





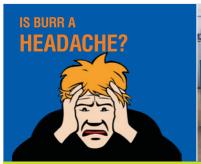


JANUARY 23 – 28, 2020, BANGALORE, INDIA

# SHOWDAILY

The official Show Daily of IMTEX FORMING 2020

Day 2 • Friday, January 24, 2020









**SOLUTIONS FOR** Deburring + Finishing + Edge rounding + Slug removal + Oxide removal + Surface Finishing for **SHEET METAL PROCESSING** 

MARCHING AHEAD

# Leading to a Bright Future

The mood at the inaugural ceremony of IMTEX FORMING 2020 & Tooltech 2020 was optimism writ large as the industry veterans reflected on the recent challenging times and deliberated on the ways to tide them.



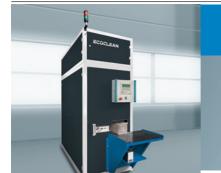
Industry veterans inaugurating IMTEX FORMING 2020 & Tooltech 2020 with the traditional lamp lighting ceremony.

The sixth edition of Indian Machine Tool Manufacturers' Association's (IMTMA) flagship event and South and South East

Asia's largest metal exhibition, IMTEX FORMING 2020 & Tooltech 2020 was inaugurated yesterday with the traditional lamp lighting

ceremony by the Guests of Honour Ram Venkataramani, Immediate Past President, Automotive Component Manufacturers Association of India (ACMA), and Kamal Bali,

To be continued on 4  $\Rightarrow$ 



## Ecoclean - Industrial Components Cleaning Machine

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Bangalore International

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Laser Welding AL-IN 200 3D Marking Machine

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Hall No. 4 **B111** 



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#### Continued from 1 \$

President & Managing Director, VOLVO Group India.

Other dignitaries present were Indradev Babu, President, IMTMA; Ravi Raghavan, Vice President, IMTMA; Jamshyd N Godrej, Chairman, Exhibitions, IMTMA; V Anbu, Director General & CEO, IMTMA, along with industry titans, as well as renowned industrial experts and academicians.

### **Leaders opine**

With eminent industry presentatives present together, the occasion was an expression of solidarity and made for the perfect setting to deliberate on challenging times the manufacturing industry on the whole is going through. The turbulence in the auto sector, caused by the disruptions and changing emission norms, has impacted the machine tool industry too. However, equipped with experience, expertise and far-sightedness, the industry captains could see positive times following soon.

Offering his take on the situation, Venkataramani noted, "We, the automotive industry, being the major consumer of the latest machinery, are passing through a slowdown condition, which has a downsizing effect on the machine tools industry. This phase, however, is a temporary one and we have to gear up to face the global competition soon. Against this backdrop, IMTEX FORMING is expected to bring exposure on the latest forming technologies that will help our members explore ways



66 To be a global leader we need to emphasise on digitisation, rapid urbanisation, collaboration, sustainability etc. big paradigm shift is necessary for the Indian manufacturers to win over the competition. New forming technologies displayed here will definitely add to the knowledge of our aggressive manufacturers.

**Kamal Bali** President & Managing Director **VOLVO Group India** 

for weight reduction, to develop composites and reduce or eliminate the use of metals." He further added, "Since most of automotive component manufacturers are MSMEs. handholding is required for them to adopt the latest technologies Automated Shopfloor, Application of Robotics and IoT. The exhibition brings more awareness on the latest nonpolluting technologies. Here, our people can witness them and directly interact with the vendors to gather more knowledge on the emerging technologies."





66 Since most of the automotive component manufacturers are MSMEs, handholding is required for them to adopt the latest technologies like Automated Shopfloor, Application Robotics and IoT. The exhibition brings awareness on the latest non-polluting technologies, and a chance for people to directly interact with the vendors and gather more knowledge.

Ram Venkataramani **Immediate Past President Automotive Component** Manufacturers Association of India (ACMA)



66 The machine tools industry is a global industry. And for the Indian manufacturers to compete in the global competition, their exposure to the latest forming technologies is highly essential. The last IMTEX FORMING witnessed a record number of attendees. The current edition of the show is slated to be even better."

Indradev Babu **President** IMTMA

### **Exhibitions empower**

Attesting to the fact that exhibitions such as IMTEX FORMING can help reverse the situation, Bali stated, "To be a global leader we need to emphasise on digitisation, rapid collaboration. urbanisation. sustainability etc. Sustainability has three components: people, profitability and environment friendliness. We need to focus on these. Opportunities will definitely increase but we may have to shift from where we stand today. A big paradigm shift is the Indian necessary for manufacturers to win over the global competition. New forming technologies being displayed here will definitely add to the knowledge of our aggressive manufacturers who want to be in the global arena in the coming days."

Seconding him Babu noted, "The machine tool industry is a global industry. And for the Indian manufacturers to compete in the global competition, their exposure to the latest forming technologies is highly essential. The last IMTEX FORMING witnessed a record number of attendees. The current edition of the show is slated to be even better."

### **Accolades to the deserving**

This year, CS Shiva Shankaraiah, Managing Director Trishul Machine Tools Pvt Ltd, has been honoured with the highly-regarded IMTMA - Premier Outstanding Entrepreneur Award. reflecting on his journey and its milestones, he noted, "Looking back, I feel things could have been better. To be globally successful, two things need to be overcome: Fear of failure and the typical middle-class mentality. traditional machine tools manufacturing countries are failing to be globally cost compe-titive today. Thus, we have enormous global opportunity. I believe the decade belongs to us."

### How to locate a stall at **IMTEX FORMING 2020?**









**Printed and Published by Magic Wand Media** 





### EXCLUSIVE TÊTE-À-TÊTE

# **Broadening Horizons**

amshyd N Godrej, Chairman - Exhibitions, IMTMA has left no stone unturned to push the cause of the manufacturing sector. Having been involved with IMTMA for years, Godrej has been a strong proponent in pushing the machine tool industry to the fore by championing various causes and creating platforms for them.

