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 Hall & Stall: 1B/B-108

Celebrating 51 Years of Excellence

With its matchless proficiency in providing complete fixture solutions across the globe, RV Forms and Gears has gone from strength to strength over the last five decades. The company now is ruling the fixture space with its smart fixtures enabled with AI/ML modules.



Source: Magic Wand Media

This year marks the 51st year of one of Asia's oldest and best-known fixture building company Forms and Gears. A pioneer on the fixture-building front, Forms and Gears has been at the helm of a number of land-

mark projects in India and abroad for over five decades. For over 50 years, the name Forms and Gears has been associated with precision and quality, and in the automotive and machine tool space the company needs no intro-

duction. "Till 2018, we didn't have a sales or marketing department. As the saying goes 'we let our fixtures do the talking' and all our business was generated by word

To be continued on 4 ▶



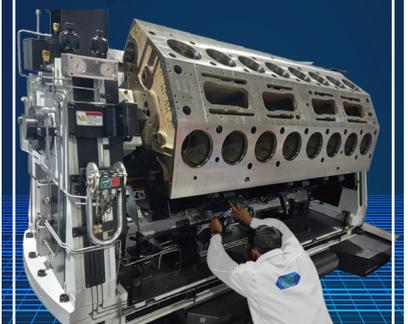
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Source: Forms & Gears



»Although building high-precision, large-sized, and complex fixtures is our core competency, we also offer a whole range of mid- and smaller-sized fixtures to all sectors of the industry. In fact, the majority of our business is now generated from high-precision, mid-, and small-sized fixtures and special equipment for the electronics and semiconductor equipment industries.«

Annu Varghese
Director, Special Projects
RV Forms and Gears

of mouth and through the performance of our fixtures,” shares Annu Varghese, Director, Special Projects, RV Forms and Gears.

Joining forces

The company was started by Annu’s father RT Varghese, an engineer from IIT Kharagpur. “After his passing away in 2001, my brother Reji Varghese and I have been running the company. I completed my Masters in Mechanical Engineering from the University of Texas in Austin and joined the company in 1995. So this is my 28th year at Forms and Gears. In 2018, Forms and Gears did a joint venture with ASM Technologies, a publicly listed Engineering Services company based in Bangalore and it is now part of the ASM Group.



Source: Magic Wand Media

“With ASM’s global reach, we now export fixtures to 10 countries across the globe,” she reveals. ASM has 1,400 engineers in seven countries across the globe. Its expertise in Product Engineering, Software, Hardware, Industry 4.0, Artificial Intelligence, Machine Learning, etc., has helped Forms and Gears leverage these technologies for fixtures and special equipment. “We see AI/ML and Industry 4.0 as a major driver of our growth in the future,” adds Varghese.

SmartFix on the showcase

Varghese is excited to be back at IMTEX 2023 & Tooltech 2023 after a long gap. “It is great interacting with clients face to face again and meeting up with industry colleagues and friends. We are displaying a breakthrough technology product—our award-winning Industry 4.0 product SmartFix—which enables fixtures and special equipment to be enabled with intelligence. We expect this to be a big draw,” she notes. The company is showcasing SmartFix and the latest AI/ML modules it has developed for this. SmartFix won the CII Innovation Award in 2020 and has been receiving a good response to the product from companies all over the world.

More than complex, large-sized, high-precision fixtures

Varghese says that over the years there is a misconception that Forms and Gears only specializes in building high-precision, large-sized, and complex fixtures. “Though this is our core competency and a lot of clients come to us when the requirement is complex, we also offer a whole range of mid- and smaller-sized fixtures to all sectors of the industry. In fact, the majority of our business is now generated from high-precision, mid-, and small-sized fixtures and special equipment for the electronics and semiconductor equipment industries,” she shares.

At present, RV Forms and Gears supplies fixtures to 10 countries across the globe. It is now a member of AMT and is exploring the possibility of starting operations in Mexico and/or the USA in 2023/24.

Plans for the future

The company has now put up three plants in Guindy, Chennai over the last two years and has invested in a whole range of state-of-the-art CNC machines, allied equipment, CMMs, inspection equipment, etc., for the three units. “We are now putting up

a larger fourth plant in the Oragadam - Sriperumbudur area where we plan to invest in 100 machining centers along with other machines. These are mainly for the semiconductor and electronics sectors where we now have a significant presence. Rabindra Srikantan, Managing Director, ASM, and my brother Reji Varghese are also on the Capital Goods Committee of the Indian Cellular and Electronics Association which is headed by Josh Foulger, Foxconn India MD,” she adds.

