



Source: Magic Wand Media Inc

**Clockwise:** Jagjeet Paul, Director - Sales & Marketing, Orcan Products Of India; Ranjit Singh - Managing Director, Rattan Power Presses Pvt Ltd, Rattan Machine Tools; Sudhir Udyavar Manager - Sales & Service Mechelonic Engineers Pvt Ltd; M I Quraishi DGM, Marketing, ITL Industries Ltd. at their company booths.

## Leveraging Opportunities

# Transforming the MSME Landscape

Considering the fact that the Micro, Small and Medium Enterprises (MSME) sector plays a pivotal role in the Indian economy, their aspirations and goals are significantly important in shaping the future of Indian Manufacturing. A look at how a few participating companies at IMTEX FORMING 2018 plan to leverage the opportunities that can help them rise a notch higher.

**M** SMEs account for over 95 percent of establishments and over 80 percent of jobs in our country. Hence, major thrust is being to strengthen the sector, it being the backbone of the Indian economy. Its exposure to advanced global trends and the cost-effective ways to adopt them can, therefore, be of high importance to India.

### Trade shows vital for MSMEs

Participation in trade exhibitions forms a vital part of business strategy for small and medium enterprises in anticipation of the much-needed exposure and personal interactions with established and potential customers. The latest edition of IMTEX FORMING receives an overwhelming response from companies that make vices, presses, parts like wheels and castors, measuring, cutting, welding and lifting solutions and much more for OEMs in India and across the world.

"Most of the footfall at this year's exhibition is from serious visitors," notes Ranjit Singh, Managing Director, Rattan Power Presses Pvt Ltd. The Ludhiana-based manufacturer of power presses is a regular participant at IMTEX FORMING. This year's show, as is always the case, has exceeded his expectations with the opportunities coming his way, he shares.

### Instant sales

Trade shows like IMTEX FORMING are themed and, thus, attract genuinely interested visitors who mean business. Hence, participating in such events spells out a huge opportunity for MSMEs. The presence of senior-most company representatives at the exhibitor stalls and decision makers from OEMs results in securing well-qualified leads and expedites the sales process at the show.

Sudhir Udyavar, Manager – Sales & Service, Mechelonic Engineers Pvt Ltd, points at a brake shoe welding machine at the company's stall, a unit of which has already been sold during the show. The special purpose projection welding machine with a main frame of heavy, rigidly reinforced welded steel combines a compact appearance with maximum resistance.

"Automobile OEMs are our main customers, and our products are used by companies like Maruti, TVS, Royal Enfield, Bajaj, HAL, Indian Coach Factory (ICF), Rail Coach Factory (RCF)," says Udyavar. Mechelonic has been associated with IMTEX since its earliest editions in Vikhroli, Mumbai. The Vapi-based welding solutions provider has plans to set up a production unit in Karnataka, with the cooperation from the state government with their manufacturing-friendly policies.

Continued on page 2. ▶



Ball Transfer Units

Hall 3A - Stall D110

Continued from page 1... ▶

“ This is our first time at IMTEX FORMING and the response that we have garnered is even better than the CUTTING show.”

**Jagjeet Paul**  
Director - Sales & Marketing  
Orcan Products Of India

“ We have been participating in both IMTEX FORMING AND CUTTING since their inception. The industry is experiencing a positive growth phase right now”

**MI Quraishi**  
DGM -Marketing  
ITL Industries Ltd

“ Most of the footfall at this year's exhibition is from serious visitors. This edition of the show, as is always the case, has exceeded our expectations.

**Ranjit Singh**  
Managing Director  
Rattan Power Presses Pvt Ltd  
Rattan Machine Tools

“ We have already applied for purchasing land in Karnataka for our long-term growth plans.”

**Sudhir Udyavar**  
Manager – Sales & Service  
Mechelonic Engineers Pvt Ltd

**Better response**

Based in Faridabad, Haryana, Orcan Products Of India, a manufacturer of vices never misses the other IMTEX shows, but this is its first appearance at IMTEX FORMING. Jagjeet Paul, Director of Sales & Marketing proclaims that the company has generated better response at IMTEX FORMING than the cutting exhibition, where the company usually gets a first floor stall. Orcan's products are engaged in die tool production and maintenance, with a customer base across India and Europe. Paul, who participates in exhibitions

worldwide, expresses hope that the logistics for exhibitions should improve and set-up time lowered, allowing smaller companies to participate without losing too much production time.

**Upbeat scenario**

Overall, the outlook for the metal forming industry seems positive. MI Quraishi, DGM - Marketing, ITL Industries Ltd, an Indore-based provider of cutting solutions for automobile and steel industry, has experienced a manifold increase in exports in recent years, and has seen growth

in the domestic market. He attributes the growth to market forces, noting that the manufacturing industry is currently going through a positive growth cycle.

**A no-miss opportunity**

The four massive exhibition halls at IMTEX FORMING 2018 are brimming over with Indian companies from as close as Peenya Industrial Area, a brief metro ride away from the exhibition venue, and from far flung places like Rajkot and Noida. There are industry leaders with their massive exhibits and small manufacturers with humble

stalls. Some have experienced a heavy footfall, promising enquiries and some actual sales, while others are still waiting for the desired response. All of them, however, share a common sentiment that they must be present at this unique and dedicated exhibition for the metal forming industry to feel the pulse of the industry and observe it close upfront. With its sharp focus, wide promotion and the trusted IMTMA brand, IMTEX FORMING gives MSMEs in the metal working sector the much-needed boost to take their business to the world.

**Roll Forming**

**Being Virtually Precise**

With the help of advanced finite element simulation software and CAE planning tools, data M has developed the very first 3D roll forming center completely virtually. A peep into the ground-breaking technology...

Over recent years the automotive industry has been focusing heavily on weight reduction in a bid to reduce CO<sub>2</sub> emission and fuel consumption. A weight optimum body in white can be achieved by using topological optimization algorithms. This, however, often leads to complex part geometries which cannot be manufactured by known and common roll forming processes. Since roll forming is a progressive sheet metal forming process with a high energy efficiency and characterized by its ability to form high tensile steels, there has been increased interest in improving roll forming technology.

**Going virtual**

In a new concept for the production of conventional and load optimized roll formed profiles, data M has developed a very first 3D roll forming center completely virtually. The technology has extended the limits of this process drastically. It now allows the production of profiles with variable cross sections. The development was made possible by consistent application of the most advanced finite element simulation software and CAE planning tools. The first parts have already been produced. Production of profiles varying both in width and height prove the flexibility of the new concept.

each side) are mounted on a robot which aligns the forming rolls into the correct forming position. Given a straight profile with constant cross section, the robot would not move during one forming process – it would just keep the rolls in their position.

Just before the second forming cycle, the rolls will be brought into their new bending position. Several bending operations can be done with one and the same rolls. The robots have a tool changing system for fast and precise tool changes during production.

