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## METALWORKING FLUIDS

# Smooth Operations

Among Blaser Swissslube's countless success stories there is one that sticks out and which the company is never tired of narrating. Read on to discover that it's only just if it does so.

Punit Gupta, Managing Director, Blaser Swissslube India, is not far from the truth when he says, "Low cost competitiveness is eroding. The manufacturing industry is realizing that investment in technology is required to succeed and to keep the winning edge." India is a growing economy. However, there are challenges of competitiveness for the manufacturing companies in India. "Customers need competent partners who bring in technology expertise and contribute to increased competitiveness. We have geared up to collaborate with our customers and are excited to bring in new technologies, execute projects as partners and generate added value for our customers through our Liquid Tool," he adds. At IMTEX 2019 & Tooltech 2019, the company is presenting its Synergy 735 — a crystal-clear, innovative, water-miscible and



Second from left - Punit Gupta, Managing Director, Blaser Swissslube India along with the Team at the company booth.

oil-free metalworking fluid that ensures spotless surfaces that are easy to clean, thanks to its neutral pH and outstanding rinsing behavior. "Synergy 735 has

a neutral odor, excellent skin compatibility and offers a clear view of the machining process. It performs on a variety of materials such as titanium and alumi-

num alloys as well as steel and stainless steel, copper alloys and composites," adds Gupta.

To be continued on 2 ➔

**"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.





Source: Blaser Swisslube AG

Spotless surfaces that are easy to clean

Continued from 1

**Titans of success**

What especially makes Gupta proud is that Titan Gilroy from Titans of CNC has switched all his machines to Synergy 735: "It's so clear – it looks just like water.

“I have used Blaser at intervals for 22 years. The older BlasoCut had a vanilla/almond smell that reminded me of Play-doh. Years later, I would smell Play-doh and that started me off in this amazing trade.”

**TITAN GILROY**  
**TITANS of CNC: Academy, USA**



Source: Blaser Swisslube AG

The best coolant I've ever used. My guys love it," says Titan. Titan Gilroy is the personification of the American Dream. A former boxer, he is now the owner of TITANS of CNC, a CNC manufacturing workshop in Northern California, US. Titan's career has been remarkable. During his time in school, he realized he had a talent for boxing

and was discovered by a local boxing coach after graduating in 1988. After winning 35 amateur fights, he moved to Las Vegas in 1991 to begin a professional career. But before he could even compete in his first professional match, he got into a fight at a night club, where he seriously injured two men. The following three years were spent in prison. In order to escape the vicious circle and start a new life, he retired from boxing and moved to Northern California with his family. There, he accepted a position with Zinola Manufacturing, a small machine shop. That step was the beginning of an important phase of life for Titan. His passion for machining grew with each passing day. He volunteered to do overtime and attended evening courses at the National Tooling and Machining Association. His boss quickly noticed his new employee's talent for machining. Within a year, Titan became chief programmer and master mechanic. In 2005, Titan and a colleague decided to open their own CNC shop: Titan Engineering. He worked day and night to manage his deadlines, and his hard work paid off. In just 3 years, Titan built his company to house 20 CNC Machines and employ 55 employees. He won key accounts to manufacture highly complex parts for the aerospace industry and machine submersibles. He has founded an online platform, TITANS of CNC Academy, to offer free training for those interested in machining for students and others in the field of CAD, CAM and CNC. It not only designed the curriculum but the online portal is the first training platform of its kind that now has fans and visitors from all over the world.

**Interesting Perspective**

There's an interesting story that Blaser Swisslube never gets tired of telling. It all began with the CNC machining school in the San Quentin prison. Titan knew that the American prison system could do a better job. Former inmates found it difficult to resume their life in society and find work. In order to offer the prisoners a new perspective and train them, an entire workshop, including state-of-the-art equipment, was built based on his ideas. The concept was a runaway success.

**Giving back**

Titan has made it his mission to promote training in the machining industry in the US. Titans of CNC and Blaser Swisslube have been working together for almost two years now. In addition to sponsors like Autodesk, Haas and Kennametal, Blaser supports the Titans of CNC Academy's free learning platform. Furthermore, Titan is one of Blaser's metalworking fluid test users – a symbiotic collaboration. Titan says, "I have used Blaser at intervals for 22 years. The older BlasoCut had a vanilla/almond smell that reminded me of Play-doh. Years later, I would smell Play-doh and that started me off in this amazing trade." As a top aerospace manufacturer, Titan has used other coolants to expand tool life in titanium, Inconel and Monel. But it switched to Vasco 7000 – the experience which left him hooked, as he experienced 30 percent more tool life. Since then, he has been part of the beta test site for the new Blaser Synergy 735. Today, all 17 of his CNC machines run on Synergy 735.

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**KNOWLEDGE SHARING**



## Taking Manufacturing to the Next Level

In order to move up the ladder and compete with their global peers, Indian manufacturers need to embrace emerging technologies including 3D Printing or Additive Manufacturing (AM). Hence to familiarize Indian manufacturing

industry with the techno-commercial advantages of Additive Manufacturing, IMTMA yesterday organized a seminar on AM. The next part of the event is scheduled on January 28, 2019 at the BIEC Conference Centre.



Source: Magic Wand Media

The Seminar presented a global and Indian outlook on Additive Manufacturing and offered a glimpse on global megatrends, technologies, applications, market players, performance and quality expectancy, and supporting ecosystem availability.

A large gathering of Industry professionals attended the Seminar with a guided tour to Additive Manufacturing Pavilion and Factory of the Future.

The topics covered included: Overview of Additive Manufacturing; Fused Deposition Modelling, Multijet Modelling and CLIP; Design for Additive Manufacturing (Direct and Hybrid); Direct Metal Laser Deposition / Hybrid Manufacturing Laser Metal Deposition and Tailoring Properties of Parts made by Additive Manufacturing.

Delivering his keynote speech, Yathiraj Kasal, AddWorks Leader - Asia Pacific, GE Additive, said that industry has recognized Additive Manufacturing beyond just prototyping. He highlighted the potential of the technology and also shed light on the challenges in AM's journey from prototyping to production. Metal AM was also discussed at length.

