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ADDITIVE MANUFACTURING
Shaping the future

INJECTION MOULDING
Reliable solutions

Leading from the FRONT

Know how **Abhishek Jain**, CEO & MD, PPAP Automotive Ltd. is taking the company ahead with innovation and technology

Leading from the FRONT

ABHISHEK JAIN, CHIEF EXECUTIVE OFFICER AND MANAGING DIRECTOR, PPAP AUTOMOTIVE LTD BELIEVES THAT RIGHT ATTITUDE LEAD TOWARDS SUCCESS AND HAS INCULCATED THE SAME CULTURE IN THE COMPANY.

By Swati Deshpande

Maruti Suzuki India (then Maruti Udyog Ltd) launched its first car in 1983-84 with the aim of bringing out affordable vehicles. PPAP Automotive has been the part of that historic moment. Speaking on the history of the company, Abhishek Jain, Chief Executive Officer and Managing Director, PPAP Automotive Ltd mentions, "We have been in the industry since the launch of the first Maruti car in the country. Since then we have consistently worked on ourselves to remain the best in technology and capability. One of our key strengths is our integrated operations that support our customers from print to build. We engage with the OEM right at the development stage and assist from part design and development to mass production."

Along with company, Abhishek also inherits the skill of leading from the front. With the motto of 'Taking challenges, together', he encourages his team to overcome challenges with calculative risk. However building such a team was not an easy task for him. Speaking on it, Jain says, "Every day brings a new challenge in the automotive industry. It depends on how much you can see and how much you can hear. The evolution will always bring about new challenges. At PPAP, we motivate our team which is always ready to face and overcome these challenges. I think the biggest challenge that I faced was to develop my team to take calculated risks to achieve breakthrough results. I always tell them, that if you are taking a calculated risk, then success is yours and failure is mine."

In this journey, setting short term goals can give tremendous results. "Daily small improvement is our key mantra for success. We firmly believe that today's result should be better than yesterday's result. The team is motivated to challenge each activity of their daily routine and are focused to doing the same activity more efficiently," he stated.

Innovation

The mantra of continuous development has translated into new developments. Giving an example of an innovation that stands tall amongst others, Jain narrates, "One of our customers requirement was the part that must be bent to match the body shape. It was possible if we used steel in our profile and bent it conventionally using a special machine. But in this case ,the customer did not want to increase the weight of the product but at the same time required the body matching of the part. Our engineers took the challenge and decided to make it by using a typical process (refer to fig. 1)."

One of the other innovations that helped PPAP Automotive Ltd bag the ET Polymers Award 2017 for Excellence in Automotive was Body slide moulding for Baleno. Speaking on this, Jain says, "Body Side Molding is used to add aesthetics and also provide safety to the vehicle in case of minor accidents. PPAP's in-house designed part is light in weight, and easy to install on the door panel. These features have resulted in improving the vehicle's fuel efficiency and time saving in part assembly. Despite weight reduction, product quality requirements were ensured through DFMEA, Design Reviews, Mould flow Analysis, material testing, PFMEA, performance testing & Inspection." The key features of this product include weight reduction (by 17 percent) - reduced wall thickness and addition of aesthetics with chrome Insert.

> **"The prime focus on reduction of fuel consumption has led many automakers to focus on reducing the weight of their car by using light weight components. Use of Engineering Plastic has been playing a major role in replacing traditionally used steel in many components."**

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In bringing out innovations, what helps the company is their strong infrastructure. Speaking proudly on the same, Jain says, "Improving the cost competitiveness of our products is driving us to challenge the current designs and come up with innovative solutions to meet our customer's expectations. To enable this, we have a Design Center, which is supported by an exhaustive validation facility as well as a tooling facility to make the dies and fixtures. We also design and manufacture the machines that are required to make these products. With the help of our state-of-the-art facilities, we were able to match the bending properties of steel with thermoplastics."

In addition to the infrastructure and attitude of taking challenges, Jain also believes in developing local R&D capabilities and facilities, localising supply chain to the maximum extent possible and focusing on preserving the environment.

Customer delight

While the team is ready to take new challenges, customers also play in important role in the success of the company. "Continuous engagement with customers helps us identify their pain areas. What further leads to offering better results is focusing on achieving manufacturing and business excellence across all facets of the organisation," he noted.

This mantra has helped the company deliver exceptional results even in the turbulent times. Speaking on the company's last year's results, Jain says, "Our journey on the path of continuous improvement and Muda elimination continued during the year and brought creditable results with the EBITDA margin crossing 21 percent in the last quarter of the Financial Year 2016-17. In the current financial year, we have targeted to grow at higher than industry rate, acquire more customers and consolidate the improvements achieved."