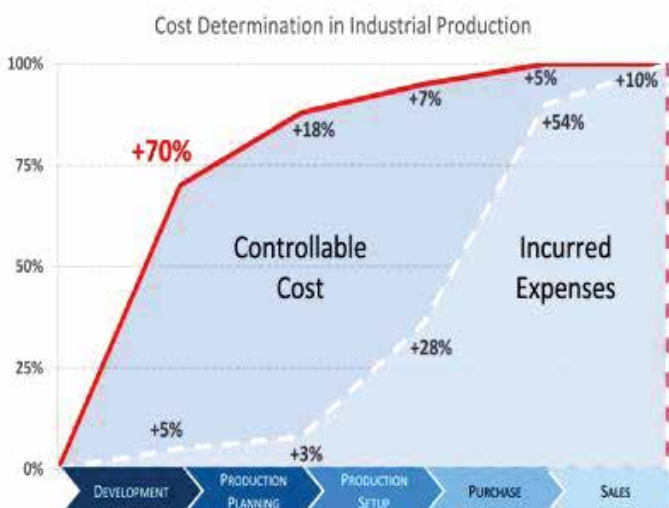
**The future**

The 3D Rollforming Center is being investigated for new materials such as high tensile steels and their forming behavior at a major material research institute. The concept is also suitable for cost-effective and flexible production of small batches of profiles. Due to this highly flexible machine concept, both conventional as well as 3D geometries can be produced in a rapid prototyping manner. Through data M Software India, the company can support Indian companies with the application of the new technology in common (classic) roll forming lines, and help them upgrade to Industry 4.0/ Smart Factory. Their portfolio for the Indian market includes COPRA RF Software, COPRA FEA RF simulation software (with MARC/ MENTAT included), sensors and monitoring systems and local consulting and “hand-holding services” by data M Software India.

**The technology**

Using advanced robotics, roll forming tools can be positioned freely in space. The combination of modern control technology and simulation technology has led to the digitization of the production process allowing for the production of smallest lot sizes of load optimized as well as classic profiles.

The 3D Rollforming Center developed by dataM is comparable to a roll form simulator consisting of a single pair of forming stands. The sheet, clamped in a die and mounted on a linear slide, passes the roll forming stands in alternating direction. The roll forming stands (one on



Source: data M Sheet Metal Solutions GmbH

Albert Sedlmaier, Co-Founder and President, data M Sheet Metal Solutions GmbH is also one of the brains behind the first 3D Roll Forming Center.

**data M Sheet Metal Solutions GmbH**  
www.datam.de  
Hall & Stall: 3A / G-106

Research & Development

# Cryogenics for better tool life

A glimpse into the industry-institute collaboration project that won the top prize at the i2 Academia Pavilion at IMTEX FORMING 2018



Source: Magic Wand Media Inc

Marathwada Institute of Technology (MIT), Aurangabad bagged the first prize.

When Shubham Industries, a small-scale metal processing company based in Aurangabad had problems with tool life in their mitring section, they turned to Marathwada Institute of Technology (MIT), Aurangabad for a solution.

**The solution**

Professor Sachin Lomte from the Department of Mechanical Engineering and two of his Third Year B Tech Students - Om Somvanshi & Akshay Jaiswal studied the problem.

They proposed a solution involving Cryogenic Treatment (CT) – a heat treatment wherein heat is extracted from the material for a certain period (soaking period) at sub-zero temperatures in a specially designed cryo processor.

Dr Pankaj U Zine, Associate Professor, Department of Mechanical Engineering, MIT Aurangabad shared, "Tool life was improved by almost three times, resulting in approximately ₹ 26L in savings annually."

Industry Wise

## Enquire, explore, then engineer

On the concluding day of the industry-academia bridging program, CONNECT, students gained a clarity on what would be expected of them as engineers and what virtues would set them apart.



Source: Magic Wand Media Inc

Rajashekara H V, Senior Director, IMTMA Design Institute addressing the audience.


"No single quality will make you a good manufacturing engineer," proclaimed Rajashekara H V, Senior Director, IMTMA Design Institute, speaking to a gathering of Engineering and Technology students at CONNECT, an academia-industry collaboration initiative during IMTEX FORMING 2018.

The four-day program featured technology and industry-focussed presentations from manufacturing stalwarts, in a bid to inspire young minds towards manufacturing careers. IMTMA Design Institute is a premium training facility offering industry-oriented courses for graduate engineers. With a focus on real-world manufacturing know-how, students are trained by faculties with extensive industry experience.

**The right mindset**


"More than anything, you are not a true engineer until you start looking at everything -- from a pen to your chair to your motorbike -- and wondering how it was fabricated," said Rajashekara, underlining a spirit of inquisitiveness as a virtue at par with proficiency in mathematics, physics, analytical and problem-solving skills.

Above all, he advised students to follow their passion as the only true way to excellence. "The only way to do great work is to love what you do. If you haven't found it yet, keep looking. Don't settle," he concluded.



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## Industry-Academia Collaboration Symbiosis in Action

Research works by universities help the industry develop new products and services. The i2 Pavilion initiative by IMTMA at IMTEX FORMING 2018 aims to encourage interaction between the duo which can lead to new research topics aligned with the industry requirements. Following is the last set of researches presented at this edition of IMTEX that have opened doors to new avenues.

**“Table Top Mini Hydraulic Press for Preparing Nanopolymer Composites”** – Sir M Visvesvaraya Institute of Technology, Bangalore.

The research presents that table top mini hydraulic press is fabricated with split metallic dies with band heater for preparing UHMWPE composites.

**“Sona Power Electronics Drives and Controllers”** – Sona College of Technology, Salem.

The research is about how these drives and controllers are implemented to overcome the drawbacks of conventional PID control form.

**“Analysis of Bead Geometry of Hardfacing Low Carbon Steel Using GMAW”** – Sree Sastha Institute of Engineering and Technology, Chennai.

Hardfacing mainly deals with preservation of machinery parts from destructive forces in chemical and fertilizer plants, nuclear and steam power plants, pressure vessels, etc. The research makes an attempt to study this by introducing an alternate material of FW-2 by depositing on low carbon steel.

**“Characterization of Welding Parameters by Resistance Spot Welding, Friction Stir Welding and Ultrasonic Welding Process”** – Sri Krishna College of Engineering and Technology, Coimbatore.

The research presents characterization of welding parameters by resistance spot welding, friction stir welding and ultrasonic welding process.

**“Heat Exchangers with Heat Transfer Enhancement for Recovering Waste Heat from Industries”** – SSN College of

Engineering, Chennai.

The research presents the various enhancement techniques that are being tried out to improve the heat duty of various heat exchangers.

**“Experimental Analysis of Abrasive Water Jet Machining - Drilling Parameters”** – St. Peter’s College of Engineering and Technology, Chennai.

In this study, an attempt has been made to minimize the thrust forces, and circularity error in the abrasive water jet drilling process.

**“Arduino Based Automated Braking Control System to Enhance Safety at Low Light and Long Stressed Drive Conditions”** – Vemu Institute of Technology, Chittoor.

The primary objective of this case study is:

- Check the utility of Arduino board to activate the pneumatic brake system.
- Find the halt distance at various vehicle speeds as well as minimum distance before collision.
- Determine the effective speed range of operations of the selected board.
- Validate the utility of the system when the driver is inattentive due to long drive or long duty hours.

**“Preparation of various Nanostructures by Green Route and their feasibility to WLEDs, Forensic, Display devices, Solar cells and Battery applications”** – BMS Institute of Technology & Management, Bangalore.

Research work is mainly focused on the preparation of nano-materials by wet chemical methods like ultrasonication sono-chemistry, solution combustion, hydrothermal/solvothermal, biomediated solution combustion, etc.

For other projects by the other institutes, visit Hall 4.



Participating students at the Academia Pavilion

Source: Magic Wand Media Inc

### Research & Development

## Academia showcases its industrial prowess

At the i2 Pavilion organized by IMTMA during IMTEX FORMING 2018 & Tooltech 2018, engineering and technology institutes shared their research works with the industry. Some of the most interesting works won awards and accolades for their institutes.



