



LIMELIGHT

By Sander Jacobs, Global Sales Director Tire, VMI

INVESTING IN INDIA'S LONG-TERM GROWTH



Sander Jacobs

VMI, the world's leading manufacturer of automated tyre building machines, is a long-term investor in the future success of India's economy. VMI now serves every major Indian tyre manufacturer while providing strong and local service support across the country from its permanent India-based service team.

Now, however, VMI's commitment to India is becoming stronger, more deeply rooted and more continuously present across the entire country. From 2024, VMI will have a new, permanent base in Vadodara and will employ around three times as many people as today while greatly expanding the scope of its activities in the country.

This is a major initiative for VMI, representing an important strategic development – so why is a company based in the Netherlands making this big bet on India? The simple answer is recognition of India's strategically vital position in the world economy and of its growing leadership in the global tyre industry. India has now become the world's 5th largest economy and is closing fast on numbers 3 and 4. While the rest of the



world has been somewhat fixated on the rise of China in past decades, India's remarkable economic successes have gone slightly under the radar. Not anymore.

Diversification and growth

The great feature of the past decade has been the step-by-step extension of economic leadership away from traditional strengths and into new areas. India is a driving force in the global IT industry, for example, and has world-class enterprises in the field. These operate all around the world and attract investment on a huge scale from US and European businesses.

Now, however, the economy is diversifying fast. Major government investments in infrastructure are leading to rapid growth in construction, logistics, automotive, transportation, consumer goods and beyond. India is no longer an exporter of skilled IT professionals and their services: it is a diverse and extremely dynamic marketplace, set to be a key driver for the world economy in the next decade.

The impact of world events

Of course, the development of the Indian economy is not just about domestic policy. In fact, there has been a change in the world's wider economic 'centre of gravity'. Global supply chains are still under pressure, and there is an urgent need for new options, new hubs to serve the wider South Asian marketplace and new centres of excellence to provide broader support and service choices for international enterprises.

Naturally enough, India's leadership in IT and software is playing a big part in this process. Automation, machine intelligence and the rise of AI as a necessary component in all complex production systems means that access to vital IT development skills is essential for long-term success. So VMI, as a business that prides itself in being a true innovator, a pioneer in automation, with a strong focus on AI, believes that having a permanent base in India is not just useful but essential.

Transforming the Indian tyre and automotive market

The biggest driver for VMI's investment is the extraordinary evolution of the Indian tyre market. So what exactly has been happening here? And why does it change the investment landscape?

The first factor, and this is genuinely transformational, is the massive public investment going into the road infrastructure of India. Outside observers have noted in the past that India's transportation network has been comparatively underdeveloped, but now all that is changing fast.

Rising demand

An estimated 40 km of high-quality new highway is being built *every day* right now. This is driving a huge demand for quality truck tyres and, as new regulations come into force in 2025, imposing higher minimum standards on all trucks using the roads, we are seeing a rapid move to higher performing trucks.

Growing prosperity

The expansion of the Indian middle classes (an estimated 350 million people and rising) is also leading to higher demand for car ownership, with a profile that is now very much in line with standards in Europe and the Americas. This development is alone enough to raise the demand for high-quality car tyres, but it is only one factor among the many driving rapid change in the market.

Electric vehicles, for example, are taking off in India, partly thanks to a government discount scheme. This market, which includes two and three wheeled vehicles in India, is projected to grow from USD 3.2 billion in 2022 to USD 119 billion in 2029, according to the Indian financial press.

Rising standards

Let's reflect on the fact that when VMI first started to trade in India, only a tiny proportion of tyres sold in the country were advanced radial models. VMI worked with Indian manufacturers, not just to satisfy existing demand but to help improve quality, bringing the Indian industry into line with global standards.

Today, the move to radial tyres for passenger tyres is close to being complete, with the changeover for truck and bus tyres about 60 percent of the way there but with change now happening extremely fast. India is now home to some of the world's largest and most ambitious tyre companies, and virtually all of them are VMI clients. According to Mike Norman, CCO of VMI Group, it is the ambition of Indian companies that is so impressive.