India scene is positive

India seems to be bucking the global recessionary trend. Global economies are interconnected, and

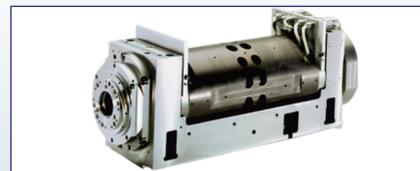
a global slowdown will catch up with India sooner than later. India is at a 6 percent plus growth base and has its inherent strengths. “Even if there were a significant global recession, it would have an impact on India, but it would be more of a temporary bump. Over the long term, manufacturing in India is poised for significant growth. Geopolitical tensions between the US and China will see a lot of manufacturers go out from China and into countries like India and Vietnam. A combination of global economic shifts and strong local policy support like the PLI program has put India on a strong wicket,” she concludes on an optimistic note.

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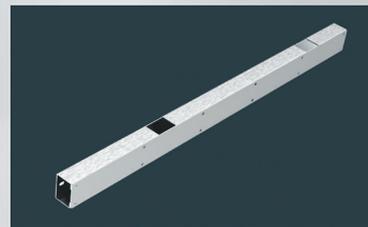
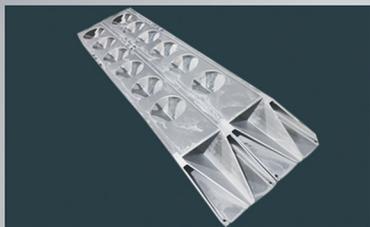
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STALL : A113 - Hall 1A

DATE : 19th - 25th Jan - 2023

TIME : 10.00 am - 6.00 pm



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Acing it all!

TK Ramesh, Managing Director, Micromatic Machine Tools, reveals the Ace Micromatic Group's focus at IMTEX and its export plans...

Ace Micromatic Group
www.acemicromatic.net
Hall & Stall: Hall 5,
Ace Micromatic Group Pavillion



Source: Magic Wand Media

shift in the adoption of Additive Manufacturing in India.

AMG-mIoT: It is a technology platform that can be leveraged by customers, machine manufacturers, and service providers to drive digital transformation in manufacturing, enabling them to deliver increased productivity and profits.

Wire Arc Hyb-AM Machine Series: The 850V Hyb-AM is a cutting-edge addition to the AMS product line. It boasts a revolutionary wire Arc type metal deposition system that greatly enhances the speed of the additive process and enables the production of highly precise parts in one setup.

TK Ramesh, Managing Director, Micromatic Machine Tools, attests to the contagious excitement at IMTEX 2023. He points to another reason to celebrate. "Micromatic Grinding starts its 50th year. What better place to celebrate this milestone than at IMTEX," he adds.

Focus on cost-effectiveness

The SME sector, according to Ramesh, is the company's 'bread and butter'. About 60 percent of its business comes from there. "That's the sector that depends on us and we depend on it. Through IMTEX, we are trying to offer cost-effective, next level of technology to the MSME sector and of course to the corporate sector."

The following products from the Ace Micromatic Group companies have been launched at IMTEX 2023 that take innovation to the next level.

Ace Designers' AMT-i 1500S: The machine is capable of advanced machining capabilities including B-axis Turning, Flash Tool Operation, Skiving, Hobbing, and many more.

amace Solutions' STLR 400: The feature-loaded, productivity-oriented but 'light-on-the-pocket' approach by the amace STLR 400 is expected to bring in a paradigm

Exports potential

"Currently, Russia seems to be a hotspot. A lot of players are looking for opportunities in Russia. In the last few days, we have had visitors from Russia, Korea, Turkey, UK, and Spain. We are looking at Mexico in a big way. We have plans to set up an office in the Middle East, Dubai, to cater to that market. The focus is on becoming an Indian global multinational. We hope that at least 15 percent of our total turnover by 2030 comes from exports, which should be over ₹500 crore," shares Ramesh.

The Group's global exports are still around 9-10 percent. He adds, "We have set our sights on a fairly ambitious target from a global perspective. Hence, we have set up Ace Micromatic International which is a separate marketing company. It is going to form that critical link between dealers, customers, and the manufacturers."

SD



Source: Magic Wand Media

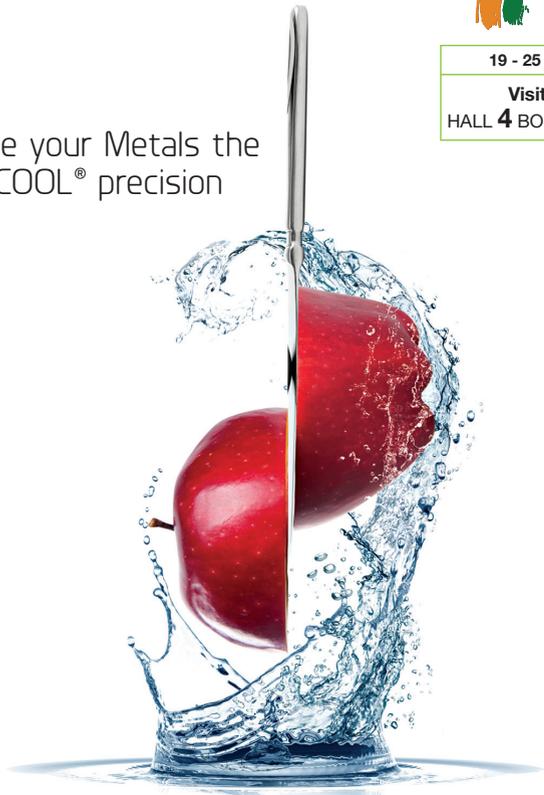
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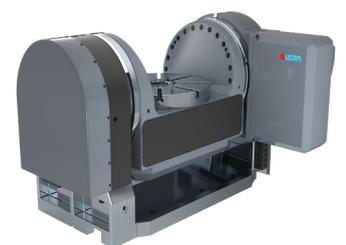
-  Direct drive technology for rotary table
-  Dual Lead Worm Gear Mechanism
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Rotary Table
Inside Machine Bed