The Academia Pavilion winners pose jubilantly.

Out of 44 participating institutions, 10 of the best displays were shortlisted for a special showcase yesterday. The selected institutions were given an opportunity to present their work to IMTEX visitors and exhibitors. Five of these presenters went back with a cash prize from IMTMA in an effort to incentivize industry-oriented research work.

The winners were selected based on their presentations and interaction with a jury comprising BR Satyan, Former

Director, Central Manufacturing Technology Institute (CMTI) Nanjundiah M, Technical Consultant; Ramesh HN, Technical Consultant; and Rajashekara HV, Sr Director – Design Institute, IMMA. A total prize money of ₹ 1,00,000 was given away, of which the First Prize winner, Marathwada Institute of Technology, Aurangabad received ₹ 50,000 cash prize. The awards were distributed by V Anbu, Director General & CEO, IMTMA; PJ Mohanram, Senior Advisor, IMTMA and BR Satyan.

The top 10 colleges who presented their work to the jury are (in alphabetical order):

| College  | City       | Theme   |
|--|------------|---|
| BMS College of Engineering                                     | Bangalore  | 3D Printing   |
| Chennai Institute of Technology                                | Chennai    | Design of layout & ergonomics analysis of wheel rim production unit using digital manufacturing technique                   |
| IIT Ropar  | Rupnagar   | Sustainable manufacturing: surface engineering & design of cutting tools for dry, near-dry and cryogenic machining          |
| IIT Bombay, Mechanical Department 3rd Prize                    | Mumbai     | Lightweighting of IC engine components piston   |
| KLS Gogte Institute of Technology                              | Belagavi   | Cold working strengthening of aluminium material by Repetitive Corrugation System (RCS)                                     |
| Marathwada Institute of Technology (MIT), Aurangabad 1st Prize | Aurangabad | Transfer of technology of cryogenic treatment of AISI D2 steel slitters from laboratory to the shop floor of a rolling mill |
| PDPM Institute of Information Technology 2nd Prize             | Jabalpur   | Development of adaptive double sided incremental forming process for die-less manufacturing                                 |
| PSG College of Technology, Department of Robotics              | Coimbatore | Design & development of Robotic Endotrainer   |
| Rajalakshmi Engineering College                                | Chennai    | Vision system to inspect a spline gear  |
| SSN College of Engineering 1st Consolation                     | Chennai    | Ballistic performance of Aluminium (Al7075) and Magnesium (Az31b) targets for light weight defence vehicles                 |

Source: Magic Wand Media Inc

Amada India

# Fiber Laser line-up



AMADA  
Fiber Laser Lineup

Amada developed its own fiber laser oscillator as the laser machine manufacturer for the first time



3kW

6kW

9kW

**AMNC 3**

Global standard  
fiber laser cutting machine

**LCG-3015AJ**

\*Also available as LCG-4020AJ



3kW

**AMNC 3**

Energy saving, v-lot production,  
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**ENSIS-3015AJ**

\*Also available as ENSIS-4020AJ



Hall No. 4  
B108



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North Taluk - 562 129, India.  
Ph: 080 - 71100200



## Visitors' Views

### A well-organized trade event



“ I have come to source machine installation products and cables, and have chanced upon some really interesting products from igus as well as Beck & Pollitzer India. The exhibition is highly organized, to say the least, with the halls being very neat and clean. The organizers have made sure that the show matches international standards, which it surely does. Kudos to them.”

**Abhijeet D Kulkarni**  
Sr Engineer Electrical – Instrumentation & Automation  
Krones India Pvt Ltd

### A no-miss show



“ I have been visiting IMTEX right from 1986 in Godrej, to Pragati Maidan and now at BIEC. I have never missed any exhibition so far. It has been laid out very well this time and is a must for those into sheet metal forming. Thanks to the organizers for such a themed show.”

**Arun Kalyanpur**  
Carnatic Engineering Industries

### Potential for IoT solutions



“ We are into providing IoT solutions. The purpose to visit the exhibition is to know about the new technologies that come along with the machinery. I have mainly come here to explore opportunities to become an IoT solution partner for the machine tools manufacturers. I found many companies that have the systems in place. Yet there are lot more which do not have proper systems. I have interacted with several vendors and exhibitors including ones from the overseas. It's been a fruitful attempt.”

**Arjun Gurudev**  
Director of Sales  
Indus Edge Technologies Pvt Ltd

### Exhibition, a learning ground



“ We design solutions for the material handling equipment. These are basically combi-products of rubber, polymer and sheet metals. We are going through a transition period through change in design and a range of applications. We have come here to learn about the applications of plasma and laser for the precision sheet cutting and metal cutting. The exhibition has been very helpful in gaining the knowledge we needed.”

**Anjan Kumar Gupta**  
Assistant General Manager – Manufacturing  
Tega Industries Ltd

### An interesting exhibition



“ We are into manufacturing auto components and the exhibition is relevant to us, especially the Laser and the Forming sections. The technologies displayed on sheet metal forming are particularly interesting. I applaud the efforts of those behind the show.”

**N Sivapragasam**  
Head – PPC  
Grace Infrastructure Pvt Ltd

### Show offers ideas to enhance productivity



“ We being the manufacturers of electrical control panels, need to work on sheet metals. Since skilled laborer is a rarity these days, we must have latest in technologies to make up for what we lack and increase our company's productivity. Technology helps in proper finishing of products as well. We are totally satisfied that we could get ideas in Laser Cutting here at IMTEX, which we would soon be implementing in our factory.”

**Bala Saheb B Patil**  
Proprietor  
Power Systems

## Future of the Indian Machine Tool Sector

### Getting the Best of Both the Worlds

**S Devarajan, Chairman, Industry & Manufacturing Expert Committee, Bangalore Chamber of Industry and Commerce – and Senior Vice President, Production Engineering, TVS Motor Company Ltd, on the status quo of the Indian manufacturing sector and the future of the Indian machine tools industry.**



“ At IMTEX 2018, there is a lot of focus on automation, sensor technology, measurement systems and latest cutting technologies, which is a very positive sign for increasing our manufacturing industry's productivity.”

**S Devarajan**  
Chairman, Industry & Manufacturing Expert Committee, Bangalore Chamber of Industry and Commerce  
Senior Vice President, Production Engineering  
TVS Motor Company Ltd

With the Indian manufacturing industry growing at a tremendous pace, a gamut of opportunities are also ushering in. Foreign companies are making forays into the Indian market, which indicates that the opportunity is high. The skill set of people is also getting enhanced. The manufacturing capability of the machine tools is also increasing leading to the improved quality of the products. Considering the overall view of the manufacturing front, India is definitely on the threshold of increasing its presence in the global market. Secondly, there is a good market for a lot of products in India itself.

### Where are we lagging?

Although Indian machine tools manufacturers today offer cutting-edge technologies, many companies are still buying machine tools from foreign companies. While explaining the reason behind this practice, Devarajan said, “We have to use Indian as well as foreign machines at this transition period. The major benefit of the Indian machines is at the service level, because service has to come from the manufacturer throughout the life of the machine. In many machine elements, like control systems, India still needs to improve a lot. We are still depending on the Japanese control systems.”

