







Ace Micromatic ® Group

## FOCUSED ONLY ON MACHINE TOOLS AND ITS ECOSYSTEM



400+ Products



60+ locations around the world





Visit Ace Micromatic Group Pavilion

Machining Solutions at **Hall 5**Industry 4.0, IoT solutions & Additive solutions at **Hall 6** 









## All You Need In Machining

Complete solutions with Ace Micromatic Group



January 24-30, 2019 • BIEC







## SHOWDAILY

The official showdaily of IMTEX 2019

Day 3 • Saturday, January 26, 2019



## **MAKING STRIDES**

## **Coming Together is Winning**

Jyoti CNC Automation Ltd considers IMTEX to have played a pivotal part in its growth. The show has given it a distinct identity among the metal cutting fraternity, encouraging it consistently to innovate and show it to the world. An ode to their journey together.

or Jyoti CNC Automation,
IMTEX has been a festival it
celebrates its growth with.
The company has been an intricate part of the metal cutting
trade fair for the past 20 years
and owes a large part of its
success to it.

"IMTEX offers us a platform to display our technological capability, strengths and competence to the world. Each edition of IMTEX has pushed us towards the next level of performance and success, consistently being there as a guiding force," says PG Jadeja, Chairman & Managing Director, Jyoti CNC Automation Ltd.

## **Making memories together**

Jadeja, who has played the role of being President of IMTMA,

Jyoti CNC Automation Ltd www.jyoti.co.in Hall 5, Booth B110

PRECIPROTE

PG Jadeja, Chairman & Managing Director, Jyoti CNC Automation Ltd and Past President, Indian Machine Tool Manufacturers' Association at the company booth

feels a sense of personal pride that IMTEX 2019 is celebrating 50 years of service to the nation and the manufacturing fraternity. He vividly recalls all the experiences he has had in terms of learning, adopting and growing through the trade fair. "IMTEX 2001 was when we first participated. It is the most memorable since our investment in the show was more than the turnover of the company. We were honored with the best booth award at the hands of the then Defence Minister of India Shri George Fernandes," he reminisces.

To be continued on 6  $\Rightarrow$ 

## "The best coolant I've ever used. My guys love it."

Meet our coolant experts at our booth A118 in Hall 3A and find out why Synergy 735 is the clear choice for Titan Gilroy.





## MOTUL

TECH

THE INDUSTRIAL LUBRICANTS DIVISION OF THE MOTUL GROUP

VISITUS IMTEX 2019



## HALL3-B STALLC-105

## 24TH-30TH JANUARY BIEC, BANGALORE



## **Industrial Quality Solutions**









## **Bridge-type CMMs**

## **SPECTRUM®**

- New level of precision and trusted results
- Unmatched scanning technology
- Small footprint
- Tailored for your application
- Patented floating mounted glass ceramic scales

## **Optical & Tactile CMM**

## **O-INSPECT**

- Optical 2D camera sensor with image processing functionality and auto focus
- Scanning and single point sensor
- Adaptive illumination system
- For plastic, medical and automotive industries

## **Shopfloor CMM**

## DuraMax® / DuraMax® RT

- Compact foot print
- Space saving design
- Rotary table
- Gear measurement in the shopfloor
- Minimal space requirement

## 3D Digitization / Laser Scanning

## T-SCAN 20

- Intuitive data capture with hand-held laser scanner & touch probe
- Suitable for onsite Inspections, Reverse Engineering

... and many more

## Carl Zeiss India (Bangalore) Pvt. Ltd.



www.zeiss.co.in



info.metrology.in@zeiss.com

















66 IMTEX offers us a platform to display our technological capability, strengths and competence to the world. Each edition of IMTEX has pushed us towards the next level of performance and success, consistently being there as a guiding force."

PG JADEJA Chairman & Managing Director Jyoti CNC Automation Ltd

Team Jyoti CNC @ the booth in IMTEX 2019 & Tooltech 2019

Continued from 1 3

## What's new in 2019

At IMTEX 2019, the company is exhibiting nine different clusters where one can find requirements for automobile parts to aerospace applications. "Under NVU cluster, five different turning and VMC machines will be showcased. Keeping in mind the demand of automation in manufacturing, we have Automation Cluster," shares Jadeja.

The Tachyon cluster is the showstopper displaying most versatile combination along with robotics. "NX Series (Double Column Machining Centers) and HX Series (Horizontal Machining Centers) are showcased under large machine cluster. An exclusive Huron cluster has finest Die-Mould machines and 5-Axis Machining Centers where we will demonstrate Artificial Intelligence (AI)," he informs.

## **Innovation is constant**

It is tough to think of IMTEX without launches! Jyoti has launched around seven new machine variants covering different clusters and various segments. In Turning series, it has launched a small and trendy variant. A new chucker with autoloader is also being launched which reduces human interface with cost-effective automation solution. Under VMC series a smaller version of VMC with NVU features is displayed. A compact version of VTL series has been added to complete the range of series. The MX 9 NVU is another 5-axis universal machining center to add that is being added to the MX Series.

## A matter of time

Jadeja has been a firm believer in technology for long now. What everyone considers buzzwords, are a necessity for him. "As a technology driven company, our focus revolves around Internet of Things (IoT), Industry 4.0, and Artificial Intelligence (AI) applied in metal cutting, real time simulation, monitoring and controlling of various manufacturing activi-

ties and so on. We are changing the way we offer demos to customers and making them part of Industry 4.0," he adds.