Cantilever Table



CNC Deep Titring Table

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CUTTING TOOLS

Offering Machines for Precision Milling

Launching a new range of Thread Mills for excellent thread form, finish, and dimensional accuracy is VP Tools India Pvt Ltd's special attraction at its booth this year.



Source: Magic Wand Media

VP Tools has utilized these past years for product evolution and demonstration at the customer end with best-in-class cutting data and achieved significant results on super alloys. "IMTEX is the largest exhibition in machine tool and manufacturing technology, which

enables Indian manufacturers to showcase their innovation, reinvention, and relevance for their customers," says Mahesh Zore, Technical Director, VP Tools India Pvt Ltd.

Thriving during the lull

"We are very excited to exhibit our new products after a gap of four

years. We are geared up to display our products and capabilities in the area of Solid Round Tools and Indexable Tools," he says. The company is showcasing industry specialized round tools solutions as well as successful case studies that will attract customers with similar application areas.

"We are launching our all-new range of Thread Mills, which is the special attraction of the booth," Zore shares. "We are very pleased to showcase the range of cutting tools we offer in our portfolio, which includes tools like drilling solutions for all material grades, industry-specific tools like endmills for the Aerospace and Oil & Gas industries, and reaming solutions for the



Source: Magic Wand Media

» This year, we are showcasing industry-specific round tools solutions along with successful case studies that will attract customers with similar application areas. We are launching our all-new range of Thread Mills, which will be the special attraction at the booth.«

Mahesh Zore
Technical Director
VP Tools India Pvt Ltd

VP Tools India Pvt Ltd
www.vptools.in
Hall & Stall: 4/B-146

Automotive industry. Special tools like Profile cutters, T Slot cutters, and Port cutters are for General Engineering." **SD**

PRECISION MACHINES

JD-1 for High-Speed Machining

MW has launched a precision machine JD-1. It has a direct drive spindle BBT 30, with a speed of up to 24,000 rpm. The machine has a rigid structure with a wider working area. It is ergonomically designed for easy loading and unloading operations. The machine comes with a faster tool

change time of 1 sec. It is designed for high-speed machining for materials such as aluminum and special aluminum alloys. The machine is suited for components for electronic segments such as mobile cases, laptops, and tablets. The company has established a pan-India network of sales and servi-

ces that cater to every industrial city in India. The Machine Tool division provides integrated solutions for various industrial needs in Automobile, Aerospace, Die & Mould, Defence, Pumps & Valves, Railways, Medical Equipment, Forging, and General Engineering industries. LMW also provides automation solutions such as simple Loaders, Gantry systems, and Robots that are tailored to meet customer requirements. **SD**



Source: Lakshmi Machine Works Ltd

Lakshmi Machine Works Ltd
www.lmwcnc.com
Hall & Stall: 5/B-107



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WINDING AND INSULATION ANALYZERS

LT400 from Marposs

Marposs India Pvt Ltd
www.marposs.com
Hall & Stall: 3A/B-101

The electric motor is experiencing an unprecedented global growth trend. This rapid deployment of electric vehicles on a large scale is placing higher expectations on component

reliability on manufacturers. These demands have implications for quality and process control requirements in the production line. The insulation system of electrical machines is a critical reliability

feature, as a failure of the insulation can lead to system failure. Standard electrical tests, required by regulations, are not sufficient to identify all types of failures because many faults produce only partial discharges, and these can only be identified by the partial discharge test method.

LT 400 is the solution

The LT400, a partial discharge winding analyzer for the R&D and quality control department, is a Marposs solution to identify all latent defects in the insulation system that could lead to failures.

A single unit capable of performing standard high voltage tests (AC/DC and Pulse) plus partial discharge measurements that allows to: select wires, plastic insulating materials, impregnation process; identify insulation weak points inside stators; and identify the beginning of permanent insulation degradation during life tests.

The LT400 partial discharge measurement system is based on capa-

capacitor coupling technology. Compared to the antenna-type solutions normally applied in this market, the capacitor coupling technique is more sophisticated and less sensitive to external noise and, therefore, more suitable for applications in the production area. Since it does not use an external sensor, the capacitor coupling approach requires equipment that can detect partial discharge simply by connecting the terminals of the product under test with the same cables used to perform standard tests. The result is a solution that is very easy to use (without any external sensors) and optimized for the production environment. The LT400 uses the same flexible test software (developed in-house) as the production machines. This means that the calibration of the test parameters, optimized during the development of the device in the laboratory, can be fully transferred to the production test machines.