Jamshyd N Godrei, Chairman - Exhibitions, IMTMA in an exclusive with Soumi Mitra, Editor-in-Chief, MMI about the evolving trends in the manufacturing sector

"Forming needs a lot of attention, development, R&D and IMTEX is a medium that can help in promoting this kind of ideas. The quality of exhibits presented here are excellent and almost half the exhibits are from foreign participants across 26 countries. We have about 40.000 visitors for IMTEX FORMING 2020, which may probably exceed."

> IMTEX FORMING is a gestation type of business, and those visiting the exhibition come up with a business plan and an order which may be worked upon in the coming years. IMTEX FORMING's main purpose is to give a basic idea of various technological develop

ments and innovations, many interesting exhibits like the laser cutting, new ways of welding, cutting, automation and handling equipment.

"Handling equipment was never shown in Forming exhibitions before and is now an integral part of exhibits as it depicts the handling of equipment, its standard uses, and safety protocols to be taken when using it. The interesting point is that I saw a lot of exhibitors from developing countries which changed the perspective and aesthetic nature of the exhibition. In the overall machine tool size, forming in India constitutes about 25% by value whereas internationally it is about 35%. So, it is still a long journey for us to reach to that number and we don't have a lot of domestic industries in Forming," adds Godrej.

### **Doing one's best**

According to Godrej, IMTEX FORMING exhibition is of a great help for up and coming entrepreneurs and people who work in 66 A show like this creates awareness. Opportunities arise for entrepreneurs to broaden their horizons not only domestically but also internationally. Budget changes may not be a solution for the manufacturing sector."

#### Jamshvd N Godrei Chairman - Exhibitions, IMTMA

associated businesses. There are more opportunities in forming as compared to cutting and an exhibition like this is important with the changing economy. "The automotive industry may contribute a little less to the GDP compared to other industries that are far more interesting like electrical, appliances, furniture, etc. These types of industries require forming machines as they work with sheet metal. The production of steel and aluminium is necessary for these industries, not to forget the changes and types of materials used for production. Our defence and aerospace industries are big users of forming machines," he adds.

### **AWARDS & RECOGNITION**

### **More than a Professional Victory**

**CS Shiva Shankaraiah, Managing Director, Trishul Machine Tools** Pvt Ltd, has been honoured with this year's highly coveted IMTMA - Premier Outstanding Entrepreneur Award in memory of Vinod Doshi. Here's knowing him up, close and personal...

ersuasive, determined, polyglot and an unflustered technocrat is how people around Shiva Shankaraiah perceive him to be. Born in 1957, Chandraiah Subbanna Shiva Shankaraiah completed his early schooling in Bangalore. He pursued his technical career in BOSCH the erstwhile MICO, and then went on to obtain Diploma in Mechanical Engineering.

A consistent and diligent contributor to the technology development, he was chosen to co-lead the TVS Team for indigenization of critical engine parts for Suzuki Motor Company in Japan in the early 1980s.

However, there was nothing to dampen his entrepreneurial spirit and soon Shankaraiah started a consulting firm to manufacturing industries and eventually created an auto ancillary unit which now employs 700 people across multiple locations in the country. There was no looking back for him once his passion and commitment for machine tools set him on the path to success. He founded Trishul Machine Tools Pvt Ltd in Bangalore in 1994. From a humble beginning in a small facility with the first export in 2005, Shankaraiah's relentless efforts have turned Trishul into an export-oriented multimillion turnover company having its footprints across the globe. One of his greatest achievements has been developing the market in Taiwan for Turning Machines.

His passion for innovation and quality products then gave birth to Polygon Turning Machines that have fetched him global recognition. A connoisseur of music, his love for Carnatic classical music has made him learn and play the Veena. He has an accomplished



family and his greatest achievement has been imbibing right values in his children

In recognition of his visionary pursuit of entrepreneurial excellence and his unique leadership style, he has been conferred with IMTMA - Premier Outstanding Entrepreneur Award in memory of Vinod Doshi.



### FACILITIES AVAILABLE AT AMTTE

- Laser system and ball bar for machine calibration
- **Dynamic Testing for Mode shapes**
- Static Rigidity Analysis
- Vibration and Noise analysis of rotating elements
- **EMC/EMI Measurements**
- Test beds for Machine Testing up to 200Tons weight
- Surface & Contour measurement
- Residual Stress Measurements and analysis
- Thermal chamber with Variable Environmental conditions (4x4x4m volume, ambient variations: 10 to 60°C, Humidity: 40-90%)
- Thermal behaviour of Spindle and Linear axes
- Electrohydraulic exciter Machine Dynamic analysis
- Latest international standards on machine testing
- Spindle assembly test rig
- Guideway Cover test rig- (2g, 120m/min)



Joint Project by DIPP, Ministry of Commerce & Industry Govt. of India, IMTMA and CMT



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Kjellberg Vertrieb GmbH







### PLASMA CUTTING TECHNOLOGY

**Kjellberg Vertrieb GmbH** www.kjellberg.de/en Hall 4, Booth B-138

# 'Q' Plasma Cutting Series from Kjellberg

Kjellberg is showing its latest generation of plasma cutting technology live at IMTEX FORMING 2020.

he 'Q' power sources show networking communication will change production processes of the future. According to the requirements of Industry 4.0, the power sources with a modular design can form networks and exchange information with their own as well as other components. The 'Q' plasma cutting system is based on an entirely new approach to design; Worldwide, it is the first pure inverter power source with a modular structure. It can produce a subsequent increase in cutting current intensity, enabling effective adaptation to changing production conditions with only little effort.