## Opinion

### Collaboration is the Road Ahead

“ IMTEX FORMING 2018 & Tooltech 2018 has provided an incredible platform for the institutes to display their research activities and get connected to industries. Institutes in India are not merely for providing quality education, but also for developing and upgrading technologies and research. IMTEX 2018 has brought these two experts on one common platform for an open discussion and exchange of knowledge and ideas.

IMTEX 2018 has motivated the educational institutes to come up with the new research projects which can be deployed in industry. This interaction is going to be fruitful for the development of the nation economically and technologically. Hope to be a part of this IMTEX2019. On behalf of People's Education Society, Mumbai, I thank team IMTEX 2018 for this confederation.”



**Prof Prashant L Pandit**  
CAD/CAM/CAE In-charge  
P.E.S College of Engineering  
Aurangabad

Cutting Systems

# Staying Ahead Through Cutting-Edge Technologies

Having made a mark in the metalworking industry, **Messer Cutting Systems India** is all set to add in more innovations to its impressive portfolio and cater to a wider customer base. The company, at IMTEX FORMING 2018, is showcasing its offerings and garnering rave reviews.



Team Messer Cutting Systems India at the booth celebrating their success



Source: Magic Wand Media Inc

“Our company grew by 17 percent last year. This year also we are expecting to grow by around 17 to 20 percent.”

**Mani N**  
Managing Director  
Messer Cutting Systems India Pvt Ltd

**M**esser Cutting Systems India is a supplier of systems, products and services for the metalworking industry. It offers a comprehensive product range including oxyfuel, plasma and laser cutting systems, from hand-guided machines right up to special machines for shipbuilding, as well as plant and equipment for oxyfuel welding, cutting, brazing and heating. Spare parts, repairs and modernisation services as well as environmental equipment for the systems. Its software solutions optimise production and business processes.

**New offerings**

Messer Cutting Systems India has just launched a new product called Plamill, which is a plate processing machine. The product clubs cutting and machining in one machine. “Now one machine can do cutting, bevelling, welding, taping, milling, thread milling and all machining. The model’s name is Plamill GV and the machine’s name is Plate processing Centre,” said Mani N, Managing Director, Messer Cutting Systems India Pvt Ltd. Known as a plasma machining giant, Messer India expanded into laser business two years back.

After having been positioned at the first place for plasma and oxyfuel cutting, it now targets the same in laser cutting in India within the next two to three years.

“In India, we now offer up to 6 kW laser cutting machines. Next year onward, we will expand the range to 10 kW. We can offer 10 kW even now, but the machine has to come from Messer Europe or Messer China. Thus, in India we would like to restrict ourselves to 6 kW this year,” informed Mani.

As a strong follower of the ‘Make in India’ mission, Messer India completely manufactures all its machines in India, which are targeted for the domestic market. “Messer’s Indian factory is the best one compared to those of other machine manufacturers in the country,” he added.

At IMTEX FORMING 2018, Messer has, so far, received great response for its newly launched versatile plate processing center. According to Mani, 10 to 12 enquiries have already come, on which the company will start making progress from the next week.

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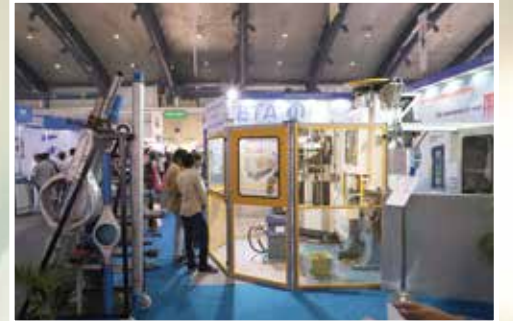
**Plamill GV**  
**Plamill GV-B**

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**LIVE DEMO**

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www.messer-cs.com  
Hall & Stall: 2A/A-116

# GLIMPSES OF IMTEX FORMING 2018 & TOOLTECH 2018





Automation Solutions

# Bringing Accuracy to Systems

Bangalore-based Givi Misure's passion to be precise has got it here at IMTEX FORMING 2018 where it has launched a new range of scales.

Precision is foremost in manufacturing. Keeping this in mind, Bangalore-based Givi Misure's core expertise lies in ensuring that its customers' needs for precision measurements low-cost automation are taken care of. The company manufactures and supplies optical scales, magnetic scales, encoders and pushing systems.

"Most of the CNC press brakes use our equipment for accurate push and feedback. So that the CNC can control accurate positioning, making correct bending, cutting etc.," said Vasant B Vibhute, Managing Director, Givi Misure Pvt Ltd.

Launching at IMTEX FORMING 2018 The company has launched a new range of scales at IMTEX FORMING 2018, which is more compatible and useful not only for metal forming machines, but also for metal cutting machines. These products are compatible with Fanuc and Siemens systems.

Commenting on the company's participation in IMTEX 2018, Vibhute said, "We have been taking part in this exhibition right from its inception. We meet and interact with people not only for business, but also if they need to just know about our innovative products."

**“ We have launched a new range of scales at IMTEX FORMING 2018, which is more compatible and useful for metal forming and cutting machines. These products are compatible with Fanuc and Siemens systems.”**

**Vasant B Vibhute  
Managing Director  
Givi Misure Pvt Ltd**

**Givi Misure Pvt Ltd**  
www.givimisureindia.com  
Hall & Stall: 3A / B-109



Source: Magic Wand Media Inc

Laser Cutting & Welding

# SLTL Gets A Breakthrough in Bogie Manufacturing

An interesting case in which SLTL, with the help of its laser and welding machines, made Bogie manufacturing a hassle-free process.

The challenges

The growing demands of a train bogie need faster production techniques. Train bogies need strongest welding joint to ensure safety and no fatigue. They needed light weight bogies. The overall aesthetics of the wagons should be intact. Customized laser cutting machine was needed for long cutting operations. The machine had to be fully automated to reduce manpower and cost of operation.

SLTL's Solution

The Sahajanand Laser Technology Ltd (SLTL) team concluded that if manufacturing is done by using laser technology, it will provide a better finish and great strength in terms of manufacturing wagons. They gave full insight into the dynamic behavior of all wagon components and helped the client make the right decisions in the initial stages of design. SLTL group, thus, provided railway manufacturing industry with two magnificent machines:

24-meter long laser cutting machine



Source: SLTL

Train wagon high power laser welding machine

Through the research, it was found that laser welding, in comparison to conventional welding, provides greater welding strength. With the machine's ability to make streamlined welding, overall aesthetics were improved.

to make streamlined welding, overall aesthetics were improved.

**“ High power laser welding machine from SLTL proved to be a problem solver in all aspects. Our productivity has increased and we are looking forward to more addition of SLTL machines.”**

**Dayasagar Rao  
Vice President – Operations  
Pennar Industries Ltd, Hyderabad**

**Sahajanand Laser Technology Ltd (SLTL)**  
www.sahajanandlaser.com  
Hall & Stall: 2A / B-106



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Industry 4.0

# Towards Smart Manufacturing

In today's ever-evolving technology world, customers' demands change at a rapid rate. This is more so in the field of automation. Hence, to combat the issue, top level automation providers are required to keep feeling the pulse of the market on a regular basis. Thus, Beckhoff Automation India ensures its participation in trade shows so as to stay abreast of the latest in products and technologies. In this issue of IMTEX FORMING, the company is exhibiting its interesting technology from the IoT space and industry 4.0 to address the needs of the current times.



