Our Focus Is On Process Integration To Enhance Efficiency: Amit Sood

Gurugram-headquartered Asahi India Glass Limited (AIS) has been supporting the automotive industry to enhance comfort, visibility and safety by the introduction of new technology automotive glazing products. The Rs 3,000-crore group supplies automotive glass to most of the OEMs in India. The company which has more than 75 percent market share in the passenger car segment, is setting up a Greenfield facility in Gujarat with many improvements compared with conventional methods.

"We are focusing on initiatives such as Low Cost Automation and Industry 4.0 to enhance our competitiveness. The Gujarat facility will be future-ready and is planned, to be built in phases to generate the maximum benefit," Amit Sood, Executive Director, Sales and Marketing, AIS, told T Murrali of AutoParts Asia in an exclusive interview. Edited excerpts:

Q: Can you give us an update of your new facility in Gujarat?

Sood: This facility is an extension of increasing our capacities, aligned with growth of the Indian market and also towards catering to the requirements of Suzuki Motor, Gujarat and other strategic OEMs in the region. We also have customers like Ford and Tata Motors and other OEMs in the West. We are setting up a state-of-art Greenfield facility by investing over Rs. 600 crore with an annual capacity of 2.4 million car glass sets, in Gujarat. This will be our largest standalone facility and will be bigger than our other major plants in Bawal and Chennai. It will be implemented in phases and modules. The first module will be the setting up of a laminated windscreen plant which will be commissioned in the current fiscal. We are getting all the required approvals on schedule. Future expansion will be aligned as per the auto industry's growth.

Bhawal plant

Q: Would each module have a specific capacity?

Sood:Yes, 0.7 million car glass sets on an average. We are looking at an industry growth rate of seven to eight percent. If we get some other breakthroughs from the segments we are targeting, we will revise the plans.

Q: What is your present installed capacity?

Sood: We have four auto glass plants in India; at Bawal, Chennai, Roorkee and Taloja. Our facility in Gujarat will be the fifth auto glass plant. We presently have a total capacity of 5.9 million laminated windshields and 4.3 million tempered car glass sets. Post start-up of Gujarat plant, we are looking at a total capacity of 8.3 million laminated windshields and close to 6.0 million tempered car glass sets by FY2022-23. The journey to growth will also be sustained by bringing in high value improvements in existing facilities and automating them. We are establishing a new laminated line for Bus and Truck windshields in Chennai, which is a Brownfield expansion.

Q: As you increase in phases do you have business prospects to cater to?

Sood: Of course. All these expansions are driven by the fact that we have good visibility of our future growth. We work with our customers two to three years prior to the launch of a new model. All expansion plans are based on the industry growth forecast and the new orders we have in hand and those we are projecting. We have a robust planning system. Everything is reviewed meticulously and relevant expansions have been factored in our plans. This is also supported by a strong Technology Roadmap which helps us in aligning sustainable technologies with the emerging products.

Q: Can you throw some light on the best practices in your plants?

Sood: Being in the industry for the last 30 years and multi-locational, different cultural learnings, different processes and the global technologies are all part of the norm which we are incorporating into our system. For example, our Gujarat plant will have many improvements from the conventional model. It is going to be a state of the art facility with high capacity lines, integrated, automated & efficient processes. We are focusing on initiatives such as Low Cost Automation & Industry 4.0 to enhance our competitiveness. The Gujarat facility will be future-ready and we are building it up in phases to generate the maximum benefit. We are able to come up with the best and optimum cost modules suitable to the requirements of the Indian automotive industry.

Q: In manufacturing glass there is no question of rework; once the job is damaged it is rejected. When you talk of improvements, what are the parameters you focus on?

Sood: We are working towards attaining Zero Defect. The technology plays a vital role in reducing the rejections. When we talk about the improvements it is the implementation of best practices out of our wide experience aided with the induction of smart machines.

We need to ensure that through multiple in-house initiatives related to productivity improvement and less handling due to Low Cost Automation we achieve best in class output meeting our customers' expectations. Adopting initiatives linked to Industry 4.0 will also help us in achieving the desired objective.

Q: Ultimately, will it help you reduce costs?

Sood: Of course it will, because controlling cost is one of the key requirements of the customer also.

Q: Efficiency has become a hygiene factor now. Will low cost automation be achieved by deploying Cobots or would you be doing your own design and development?

Sood: We will do it through process integration and localisation. If we can integrate the pre, main and final processes, and reduce handling during the complete process, then that in itself would bring in a lot of efficiency. We believe in low capex model thus most of the technologies are developed in-house. Small PDCA projects such as reducing energy consumption, improving line productivity is what we are focusing on. We are very clear that Gujarat has to be looked upon as a benchmark plant with respect to what it will deliver. Internally, we have a process of constant benchmarking not only with our global counterparts but also with the industry best-in-class and our own internal benchmarking. That's how we challenge ourselves to meet the objectives and targets.

Q: Can you tell us about the new line for bus in Chennai?