All well-known, high-quality technologies are implemented in this 'Q' series including Silent Cut,



The cutting process is controlled digitally with real-time communication between all components. At the same time, a wide range of sensors are used to monitor process and status indicators, which, in turn, can be analyzed and evaluated by integrated microprocessors. From now on, the browserbased 'Q-Desk' user interface, developed in-house, will provide all information including FAQs and video tutorials in a user-friendly format on smartphones, tablets or desktop PCs. In addition to displaying up-to-date system information, this also allows targeted forecasting and preventive recommendations for maintenance and service. With an Ethernet connection and the approval of the user, various data can be transferred

Contour Cut, Contour Cut Speed,

and the new Q hole and Q mark.

securely to service partners. This means that permanent status monitoring of components and the cutting process are now part of this sophisticated technology.

i2 Academia Pavilion

**DIE LOADING ARMS** 

Güthle Pressenspannen GmbH www.guethle-swt.de Hall 3A, Booth B-125

# **ROLLBLOC Die Loading Arms**

These die loading arms from Güthle are ideal for safe and reliable transfer of dies.

ne ROLLBLOC die loading arms are used for a safe and reliable transfer of dies weighing up to 5kN to 100kN that are transported with the aid of a crane (or) stacker truck / fork lift.

The needle bearing-mounted load carrying rollers of the ROLLBLOC die loading arms ensure smooth, and linear movement of the die



from and onto the press bed. The arms are always used in pairs.

The different designs of the die loading arms enable effective adaptation to the die weight and format while taking into consideration the space available. 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. The Swivel die loading arms are flange-mounted. When not required, they can be simply swiveled to the side.

LASERS

### **High Peak Power Lasers**

High Peak Power (HPP) Lasers deliver an all new QCW mode to CW lasers, available exclusively in the latest releases of YLR and YLS lasers.

igh Peak Power is made possible by IPG Photonics' QCW diode designs which can provide very high peak power for short duty cycles with real-time capability of switching to CW mode. The advantages of these lasers are:

- Faster and Cleaner Piercing
- Increased Quality
- Repeatability
- Less Waste

The HPP option enables the user to run a CW laser in pulsed mode with up to 2x increase in peak power in comparison with CW average power. High Peak Power



provides advanced processing capabilities for faster piercing, increased output repeatability and waste reduction. HPP Lasers increase the overall processing speeds, repeatedly drill clean holes and deliver high-quality cuts of intricate parts with fine features while reducing overall laser power requirements. The lasers also enhance drilling capabilities by allowing clean and controlled drilling in thicker materials. For cutting applications, this means shorter lead-ins and denser part nesting, reducing material cost and waste. HPP lasers provide improved cutting and drilling quality and increased overall throughput, while saving material, time and operating costs.

Available Power Ratings of HPP Lasers:

YLR: 2,000/4,000 Watt and 3,000/5,000 Watt YLS: 3,000/5,000 Watt, 5,000/10,000 Watt and 6,000/10,000 Watt









### MACHINE TOOLS AND EQUIPMENT

Batliboi Ltd www.batliboi.com Hall 2A, Booth B-120

# **Equipped for Tomorrow**

For Batliboi, IMTEX is an ideal base to meet major customers from diverse industry segments, and explore respective machine tool type. Read on to know about its DAVI machines...

atliboi Ltd has been participating in IMTEX FORMING for several decades. Kabir Bhogilal, CXO – Corporate Strategy, Batliboi Ltd, considers the show as one of the most important exhibitions for machine tools in Asia, and definitely the best in India.

"IMTEX is a very good base for us to meet major customers from diverse industry segments to discuss and explore respective machine tool type," he adds.

"We are not just into manufacturing and sourcing leading brands of machine tools and equipment from across the world to meet customer requirement in the Indian market; engineering excellence for us is more about being ready for tomorrow," he stresses, making a point that the show aids the company in that process.

### **Knowing DAVI**

In India, the company represents its Principal, M/s PROMAU S.r.l, Italy, that manufactures and markets its machines under the brand name of 'DAVI'.

"DAVI is a manufacturer of the most sold plate bending and section / pipe bending machines in the world. The machines are manufactured in a variety of sizes and configurations to meet the customers' requirements," explains Bhogilal.

The range includes:

 CNC/NC controlled Hydraulic Plate Bending Machines – 4

66 We are not just into manufacturing and sourcing leading brands of machine tools and equipment from across the world to meet customer requirement in the Indian market; engineering excellence for us is more about being ready for tomorrow."

Kabir Bhogilal CXO – Corporate Strategy Batliboi Ltd



Roll type and 3 Roll type (Variable axes, Pressing type). MCA Series Four Roll Hydraulic Plate Bending, MCB Series Four Roll Hydraulic Plate Bending, and MAV Series Three Roll Hydraulic Plate Bending

 CNC/NC controlled Hydraulic Section Bending Machines – 4 Roll type and 3 Roll type. MCP 3 Roll Series Hydraulic Section Bending and MC4P 4 Roll Series Hydraulic Section Bending Machines.

In India Batliboi supports DAVI in all pre-sales and post-sales activities and services.

All DAVI Plate Bending Machines are with pre-pinching facility. DAVI also offers a variety of accessories to facilitate plate bending and to ensure easy handling of the plates so as to minimize use of overhead crane.



Valgro-Hyzer

Kabir Bhogilal, CXO - Corporate Strategy, Batliboi Ltd at the company booth

POLISHING MACHINES

Valgro India Ltd www.brushingmachine.com Hall 4, Booth A-132

# **Aluminum Profile Polishing Machines from Valgro**

The advantages offered by Valgro Aluminum Profile Polishing Machines outweigh traditional buffing processes by a great margin.

algro Aluminum profile polishing machine is for the surface treatment of aluminum profiles. Die lines, scratches, and marks on the surface of aluminum extrusion profiles appear after extrusion in the aluminum extrusion factory, which affects the surface quality and market competition of aluminum profiles. This Aluminum polishing machine can solve this problem effectively.

