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# INSIDE BEML'S GROWTH PLAYBOOK

## BEML CMD Shantanu Roy on tech and big orders

Shantanu Roy, Chairman & Managing Director of BEML Ltd, outlines the company's renewed focus on construction equipment, indigenous mining technology, rail and metro expansion, exports, and his long-term vision aligned with Atmanirbhar Bharat. Excerpts from his interview with Subhajit Roy.

**How does EXCON reflect BEML's current strategic priorities?**
BEML was founded over 60 years ago with heavy earthmoving machinery as its backbone. Our first manufacturing unit at KGF was dedicated to this segment, and it continues to be central to our strategy. Over time, we diversified into rail, defence, and mining, but infrastructure equipment remains core.

After restructuring BEML into 14 Strategic Business Units in April 2024, we consciously decided to refocus on the construction equipment space. India's infrastructure spending now exceeds ₹45,000 crore, and that presents a huge opportunity. At EXCON, we have relaunched several upgraded machines, including the 20-tonne BE220 excavator, motor graders, wheel dozers, and smaller equipment variants – products that have been significantly reworked to meet current market needs.

**You are showcasing the BRS 21 rope shovel. Why is it significant?**
The BRS 21 is a landmark achievement. It is a 21-cubic-metre rope shovel that was earlier fully imported into India. Coal India placed an order with us for indigenous development, and within just three years we designed, developed, manufactured, assembled, and commissioned it in-house.

The machine has already clocked over 2,700 operating hours successfully. This project clearly demonstrates BEML's capability in heavy mining equipment and its contribution to Atmanirbhar Bharat.

**BEML has partnered with HD Hyundai in the marine segment. What is the strategic rationale?**
India's maritime ecosystem is poised for strong growth under initiatives like Maritime Vision 2030 and Amrit Kaal Vision 2047. Shipbuilding and ports will need advanced cranes—ship-to-shore, level-luffing, Goliath cranes, and port handling equipment. Currently, India depends heavily on imports for these.

BEML has strong capabilities in heavy fabrication, hydraulics, and power systems, which are essential for crane manufacturing. Our partnership with a leading global OEM like HD Hyundai is the first step in building indigenous capability in this segment. It will take time to mature, but the foundation is firmly in place.


Shantanu Roy

**Rail and metro are major contributors to your order book. What are the recent milestones?**
Indian Railways is replacing ICF coaches with LHB coaches, and a large fleet still needs to be upgraded. BEML will be supplying 600 LHB coaches and is well-positioned to scale up if required.

Metro rail is another fast-growing segment, with projects coming up in Tier-II and Tier-III cities such as Bengaluru, Chennai, Hyderabad, and Andhra Pradesh, along with upcoming tenders from Delhi Metro. Over the next two to three years, the market could require around 2,500 metro coaches.

Our current order book stands at ₹16,000–18,000 crore, with rail accounting for 60–65%. Metro and rail are currently split almost evenly, but commuter rail is expected to grow significantly in the coming year.

> **My vision is clear—achieve a five-digit top line and a four-digit bottom line, establish BEML as a global leader in rolling stock manufacturing, and strengthen and diversify our defence portfolio...**

**How important are exports to BEML's growth strategy?**
A 5–6% export share of turnover is healthy, but our aim is to cross 10%. We are not limiting exports to mining equipment alone. We have already secured a rolling stock upgradation order from Malaysia and are actively pursuing opportunities in Africa, the Middle East, GCC, Asia-Pacific, Australia, and the CIS region.

**What is your vision for BEML as it moves towards 2030?**
My vision is clear—achieve a five-digit top line and a four-digit bottom line, establish BEML as a global leader in rolling stock manufacturing, and significantly strengthen and diversify our defence portfolio so that we can serve the nation in a larger and more meaningful way.

*WATCH: https://bit.ly/beml-m4i*

# How automation will power India's $5 trillion push

## In conversation with **Sanjeev Srivastava**, Head – Industrial Automation, Delta Electronics India

As India pushes toward its ambitious $5 trillion economy target, industrial automation is emerging as a decisive growth catalyst. From electronics and semiconductors to infrastructure and machine tools, manufacturers are increasingly turning to smart, energy-efficient technologies to scale operations sustainably. Here, Sanjeev Srivastava, Head – Industrial Automation at Delta Electronics India, outlines how Industry 4.0, AI-driven manufacturing, and local R&D are reshaping India's industrial landscape.