The company has also introduced AI for the first time in Indian machine tool industry. The next two years will be dedicated to IoT and AI tools for better human comfort.

"'Propelling Technology, Prospering Life' is our motto and we align to it not only for our customers but our suppliers as well. Represented as 'Temple of Technology' to our clients, we transform the technology-savvy attitude into reality through continuous R&D and innovation endorsement in our products. We are well-known for our customized solutions," says Jadeja. Jyoti is also serving the nation by providing custom-built solutions for many government agencies and research laboratories. It has a huge number of successful installations in government Ordnance Factories across the country.







## Visit us at Hall 1A, Stall B101

## High Speed. High Performance

## **NOAH SERIES**

**CNC Gear Hobbing Machine** 



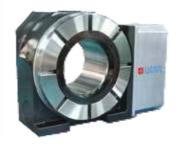
## **Key Features:**

- Productive & High Precision
- High Speed High Torque Hobbing
- HSK Hob Changeover System
- Direct Drive Technology for Hob & Work Drive
- Suitable for both Wet & Dry Hobbing

www.nimblemachines.co.in

## Our Wide Range of 4th & 5th Axis Rotary Tables.

















## REPUBLIC DAY **Greetings!**





66"I extend my Republic Day greetings to all exhibitors and visitors at IMTEX 2019 & Tooltech 2019. I wish you all the very best during the exhibition."

JAMSHYD N GODREJ **Chairman - Exhibitions** IMTMA



66 IMTEX is celebrating its 50 years as India celebrates Republic Day. My warm wishes to all exhibitors and visitors."

P RAMADAS President IMTMA



66 On behalf of IMTMA, I wish you all a very happy Republic Day. I wish exhibitors and visitors to IMTEX 2019 the very best and trust that you will have great takeaways from the show."

V ANBU **Director General & CEO** 

## **PMT Machines Limited**

**CNC Internal Grinding** 

## **CUSTOMISED SOLUTIONS**

## **CELEBRATING 57 YEARS**

**CNC Turning** 

CNC HEAVY DUTY LATHE

**Automats** 



BIG BORE GRINDER



**CNC Cylindrical Grinding** 



**Surface Grinding** 

AUTO LOADING

HYDRAULIC / PLC







A15/25





CREEP FEED GRINDER

**Built To Last** 



PMT MACHINES LIMITED

Head Office & Works: P. O. Box No.1102, Behind PCMC Building, Mumbai - Pune Road, Pimpri, Pune - 411 018. (India)

Tel. Nos: +91-20-27426219 to 23 - Fax: +91-20-27426231/35 - E-mail: rd@pmtmachines.com, marketing@pmtmachines.com - website: www.pmtmachines.com

Halol Works: 178, Kadachala, Halol - 389350, Gujarat (India)

Tel. : +91 02676 246786/87 - Fax: +91 02676 246786 - E-mail: cb@pmtmachines.com, mkt.brd@pmtmachines.com

Pune: 9730576789; Mumbai: 9821713400; Delhi: 9810401815; Bangalore: 9845026905; Chennai: 9840896822; Coimbatore: 9840366822; Jamshedpur: 9934119234; Vadodara: 9662503927







## PROGRAM SMARTER... MACHINE FASTER



## **CAMWorks is Powering SOLIDWORKS CAM**

First and Best Integrated CAM Software in **SOLIDWORKS** 

## **CAMWorks Additive Manufacturing**

First Intelligent **Additive & Subtractive**Manufacturing Solution Available for SOLIDWORKS

## **Tolerance Based Machining**

Automatically Creates Toolpaths to Meet Tolerances & Surface Finish Requirements – compliant to **Industry 4.0** 

**VISIT US AT** 



BOOTH A 114, HALL 6









## ADVANCED TECHNOLOGY SOLUTIONS

## **Partnering for Innovation**

For Yamazaki Mazak India Pvt Ltd, customer partnership is more than just putting customers first. It has always been there for the customers, putting in place practices that can help them easily reach the company when in need.

IMTEX has been one of most trusted platforms for technology and machine tools in India. It offers us an ideal ground to interact and engage with present and prospective customers who visit our booth. This not only helps us in understanding the market needs, but also helps us to offer better solutions and services to our customers, prospects and industry partners," says Pramod Kore, General Manager, Service & Tech Support, Yamazaki Mazak India Pvt Ltd. This year Mazak is celebrating 100th year anniversary. The company has always believed in innovation through its highly resourceful R&D facility at Japan headquarters together with other global manufacturing and research centers like Kentucky (USA), Worcester (UK). Mazak's recent developments are in Multitasking Hybrid technology. As it is a pioneer in Multitasking machines for years, its latest Hybrid Machines are equipped with technologies such as Friction Stir Welding (FSW), Hot Wire Laser Welding Deposition (HWD), Adaptive Manufacturing, and Auto Gear (AG).

### **Being there**

"Every manufacturer knows the vital role 'ease of use' plays in maintaining a high-level of productivity. While most think of this issue in terms of machines and equipment, we believe it holds just as true when it comes to Service and Support," notes Kore.

The company focuses on its customer support functions such as Single-Source Support through dedicated toll-free number and email; Technical Support for the Machine & CNC Control; Factory trained team of experienced field service engineers at 15 different locations across pan India & UAE for quick support; Spindle repair facility which is unique in India; Parts center which has more than 5000 different stock parts; Machine maintenance and operation training; IoT Solutions; automation and engineering support to facilitate customized needs of customer.

