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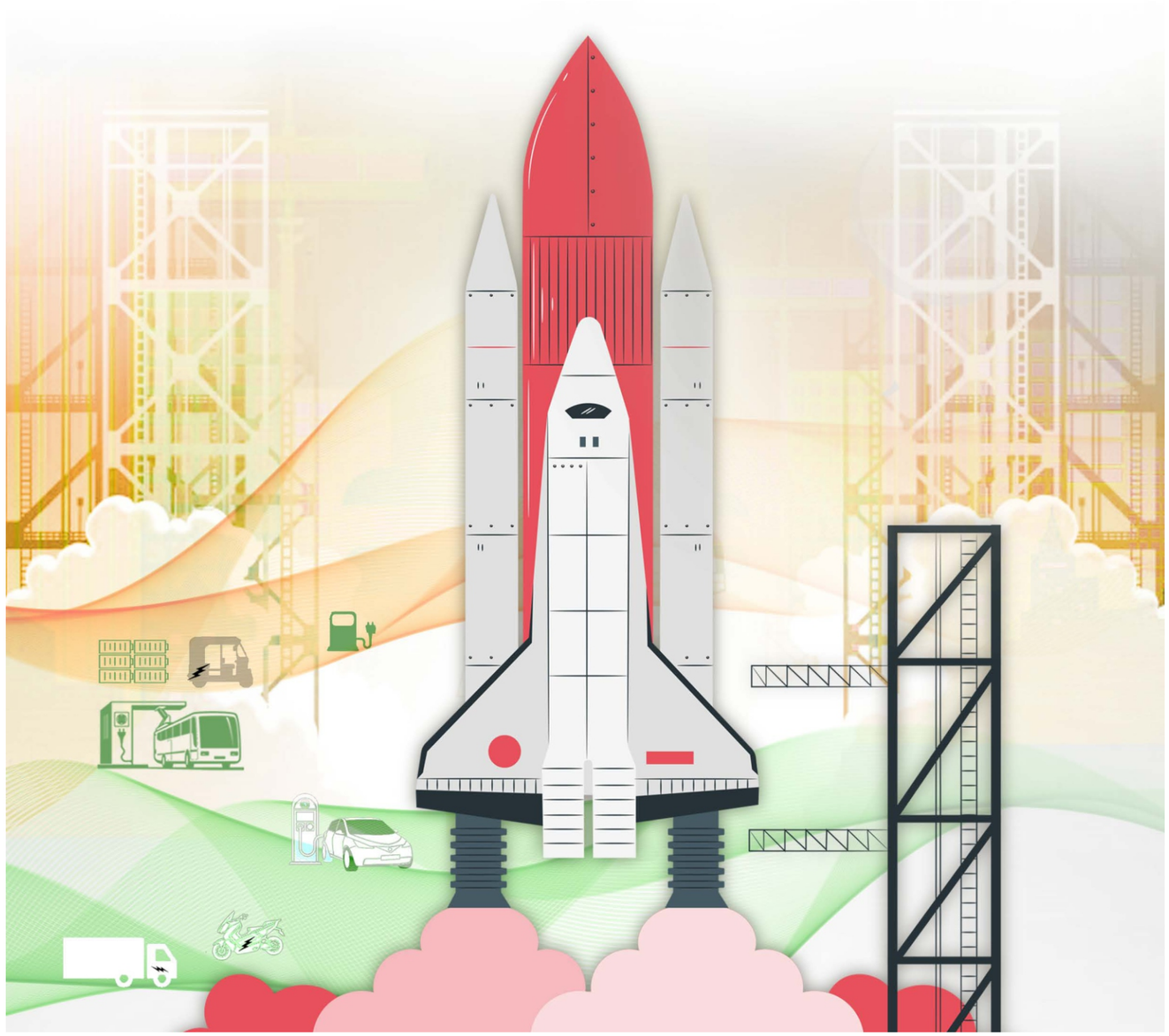
ETN

EMERGING TECHNOLOGY NEWS

Atmanirbhar Bharat
E-mobility Mission Take-off



New vistas in EV component industry

The electric vehicle market is primed for expansion. In order to thrive in the new order, EV component makers will be required to think of a long-term focused strategy while new entrants will have to overcome substantial barriers.

