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DRIVING INNOVATION IN GEARED MOTORS

R. Haridoss, Senior Vice President – Business Development, Radicon Power Build, highlights the company's cutting-edge products and commitment to customer satisfaction

Radicon Power Build showcased its innovative solutions tailored for the construction and mining industries at bauma CONEXPO India 2024. With over five decades of manufacturing excellence, the company unveiled three new products, emphasizing their unique capabilities and commitment to quality.

"PowerBuild has been manufacturing Geared Motors and gearboxes in India for over 50 years," said R. Haridoss, Senior Vice President – Business Development. "bauma CONEXPO is a significant platform for us to meet our customers and introduce them to our new products. This year, we've launched three innovations: Planetary Geared Motors and Gearboxes, Advanced Variable Frequency Drives, and Hoist Geared Motors for crane applications."

The planetary Geared Motors and gearboxes offer torque ranges from 800 N-m to 275,000 N-m, suitable for diverse construction applications. "Our variable frequency drives support capacities up to 400 kW, with centralized and decentralized configurations up to 11 kW," Haridoss explained. "Additionally, our new Hoist Geared Motors are designed specifically for crane applications, addressing a crucial market need."

Radicon Power Build prides itself on being a 100% Indian-owned company with complete in-house manufacturing capabilities. "From bar stock to finished products, every component is manufactured in our facility," Haridoss noted. "This ensures controlled quality and allows us to meet customer expectations efficiently. Unlike competitors, we don't rely on subcontracting, which gives us a significant edge."

The company's global footprint has expanded significantly since acquiring the Radicon brand in 2010. "Our components are manufactured in India and Thailand and assembled at centers worldwide," Haridoss stated. "This global reach reinforces our commitment to quality and performance."

Radicon Power Build's customer-first philosophy is evident in its service model. "We address customer complaints within 24 hours," Haridoss said. "With over 15 branch offices, six assembly centers, and a robust service network across India, we ensure customers receive timely support and solutions."

Reflecting on the company's USPs, Haridoss highlighted two key aspects: "First, our Geared Motors are compatible with IEC frame motors, providing flexibility for customers. Second, our R&D, manufacturing, and design capabilities are entirely based in India, enabling us to deliver tailored solutions. These USPs set us apart in the market."

Addressing potential customers, Haridoss emphasized Radicon Power Build's commitment to problem-solving and growth. "We're available 24/7 to address customer needs. As an Indian company, we're dedicated to delivering high-quality products and expanding our customer base," he said. "Over the past five years, we've seen significant growth, with many customers recognizing the value of our Geared Motors."

Radicon Power Build's participation at bauma CONEXPO India 2024 underscores its role as a leader in Geared Motor technology. With a focus on innovation, quality, and customer satisfaction, the company is shaping the future of the construction and mining industries.

Watch the video here: https://bit.ly/powerbuild-mojo

R. Haridoss

3D printing and AI: Transforming industries

Paramjit Singh, General Manager – South India, DesignTech Systems, shares insights on the company's innovative technologies and goals at IMTEX 2025

"Whether in education, healthcare, or aerospace, we see immense potential for these technologies to transform industries and enhance lives," said Paramjit Singh, General Manager – South India, DesignTech Systems. He outlined DesignTech's primary focus for 2025: advancing innovation through 3D printing and AI-driven solutions.

Showcasing innovation

IMTEX 2025, South and South-East Asia's premier machine tool and manufacturing technology exhibition, served as the perfect platform for DesignTech to present its latest breakthroughs. As a key partner of global giants like Stratasys and Altair, the company continues to drive innovation in automotive, aerospace, and healthcare industries with its state-of-the-art solutions.

Revolutionizing manufacturing

A major highlight of DesignTech's booth was its Stratasys Industrial 3D Printers, which are redefining prototyping and product lifecycle management.

"The Stratasys 3D printers we are showcasing at IMTEX can be used at nearly every stage of the product lifecycle," Paramjit explained. "From precise prototyping to aiding R&D, these printers empower industries to innovate with confidence."

With growing demand for high-quality prototyping tools in sectors like automotive, aerospace, and healthcare, 3D printing is becoming indispensable. "Manufacturers can now visualize future components in a virtual environment and bring them to life with unmatched precision. This capability is a game-changer for companies aiming to meet global quality and innovation standards," he added.

