COVER STORY

Engineered Around the Yarn: Six Decades of Rabatex and What Comes Next

Keyur Panchal | *Executive Director, Rabatex Industries Pvt. Ltd.*

Rabatex Industries began in Ahmedabad in 1962 as a precision engineering workshop. Today it builds weaving preparatory machinery and material handling systems for mills in more than 38 countries, and it is weeks away from commissioning a 2 lakh sq ft plant. Ahead of India ITME 2026, Executive Director Keyur Panchal talks about the journey, the machines and the road ahead.

Q1. Please provide a brief overview of Rabatex Industries Pvt. Ltd., including its journey, milestones, and key achievements.

A. Rabatex began in 1962 as a small precision engineering workshop in Ahmedabad. In those years we did not build machines; we built what went inside them, mainly crankshafts and sub-assemblies for weaving and textile processing machinery. We always start the story there because it explains our habits. A company that grows up making components learns to worry about tolerances long before it worries about brochures.

Complete machines came in the 1980s: first sectional warpers and then, in 1988, India's first indigenous warp sizing machine. Material handling followed in the 1990s, after we saw the bottlenecks our weaving customers faced in moving beams and fabric rolls between departments. Since then the range has widened step by step: the Vertical Lift Module, a complete fabric sampling line and, in 2024, the Splitmatic for mother mono yarn.

Today we are a team of more than 300 people working across four plants in Ahmedabad, with a new and much larger unit about to open. More than 3,800 of our sectional warpers and over 6,200 material handling and storage systems are at work in over 38 countries. The figure I value most is a smaller one: more than 43 per cent of our orders come from customers who have bought from us before. In capital equipment, nobody comes back out of politeness.



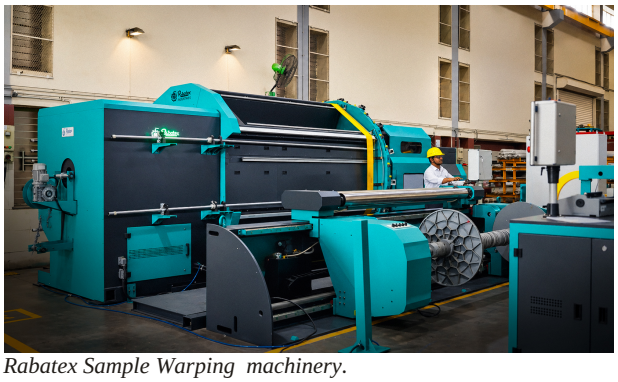
Keyur Panchal, Executive Director, Rabatex Industries Pvt. Ltd.

"In capital equipment, nobody comes back out of politeness."

Q2. What are the company's core products, technologies, and solutions offered to the textile industry?

A. Everything we make either sits between the yarn package and the loom or moves material around the mill.

The core is warp preparation. Our high-speed computerised sectional warping machines are PLC-controlled, with a servo-driven reed table and traverse, load cells that hold section and beaming tension, and electronic stop motions. Each is paired with a creel chosen for the yarn, including dedicated creels for monofilament, glass, carbon and geo-textile yarns.



Rabatex Sample Warping machinery.

Around that core are three specialist lines. For product development, we offer a complete fabric sampling line of sample warper, mini sample warper, single-end sizing machine and sample weaving machine, so a mill can take a design from yarn to woven sample in-house. For synthetics, the Splitmatic range takes mother mono yarn from the package straight to the beam. For technical textiles, we build heavy-duty warpers and creels for high-tenacity and composite yarns.

The other half of the business is intra-mill logistics: motorised beam trolleys, warp beam and cloth roll carriers, beam storage systems and the RAPID Vertical Lift Module, which runs on our own inventory software and connects to a mill's ERP.

What ties these together is a way of working. We configure the machine around the customer's yarn and shop floor, and we do not ask the customer to adjust to a catalogue.

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Q3. What are the latest innovations or developments introduced by Rabatex in recent years?