## IMTMA celebrates Republic Day



Source: Kumar

Flag Hoisting at BIEC to mark India's Republic Day

**NEWS**

## Bringing the Best

In today's competitive market scenario, while Indian manufacturers are looking for more precision, accuracy and least time for delivering their products, the obvious solution is complete automation at all stages of manufacturing. DMG MORI, the global leader in CNC machining, is here at IMTEX 2019 & Tooltech 2019, to show-

case a number of machines that can add real value to any workshop by improving its productivity and bringing down the overall cost of manufacturing operations. Although comparatively a new entrant in the Indian market with its highly automated and Industry 4.0 ready machines, the company has already started getting good response from the Indian

manufacturers. Sunil Rao, Deputy Managing Director, DMG MORI India Pvt Ltd said, "At present we are selling around 20 machines per month in India. The market is growing rapidly, and by 2025 we hope it to be equal to the Chinese market and then outgrow it." Highlighting the uniqueness of DMG MORI's metalworking machines, Rao informed, "After acquiring INTECH, we now have complete in-house control on all the hardware and software that are required to build a precision machine. Our innovative automation techniques can not only allow metalworking from multiple directions, but also allow the work table to move in different directions. We can offer service to any part of India within 24 hours." On customization, he



Source: Magic Wand Media

“As importing spare parts is costly to this country, we plan to start production of 10 percent of spares in India.”

**Dr MASAHIKO MORI**  
President  
DMG MORI Co., Ltd



Source: Magic Wand Media

(L-R) Sunil Rao, Deputy Managing Director, DMG MORI India Pvt Ltd; Dr Masahiko Mori, President, DMG MORI Co., Ltd and Shinji Miyamoto, Managing Director, DMG MORI India Pvt Ltd addressing the media



Sunil Rao, Deputy Managing Director, DMG MORI India Pvt Ltd

pointed out, "We offer direct sales, service and technology, so the machines are truly customized and supported."

In addition to metalworking machinery, the company is also showcasing an industrial robot that can simultaneously cater to multiple CNC machines. Since managing these machines need special skills, the company has started receiving enquiries from various Indian SMEs for imparting training on their advanced machinery.

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**Carl Zeiss India (Bangalore) Pvt Ltd**  
www.zeiss.co.in  
Hall 2B, Booth A102



SN Ravi Kumar, Divisional Manager, Industrial Quality Solutions, Carl Zeiss India at the company's booth

“Our indigenous products are gaining popularity in different countries like Korea, Mexico, Brazil and South East Asia. We have been able to reduce the cost of our indigenous machines at least by 20 percent.”

**SN RAVI KUMAR**  
Divisional Manager  
Industrial Quality Solutions  
Carl Zeiss India

mated Solutions for Metrology and Industrial microscopes, which are aligned with Industry 4.0 ZEISS products are well-known for their reliability and uncompromising quality.

However, to make it cost-effective for Indian customers, ZEISS India has started 'Indianization' of the Metrology machines. SN Ravi Kumar, Divisional Manager, Industrial Quality Solutions - Division, explains that, ZEISS India is now all set to offer its own designed and produced machines to the world. Targeting the Indian mid-segment and entry-segment, the company has been drastically successful in providing high quality machines at affordable costs, which the manufacturers can adopt to enhance the quality of their products. Drawing attention on the need for quality enhancement of the Indian manufacturing sector, Ravi Kumar said, "I see that there is a huge potential for the Indian industries. It's time for us to conquer the world with a high level of precision for the products made in India.

**NEWS**

## Carl Zeiss Offers Global Technology at Local Cost

Carl Zeiss India Pvt Ltd, a part of the global ZEISS group, has been displaying cutting-edge metrology products at IMTEX 2019 & Tooltech 2019. The company has launched a accurate coordinate measuring machine (CMM) – SPECTRUM at the show. The machine can be tailored to the customer's application and offers better data quality which

ultimately leads to higher productivity, reducing time and cost of production. Beside SPECTRUM, ZEISS India is also showcasing several other measuring machines like Non-Contact measuring machines, Reverse Engineering solutions, Surface, Roughness, Roundness measuring machines, 3D Scanners, 2D & 3D X-ray measurement solutions, Additive Manufacturing solutions, Auto-



**CNC GEAR HOBGING MACHINES**

## UCAM's 6-Axis Noah Series

The machines from UCAM's Nimble Machines unit have been incorporated with the latest technology.

Noah series 6-axis CNC gear hobbing machines are equipped with stiff electronic gear box (EGB) to give the best synchronization to generate the most accurate gear profiles. Hob heads, which are provided with precision spindle bearing arrangement, enable precise gear cutting. Noah machines have been incorporated with the latest

technology such as direct drive for HOB spindle and work table, which allows the machines to cut gears at very high speed to give the highest productivity and quality.

**Features**

- 6-Axis CNC controlled
- Direct Drive Technology in Spindle and Work Table

**UCAM Pvt Ltd**  
www.ucamind.com  
Hall 1A, Booth B101

- High Precision Electronic Gearing Feature
- Control System suitable for Hobbing Spur, Helical, Sprocket and Spline
- Servo Controlled Hob Shift
- Powerful motor torque for X & Z axis
- High clamping torque on the swivel axis
- Auto Hob retraction during power failure

**Optional Features**

- Automation for component loading and unloading
- Linear scale feedback for linear axis
- Remote diagnostics feature for machine maintenance
- Box Guide Way
- Optional customization of Hob Spindle for specific power and speed

## Eco Design Award Winners

**30 to 50 sq mt @ IMTEX 2019**

Dahanukar Machine Tools  
Exim India Pvt Ltd  
Perform Coat Europe AG

**30 to 50 sq mt @ Tooltech 2019**

Dynascan Inspection Systems Company  
Hawe Hydraulics Pvt Ltd  
Pratap Tex Chem Pvt Ltd

**51 to 100 sq mt @ IMTEX 2019**

ETA technology Pvt Ltd  
GH Induction India Pvt Ltd  
Venus Automation Pvt Ltd

**51 to 100 sq mt @ Tooltech 2019**

Manar Tools Pvt Ltd  
2<sup>nd</sup> LNS Asia SA, Taiwan Branch

**101 to 250 sq mt @ IMTEX 2019**

Okuma India Pvt Ltd  
Mitsubishi Electric India Pvt Ltd  
Matrix Machine Tool (Coventry) Ltd

**101 to 250 sq mt @ Tooltech 2019**

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**Above 250 Sq mt @ IMTEX 2019**

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L-R: Mahesh K Desai, Sr Vice Chairman, EEPC India; TK Ramesh, Managing Director & CEO, Micromatic Machine Tools Pvt Ltd and MG Srinivas, Executive Director, Association Initiatives, BIEC, IMTMA at the Buyer-Seller Meet.