AI-powered inspection

Another standout innovation unveiled at IMTEX 2025 was VisionX, an AI-driven 360-degree vision inspection tool. Making its debut at the event, VisionX represents a significant leap toward achieving near-zero manufacturing defects.

"VisionX harnesses AI to detect even the smallest defects in manufacturing," said Paramjit. "This not only enhances product quality but also minimizes rejection rates, ensuring customers receive only the best."

Applicable across industries such as automotive, electronics, and aviation, VisionX enables manufacturers to identify and rectify quality issues at the production stage, saving both time and costs. "With VisionX, companies can uphold the highest quality standards in today's competitive market," he emphasized.

Advanced solutions

DesignTech also showcased its collaboration with Altair, featuring advanced Computational Intelligence (CI) solutions such as physics-based AI, data analytics, and digital twin technology. These cutting-edge tools are helping industries enhance their R&D capabilities.

"Altair's solutions enable manufacturers to simulate and analyze complex systems in a virtual environment," Paramjit noted. "This accelerates development while offering crucial insights for informed decision-making. Whether it's optimizing designs, improving performance, or reducing costs, these tools give manufacturers a competitive edge."

He also pointed out the growing demand for R&D tools in India, spurred by initiatives like 'Make in India.' "Industries are actively seeking advanced tools to strengthen their competitive position, and Altair's solutions provide exactly that," he concluded.

Watch the video here: https://bit.ly/DesignTech-mojo

Paramjit Singh

Accelerating infra development

MMRDA inks $12 bn MoU to transform Mumbai's infrastructure

Mumbai Metropolitan Region Development Authority (MMRDA) has signed a landmark Memorandum of Understanding (MoU) with global investment firm Brookfield to accelerate infrastructure development in the Mumbai Metropolitan Region (MMR). The agreement, valued at $12 billion (₹1,03,800 crore), was formalized at the World Economic Forum (WEF) in Davos, in the presence of Maharashtra Chief Minister Devendra Fadnavis, MMRDA Commissioner Dr. Sanjay Mukherjee, and Brookfield CEO Anuj Ranjan.

According to an official statement from MMRDA, this Foreign Direct Investment (FDI) will play a pivotal role in transforming MMR into a global economic powerhouse within the next five to seven years. The collaboration will drive key infrastructure projects, including Metro networks, roads, bridges, urban development, real estate ventures, Transit-Oriented Development (TOD), and sustainable blue and green initiatives.

(from left) MMRDA Commissioner Dr. Sanjay Mukherjee, Maharashtra CM Devendra Fadnavis, and Brookfield CEO Anuj Ranjan

A significant portion of the investment will be directed toward Mumbai 3.0 (KSC New Town, covering 323.24 sq. km.) and Special Planning Areas (SPAs) in MMR's northern (1,006.76 sq. km.) and southern (673.33 sq. km.) regions. The projects will encompass residential, commercial, and mixed-use developments, alongside logistics parks, data centers, and Global Capability Centres (GCCs). The initiative also aims to strengthen physical, digital, and social infrastructure across the region.

The MoU is expected to drive MMR's economic growth to $300 billion and generate three million new jobs by 2030. Under the leadership of Dr. Mukherjee, MMRDA has actively participated in the WEF Annual Summit at Davos for the second consecutive year, securing investment commitments totaling $40 billion. As MMRDA marks 50 years of planning and infrastructure development, it continues to attract strategic investments that will shape the future of the region.

Read the news here: https://bit.ly/mmrda-mojo

QVI unveils precision measurement solutions at IMTEX 2025

Empowering Indian manufacturing with high-accuracy measurement technology

Quality Vision International (QVI) India Private Limited, a subsidiary of QVI Inc. USA, made a strong impact at IMTEX 2025 with its latest range of precision measurement solutions. With a legacy spanning over 80 years, QVI has been at the forefront of non-contact video measuring technology, delivering industry-leading accuracy, reliability, and quality through its Optical Gaging Products (OGP) brand. At this year's event, the company unveiled its newest SmartScope M-Series and E-Series video measuring machines, along with the ShapeGrabber AI320 3D scanning system, reinforcing its commitment to supporting the Indian manufacturing industry.

