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AFTER GAINING A SIZEABLE MARKET SHARE IN INDIA, NEERAJ KANWAR, VC & MD, APOLLO TYRES, IS SEEKING A PREMIUM POSITION IN EUROPE

BY **JAYASHREE KINI-MENDES**

IT'S NOT OFTEN THAT INDIAN COMPANIES are welcomed with much fervour and excitement when they inaugurate a manufacturing plant overseas. Even more, few are given special permissions to light up the sky with a laser show in a country that is reserved to unusual ostentatiousness. The citizens of Hungary were witness to all this and more when Apollo Tyres inaugurated its first green field plant outside India in April. Not only did the Hungarian Prime Minister inaugurate the plant, but even allowed the $1.94-billion tyre company to light-paint the chain-bridge with the 'Apollo purple' along with a laser show lighting the Budapest sky with 'Apollo Tyres'.

Considering that the Indian company set up operations without much brouhaha in 1972, Apollo Tyres has certainly grown leaps and bounds, and this at a time when multinational companies have exhausted their ability to out-think their local competitors. It is, by far, the only Indian manufacturing company that has met with success overseas.

Speaking about the Hungarian facility, **Neeraj Kanwar, VC & MD, Apollo Tyres**, says, "This is a landmark for us in our global growth journey. At the end of Phase I, we are looking at an annual capacity of 5.5 million passenger car & light truck (PCLT) tyres, and 675,000 heavy commercial vehicle (HCV) tyres. We will first cater to the European market from this facility, and any excess capacity would be then exported to other geographies." The facility will complement Apollo Tyres' existing facility in Netherlands and will produce both the Apollo and Vredestein brand of tyres. The highly automated plant is totally reliable on IT-driven systems and robotics.

In another first, the company recently announced its foray into the European truck-and-bus radial (TBR) tyre market with the launch of a new range of products to be sold through its platform *ApolloTyres-Direct.com*, which is initially being piloted in the UK, Ireland, Belgium, the Netherlands and Germany.

ROLLING WITH THE PUNCHES

Over the last few years, several Indian manufacturers have pumped in billions of dollars of investments into green field facilities. Few have ventured overseas and

1. The Apollo Tyres plant at Chennai.

2. Quality checks are conducted at every stage of the manufacturing process - right from every new batch of raw material to the finished goods.

Laying emphasis on systems and processes, running a lean operation, and zero tolerance to defects are few things we have learnt and implemented.
- Satish Sharma

become success stories. Like other emerging-market companies, Apollo Tyres ventured into the global market in 2009 when it bought Vredestein Banden, a premium Dutch tyre maker. The buyout of Vredestein was a good fit and gave the firm a recognised name in Europe, thus allowing it to contend effectively with other established brands. It is often the case with a developing-country buyer to absorb practices and processes from the business it has bought. But this has not been the case. Over time, Apollo has taught Vredestein how to stay efficient.

Similarly, in November 2015, it acquired Reifencom GmbH, one of the largest tyre distributors in Germany, with both online and offline presence.

Satish Sharma, president, Asia Pacific, Middle East & Africa (APMEA), says, "As a company, with multi-national presence, we need to adopt the best practices from across the world. Even within the organisation, there were pockets of best practices deployed at a company-wide level. Laying emphasis on systems and processes, running a lean operation, and zero tolerance to defects are few things we have learnt and implemented."

The firm has two key brands: Apollo and Vredestein. Others are Regal, Kaizen (truck-bus tyres), DuraTyres (retreaded tyres) and DuraTread (retreading material). Apollo manufactures tyres for the entire range of passenger cars, SUVs, MUVs, light trucks, truck-bus, two-wheelers, agriculture, industrial, specialty, bicycles and off-the-road tyres, retreading material and tyres.

A GRIPPING STORY

With six manufacturing plants *(see box)* and a strong presence in the global market, the firm, at the core, has a systemic approach to operations demanding execution excellence. Tyre manufacturing has its own set of complexities. On the outside, it may appear as mere four patches of rubber, but they do the vital job of attaching them to the road. Tyres may stir little emotion as compared to the whole car or the

MOVING WITH THE TIMES

- Six manufacuring plants. Largest unit is near Chennai. Two other units are located in Kerala, one in Limda, Gujarat. These 4 have a combined production capacity of 1,600 tonnes a day. The Enschede plant in the Netherlands adds another 195 tonnes a day. The 6th facility in Hungary has just started rolling out tyres
- India contributes 63% to the revenue, Europe 32% & other geographies 5%
- Approx. 16,000 employees globally
- R&D centres: 2 (Chennai & The Netherlands)

3. Apollo Tyres' highly automated manufacturing process.

4. Tyre building machine at Apollo Tyres' Hungary plant.

5. Apollo has always been inclined towards adopting technologies that increase capacity or profit.

bonnet badge. But the making of a tyre is a process centred around in-depth research and design capabilities, cutting-edge manufacturing, utilising highly advanced machinery in large state-of-the-art plants at Apollo.

The company officials says that as many as 200 raw materials are combined by a unique mix of chemistry, physics and engineering to give consumers the highest degree of comfort, performance, efficiency, reliability and safety by leveraging modern technology.