## INTERNATIONAL BUYER-SELLER MEET

# Forging New Connections

Concurrently with IMTEX 2019, IMTMA jointly with EEPC India (Engineering Export Promotion Council), has organized the International Buyer-Seller Meet 2019. Potential buyers of machine tools from target overseas markets have been invited to explore mutual business opportunities between Indian machine tools and accessories manufacturers.

The meet which has been an integral part of the IMTEX since 2017, kicked off yesterday with an introductory meeting. Delegates from 12 different countries including Russia, Czech Republic, Iran, South Africa, Mexico, Vietnam, Thailand, Italy, Indonesia, Ukraine, Egypt and Bangladesh are participating in the meet.

The inaugural session was addressed by TK Ramesh, Managing Director & CEO, Micromatic Machine Tools Pvt Ltd; Mahesh K Desai, Sr Vice Chairman, EEPC India; and MG Srinivas, Executive Director, Association Initiatives, BIEC, IMTMA.

Focusing on the accelerated growth of the Indian industry, Ramesh said, "India has jumped 23 places in global ranking for ease of doing business. Thus, it is emerging as a prime destination for the global investors." He highlighted IMTMA's leading role in uplifting and promoting the Indian Machine Tool Sector since its establishment in 1946. He also drew attention on the real growth and projection since 2013-14 to 2020-21.

Desai shed light on Indian manufacturers' interest in exporting

their products and also highlighted growth in EEPC's membership. "EEPC was started in 1955 with only 22 members interested in exporting their products, today the council has 13,000 members. So, we have set a target of \$150 billion export in the next two years." He also informed that the Government of India has recognized the importance of the machine tool sector because the success of Make in India and other recent government programmes solely depend on the development of this niche sector.

Pointing to the overwhelming response that IMTEX 2019 has received so far, Srinivas assured the international delegates of the great success in their business search and potential partnership development. He said, "We are sure that with an exhibition of this high magnitude in the South Asia, you will definitely be able to source desired machine tools, latest technology and a reliable partner."



Micromatic Machine Tools Pvt Ltd  
www.acemicromatic.net  
Hall 5 Machining solutions



"We are proud of the fact that we have truly played a part in the Make in India journey, by enabling over 10,000 Indian entrepreneurs and creating wealth."

**HARISH B**  
Vice President  
Micromatic Machine  
Tools Pvt Ltd

## METAL CUTTING SOLUTIONS

# Growing Strength to Strength

Harish B, Vice President, Micromatic Machine Tools Pvt Ltd, gives us a glimpse of the Ace Micromatic Group in its infancy and its present stature with figures that overwhelm.

Ace Micromatic is India's largest machine tool group with over 50,000 CNC machine installations in India and abroad. "We are leveraging IMTEX platform to actively engage with customers, maximize sales, with a combination of attractive schemes and offers with our finance and ecosystem associates. As in the past, we will try to better understand the needs of our customers and reinforce our business relationship, who give us 65 percent repeat business every year," says Harish B, Vice President, Micromatic Machine Tools Pvt Ltd. Ace Micromatic is displaying 35 CNC machines at its over 20,000 sq mt stall, which is a mix of high technology and innovative products. A few of the products on display are import substitute products. New launches are CNC machines for alloy wheel machining, hard part turning, graphite machining, multi-pallet

HMCs, high speed drill tap centers, twin spindle lathes and VMCs, plus its new range of SPMs.

### Milestones created

The Indian machine tool industry has come a long way since the first IMTEX was held in Mumbai. "There has been tremendous technical progress by every Indian MTB. In the 50<sup>th</sup> year of IMTEX. We see more of import substitute and high technology products to take on leading machine tool builders from Europe and Asia. We also see the application of Industry 4.0 and integration of IoT solutions with CNC machines," says Harish. Over the last four decades, the company has grown from a car garage to becoming the largest machine tool group in India. It started its journey with SSI sector and then gradually established its presence in medium, large scale and corporate customers.



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**NEWS**

## MotulTech receives brand recognition at IMTEX 2019

The 165-year-old Motul Group is participating at IMTEX 2019 and Tooltech 2019 through its Indian subsidiary. The French company

has launched two products at the trade show. Giving further details, Yatendra Kumar, Business Head, MotulTech, Industrial Lubrication Division of Motul Group, said, "One of the products is our new semi-synthetic metalworking fluid which can withstand up to 70 bar of pressure without foaming. The second is a clean hydraulic oil for the machine tool industry. Owing to its property of barring any carbon deposit, this oil does not just increase the life of the tank, it also reduces the cost leading to increased productivity."

Commenting on the increasing popularity of the Motul products in India and the role of IMTEX in it, Olivier Vergnes, Marketing Manager, MotulTech, said, "We come to IMTEX with a brand



Source: Magic Wand Media

"IMTEX 2019 shows that the Indian manufacturing industry is moving in the right direction, which is promising for the future."

**OLIVIER VERGNES**  
Marketing Manager  
MotulTech



Source: Magic Wand Media

"This time the response is quite positive at the show. There are serious visitors who are keen to know more on new technologies and innovations happening all over."

**YATENDRA KUMAR**  
Business Head  
MotulTech



**Atlantic Lubricants & Specialities Pvt Ltd**  
www.motul.com  
Hall 3B, Booth C105

Source: Magic Wand Media

L-R: Olivier Vergnes, Marketing Manager, MotulTech and Yatendra Kumar, Business Head, MotulTech at company booth

recognition goal and to establish a link with all the machine manufacturers and visitors. We have received very good response at the show this time." "According to our sales representatives, show visitors in the past

would come and ask what Motul meant. Today, they approach wanting to know more about our products. IMTEX has played a big role in making us visible and create our brand awareness," he added.