Expanding the frontiers

"Our focus and objective at IMTEX 2025 was to showcase our latest range of video measuring machines and introduce a 3D scanning machine," said Shreyansh B. Hippargi, Managing Director, QVI India. "I believe these advancements are going to help Indian manufacturing industries, especially the electronics and aerospace sectors, by providing high accuracy, high speed, and a globally trusted brand at a very affordable price."

Highlighting the company's technological advancements, Hippargi introduced John Mangus, Operations Manager of OGP Asia, to provide a detailed walk-through of the new SmartScope M-Series video measuring machines.

Redefining video tech

The SmartScope M-Series represents a major leap in precision measurement technology, bringing high-performance optical measurement capabilities to a wider range of industries. John Mangus said, "This series includes four models—two benchtop models, the M7 and M20, and two floor models, the M45 and M50—offering measurement travel ranges from 250mm to 600mm."

One of the standout features of the M-Series is the Intelli-Centric M-Series optics, a fully telecentric optical system that minimizes distortion across the entire field of view. "This allows users to maximize the field of view without compromising accuracy, significantly increasing optical throughput," Mangus explained.

The M-Series also incorporates OGP's proprietary Zone 3 software, which offers multi-sensor compatibility, parallel processing, and enhanced visualization tools. "One of our most exciting innovations is our virtual zoom technology," he added. "Resolution is retained as you transition from low to high magnification, ensuring crystal-clear imaging at every level. This is proprietary technology that gives OGP a significant advantage in the market."

(From left) John Mangus, Shreyansh B. Hippargi, and David O'Connor

Mangus confirmed that the SmartScope M-Series would be officially available in the Indian market starting in March 2025, marking a milestone in precision measurement solutions tailored for Indian manufacturers.

High performance

Recognizing the need for cost-effective precision measurement solutions, OGP has also introduced the E-Series, a budget-friendly alternative to the M-Series that offers exceptional accuracy without compromising on essential features. "We understand that not every manufacturer requires a high-end system, but accuracy and reliability remain crucial," said Mangus. "That's why we developed the E-Series, which includes two models—the E7 and the E45—both of which deliver outstanding performance at an accessible price point."

Unlike other entry-level measurement systems, the E-Series is equipped with fully telecentric optics, a feature rarely found in budget-friendly machines. "This is a game-changer in the industry," he emphasized. "The optical capabilities of the E-Series rival those of far more expensive systems, making precision measurement more accessible than ever before."

Next-Gen 3D scanning

Beyond video measurement technology, QVI also showcased its latest innovation in 3D scanning technology, an essential tool for modern manufacturing. David O'Connor, Director of Sales & Marketing at ShapeGrabber Inc., introduced the ShapeGrabber AI320, a high-precision metrology-grade 3D scanner engineered to meet the evolving needs of industries that require highly detailed, repeatable, and accurate measurement data.

"3D scanning technology has taken off in recent years because of its ability to capture vast amounts of data in a short period of time, with minimal user intervention," said O'Connor. "What makes our ShapeGrabber system special is that we are bringing true metrology-grade 3D scanning into the quality assurance space."

Designed for manufacturing processes where deviations in quality are common, the AI320 is particularly suited for injection molding, metal casting, and additive manufacturing (3D printing). "Many manufacturing processes, such as injection molding, experience warpage and shrinkage. Similarly, in 3D printing, variations can occur based on positioning, speed, and material properties," O'Connor said. "Our scanner enables manufacturers to detect and correct these inconsistencies with unparalleled precision."

The AI320's ability to capture full 3D data without additional setup makes it an indispensable tool for manufacturers who need fast, accurate, and repeatable measurements. "Our goal is to make precision scanning easier, faster, and more accessible, and I believe the AI320 accomplishes exactly that," he concluded.

Vision for future

"The future of manufacturing depends on automation, precision, and data-driven decision-making," said Hippargi. "With the M-Series, E-Series, and ShapeGrabber AI320, we are offering Indian manufacturers the tools they need to stay ahead in a rapidly evolving global market," Hippargi said.

Watch the video here: https://bit.ly/qvi-mojo