

Rane TRW steers into tractor power steering business

Text: Bhargav TS

Rane TRW Steering Systems (RTSS), a 50-50 joint venture between the Chennai-based Rane group and ZF TRW, has entered the tractor segment to manufacture fully integrated hydraulic steering gears. The Steering Gear Division (SGD) of RTSS manufactures fully integrated hydraulic steering gears, hydraulic pumps, power rack and pinion, power steering fluid, including plastic reservoirs, and supplies to major OEMs in the country. The other division of Rane TRW is the Occupant Safety Division (OSD) which manufactures safety seat belts and air bags.

“In the commercial vehicles M&HCV segment is looking promising. This year we hope to cross 400,000 units, which is a positive sign for us. We are supplying hydraulic power steering to most of the commercial vehicle manufacturers in India. This industry will be dominated by hydraulic power steering in the coming years. For passenger cars, the electronic power steering (EPS) is manufactured by our group company Rane NSK. In order to grow in the steering business, we decided to enter the tractor segment and started manufacturing hydraulic power steering for the same. So far in tractors, hydrostatic steering systems (HSS) were used and now, by introducing hydraulic



power steering system, the comfort level and efficiency are set to increase,” G Parthipan, President – Rane TRW Steering Systems, told Auto Components India

RTSS manufactures hydraulic power steering systems for commercial vehicles and tractors at its Viralmalai plant near Trichy in Tamil Nadu. Rane has started supplying 500 units of hydraulic power steering gears to VST Tractors. It is in talks with all tractor manufacturers for supplying the same. The company feels that there is a good demand in the tractor segment as the market has been growing year- on-year, except in 2015-16, when there was a negative growth of 6%. The market estimates that 2016-17 will witness 611,000 units and by 2020 the volume is expected to be 772,000 units with a CAGR of 6%. The company is optimistic about grabbing a good market share and hopes to have a volume of 50,000 units for the tractors that are equipped with hydraulic power steering.

Parthipan said that electronic power steering (EPS) system has evolved as a promising technology in recent years and currently it is being used in the passenger cars. The hydraulic power steering (HPS) systems dominate the commercial vehicle segment. The commercial vehicles are transforming to the next level and the steering system manufacturers have started looking at bringing some electronic components into the HPS system. Once this system is ready it will be an emerging technology offering the benefits of EPS and HPS systems.

The market for steering systems is mainly driven by growing vehicle production as a result of increasing demand. In the power- assisted systems, EPS systems are leading the market by volume, followed by HPS systems. More and more focus on emission standards drive the car manufacturers to use EPS in the entry and medium-segment cars. About the adoption of EPS in commercial vehicles, Parthipan said, “when people migrated

to power steering from manual it offered great relief to the drivers, so they all moved to it. When we launched the power steering in 1991 the cost of the system was Rs 35,000. Now it costs only one third of it due to indigenisation and increased volumes. While the car manufacturers are moving to EPS as it eliminates an engine-driven hydraulic pump and increases fuel efficiency marginally, the overall driving experience for the end-user remains the same in commercial vehicles. Hence the adoption may take a very long time. Moreover adoption of any new technology is a very big challenge.”

As the technology evolves the OEMs and component makers have to adopt the latest technologies. Therefore RTSS has incorporated high speed sensitivity in its systems. High speed sensitivity is nothing but giving a stable feeling to the



Hydraulic Power Steering Pump

**G Parthipan,
President – Rane
TRW Steering Systems**

drivers during high-speed driving. This is possible with the unique rotary valve technology. Also to differentiate them, Rane has developed a hydraulic oil with the help of a German agency and IIT Madras. Normally in the steering systems hydraulic oil is used to actuate the valves. This oil has to be changed after clocking 80,000 kms, but the oil

developed by Rane has been formulated specially and the additives used have doubled the life and now the change interval is 160,000 kms.

The occupant safety division of RTSS manufactures seat belts and air bags for the passenger cars. It supplies air bags to Ford and Mahindra & Mahindra. As per the government’s mandatory norms, from October 2017 onwards every new passenger car model launched in the country will have to be equipped with driver and passenger airbags. Therefore RTSS will be playing a major role in the coming years. The airbag and seatbelt facility in Chennai assembles driver and passenger airbag modules with an installed capacity of 500,000 airbags.

Parthipan said, “Due to the safety regulations airbag is coming up and we are getting a lot of enquires. We see the potential for a phenomenal growth in this business. In 2015-16 we recorded around Rs 225 crore and we are planning to reach Rs 560 crore in 2018-19.”

In the commercial vehicle segment, we supply to Tata Motors, Ashok Leyland, Daimler, Mahindra and Volvo Eicher. In the passenger car market we supply to Fiat India, Mahindra and Mahindra, Renault-Nissan and Tata Motors. Going forward RTSS is also looking to grow in the small commercial vehicles (SCV). “In the small 1-tonne segment 3 years ago Tata Ace was ruling the market but due to slow down, the numbers started going down. Now the customers are looking for various options and there are new vehicles also coming up. So I expect the segment to grow by 10-12% in the coming years,” Parthipan said. **ACI**