"We work with companies that not only want to make best use of growth in the national market but are determined to be true global players," he says. "Indian tyre manufactures are working closely with international original equipment automotive businesses, so their goal is to reach international Tier 1 quality standards."

VMI has been part of the Indian tyre industry's development, and their latest investment decision is designed to play a strategic role in the next stage of growth.

Why is India so important?

India is now the world's most populous nation, and its economic growth rates are likely to remain among the highest in the world over the next decade. That alone is enough to make it a key investment priority for foreign firms. Yet there are some other reasons why India really matters – specifically to the tyre industry as a whole.

Automation and skills

There is a drive for *higher levels of automation*. To meet growth targets, it is now clear there will not be enough people available with the specialist skills the tyre industry demands. As the need for speed, quality and productivity becomes irresistible, the industry must automate. VMI's acknowledged leadership in automated tyre building is a key factor in enabling Indian manufacturers to meet their growth targets.



Reshoring and multiple hubs

Global manufacturing is moving to a *multi-polar model*, as manufacturers seek to avoid exposure to any single production base, simplifying supply chains and reducing their risks along the way. India is now becoming a much more attractive supply and service support base for the world tyre industry. VMI expects its new Indian hub to add depth and new capabilities to the service support offered, not just to Indian companies but to those in the rest of South Asia, to China and other East Asia nations, right through to the Middle East and Africa. 24/7 service support will become easier to deliver, while India's English language skills and highly businesslike, flexible attitude will be a major bonus.

The importance of software

Large enterprises are changing in many ways, with businesses distributing their resources and facilities across wider geographies and using software to manage more complex business and production relationships. There is no fixed divide between IT and manufacturing any more, and India, as the world leader in IT-related skills, is becoming a more attractive investment location as a direct result of this need for technology development capabilities.

This is a subject worthy of an article all on its own. Let's just note that VMI's own production platforms now use AI and machine learning as basic components in their design, with advanced control software integrating different components in a very fast and flexible manner. The way products are designed, managed, operated

and maintained is changing due to the inclusion of advanced IT systems at the heart of product design.

India matters because a high proportion of this work will be done here. Investing in India's world-leading technology expertise is basic common sense.

The installed base

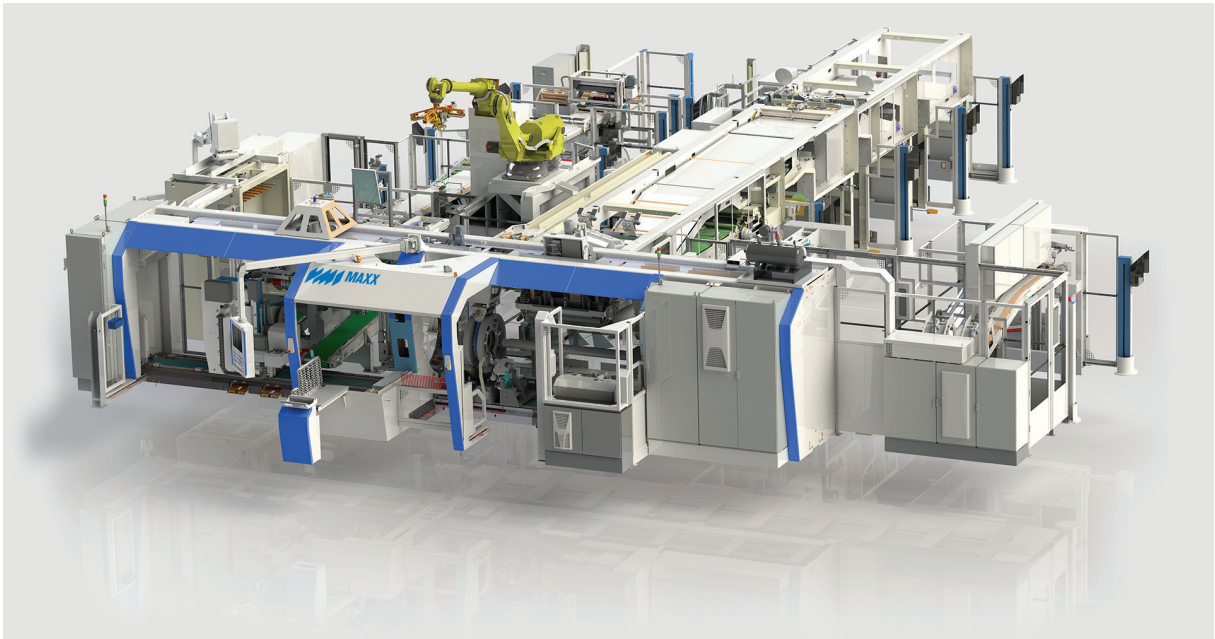
VMI's long-term commitment to India means there is now a large installed base that requires end-to-end support, from initial installation to updates, upgrades, routine maintenance, refurbishment, 24/7 support, remote and on-site. The company now needs a strong presence just to meet the demands from existing customers. And that is not the whole story, as Mike Norman reminds us:

"We have moved away from building and selling machines that always stay at their original specification, and now build production platforms, which are designed to evolve and develop naturally throughout their lifecycles. This process started a long time ago – more than 20 years – but this is changing everything, these days, when it comes to how we work with our clients."

Let's find out why.

New vision, new technology

Automation is the key to smart manufacturing. This is fundamental to everything VMI and other advanced manufacturers do. As we have seen above, VMI designs and builds production platforms, which integrate and communicate with other systems and products to extend capability more widely and are built for constant evolutionary change.



Best practice – always

A platform is designed both to have an exceptionally long working life and to stay at best practice level. That means it has now become entirely normal to retrofit installed platforms with new or more advanced components as they become available. Installed machines can be integrated with new components designed to enhance quality or production efficiency.

A good recent example is the new option to add the robotic bead loader onto our installed base of EXXIUM machines. This new development reduces the need for operator intervention and accelerates the production process while reducing errors and wastage. It perfectly illustrates the way that the platform concept future-proofs investments and adds value throughout the lifecycle of the product.

New focus for people

Automation means that skilled personnel can now move to supervisory tasks, potentially overseeing fleets of production assets, making their skills go much further. It is now possible to fine tune performance to enhance quality and efficiency. We are now also using remote monitoring for predictive maintenance and advance warning of possible failures, cutting downtime and raising efficiency.

These changes help to explain why VMI is now an important software business, as well as being a manufacturer. The commitment to India offers an interesting trade-off, strengthening a key area of India's manufacturing base while giving VMI easier access to the world's largest population of skilled IT graduates.

New initiatives for India

The stronger focus on the Indian market means that VMI will be bringing more of its most advanced technologies to India, providing solutions for growing demand, and also launching completely new concepts for this huge and fast-growing market.

MILEXX

First launched in 2016, MILEXX has established itself as perhaps the leading automated truck tyre building platform on the world market. As demand for high-quality new truck tyres accelerates across the Indian market, the importance of MILEXX to the Indian market increases – and we are expecting significant growth in this area over the next few years.

Investment in highways is fuelling a rapid rise in road logistics, while new regulations mean there is a point – just two years into the future – when many of India's existing light trucks will be removed from the road. There is an urgent need for radial tyres suitable for the new generation of vehicles that will replace them, and Indian tyre companies are investing in the capacity to meet this rising demand.

MILEXX is based on VMI's industry-leading MAXX passenger car Tyre Building Machine and incorporates many of its key features, including advanced user interface, sophisticated vision systems to monitor key parameters from loading to release to proving the



green tyres and storage. Automated systems are used to make corrections before serious errors can occur, while the easy-to-use MES interface adds to improved operational efficiency.