Mazak's customers influence every aspect of the company's business and is the foundation of its success. "Customer partnership is more than just putting customers first. It requires



66 Every manufacturer knows the vital role 'ease of use' plays in maintaining a high-level of productivity. While most think of this issue in terms of machines and equipment, we believe it holds just as true when it comes to Service and Support."

PRAMOD KORE General Manager Service & Tech Support Yamazaki Mazak India Pvt Ltd

utmost commitment to forging long-term relationships that create synergies of knowledge, security and adaptability for both," sums up Kore.



## SCHEDULE



Seminar on
Additive Manufacturing
January 26 & 28, 2019,
BIEC, Bangalore
"Converting Disruption
into Opportunity"

International-Buyer Seller Meet 2019 B2B meetings at Hall 3C (BIEC) Jan 26 & 27

WE LOVE TECHNOLOGY





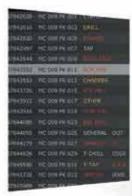


## **STICIOTH** TECHNOLOGY

By combining the newest advanced hardware, unique software and our extensive manufacturing expertise, SMOOTH TECHNOLOGY provides you unexcelled versatility and exceptional performance.



**ADVANCED MACHINING** 



**TOOL DATA MANAGEMENT** 



AND COMPENSATION



**AUTOMATION SYSTEMS** 



**UTILIZATION MONITORING AND ANALYSIS** 

**PROCESS PLANNING** 

















Shahrukh Mistry, Founding Partner of Mistry Architects addressing the audience

## NEWS

## **Nurturing Eco-Friendly Exhibitions**

n order to promote sustainable lifecycle practices in exhibitions that balance quality, environment and economics with compliance to health and safety obligations, IMTMA, at IMTEX 2019, has constituted an Eco Design Award. This is an endeavor to encourage exhibitors to use eco-friendly materials in construction of their booths. Several categories are formed under this award and exhibitors are encouraged to participate and contribute towards 'minimum carbon footprint'. The award considers environmental and cost-effective design, reduced resource consumption during booth construction, reduced pollution during set up, minimal waste post use, and re-use of the materials.

## **CUTTING OILS**

## **Tool Life Enhancing Oils**



HAKUFORM water soluble cutting oils with KLUTHE Advanced Surfactant Technology that creates stable micro emulsions.

AKUFORM water soluble cutting oils are formulated based on Chlorine-free Extreme Pressure additives like esters that provide excellent tool life without compromising on environmental norms and risks associated with conventional chlorinated water soluble oils. KLUTHE Advanced Surfac-

tant Technology creates stable micro emulsions and enables the action of multi-functional power surfactants (combination of nonionic and cationic surfactants) to deterge matters like chips and burrs at a faster pace and lower carryover losses. KLUTHE BIOLIT® Technology releases active Buffer Biostability ingredients continually at a low concentration to the water-based cooling lubricants, producing sterile solutions and emulsions with a long sump life.

## **Benefits of HAKUFORM** water soluble cutting oils

- Chlorine-free EP additives:
   Higher productivity with environment-friendly formulations
- Advance Surfactant Technology: No foaming and better fluid dynamics
- Micro Emulsions: Lower carry over losses and reduction in consumption
- BIOLIT® Technology: No skin irritations or smell issues.

Zavenir Daubert India Pvt Ltd www.zavenir.com Hall 3A, Booth B125





## **IMTMA** prepares Indian Industry for the Future

Indian make the manufacturing fraternity aware of the benefits of technologies, Indian Machine Tool Manufacturers' Association (IMTMA) yesterday organized a seminar on Factory of the Future. The seminar presented a global and Indian outlook of Industry 4.0, offering a holistic understanding on the importance of IT infrastructure, data security and IIoT, and debunking myths surrounding its implementation. The seminar began with the traditional lamp lighting by P Ramadas, President, IMTMA; Renate Schimkoreit, Minister &

Head, Economics and Global

Prof Frank Treppe, Managing

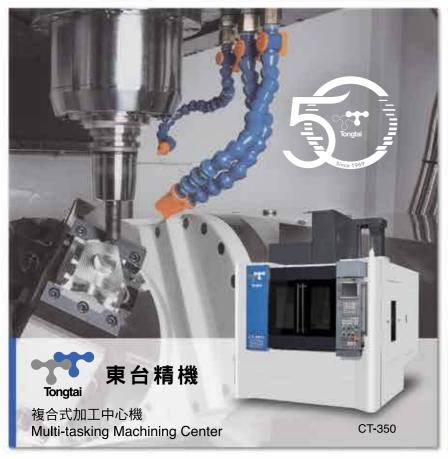
German Embassy:

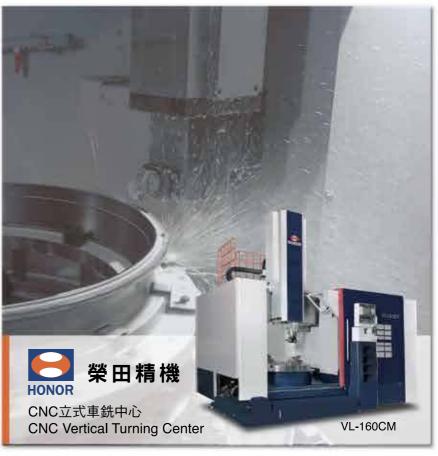
Affairs

Director, Political and International Affairs, Fraunhofer-Gesellschaft, Munich; Anandi Iyer, Director, Fraunhofer Office, India; P J Mohanram, Senior Advisor, IMTMA and Gautam Doshi, Advisor, IMTMA.

