

# SHOWDAILY™

The official showdaily of IMTEX 2019

Day 7 • Wednesday, January 30, 2019

**CNC ROTARY TABLES & GEAR HOBBING MACHINES**

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

## In the Right Place at the Right Time

Indradev Babu, Managing Director, UCAM Pvt Ltd, a specialist in precision CNC rotary tables and gear hobbing solutions for machine tool applications, is well-aware of the reach of IMTEX and deems it as just the right platform to showcase and launch one's innovative products.



UCAM Group at the company booth at IMTEX 2019 show.

Source: Magic Wand Media

According to Indradev Babu, MD, UCAM Pvt Ltd, IMTEX, besides being the opportunity to showcase a diverse range of products created through continuous innovations over the years, is also the perfect platform to launch new products as one is sure to get noticed. "The discussions and interactions with customers help to feel the customer

pulse and realize future needs. Of course, brand enhancement and recall are the additional areas to derive from the trade show," he notes.

### UCAM in a nutshell

The company has four business verticals of which largest is the CNC Rotary Tables. "We have shown 22 varieties of tables, all of

which are new or improved. The new MINT series of tables called the URX and URXH series have new and vastly improved features. The new Direct Drive table is also garnering a lot of interest. The one for VMC applications does not need water chillers and has low cost of ownership," he adds. The company's 600 Dia. Table is with Turn-Mill capability and is

aimed for high-end 5-axis machines. It has bagged orders from Europe for this product. UCAM's business unit Nimble Machines produces high-tech and high-performance machines. "We are showing our new high-speed, high-precision CNC Gear Hobbers. We are also displaying

To be continued on 2 ➔

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Continued from 1

two Gear Hobbing Machine variants – with automation and extra rigid versions,” shares Babu. Nimble Electric is the company’s third but key vertical that develops and produces high-tech customized Motors for CNC machine tools. “It has now forayed into Defence applications. You can now see a wide variety of Torque Motors and Asynchronous Motors for spindle applications,” he adds. The company’s UCAM Mechatronics basically trades in high-performance elements from Europe. It deals with the subsystem needs of machine tools and other manufacturing industries that are also the customers of UCAM for its indexing and gear hobbing solutions.

#### A sense of achievement

Babu admits that Additive Manufacturing is a good buzz and contributes to part manufacturing

“I expect that companies will educate customers and get them to think of out-of-the-box applications. Productivity is the key issue for all manufacturing companies and deploying smart manufacturing techniques helps them achieve this.”

**INDRADEV BABU**  
Managing Director  
UCAM Pvt Ltd

that is witnessing a steep growth. “I expect that companies will educate their customers and get them to think out-of-the-box applications. Productivity is the key issue for all manufacturing companies and deploying smart manufacturing techniques helps them achieve this. IIoT adoption helps machine tool users move into smart manufacturing,” says Babu. At IMTEX 2019 & Tooltech 2019, the company is showcasing



Indradev Babu, Managing Director, UCAM Pvt Ltd at the booth.

Source: Magic Wand Media

the latest technological features in its products to enable their users to save and also compete. UCAM works closely with OEMs as well as end users to solve complex machining problems and address productivity challenges of user industries. Not only this, its innovative products as well as new machine tool range of products are

devised to help the user industry to bring down the overall cost of acquisition of new technology. This approach is helping both the customers and UCAM grow together. “Our sustenance and growth depend on working together with our esteemed customers and improving continually,” he sums up.

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#### INDUSTRY 4.0

## Live Demo @ IMTEX 2019



Source: Magic Wand Media

Industry 4.0 or the fourth industrial revolution is simply stating yoking of IT and manufacturing operations. It's the biggest shift in the manufacturing world since automation. Comprised of advanced robotics and automation, new ways of human-machine interaction and large pools of data and boosted connectivity, Industry 4.0 is slated to modernize manufacturing and boost industrial competitiveness. In order to enhance their competitive-edge and be on par with global peers, it thus becomes imperative for the Indian players to be part of this revolution. For which they must have a clear roadmap on which technologies to adopt to benefit their organizations and how to implement them. IMTMA, with the view to offer them a helping hand in doing so, organized a live demo of a smart factory.



# HEAVY DUTY CNC LATHE



LR30TL12

## Turning Center

### Highlights:

- Rigid integral bed structure design
- Larger size steady rest (200mm) to accommodate bigger components
- Box Guide ways for heavy duty cutting
- High power up series spindle (15/18.5kW) for heavy depth of cuts
- Spindle Bearing 120mm dia with A2-8 spindle nose

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Hall No. 05

Stall No. B106



LTV50M

## Vertical Lathe with Live Tool

### Highlights:

- Roller LM guide ways in linear axis
- 12 stations BMT 75 Live tool turret
- Live tool with spindle power (5.5kW)
- 60 mm boring bar & Er 40 live tool holder can be accommodated
- A2-11 spindle
- Interference free dia. of 295 mm with adjacent tool holders
- Max. Tap size of M-20 and Max drill dia 26 mm can be achieved with live tool



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Source: Magic Wand Media

First Prize



Source: Magic Wand Media

Second Prize



Source: Magic Wand Media

First Consolation Prize

INDUSTRY ACADEMIA

## Applauding Merit

Indian Machine Tool Manufacturers' Association (IMTMA), as part of its effort to link the Industry and Academia, provided an opportunity for Indian Academic / R&D Institutions to showcase their R&D capabilities in the metalworking field. This participation allowed the selected institutions to display four posters and product demonstration each at IMTEX 2019. The best displays were announced as the winners and were honoured with awards.



