

# Rane TRW focuses on safety components

By Bhargav TS

Not only vehicle manufacturers even end users wish that every component in a vehicle functioned effectively. But there is one particular component/system, which everyone wishes does not have to be activated. Of course, it should instantly function in the unlikely event of a necessity. It is nothing but the airbag in your vehicle. An airbag is an occupant-restraint system consisting of a flexible fabric envelope or cushion designed to inflate rapidly during an automobile collision. Its purpose is to cushion occupants during a crash and provide protection to their bodies when they strike interior objects such as the steering wheel or a window.

So now it's understood how important this equipment is in a vehicle. It requires lot of capabilities and latest technologies to manufacture it



Mr B Ayyappan, Vice President – Occupant Safety Systems, Rane TRW Steering Systems Ltd

precisely and defect free. Chennai-based Rane TRW Steering Systems, the 50-50 joint venture company between the Rane group and American corporation TRW Automotive, has recently started manufacturing airbags out of its Occupant Safety Division (OSD) located in the outskirts of Chennai. The Occupant Safety Division currently manufactures safety seat

belts and air bags. The other division of Rane TRW is Steering Gear Division (SGD), which 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.

Till now Rane TRW was importing the airbags directly from TRW's Germany plant to its Indian customers. Now in its localisation programme, Rane TRW has set up a separate line at its plant in Singaperumal Koil near Chennai. "We have started manufacturing and supplying airbags to Mahindra & Mahindra and Ford India," said B Ayyappan, Vice President – Occupant Safety Systems of Rane TRW Steering Systems Ltd. He further said the company would be utilising the facility to manufacture driver airbag and passenger airbag. The key components will be imported from the JV partner and will be assembled out in Chennai facility.

"We are excited to increase our range of high technology seatbelt products and also add airbags to our product portfolio. Our goal is to anticipate our customer's future needs and offer the appropriate technologies. TRW is a global leader in safety systems and we are excited to bring the latest global product offering to India. We will increase our localisation in the coming years so that we can offer even more competitive prices to our



Wide range of seat belts, airbags and reservoirs are manufactured at Rane TRW's Chennai plant



**Rane TRW has 22 stations to manufacture seat belts and buckles**

customers,” said Harish Lakshman, Managing Director, Rane TRW Steering Systems Ltd.

A typical airbag system consists of an airbag module (an inflator or gas generator and an airbag), crash sensors, a diagnostic monitoring unit, a steering wheel connecting coil, and an indicator lamp. These components are all interconnected by a wiring harness

and powered by the vehicle’s battery. Airbag systems hold a reserve charge after the ignition has been turned off or after the battery has been disconnected. Each and every time when the ignition is switched on, the airbag performs an internal test and indicates in the instrument cluster.

Replying to a question on localising the airbag manufacturing, Mr Ayyappan said, “If our order books are full, we can think of localising it. An airbag consists of seven components, out of which we have to import the inflator and the bag, rest we can manufacture it locally.”

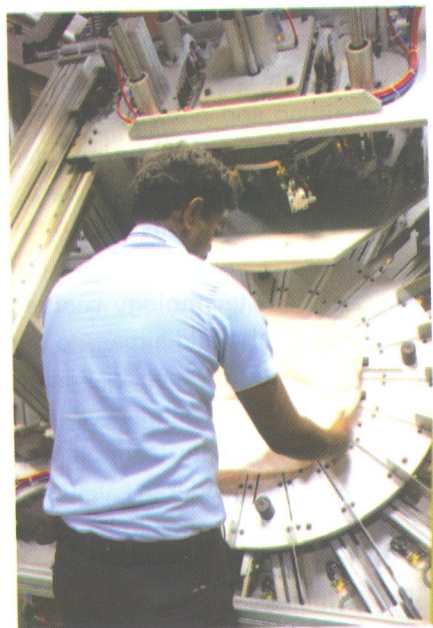
### **New airbag test facility**

Rane TRW is setting up its airbag test facility in its premises, which will be in operation from November 2013. L Radhakrishnan, General Manager – Engineering OSD, said, “Since airbag is a critical product in the vehicle, it requires lot of testing and validation. For which we are setting up an test facility, in which we will be doing confirmed development testing, which means whatever product we are go-

ing to make, based on our customer requirements we are going to fire the airbag and check whether bag deployment is correct and any tear in the bag occurs. We will be doing this as a random process and validate all other parameters.”

### **Seat belts**

According to a study, the combined use of air bags and seat



**Currently Rane TRW supplies driver airbag to Mahindra & Mahindra**



**Rane TRW has a capacity to manufacture 240,000 driver airbags and 81,000 passenger airbags**