The key note address by Prof Treppe on 'Industry 4.0 – The Global Outlook' set the tone for the event that was packed with interesting tracks from industry experts.

A technical exhibition was also held in conjunction with the seminar to provide an opportunity for delegates and visitors to experience live products and solutions to support their decisions to move to factory of the future.



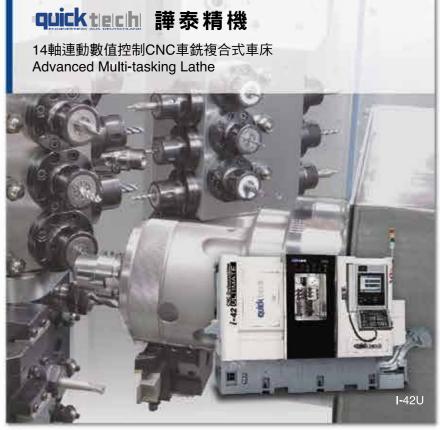


**Total Solutions Provider** 

Booth No. Hall5 A120

























## **HONING MACHINES**

## **Making it Matter**

Khushbu Engineers has launched an 8-spindle Single Pass Honing machine SP850 at IMTEX 2019. It has invited domestic as well as its European customers to visit and experience the live demo of machines. It is simultaneously displaying the parts produced by its machines.

he SP850 has a capacity to produce 10,000 parts per day with two microns bore accuracy. It's a CNC controlled machine with robot ready feature, and the vertical and rotary axes are controlled by Servo. The tools are diamond coated for a longer tool life. The SP850 Honing machine is user-friendly and easily allows a semi-

66 Additive Manufacturing and Industry 4.0 will change the way we manufacture today. IMTEX 2019 offers a new learning experience on the latest in this emerging field."

AJEET SAMANI CEO Khushbu Engineers

skilled operator to work on it.

## An interesting mix

It's a matter of pride for the company to work with reputed customers such as Eaton, Godrej, Bosch, Bajaj Motors, Indo US MIM, Preciforge & Gears, Hitech Gears, Sanjeev Auto, Sundaram Fasteners, ABI Group, etc.

The company believes that Additive Manufacturing and Industry 4.0 will be the game changer for the manufacturing industry. "Both these technologies will change the way we manufacture today. It'll be a new learning and an interesting experience to witness the latest in this emerging field," says Ajeet Samani, CEO, Khushbu Engineers.







Students from Nitte Meenakshi Institute of Technolog

## INDUSTRY-ACADEMIA

Visit us at Hall 3C

## **New Thinking, New Possibilities**

In a bid to forge the highly crucial Industry-Academia bond, IMTMA has called upon academic institutes to display their innovations and closely gauge industry requirements to become industry-ready.

MTEX 2019 & Tooltech 2019 is hosting 50 engineering colleges to show their innovative developments. Some of the innovations have already received sponsorship from the industry and others are looking for ways to reach shop floors.

Students from Nitte Meenakshi Institute of Technology are displaying a 3D Printer that makes mixing of two different colors possible. This way the final product gets a new color. Although such 3D Printers are available in the market, the students' value addition is its innovative design that significantly reduces the Printer's cost.

Students from IIT Kanpur are showing how optimized serrated milling technique can reduce the force required in the milling process to increase productivity. Their technique can reduce chattering and vibration effect on the tools and products.

Explaining his project, A Ramesh Kumar, Assistant Professor, Sona College of Technology, said, "In conventional drilling techniques, the tool makes damages, especially to the composite materials. I have introduced ultrasonic assisted drilling. Based on analysis, I can choose ultrasonic of a particular frequency that can be used for drilling and surface finish without causing any damage to the materials or tools."

The team from Sri Krishna College of Engineering & Technology, Coimbatore, is doing research on Electrical Discharge Machines. For such machines, the workpiece must have electrical conductivity. Usually, composite materials do not show this property, but selected materials like silicon nitrate and titanium nitrate do exhibit electrical conductivity. Work is on to optimize parameters of these materials.







## Large. Rigid. Precise. Multitasking

**'Uniturn 400 HD TM**' the all new high precision Heavy-Duty CNC Turn Mill Centre from **Gedee Weiler**. The advanced and larger version of our proven legendary universal machine **'Uniturn 300 HD**'. Visit us at **IMTEX-2019** for a live demo and experience other exciting demos of our latest products and innovative solutions in precision, automation and customization.

## UNITURN 400H® TM





Rigid construction | Legendary precision | Wide choice of turrets & controllers

Please visit us at IMTEX-2019, Hall No. 2A - Stall No. A 104 from 24th - 30th Jan 2019, Bangalore





## **GEDEE WEILER**

A CUT ABOVE THE REST















CNC Software, Inc. www.mastercam.com Hall 1B, Booth C101

## NEWS

## Mastercam India Launches its India Newsletter

astercam India, yesterday at IMTEX 2019, unveiled its India Newsletter in the presence of eminent industry players. The newsletter will be published quarterly and will focus on the company's success stories with its customers. During the event, Vineet Seth, Managing Director, Mastercam India, said, "The aim of the newsletter is to reach out to our customers. This newsletter is the outcome of hard work of the team. It has engaging content which would interest our customers."

## ADDITIVE MANUFACTURING



## **Giving Shape to Ideas**

For Nishant Shah, Director, Imaginarium India, the pavilion on Additive Manufacturing is a great initiative at IMTEX.



