different die loading arm designs enable effective adaptation to the die weight and format while taking into consideration the space available. ROLLBLOC die loading arms are always used only in pairs. Swivel die loading arms are flangemounted. When not required, they are simply swiveled to the side. The different versions ensure the space available in front of the press table can be used most effectively.

ROLLBLOC overhung and bridge version die loading arms are only attached in fixed mounting hooks directly when required. This mounting technology facilitates the use of die loading arms on several presses.

# Güthle Pressenspannen GmbH www.guethle-swt.de Hall 3A, Booth E103

### HYDRAULIC PRESS SOLUTIONS

# **Pressing Matters**

Incredible Machines is showcasing products that will alleviate the pain points of press shop people and provide them with customized indigenous solutions.

Iren Pandya, Director - Technical, Incredible Machines, says, "We have worked closely with automotive manufacturers and understand their core requirements. We hope to expand our reach further by presenting our world-class hydraulic press solutions."

Showcasing the hydraulic press for sheet metal forming applica-



Incredible Machines www.incrediblemachines.in Hall 2A, Booth B102



>> Incredible Machines is showcasing press automation that will help customers make their process faster, error-free and enhance the press shop productivity.

> Viren Pandya Director – Technical Incredible Machines

tions along with automation, he says the press is used by automotive sheet metal press parts manufacturers, home appliances & white goods, healthcare equipment, defence, railway, and general engineering industries.

**ENGINEERED ALLOYS** 

# **Tube Bending Consumables**

AMPCO METAL is showcasing what it does best, which is manufacturing consumables like flexible ball mandrels, wiper dies, and links for the entire tube bend die tool set, at this year's IMTEX.



Hall 3A, Booth A104

MPCO METAL designs, manufactures, supplies, and proves out the entire tube bend die set (bend die, pressure die, clamp die, collet, etc.). However, the core competency remains the manufacturing of consumables of these tool sets, for example, wiper dies and mandrels, among others. Tools made of AMPCO® Bronze offer great advantages such as minimum friction, no seizing, scratching, or corrosion starting point, and improved sliding properties.

Mandrels: Since the introduction of the modern ball mandrel in the 1950s, aluminum-bronze and hard chrome-plated steel have been the most common material specifications. And there remain good reasons for preferring aluminum-bronze and hard-chromed plated steel for mandrel tooling.

For example, the primary cause of shortened mandrel life is not the material specification but its setup. The purpose of the mandrel is to maintain the original round, square, rectangular, or other shapes of the tubing throughout the arc of the bend. This is achieved by setting the mandrel in a way that its nose supports the point of the bend, at which the tubing material becomes plastic as it is drawn into a bend. Too often, the mandrel nose is set behind the point of bend so that the weaker balls and links must do the work of the nose, which significantly shortens the life of these components.

As a result, AMPCO METAL developed alloys that are highly suitable

for mandrels and balls, such as AMPCO®21, AMPCO®22, and AMPCO®M4. Mandrels and balls made of these alloys offer an extended life, thus reducing production costs. Furthermore, there is no need for hardening or expensive coatings on the mandrel required. Both materials also prevent any galling.

Wiper dies: Like with mandrels, aluminum-bronze steel has been the most common material specification for wipers. Aluminum-bronze is best for ferrous and titanium tubing, whereas steel is more suitable for non-ferrous tubing. Unlike mandrels, softer grades of these materials are preferred so that the finely tapered feathered edge of the wiper does not prematurely break because of brittleness.

Generally, aluminum-bronze and unhardened steels have been preferred for wiper dies, and they remain the most cost-effective materials today. The most significant exception to this involves the bending of aluminized and galvanized steel tubing. To mitigate the

build-up of debris from these coatings on the bore of the wiper dies, often hard-chrome plated alloy steel is a good alternative. As with mandrels, the most critical factor in extending wiper die tool life is setup, not the material specification.

AMPCO METAL has developed alloys that are highly suitable for wiper dies, such as AMPCO®18, AMOCO®18.23, and AMPCO®M4. Generally, these materials offer an easy setup and an extended life. For instance, the life expectations of a wiper die made of AMPCO®M4 is up to 20 times longer than the one of conventional wiper dies. Furthermore, all alloys mentioned cause no galling, no scratching, and no corrosion starting point.

Links: These are important elements in flexible ball mandrel which connects balls to the mandrel shank. We produce the links in various sizes, it is essential to select the correct size of the link for the ball mandrel which ultimately results in better quality of end product and life of the mandrel.

**MACHINE TOOL PROBES** 

### **Optimizing Processes**

Hexagon's machine tool probes have been developed to minimize setup times and reduce the risk of errors.

exagon touch probes and tool setters have been proven to meet all machine tool require-

Metrology (India) Pvt Ltd

Hexagon Metrology (India) Pvt Ltd www.hexagonmi.com/en-IN/ solutions/industries Hall 3A, Booth B111

ments and guarantee optimum process safety.

The four products on display under Machine Tool Probes are: ELS (Entry Level System-Infrared); IRP 40.02: (Infrared Technology for Small and medium machines); RWP 20.50-G: (Radio wave solution for big machines); and Tool Setter TS 35.20.

The IRP40.02 infrared touch probe system meets all the dynamic requirements in the machine tool. Extreme accelerations, high positioning speeds, constant

vibrations, hard tool changes, increased temperatures, and aggressive coolants pose no problems for it. Hexagon's precision

mechanics can continue to switch without wear and extremely precisely for years under all these conditions. Thanks to its extremely compact and robust design, the probe needs a very small space in the machine and can also be used for applications in extremely limited spaces.

It is robust and easy to handle and is equipped with one-touch strategy and ITE technology to measure in the shortest possible time with the highest precision. The workshop-oriented design, along with zero downtime, helps save manufacturing time. IRP 40.02 has Innovative Data Transmission (HDR) technology with

long battery life, i.e. up to 800 hours). It has a proven track record for its usage in the electronic industry.

IRP 40.02 is suitable for extremely short cycles in non-stop production for the highest process reliability and the lowest manual interventions. The stainless-steel housing and natural glass ring are for performing in the rough environment of mass production while constantly being doused with a coolant or hit by swarf. Given Z-Crash detection, it is immediately visible that the measuring unit should be checked, even though the probe is still ready for use.





HALL: 4 BOOTH: B-108

# TECHNOLOGY ERA

Embracing Internet of Things and Automations to transform your Tube / Pipe - Cutting Experience

# Introducing

Change for the Better!