Markus Korsten, chief manufacturing officer, says, "Tyre manufacturing consists of a wide variety of production steps and processes. We take the raw materials through mixing, calendaring, extrusion to our tyre building process, followed by tyre curing. And all of this is governed by strict quality controls. With our global manufacturing management team, we are enhancing technologies developed in one of the plants. This will then be rolled out to other units too. Apollo has always been inclined towards adopting technologies that increase quality, capacity or profit, but due diligence is carried out before deployment. A good example is our tandem mixing technology. Another example is on the extrusion technology. We are installing a quadruplex extrusion line which we use to produce multilayer treads, a key technology for most modern tyre designs. Both technologies have been developed in Europe and are getting installed in our Indian plants now."

Today, manufacturing is no longer just about production. Production is now the core of a much wider set of activities. Keeping to its 2020 vision to achieve a premium position in Europe and be the leaders in all the segments they operate in, Apollo Tyres has instilled global standards in its manufacturing processes. Korsten says, "We constantly rework our Apollo Manufacturing System to maintain lean principles and integrate our targets to shop floor management through standards and numerous skills. With that we regularly benchmark the plants."

From being a replacement market focused company, Apollo is in the final stages of beginning supplies to premium OEMs in Europe. It has already been approved by few leading OEMs. "In India, while we already are the leaders in the TBR segment, with the expansion of our TBR capacity in Chennai — from 6,000 tyres per day, we are going up to 12,000 tyres per day — we will consolidate our position further. We also have the largest production capacity for PV tyres, and supply to 16 of the top 20 car models," says Kanwar.

Technology plays a large role in increased efficiency. That's where systems like PIBS and SCADA come into play. Sharma says, "PIBS has been brought in from our Enschede plant in The Netherlands and fine-tuned to Chennai needs. It is now an integral part of our manufacturing setup. These are technologies which allow for pre-programmed implementation to take place without constant human intervention, resulting in error-free material deployment at all times."

With technology being a key pillar for growth, the firm's investments in R&D has increased gradually in the last 3-4 years, and today stands at close to 2% of net sales. The two R&D centres (Chennai, India

"We constantly rework our Apollo Manufacturing System to maintain lean principles and integrate our targets to shop floor management through standards and numerous skills."
- Markus Korsten

and Enschede, The Netherlands), which are run with an experienced team of 300-plus scientists, help in furthering the dimension of R&D. They have been tasked to create better and technologically advanced products for customers worldwide. Developing tyres with low rolling resistance, better fuel efficiency and using environment-friendly raw materials are all being worked upon by the R&D teams. Kanwar says, "Such focused efforts have secured us a leading position in radial tyre technology in India. Gaining a majority share in new products from OEMs, would be the key for R&D. To support the OEM journey and competitiveness in passenger car tyres, new technologies are under development, specifically focused on extended mobility and fuel saving."

Simultaneously, the Bengaluru-based Advanced Engineering Centre is working towards developing new systems, technologies and tyre sensors to enhance the tyre management, and the integration between tyre and vehicle electronic systems. Apollo Tyres has created another satellite R&D centre in Raunheim to develop products specifically for European OEMs.

In terms of innovation in design, Kanwar also believes that development of intelligent vehicle systems such as driverless cars, sensor mounted tyres and tyre plus products such as TPMS for driver information and enhanced safety systems, will gain focus for research in the coming period.

Being a manufacturing company, says Sharma, our innovations are centric to our products and processes. "Our truck-bus radial tyres have set the standard for the industry. We recently challenged the passenger vehicle tyre market by introducing a tyre that gives 100,000 km mileage," he adds.

6 & 7. The firm recast its supply-chain strategy from a 'push' based to 'pull' based. Today, the response to demand is on actual sales rather than a forecast made.

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COLLECTIVE ACTION

When one has a bias to action as opposed to procrastination, it is possible to achieve much in the way of progress. The critical point for any manufacturing company is getting its supply-chain right. A supply-chain that is more responsive and demand driven will quickly show in the bottom line. Kanwar says, "We recast our supply-chain strategy from a 'push' based to 'pull' based. Today, the response to demand is on actual sales rather than a forecast made. All our sales offices, warehouses and even plants are on a replenishment-based system. Consequently, we have been able to sense change in customer demand in days, compared to weeks, in the past."

The results: A 64% reduction in lost sales, and 12% improvement in service levels with reduced inventory, have contributed significantly to customer satisfaction and delivered financial benefits, solving the classic problem of balancing service levels with inventory.

What continues to remain a challenge is the volatility in the raw material prices. Most often, this problem is tackled internally through cutting costs wherever possible, beyond which, one has to opt for necessary price corrections. "Having said that, such challenging situations push us towards trying out alternatives of some of our key raw materials," adds Kanwar.

Managing a global footprint also calls for deepening knowledge of Programme Management while running complex projects/programmes that impact geographies and need to be worked by cross-functional teams. Hence, safety and quality assurance programmes have benefitted from the global best practices.

Apollo has lined up Rs 2,500 crore capex for the current fiscal as it eyes a double-digit volume growth. Besides the plant in Hungary, it expects to commence construction activity at its new plant in Andhra Pradesh, manufacturing tyres for 2-wheelers and LCVs this year.

In disarming Europe, Apollo Tyres has not been remiss about India. If things go according to plan and the market plays nice, before long Apollo will be circling the planet. MT