Imaginarium India www.imaginarium.io Hall 6. Booth D101



he company is here to create awareness regarding the importance of Additive Manufacturing in prototyping in today's fast-growing development cycles. "We are also keen to identify and engage with professionals wanting to know about our services and see how we can help them in their applications," he adds.

## **Metal Printing to steal** the show

Shah believes that Metal 3D Printing will definitely take the prime spot. Unlike Plastic Printing, which is still widely used for prototyping, Metal Printing is being seen as an end use production of parts. "Although it is expensive than other traditional methods, the benefits it brings to the table such as weight reduction, customization, and reduction of assemblies will help Metal 3D Printing rule," he says.

Shah is happy that there is a growing awareness about Additive Manufacturing and that people are reaching out to them to see the possibility of using 3D printing for different applications. "With the introduction of low-cost printers, availability and choice of materials, consumers have started using Additive Manufacturing a lot more. But there still is a gap that needs to be filled for which we have opened a first-ever 3D Printing café in Mumbai. Here anyone and everyone can walk in, learn about the basics of 3D Printing, and also get some cool customized things printed for themselves," he shares.

## India catching up

Today, many large OEMs have in-house printers and even produce end use parts. "The Indian market is growing faster than the global market. New service providers have come up last few years. This has led to global machine manufacturers look at India because of its potential. Industries like jewelry have totally adopted 3D printing and most jewelry manufacturers either own or use a 3D printer," he adds.

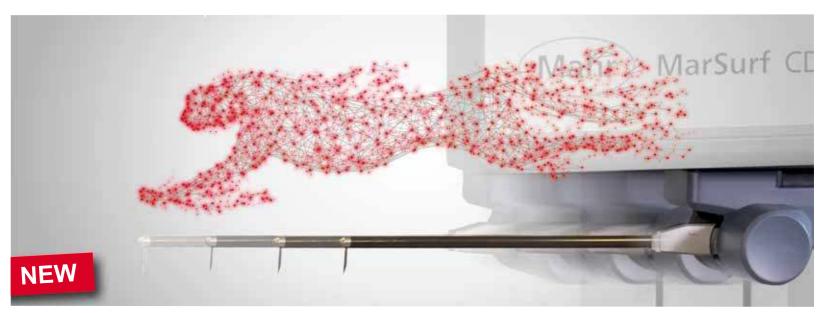
## **MEASUREMENT SOLUTIONS**

That you receive 360° support so that you can rely 100% on accuracy.

This is what **EXACTLY** means to us.



## Automation in Industry 4.0 - Minimize test costs

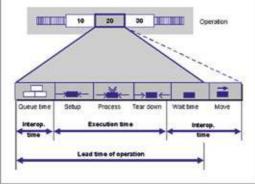


## **METROLOGY - MAHR ADVANCES IN MEASUREMENT**

Mahr is a world leader in many areas of metrology. Our products stand for accuracy, quality and innovation. Mahr constantly exceeds the limits of what is possible and ensures your lead in metrology. As a partner for the future, we will make your quality assurance more reliable, more automatic, faster, more wireless and even more user-friendly.



Loading and unloading by robot, integration of the measuring machine into the production



Work plan in the PPS system

The automation of measurements belongs to the smart factory of Industry 4.0. At the same time, automated test sequences minimize the testing cost in quality assurance. Mahr presents various automated measurement solutions. Read here how the measurement solutions optimize the process costs.

The measuring machines from Mahr can be networked with the production machines. Thus, in the case of deviating tolerances, the production can be adapted automatically. This safeguarding of the workpiece quality, which is free of operator errors, makes production significantly more reliable.

## **Networked machines in production**

This vision relies on flexible, automated and networked machines in production. Mahr offers the right answers for quality assurance: Measuring camshafts on the MarShaft Scope 600 plus 3D shaft measuring system with workpiece loading by robot makes it possible, for example, to carry out measurements within the production line.

## New possibilities in production systems

With the MarSurf CNC modular measuring system, Mahr also offers flexible and networked measuring of various workpieces: automatic parts recognition, part labeling and robot handling are new possibilities for measuring technology in today's and future production systems.

## Integration of the measuring instrument into the organizational structure of the ERP system

A plurality of measuring programs are usually locally stored on a measuring machine which is, for example, used for five different workpieces. These programs are "mutations" and copies of the original programs and only the responsible worker knows exactly which one is the right measuring program for the machine. The more concise the measurement program, the more accurately the devices can measure. From this point of view, the integration of the measuring instrument into the organizational structure of the ERP system will be more important.

## Integration in capacity management

In addition, integration in capacity management is taken into account so that at the end of the integration process only one measuring program is available on the measuring machine.

This measurement program is then replaced by the new measuring program to be executed.

## **Mahr Metrology India Private Limited**

Corporate Office: B6, 4th Street, Reddipalayam Road, Mogappair West Estate, Chennai - 600 037. Tel: +91 44 4617 5555

• Ahmedabad • Bangalore • Chennai • Delhi • Hyderabad • Jaipur • Kolkata • Pune

E-mail: mahrindia@mahr.in | For Service: Service.India@mahr.in | Website: www.mahr.in

24-30 JANUARY, 2019
Bangalore International
Exhibition Centre, Bangalore
Visit Mahr @
German Pavillion Hall 2B Stall F101









## FROM FAR AND WIDE

Economic & Commercial Office of Spain www.india.oficinascomerciales.es Hall 1B, Booth D101

## In Favor of India

The Economic & Commercial Office of Spain is in favor of more Spanish companies participating in IMTEX 2019 and would like to see more trade between the two countries.

ffIndia has been a very important market for Spanish companies of advanced manufacturing technologies due to the products and technology that have been highly valued and fostered understanding and collaboration between Indian and Spanish companies," says Vanesa Alvarez Franco, Economic & Commercial Counsellor, Economic & Commercial Office of Spain.

