

# “Our focus is technologically advanced engineering solutions”

The success of RSB Transmissions (India) Limited in the production of propeller shafts, steering systems and components, transmission components and assembly, other automotive components, etc. as well as construction equipment aggregates lies in the fact that it pays special attention to engineering fundamentals through an associate company that singularly focuses on this aspect. In this interview with Huned Contractor, the company's Executive Director-Business Development and Strategy Nishit Behera elaborates about the journey of the company and its future strategies



**Nishit Behera - Executive Director-Business Development and Strategy RSB Transmissions (India) Limited**

## Q. Could you provide a history of the company and its journey up to 2018?

In 1975, two bubbling young entrepreneurs from Jamshedpur, from humble middle-class background, plunged into the hurly-burly world of business with a passion and dedication to do something different and to traverse a different path. They knew not the contours of the path, but were confident that the ultimate destination would be success. For them, ‘dreams were responsibilities’. The brother entrepreneurs are Rabindra Kumar Behera and Suvendra Kumar Behera, fondly known as RK and SK respectively. RK had just chucked the security of a job with Bokaro Steel after graduating as a mechanical engineer from NIT, Jamshedpur and SK was pursuing his commerce education.

They ventured with little finance – mere

Rs 15,000 – borrowed from their father, but with lots of family support and moral and human values imbibed from parents. Growing up in Jamshedpur in the midst of the successful TATA Industries and its value system, the brothers were deeply influenced and inspired by the entrepreneurship of the Tata family and their ethical values to people, society and the environment. This upbringing echoes in all that they have accomplished so far and all that they dream to create.

The brothers then established International Auto Products, a sole proprietorship company, and the operations commenced in 1975. R K Behera, the founder and current CMD of RSB Transmissions (I) Ltd., along with his brother S K Behera (Vice Chairman and Managing Director), led and guided International Auto Products through its growth. After several transformations it became a public limited company, International Auto Limited in 1994, which eventually merged with RSB Transmissions (I) Ltd. in 2009.

The acorn has grown to a mighty oak now. Travelling through many trials and tribulations, when lesser mortals would have abandoned the tortuous path, RK and SK never wavered from their dreams. The group, which started with only Rs 15,000, has today, in a span of four-and-half decades, grown into a global engineering institution, with turnover in excess of Rs 1,400 crore, engaged in the production of propeller shafts, steering systems and components, transmission components and assembly, other automotive components, etc.

as well as construction equipment aggregates. It operates in several countries. Presently, it has 13 manufacturing plants spread over seven locations in India, namely, Jamshedpur (Jharkhand), Pune (Maharashtra), Dharwad (Karnataka), Chennai (Tamil Nadu), Pantnagar (Uttarakhand), Cuttack (Orissa) and Lucknow (Uttar Pradesh) as well as one each in Homer (USA), and Silao (Mexico).

In 2006, RSB made its first foray overseas and acquired Miller Brothers in Michigan, USA. It further expanded its global footprint by setting up a greenfield project in Mexico in 2011. In November 2013, RSB joined the select band of elite global quality corporates after having been conferred with one of the world's highest awards in TQM (Total Quality Management), Deming Prize – one amongst the few Indian automotive companies to get this award – by JUSE (Union of Japanese Scientists and Engineers) at Tokyo, Japan, for achieving all-round business excellence – a globally accredited mandate for highest product quality and service.

In November 2014, RSB signed a Technical Assistance Agreement with Jidosha Buhin Kogyo (JBK), Japan to manufacture and sell latest state-of-art propeller shafts for the SCV/SUV/LCV segment in the domestic and export markets. In April 2015, RSB signed a pact with the Government of Andhra Pradesh for setting up a state-of-art plant at Sri City for manufacturing the latest generation of propeller shafts. RSB's Indian and overseas customers are leading Indian and global OEMs like Tata Motors,

Tata Hitachi, Ashok Leyland, Mahindra & Mahindra, John Deere, Fiat, Ford, Allison Transmissions, American Axle, Eaton, Magna, GKN, Daimler, Renault Nissan, Kamaz, Caterpillar, Terex, JCB, Kobelco, Komatsu and GE, Volkswagen, and PSA Peugeot Citroen, amongst others.

**Q. What is the company's product portfolio and applications?**

RSB operates in two verticals, namely, automotive and CMI (construction, mining and infrastructure) equipments and aggregates. In the automotive vertical, RSB is a leading global manufacturer of propeller shafts/steering systems and components, an array of axles including front axle, trailer axle, tractor axle, dummy axle and axle beam, fully finished gears, shafts, hubs and sleeves, and passenger car steering systems, namely, manual/power steering gears, steering rack and pinion, tie rod, hydraulic/aluminum pumps, transmission components like differential cases, yokes and carriers for medium and heavy commercial vehicles, passenger cars, tractors and light commercial vehicles. In the CMI segment, it is a leading manufacturer of heavy fabrications and aggregates like frames, arms, booms and buckets for excavators, back hoe loaders and front-end loaders.