Sood: We have been in this segment for a while. Over the years we have supplied to players like Volvo, Daimler, Tata Motors, Tata Marco Polo and many others. What we feel is that post the implementation of GST there has been some kind of vendor rationalisation in the truck and bus body segment being produced beyond the OEM plant. Earlier, there was a lot of clutter in the industry in sourcing from multiple players; now what we see is that because of GST, OEMs have begun to rationalise their vendor base to bring in an element of competitiveness and get better quality.

If the bus body code gets implemented, OEMs would focus on building the cabins themselves. We have got some good leads after extensive discussions with all the OEMs. We want to exploit this. We are fully aligned with Daimler and our new windscreen line in Chennai is not only for buses but also for large trucks.

Bus and Truck segment is growing and so it makes sense to move our production there to service OEMs in the South like Daimler, Ashok Leyland, Tata Marco Polo etc; their locations are nearer to Chennai than Bawal which will enhance our competitiveness. Apart from OEMs, we are also looking at opportunities in Exports and Replacement Markets which could give us good business.

Q: With the AIS Bus Body code coming in, some OEMs have already started building coaches based on that regulation. How flexible is your plant to customise windshields for bus application as coaches may have different dimensions, especially height, for the windshield?

Sood: We have designed the line in such a way that it covers the entire spectrum of OE requirements today. We have taken into consideration that every SKU or customer will have a different design requirement. That is not a constraint because when we design the line we include the maximum size that is visualised; anything less than that can be easily accommodated.

Q: When vehicle manufacturers lose on certain advantages like aerodynamics, due to design constraints, how effectively do you help them offset that?

Sood: This is something we have been doing all over the years. For example, we have been working with several OEMs from the design stage itself to come up with optimum solutions to overcome blocks as they crop up.

Another example could be light weighting; everybody wants to focus on it to meet CAFE and BS-VI norms to reduce the emissions. One of the ways we can help is by reducing the thickness of the glass. This helps in improving fuel efficiency because as weight goes down efficiency gets better.

Traditionally, the industry has been focusing on one colour of glass that we call as standard or the normal green. About 20 to 30 years ago the industry was principally using clear glass and green glass for high-end models. Today, from an OEM perspective, there is hardly any vehicle that uses clear glass except a few legacy truck models; across the industry everyone is using the standard green glass. This glass has the property of reducing ultra violet rays and the light and solar energy transmitted.

India is a hot country with an average temperature of 35 degree Celsius for average 7 to 8 months in a year; for anything over an outside temperature of 27 degree Celsius, people will switch on the air-conditioner in the vehicle. What we found was that the average use of air-conditioner within the country was for a period of 7 to 8 months. We did a consumer research, we got feedback from the end-consumers that they wanted something to reduce the cabin temperature. We took the findings of the study back to OEMs and collaborated with our JV partner AGC Inc. (in Japan) and came up with something unique called – Dark Green UV cut glass.

The regulation in India for light transmission calls for more than 70 percent in the windshield and backlite and more than 50 percent for all side glasses. It is a unique regulation found only in India; it doesn't exist in other markets. Outside India there is no limitation on the light transmission on any glass behind B-pillar. So what we came up with was a product that was suitable for India market. This was exactly as per the regulation with UV cut by 82percent and reduction in solar transmission to 54percent vis a vis standard or normal green glass which has UV cut property of 68percent only and solar transmission of 70percent. This helps in preventing the heat load from coming into the cabin thus increasing the effectiveness of the air-conditioner. Apart from giving better comfort, better aesthetics, this can also positively impact fuel efficiency. This glass is already introduced in the country with Maruti Suzuki using it on one of their Baleno variants.

Q: Can it be used for backlite?

Sood:This can't be used for the backlite. What we are proposing is to replace the windshield with an Infra Red (IR) cut PVB (Polyvinyl butyral) laminated glass that gives the same function. The backlite can be solar control glass; it is being used by some of the OEMs, the latest one being Toyota Yaris. The four side door glasses (sidelites) can be used with this combination of Dark Green UV Cut Glass. What we have established, is that by using this combination the surface temperature of the dashboard, the gear knob or the parcel tray reduces by as much as eight to nine degrees Celsius and cabin temperature reduces by two degrees under soaking condition. When the air temperature is better inside the cabin than a cabin using conventional green it would definitely improve the cooling of the air-conditioner.

Q: What has been the feedback from the OEMs?

Sood: We expect OEMs to conduct their own trials with the Dark Green UV Cut Glass combination and establish the benefits related to comfort, fuel efficiency and thereby emission which possibly can also be helpful towards meeting of the upcoming BS-VI and CAFÉ norms.

Q: What would it be like for EVs?

Sood: The EV challenge would be first of all to look at lightweighting to prolong battery life and then the options that consume power. We can reduce the load on the air-conditioner by using this type of advanced glazing to decrease the heat inside the cabin.

Because of no engine noise inside the cabin, the passenger would be more sensitive towards the outside noise and solutions like Acoustic windshield, which Toyota Yaris is using today, will be helpful. Ultimately, we expect the OEMs to do this validation themselves to get satisfied. We want to collaborate with the OEMs and whatever direction they set on how it is to be done, we will follow that.

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