SD



Source: Marposs India Pvt Ltd

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TOOLHOLDING SYSTEMS

REGO-FIX AG, Switzerland
www.rego-fix.com
Hall & Stall: 3A/C-110

Holding on Tight

Urs Birri, Area Sales Manager ASIA, REGO-FIX AG, Switzerland, is here at IMTEX 2023 to showcase the company's toolholding excellence.



Source: REGO-FIX AG, Switzerland

» We have also increased our product portfolio with different cleaning and measuring products. It is our goal to further improve our Swiss-made products and the customer experience with excellent toolholding possibilities that leave no compromises.«

Urs Birri
Area Sales Manager ASIA
REGO-FIX AG, Switzerland

Products on display at IMTEX 23

The company is showcasing its toolholding excellence with the best-of-class toolholders, measuring equipment, clamping units, cooling retrofit systems, and much more. "You can find a wide range of products in our booth from the powRgrip, micRun, ER and Multiline product portfolio," he informs.

PGU 9500 and PGC clamping units, the reCool Demo unit as well

as various toolholders and tool clamping systems, and interfaces are also being displayed.

"REGO-FIX is presenting a new technology powRgrip for the first time at an exhibition in India. However, it has been displayed at various Open House events. There are also a few new products that we have lately added to our range such as Spindle Taper Cleaner and 3D EdgeMaster as well as the MasterBars," reveals Birri. **SD**

REGO-FIX is continuously improving its product portfolio and has done a lot in the last four years to offer even more customer value to its existing product range. "We have also increased our product portfolio with different cleaning and measuring products to get even the

last micron out of your application. As the founder of the ER collet, it is our goal to further improve our Swiss-made products and the customer experience with excellent toolholding possibilities that leave no compromises," shares Urs Birri, Area Sales Manager ASIA, REGO-FIX AG, Switzerland.

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MACHINE TOOL PERIPHERALS & SUB-ASSEMBLIES

Driving Relentless Innovation

U-Tech Associates has come up with some smart innovations that it has been waiting to showcase. The company is also offering live demos of its variety of products.



Source: Magic Wand Media

Anant Deshpande, Executive Director, U-Tech Associates, has been waiting for the last two years for IMTEX 2023 & Tooltech 2023 and Digital Manufacturing 2023. "We have been eager to showcase some new products in the fields of chip handling and coolant filtration," he adds. U-Tech is displaying a total of eight products for different metal-cutting applications. "They start from a

small oil skimmer to a much more complicated dual conveyor," says Deshpande. "Additionally, we are displaying a Smart Coolant Tank that is Industry 4.0-ready for our visitors."

New variants and their scope

There are two products the company has launched at the show. The first one is a Smart Coolant Tank

that can digitally display a wide range of parameters, like pH, pressure, flow, coolant level, and temperature. This helps the user to identify if the system is healthy or if it has generated any alarms. The INVERSO series of chip conveyors, which is a uniquely built conveyor capable of handling all types of chips, even those floating in coolant, is the second product launch. This conveyor is low-maintenance and simple to use. The company has scheduled live demonstrations of a variety of its product categories. "We have invited people to come and have a look at the Smart Coolant Tank, which is on display. The coolant tank is specially designed for a Drill tap center and has almost all the elements needed for efficient filtration of coolant," he adds. "The coolant tank has a



Source: U-Tech Associates

» We have been eagerly waiting for the last two years to showcase some new products in the fields of chip handling and coolant filtration. The use of new technologies in the form of an Industry 4.0-ready Smart Coolant Tank is this year's highlight."

Anant Deshpande
Executive Director
U-Tech Associates

U-Tech Associates
www.u-techindia.com
Hall & Stall: 5/B-120

chip conveyor, bag filter, oil skimmer, line filter, and hydrocyclone to effectively take out the dust generated in the machine." **SD**

DEBURRING OF CROSS BORES

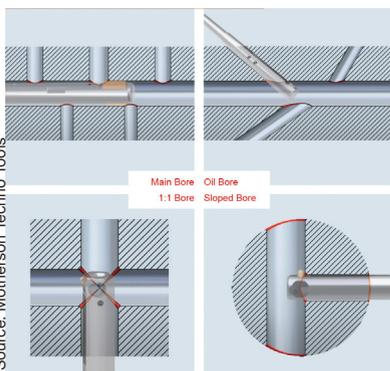
HEULE's X-Bores

With the X-Bores program, HEULE takes up the challenge to provide solutions for the automated deburring of intersecting bores. Existing technologies reach their limits soon. The deburring by means of a defined cutting edge in a chip-making process brings up major advantages. Modern components increasingly have more complex geometries and are made of new materials or material combinations. Furthermore, the demands

on the deburring quality, process capability, and efficiency that have to be met are rising continuously. HEULE as an experienced problem solver offers customer-optimized solutions based on four different tool systems.