It's no surprise that IMTEX should be a prime platform for showcasing Spanish machine tools in India, which has the support of ICEX, Spain Trade & Investment and the Economic & Commercial Office of Spain. Together with the member companies of AFM (Spanish Association Manufacturers of Machine Tools, accessories, parts and tools) who also collaborate in the organization of the Spanish pavilion, the team has been participating in IMTEX for almost a decade, and this year has 10 companies from Spain exhibiting their products.

### Strong in machine tools

The Spanish machine tools sector has been especially recognized for its large-scale, high-performance and top-precision machinery, being world leaders in some turning, milling and grinding applications. The companies are known for their remarkable contribution to the power generation, railways, aeronautics and automotive sectors worldwide. "Spanish exports of machine tools to India during 2017 remained stable at around €26 million, placing India in the 10th position. Considering that Spain is the ninth world exporter (third in Europe) and that 73% of the machine tools produced in Spain are exported, Spanish companies can still further progress in this market," shares Franco.

Talking about the opportunities between the two countries, she adds, "We are invariably exploring new and innovative means of collaboration with Indian companies."

## **Making a mark**

From over 200 Spanish companies that have their presence in India, a wide number of companies belong to the machine tools sector and have their own representatives in India.

More than 10 Spanish companies are exhibiting at IMTEX 2019 including Ekin, Etxetar, Fagor Automation, Gamor, Gurutzpe, Ibarmia, and Juaristi. "They are located in Maharashtra (Mumbai and Pune), Gurgaon, Chennai as well as Bangalore," adds Franco.

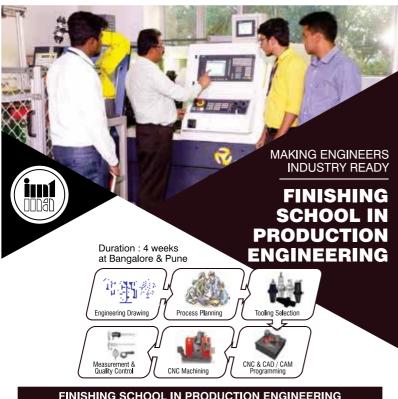
The subsectors that are mainly represented by these companies are: Milling machines, engraving machines, crankshafts, die-sinking ma-



66 India has been a very important market for Spanish companies of advanced manufacturing technologies due to the products and technology that have been highly valued and fostered underand collaboration standing between Indian and Spanish companies."

VANESA ALVAREZ FRANCO **Economic & Commercial** Counsellor **Economic & Commercial Office** of Spain

chines, cutting tools, tool grinding machines, screw cutting machines, twist drill machines, machining centers, multifunction machines and boring machines.



## FINISHING SCHOOL IN PRODUCTION ENGINEERING

- → Engineering Drawing
- → Measuring Practices
- → Process Planning
- → CNC Turning Centre (Hands-on Prac
- → CNC Machining Centre (Hands-on Pro
- → CAD/CAM Programming
- → PC based CNC Simulation
- Industry Level Components
- Quality Control
- → Project & Assessment
- → Industry Visits
- Short Internship
- → Placement Assistance

**Digvijay Nath Pandey** Programme Co-ordinato IMTMA - Bangalore +91- 7349067391 | digvijay@im

Abhishek Verma Programme Co-ordinator IMTMA - Pune +91- 8237960076 | abhishekverma@

www.imtmatraining.in



## "Knowledge **Gathered Helps** Later"

66 I have been attending IMTEX for the last 15 years and every time it brings in new technologies. The knowledge gained helps when we take up a new project and identify their applications. Visiting the show always bears fruits sooner or later.

**RAJESH SINGH Motherson Advanced Tooling Solutions Ltd** 



## "IMTMA's **Initiatives are** Commendable"

661 would like to congratulate IMTEX for its golden jubilee year. The show is definitely grander than ever. I commend IMTMA on its initiative of having a special pavilion on Additive Manufacturing and raising its awareness among the participants as it is the future of manufacturing.99

**RSS SATISH BABU** Director **Subas Foundry** 

## VERTICAL MACHINING CENTER WITH ROTARY AUTOMATIC PALLET CHANGER





## JV65 JV105

## Highlights:

- Direct driven spindle
- Counter Weight (Z axis)
- Hydraulic port for fixture on both pallets
- Hydraulic Rotary Automatic Pallet Changer
- JV105 machine comes with Box guideways in Z axis
- JV105 machine is provided with 3 Rows of LM guides in Y axis

Visit Us @

Hall No. 05

Stall No. B106



INTEGRATED SOLUTIONS

AEROSPACE DEFENCE AUTOMOBILE OIL & GAS MEDICAL AGRI & EARTH MOVERS PUMPS & VALVE DIE & MOULD GENERAL ENGINEERING

INDIA'S FINEST RANGE OF CNC MACHINES www.lmwcnc.com













(L-R): Stefano Corradini, Group Director Marketing, Marposs SpA, Italy and SM Sood, Managing Director, Marpos India Pvt Ltd at the company's booth

## PRECISION MEASURING EQUIPMENT



## **Maximum Utilization**

Marposs India solutions are available to both structured, innovative companies as well as traditional ones.

he trade fair IMTEX is a great gathering ground for everyone in the machine tool industry.