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Source: GROB Machine Tools India Pvt Ltd



**GROB Machine Tools India Pvt Ltd**  
www.grobgroup.com  
Hall 4, Booth A118

**UNIVERSAL MACHINING CENTERS**

## GA-550

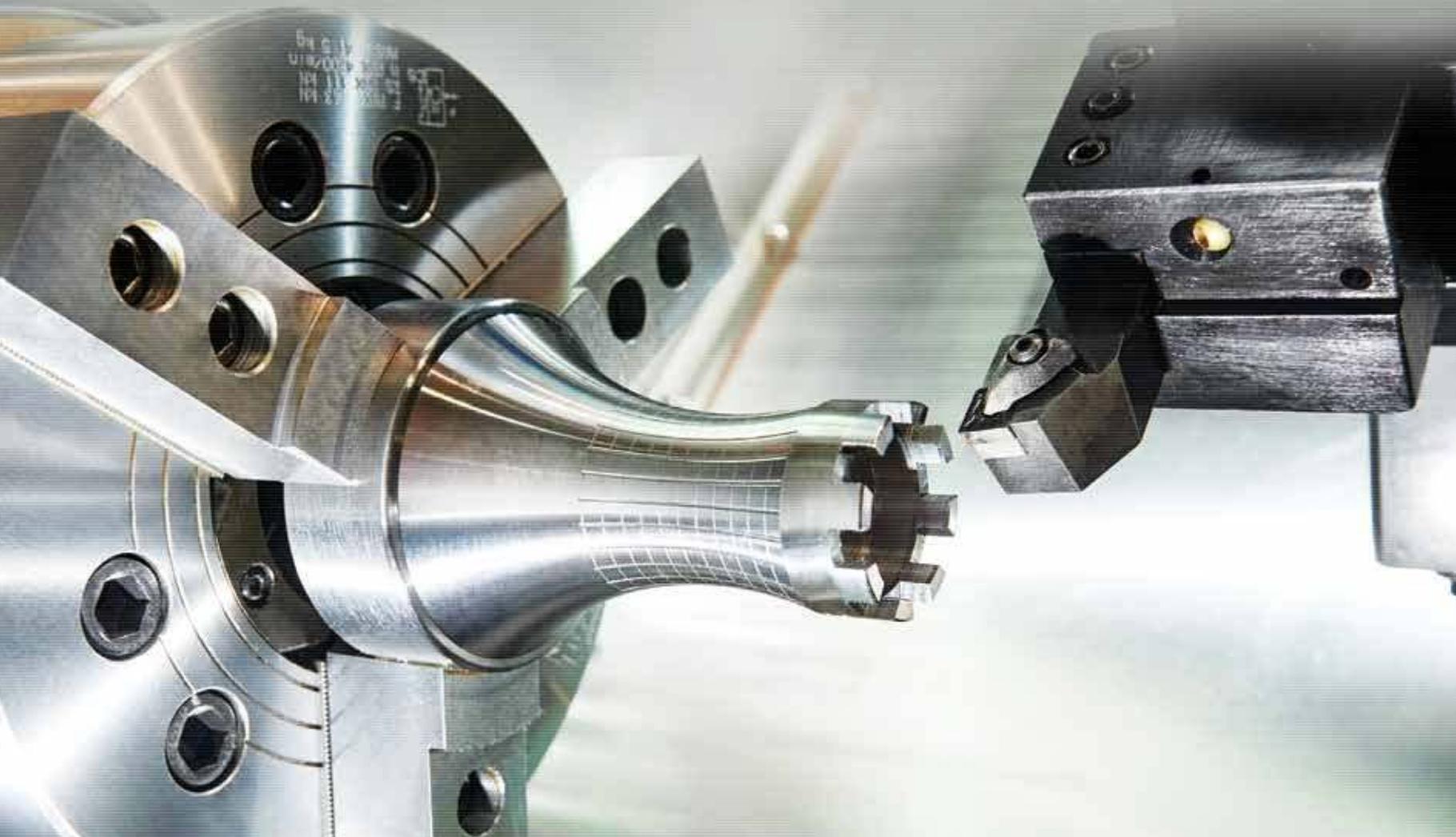
GROB's highly successful 5-axis Universal Machining Center is at display at IMTEX 2019 with a range of other offerings.

GROB is a highly focused company when it comes to machine tool concepts and designs and make only Horizontal Spindle Universal 5-axis Machines and everything else that make its performance stand out. At IMTEX 2019, it is showcasing its highly successful 5-axis Universal Machining Center model GA-550 with Horizontal spindle, with a table swivel range of 240 degrees in A axis and 360 degrees in B axis with a 16,000 rpm high torque spindle and 2.5 micron repeatability in X, Y and Z axes. In addition to that GROB is displaying its G Module production solutions, Automation ideas, Transport, Pallet and Tool Storage solutions, Thermal Spraying equipment, initiatives in Industry 4.0, Electromobility solutions for electric vehicle production, Customer specific assembly lines, and its unique service capabilities in India.



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Vikram Salunke, Managing Director, Accurate Gauging & Instruments Pvt Ltd at the company's booth

**ADVANCE TECHNOLOGIES**

## In tune to the Changing Times

In view of the industry 4.0 wave Accurate Gauging & Instruments Pvt Ltd is showcasing data connectivity on shop floor for real time decisions as well as highlighting productivity in measurement in each of its offerings in IMTEX 2019.

Speaking on the company's array of products displayed at the show, Vikram Salunke, Managing Director, Accurate Gauging & Instruments Pvt Ltd shares, "We are show-

casing 35 different products covering various measurement tasks. The highlight of the show is Robotic measurement using white light sensors for glass and car body. We are also demon-

“As the production volumes grow the metrology needs of our customers change so we make our best efforts to respond to the changing requirements.”

**VIKRAM SALUNKE**  
Managing Director  
Accurate Gauging & Instruments Pvt Ltd

strating 5 axis trigger and scan technologies.” The company is also showcasing its first Multi sensor CMM AIM as well as vision-based sorting machines for visual inspection.

### Smart Manufacturing

During this edition of IMTEX we are witnessing significant campaign by every maker on the Industry 4.0 compliant solutions. Most of the visitors are looking for solution providers with exposure to these technologies. Talking about Smart manufacturing Salunke said that Accurate believes in facilitating companies manage the skill gaps on the shop floor.