Source: Magic Wand Media

Third Prize



Source: Magic Wand Media

Second Consolation Prize

College Name	Themes	Prize
Walchand College of Engineering, Sangli	Development of Low Cost 3D Printer	1 <sup>st</sup> Prize
Indian Institute of Information Technology Design and Manufacturing, Kancheepuram	A – Low -Cost Build – Your – Own Three Axis CNC Mill	2 <sup>nd</sup> Prize
Acharya Institute of Technology, Bangalore	Hybrid approach for Additive Tool Manufacturing	3 <sup>rd</sup> Prize
Chennai Institute of Technology, Chennai	AGV for Material Movement in Plants, Warehouses	1 <sup>st</sup> Consolation Prize
KLS Gogte Institute of Technology, Belagavi	Research Work on Nanofluid assisted MQL Milling,	2 <sup>nd</sup> Consolation Prize

NEWS

## ICTMA members discuss surface finish



Source: Magic Wand Media

Dr Denis Kurapov, Global Market Segment Manager, Orelikon Blazers presenting his perspective on surface finish

Surface finish is an age-old challenge in the manufacturing industry. Lack of perfect surface finish not only kills the aesthetics an object, but also reduces the life of it. The same is true for the industrial tools and machinery.

Under the aegis of IMTEX 2019, Indian Cutting Tool Manufacturers' Association (ICTMA) organized a members' meet which included an informative technical session on surface coating.

**The session comprised of four presentations:**

Dr Denis Kurapov, Global Market Segment Manager, Orelikon, delivered his presentation on '40 years leading edge PVD technology by Orelikon Blazers'.

Rene Scheibe, COO, PD21 Europe GMBH, talked on 'PVD coatings in relation to the machining process variables, correlations and its evolution'. Dharmesh Bhutani, COO, Surface Engineering, IND-SPHINX Precision Pvt Ltd, shed light on 'MMP Technology – Super Precision Surface Finishing'. Bernd Hermeler, CMO, Cemecon AG discussed the 'Latest trends in PVD-HIPIMS and CVD-Diamond coatings.





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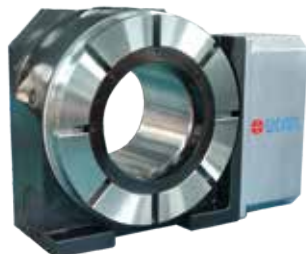


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**PAYING TRIBUTE**

# Felicitating Industry Stalwarts

The Golden Jubilee eve of IMTEX turned out to be the perfect time to honor Indian Machine Tool Manufacturers' Association's (IMTMA) Past Presidents and their contribution in the show's journey to this juncture. Two books were released to mark the trade fair's milestone.

Picture Credit: Kumar



Felicitating of Godrej family members



Felicitating of Past President, IMTMA, G.A.R Shaikh - 1982 to 1984



Felicitating of Past President, IMTMA, Jamshyd N.Godrej - 1985 to 1987



Felicitating of Past President, IMTMA, R Srinivasan & Vatsala Srinivasan - 1987 to 1989



Felicitating of Past President, IMTMA, Shailesh Sheth & Pratima Sheth - 1993 to 1996





Felicitation of Bir D. Singh & Komal Singh - 1998 to 2000



Felicitation of Shrinivas G. Shirgurkar & Bharati Shirgurkar - 2000 to 2002



Felicitation of Past President, IMTMA, V S Goindi & Aman Goindi - 2002 to 2004



Felicitation of Past President, IMTMA, C P Rangachar & Vidya Rangachar - 2004 to 2006



Felicitation of Past President, IMTMA, N K Dhand & Neelam Dhand 2006 - 2009



Felicitation of Past President, IMTMA, M Lokeswara Rao - 2009 - 2011



Felicitation of Past President, IMTMA, Vikram Sirur & Alka Sirur - 2011 to 2013



Felicitation of Past President, IMTMA, L Krishnan & Girija Krishnan - 2013 to 2015



Felicitation of Past President, IMTMA, P G Jadeja - 2015 to 2017



Release of Coffee Table Book on the occasion of 50<sup>th</sup> year of IMTEX

Source: Kuntar





Source: Magic Wand Media

**INDUSTRY DELEGATE**

**“We Need Indigenous Development of Niche Products”**

I have come to IMTEX after four years and there is a visible difference between then and now. The sophistication in the Indian machine tool industry has significantly gone up. There is a wide-spread adoption of Industry 4.0. I am impressed with the automation solutions, the measurement & inspection solutions, and the overall innovation from the Indian players. It's amazing that there is such demand for our products globally. It's something that I was not aware of before. We are gaining the competitive-edge that we missed some time ago. The machine tool industry is a technology-intensive industry. The niche technologies in controllers, encoders and different types of sub-systems, components are still not easily available. It will be a real achievement if we could develop those. IMTMA's efforts in successfully arranging such a large-scale exhibition are commendable.

**SAURABH KUMAR**  
IOFS, DGOF & Chairman  
Government of India  
Ministry of Defence  
Ordnance Factory Board



Source: Magic Wand Media

**INDUSTRY DELEGATE**

**“Industry must come to end-users' premises”**

IMTEX 2019 & Tooltech 2019 is a spectacular trade expo. It is my third visit to IMTEX, but the 50th anniversary show is unique. When we were given presentation for this in Delhi with videos and ppts, we had no idea it was going to be this grand. We are highly impressed with this year's product and technology offerings at the show. However, the role of the industry does not end here. They must come to our premises, and closely understand our challenges and educate us on how their technology can fit into our requirements. We are going for indigenization in Railways. Only those technologies that are not available in India are what we are importing. We urge the companies or IMTMA as the industry representative to come over and take stock of our needs. Lastly, we extend huge thanks to the Association for putting this all together.

**PRADEEP KUMAR**  
Chief Mechanical Engineer  
COFMOW, New Delhi



Source: Magic Wand Media

**INDUSTRY DELEGATE**

**“Right Guidance at IMTEX 2019 & Tooltech 2019”**

Ordnance Factory is going for modernization. Hence this visit to check out the machines available in the Indian market and abroad for inducting them to achieve higher levels of productivity. This is our second visit to IMTEX, and there is a significant improvement in the show. Many new machines are Industry 4.0 compatible. Also, the space for the exhibition has been increased to accommodate more stalls. Some of our General Managers have also come to have a view on the technical advancements. They have been directed well to choose machines that suit their operations. We are highly impressed with not just the wide variety of machines, but also the guidance offered. I would like to thank IMTMA for making such an elaborate arrangement.