A. Three developments say the most about where we are heading.

The first is the Splitmatic, launched in 2024. Its creel takes up to 160 ends of mother mono yarn, splits each into 12 filaments and lays them directly on the warping beam, so the cop-winding stage disappears. More than 75 machines have been installed since launch. The same machine can switch between mother yarn and regular filament, which matters to a weaver whose order book changes from month to month.

The second is in technical textiles. For an Indian manufacturer of high-density industrial fabrics, we built a customised sectional warper, the Techmatic, to process 12,000 denier yarn at beaming tensions of up to about 90 kN, with a reinforced drum and load-cell tension control. At the other end of the scale, our fabric sampling line has gone to a global medical device manufacturer developing woven structures for heart valves and peripheral balloons. That is a long way from a shirting mill, and it shows how far woven fabric now travels.

The third is in storage. The RAPID Vertical Lift Module is now offered in heights of up to 24 metres, with trays carrying up to 1,000 kg. In one recent project, four units were linked across two levels, so material enters at ground level and is retrieved about six metres higher, beside the assembly area.

Our newest machine is a hank reeling machine for the hank dyeing process, and at India ITME every machine on our stand will be a new-generation version.

Q4. How does Rabatex support the modernization, automation, and sustainability goals of textile manufacturers?

A. We treat the three as one question, because on a shop floor they are usually the same investment.

Modernisation, for most of our customers, begins with the loom. A modern high-speed loom is unforgiving of an uneven warp, so a mill that buys new looms soon finds that its old warper is the bottleneck. Our sectional warpers are built to close that gap. Servo drives and load cells hold tension automatically, laser sensors on the heavier models measure yarn build-up and set the feed, and the settings for hundreds of patterns sit in the machine's memory instead of in one experienced operator's head.

Automation then moves outwards, to the areas mills used to ignore. Beam trolleys and carriers take the strain and the damage out of moving beams and rolls. The RAPID VLM brings the tray to the operator, so nobody walks the aisles searching. The machines also report: production data, end breaks and faults can go to the mill's ERP or MES, and our service team can diagnose a problem remotely.



Aerial view of the Rabatex facility.

Sustainability, in our segment, is mostly arithmetic: how much yarn, power, chemical and handling it takes to produce a metre of good warp. The Splitmatic removes an entire rewinding stage, in which 120 to 180 packages used to become 1,200 to 1,400 cops. Single-end sizing cuts chemical use and effluent load. A sample beam of under 500 metres, made from as few as 16 packages, replaces a production trial. In our own operations, the new plant has its own sewage treatment plant. A steel-based business cannot pretend its footprint is light, but we are reducing ours steadily.

Q5. What are the key market trends currently shaping the textile machinery sector?

A. We would point to five, and all of them show up in the enquiries we receive.

One, mills no longer want catalogue machines. They ask for a warper or creel engineered for the exact yarn they run, with recipe management and lower power consumption built in.

Two, synthetics are gaining ground. Cotton supply and prices have become harder to predict, and brands want lighter, finer fabrics. Surat led this shift, and Palladam, Tirupur and Erode are now following quickly with mother yarn.

Three, development speed has become a competitive factor in its own right. Orders are smaller and more frequent, so the mill that gets a sample approved first often wins the programme.

Four, technical textiles are pulling machinery into new territory. Carbon, glass, aramid and basalt need tension control and filament handling that conventional warpers were never designed for.

Five, labour and floor space are getting costlier, which is pushing automation into beam handling and stores.

Behind all of these sits a broader shift. Global buyers are spreading their sourcing across more countries, and that brings new weaving capacity, and new machinery buyers, into the market.

Q6. What are Rabatex's major strengths and competitive advantages in the Indian and global markets?

A. We would name four, and then one area where we still have work to do.

The first is focus. For six decades we have worked on weaving preparation and material handling and very little else, so we understand the weaver's economics as well as the weaver's machine. In India, that has made us the largest manufacturer of sectional warping machines, with a domestic share that has stayed above 65 per cent for the past decade.

The second is engineering to order. Each project is configured around the customer's yarn, fabric and floor.