Attrition of skilled force on the shop floor is one of the major concerns for the manufacturing managers in India. Various IT tools in smart manufacturing are expected to help better manage the effect on the quality due to such changes. He explained further, "Currently the data from post process gauging system is essentially used for process monitoring, a smart way to use this data on process control through automatic tool wear compensation can lead to significant benefits for extending tool life." Reminiscing about the company's journey since last 50 years Salunke shares, "All of our product offerings have evolved due to need of our customers for a solution with corresponding application knowledge. We have responded to these needs and come long way with the current offerings which are cutting edge technologies in the western manufacturing."

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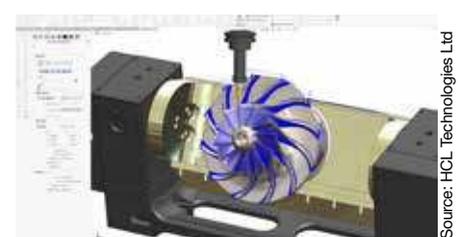
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An Expo on Industry 4.0

**HCL Technologies Ltd**  
www.camworks.com  
Hall 6, Booth A114

## CAMWorks 2019

At IMTEX 2019, HCL Technologies is showcasing CAMWorks 2019, the most advanced CAM software available.

The CAM software combines production-proven feature-based CAM technology, automatic feature recognition, and rules-based machining along with tolerance-based machining to leverage MBD and PMI technology to automate



Smart Manufacturing for CNC programming – paving the way to advanced digital manufacturing. Due to CAMWorks' superior technology, SOLIDWORKS has selected CAMWorks to power SOLIDWORKS CAM.

**Tolerance Based Machining** - Reads SOLIDWORKS MBD/PMI data including tolerances and annotations in 3D models to automatically create CNC programs

**CAMWorks Additive Manufacturing** - First Intelligent Additive and Subtractive Manufacturing Solution Available for SOLIDWORKS

**Feature-Based Machining** - Automatic Feature Recognition (AFR) automatically recognizes over 20 types of prismatic features on SOLIDWORKS part models, reducing programming time by as much as 90% compared to traditional CAM software

**Knowledge-Based Machining** - Allows you to capture and reuse your programmers' best practices, reducing programming time by as much as 80% and provides a company-owned database to store employee knowledge and skill

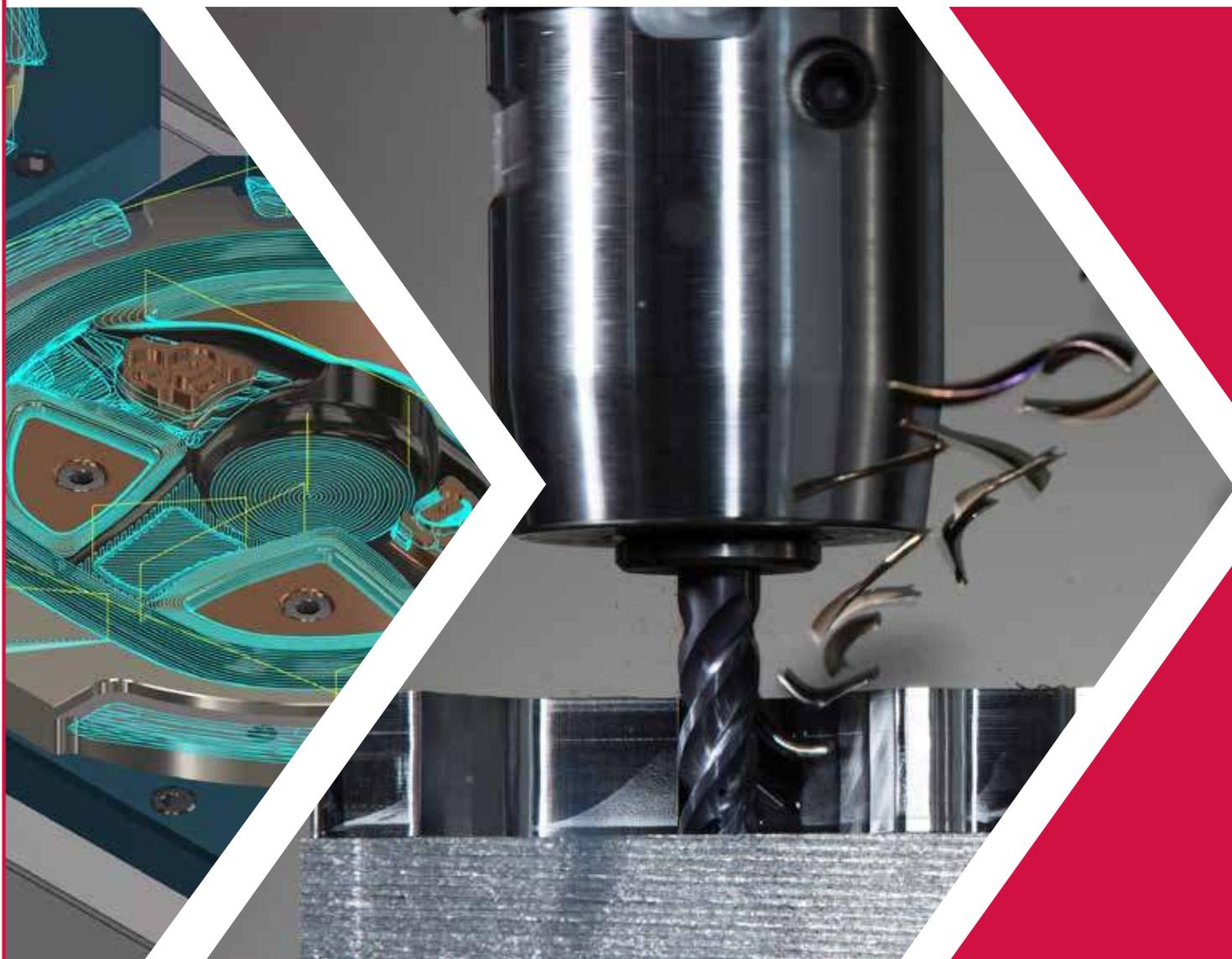
**CAMWorks Virtual Machine** - Performs true G-code machine simulation directly from the G-code used for the CNC machine, virtually eliminating dry runs and set up time

**CAMWorks VoluMill™** - The ultra-high-performance toolpath engine allows you to reduce your cycle time by 80% and your tool-life by as much as 500%.