**VIDYA SAGAR VERMA**  
IOFS, ndc, ADDL. DGOF & Member  
Government of India, Ministry of Defence  
ORDNANCE FACTORY BOARD



Source: Magic Wand Media

**“Got Updated on Latest Technologies”**

“We manufacture bright bars. I have come here to see the latest metalworking technologies. There is a lot to learn from the big players. On the technology front, I found robotics and automation offerings quite interesting.”

**SANTOSH SAKKAR**  
Kalika Enterprises



**“Vast Source of Information”**

“I have been attending IMTEX for a long time. This edition, the participating companies are visibly more. There are many advanced machine tools on display; also, the stall attendants are considerate to give a detailed demonstration and commentary on their products. Great place to learn about technical advances.”

**SOPAN KALBHOR**  
Plant Incharge  
Globewin Precise Products



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METALWORKING FLUIDS



Blaser Swisslube  
www.blaser.com  
Hall 3A, Booth A118

# Unleashing the Liquid Tool

Blaser Swisslube could help Dantal Hydraulics maximize its profitability of machines and tools with its liquid tool Synergy 915 coolant despite it costing much more than what the company earlier used.

At its plant in Haryana, India, Dantal Hydraulics Pvt Ltd manufactures customized hydraulic cylinders and hydraulic systems, aircraft hydraulic service trolleys and car parking solutions. Established in 1990, the company has since then been catering to various sectors of the country including agriculture, earth moving equipment, waste management, material handling, mining, industrial applications, heavy equipment, renewable energy and defence. Dantal Hydraulics was approached by Blaser Swisslube, a globally active company in the metalworking fluid sector, that introduced its philosophy of maximizing profitability of machines and tools.



Source: Blaser Swisslube AG

Dantal Hydraulics offers complete hydraulic solutions to varied sectors in India.

### A close look at parameters

“Blaser Swisslube India team explained to us in detail how they will first analyze the current machining

process and structure their testing accordingly,” says Yogesh Tyagi, Deputy General Manager, Plant Engineering, Dantal Hydraulics. “We were curious and agreed on a test on their SIERRA for almost two months,” he adds.

“We found good chances to improve tool costs and overall savings for the skiving and burishing process,” says Sandeep Kumar Bhat from Blaser Swisslube. Based on his experience and the recommendation from the headquarters in Switzerland, the coolant Synergy 915 was selected for the given machining situation at Dantal Hydraulics. “Synergy 915 is a synthetic; water-miscible; chlorine-, mineral oil- and ester oil-free metalworking fluid and

suits perfectly for demineralized and soft water applications,” adds the Blaser representative.

### Outstanding result

The results from the testing were very promising. During the test phase, the tool costs were reduced by 22 percent. This resulted in an annual tool cost saving of ₹1.33 million. Furthermore, the machine remained cleaner and the foam disappeared completely. “We are very happy with the new coolant from Blaser Swisslube, especially with the tailored on-site customer service. I was very sceptical at first. The coolant price per litre of the new Synergy 915 is 47 percent higher than our previous coolant. But the Liquid Tool solution pays for itself,” says Tyagi.

### Growing symbiosis

After the first success, the Blaser coolant was used on two more machines. However, the potential has not been fully exploited yet. With Dantal Hydraulics’ plan to invest in expansion, Blaser will be at its side as a trusted coolant partner for further continuous improvements on the shop floor.

### The Liquid Tool

Productivity, cost-effectiveness and processing quality are factors that depend on the selection and quality of the metalworking fluid to the highest degree. “With our extensive machining know-how, customized services and first-class products, we can help our customers to fully exhaust the potential of their machines and tools and to convert the metalworking fluid into a central factor for success – a Liquid Tool,” says Marc Blaser, CEO, Blaser Swisslube AG.

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## MILLING GRADES

Dormer Tools India Pvt Ltd  
www.dormerpramet.com  
Hall 3A, Booth B119

# In Control of Difficult Materials

The new milling grades - M4303 and M4310 - provide durability and reliability in semi-finishing and finishing applications.

Each is designed for high speed milling for the die and mold segment, offering consistent wear and longer tool life. An ultra-thin PVD coating increases cutting edge toughness, while its substrate provides high hardness and strength of cutting edge, preventing fracture by chipping. The M4310 takes over from the existing 7215 grade and offers an optimum balance of toughness and wear resistance in hardened steel and cast iron. It can also be used for machining stainless steel, steels and non-ferrous metals.



Source: Dormer Tools India Pvt Ltd





**Felsomat India Pvt Ltd**  
www.felsomat.in  
Hall 2A, Booth B104

(L-R) Sreekanteswar S, Vice President, Sales & Marketing and K P Chander, MD, Felsomat India Pvt Ltd at the company booth

**AUTOMATION SOLUTIONS**

## Ahead of the Curve

Felsomat India has diverse automation solutions for numerous industries. This time, besides of course catering to sectors, the company is wooing the commercial vehicles segment.

“There is a dire need to automate processes where heavy lifting of components requires to be done. We are demonstrating our solution for a similar requirement for the commercial vehicle segment.”

**KP CHANDER**  
MD, Felsomat India Pvt Ltd

wards advanced automation. There’s a dire need to automate processes where heavy lifting of components requires to be done. We are demonstrating our solution for a similar requirement for the commercial vehicle segment,” says KP Chander, MD, Felsomat India Pvt Ltd.

**On Display**

Indian two-wheeler manufacturers have always been strongly inclined to automation. That is because they need to churn out products faster considering that Indians are the largest consumers of two-wheelers in the world. Similarly, the passenger vehicles and commercial vehicles segment has been growing steadily too. “This has resulted in the establishment of new production units by global automotive companies. With the increase in volumes, these industries are also moving to-

The company is displaying a heavy-duty gantry automation for a commercial vehicle crank shaft, which can lift components of up to 150kgs. The payload on Z-axis is about 600kgs and the solution consists of three axes for each loader with specially designed gripper. “Over the years we have seen an increase in participation from global manufacturers and an increase in customer footfalls. This being the Golden Jubilee anniversary for IMTEX, the association has taken initiatives to attract more customers,” he adds.