SM Sood, Managing Director, Marposs India Pvt Ltd, says, "The significant growth of the industry in the last few years and

66 Industry 4.0 improves quality of not only the end product, but at every stage of manufacturing. This is what will compel Indian companies to be competitive in the global marketplace."

SM SOOD Managing Director Marposs India Pvt Ltd

the adoption of latest technologies will enhance quality standards to meet global needs. Over the years, we have been investing in continuous developments and acquisitions and now are fully geared to offer technologies/ solutions that will help customers achieve a high level of productivity and optimum utilization of machine tools."

The company has taken up a booth in Industry 4.0 pavilion. It has a separate dedicated booth to showcase new technologies for advance manufacturing. The solutions are perfectly suited to

the paradigms of Industry 4.0 and can transform existing factories into Smart Factories through continuous monitoring of production processes and working data. "Industry 4.0 is for the development of industrial production that links man, machine and product in a smart, independent network. Marposs solutions are available to both structured, innovative companies and also to traditional ones," adds Sood. Using this concept, the customer can continuously monitor every product production process, guaranteeing its quality and analytical traceability.

### **Heightened awareness**

"For Smart Manufacturing, we provide the systems which can monitor the process, by gathering process data using different kind of sensors capable of detecting multiple metrological process parameters to optimize the whole machining cycle," shares Sood. This facilitates the customer to continuously monitor and optimize the use of machines and processes.



### FACILITIES AVAILABLE AT AMTTF

- 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 CMTI



ADVANCED MACHINE TOOL TESTING FACILITY CMTI Campus, Tumkur Road, Bangalore - 560022, Telephone : 080 23370108 / 08867475758

www.amttf.in | director@amttf.in



## SURFACE GRINDING MACHINES

## **PMT Surface Grinders**

The grinders come in many variants and find their applications in a wide variety of industries.

MT Surface Grinders are built on strong German Foundations with rigid construction and cater to surface grinding needs of Automobile, Aerospace, Ceramic applications.

The machines come in variants like CNC, PLC, Conventional models with Horizontal and Vertical Spindles as well as Reciprocating and Rotary Tables.

Reciprocating Table Machines of sizes ranging from 400 x 200 mm up to 2000 x 700 mm and Spindle power of 2.2 Kw to 37 Kw, and Rotary Tables with Vertical Spindle Machine with Table sizes ranging from 600 mm up to 1400 mm and Spindle power from 3.7 Kw to 50 Kw are available.

Industrial solutions for tool room applications are offered with application and prove out support.

Accessories like rotary indexer, auto coolant nozzles, rotary disc type dressers, fume extractor, high pressure coolant system, fully enclosed guarding auto door closing with auto dressing, and special programing features are available as per requirement with latest CNC control systems.



















## STATIONARY WORKHOLDING



- √ 3 clamping slides (Basic: clamping slides)
- ✓ Repeatability < 0.005 mm
- ✓ Protective coating
- ✓ Turbo function for increasing the pull-in forces
- ✓ Solid base plate (height 28 mm) for maximum stiffness
- ✓ Easy mounting on the machine table due to positioning holes



- ✓ Ideal suitable for OP 10 use
- Compact design with best accessibility of the machine spindle
- High adjustable clamping forces
- ✓ Jaws with Sinter Grip clamping inserts for clamping of workpieces with lowest depth and without pre-marking
- ✓ Interfaces for all well known zero point clamping systems



- Modular system: wide range of standard products and shortest delivery times
- ✓ Highest stiffness and anti-vibration design
- Best accessibility of the machine spindle to the workpiece
- Highest accuracy and precision

www.stationary-workholding.com

## LIVE TOOLING



- ✓ PATENTED DRIVE TRANSMISSION
- ✓ SEALED BEARING
- ✓ PATENTED SEALING SYSTEM
- ✓ SUPER COMPACT DRIVE SYSTEM www.live-tooling.com

## SMW AUTOBLOK WORKHOLDING (P) LTD

Plot No. 4, Weikfield Industrial Estate, Gat No. 1251, Sanaswadi, Tal. Shirur, Dist. Pune-412208 Phone: 02137-616974 Fax: 02137-616972

Mail: info@smwautoblok.in

Web: www.smwautoblok.in / www.smwautoblokgroup.com











### **END-USER FEATURE**

## Helping Customers Win! The Blaser Swisslube Productivity Trophy

he 3<sup>rd</sup> edition of Blaser Productivity Trophy in India selected deserving winners from those customers who were willing to document their achieved added value through collaboration with Blaser Swisslube in 2017 and 2018.



66 Liquid Tool gives us a chance to grow with customers who have a holistic approach to production and manu-facturing processes, and recognize the true value of cutting fluids. We want our customers to be more successful with our Liquid Tool and would like to commit ourselves to do everything possible in this journey.99

PUNIT GUPTA Managing Director Blaser Swisslube India Pvt Ltd

## **Industry** is opening up

Following five customers have been recipient of the Blaser Productivity Trophy in India. They have experienced considerable enhancement in Tool optimization, Total costs of ownership, Metalworking fluid optimization, Productivity increase, and Process optimization.

## **Bajaj Motors Ltd**

Challenge: Blaser's aid was sought to examine Bajaj Motors' AAWA AAYA line for improvement potential. After a detailed on-site analysis, the Blaser experts could find a great deal of scope to improve tool life while reducing tool cost by using the right coolant.