Source: HCL Technologies Ltd



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**APM Technologies 3D Pvt Ltd**  
www.apmtech.in  
Hall 2B, Booth F105

Source: APM Technologies 3D Pvt Ltd

**SCANNING AND INSPECTION SYSTEMS**

# Success Measures

APM Technologies is here at IMTEX with its wide range of highly critical measuring systems.

Anil Gupta, Managing Director, APM Technologies 3D Pvt Ltd, considers IMTEX as the mother of all trade fairs in India. "It offers a great opportunity to demonstrate our latest solutions available for current dimensional metrology issues of manufacturing and quality professionals," he says.

**Measure matters**

APM is showcasing its high-end, high-speed measuring system with the capability of data acquisition to create thorough dimensional inspection reports

automatically. "We have displayed systems covering a large range of sizes, types and functionalities," he adds. ATOS Scanport is suitable for fully automated inspection of small and medium parts. While ATOS Scanbox is for fully automated inspection of medium to large parts. "ATOS5, in 8M and 12M versions, with Blue light Equalizer offers the fastest scan time of 0.2 sec, which is an industry record. It is being showcased for the first time in India," Gupta shares.



Source: APM Technologies 3D Pvt Ltd

"IMTEX is the mother of all trade fairs in India. It offers a great opportunity to demonstrate our latest solutions available for current dimensional metrology issues."

**ANIL GUPTA**  
Managing Director  
APM Technologies 3D Pvt Ltd

**Smart moves**

Product development time and budget are increasingly shrinking, says Gupta. "In this scenario, smart manufacturing is the only way out. Companies want to invest in customizable and adaptable solutions in terms of manufacturing machines, tooling, fixtures and measuring systems," he adds. With globalization, the expectations of Indian customers have also risen. "This creates demand for products meeting global standards necessitating the use of advanced technologies and machines," says Gupta summing up.

**DEBURRING AND SUPERFINISHING MACHINES**

# Finishing Touch

The machine has been specially developed to cater to Indian two-wheeler industry.

The new compact Deburring and Superfinishing machines from Nagel Special Machines has been developed in-house on the request of two-wheeler industry in India. This machine is mainly used to remove the burrs generated during grinding operation and superfinish the camshaft and crankshaft bearing journals and cam lobes which requires a smooth surface finish to maximize engine efficiency. The superfinishing operation helps in increasing the engine performance by offering lower resistance and



Source: Magic Wand Media

improving the surface finish and accuracy of shape of highly stressed machine parts. It allows for controlled stock removal without considerably heating the part. The salient features of this machine are:

- Combined deburring and finishing operation that eliminates need for a separate deburring machine
- Compact footprint
- Single lift machine
- Economical solution to achieve low cost per piece
- No hydraulics
- Deburring with either stone or special brush
- Finishing with abrasive tape
- Machine offered with PLC or CNC control
- Concrete filled machine base for higher stability
- Modular arm configuration.

**Francis Klein & Co. Pvt Ltd**  
www.francisklein.in  
Hall 4, Booth A106



Source: Magic Wand Media

**"Versatility Under One Roof"**

"I am pretty impressed with the plethora of options here. I have especially liked the Hall 6 where the future technologies are being exhibited. Another interesting aspect of IMTEX 2019 has been participation of so many countries. It's been an overall great experience."

**SAYANTAN GHOSH**  
Partner  
Hive Industries



Source: Magic Wand Media

**"Ideal Platform to Track Developments"**

"I have always been coming to IMTEX to see new technologies as well as to track new suppliers. This is the place where we can watch several foreign companies and check their latest developments. IMTEX 2019 has met my expectations and it's been worth coming here."

**NEVILLE KOYITHARA**  
Managing Director  
Safroys Machines Pvt Ltd

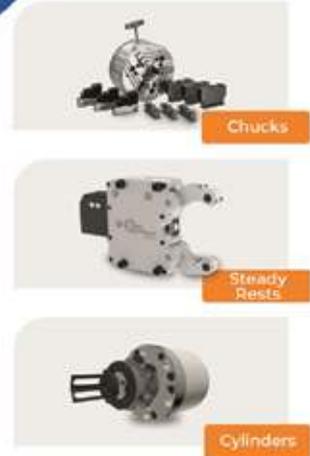


Source: Magic Wand Media

**"A Well-Organized Show"**

"I feel proud to be at IMTEX in its golden jubilee year. I have come here with the aim to check out the latest technologies of certain specific automation vendors. It is an extremely well-organized trade show and a great source of knowledge."

**VIVEK L JOSHI**  
Director  
Pentaco Automation Pvt Ltd



**IMTEX 2019** HALL 3A  
STALL B109

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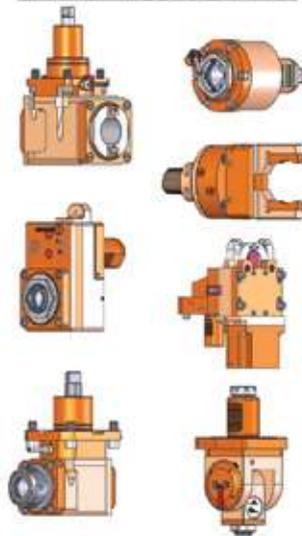
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GRINDING MACHINES

# Reaching Out

**PMT Machines Ltd**  
www.pmtmachines.com  
Hall 5, Booth A103



Ronald D'Souza, CEO, PMT Machines at the company's booth

**PMT Machines deems IMTEX 2019 as a perfect platform to showcase its products and meet customers and prospects.**

For Ronald D'Souza, CEO, PMT Machines IMTEX is an opportunity to display the company's strengths and understand market requirements and offer solutions. "We are displaying a range of products along with our best technical and marketing team to welcome the visitors," he adds. The company is displaying its Creep feed CNC Surface grinding machines, CNC Internal Grinding Machines with CBN technology, CNC Cylind-

rical Grinding Machines, CNC Turning Machines and Automats.