**CNC TURNING & MILLING MACHINES**

**Shilpin Machine Tools Pvt Ltd**  
www.shilpin.co.in  
Hall 5, Booth C108

## A Perfect Combination

Shilpin in collaboration with GIMA Machines of Belgium has developed COMBI machine that gives the functionality of both CNC Turning machine and CNC Milling machine. The concept was developed by Stef Bruynseels, Director, GIMA Machines. Shilpin Engineers designed the entire machine and manufactured it at its facility in Aurangabad. The COMBI has X, Y and Z axes strokes of 250 mm each. The unique construction of the machine permits Turning a flange of 500 mm diameter. A shaft of 400 mm length and 140 mm diameter can be OD turned. A 5.5 kw BT 40 spindle and roller guides used make this machine a compact and rigid machine. The machine prototype was successful and another machine has been exported to Belgium. With a wide choice of controllers from Fanuc, Siemens and Heidenhein, this machine has been launched at IMTEX 2019 for active consideration of Indian industry.

**NEW LAUNCH**

**Ametek Instruments India Pvt Ltd**  
www.ametek.com  
Hall 3B, Booth C106

## TALYScan 280 Non-Contact System

The TALYScan 280 is the ideal instrument for the inspection of roundness, straightness, parallelism, taper, roughness and diameter, all from a single full 3D scan. The system is designed to deliver high accuracy measurements of injectors, hydraulic components, lens barrels, roller bearings, precision bores, precision and thin walled cylinders. It is easy to set up and program with powerful, intuitive and user-friendly software. With the ability to analyse 10,000 data points per second and up to 9 million data points in one scan, it produces unparalleled high definition measurement data.



Source: Magic Wand Media

Source: Ametek Instruments India Pvt Ltd



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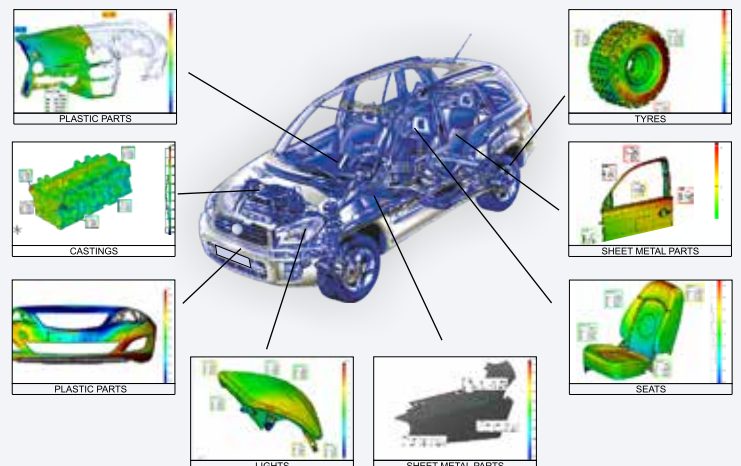
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“There has been much talk about Industry 4.0, but mainly confined to conferences. It is now time to Walk the Talk. Exhibitors need to drum up R&D on showcasing real Industry 4.0 solutions at a platform that offers such a unique opportunity.”

**GIRISH RAO**  
CEO  
HARTING India Pvt Ltd

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**HARTING India Pvt Ltd**  
www.HARTING.in  
Hall 6, Booth E 102

**Making new connections**

Girish Rao, CEO, HARTING India Pvt Ltd says that there has been much talk about Industry 4.0, but mainly confined to conferences. It is now time to Walk the Talk. Exhibitors need to drum up R&D on showcasing real Industry 4.0 solutions at a platform that offers such a unique opportunity.

The concept of Smart Manufacturing is all about digitalization of the entire manufacturing process with key deliverables like production on demand, data analytics, predictive maintenance with lower costs.

**Sahajanand Laser Technology Ltd**  
www.sltl.com  
Hall 2A, Booth A108

**LASER SOLUTIONS**

**Bearing Automation System**



Sahajanand Laser Technology Ltd (SLTL) Group has introduced customized technologies for the bearing industry including marking, cone measurement, oil slusher system and others. The technology enables solutions for bearings of any type, width and diameter. The rotary and X-Y solutions come handy while marking the larger bearings. Dual side laser marking system, 3G marking with vision system and marking on flinger shield are some features the laser marking system offers. The system is capable of simultaneously imprinting brand name and serial number with the indexing mechanism. This helps reduce the downtime and improve productivity. Along with automation features engineered for the bearing industry, the company makes machines with inbuilt 3G Marking with Vision System and Systems integrated with Poka Yoke Mechanism.

Source: Sahajanand Laser Technology Ltd



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(A Society registered under Tamil Nadu Society Registration act Regn. No. 421/2016)

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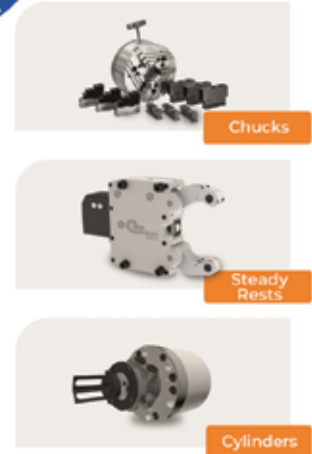
**Lakshmi Machine Works Ltd**  
www.lmwcnc.com  
Hall 5, Booth B106

**JV200 VMC**

The JV200 VMC from Lakshmi Machine Works Ltd has a large table size of 2100 X 800 mm. It has 4 rows of LM Roller Guideways and 2 support guideways for Y axis. Due to this, it has minimum sagging of table and higher rigidity (flatness, squareness, PCD, circularity). The table load carrying capacity is 2.5 tons due to which it is suitable for larger components. The box guideways for the Z axis offers better rigidity and higher vibration dampening, resulting in higher material removal, reduced cycle time and better surface finish. The large

opening on the front and the top is for easy component loading and unloading, thus catering to a variety of components and leading to operator convenience and higher productivity. The conveyors are side mounted for better chip disposal, which results in better maintenance, low running costs, lesser downtime and lesser floor space. The machine weight of 17 tons offers better rigidity and is ideal for large-part heavy-duty machining. The counterweight on the Z axis results in no axis drop, thus no tool/component damage and lesser rejection.