**How critical is industrial automation to India's $5 trillion economy ambition?**
For any economy to reach the $5 trillion mark, manufacturing, services, and agriculture must grow together. While services and agriculture have seen transformation, manufacturing in India has expanded multiple times in recent years. We are witnessing strong investments in electronic component manufacturing and semiconductors, with several global players setting up operations here. Growth is also visible in machine tools, textiles, cement, steel, and paints. As manufacturing expands, automation naturally grows alongside it.

At Delta, we have moved beyond supplying individual products. Today, we offer end-to-end solutions – energy management, warehouse management, traceability, and more – allowing customers to scale efficiently with a complete solution stack.

**How do you see the adoption of Industry 4.0 solutions in India?**
Awareness has increased significantly. Industry 4.0 is no longer a buzzword; customers are actively discussing implementation, and soon Industry 5.0 will also enter mainstream conversations. Delta is fully prepared with a comprehensive Industrial IoT portfolio—control systems, communication products, and field devices that seamlessly integrate. Because we offer the entire product basket, Indian manufacturers increasingly see us as a long-term strategic partner.

**How is Delta helping industries accelerate automation adoption?**
Speed, productivity, and efficiency are paramount for manufacturers today. Our industrial robots, drives, and MSI permanent magnet motors—classified under IE5 high-efficiency standards—help customers achieve these goals. We also offer intelligent and collaborative robots that enhance flexibility and safety on the shop floor. By integrating these technologies, Delta has made strong inroads into Indian manufacturing and is positioned for rapid growth.

**Which technology will most radically reshape manufacturing in the next five years?**
Artificial Intelligence (AI) will be transformative. AI helps analyse massive volumes of machine data and convert them into actionable insights. Predictive maintenance is a prime example – machines are monitored continuously, and maintenance is carried out only when required, reducing downtime and improving efficiency. Alongside this, the growing adoption of SCARA, industrial, and collaborative robots will significantly change factory operations.

**Is Delta investing aggressively in AI and R&D in India?**
Absolutely. We have a major R&D centre in Bommasandra, Bengaluru, with over 500 engineers today, scaling to more than 2,000 in the coming years. Much of our development is "in India, for India," ensuring solutions are tailored to local manufacturing needs.

**What were the key highlights of 2025 for you?**
We launched new drives, IE5 permanent magnet motors – especially impactful in HVAC – and collaborative robots that are gaining traction in electronics manufacturing. Our SCARA robot range expanded, and we introduced smart screwdrivers capable of variable torque in a single assembly line. Delivering end-to-end manufacturing solutions for automotive customers was another milestone. Semicon 2025 was especially memorable. Prime Minister Narendra Modi spent considerable time at our booth, appreciated our digital twin technology, and was pleased to see Delta manufacturing in India for global markets – closely aligned with the "Make in India" vision.

**What is your outlook for 2026?**
With continued investments in manufacturing and infrastructure, the automation sector will see strong momentum. Together, these drivers will create sustained growth opportunities.


Sanjeev Srivastava

*WATCH: https://bit.ly/DeltaElectronics-m4i*

# ABB India launches ACS380-E drive at ENGIMACH

ABB India has launched the ACS380-E drive, the latest addition to its all-compatible drive portfolio. The drive, which is designed for automation-centric machine building, simplifies machine integration and is future-proofed for industrial automation.

With India's manufacturing landscape rapidly embracing digitalization and smart-factory upgrades, driven by rising automation adoption, growing demand for quality and efficiency, and a push toward Industry 4.0, the latest machinery drive supports this shift, offering advanced connectivity, improved flexibility and easy commissioning.

"As the Indian industrial landscape evolves with advanced automation and the rising need for energy efficiency, it is crucial for variable speed drives to adapt effortlessly to diverse industrial applications," said AR Madhusudan, President and Local Division Manager, Drive Products, ABB India. "Our customers across diverse industries will be well-equipped to build high-performance machines with the futureproof ACS380-E drive with robust cybersecurity for maximum uptime and meeting regulatory demands of today and the future."