Source: Magic Wand Media Inc

Staying on top of trends

JitendraKumar Kataria, Managing Director, Beckhoff Automation Pvt Ltd, said, "Beckhoff, being a leading automation technology provider, has to cater to the current market requirements, and also show the new products coming from Beckhoff's side to the market. IMTEX has always been a very interesting show. We meet a lot of people coming from the OEM industry as well as from the end user industry." Commenting especially on IMTEX 2018, Kataria said, "It has been a fabulous show; I have met a lot of interesting people – our existing customers and potential clients – who are looking forward to advanced technology from Beckhoff."

**"IMTEX is the best platform to showcase our latest offerings and meet our potential customers."**

**Jitendrakumar Kataria  
Managing Director  
Beckhoff Automation Pvt Ltd**

**Beckhoff Automation Pvt Ltd**  
www.beckhoff.com  
Hall & Stall: 3A / C-104

Laser technology

# Leading the Way with Fiber Lasers

A leading supplier of Fiber Laser solutions to the Indian industry, IPG Photonics (India) Pvt Ltd wants to leverage IMTEX FORMING 2018 platform in creating awareness on the use of Fiber Laser technology in diversified applications.

With an eye on efficiency, reliability and operational excellence for diverse applications, IPG Photonics (India) Pvt Ltd is focussed on propagating the use of fibre laser technology in industries. A 100 percent subsidiary of the IPG Group, the world leader in manufacturing of fiber lasers, fiber amplifiers and beam delivery products, IPG India has come a long way since its inception in 2001.

The company has remained consistent in its commitment to deliver excellence and facilitate industries in adopting Lean Manufacturing concepts through the use of Fiber Laser Technology. "In our endeavour to anticipate the future use of technology and meeting the demands, IPG is taking giant strides in building its know-how, which we believe will create value to our customers," shares Rajesh Sharma, General Manager, IPG Photonics (India) Pvt Ltd.



Source: IPG PHOTONICS (INDIA) Pvt Ltd

**Lean Manufacturing concepts through the use of Fibre Laser technology will lead to precision and quality."**

**Rajesh Sharma  
General Manager  
IPG Photonics (India) Pvt Ltd**

treatment, cladding, drilling, micro applications, science and research, informs Sharma.

**IPG Photonics (India) Pvt Ltd**  
ipgphotonics.in  
Hall & Stall: 3A / A-101



# Who did you notice more?



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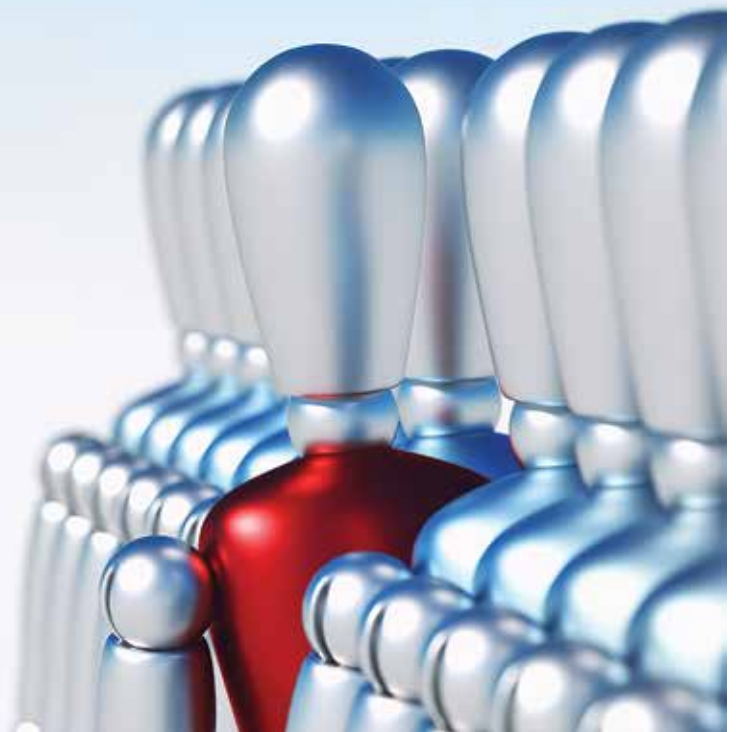
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Indian Machine Tool  
Manufacturers' Association

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## Sheet Metal Working Changing the Paradigms for Fabricators

Keen on making fabricators aware of the latest technologies available to improve productivity, LVD-Strippit India is all set to make a splash at IMTEX FORMING 2018 with its wide range of products.

Supplier, manufacturer, and exporter of integrated products for sheet metalworking, LVD-Strippit India Pvt Ltd is making its presence felt at IMTEX FORMING 2018 with its wide array of products including laser cutting machines, punching machines, bending machines and shearing machines.

Driven by the importance of demonstrating its products and technology to fabricators, the company has been actively participating in trade shows all over the world. "There is nothing that can take the place of one-on-one interactions we have at these events, where we have the opportunity to showcase our sheet metal fabrication products to users who are actively looking to improve their operations, particularly as they are faced with the need for smaller batches, shorter production runs, tight deadlines, and low to no inventories. It's a great platform to hear from shops and to help fabricators improve their current state," says MK Narasinga Rao, Managing Director, LVD-Strippit India.

At this year's edition of IMTEX, LVD is

spotlighting bending and laser cutting technology with its Lynx FL 3015 4 kW laser and PPEB-8 135/30 press brake. "We have selected the Lynx because it's the perfect machine for fabricators who are considering entering the



Source: LVD-Strippit India

world of fiber laser cutting. Fiber laser is, overwhelmingly, the technology of choice for flat sheet cutting as advances make this production tool faster, more economical and more versatile than ever. Our PPEB press brake is a perfect complement to the Lynx laser. It offers precision bending in a flexible design. You can configure this press brake to meet your exact requirements – choose your back gauge, increase the distance between the table and ram, integrate a robot, add CNC sheet supports, etc.," explains Rao.

### Technology is the key

Targeting sheet metal fabricators, the company is keen to educate fabricators about today's technology in these areas as well as when it comes to managing data and optimizing process flow. "A big initiative of ours is to take the mystery out of Industry 4.0 and we do that by taking a very straightforward approach to data gathering and management through our CADMAN software suite and 'Touch' controls," he adds.



“There is nothing that can take the place of one-on-one interactions we have at events like IMTEX, where we have the opportunity to showcase our sheet metal fabrication products to users who are actively looking to improve their operations.”

**MK Narasinga Rao**  
Managing Director  
LVD-Strippit India Pvt Ltd

**LVD-Strippit India Pvt Ltd**  
www.lvdgroup.com  
Hall & Stall: 4 / A-112

## Fasteners

### Reliable Fasteners for Assured Safety

Owing to the safety factors associated with them, fasteners have a special importance in the manufacturing industry. They are required to be reliable at any cost.

Kapasi Inc., with years of experience in serving OEM markets, stocks and offers a comprehensive range of specialised imported fasteners to the Indian industries. Pankaj Kapasi, CEO & Application Specialist, Kapasi Inc., said, "We have tie-ups with many big companies around the globe for different types of fastening and joining solutions, which we offer to the Indian sheet metal engineering society and the industry as well."

### Inability to manufacture

When explaining the reason behind importing their products instead of manufacturing in India, he explained, "These are very special parts, thus we are not able to manufacture them in India due to patent and other issues." The company sources its products mostly from technology-rich countries like the US, Europe, Belgium and so on.