Source: Lakshmi Machine Works Ltd



**IMTEX 2019** HALL 3A  
STALL B109

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- ✓ Solid base plate (height 28 mm) for maximum stiffness
- ✓ Easy mounting on the machine table due to positioning holes



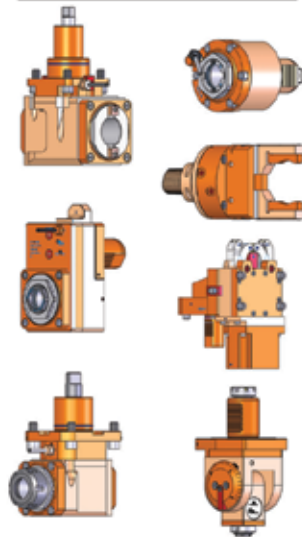
- ✓ Ideal suitable for OP 10 use
- ✓ Compact design with best accessibility of the machine spindle
- ✓ High adjustable clamping forces
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FROM FAR AND WIDE

AFM-Advanced Manufacturing Technologies  
www.afm.es

## Together to Grow

Spain's Mikel Artola, International Manager, AFM - Advanced Manufacturing Technologies, considers IMTEX 2019 to be a great trade show that exemplifies the work and growth of IMTMA and India.

“Industry 4.0 represents a fascinating change in the industry and a trade show of the stature of IMTEX should include industrial digitisation breakthroughs and trends.”

**MIKEL ARTOLA**  
International Manager  
AFM - Advanced Manufacturing Technologies



Source: AFM

AFM is the Spanish Association of Manufacturers of Machine Tools, accessories, parts and tools and represents 90% of machine tool and advanced manufacturing technology companies in Spain. Its participation in IMTEX 2019 is suggestive of Spain's growing interest in our machine tools industry.

### India, important to Spain

“India is an important country for our companies and we make a significant effort to adapt to its requirements and needs,” says Artola. The Spanish companies participating in this IMTEX edition are: DanobatGroup, Nicolás Correa, Ekin,

Etxe-tar, Fagor Arrasate, Gamor, Gurutzpe, Ibarria, Juaristi, Shuton and Zayer.

### Advanced technologies

The emergence of additive manufacturing (AM) and Industry 4.0 is a clear example of the dynamism of machine tools and advanced manufacturing technologies. “AFM companies have already spent three years adapting their equipment to provide 4.0 services. As regards AM, AFM has founded one of the first national additive manufacturing associations in the world: ADDIMAT, which now has 73 members in Spain.

CUSTOMER SPEAK

## Offering Excellence

Hyderabad-based AZAD Engineering gives an account of GROB's 5 axis machining center and how well it serves the company

AZAD Engineering Pvt Ltd is a Precision Component manufacturing company that has been using GROB Machine Tools India's 5-Axis Machining Centers.

“Together with GROB 5-Axis Machining Centers and AZAD's process expertise, our company's components today are earmarked for excellence. We emerge as a supplier with innovative and productive solutions to various OEM requirements across the globe,” Rakesh Chopdar, Managing Director, AZAD Engineering, Hyderabad. AZAD has been using four of GROB's multipurpose machines to manufacture a wide product variety of parts belonging to Aircraft, Radar Control & Power Generation industries in materials including Stainless Steel, Aluminum, and Titanium and Heat Resistant Super-alloys.

### GROB horizontal 5-axis machining center

It is a fully capable and rigid machine with simultaneous 5-axis machining and 4 micron positioning accuracy, 2.5 micron repeatability in a compact and rugged package. GROB G Series horizontal 5-axis machining center is known to be an ideal machine tool to face the challenges of modern manufacturing. It is capable to meet typical



INDUSTRY 4.0

Siemens  
www.siemens.in  
Hall 2B, Booth B101

Source: Siemens

## Catering to Evolving Needs

Vijay Pratap Singh, Head of Motion Control Business, Digital Factory, Siemens, congratulates the Show Organizers on the golden jubilee of IMTEX that lends the company a platform to showcase technological refinements in this space.

For Singh there cannot be anything better than to have an audience which is a pure gamut of manufacturing and ancillary industries including key decision and policy makers, keen to source latest technologies and manufacturing solutions for their product lines.

### Close quarters

Singh is eager to receive feedback on the company's displayed next-gen technologies - Smart CNC Technology, Additive Manufacturing Integrated robot control, Internet of Things (IoT), Machine Virtualization. “We are showcasing our Digital Enterprise portfolio which provides the foundation for the machine tool industry to adopt Industry 4.0 and move into digital manufacturing, from product design, planning, engineering, execution and digital services. Siemens Digital Experience & Application Center is a live showcase of Industry 4.0 elements



Source: Siemens

“Smart Manufacturing not just gives the ability to better manage productivity through appropriate performance metrics but also increase the velocity of business.”

**VIJAY PRATAP SINGH**  
Head of Motion Control Business, Digital Factory  
Siemens

and vital link in unlocking the potential of Industry 4.0 to support Indian Machine tool manufacturers achieve their transformation goals,” shares Singh.

machined part tolerances, has an integrated design, and comes with an excellent service support.

“We find GROB beneficial when profiling complex areas of the component, reducing manufacturing costs with shorter tool length and faster machining, thus making our prices economical to our customers,” adds Chopdar.

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



Source: GROB Machine Tools India Pvt Ltd



**METALWORKING FLUIDS**

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

**Going with the Flow**

Zavenir Daubert understands the lacuna between the fluids and oils used by manufacturers and offers the right one accordingly.