Revolute

In addition, VMI is bringing Revolute, its new Bead Apexing solution to India, with use of robotics and automated handling to accelerate production (almost double the current levels), enable use of higher apices (making it possible to handle a wider variety of compounds) while cutting change-over times and using recipe-based methods to reduce operator time required.

VMI Revolute is all about simplified handling, lower waste and higher quality output, enabling tyre companies to handle the growing need for flexibility in the market. As the electric vehicle revolution gains momentum and the need for radical improvements to sustainability performance grows, VMI's emerging technologies will offer manufacturers new options as they rethink their processes, materials and methods for the very different market that is taking shape around us.

In India for the long term

There are excellent reasons for making a deep and long-term commitment to India, as VMI is doing. So, what exactly will that look like?

The permanent base

VMI is building one of India's most advanced service and support facilities in Vadodara, Gujarat. It will be the hub for around 50 people, and we expect that number to grow. The team will be supporting every major tyre manufacturer in the country, and that's a big task. The Vadodara base will be acting as an all-India service centre, able to reach all our clients in the country at high speed, via road or air, with direct flight connections to the most important cities in the country.

From now on, the service response – for everything from performance consulting to troubleshooting – will be fast, extremely reliable and truly Indian.

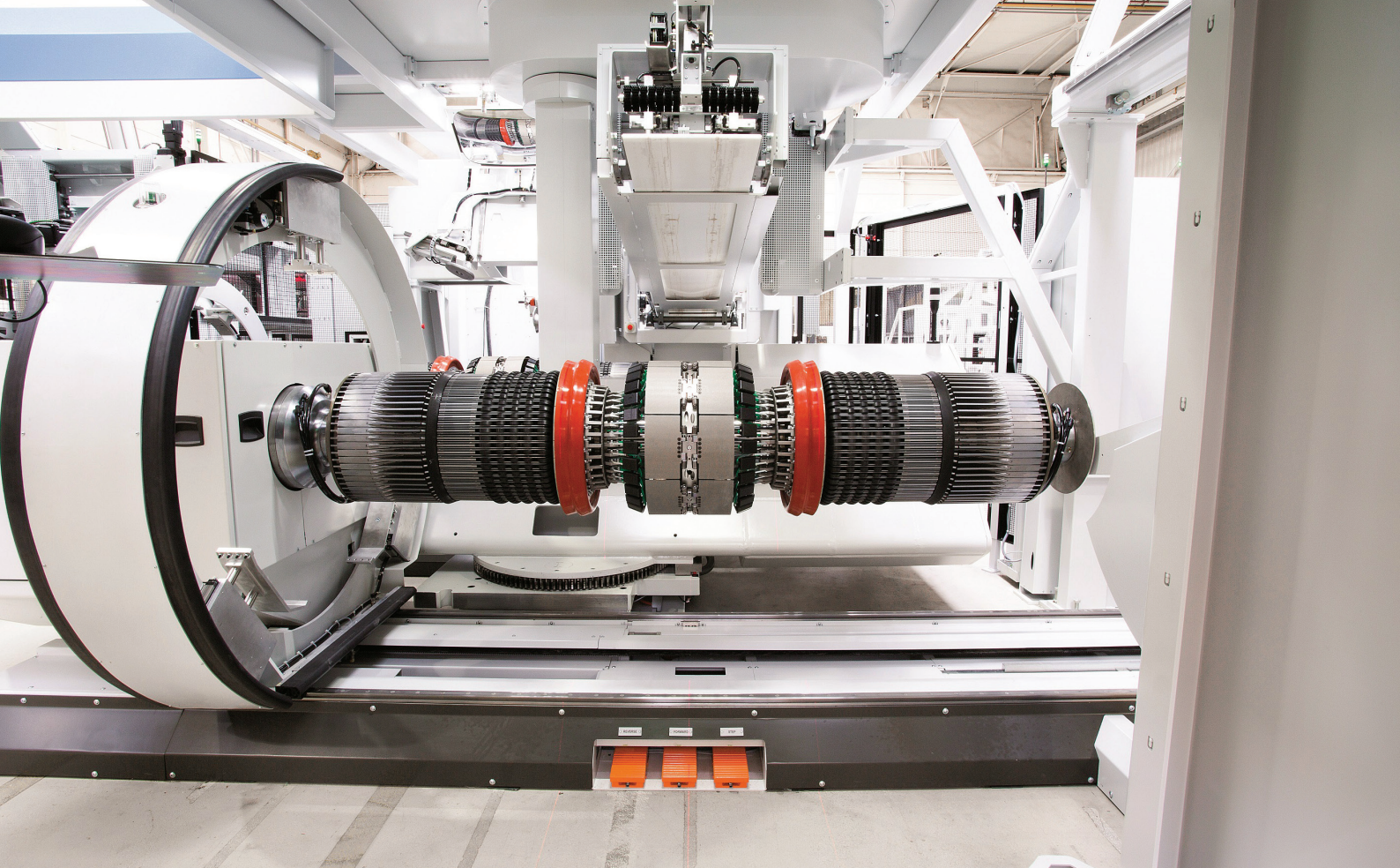
New and enhanced services

VMI will also be launching new service offers to all its clients. These will include:

Rapid drum refurbishment service. This will be delivered both at a permanent workshop in Vadodara and also potentially from a portable unit that trucks to the client site at their convenience, carries out the work and reinstalls the serviced drum ready to go, all in guaranteed time and at a fixed price.

On-site retro fitting, with highly flexible timing, managed to suit the client's convenience and needs. Every aspect of best practice upgrades that you would expect anywhere in the world – these will now be





available in India exactly as and when the client needs the service.

Rapid response team, ready to deal with emergencies within 24 hours. No long-haul flights from Europe are needed: everything you will ever need is based in India, ready to go, with every member of the team working in the same time zone.