The variety of combinations of intersecting bores is tremendous. Equally big are the challenges when it comes to deburring them. Answers with regard to feasibility, reliability, and efficiency have to be given. HEULE acquired the necessary knowledge for machining cross bore edges in the course of customer projects. Four different tool systems resulted from this development work. They serve as a basis technologies for solving individual customer demands. All these systems work with defined cutting edges assuring a high level of process capability. Due to the singularity of the problems, the most suitable basic technology will be chosen and tailor-cut and optimized to the customer application.

HEULE distinguishes four application categories of cross bores: Main Bores, 1:1-Bores, Oil bores as well as Sloped bores. **SD**



Source: Motherson Techno Tools

Motherson Techno Tools
(JV with Sumitomo Electric)
www.mothersontools.com
Hall & Stall: 4/B-143

DELEGATE SPEAK

Interesting Mix of Technologies



Source: Magic Wand Media

Pankaj Goel, IOFS, General Manager, Munitions India Ltd, Ministry of Defence (second from left) along with team members at IMTEX 2023 & Tooltech 2023 and Digital Manufacturing.

The show is highly comprehensive. We have visited a few companies such as Zoho, WiMate Technology Solutions, Carl Zeiss, Accurate, Jyoti CNC Automation, Ace Micromatic, and S&T Group, and witnessed cutting-edge CNC machines and how automation works including Industry 4.0, IIoT, and optical imaging. We have invited the firms to come to our factory near Ooty so they can understand our requirements and give us an appropriate solution. That way the visit has been highly productive. **SD**

CASE STUDY

Optimizing the Process



» The high performance of Blasocut 2000 Universal made it possible to improve surface finish and achieve process security. There was also a remarkable reduction of up to 95 percent in rejections. The surface finish achieved was superior across all the components. «

Pavankumar Patodi
Vice President -
Operations 4W BU
ADVIK Hi-Tech Pvt Ltd (AHPL)

ADVIK Hi-Tech Pvt Ltd (AHPL) is one of India's leading automotive component manufacturers on a global scale. It is serving the eclectic needs of a number of domestic and overseas customers across four continents in the two-wheeler, four-wheeler, stationary

engine, transmission system, and EV braking segments. The ADVIK plant in Chakan experienced issues of size variation and poor surface finish, which was leading to the rejection of machined components. Additionally, there was a foul smell of coolant in the factory. So, overall, there was

an urgent need to work on process security. Blaser experts visited the ADVIK facility and discussed the added value through the Liquid Tool approach. After a detailed on-site analysis by the Blaser experts, they found a good chance to improve the surface finish and process security.

One of the safest formulations

Water-miscible Blasocut emulsions remain biologically stable naturally without the need to add any bactericides – a well-proven concept introduced in the early 70s. The Blasocut Bio-Concept promotes a naturally robust microbiological equilibrium that ensures long emulsion life. Because this primary bacteria commonly found in drinking water leave the emulsion properties unchanged, and, therefore function as a natural stabilizer. Blasocut is free of formaldehyde and boric acid and has no tank-side additives or bactericides. It has a longer emulsion, thanks to

natural stabilization. It shows excellent human and environmental compatibility and respects the latest EU regulations. It has been proven for over 40 years and is being continuously improved.

Favorable results at ADVIK

The results were exciting. The high performance of Blasocut 2000 Universal made it possible to improve surface finish and achieve process security. There was also a remarkable reduction of up to 95 percent in rejections. The surface finish achieved was superior across all the components. The challenge of foul smell was also eliminated, providing an improved work environment. The implementation of a robust coolant monitoring system brought smiles on the faces of the team at ADVIK.

With this positive experience from Blaser Swissslube, the ADVIK team is highly delighted, and this was another milestone in the journey of value-added association. **SD**

Company Name: ADVIK Hi-Tech Pvt Ltd (AHPL)

Award Category: Process Optimization

Industry: Automotive supplier

Production: Automotive components

Application: Machining

Material: Aluminum

Objective: Process optimization

The ADVIK plant in Chakan experienced issues of size variation and poor surface finish, which was leading to the rejection of machined components. Additionally, there was a foul smell of coolant in the factory.

Solution: Blasocut 2000 Universal

With Blasocut 2000 Universal, there was also a remarkable reduction of up to 95 percent in rejections. The surface finish achieved was superior across all the components. The challenge of foul smell was also eliminated, providing an improved work environment.



Source: Blaser Swissslube Solutions Pvt Ltd

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METROLOGY, CAD & REVERSE ENGINEERING

The Future of Everything is Automation

APM Technologies 3D Pvt Ltd aims to bring the latest technologies to the Indian industry in the field of 3D scanning services, reverse engineering services, rapid prototyping services, and measuring and product development.