Kapasi Inc. has been participating in IMTEX for quite a long time. The company finds it to be an ideal platform to display high-end fastening and joining technologies to the sheet metal industry. "I see the stalls are getting bigger and better at IMTEX. There is no doubt that it has reached the international standard."



Source: Magic Wand Media Inc

“IMTEX is the best place to display specialised products to targeted people.”

**Pankaj Kapasi**  
CEO & Application Specialist  
Kapasi Inc.

**Kapasi Inc.**  
www.kapasiinc.com  
Hall & Stall: 3A / B-107

## CNC for Laser Processing Machines

### Mazak's Next Generation CNC

Next Generation CNC for Mazak laser processing machines, MAZATROL Preview G has following features:

**Advanced hardware:** State-of-the-art CPU for unsurpassed operation speed, high-response, high-speed machine motion;

**Optimum acceleration/deceleration for the reduction of cutting time:** Tolerance control ensures high-speed corner cutting;

**Improved laser operation responsiveness:** Laser control is improved to generate optimum laser power in the minimum time, and achieve improved performance for fly cutting and sharp edge cutting;

**Large 19 in. LCD display with touch screen operation:** Operates similar to the smart phone / tablet for increased ease of operation;

**Switches:** Large switches and high-visibility LED lights prevent operation errors. If a function button cannot be used during a particular operation, it is clearly indicated by the button illumination. Buttons and switches are grouped according to functions for the ease of operation.

Source: Yamazaki Mazak India Pvt Ltd



MAZATROL Preview G - the next generation CNC for Mazak laser processing machines.

**Yamazaki Mazak India Pvt Ltd**  
www.mazakindia.in  
marketing@mazakindia.com  
Hall & Stall: 4 / B-102

**Zero Wastage**

**Henkel's Product Combines Cleaning with Lubrication**

Henkel Adhesives Technologies India Pvt Ltd, a wholly-owned subsidiary of Henkel AG & Co. KGaA, Germany, is displaying its latest developments in the field of metal adhesive at IMTEX FORMING 2018.

**Dual Product**

The company's Bonderite dualCys technology, is a patented one, and was launched at IMTEX last year. It is a dual product which combines cleaning and lubrication operations. This helps the customer in gaining more than 40 percent cost savings in their operations. It is a 100 percent recyclable product with zero wastage. At the same time, it helps in making the site bacteria-free and stain-free. It keeps the CNC machine or other customers' products very clean.



Source: Magic Wand Media Inc

**IMTEX experience**

While talking about the company's experience at IMTEX 2018, Kumar Venkatraman, Market Development Manager, Transport and Metals, Henkel Adhesive Technologies India Pvt Ltd, said, "IMTEX provides a great platform to the industry, machine manufacturers, the other leading players and their Tier I players. It is a congregation where industry-wide people come and interact to understand which way the market is going, and what are the emerging business opportunities. It also helps in maintaining relationship with the clients here."

**“IMTEX is a platform that helps assess the market trend.”**

**Kumar Venkatraman**  
Market Development Manager  
Transport and Metals  
Henkel Adhesive Technologies  
India Pvt Ltd

**Henkel Adhesive Technologies India Pvt Ltd**  
www.henkel.in  
Hall & Stall: 3A / C-126

**Power Presses**

**Japanese Accuracy in Indian Machine**

With the growth of the Indian manufacturing sector, the demand for power press is also increasing. Although there is no shortage of power press manufacturers in the country, the quality of the products vary from manufacturer to manufacturer.

**Products with premium quality**

At IMTEX FORMING 2018, Rajkot-based Singhal Power Presses Pvt Ltd is showcasing its products which offer Japanese standard. The company's products are mostly used in automobile sector.

Its clients are Tier I suppliers to Maruti Suzuki, Honda etc. Around 10,000 presses manufactured by the company are successfully running in the country.

While commenting on IMTEX FORMING 2018, Harmeet Singh Chawla, Director, Singhal Power Presses Pvt Ltd, said, "IMTEX is ideal to meet all our clients. The trade fair brings everyone in one place from all over India. Also, it's more than just meeting everyone and building relations."



Source: Magic Wand Media Inc

**“IMTEX brings people close to each other. It's a place to understand current trends and gear up for the future.”**

**Harmeet Singh Chawla**  
Director  
Singhal Power Presses Pvt Ltd

**Singhal Power Presses Pvt Ltd**  
www.sewpresses.com  
Hall & Stall: 2A / B-104

**Laser Cutting Machines Soaring High**

That the Indian market is expanding very fast is known globally. The truth was echoed by Patric Ma, Director, Bodor Laser: "Indian market is a very potential market and it has world's no. 1 growth speed in the industry. By now, we have already installed 40 machines all over the country. This year we expect 100 more machines to be installed."

**Presence in Indian trade events**

The company repeatedly makes its appearance in Indian trade shows. Ma said, "This is our fifth time participation in Indian exhibitions. But this is our first visit to IMTEX. When we first came to India in 2016, we heard from many customers that IMTEX is the biggest show in India. Thus, we are here today."

Ma truly finds IMTEX as the biggest show in India. They are planning to come back to IMTEX again. The company has received many customers and many enquiries in IMTEX FORMING 2018



Source: Magic Wand Media Inc

**“IMTEX is the biggest Indian trade show as far as our business is concerned. We will be here again.”**

**Patric Ma**  
Director  
Bodor Laser

**Bodor Laser**  
www.bodorcnc.com  
Hall & Stall: 3A / Q-102

**Automation Solutions**

**A unique platform for cross-industry discussion**



**“IMTEX 2018 is a unique platform for cross-industry discussion and idea exchange.”**

**N Sarvanan**  
Assistant Manager – Plain Outsourcing  
Titan Company Ltd

Yesterday, delegates from Titan Company Ltd paid visit to IMTEX FORMING 2018. Their industry is still like a cottage industry where personal skills matter. However, due to various socio-economic reasons, the number of skilled workers in the field is dwindling. Under such circumstances, Titan Company Ltd, a joint venture between the TATA Group and the Tamil Nadu Industrial Development Corporation (TIDCO) is looking for solutions to automate some areas of their jewellery manufacturing processes. "We have come to IMTEX 2018 to gain knowledge on automation to simplify our processes. Jewellery is basically a cottage industry, which does not have much engineering present," informed N Sarvanan, Assistant Manager – Plain Outsourcing, Titan Company Ltd.

He went on to explain, "In our industry, getting the right goldsmith (Karigar) is very difficult these days. It is increasingly becoming tougher. So, we feel this is the right time to go for automation. That will simplify the work and increase our productivity."

Titan Company is at present procuring six percent of the total jewellery products' demand in India. If it can deploy automation, it will be able to achieve more productivity, and that will increase its contribution to the national demand.

Talking on whether the visit helped, Sarvanan said, "We have got ideas from two or three companies. One of them is Dalal Engineering of Mumbai. They have suggested some solutions for our products in terms of polishing, which will increase our productivity and improve the quality of our products. We must try it."

Surface Finishing

# Making the Most of Special Purpose Machines

Over the years, Grind Master Machines has not only created a wide range of products but has spearheaded technological revolutions in technical collaborations with companies from across the world. The company is here at IMTEX FORMING 2018 to gain brand visibility and customer connect.

Grind Master Machines Pvt Ltd has come a long way from a small production unit working out of a garage to achieving the status of a pioneer and leader in the making of special purpose machines (SPMs) for metal finishing, deburring, microfinishing and robotic automation. In fact, the company is now acknowledged as a total solution provider for surface finishing requirements.