**Q. What are the new developments made for propeller shafts, transmission compo-**



**ments, axles, castings, forgings, etc.?**

RSB's propeller shaft is known as the provider of integrated solutions, having the largest share in the medium and heavy commercial vehicle segment in India. Our new generation propeller shafts offer unbeatable value and reliability. We have designed and developed shafts that are light, cost-effective and achieve improved performance. We also provide validated newer designs extended to cover several models of commercial vehicles, trucks and buses by conducting extensive trials under various terrains and load conditions. Axles are one of the most significant products offered by RSB. We have well-equipped manufacturing lines dedicated to develop and supply a variety of axles. We manufacture

extensive range of fully finished gears to cater to diversified industry sectors including CVs, passenger cars, tractors, pumps, OEMs, etc.

We have our in-house design for manufacturing running gear systems like axle, fifth wheel coupling, king pin and landing legs. Our machined castings (ferrous and nonferrous) can lay claim to precision manufacturing with zero defect and unmatched quality, meeting stringent global quality standards. We manage the complete supply chain, right from sourcing to finishing and meeting a customer's PQC (production, quality and cost) requirement. We have a dedicated forging plant at Cuttack, Odisha, manufacturing a variety of forging components. Besides, we have a subsidiary, RSB Castings Ltd. that produces castings for automotive applications.

**Q. What kind of research and development does the company engage in?**

We have a subsidiary company – I-Design Engineering Solutions Ltd. – that provides integrated engineering solutions right from designing through prototyping and testing. With expertise in core design services, I-Design supports automotive as well as engineering industries offering design of automotive systems, attachments and variants, design layout, detailing for part manufacturing, design review, value engineering and DFMEA. Our focus area is



cost-effective, durable, rugged and technologically advanced engineering solutions, keeping pace with the changing day-to-day automotive scenario.

**Q. What are the foreign technical collaborations that the company has entered into?**

We have on-going collaboration and tie-up with Eugen Klein, who is our technology partner. The continual technology transfer focuses on lightweight, cost-effective and improved performance. As mentioned earlier, we have also signed a Technical Assistance Agreement with Jidosha Buhin Kogyo (JBK), Japan to manufacture latest state-of-art propeller shaft for the SCV/SUV/LCV segment for the domestic and export markets.

We have also inked a pact with the Andhra Pradesh government to set up a state-of-art facility at Sri City to manufacture latest generation of propeller shaft to cater to Isuzu Motors and other global OEMs such as Ashok Leyland, Daimler, etc. in the southern region besides pan-India and overseas.

**Q. What are the expansion plans for 2018?**

Our state-of-art facility in Sri City is expected to go on stream during 2018-19. There are more products in the pipeline

under development, but due to reasons of NDA agreement with the customers, I may not be able to share the same at this point of time.

**Q. Could you elaborate about the production infrastructure for the various products and the capacities?**

All the facilities have latest state-of-art technology consisting of critical machining on SPMs, phosphating facilities and sophisticated paint shop, latest generation of 3-plane balancing machines with digital PLC, fully automated line for manufacturing cross and bearing cup with online SPC, metallurgical lab for validation of raw materials and fully automated testing and validation for assemblies – all in-house. Our integrated engineering plant has been facilitated with the state-of-art technology to design, develop and validate axles. The facilities include induction heating, friction welding, flexible designed SPMs, CNC turning/vertical machining centres, painting, etc.

The gear plants have organised amenities complying with DIN Class 6/7, advanced CNC gear cutting machines for hobbing, shaving, shaping and sealed quench furnace for carburizing and carbonitriding. Our passenger car plant manufactures car gears and is fully finished with gear

teeth grinding/power honing with special process, namely, hypo-cyclodia back taper milling and continuous synchronised chamfering, laser welding, rotary hearth furnace for carburising and induction plug quenching.

Our fifth wheel coupling has unmatched global standards, having CNC-machined forged components, double spring features in both cast and fabricated leg and secondary locking system. Our manufacturing plants are armed with robotic welding, submerged arc welding, shot blasting, etc. to ensure cost-effectiveness, highest quality and durability of our products. Our machined castings (ferrous and nonferrous) facilities have high-speed machining centres with CNC pre-setters and sophisticated validation facilities. CMMs are installed to ensure zero defect and unmatched quality.

**Q. What is the company's status in exports?**

We export shift sleeve to Fiat at Argentina and Brazil; gears to JCB, UK; offset frame, spring filler and bracket to Navistar, US; steer arm and tie rod arm to Paccar, US; and flange yoke to Eugen Klein, Germany.

**Q. What are the triggers in the automotive sector that will spur growth in the coming years?**

There will be a paradigm shift for wheels-on-the-move as electric vehicles will be dominating the future globally to mitigate climate change and protect the environment from auto emissions and pollution. With the thrust given by the government to make India an e-vehicle nation by 2030, there will be a quantum shift in operations from Indian and overseas OEM players to align their technology and production facilities to fall in line with the e-initiative. This aggressive push will be compelling vehicle manufacturers and their supply chain to modernize their technology and facilities. It will be a major challenge for the automotive industry that will have to embrace this change. ■