Source: APM Technologies 3D Pvt Ltd



Source: Magic Wand Media

“We are elated that IMTEX 2023 & Tooltech 2023 and Digital Manufacturing 2023 is finally happening. The preparations are great, and this time we are focusing on automation in scanning by giving a live demo of ScanBox, which measures four times faster,” says Anil

Gupta, Managing Director, APM Technologies 3D Pvt Ltd. “We have also taken some special initiatives to attract visitors to our booth. Our team has interacted with important industry leaders in person and invited them for a live demo of ScanBox,” he adds.

Adoption of emerging technologies

The company is showcasing ATOS ScanBox which is an all-in-one solution for automated inspection and digitization of complex parts. It measures 4X faster, the measuring procedures are automated, and the reproducibility of 3D measuring data for identical parts is ensured. “We have scheduled a live demonstration of the product on different applications, which takes place two times in a day until January 24,” he informs. In this edition of IMTEX 2023, the company is focusing on automation in scanning, augmented reality, and 3D printing. “We are displaying new products in each of these categories, offering never-before-seen solutions for difficult industry problems in quality,” Gupta shares. “We believe that industries need this solution to improve productivity, enhance quality, and reduce cost.” Along with the live demonstration of the intelligent and self-programmable ATOS ScanBox for inspec-

» We are elated that IMTEX 2023 & Tooltech 2023 and Digital Manufacturing 2023 is finally happening. The preparations are great, and this time we are focusing on automation in scanning by giving a live demo of ScanBox, which measures four times faster.«

Anil Gupta
Managing Director
APM Technologies 3D Pvt Ltd

APM Technologies 3D Pvt Ltd
www.apmtech.in
Hall & Stall: 2B/A-111

tion and quality control, the company is also displaying SUPAR, which is its augmented reality solution for visual inspection. “In addition, we have conventional scanning systems from CARL ZEISS GOM METROLOGY,” he further adds. “We are offering a live demonstration of the product on various applications for sheet metal, plastics, and castings.” **SD**

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DELEGATE SPEAK

“A Display of Highly Innovative Products”

I am a regular visitor to IMTEX and, as always, IMTMA has done a commendable job in organizing the show. It is happening after four years and the enthusiasm of the participants and the exhibitors is apparent. We have visited quite a few booths and explored the latest in technologies and products of different brands. The Digital Manufacturing section has some highly advanced and innovative products on Industry 4.0. It's interesting to witness such a wide variety of technological advancements on one platform. We visited several companies including the measurement and related services company Accurate. We discovered that Mazak is coming up with a new plant in India, which is in alignment with the 'Make in India' initiative you can say. Sphoorti Machine Tools has some extremely interesting products, not only for Indian manufacturers but for global too. It is promising to see that Indian companies are also catering to the requirements of global players. ASM Technologies Ltd and Rajamane Industries Pvt Ltd also have come up with some interesting products. It's been a satisfying experience at IMTEX 2023.



Source: Magic Wand Media

L-R: Jaydeep Sagare, Director - Purchasing, India, Volvo Group Purchasing, Volvo GE India Pvt Ltd, and Senthilkumar A, Head - Supplier Development India, Purchasing, Volvo CE India Pvt Ltd.



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INDUSTRY-ACADEMIA

Students Showcase Innovative Ideas

The i2 Academia Pavilion at IMTEX 2023 & Tooltech 2023 and Digital Manufacturing 2023 is a platform for budding engineers to showcase their innovations and understand the requirements of the industry.



Source: Magic Wand Media

This IMTMA initiative allows industry professionals in technology, human resources, design, production, and others to interact with 22 renowned academic/R&D institutions' metalworking capabilities.

Some of the participating institutions include Amrita Viswa Vidyapeetham (Kollam) - Cost Effective Universal Form Tester; Indian Institute of Technology Kanpur (Kanpur) - Adaptive

gain tuning for active damping of machine tool vibrations; KLS Gogte Institute of Technology (Belagavi) - Application of minimum quantity lubrication cooling technique for Aerospace material machining in an industry; and SSN College of Engineering (Chennai) - Ballistic performance of Aluminium 6061-T6 targets with 'Bio-inspired pattern' and internal grooves.

Bright minds inspire

Harshit Gawda TN, Reva University (Bangalore), explains, "We have developed a manufacturing technique with aluminum alloy (Al 7075) with a mixture of beryl (6%) and graphene (2%) to increase the stiffness and lifespan of the metal. This can be used in the automotive industry for manufacturing outer body parts."

V Adesh, Sona College of Technology (Salem), shares, "Our project is Developing Superhydrophobic Surface (coating kit) using IoT-based systems, by using an acid erosion method with an ultrasonic cleaner, making it a water-repellent surface. This will be used in Aerospace, Automobiles, and other industries. We have received a grant of ₹15 lakh from the MSME Department, Gol through this project to set up a small business." Trilochan Nanda, Ph.D. scholar, IIT Madras, reveals, "We are showcasing New Generation Multi-Point/Single Layer Superabrasive tools. We have developed our own tools through modifying commercially available (diamond) tools; they will directly go for stock removal processes up to 5 to 10 mm."