The machine is used to have a brush hairline and satin finish on aluminum extrusions prior to anodizing. Valgro Abrasive Brushes clean the surface of aluminum and eliminate extrusion lines, scratches, and marks.

The machine has a Polishing head work that rotates with high rpm. Different types of abrasive grits offer smooth and uniform brush effect with dry polishing process.





The etching duration of satin brushed aluminum prior to anodizing is much less than the unbrushed counterparts, resulting in less chemical consumption in etching and wastewater treatment,

and therefore considerable reduction in production costs.

After Valgro mechanical polishing treatment, the aluminum profile obtains soft-colored, high-grade and elegant appearance. No polishing paste or dust is created during the work.

Advantages of Valgro machines as compared to the traditional buffing processes:

- The machines can easily be run by unskilled labor
- It's a dry process and does not need use of water or oil
- The machines offer odorless and mess-free operations
- No physical strain on workers due to vibrations
- Eliminate flying sparks, dust and noise
- Avoid unhealthy position compared to traditional buffing operations
- Less downtime saves money and time.





### **QUALITY ASSURANCE**

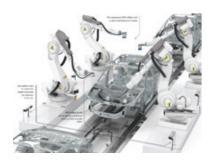
### **ZEISS' Car Body Solutions**

Witness a live demo of ZEISS' Systematic Quality Assurance solutions in Car Body Construction at its booth at IMTEX FORMING 2020 & Tooltech 2020.

EISS is a one-stop partner for systematic quality assurance in car body construction: from measurement and inspection technology to

the fixtures up to quality data management and service. All products and services from ZEISS are compatible with each other for maximum quality and productivity.





### **In-line Inspection**

Quality inspection must keep up with the fast pace of highly automated car body production. Robot-guided optical sensors from ZEISS measure and inspect all parts without interrupting the production cycle. The quality of selected characteristics can thus be monitored with almost no loss of time. Networking with ZEISS PiWeb opens up entirely new potential to use the quality data in a smart factory.



### **Modular Fixturing Kit**

The ZEISS CARFIT modular system has become the international standard for the manufacture of fixtures and inspection equipment. The wide range of available components and their combination possibilities covers an extremely large number of applications. All standard ZEISS CARFIT components are modular, compatible with each other and can be delivered on short notice.



### **Off-Line Inspection**

If large parts, assemblies or mounted car bodies need to be inspected comprehensively and highly precisely, there is just no getting by the measuring room. The ZEISS portfolio ranges from fixtures to flexibly configurable measuring machines, optical and contact sensors, measurement and quality data software, up to a global service offering.



### **Optical Surface Inspection**

timely detection and objective classification of surface defects with the high-precision ZEISS ABIS II surface inspection system opens up new frontiers in quality assurance. ZEISS ABIS is used in press shop and body-inwhite. ZEISS ABIS systems are available as In-line, At-line or Off-line solutions.

Carl Zeiss India (Bangalore) Pvt Ltd ZEISS Group http://www.zeiss.co.in/metrology/

Hall 3A. Booth A-126 (German Pav

### FIBER LASER MACHINES

## **Cutting Thin to Mid-thick Materials on Single Lens**

The latest upgrade to the Amada global standard fiber laser cutting machine, LCG AJ series is the most efficient fiber laser cutting system for processing thin to mid-thick sheet metal.

LCG AJ series machines have following features:

### **High Production Efficiency**

- The machines eliminate any need to change lens for various materials. This reduces burden on the operator, cutting risk, and helps achieve efficient and stable processing.
- The Automatic 8-station nozzle changer helps in continuous cutting and production planning, reducing preparation time of nozzles for various materials and thicknesses. This helps achieve flexible response to urgent parts.

Amada (India) Pvt Ltd www.amadaindia.co.in Hall 4, Booth B-111



AMNC 3i Controlle



· Oil shot sprays oils on the material before piercing, preventing spatter build-up and improving the processing quality and stability.

### **New Application**

- High-pressure Air Cutting: Auxiliary gas high-pressure expansion of air cutting range. High-grade processing with reduced cost (reducing the secondary process).
- Deep Etching: Deeper depth marking is possible, which is visible even after the powder coating process.

#### **Automation**

Adapted to diversified production patterns.

### **Easy Operation**

• The latest NC unit, AMNC3i can be operated quickly and intuitively like a smartphone. A large screen provides good visibility and can display many functions and information items. Operability is improved substantially, setup reduced drastically, and many quality and equipment management support functions have been provided.

### **Factory Monitoring**

· Connecting IoT to visualize factory issues in real time. All employees from the manager to the operator share the same information through 'My V-Factory'.









### SAFETY CONTROLLERS

Beckhoff Automation Pvt Ltd www.beckhoff.com/EL1918 Hall 3A, Booth A-121

### Modular and scalable TwinSAFE

Beckhoff promises reduced hardware and engineering costs through new generation of safety controllers.

ith its focus on increased modularity and scalability, the new generation of Beckhoff safety controllers allows optimum adaptation to the specific safety requirements of individual machine concepts. The ability to distribute the intelligence of an

entire safety application across multiple TwinSAFE Logic-capable I/O modules enables the flexible implementation of increasingly modular architectures that can be adapted to given system requirements even more effectively than before.