ASHOKMINDA
ChairmanandGroupCEO
MindaCorporationLtd

Business overview: Spark Minda Group had announced the establishment of Spark Minda Technical Centre (SMIT) in 2016. This unit will enhance the group's ability in product development and design, to deliver inter-disciplinary products in the EV component business. We have been instrumental in development of stringent quality EV components, which will meet the automotive and EM/EMC norms. OEMs are focusing on achieving higher efficiency and performance in vehicle electrification solutions and seeking innovative products for their upcoming vehicle programs. We have deployed an expert team of power electronics and embedded professionals who are working on various new technology platforms, to cater to the electrification requirements.

EV components manufactured: DC-DC convertor, battery charger, connected clusters, HV wiring harness, keyless entry systems and EV telematics are the primary EV components for e-2Ws and e-3Ws vehicle segments.

E-mobility strategy: With the increase in the penetration of the EVs especially in 2W and 3W space, our focus is on development of power electronics viz., DC-DC converter, battery charger, motor controller, etc. We are also exploring opportu nities for a potential joint venture for expanding our product range.

We will be localizing the entire value chain right from R&D to manufacturing, basis specific customer requirements.

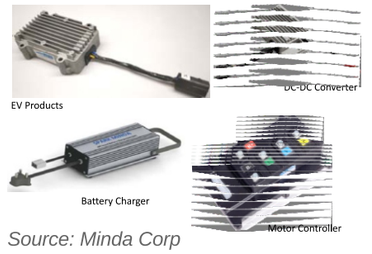
Products and market reach: We cater to all the segments of the automobile industry i.e. 2W, 3W, passenger vehicles, commercial vehicles and off-road vehicles. Minda Corporation focuses on three domains in a vehicle i.e. Safety Security and Restraint System (Mechatronics), Driver Information and Telematics System (Information and Connected Systems), and Interior System (Plastics and Interiors).

In Mechatronics Vertical we offer Vehicle Access Systems for all segments like conventional lock set to Advanced Passive Entry Passive Start – keyless entry systems, high-end die casting parts like housing compressor and turbo charger parts, and auto electrical parts for the tractor industry.

In the Information and Connected System vertical, we offer connection systems such a wiring harness for all segments, instrument clusters ranging from mechanical to advanced clusters such as LCD, (thin film transistor) TFT-based and connected, various sensors depending on regulations, mega trends and customer needs.

In Plastics and Interiors we focus on value added products such as kinematic plastic parts like center console, and light weighting plastic parts like oil pan battery tray, etc.

We also offer new technology products based on the mega trends, change in regulations, comfort and convenience, electrification, electronification, light weighting and shared mobility space.



Source: Minda Corp

Our focus is to provide end-to-end solutions and products to our customers in the area we operate in. We have already won orders from OEMs on new technology products such as DC-DC convertor, battery chargers and telematics, to capture the growth. We export mainly to the ASEAN (Association of South East Asian Nations) and European regions and our products go to the ICE, EV and hybrid technology manufacturers.

Opportunities and challenges: The main challenge faced by the auto-component makers is the low volume of EV due to various factors like cost of ownership, driving range, battery issues and charging infrastructure. Meeting the stringent EV norms presents a formidable challenge. While affordable and customized solutions, specially designed for the local need, will help us succeed.

Localization effort: We are building a world class manufacturing facility for automated assembly of electronic units in Chakan-Pune. We already have established a technical center equipped with state-of-the-art development infra-structure. Localization will enable India to align with global trends in an agile manner delivering frugal engineering solutions to global markets. Building required skills, development infra-structures and tier-2 capability to develop high precision EV parts, are currently the main challenges.