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- Hands-on Training on Industrial and Machine Automation for Digital Manufacturing (Duration 6 Weeks)
- Product Optimization through Finite Element Methods (FEM) (Duration 6 Weeks)
- Master class in Implementing Industry 4.0 in Manufacturing – A Hands-on approach (Duration 4 Weeks)

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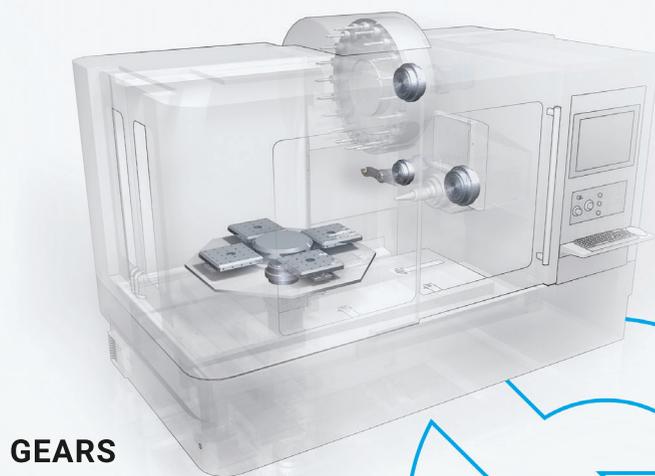
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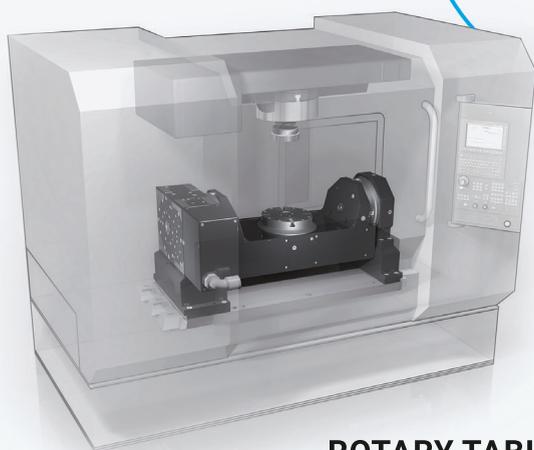
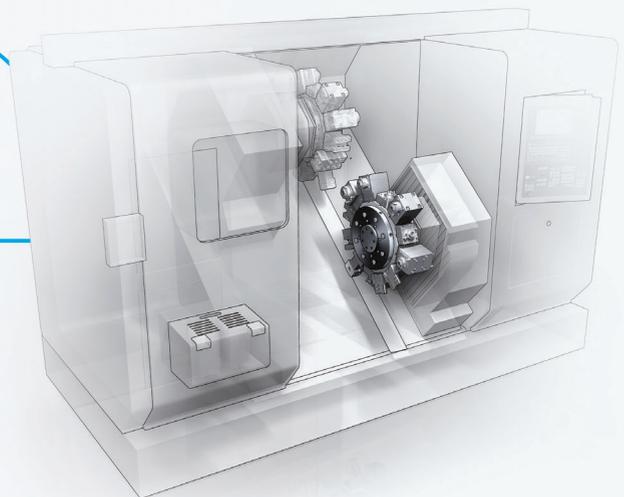
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INTERNATIONAL ASSOCIATION - VDW

Together We Grow

Dr Wilfried Schäfer, Executive Director, VDW (German Machine Tool Builders' Association), is highly pleased that IMTEX 2023 & Tooltech 2023 is taking place again for the German companies to showcase their innovative offerings and feels that the modern BIEC offers excellent conditions for it.

VDW (German Machine Tool Builders' Association)
www.vdw.de
Hall & Stall: 2B/B-109A



Dr Wilfried Schäfer, Executive Director, VDW (German Machine Tool Builders' Association)

India has long been an important market for the German Machine Tool industry. Currently, we rank 14th among its most important sales markets. "IMTEX 2023 & Tooltech 2023, thus, is highly welcome as a business platform where our companies can show their innovation and competence for the Indian market and meet again existing and new customers in person," notes

Dr Wilfried Schäfer, Executive Director, VDW (German Machine Tool Builders' Association).

Strengthening ties

The quality of the Indian Machine Tool industry has improved significantly in recent years, believes Dr Schäfer. "Nevertheless, machines from Germany are highly valued in India and are sold to numerous different

branches, above all the Automotive industry. Our companies around the world have an extraordinary amount of experience with this industry, from which Indian customers can also benefit from joint projects. The range of products offered by German manufacturers is diverse. It ranges from simple machines to very complex special technological solutions. Consulting, financing, and service are also an outstanding strength of German suppliers," he adds.

As in previous years, the Indo-German Chamber of Commerce is organizing a joint German participation at IMTEX 2023 & Tooltech 2023 on the initiative of the VDW. Traditionally, it also integrates state participation from Baden-Württemberg and Bavaria. "As part of the joint participation, 73 German companies are present. In addition, there are other German companies that are represented with their own booths through their Indian subsidiaries. Certainly, some companies are also looking for suitable representatives for their products," he shares.