Local customer service, covering everything from installation to maintenance, training, inspection visits and, of course, the ability to deliver a richer 24/7 support service to the region.

A major development is the extension of our software team to Vadodara. This is not a 'branch office' or subordinate group: every Indian employee is a fully integrated member of our global team, innovating, leading and working in the closest way with colleagues globally.

The new Indian base perfectly illustrates the VMI service support philosophy, which is both local and global. The global engineering approach aims to deliver common standards across every geography where VMI operates, with every engineer, in every location a fully integrated member of a single, international team.

This enables VMI to introduce its most advanced thinking and concepts everywhere, at virtually the same time, backed by the best of its international resources. New developments will include use of AI across its production machines, with innovative control and analytical systems largely developed in India and the move towards hybrid production environments, which could prove the most important evolutionary step of all.

A carefully chosen base

Vadodara is a key factor in all these developments. One of India's most historically important cities, with a cultural tradition that goes back many centuries, it is also a place that makes an excellent home for a company of our size and strategic vision.

VMI aims to be a 'home' for its people. Individual employees rarely 'come and go': they stay, to build and shape the business through their own vision, inspiration and ideas. Vadodara is the ideal location for people who have long-term attitudes and insist on the right balance between work, family and wider interests. We are building a world class industry hub for the long term, and Vadodara is the ideal place to get started.

How do we summarise these major new investments for VMI? Let's give the last word to Mike Norman:

"VMI believes the Indian tyre and automotive markets will become more important in the next few years. We anticipate further growth in our commitment to India and believe additional investment is very probable."

What next for the Indian market? The first Tier 1 Indian company is going to appear in the next five years. Relationships between India and global OEMs will become stronger and closer over the same period. We expect to see transport infrastructure continue to develop, leading to higher demand for our products.

At the same time, India will be especially hard hit by the effects of climate change, so sustainability and better environmental performance will become a top priority.

With these changes taking place, VMI is convinced that a strong commitment to India is a key factor in its own growth and long-term success. ■