With the new safety controllers based on the EL6910 TwinSAFE

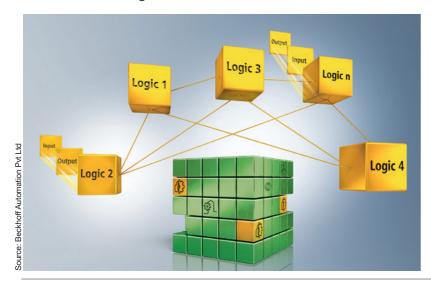
Logic, it is possible to adapt the TwinSAFE system even more specifically to the individual requirements of a machine concept as well as to a broader spectrum of safety applications. The new I/O components include:

- TwinSAFE EtherCAT Terminal EL1918: digital terminal with eight safe inputs
- TwinSAFE EtherCAT Terminal EL2911: safe potential supply terminal with four safe inputs and one safe output
- TwinSAFE EtherCAT Box EP1957-0022: IP 67-protected digital combi module with eight safe inputs and four safe outputs.

# More options for distributed safety applications

Just like the TwinSAFE Logiccapable I/O and motion products that are already available, the three new I/O modules can be used as controllers for the direct execution of customer-specific safety projects. A special feature is their communication capability, because like a dedicated controller, the safety project to be executed on the corresponding I/O component can establish direct communication relationships with other safety-relevant devices and preprocess the data internally. This makes it possible to implement highly granular machine modules with distributed safety applications. The central safety controller, if it exists in the application scenario, only needs to process the data that has already been accumulated.

The consistent hardware and software modularity of the TwinSAFE system simplifies the implementation of even very complex safety applications, and the combination of I/O and TwinSAFE control functionalities in a single I/O component makes it easier to distribute safety tasks individual across machine modules. It also reduces hardware costs. In terms of engineering, the customizing function speeds up the process and makes it more convenient. It also ensures minimum validation effort, which in turn further reduces the development costs.



### METROLOGY SOLUTIONS

# **Setting New Standards**

The FARO® 8-Axis Quantum ScanArm is the world's only eight-axis portable metrology arm solution.

eamlessly integrated with any FaroArm®, the 8-Axis is a complete rotational axis identical to and a natural extension of all FaroArm products. The breakthrough solution enables operators to rotate a part in real-time, relative to the Arm; as opposed to moving the Arm around the part. As a result, the 8-axis makes it easier to scan and measure

Faro Business Technologies India Pvt Ltd www.faro.com/india Hall 3A, Booth K-105



typically hard-to-reach areas, and also dramatically reduces both measurement time and human error — since the part rests on a stable, consistent platform.

When paired with the FAROBlu™ the 8-Axis Quantum FaroArm® offers a comprehensive contact and non-contact metrology solution significantly speeds up and simplifies measurement and scanning activities. The FAROBlu leverages an optically-superior blue laser technology that delivers high fidelity point cloud data at high speed. can digitize simple Users features with the Arm's hard probe and seamlessly scan across diverse surface materials regardless of contrast, reflectivity or part complexity without any special coatings or target placement.



Source: RadCAM Technologies Pvt Ltd







PUNCHING MACHINES

RadCAM Technologies Pvt Ltd www.Radcamtechnologies.com Hall 4, Booth C-116

# **Euromac's Solutions with Hybrid System**

Euromac MTX and STX come with 6 B stations with retractable dies which makes them ideal for scratchfree sheet processing during forming operations.

uromac Punching Machines are dynamic and flexible for manufacturing. \_superior They are versatile and highperformance, yet economical and user-friendly solutions. The hybrid system offers a unique technology which uses both electric and hydraulic units to deliver the best of both the worlds. In the company's patented hybrid technology, the hydraulic ram is controlled by a feedback control servomotor for greater power delivery at an increased accuracy and precision in repeatability. The machines are equipped with flexible turret configurations so that one is no longer restricted to manufacturers' standard turret station sizes. Tool configurations with up to 66 tools capacity with rotation up to 30 tools are possible. Euromac MTX and STX come with 6 B stations with retractable dies which makes them ideal for scratch-free sheet processing during

operations. The patented Multitool technology can accommodate Multiple A, B, Or C station tools inside a single station which makes the machine compact, and reduces the tool changing time. The average power consumption is at industry best 4.5 KW, bringing down the running cost to bare minimum. The Euromac Direct Drive system for tool rotation eliminates transmissions components featuring more precision, strength and less wear. A robust casted C frame is used in building of the machinery. The open Design of frame makes it possible to process the sheet sizes twice the size of its throat depth. Machines have high processing speeds with up to 1,080 hits/min in nibbling and 2,000 hits/min in marking. Die clearances down to 0.10 mm allow to punch extremely thin materials (0.6) incl. all auto indexed tool. Clamp opening capacity of 11 mm allows to punch/process high thickness soft metal like bus bars etc.



PRESS BRAKES

### For a Connected Factory

SafanDarley showcases its latest innovations for the sheet metal industry at IMTEX FORMING 2020.

afanDarley has been the world leader Electronic, Hybrid and Hydraulic press brakes. 25 years of experience gives SafanDarley a permanent competitive edge in fully electric press brakes that will be demonstrated at IMTEX 2020. Discover how you can also achieve the highest degree of efficiency with the fastest and safest bending cycle, off-line programming and unrivalled energy and CO<sub>2</sub> reduction.

#### **E-Brake Premium series**

At IMTEX 2020, SafanDarley will demonstrate the E-Brake Premium 100T-3100. The latest version of the multi-award winning fully electronic press brake series.

The E-Brake Premium is fitted with a split screen touch control system operating on a Windows platform, which facilitates a paper-free working environment.



The series can also be fitted with a 3D back-gauge, the patented E-Bend L Blue angle measurement system and a range of CNC-driven bending aids.

## AutoPOL off-line bending software

The company's unique AutoPOL off-line bending software is a modern 3D system for off-line press brake programming and unfolding of 3D CAD files. The optional Batch & Remote function enables automatic processing of multiple parts. All tasks are performed without user input. Results are reported back and production data is created. It dramatically reduces programming costs.