**In sync with the world**

D'Souza believes that Smart Manufacturing is the only way towards excellence. "It identifies opportunities for automating operations and use data analytics to improve manufacturing performance." He is happy that IMTEX 2019 is housing two separate pavilions on Industry 4.0 and Additive Manufacturing. "The technologies are to change the face of manufacturing. They can enable creation of first-to-market products and create ways for future business."

**For the customer**

The company strives towards that goal. "The Internal Grinding Machines manufactured by PMT are import substitution and has created opportunity for various automotive and gear manufacturers in India to grind gears at the lowest cost with world-class process capabilities also enabling them to export gears from reputed companies of the world," he shares.

Source: Magic Wand Media



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**Lakshmi Machine Works Ltd**  
www.lmwcnc.com  
Hall 5, Booth B106



CNC LATHES

## LR30TL12 Horizontal Lathe

The lathe is ideal for heavy duty cutting.

The LR30TL12 from Lakshmi Machine Works comes with a chuck size of 12 in. The maximum turning dia. is of 470 mm and maximum turning length is of 1,200 mm. The rigid integral bed structure and large steady rest (200 mm) accommodate bigger components and box guide ways for heavy duty cutting. The machine has a high-power spindle (15/18.5kW) for heavy depth of cuts. Integral guideways (X & Z axes) result in higher rigidity and higher vibration dampening. Thus, the components have better surface finish and quality. Hardened and box type guideways result in better vibration dampening, making hard part turning possible. The cartridge type spindle has easy serviceability and lesser downtime. It has a programmable tailstock which reduces setting time and operator fatigue, thus improving productivity.



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- ❖ Metallography machines
- ❖ Electric Drives
- ❖ Machine Controllers

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- **Automotive** Engine Components Engine Efficiency Friction Reduction
- **Smart manufacturing** through Artificial Intelligence, IoT, Big data analysis



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## JV130

Table Size: 1350 x 660 mm  
Stroke (x,y,z): 1300 x 700 x 650 mm



## JV200

Table Size: 2100 x 800 mm  
Stroke (x,y,z): 2000 x 900 x 800 mm

### Highlights:

- Hydraulic counter balance is provided in JV130 machine
- Roller LM Guides on all axes in JV130
- JV130 machine is provided with 3 rows of LM guides in Y axis
- Counter weight (Z Axis) in JV200
- Roller LM Guides on X & Y axis in JV200
- Box guideways in Z axis in JV200
- 4 Rows of LM guides in Y axis & additional 2 support rails in JV200

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**CNC CYLINDRICAL GRINDERS**

## Bringing in Global Expertise

Mamoru Nagasawa, Managing Director, Toyoda Micromatic Machinery India, has a heightened sense of awareness of what the Indian market wants and is keen to deliver.

“With the industry moving towards advanced technologies, we are bringing in global expertise to build local capabilities across sectors such as manufacturing, automobile, consumer durables, etc. in every market we are invested in,” says Mamoru Nagasawa, Managing Director, Toyoda Micromatic Machinery India Pvt Ltd.

### Displaying strengths

JTEKT has been a regular participant at IMTEX and this year is reinforcing its commitment to the ‘Make in India’ initiative by displaying Toyoda high-precision CNC cylindrical grinder, GL4P. The leadership team expects to meet local companies and explore ways to partner with customers at large. This year, the company is displaying a mix of global and local

technology capabilities to suit market requirements.

### Array of Products

**Toyoda Van Moppes** – Super Abrasives range. This comprises CBN Wheel, Diamond Dresser and Poly Crystalline Diamond (PCD) Center  
**Koyo Bearings** – High-performance Precision Bearings for machine tools

**Smart Factory Concept** powered by IoE solutions

“Whether it is job shop application or high-volume production needs, our products are engineered for innovators, and built with the speed, strength and capacity to get you there,” says Nagasawa.

With its local partnership with Micromatic Grinding Technologies Ltd, JTEKT has not only catered to India but also to South East Asian markets.

**Toyoda Micromatic Machinery India Pvt Ltd**  
www.toyoda.jtekt.co.jp/e/  
Hall 5, Booth B108



Source: Toyoda Micromatic Machinery India Pvt Ltd

“We understand tight tolerances, superior speed, and peak performance. Our product offerings come with the promise of high durability and longevity that establishes the benefits of Total Cost of Ownership.”

**MAMORU NAGASAWA**  
Managing Director  
Toyoda Micromatic Machinery India Pvt Ltd

**SCHEDULE**



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Additive Manufacturing  
January 28, 2019,  
BIEC, Bangalore  
“Converting Disruption  
into Opportunity”

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



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

Team Zavenir Daubert India at the company booth in IMTEX 2019

**NEWS**

## Being Nature Kind

Zavenir Daubert has kept its promise to the environment and will display eco-friendly products that more and more customers have been demanding for some time.

Balwant Bains, General Manager - Product Management & Marketing, Zavenir Daubert India Pvt Ltd, is hopeful that IMTEX 2019 will help the company glean emerging opportunities in metalworking. “Events like these help us meet customers outside the work environment and assess thoughts and gather feedback about new product developments,” says Bains.

### Going green

This year, Zavenir Daubert India is displaying many new products and services under its Chemistry 4.0 initiatives. It is showcasing unique, innovative and environment-friendly solutions. “We are exhibiting next generation technologies and trends in metalworking fluids (neat cutting oils, water soluble cutting oils, cleaners), rust preventives (oils, waxes, coatings) and VCI packaging (films, paper, devices, etc),” he adds.

### Auto veto

The company is banking on the growth of the Indian auto components sector. According to reports, the sector is expected to grow to \$200 billion in the next decade. A major chunk of growth is expected to come from exports.

**Güdel India Pvt Ltd**  
www.gudel.com  
Hall 2A, Booth A110



Source: Magic Wand Media

**INTELLIGENT MOTION SOLUTIONS**

## Güdel at IMTEX 2019

The company has a wide range of product innovations to present to its visitors.

