

# Rane Makes New Products With Latest Technologies

By L Ganesh



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Indian auto parts manufacturers are going global. The earlier model of waiting for vehicle companies to come to India and then localising and making a product for the Indian market is changing. This change is mainly owing to two important reasons.

One is that the number of global car companies coming to India and the models they introduce are phenomenal. So our customers are thinking increasingly about global products. Even a product developed in India is not only for India. Some products may be developed in Thailand. They could include the Indian needs also. Nobody is going to give an opportunity just to develop a product for the Indian market alone.

The second point is that scale has become very important. If we have to become more innovative, we must be able to invest in R&D. It is not possible to follow the Indian growth path alone and achieve a scale where we can invest and innovate. I feel the Indian auto parts companies also have to go more global.

Obviously, many of us have to take small steps in the beginning. That is the way we have to go forward in the globalisation process. We cannot afford to wait for things to happen; we have to act on our own. Similarly the models developed elsewhere in the world are not going to work here. There they encourage and protect their local industries, and then build a scale. In India in 1991, we opened up the economy to the whole world without any consideration for local the industry.

## Major Impediments

Today, I would say, the major impediment for globalisation is our mind-set. We have to change the mind-set and start looking



for global opportunities rather than saying we are Indian players with some exports. I think, we should start saying that, “we will grow our business by taking advantage of the global opportunities.”

We must also learn the cross-culture kind of management. We cannot manage a company overseas fully from India. Understanding the local culture there and then getting integrated into the local environment is very important. That cultural-fit is something we have to learn as we go forward.

Capital for the Indian components companies with no big scale can be a challenge. I think one has to take that call. Capital is available in the market for a company which has a good track record and a good business plan. Capital is looking at markets like India as growth in other markets has matured. Lot of capital is ready for Indian investment. By understanding the process one can raise capital without much difficulty.

### Global Market

I think, understanding of the global market place is very important for our globalisation efforts. The US is completely open as it has a cosmopolitan environment. There is no issue of the origin of the product. They are clearly looking for only performance at the end of the day. If quality products are delivered at the right cost and the customers satisfied, then I think it does not matter who owns the company. They look at a company’s capacity to grow and capability to invest to support them continuously. Origin is not an issue for them.

Although we do not have much experience in Europe so far, I think, the European market also is pretty much similar. China and Japan

could be different. Honestly, I don’t know whether they are equally open to the foreign ownership. There could be some issues.

Mexico is close to NAFTA and it is an attractive destination for many companies supplying to the US and Canada. Some parts of Mexico, they say, are very good and some parts are not so conducive for us to manage. Many auto parts companies are setting up shop in certain parts of Mexico. From the market access point of view, it has got certain advantages; especially when the customers are in the US.

Mexico also is growing very fast and over a period it may catch up with developed markets in terms of wages and salaries. It may not be very attractive going forward.



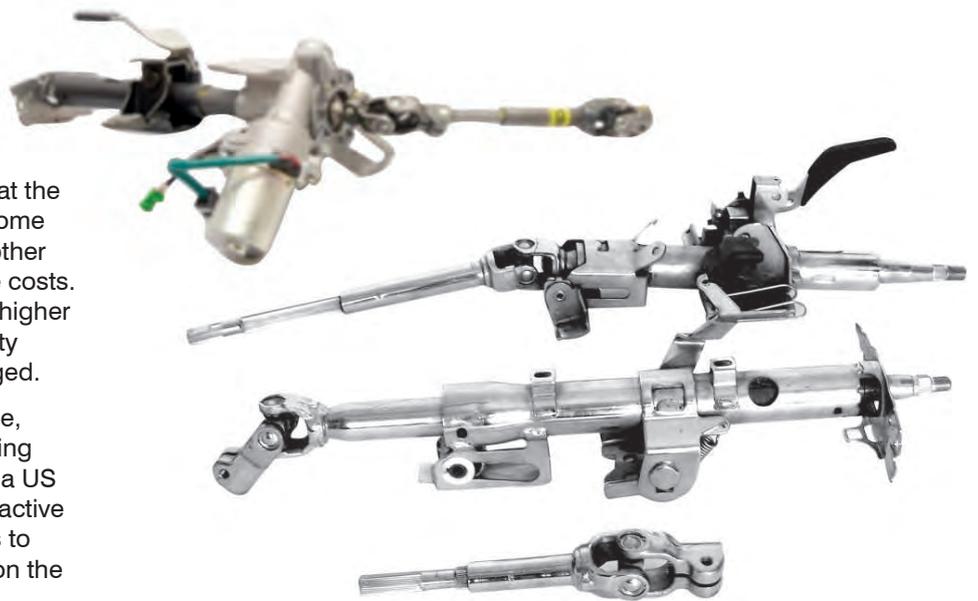
And there are lots of advantages that the US is offering today, especially in some of the southern states. Power and other facilities are available at reasonable costs. Only salaries and wages are much higher there. But if you get your productivity levels then this issue can be managed.