Solution: The results achieved with the Blaser's suggested coolant, Blasocut BC 4000 Strong were overwhelming. Bajaj Motors could reduce tool costs and improve their surface quality. The investment paid back in a month's time and generated an annual net saving of almost ₹5.6 million. Highway Industries Ltd

Challenge: The company was looking for a compe-

tent partner that could help it achieve its goals of improvement in sump life, coolant stability, corrosion protection, and tool life, and reduction in machine breakdowns.

www.blaser.com Hall 3A, Booth A118

Solution: The project started with the use of BC 20 SW Blasocut that is based on a unique bioconcept, making it one of the safest formulations in the world for humans and the environment. Highway Industries achieved its goals with a substantial reduction in tool cost. This optimization helped the company achieve an annual saving of ₹1.1 million for 23 machines.

## **Cummins India**

Challenge: Cummins India's Phaltan Engine Plant manufactures QSK 23 L and 60 L engines along with critical components machining with design flexibility for KV, N14 and K19 models. The plant experienced corrosion issues on costly machined components and there was an urgent need to work on the process security.

Solution: Blaser was chosen as the partner with the requisite robust technology and a high competence to analyze and support. The central system of 1,20,000 L was filled with Blaser's innovative formulation B-Cool 9665 that has an excellent corrosion protection behavior and a good cutting performance. It gives an extremely stable emulsion due to a highly robust formulation technology. Mahindra Vehicle

### Mahindra Vehicle Manufacturers Ltd

Challenge: Mahindra's popular utility vehicle (Brand name: Bolero) saw an increased demand from the market. Having the machining processes fully optimized and capacities fully utilized, it was a big challenge to increase the output further.

Solution: Blaser's Blasocut BC25 with high cutting performance and high stability met Mahindra's requirements. After intense testing, that resulted in a cycle time reduction of 15 percent, the coolant was deployed on the entire Cylinder Block line. This resulted in a huge saving of ₹3.6 million for Mahindra. The accuracy in machining cylinder blocks improved by more than 33 percent, which was an added value. **OSG India Pvt Ltd** 

**Challenge:** As part of the drive to fulfil its customers' demands through continuous improvements, OSG India wanted to enhance its long-term carbide grinding process capabilities.

**Solution:** Innovative hydrocracked formulation Blaso-



66 Productivity, efficiency and quality of machining in a manufacturing process depend significantly on the selection of the right coolant. To make this connection visible, we have created the Blaser productivity trophy. By awarding the productivity trophy, we honor the exceptional cooperation and mutual success with our customers."

MARC BLASER CEO Blaser Swisslube AG

grind HC 5's high performance and reliability made it possible to reduce the cycle time and achieve a 12 percent productivity increase. Improvements in wheel loading, process security and surface finish were also achieved. The investment done by OSG was more than justified with an annual saving of ₹14 million.

All five cases prove the importance of the right coolant and the tailored customer service of a competent coolant partner. All customers are eager to continue and expand their cooperation Blaser Swisslube. The contest will continue in the future and Blaser Swisslube India looks forward to improve more machining processes.



66 Automobile manufacturing is one of the most challenging and changing industries. Process optimization and productivity increase is the only way to survive. I thank the Blaser team for their support in our initiative. We were unaware that by incorporating a small change in our process through the Liquid Tool, we could gain substantial savings."

TARUN BHARGAVA Asst. Vice President Bajaj Motors Ltd



66 The implementation of a robust coolant monitoring system was exactly what Highway was looking for. Thanks to the Blaser Team for helping us achieve significant improvement in tool life.99

DEVINDER SINGH General Manager – Production Highway Industries Ltd



66 Blaser's expertise has helped in good coolant monitoring practices. We are highly confident that it is going to be a long journey of mutual co-operation and success with Blaser.99

ABHIJEET BHANDARI
Deputy General Manager
Cummins Technologies India
Pvt Ltd



66 The holistic approach of Blaser and our investment in its Liquid Tool solution was the right decision for us. We are excited to explore more of the solution while implementing it in our other areas of manufacturing.

PANDURANG KASTURE Senior Manager Mahindra Vehicle Manufacturers Ltd



66 We have achieved good results with the Blaser's solution. The co-operation has begun and we are excited to look at the consistent results on various process parameters for the next five years and to even expand our collaboration.

NAOKI 'NOAH' NISHIKAWA Managing Director Carbide Cutting Tools (OSG India Pvt Ltd)



For over 45 years Forms & Gears has been supplying Precision Machining Centre Fixtures to the world's leading Auto OEMs and Machine Makers in Japan, Germany, UAE, Qatar, Thailand, Turkey, Indonesia and all over India.

- ☑ IoT enabled Industry 4.0 fixtures for High Performance Machining.
- ☑ Cloud based application that monitors readings from sensors on fixtures.
- ☑ Fixture level analytics to help isolate and troubleshoot faster.
- ☑ Graphical data with robust analysis.





## **RV Forms & Gears LLP**

MF 11, SIDCO Industrial Estate, Guindy, Chennai - 600 032, Tamilnadu, India Call +91 77570 53326 or email us on marketing@rvformsandgears.com

www.rvformsandgears.com







# CNC MULTI TASKING MARVEL

# TECHNOLOGICAL BREAK THROUGH



Hall

AEROSPACE AUTOMOBILE DEFENCE ENERGY