The new machinery drive is engineered specifically for industrial machinery applications in several industries, including textile, cable and wire, plastics, intralogistics and more. It will help speed up commissioning, installation, wiring and assembly while supporting future compliance with stringent cybersecurity requirements. Its embedded dual Ethernet ports and selectable protocols – which come as standard – remove the need for separate option modules, reducing complexity and installation time.

Additionally, with versatile USB-C commissioning and firmware access via Ethernet, the ACS380-E streamlines setup and means that it will stay up-to-date in terms of cyber security.

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The ACS380-E drive will support all common rotary motor types across global voltage ranges (100-600 V) and will deliver superior motor control for applications like packaging systems, conveyors, extrusion lines and multi-axis machinery. It will also be ready to seamlessly integrate with all major automation systems, including ABB's AC500 PLC and products from the other main players in the market. The drive integrates effortlessly into confined cabinet spaces via compact construction and versatile installation options.

Enhanced by ABB's Drive Composer software – and compatible with new Drive Composer 3 - the ACS380-E also simplifies monitoring and managing equipment, adaptive programming tools, and rapid offline configuration capabilities. In India, the ACS380-E machinery drive is available, covering ratings of up to 22kW, 400V.

*WATCH: https://bit.ly/abb-engimach25*

# Ace Micromatic at ENGIMACH 2025

Ace Micromatic Group presented a wide range of high-performance machining solutions and automation-ready platforms at ENGIMACH 2025, underlining its focus on productivity, precision, and future-ready manufacturing for the Indian industry. The company's exhibit featured precision mould-making machines, compact turn-mill centres, automation cells, and CNC simulation technologies.

## Die & Mould Machining

Highlighting its die and mould machining portfolio, Thilar K, Product Manager – Die & Mould at Ace Designers Limited (Marketing & Service Division), introduced the 1370V vertical machining centre, developed specifically for mould-making and die-mould applications. The machine offers an X-axis travel of 1300 mm, Y-axis travel of 700 mm, and Z-axis travel of 700 mm, supported by a 1450 mm × 700 mm table.

Equipped with a BT40 spindle interface, an 8,000 rpm direct-driven spindle delivering 15 kW power at 11 bar, and a 24-tool automatic tool changer, the 1370V is designed for demanding material removal operations. The machine is powered by the latest Mitsubishi MIT-VA controller, capable of processing speeds of up to 2,020 blocks per second.

During the exhibition, live machining demonstrations showcased the machine's heavy cutting capability on P20 pre-hardened steel. "The machine can be effectively used for all heavy metal removal applications," Thilar added.

> **Through its ENGIMACH 2025 showcase, Ace Micromatic reinforced its commitment to combining machining excellence with automation and digital technologies to meet the evolving needs of Indian manufacturing.**


## Turning & Milling

In the turning and milling segment, Brijesh Jagani, Manager and Business Head – Marketing & Service Division, Ace Designers Limited, presented a compact turn-mill centre equipped with a 12-station live servo turret. The machine supports a wide range of live tooling applications and is aimed at industries such as general engineering, hydraulics, valves, and fittings. Its compact footprint allows easy integration into space-constrained shop floors while combining multiple operations on a single platform.

## Automation

Automation was a key theme at the Ace Micromatic booth. Narendra R, Project Head – Automation & IoT, Ace Designers Limited (Turning Centre Division), explained that the automated loading system on display was designed to address high-volume, multi-variant production requirements. The system can handle cup-type, shaft-type, and externally profiled components, enabling continuous production with minimal human intervention.

Narendra noted that the return on investment for such automation solutions is typically under 1.5 years, driven not only by reduced manpower costs but also by significant efficiency gains. He also pointed to workforce availability as a growing challenge, reinforcing the need for automation-ready manufacturing setups.

## CNC simulator

Another highlight was Ace Micromatic's CNC simulator, aimed at both educational institutions and industrial users. The simulator allows NC programs for turning and milling to be developed, verified, and simulated offline without interrupting machine operations. Users can analyse tool paths, conduct virtual measurements, and deploy verified programs directly on the shop floor, enhancing safety and programming efficiency.

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*WATCH: https://bit.ly/AceMicromatic*