Production heads on the shop floor need to be prudent and discerning when choosing coolants, lubricants or metalworking fluids (MWFs). "In case of MWFs, the selection is generally defined by specific manufacturing technique and its purpose, operating environment and cost, effect on health and environment, efficiency, and disposal/recycling cost. Today, customers are looking for products that not only enhance tool life but also meet global environmental norms. Demand for products using advanced technology to improve performance and reducing recycling cost is increasing rapidly," says Balwant Bains, GM – Product Management & Marketing, Zavenir Daubert India Pvt Ltd.



“Smart Manufacturing not just gives the ability to better manage productivity through appropriate performance metrics but also increases the velocity of business.”

**BALWANT BAINS**  
GM – Product Management & Marketing  
Zavenir Daubert India Pvt Ltd

**Getting it right**

In order to understand the customers better, Zavenir Daubert's technical experts study the complete process of its customers' manufacturing right from procurement of the raw material to finished goods shipment. It seeks to understand all the chemicals used in the manufacturing process – cutting oils, cleaners,

rust preventives and packaging are evaluated for HSE (Health, Safety and Environment), chemical compatibilities and potential reduction in materials/cycle times/energy, etc. The VAVE output of this exercise has given tangible benefits to customers in improving productivity, reduction in cost per component and enhancement of quality.

**END USER FEATURE**

V.P. Industries  
www.vpindustries.co.in  
Hall 3B, Booth A110

**Offering the Right Tools**

One of the customers of V.P. Industries' sought a total tooling solution. Here's how it was helped.

V.P. Industries' customer in question is into Aerospace component machining. The project involved giving a complete solution for round tools, and the component material was Aluminium 7075T. The challenge was a minimum number of tools due to the limitation of the number of tool pockets in machine tool magazine. Also the machining dimensions showed non-conformance after a special coating process.

**Solution**

After studying the component details with the engineering team of the customer, V.P. Industries finalized a feasible tool list with a maximum permissible combination in one tool. Then the reaming hole size required on the component before the special coating process was also finalized. A tool layout was prepared with all details, and after discussion with the client, manufacturing was proceeded. Toolings included step drill with 2 to 3 combinations and reamer with precise size control. All tools were delivered within 1 week with proper Carbide Rod material, geometry and coating. Optimum number of combination was taken in one tool to reduce number of tools. Hence, all tools assemblies could fit in the given tool magazine.



Source: V.P. Industries

**SCRAP METAL PROCESSING**

U-Tech Associates  
www.u-techindia.com  
Hall 3A, Booth E101

**Chip Compactor by U-Tech**

BRIKETTO offers several advantages and can process almost any type of material.

The new compact chip compactor manufactured by U-Tech is used to compact waste metal scrap produced from metal cutting operations like milling, turning, boring etc. The compactor uses 80 tonne of force to press the scrap into briquettes of size 100 mm in diameter and 65 mm in height. The force used to achieve this enables the briquettes to be highly dense, typically more than half the density of the original metal.



Source: U-Tech Associates

**The major advantages of using a Chip Compactor are:**

- Reduction in storage space
- Better value for dry briquetted scrap
- Recovery of precious coolant
- Reduction in transportation costs
- Improved efficiency in foundries if briquettes are used instead of scrap.

Almost any type of material can be processed in this Chip Compactor. For Cast Iron, the machine has a capacity to process 250 to 300 Kg of scrap per hour. The capacity, however, varies according to the nature of the chips.

The new compactor requires less floor space compared to the older version. The new design allows the machine to be more flexible so that it suits different application related requirements.



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For Further details and registration contact :

**Digvijay Nath Pandey**  
Executive officer, IMTMA  
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www.imtmatraining.in



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Hall 5 & 6 / Booth B112 / F104

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# Match for Match

Fanuc India is displaying its enhanced line of products with smart features that increase productivity, IoT solutions, and lifetime service support. With over 160,000 units installed base at 40,000+ customers across the Indian subcontinent, IMTEX is finally here to connect with customers.



Source: FANUC India Pvt Ltd

“IoT solutions have supported major automotive OEMs to improve productivity and adopt Smart Manufacturing with seamless connectivity. The success of our customers is our reward.”

**SG KULKARNI**  
President & CEO  
FANUC India Pvt Ltd

SG Kulkarni, President & CEO, FANUC India Pvt Ltd, says, “A perfect opportuni-

ty for everyone in this domain. Here’s a chance for end users to first hand observe and learn a deeply of the value possibilities from invoking IoT and Smart Manufacturing. In the past 2 years, we have successfully installed over 2,000 licenses of our IoT solution – Machine Tool Link-i nationwide. These “plug and play” solutions for machines and robots will bridge the various gaps in today’s manufacturing.” Fanuc believes that Industry 4.0 is not complex anymore. Going by the current line-up of products, it’s fully equipped with the required protocols. It has an expert team of FA Application Engineers across 10 locations providing extensive support to system integrators and end users.

**FROM FAR AND WIDE**

**Manufacturing Technologies Association**  
www.mta.org.uk  
Hall 3

# Looking out for SMEs

James Selka, CEO, The Manufacturing Technologies Association (MTA), believes that as manufacturers it is vital to always look for new ways to improve production processes through new concepts and ideas.

“We took some old machine tools from the 50s and 60s and retrofitted sensors to the equipment so data could be extracted while the machines are running. This proved to be a cost-effective solution for SMEs wanting to make the leap into digital technologies.”

**JAMES SELKA**  
CEO  
MTA



Source: Manufacturing Technologies Association

Congratulating the IMTEX organizers on completing 50 years, he compares it with his own experience as the organiser of the UK’s largest manufacturing technologies exhibition, MACH, and its importance in creating new business opportunities. He is glad that companies such as Bowers Metrology, Eclipse Magnetics, Filtermist, PTG Holroyd, Matrix Machine Tools (Coventry) Ltd, Renishaw, Mollart, and Wickman, are participating in IMTEX 2019.