Güdel is presenting a TMF-2 floor drive axis and a ZP-4 two axis gantry. The drive axis is driven by a Güdel high performance angle gearbox HPG 060. In combination with Güdel's own racks and pinions, this results in the ideal drive train. The static payload is 2.5 tons and a dynamic payload of 900 kg can be moved. The drive axis is compatible with all industrial robot models. Up to four carriages can be driven separately or all in one. The ZP-4 offers low-noise and precise production handling for a payload of up to 200 kg. The gantry guarantees high reliability, flexibility and short cycle times. Helical racks ensure smooth operation and reduced noise. The gantry is equipped with one fixed and one innovative telescopic axis. In addition, relevant product components, such as helical gear racks and powerful end position buffers, could be adapted to other portal standard. Other advantages are the double securing of the inner carrier profile by a second toothed belt, increased safety conditions and optical monitoring of both belts.



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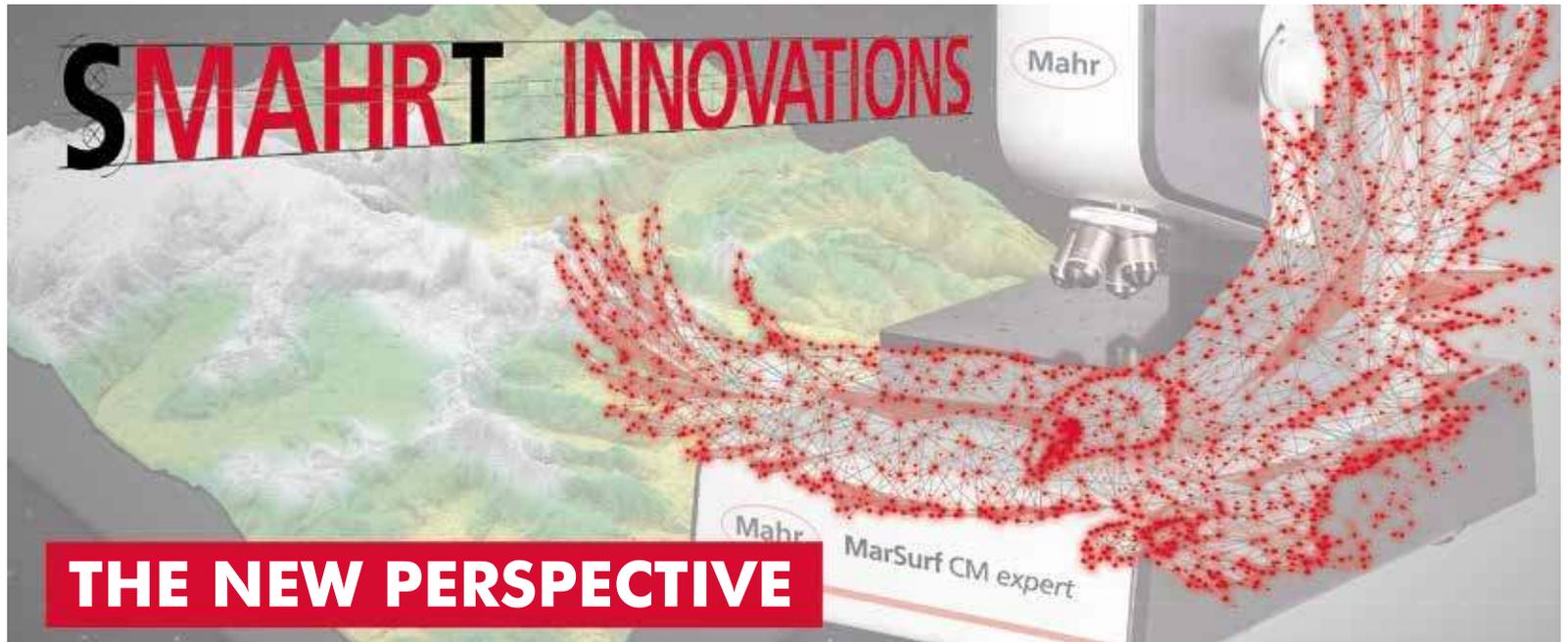
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# New confocal measuring systems for 3D measurements



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For first time at IMTEX 2019, Mahr proud to announce a New confocal measuring devices for the Non-Contact 'testing of surfaces. The new systems of the series MarSurf CM and MarSurf CP measure in seconds – even at the highest resolution.

With the new product families, Mahr expands its product range by five high-resolution confocal 3D surface measuring stations. They all operate without contact, independently of material and quickly.

### An overview of the new units

The measuring system MarSurf CM explorer is a compact confocal microscope for three-dimensional measurement and analysis of surfaces.

Due to its robust construction and the insensitivity to environmental influences, it is also suitable for quality assurance in production environments.

The MarSurf CM expert is the "big brother" of

the explorer. It is also used for non-contact 3D surface inspection and can be used in test and inspection laboratories as well as in production.

The MarSurf CM mobile was developed especially for mobile use: it is light and operated via a laptop. The MarSurf CM mobile is particularly well-suited for flexible measurements on large objects and difficult-to-move samples – for surface analysis of rollers, for example.

The new product family MarSurf CM also includes the configurable confocal microscope MarSurf CM select. Thanks to its modular design, the measuring system can be adapted to different measuring tasks.



The MarSurf CM explorer is a compact confocal microscope for 3D testing of surfaces

Furthermore, the Mahr assortment is supplemented by the MarSurf CP select for 2D/3D profilometry.

### Convincing features

- High Dynamic Range (HDR) function (16 Bit)
- High measuring speed – also with full resolution
- HD stitching for constantly high resolution even over large surfaces
- Easy and intuitive operation
- Collision detection for the protection of workpiece and measuring system



The MarSurf CM mobile is optimal for measuring larger objects and heavy samples

## Mahr Metrology India Private Limited

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

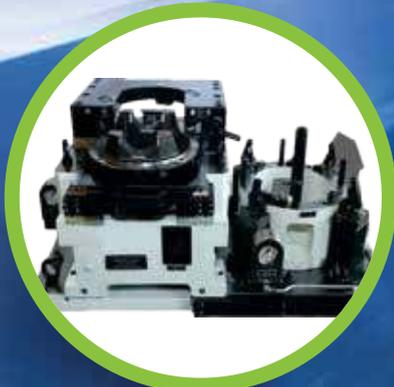
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## tachyon<sup>1</sup>

/tæki.on/ or tachyonic

noun

is a hypothetical particle that always moves faster than light. Conceptualized by a team of scientists Which includes Indian scientists Mr. V.K. Deshpande and Mr. E.C.G Sudarshan in 1962.



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