



Chaphekar grows 'body' of work

Thus far focussed on haulage bodies, the company is getting into higher-end applications like tippers, trailers, car-carriers and reefers.

Story: Rajesh Rajgor

The last fiscal has been difficult for all stakeholders of the CV industry. Pune-based truck application developer Chaphekar Engineering Private Limited (CEPL) has not been immune to the trend. On the back of declining truck sales, it registered a turnover of Rs 120 crore during FY12-13, a dip of 25 percent vis-a-vis the Rs 160 crore notched up a year before. Most

other companies may have been reeling under such circumstances but Chaphekar sees opportunity in adversity. 'We aim to revert to a Rs 160 crore turnover this fiscal on the back of an expanded range of applications,' sets out Sachin Chaphekar, Director, CEPL. A rash of recent orders indicate that the company is walking the talk. Just a couple of months ago, the

Three generations of the Chaphekar family have been active in the automotive space. In the picture are father-son duo Sachin (standing) and Ashok Chaphekar.



company has developed 400 vaccine vans based on the Force Trump SCV. This development comes not too long after Chaphekar supplied 600 'cafeteria vans' based on the Tata Ace in order to help the OEM meet its export commitments. And then, a new plant, the third for Chaphekar in the Pune region has begun putting out 3.5 cum tippers based on Mahindra Navistar's LoadKing LCVs. 'We are also working towards the development of larger tippers on the other platforms,' informs Chaphekar. Bottle carriers, ambulances, service vans, pillar-less containers, side-door containers, truck-mounted cranes, tankers as well as cowl-cabins are some of the other applications that CEPL has proven its mettle in. Moving up the value chain, the firm has developed insulated and refrigerated vans on LCV platforms, besides commencing supplies of car-carriers to logistics majors. Concurrently, flat bed and skeletal trailer applications are also ready to be commercialised. In sum, Chaphekar can now develop 60 applications that are priced in the range of 'Rs 15,000 for a small load body to Rs 7-9 lakh for a car-carrier.' The potent product portfolio has been constructed on the back of CEPL's reputation as a reliable manufacturer of cargo bodies.



↑ **CEPL has had initial success in the delivery of car-carriers to prominent automotive logistics companies.**

↑ CED: Key differentiator

'We found that cargo boxes on Tata Motors' trucks began to rust, when exposed to humid air. Our traditional spray and dip phosphating methods did not prove good enough to safeguard the integrity of the paint over a long duration. At that juncture, we knew that the solution had to come from CED coating,' explains Chaphekar. Cathodic Electro Deposition (CED) allows bodies to withstand 1,200 hours of abuse in the salt spray chamber – four times as many hours as allowed by dip phosphating operations. Moreover, the former, a simpler process, provides for coating in body contours deemed inaccessible through the latter process. Chaphekar reckoned that customers would not mind paying a 4-5 percent premium to secure

the same advantages that accrue to passenger car owners. Accordingly, it inaugurated the CED plant in March, having made an investment of almost Rs 30 crore. The plant features 13 tanks, with nine being for pretreatment and four for CED (colour coating). Once welding is completed the load body skids through on a load bar. It is then integrated together on the jack and dipped into the pretreatment de-greasing tank. This dip helps to remove oil and other dust particles that the body has accumulated during bending, joining and welding operations. Post this stage, it is immersed into the 7 metre tall and 3 metre wide CED tank. The coating helps the paint stick that much better to the body. The body is then baked in an oven to ensure optimum spread, finish and longevity of the paint. ➤➤



← **The CED facility has entailed investments of almost Rs 30 crore.**



Averaging about 1,700 bodies per month, the company has put out more than 2,00,000 applications through the course of its three-decade old existence. The customer list includes names such as Ashok Leyland, Mahindra Navistar, Force Motors, MAN Trucks, Hino Motors as well as institutional customers like Coca Cola India, KSH Logistics and Transystem Logistics. But the bulk of CEPL's business comes from Tata Motors - upon whose insistence the company came into being in the first place. 'Our company was set up in 1982 with the intention of providing pressed and fabricated components as well as bodies to Tata Motors. We got off to a great start. The OEM selected us to be a key supplier of bodies for the 407, when it was launched in 1983-84,' recounts Chaphekar. There was no looking back after that. Recognition of CE's 'tool room capabilities' led Tata Motors to award the former with the mandate to develop bodies on the 909 and 1109 platforms. Keen to demonstrate its mettle, CEPL undertook value-engineering on the body design and succeeded in saving 15 percent off the originally estimated cost. Having reaped handsome cost savings, the CV major was only too happy to assign the application builder, the responsibility of developing bodies

across its 7-31 tonne GVW range of vehicles. Apart from truck-based applications, Chaphekar also makes a range of auto components. It supplies hood locks to ALL, while providing Side Under Run Protection Devices (SUPD) to Tata Motors and Mahindra Navistar among a few other OEMs. Also supplied to Tata Motors are power steering mounting brackets. Radiator frames, cradle assemblies, rocker arms, select lever and support gear controls, complete rocker arms, welded forks (twice), (front/side/rear) guards and bumpers complete the bouquet of Chaphekar's auto component offerings. In all, this business accounts for about 5-10 percent of the company's turnover.

Quality consciousness

'At the end of the day, body building is welding of components,' avers Chaphekar. He does not say it lightly. On an average, every cargo body undergoes 150 metres of stitch welding. Even considering an average daily production of 50 bodies, the weld distance adds up to a whopping 7.5 km. 'The challenge is to ensure consistency of quality over such a large volume of work. This scenario is made even more difficult due to a shortage of welders,' admits Chaphekar. In order to address these issues, CEPL

↑ **A haulage body application developed by Chaphekar on the BharatBenz 3123 rigid.**

↑ **A 3.5 cum tipper mated with the Mahindra Navistar Loading LCV.**

has set up ergonomic welding fixtures and devised schedules and designs to reduce worker fatigue. Undoubtedly, welding operations factor durable builds, but Chaphekar understands that aesthetics is an important consideration as well.

'Top hat sections of the body are aligned with the floor through welding of the side walls.

The welding job is clearly visible when it is placed vertically.

Therefore, we have designed a closed box, which when fitted on the side panel creates a natural buffer area where welding can occur without telltale weld marks,' underlines Chaphekar.

Apart from welding, Chaphekar's main strength lies in tooling.

'Drawing from our strengths in tooling, we have reduced quite a few joineries in the body.

This, in order to reduce the intensity of labour input,' adds Chaphekar. CEPL can carry out die-making, pressing, cutting and bending operations on the basis of equipment like shearing machines (2.5 metres and 3 metres), press brakes (3 metres: 80 tonnes and 160 tonnes) and power presses (10-300 tonnes capacity). ● ● ●