### Hybrid and Hydraulic Machines

SafanDarley also offers a range of unique energy-saving hybrid and hydraulic machines up to 1,250 tonne capacity.

### **Industry 4.0 interface**

In addition to all the machine innovations, the company also offers an Industry 4.0 interface, the E-Control GateWay. With this interface, one's overall press brake production is claimed to be more efficient through better planning, shorter downtime, greater flexibly and faster adjustment. A solution to take a big step towards a connected factory.

# Glimpses from Exhibitor Night @ BIEC









### LASER SOLUTIONS

Laser Technologies Pvt Ltd www.lasertechnologies.co.in Hall 4, Booth B-137

# **Leader in High Power**

Laser technologies is the authorised service provider for HSG LASER in India whose laser cutters are known for its high speed, reliability, efficiency and low production cost.

SG LASER is one of the world's leading manufacturers of high-tech industrial laser solutions, dedicated to providing laser intelligent equipment solutions and enabling customers in various branches around the world to become more efficient and competitive. With more than 250 laser cutting

systems in the Indian market, it has a rapidly increasing global base. Laser technologies is the authorised service provider for HSG in India. HSG is in a favourable position to serve the international customer base, guaranteeing highest quality and shortest response time. The main focus of HSG -LASER TECHNOLOGIES is

innovation, continuous improvement and rapid development of technologies, all of which aim to increase efficiencies and flexibility, minimize costs while generating the highest levels of environmental friendliness and sustainability.

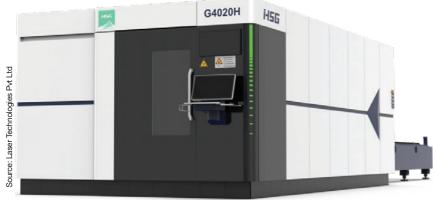
#### **HSG GH Model**

The GH laser cutters, also called high power models, are the running models in industry due to their high speed, reliability, efficiency and low production cost.

HSG GH model features:

- Carbon structural steel plate welding
- Double motors exchange table
- Partition blowing dust removal system

HSG LASER uses a self-developed software i.e. HSGX-2000 which saves raw materials and increases the processing efficiency.



### Technical Parameters of HSG GH Laser Cutter

	Performance index	Parameter		
	Machining area (length × width)	4000mm×2000mm	6000mm×2000mm	6000mm×2500mm
	Positioning precision of X/Y axis	±0.03mm/m	±0.03mm/m	±0.03mm/m
	Repetitive positioning precision of X/Y axis	±0.03mm	±0.03mm	±0.03mm
	Maximum accelerated speed	2.0G	2.0G	2.0G
	Tool weight	13000Kg	22000Kg	25000Kg
	Maximum load of workbench	2000kg	2000kg	2000kg
	Machine overall dimensions (length× width× height)	11500×3500×2500mm	15500×3500×2500mm	15500×4050×2500mm

## **International Buyer-Seller Meet 2020**

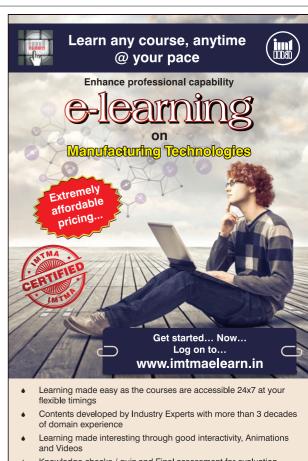
Date: Jan 24-25, 2020, Time: 10.00 am Venue: Hall 4, RBSM Arena, BIEC, Bangalore

### **Participating Countries**

EGYPT	RUSSIA	FRANCE	III SRI LANKA	KENYA
GUATEMALA	THAILAND	<b>IRAN</b>	<b>L</b> UAE	UZBEKISTAN

### **Participants Profile**

COMPANY NAME	COUNTRY	PRODUCTS OF INTEREST
Omega Technology	Egypt	CNC Cutting Tools
Ratmo	France	Industrial Machinery, Dies & Moulds
Metal Total, S.A.	Guatemala	CNC Multi Function Machines
Yazdan Khodro	Iran	Forming Machine components
Electechnique Power Limited	Kenya	Tools for metal working
Stanko Indo Ltd	Russia	Turning Machines
LLC Grover International Ltd	Russia	Roller machines, Grinding Equipment
Pubudu Engineering Pvt Ltd	Sri Lanka	Lathe Machines
Sabaragamuwa Chamber Of Commerce and Industry	Sri Lanka	Grinding machines, Mechanical elements and components
Ideal Automotive Parts Pvt Ltd	Sri Lanka	Tooling systems
Bopitiya Auto Enterprises	Sri Lanka	CNC Turning Centers (4 Axis), CNC Milling Machines, Tools
M. V. Electronic (Pvt) Ltd	Sri Lanka	Screwing and Tapping Machines, Special Production Machines
Machinery Development Technology Co Ltd	Thailand	Laser Cutting, Forming Machines
Inuc Services Co. Ltd.	Thailand	Sheet metal
International Engineering Solutions Co Ltd.	Thailand	CNC Multi-Function Machines, Flexible Manufacturing Systems
Advancetech International FZE	United Arab Emirates	Heat Treatment and Hardening Machines
Rockwood International LLC	United Arab Emirates	Sheet metal cutting & Forming machines
Akela Group Machinery	Uzbekistan	Innovative Machines and Spare Parts
LLC Doctor Energy	Uzbekistan	Metal press



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Manufacturers' Association
BIEC, 10th Mile, Madavara Post,
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### INTERNATIONAL VIEWPOINT

**Taiwan Association of Machinery Industry (TAMI)** www.tami.org.tw Hall 3A, Booth C-102

# A Good Win Ahead

Tommy Hsu, President, Taiwan Association of Machinery Industry (TAMI), is leaving no stone unturned in ensuring that Taiwan makes the most of the Indian opportunity.

ndians have always had a 'good buy' relationship with Taiwan. A few years ago, Indians preferred Taiwan as a destination to purchase electronics. Not much has changed even today.