**Advantage IMTEX FORMING 2018**

With the aim to create the best customer-connect at IMTEX FORMING this year, Grind Master Machines is showcasing its CF Series machine

for heavy deburring and fine edge radiusing of flat parts. "These machines use combination-coated abrasive belt heads and planetary deburring heads that give precisely deburred output parts. Grind Master has delivered over 100 such conveyerized deburring SPMs worldwide. The wide belt grinding machines from Timesavers Holland are the key



Source: Grind Master Machines Pvt Ltd

products showcased for sheet metal fabricators as well as the aerospace industry," informs Sameer Kelkar, CEO and R&D Head, Grind Master Machines. Further, since IMTEX FORMING is also a key exhibition for the foundry and forging industry, Kelkar feels that their robotic fettling, grinding, deburring solutions are relevant to the visitors from this sector.



**“The wide belt grinding machines from Timesavers Holland are the key products showcased at IMTEX FORMING 2018 for sheet metal fabricators as well as the aerospace industry.”**

**Sameer Kelkar  
CEO and R&D Head  
Grind Master Machines Pvt Ltd**

mers who can benefit from the best of deburring and finishing technologies," he adds.

**Grind Master Machines Pvt Ltd**  
www.grindmaster.co.in  
Hall & Stall: 2A / B-110



Source: Grind Master Machines Pvt Ltd

**Focus on forming**

Grind Master Machines has recently entered into collaboration with MJC Engineering of the USA, thereby adding flow forming machines in its product portfolio. An expert team from MJC is available at IMTEX to discuss various flow forming requirements from the Defence, Aerospace and other Engineering sectors and this, Kelkar feels, will pave the way for growth in the near future. "We are tapping many fabricators doing sheet metal working since they are our potential custo-

Plasma Cutting

# Kjellberg's Solution to meet Highest Cutting Demands

The plasma cutting systems of the HiFocus neo series meet the highest demands in the cutting range between 0.5 and 160 mm. Due to the constriction of the plasma arc by means of a heavily rotating swirl gas, it is possible to achieve laser-like cuts with nearly dross-free and rectangular cut surfaces. Users benefit from diverse possible applications as well as low process costs due to high cutting and marking speeds: The plasma cutting units can be used in connection with all common CNC guiding systems, pipe cutting machines or robots, also for bevel cutting or underwater plasma cutting (from HiFocus 280i neo).

**Using Contour Cut technology**

All HiFocus units (except for HiFocus 80i) use the patented Contour Cut technology for precise cutting of mild steel: finest contours, narrow webs and small holes with a diameter to material thickness ratio of 1:1

can be cut with excellent quality. For cutting larger contours, the further technological development Contour Cut Speed is used. With equivalent cut quality, the cutting speed is increased by 50 percent. This improves the cutting performance, while the costs per cutting meter are reduced. With the automatic and manual gas

control units FlowControl and PGE, the optimum mixture of plasma gases is created for each cutting task. The automatic gas control unit FlowControl is equipped with its own database for the control of the gas quantities. Additionally to the parameters set in the factory, individual adjustments can be included.



HiFocus series

Source: Kjellberg Finsterwalde

**Kjellberg Finsterwalde**  
www.kjellberg.de/en  
Hall & Stall: 4 / B-113

Cutting Systems

# Shaping the Future of Industrial Cutting

Celebrating 50 years of being consistently innovative in industrial cutting, Hypertherm is back in this year's IMTEX FORMING to connect with loyal customers, present its latest offerings and share knowledge on plasma cutting.

A pioneer in plasma cutting innovation, Hypertherm designs and manufactures industrial cutting products for use in a variety of industries such as shipbuilding, manufacturing, and automotive repair. Its product line includes cutting systems, in addition to CNC motion and height controls, CAM nesting software, robotic software and consumables.

Yaseer Wajahet, Market Manager, Hypertherm India shares, "IMTEX FORMING provides a great opportunity for us to network with industry leaders, decision makers, and value chain participants in the metalworking industry from around the world. The innovation-led event is an important link between the international and local market, and it provides an attractive platform for companies to showcase their latest technologies."

enabled by new technologies such as Vented Water Injection (VWI), plasma dampening, and Vent-to-Shield. The result is squarer cut edges, markedly less angularity, and excellent surface finish on non-ferrous

metals like aluminum and stainless steel. The cutting-edge technology enables the XPR300 to cut faster, providing users with greater productivity and lower operating costs when compared to earlier Hypertherm systems.

Sensors in the power supply deliver refined diagnostic codes and significantly enhanced system monitoring information. This reduces trouble-

shooting time and provides proactive data to boost overall system optimization and uptime.

### Synergizing business and knowledge

Reaffirming the company's faith in IMTEX, Wajahet states, "IMTEX FORMING is an important avenue for us to feature our latest technologies. Besides that, IMTEX also provides Hypertherm with an essential opportunity to reinforce existing partnerships and cultivate new ones. It is a flagship event for the metal forming sector in India, and we anticipate receiving enquiries from the manufacturing, metal fabricating, and construction industries."

Beyond reinforcing business ties, the company is committed to sharing its knowledge to help the market understand and adopt new approaches. "We also hope to use this platform to redefine the common understanding of what plasma can do and share how Hypertherm's X-Definition plasma can further enhance the use of plasma cutting for high precision applications," he adds. With the live cutting demonstrations at the Hypertherm booth, the company aims to cultivate greater awareness about the shift in cutting technology from oxy-



**“We hope to use this platform to redefine the common understanding of what plasma can do and share how Hypertherm's X-Definition plasma can further enhance the use of plasma cutting for high precision applications.”**

**Yaseer Wajahet**  
Market Manager - India  
Hypertherm Inc

### X-Definition debuts at IMTEX

This is the first time Hypertherm is showcasing its latest X-Definition plasma in India, in live cutting demonstrations. X-Definition provides users with industry-leading cut quality and superior performance on all metals,



Source: Hypertherm Inc

fuel to plasma, and the advantages of plasma in terms of both productivity and cost.

**Hypertherm Inc**  
<https://www.hypertherm.com>  
Hall & Stall: 4 / C-102

Machine Elements

# Leading by Example

From clamping knobs to clamping levers and U-handles to control elements and much more, the brand name Elesa+Ganter has created a niche for itself across the globe

When it comes to the design and manufacture of plastic and metal standard machine elements for the mechanical industry, there are few companies that can hold a candle to Elesa+Ganter, a commercial joint venture of two world leaders, namely, Elesa SpA (Monza, Milan, Italy) and Otto Ganter GmbH & Co. KG (Furtwangen, Germany).

### IMTEX platform to create awareness

With an ambitious plan to participate in several industrial shows this year, it is with IMTEX FORMING that the company has flagged off its journey for 2018 in order to gain an insight into the latest technological developments as well as get an opportunity to initiate business relationships with new prospects. "The whole process results in contributing to overall business growth and forging new relationships with clients," says

Ram Grover, Managing Director, Elesa and Ganter India Pvt Ltd.

At the show, the company is creating awareness about its 50,000 standard machine elements available worldwide. "We want the visitors to know about our unique design, perfect service and the ability to create special customized solutions in a very short time. We are constantly engaged in the development of new and innovative solutions. The wide assortment of our standard machine elements grows constantly through the development of new products," Grover says. The product range on display will include:

Operating elements, machine elements, indexing elements, Clamping knobs, clamping levers, U-handles, fixed, revolving, foldaway handles, Control elements, rotary controls, levelling elements, Joints, hinges, latches, hook, toggle and power clamps, accessories for hydraulic systems, tube clamp con-

nectors, castors and wheels, retaining magnets, etc.