The third is patient R&D. We run three to four research and trial projects a year, many on the customer's own yarn, and we accept that some will end in tonnes of scrap and a decision not to build. The Splitmatic came out of that discipline.

The fourth is service. We keep a permanent technical team in Erode for the south and have a long-standing service presence in clusters such as Surat, Kolkata, Delhi, Pune, Mumbai, Coimbatore, Panipat and Bhilwara, backed by remote diagnostics.



Machines wrapped and ready for dispatch on the Rabatex shop floor.

Globally, our proposition is European-class build quality with Indian cost, delivery and responsiveness. Where we, like most Indian machinery makers, still have ground to cover is local service infrastructure and brand perception overseas. We are addressing that through international business teams and service partnerships, because a buyer abroad judges the support behind a machine as closely as its specification.

Q7. How do you see the future of the Indian textile industry, particularly in the context of India ITME 2026?

A. With optimism, and we can give reasons for it. India has the whole chain in one geography, from fibre and yarn to fabric, processing and garments, which very few countries can offer a global buyer. Policy is pulling in the same direction through the PLI scheme, the National Technical Textiles Mission and the PM MITRA parks. And buyers who want to reduce their dependence on a single sourcing country are looking seriously at India.

The caveat is that our industry still depends heavily on imported high-speed weaving machines and on imported drives and controls for Indian-built machinery. It also has to compete with used and misclassified machinery entering the country. These problems can be solved, but they need attention from both policy-makers and manufacturers.

India ITME 2026 arrives at a useful moment. It comes once in four years, and it is where a mill owner can stand in front of a machine, question the engineer who designed it and compare. Holding it in Greater Noida also brings the show closer to northern clusters such as Panipat and Bhilwara. On our stand, visitors will see a complete fabric sampling line and our redefined sectional warping machine, both in new-generation versions. My hope is that mills leave the exhibition with a clear picture of how much of their modernisation can now be done with technology developed and supported in India.



Haresh Panchal, Managing Director (standing), and Keyur Panchal, Executive Director.

Q8. What are the company's growth plans, expansion strategies, and future business outlook?

A. The largest step is only weeks away. Our new unit in Ahmedabad, spread over 2 lakh sq ft, is due to start operations by the end of December 2026. It gives us the capacity to meet domestic and export demand together without stretching delivery times, and both our team and the component suppliers around our plants will grow with it.

On products, three areas will take most of our R&D time: preparatory machinery for technical textiles, mother mono yarn processing as finer deniers become commercial, and adding data and intelligence to the existing range. We have begun work on AI models, mainly for the RAPID VLM and the sampling line, but nothing will be released until it solves a real problem on the shop floor.



Entrance to the Rabatex facility.

Diversification will come through storage and intralogistics. With more than 100 ASRS installations behind us, we know our engineering and controls work outside textiles, and we see warehousing automation as a significant adjacent business.

In exports, the plan is to build our own service and spares capability in key markets instead of relying on agents alone, across Turkey, Europe, Latin America, Africa, South-East Asia and North America. ITMA 2027 in Germany will be our next major international showcase after India ITME.

The outlook is positive. The discipline we have set ourselves is to grow without becoming slower to respond.

Q9. Please share a message from the Managing Director on the company's vision and commitment to the textile industry.

A. Rabatex has been part of the Indian textile industry since 1962, and everything we have built has come from working alongside weavers. Our vision is to be a preferred partner worldwide for weaving preparation and material handling, and to make sure that a weaving unit of any size can get world-class preparatory technology developed and supported in India.

Our commitment is practical. We will keep engineering each machine around your yarn and your shop floor. We will keep investing in R&D, even when a trial teaches us only what not to build. And we will treat every installation as the start of a long partnership.

I am grateful to our customers for their trust and to our team of more than 300 people, whose work is the reason those customers return. I look forward to meeting many of you at India ITME 2026 in Greater Noida, at Hall 15, Stall No. H15E8.

Visit Rabatex at India ITME 2026
Hall 15, Stall No. H15E8, Greater Noida



Warping machines in the Rabatex assembly hall.