There is a predilection for other things too that few are aware of. Like machine tools and metal forming tools. Like Hsu says, "The total export of machine tools from Taiwan to India in 2019 was \$140 million (14.67% down as compared to 2018). For the Taiwan machine tool industry, India stands at No. 3 (No. 4 in 2018) as export destination. It apparently shows how India is an important market as a business partner for the Taiwan machinery industry. And we believe there's plenty of potential and much opportunities for cooperation between India and Taiwan."

### **Making headway**

As an association, Taiwan Association of Machinery Industry or TAMI as it's popularly known, is exploring newer markets what with the US-China trade war taking on new faces. Taiwan is not sitting idle waiting for business to come their way. Hsu "We expect IMTEX FORMING 2020 to enhance the ties between Taiwan companies and Indian customers. Since the show is positioned as a professional exhibition for forming machinery, we expect to glean understanding on local sales channel and demands patterns of the local market."

For Taiwan, who is one of the most active players in trade fairs, IMTEX FORMING is an important exhibition. In 2018, the Taiwan Pavilion had 20 exhibitors. This

year, considering that the Chinese New Year coincides with the exhibition, the Taiwan pavilion has five exhibitors in Hall 3A. Besides, the companies have made arrangements to offer their products through Indian agents.

### **Adopting advanced** manufacturing

At a time, when most countries are advancing into the future, not wanting to be left behind, Taiwan too is adopting Industry 4.0 or smart manufacturing. Over the last couple of years, the country has worked on developing Industry 4.0. The metal forming sector, with no exception, is the first achievement for smart manufacturing. For example, the Chin Fong company, a leading press machine maker in Taiwan, established its first Industry 4.0



66 Since IMTEX FORMING is positioned as a professional exhibition for forming machine, we expect to glean understanding on local sales channel and demands patterns of the local market."

**Tommy Hsu** President **Taiwan Association of Machinery** Industry (TAMI)

demonstration plant at Changhua, Taiwan, in 2015. On the other side, the SEYI company, a well-known press machine maker, published the SIMS (SEYI Intelligent Manufacturing Solution) system at TIMTOS 2019. With the assistance of sensors, IoT, and ERP system, it only goes on to prove that Taiwan has the ability to offer smart manufacturing service in the metal forming sector.

SHEET METAL FABRICATION

Pivatic Oy www.pivatic.com Hall 4, Booth A-127

provides shorter lead times with

Sheet metal parts produced with

the company's machines can be

found in everyday objects and

applications such as office

consistent part quality.

## **Solutions from Pivatic**

Leading solutions provider for the production of sheet metal parts, Pivatic is showcasing its main products including PivaPunch and PivaBend at **IMTEX 2020.** 

ivatic designs and provides machines for sheet metal part manufacturing. Its main products are automatic punching and bending lines, PivaPunch and PivaBend, which can also be integrated together to form a single process, PivaSystem.

handle small series as well as mass production and can be

furniture, heating and ventilation, domestic appliances, shelving and enclosures. The company solutions can customized in desired configura tions. The automated process

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### **ENGINEERED ALLOYS**

# **Enhancing Metal Forming Process**

Manufacturers keep seeking solutions to reduce friction on their production tools, speed up production and consistently deliver better quality. Aluminum bronze has emerged as an ideal material that can help accomplish all these and more.

ne thing quite a few manufacturers in the metal forming industry do not seem to know is that there are alternatives to conventional tool steel or coated materials that actually have better properties. It is possible to attain lower friction, avoid galling, manufacture without heat treatment and with fewer steps and make modification easier. The material that allows for all this is called aluminum bronze. If you use tools made of aluminum bronze in the metal forming process, you will improve your production on many fronts.

aluminum. It comes with high hardness, great compressive strength and excellent friction properties at the same time. The material is very well-suited for processes in which tearing, scratching and galling cannot be tolerated. The different kinds of aluminum bronze alloys are made for everything from short runs and moderate service up to long production and requirements. They are generally most valued for their higher strength and corrosion resistance compared to similar materials. The aluminum in the alloy reacts with atmospheric oxygen to form

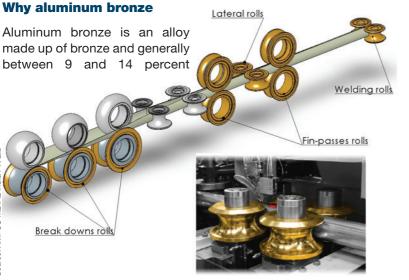
acts as a barrier to corrosion. severe

These alloys are also tarnishresistant and have low oxidation rates at high temperatures as well as low reactivity with sulphurous compounds and other exhaust products of combustion. In addition, they are resistant to corrosion caused by sea water. Their friction coefficient can be as low as 0.18 (in unlubricated condition), while the friction coefficient of conventional tool steel is usually about 1.11. Compared to bronze, aluminum bronze has higher hardness and quality because combining bronze with aluminum in the right way results in a more homogenous microstructure, significantly better sliding properties and much lower wear. The alloy is also better than coated materials as it allows a better wear resistance while also making changes of geometry possible at any time.

**AMPCO METAL India Pvt Ltd** 

www.ampcometal.com Hall 3A. Booth L-103

a thin, tough surface layer that



### **Best choice for metal** forming tools

Aluminum bronze offers a range of properties that make it a great choice for metal forming tools. Using this alloy in your metal forming tools minimizes friction, eliminates seizing and scratching,

improves sliding properties, reduces production costs, speeds up manufacturing and ultimately increases product quality. The metal forming process with aluminum bronze tools requires less preparation and causes less wear, all of which lowers overall production costs.