**A new dawn for India**

He realizes that India is seeing a sudden surge in interest in Industry 4.0 and Additive Manufacturing (AM). “Industry 4.0 enables data acquisition to allow accurate monitoring of the condition of a machine and gives production managers information about energy consumption and performance. AM can be a vital tool when undertaking prototyping as well as finding light weight new solutions for production,” says Selka.

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**Hall 5 • Stall A103**



Source: Magic Wand Media



**Gleason Works (India) Pvt Ltd**  
www.gleason.com  
Hall 5, Booth A124

Pardeep Aggarwal, General Manager, Gleason Works (India) Pvt Ltd at the company booth

“Partnerships with customers are of reciprocal benefit since we grow together in joint developments and projects. We strive to improve with every step we take to exceed our customers’ expectations.”

**PARDEEP AGGARWAL**  
General Manager  
Gleason Works (India) Pvt Ltd

**PARTNERSHIPS MATTER**

**Exceeding Customer Expectations**

Gleason Works India constantly strives to step up its game to cater to its customers’ dynamic requirements. Its offerings at IMTEX 2019 bear testimony to that.

Gleason has been a close partner to its local Indian customers since the founding of Gleason Works India in 1996. “Partnerships with customers are of reciprocal benefit since we grow together in joint developments and projects,” says Pardeep Aggarwal, General Manager, Gleason Works (India) Pvt Ltd.

Based on customers’ input, Gleason India has been continuously expanding its local product portfolio to provide complete gear manufacturing systems, being able to offer not just a single pro-

duct, but a solution to a manufacturing task including gear and transmission design, machines, automation, workholding and tools, technology support and a wide array of services including training and tailored seminars.

**Challenging the traditional**

Speaking on the impact of advanced technologies, Aggarwal notes, “We are facing groundbreaking changes in our major markets, especially within the automotive industry with BS-VI and EV demands which will not only affect the number of gears produced but also different precision and surface requirements. Industry 4.0 brings a number of technologies which have influence on the speed of gear development, reduction of scrap and optimization of gear production.”



**Blitz Cutting Tools Company**  
www.blitzindia.com  
Hall 3A, Booth A137

Source: Blitz Cutting Tools Company

**HIGH PERFORMANCE ENDMILLS**

**Exotic Material Machining**

Blitz Cutting Tools has developed High Performance Endmills for exotic materials such as Titanium, Inconel, Stainless Steel, and other high tempered alloys. The Endmills are majorly used by the Aerospace Industry to machine structural parts for aircrafts and other industries looking for high-precision parts along with very good structural properties. The standard tools are built for tough materials up to 55 HR and offered in a variety of options that include variable pitch, multiple profiles, and flute counts from 3 to 14.

The Endmills are specifically engineered to accelerate metal removal rates and achieve a quality finish while machining by decreasing chatter and harmonics. They give superior tool life due to special micro geometry specifications that give maximum edge strength thus minimising wear. The Endmills can be manufactured with offset chip breaker geometry that creates smaller chips for optimal evacuation and are used for heavy roughing applications from ramping, slotting to plunging.

**FIBER LASERS**

**IPG Photonics (India) Pvt Ltd**  
www.ipgphotonics.com  
Hall 5, Booth A128b

**Nanosecond Pulsed Lasers**

IPG Photonics produces the broadest range of pulsed nanosecond lasers in the world, with a wide range of operating parameters to perfectly suit all demanding application requirements.

A nanosecond is one billionth of a second. In that one billionth of a second IPG’s pulsed nanosecond fiber lasers can interact with a range of materials to mark, ablate, clean, scribe, cut, engrave and drill. Nanosecond fiber lasers with good beam quality (low M<sup>2</sup>) are excellent for marking and microprocessing/micromachining applications. The introduction several years ago by IPG Photonics of low average power nanosecond fiber lasers for general purpose marking has led to a sea-change in the laser industry with almost every supplier of laser marking systems switching over to this type of fiber laser. A range of lasers from 10 up to 500 W average power and with both fixed (from 1.5 ns to 500 ns) and variable programmable pulse durations are now available. Higher power pulsed fiber lasers with higher M<sup>2</sup> value

are optimized for large surface area treatment applications. The range of average powers is from 100 W to 5 kW, the pulse energy is up to 100 mJ, and the beam spot size is optimized for high throughput.



Source: IPG Photonics (India) Pvt Ltd

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**NEW LAUNCH**

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www.toyoda.jtekt.co.jp/e/  
Hall 5, Booth B108

# CNC Cylindrical Grinder GL4P-32E

Made in India by Micromatic Grinding Technologies (MGT), this machine has been made in a technical collaboration with JTEKT Corporation-Japan.



Source: Toyoda Micromatic Machinery India Pvt Ltd

The machine comes equipped with JTEKT's original 'TOYODA STAT BEARING' which provides no metal-to-metal contact and has a high vibration damping capacity. High accuracy grinding and longevity of the machine is achieved using JTEKT's proven spindle technology. The key USP of the machine is that it includes Hydrostatic Wheel Spindle for machine longevity, rigidity and precision results. The machine has application in automotive transmission and all cylindrical shafts (up to 320 mm long). A high rigidity bed to support moving bodies has been made

to provide improved natural frequency. Herein, accuracy is stabilized by improving the natural frequency and joint oscillation with the vibrating source of the machine is prevented. The high accuracy feed mechanism has been achieved by making the ballscrew thicker and more rigid and therefore reduction of error in the feed direction. Additionally, a floating plate has been adopted on the wheel head and table to absorb ballscrew runout. So, by absorbing runout while maintaining rigidity of direction, improved straightness and surface integrity is achieved.

**END USER FEATURE**

## Fluid Power

MotulTech's solutions helped France-based Leroy Somer achieve its goals.

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



Source: MotulTech

France-based Leroy Somer (Emerson Group) is a manufacturer of engines, gearboxes and brakes. The company needed a metal working fluid for its machining processes that included turning, drilling and tapping. The types of machined metals comprised of Steel CNDE, Cast Iron 250/400 and Aluminium AU46 and AS7G6. The number of machines was 50/70 CN (HELLER line 4/5/6/7). The company was on a lookout for a solution with a longer shelf life that could reduce foaming issues and production cost.