Give and take

According to the VDW data, for many years, Germany has been the third most important supplier of machine tools for India, behind China and Japan. German exports amounted to over €126 million in 2021. This marks a drop of 10 percent compared with the previous year. In the first nine months of 2022, however, exports increased by an impressive 60 percent to a good €134 million. A wide range of machines was supplied: Machining centers, grinding machines, honing machines, gear-cutting machines, eroding machines, laser machines, lathes, presses, milling machines, etc.

Orders from India also went well. An increase of more than 50 percent was recorded in the first half of the year. Imports from India to Germany rose by 42 percent to €18.3 million in 2021, and by a further 50 percent to just under 19 million euros in 2022. The vast majority of these imports are lathes. **SD**

WORK HOLDING TOOLS

"Be Indian, Buy Indian Products"

Vikrant Saigal, Managing Director, Airtech Pvt Ltd, cannot stress enough the importance of buying indigenous products.



country's leading chuck and work holding tools manufacturers. "We showcase our new products here since we get most of our customers in person under one roof. Not only our Indian customers but also many foreign customers visit the show. Apart from being an ideal place to showcase our products, it is also a learning ground

about the latest processes and tools," he notes.

Indian goods must be tried

Saigal shares that the number of quality visitors that the company is receiving at IMTEX 2023 is increasing by the day. "The Indian market, I believe, will see tremendous growth in the next 15 to 20 years." He calls upon the Indian buyers to give indigenous technologies a chance first. "If we cannot satisfy their requirements, then they can think of buying from foreign companies. We are propagating the campaign, 'Be Indian, Buy Indian Products'," he insists. **SD**



» Indian buyers must give indigenous technologies a chance first. If we cannot satisfy their requirements, then they can think of buying from foreign companies.«

Vikrant Saigal
Managing Director
Airtech Pvt Ltd

Airtech Pvt Ltd has always been participating in IMTEX. The company is known to be one of the

for us. It is where we get exposure to the latest trends, processes, and tools in the field and what other players are up to. This way we learn

Airtech Pvt Ltd
www.airtechindia.com
Hall & Stall: 4/B-137

Source: VDW

Source: Magic Wand Media

Source: Magic Wand Media

INDUSTRY - ACADEMIA

Making the Right Connections

IMTMA has come out with a unique forum for students and manufacturing companies to connect with each other.



Source: Magic Wand Media

One of the extra attractions at IMTEX 23 is 'CONNECT', where engineering students from mechanical and electrical streams, among others, can meet, network, and explore prospects in

various machine tool and manufacturing industries. Recruiting industries present their company profile, technology, and current job requirements, and begin the interview process. The sessions enable aspiring engineers to become

acquainted with the organizations, products manufactured, technology developed, job roles, and career opportunities.

Yesterday, on January 22, each recruiting company was given its own booth at no cost. The forum featured around 40 organizations and over 300 roles in Design, Production, Quality, Sales, and Marketing. Companies from major cities like Bengaluru, Chennai, Mumbai, Pune, and Hyderabad were present. Thirty-eight companies with multiple vacancies were present. There were 185 students registered, including 132 from Mechanical, 14 from Electrical, 1 from Mechatronics, and 38 from Electronics.

Insiders' take

PJ Mohanram, Principal Advisor, IMTMA, explained, "Through this platform, the young engineers will be able to assess the work envi-

ronment. The companies will be able to choose the type of people they are looking for. It is a win-win situation for both."

"Current contribution of the manufacturing sector to our GDP is 16 to 17 percent but as per our government's target, it has to go up to 25 percent of GDP. All these young brains have to be instrumental in achieving that," said Jibak Dasgupta, Director General, IMTMA.

Rajendra S Rajamane, Vice President, IMTMA, noted, "In India, Defence and Aerospace industries are flourishing and offering new opportunities. Mobile phones are also being manufactured here now. All these are creating scope for all kinds of engineers."

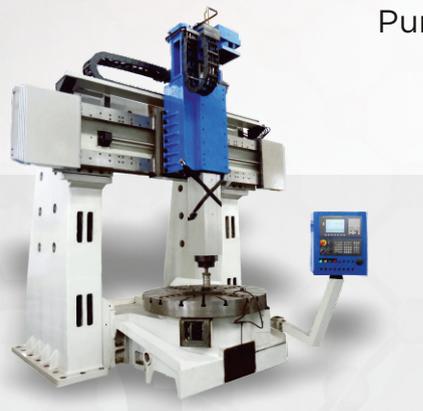
"The manufacturing industry is no longer a dirty workshop. You can see in our Tech Centre how the new machines are built and how they deliver. Today at CONNECT, you will get the opportunity to interact and understand the activities and work environment of so many companies. I hope by evening all of you will come out with a nice job. All the best," said MG Srinivas, Executive Director, Association Initiatives, IMTMA. **SD**

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noun

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