AMPCO METAL offers a great range of materials for industry usage and an attractive range of aluminum bronze alloys for the metal forming industry. For instance, the alloys named AMPCO®21 and AMPCO®22 are for moderate service severity, AMPCO®25 and AMPCO®26 are the alloys of choice for severe requirements and demanding applications.

### AMPCO® 25 aluminum bronze alloy

It makes for an ideal material for Tube Forming and Deep Drawing. Its properties include: excellent sliding characteristics; high hardness; no cold welds on the forming rolls and dies; absolutely perfect surface on carbon, stainless steel or titanium tubes; extended lifetime; non-magnetic property; no hardening or expensive coatings; easy to regrind; and high thermal conductivity.

### AMPCO® 18, 21, M4 aluminum bronze alloys

These allows are ideal for Tube Bending. They speed up tool manufacturing, improve sliding properties, reduce production costs, increase product quality, pose minimum friction and do not allow seizing or scratching.









### LASER CUTTING SYSTEMS

## **High Power Fiber Laser Cutting System**

VECTOR from the SLTL Group's trademark Brahmastra Laser Cutting series brings in versatility, power, speed and productivity to the manufacturing industry.

he manufacturing industry has always faced challenges of producing high-quality yet cost-effective products. This motivated the Sahajanand Laser Technology Ltd Group (SLTL) to come up with Fiber Laser Cutting Systems for the very first time in the industry in 2003, at the time when the industry across the globe was using CO<sub>2</sub> cutting technology for manufacturing and fabrication. The key factors for innovating fiber laser cutting technology were:

- Conventional technologies were inefficient;
- 2. These technologies required frequent maintenance:
- The unavailability for consumables such as the purest form of CO<sub>2</sub> gas;
- There was large wear and tear of machine components, resulting in repetitive maintenance costs.

The above challenges were completely eliminated by the invention of fiber laser technology.

### **Introducing VECTOR**

The company has now come up with a new Laser Cutting System which is sustainable by design, robust by structure, and productive by technology. The idea again was to produce a quality product at a reasonable price. The eco-friendly Fiber Laser System VECTOR comes with a power-efficient technology. It offers 50 percent energy savings than other laser cutting technologies. The state-of-the-art fume suction technology exceeds the fume suction method by removing more than 90 percent of fumes from the laser cut environment, thus making VEC-TOR a highly efficient model for the metal cutting process.

#### **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.

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 greater role to play in reducing the 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 cabinet (lp55), and door interlocks. Laser safety windows keep the laser radiation intact inside the machine during the marking processes.

### Product of intensive in-house R&D

VECTOR is the result of SLTL Group's long-standing research and development program aimed to support fabricators with the ultimate cutting tool. 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 15kW.

The drive system in VECTOR allows the machine to achieve the 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.





### DELEGATE'S PERSPECTIVE

# Highly Essential for Indian Manufacturers

66 IMTEX FORMING has always been presenting the best forming technologies from technologically advanced countries. With Indian manufacturers going global, it is absolutely important to improve quality of the products and remain consistent with it. IMTEX FORMING brings Indian manufacturers under one roof to explore various advanced technologies. Today the manufacturing processes have become more sophisticated. Thus, to be globally competitive, Indian manufacturers have to maintain the highest order of accuracy, precision and consistency. Although in India, the adoption of automation on the shopfloors is slow, it is high time manufacturers understood its benefits. Products are evolving and there is a need for better, faster and more economic ways of forming. Thus, for us to become a global manufacturing hub, our manufacturers need to stay updated on the developments in the industry. IMTEX FORMING show has been shouldering the responsibility to spread awareness among the Indian manufacturers and bringing to them cutting-edge solutions from across the globe. Hence, every progressive Indian manufacturer must ensure to make his way to the exhibition."

Shyam Warialani Managing Director Baumer Technology







# VISITORS' VIEWS



66 As a dealer from Noida, I wanted to include some forming machine tools to my portfolio. I have come across interesting forming machinery, which I will be finalizing tomorrow. The exhibition has displayed a comprehensive range of tools, making the visit incredibly worthwhile.99

**GR Sharma Proprietor** Hanuman Hoist **Solutions** 



66 Being from a company that mainly deals in special purpose machinery, I have basically come to IMTEX FORMING 2020 to interact with suppliers and explore customer demands. As one of the biggest exhibitions in metal forming, the show has been delightful with its innovative displays. It's been an amazing experience at the exhibition so far.99

**Prithiv Prakash Director - Sales and** Marketing Flowlines Engineering Pvt Ltd



**66** Belonging to the metal forming industry, our interest lies in discovering the latest trends and technologies in the industry. We have witnessed some interesting technologies in the Laser and 3D Printing section. Thanks to the show, we have realised that Rapid Prototyping technology is ideal for manufacturing our sophisticated parts.99

**Abhiieet Krishna Assistant Manager Tata Sikorsky Aerospace Ltd** 



66 We have been taking part in IMTEX FORMING shows since 1972. As the first to develop PLC drives in India, we also presented our products here the same year. The exhibition has evidently improved over time displaying an elaborate range of offerings each edition.99

N Ramachandra **Ex President** Kirloskar Company



66 I hail from Jamshedpur with the purpose to know more about the latest forming technologies. I have zeroed in on a few that can be implemented in our field. With the kind of displays and knowledge to gather, I am sure to visit each edition to keep myself updated on the metal forming technologies.99

**Sumeet Rai Director** Kross Ltd



66 I have been coming to the exhibition for the last five years and find it extremely well managed every time. The focus has relentlessly been on the quality of its displays rather than the quantity. Needless to say, I will be visiting next time too.99

Sanjay Panchal **Anticorrosive Equipment Pvt Ltd** 





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