### Sectors that matter

Elesa and Ganter India is highly focused about reaching out to specific sectors. These include makers of construction and material handling machines, hydraulic equipment, metalworking machines, dairy industry machines, packaging bottling and labelling machines, medical and laboratory equipment, paper processing and printing machines, machines for building materials, plastic/rubber moulding machines, agriculture and gardening machines, woodworking machines and textile machines, among others. "We have products with specific properties for every application," Grover says.



**“We are constantly engaged in the development of new and innovative solutions. The wide assortment of our standard machine elements grows constantly through the development of new products.”**

**Ram Grover**  
Managing Director  
Elesa+Ganter India Pvt Ltd

**Elesa+Ganter India Pvt Ltd**  
[www.elesa-ganter.in](http://www.elesa-ganter.in)  
Hall & Stall: 3A / D-103

Metrology

# TAL Soars to Greater Heights with FARO Measurement Solutions

An account of how FARO's measuring devices helped TAL Manufacturing Solutions achieve 70 percent time savings, enabling it attain high levels of productivity.



Source: FARO Business Technologies

Time-savings of up to 70% enables TAL to achieve highest levels of productivity

TAL Manufacturing Solutions Ltd (TAL) is a wholly-owned subsidiary of TATA Motors Ltd that focuses on manufacturing precision components and assemblies for aerospace structures. In line with its business unit motto, the TAL aerospace division strives to uphold its reputation as being the most reliable provider in the development, manufacturing, and assembly of aerospace components and structures.

**Measurement concerns**

In the aerospace industry where safety concerns always come under the spotlight, measurement requirements must be thorough to ensure zero deviation from computer-aided design (CAD) data. Failure to meet these standards can delay approval on aircraft components, and ultimately incur losses on time as well as investment costs. Measuring systems that can provide accurate measurements are therefore considered vital

support equipment in the industry. Moreover, aircraft components can range from 2 to 30 meters, and it can be especially challenging to measure large component parts where run-of-the-mill coordinate measurement machines (CMM) may be unable to capture the data accurately. "The components that we measure can come in different sizes and there are times when we have to carry the larger parts to the machine for measurement," explained Bhupendra Darne, Quality Engineer – Aerospace Business Unit, TAL Manufacturing Solutions Ltd. "It was straining and time consuming for us, especially when we had complex parts which were difficult to measure using our then CMM."

**The Journey Towards Improvement**

FARO is the world's trusted source for 3D measurement, imaging and realization technology. The company develops and

markets computer-aided measurement and imaging devices and software. Technology from FARO permits high-precision 3D measurement, imaging and comparison of parts and complex structures within production and quality assurance processes.

Influenced by its customers' positive reviews on FARO solutions, TAL decided to try FaroArm. With a measuring range of 10 feet, the FaroArm was capable of offering high accuracy measurement, including fixture alignment, calibration, and dimensional calculations.

The FaroArm helped greatly in TAL's production process, especially on the sub-assembly level, where it provided high accuracy when conducting inspection for small components. "The level of accuracy required in our line of work is nearly 120 microns, and the device complied with our requirements," Darne recalled. Won over by the positive experience, TAL went on to purchase its second unit of FaroArm. With an extended measuring range of up to 12 feet, this device performs similar functions as the first unit, allowing the team at TAL to measure parts over a larger volume.

"As we had a positive experience with FARO, we decided to further extend our capabilities by investing in two sets of FARO Laser Tracker ION," Darne acknowledged. "Right from the start, the Laser Trackers were clearly valuable additions to TAL's existing operations, providing us with outstanding accuracy levels on major inspections in the post-production stages. With this device, we

**“ In the past, we would take up to 2-3 days to complete component measurements. However, using FARO devices, we have narrowed it down to just 1.5 days. TAL continuously welcomes efficient methods for improvement. When the need arises again, FARO will definitely be on the top of our list for consideration.”**

**Bhupendra Darne**  
Quality Engineer - Aerospace Business Unit  
TAL Manufacturing Solutions Ltd

are assured of precision even with bigger components."

A state-of-the-art interferometer (IFM) based measurement system, the Laser Tracker ION is capable of providing high-accuracy machine calibration and in-line measurements. Due to its line of work, TAL uses both devices on a weekly basis, each usage spanning over 8 hours and can extend up to 16 hours for critical components measurement. The remarkable features have helped TAL in easing time constraints and made significant differences in total time-savings.

**FARO Business Technologies**  
www.faro.com/india  
Hall & Stall: 3A / B-102

Heavy Engineering Equipment

# Taking a Leap into the Future

With Industry 4.0 now becoming the norm across the world, India-based ISGEC Heavy Engineering is now working on cutting-edge technologies to help improve productivity in the most cost-effective way.

ISGEC Heavy Engineering Ltd is a multi-product, multi-location public company that has been providing engineering solutions to customers around the world for the past 80-plus years. According to Yogesh Saxena, Vice President, ISGEC Heavy Engineering Ltd,

applicable solutions to meet the upcoming needs of the industry. "As the manufacturing technology is changing in line with latest safety and environmental norms, the information gained and the interactions held at IMTEX are both time and cost-effective, which helps in responding to market needs promptly," he states.

**Unveiling new products**

For the company, the current edition of IMTEX FORMING will serve to launch two new technologies:

**ISGEC REACH 4.0:** In line with smart technology, ISGEC will launch REACH 4.0 through which real-time data like temperature, pressure, vibration, strokes, status message and many more parameters can be captured from machines through

smart sensors and sent to a centralized location on the web. This data is analyzed by well-defined algorithms to improve productivity, reliability and uptime information on a real-time basis.

**3-Axis Servo Transfer System:**

This a product that ushers in greater automation, its salient features being high stroke rates by stiffer/modular design, freely programmable, absolute encoder for all axes for precise positioning in 0.01 mm accuracy, optimum power consumption, semi-automatic tool change, fully automatic centralized lubrication, and free access for blank loaders, conveyor shuttle system, etc.

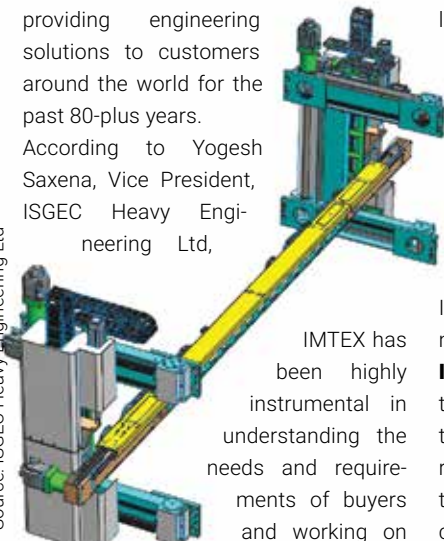
**ISGEC Heavy Engineering Ltd**  
www.isgec.com  
Hall & Stall: 2A / B-102



**“ Our plan at IMTEX FORMING 2018 is to introduce the latest developments and technologies available from ISGEC to industry users and keep pace with the latest sheet metal forming technology developments taking place across the globe.”**

**Yogesh Saxena**  
Vice President  
ISGEC Heavy Engineering Ltd

Source: ISGEC Heavy Engineering Ltd



Automation for productivity enhancement



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