**Solution**

MotulTech's solutions SAFKOOL 6220 and SAFKOOL 6420 proved to be the right choice for Leroy Somer.

**SAFKOOL 6220**

SAFKOOL 6220 is a high-performance, semi-synthetic soluble concentrate particularly suited for machining processes with a very high cooling power. It is mainly used in machining processes including turning, milling, threading, grinding, gearing, boring, drilling and sawing. The solution is recommended for metalworking on ferrous and non-ferrous metals and standard aluminium alloys. The solution is free of chlorine additives, nitrite, glycol ether, DEA, sulphur additives, bactericides, formaldehyde and formaldehyde releasers.

**SAFKOOL 6420**

SAFKOOL 6420 is a soluble concentrate specially designed for machining processes requiring a minimum water foam of TH 5 - 80° F. It is mainly used in machining

**The Challenge**

Leroy Somer needed a metal working fluid with a longer shelf life that could reduce costs and foaming problems

**The Solution**

MotulTech's solutions SAFKOOL 6220 and SAFKOOL 6420 that show good performance and stability when machining cast iron

processes including turning, milling, cutting, tapping, drilling and boring. The solution is recommended for machining ferrous metals, non-ferrous metals, nickel alloys, aeronautic aluminium and titanium alloys. The product is free of formaldehyde and formaldehyde releasers. It is also free from chlorine additives, nitrite, DEA, butyldiglycol, and sulphur additives. Both the products have pleasant odor, are operator-friendly, show good dermatological behavior and are easy to use. They also ensure cleanliness of the work environment.

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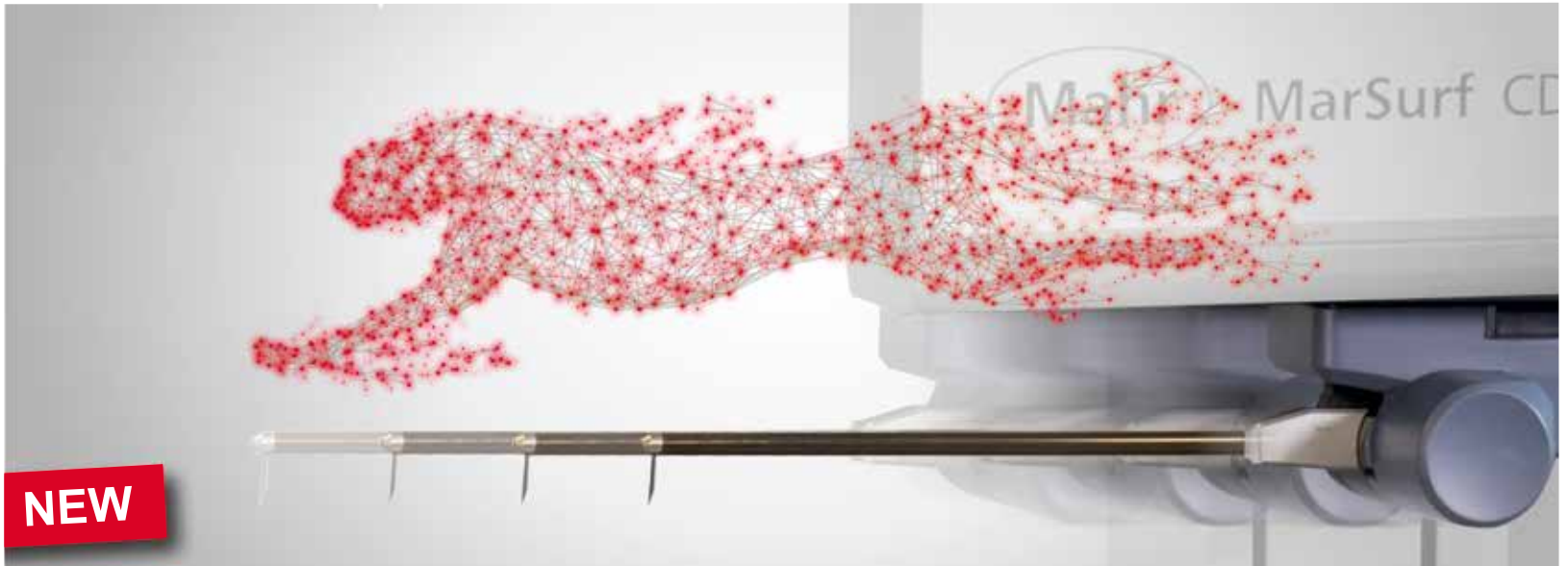
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# Reference camshaft: Testing of shaft measuring machine



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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.



Camshaft measuring station  
MarShaft SCOPE 600 plus 3D



Increases the production quality of  
camshafts: the reference camshaft

Every year over 100 million camshafts are produced worldwide. They are regularly checked for quality during production by means of shaft measuring machines. Yet even the measuring devices themselves must be checked. This is why Mahr offers a reference camshaft, designed to check the measuring accuracy of measuring machines within minutes.

### Value for the user:

The production quality of camshafts is secured and rejected parts prevented.

### The reference camshaft has:

- all common cam forms used worldwide
- C-references
- concave and convex cams
- inclined, double and triple pump cams
- excenter
- bearing with g6 quality
- 2-flat
- axial and radial bores
- feather key groove, trigger wheel and locating bearing

### Fast and easy testing

The inspection of a camshaft measuring machine is quick and easy:

the operator merely clamps the shaft in place and runs the measuring program on the corresponding feature. The determined values are then compared with the values of the calibration certificate.

### For all makes of camshaft measuring machines

The reference camshaft is used in camshaft measuring machines of all makes.

As a result, every manufacturer of camshafts can easily and quickly check his measurement technology - not only in the production of camshafts for passenger cars but also for dialysis or high-pressure pumps.

### Optional: Calibration by DAkkS reference laboratory

Each reference camshaft can optionally be calibrated by a DAkkS reference laboratory for length measurement technology.

## Mahr Metrology India Private Limited

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