Though Mexico is an attractive place, some companies have started looking at the US as an alternative site. For a US company Mexico could be very attractive but for an Indian company, one has to look at both, compare and decide on the most suitable location.

### New Products

In terms of new products, advanced electric power steering with brushless motor is something that is catching up. This is what Rane NSK is well equipped to supply and that application is in high demand for passenger cars. We are developing Rane NSK as a centre for commercial vehicle columns. With the support of NSK, we have created engineering competence, testing and validation facility at our Chennai plant. We can start developing commercial vehicle columns from India and this is a good development. We are progressing well and we will be exporting this year to Isuzu Thailand.

For some products our engineers are working in Japan in line with Isuzu. They have trained nearly 12 engineers in Rane NSK and many of the future



developments will be here. In terms of new products, air bag is our latest product that we have added and it is growing quite rapidly. This is because our customers are adding airbags for meeting safety regulations, for competitive positioning and for exports models. Airbag is the product that will grow rapidly in the coming years.

We have the latest and up-to-date compact technologies from TRW for seat belts and that is giving us some advantages. We have started exporting to South America, Brazil and Columbia. In seat belts also we have compact designs and the market for them is going to expand.

For other products, light-weighting seems to be a major trend here for enhancing fuel efficiency.

We are also working on all our product lines to reduce weight. For example, for the hydraulic power steering we have been able to develop aluminium pumps and we are working with our customers. From our conventional cast iron pump we have developed compact aluminium pump. It reduces weight by 30-40 percent for commercial vehicles. We are currently testing this product in new commercial vehicles. We have also reduced the weight of gears. Some models that are going to be launched this year will have these gears. That gave us the concept that “if you start from the drawing board it is possible to achieve results.”

With emission standards moving from BS IV to BS VI, we have to





develop suitable engine valves. So we have started working on new materials for some export customers like BMW. Innovative construction is required to reduce the weight of the valves. Though they are very light products, there is opportunity to make them lighter. This is important as the multi-valve engines with very high RPM and better fuel efficiency, need valves with a unique construction. We are investing in R&D in that area. We are developing some prototypes of very light valves with some fancy alloys.

The heat transfer from head to the stem through the cylinder head is very important. When RPM goes up from the conventional levels, temperature will raise, especially in the exhaust valves. It will be crucial for trucks having longer duty cycles. As the engines today are not opened at all, the reliability of the parts becomes very crucial. It looks very deceptively simple. But when you use millions of pieces, reliability becomes very important. We are working on some materials, constructs and prototypes.

### Electronics

Use of electronic is very common and is increasing. The power steering and airbags have sensors. Our first step in Rane is to assimilate and invest in some electronic capabilities to understand the use of electronic products and how it can be integrated with mechanical parts. Right now we do not plan to get into electronics as there are enough specialists. Our focus is on to understand how to procure, handle and how to integrate the

electronic-mechanical parts. Electric Vehicles (EVs) are becoming a reality now. Electronic giants like Apple, and big car companies are getting into it. It is said that some of the biggest technology centres of Ford or Toyota are in San Francisco and not in Detroit. EVs will grow much faster than we think. One has to wait and see.

However, there are several issues including infrastructure, battery prices, oil prices, range and others. The one product that is a threat to us is engine valves. The engine valve is an issue which we will have to think about in future. Most of our other products will continue to be used. We are also trying to understand what will happen to our products such as brakes and steering systems etc, when electric vehicles come. We are trying to understand the implications and what we need to do. That is the knowledge we are trying to assimilate.

Additive manufacturing is extremely useful in prototyping and development work for validation and simulation testing of various parts. It is the best and quickest way to do it. It seems very good for high precision small batch production like aerospace. I am not sure if it is equally valid when we produce millions of parts for automobiles.

### Future Plans

This year (2016-17) will be reasonably good as commercial vehicles and passenger cars are doing well. There is some movement in infrastructure like road building, power etc. We see some encouraging activities. The

uncertain areas are tractors and entry-level motorcycles. But in the recent months, there is a pick-up in these motorcycles. But for tractors, it seems, we have to wait and watch the monsoon. Today it is very subdued; if the monsoon is good and if the focus of the budget is on rural economy, it also might pick up.

The overall attitude of the automotive industry is very positive. We are going ahead with our plans. The performance will be good in the next two- to- three years. If the economy continues to grow and this government that has already started showing some results in the areas like power, infrastructure and road building, continues to progress, we think the next two three years will be good for India.

Because of our extreme focus, we have made good breakthrough in exports. Our order position for the next three-four years is quite good. In terms of capital, we are very closely watching the market and if the business is good, we will continue to invest. Overall I am quite positive for the next three to four years.

Setting up a greenfield facility is not on cards now. However, there will be expansion of capacities. We will be expanding our steering system plant, Rane NSK in Bawal, as there are some new programmes, and the Rane NSK plant in Uttarakhand, since it is a very small plant. We are looking at options to shift some of our northern customers from Chennai to Uttarakhand. We may add some lines at our engine valves plant also. **APA**

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