Eventful period

The last few months have been quite eventful and equally turbulent to the automotive industry. Some of the key instances are demonetisation that affected the automobile and hence automotive industry for short period of time, introduction of GST and adoption of BS IV regulations. "GST regime will definitely support the competitiveness of the automotive industry as it will remove the state boundaries and goods can be easily transferred from one state to another. The biggest change that has come about is that all expenses towards business furtherance barring a few items that are specifically blocked are now eligible for Input Tax Credit. As a result the cost of production is expected to come down. While, transition is obviously challenging, the process can be said to have become simplified. On the whole we are very positive about this significant reform," opines Jain.

"We are continuously adapting to the changing environment

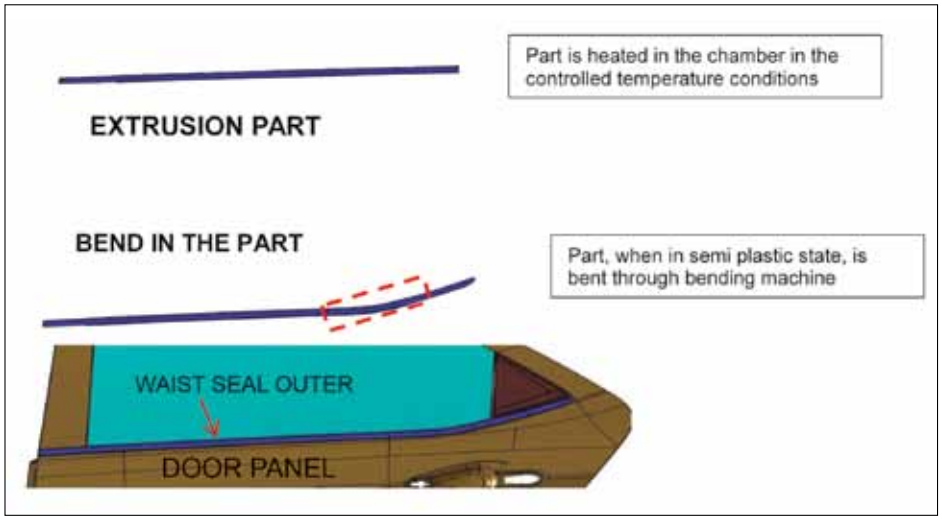

Figure 1

Manufacturing excellence

PPAP Automotive Ltd's state-of-the-art manufacturing facilities are located in Noida (UP), Greater Noida (UP), Chennai (Tamil Nadu) Pathredi (Rajasthan) and Surajpur. The company has an integrated development center, which designs the products using the latest softwares. It also has a validation and testing facility to validate the designs along with a tool manufacturing facility which makes all the tools required to manufacture the products. The company has Extrusion lines that are capable of processing Engineering polymers like PVC, PP, TPO, TPE and TPV materials. The Co-extrusion facilities are capable of extruding up to 4 different hardness materials into a single profile based on the customer's requirements.

The company also has EPDM Rubber Extrusion lines and TPV Glass Run Channel line in its joint venture company. All the lines are fully automated and use the best and most cost effective technology. Besides Extrusion lines, the company also has Injection Molding machines ranging from 60–2500 tons.

and continue to focus on delighting our customers with their stated and implied needs in a proactive way," he adds.

Projecting the future developments Jain states "The paradigm shift that is taking place in the industry is towards the reduction of fuel consumption and a connected car concept where the car is an extension of yourself. We are continuously challenging our designs and providing lower weight solutions to our customers."

"The prime focus on reduction of fuel consumption has led many automakers to focus on reducing the weight of their car by using light weight components. Use of Engineering Plastic has been playing a major role in replacing traditionally used steel in many components. PPAP has been consistently supporting this initiative by efforts towards reducing the cross section of its profiles as well as wall thickness of Injection Molding parts, thereby reducing the weight of the components manufactured by it," he elaborates.

> **We will be a seeing a lot of technology getting changed on the fuel intake systems, emissions and the exhaust systems. Many component suppliers are ready with the technology to cater to BS VI requirements.**

The plastic has been playing a crucial role in the automotive industry. "While motorists want high performance cars with greater comfort, safety, fuel efficiency, style and lower prices, society demands lower pollution levels and increased recovery at end of life. Continual innovation is a key feature in the use of plastics in cars. Plastics will continue in the next decade to help designers and engineers to innovate and take car performance further," Jain opines.

He further adds, "The innovative use of plastics and plastic composites is driving a revolution in the capabilities of automotive industry. Lightweight plastics allow automotive designers and engineers the freedom to deliver innovative concepts cost effectively. Some of the key attributes that plastic features are durability, strength, lightweight, resistance to chemicals and harsh environments, thermally and electrically insulating, transparent, translucent, or opaque. Additionally, the material is also soft, flexible, or hard in almost any shape and size as well as heat- and corrosion-resistant. Its recyclability and cost-efficiency make it a preferred material."

Looking ahead at the adoption of BS VI regulations that is expected to be implemented by 2020, Jain suggests "We will be a seeing a lot of technology getting changed on the fuel intake systems, emissions and the exhaust systems. Many component suppliers are ready with the technology to cater to BS VI requirements. The biggest foreseeable change will happen when India decides to adopt Hybrid and Electric vehicle technology in a big way."