

# Indian engineering

**ELECTRIFYING GROWTH** 





# Engineering is India's largest foreign exchange earner

Engineering is the largest segment in Indian industry. It contributes 25% to India's total exports in goods and is its largest foreign exchange earner.

• The sector has a 30% weight in India's Index of Industrial Production (IIP).



### MSMEs BACKBONE OF INDIA'S ECONOMY

- Micro, small and medium enterprises employ over 111 million people and has a 31% share in the total manufacturing output. MSMEs account for 95% of the enterprises in the country and 40% of the total exports.
- The 63.4 million MSME units in India contribute around 6.11% of the manufacturing GDP and 24.63% of GDP from service activities. The sector has consistently maintained a growth rate of over 10%. About 51.25% of the MSMEs are based in rural areas.
- Mandatory procurement by PSUs from MSMEs have increased from 20% to 25%.
- The government's ZED Certification Scheme (zero

- manufacturing defect and zero environmental impact) guarantees high-quality products.
- The production of India's casting and forging industry was 13.5 million tonnes in 2017-18. India has over 6.000 foundry companies, most of them MSMEs.
- India is 12th in production and 8th in the consumption of machine tools in the world. The size of the machine tools market in India in 2016–17 was estimated to be about US\$1.78 billion and the production of machine tools was US\$1.02 billion. More than 160 companies are in the organized machine tools sector, while approximately 400 units are small and medium enterprises (SMEs).

# INDIAN ENGINEERING BRILLIANCE

- India is the third largest producer of coal, second largest producer of steel and the fourth largest in iron ore. India was the second-largest steel producer in 2018, producing 106.5 MT. The growth in the steel sector has been driven by domestic availability of raw materials and cost-effective labour. Consequently, the steel sector has been a major contributor to India's manufacturing output.
- With a generation of 1,497 TWh, India is the third largest producer and the third largest consumer of electricity in the world.
- India's rank jumped to 22 in 2019 from 137 in 2014 on the World Bank's Ease of Doing Business – 'Getting Electricity' ranking.
- India's installed power capacity is 367.281 GW as of December 2019. Renewable power plants, which also include large hydroelectric plants, constitute 35.5% of India's total installed capacity.
- With an estimated 37 million motorcycles/mopeds,

- India has the largest number of motorised twowheelers in the world.
- The Indian automotive aftermarket may grow at around 10-15 per cent to reach US\$16.5 billion by 2021. It could generate up to US\$300 billion annually by 2026, create 65 million more jobs and over 12 per cent to India's GDP.
- 20 large and 100 small technology centres (with block chain and artificial intelligence expertise) have been set up in the country and 15 more are coming up.

## **ENGINEERING EXPORTS - A SNAPSHOT**

- Fiscal 2018-19 was another remarkable year for India's engineering exports: it reached US\$81.02 billion despite a number of impediments to growth, surpassing the US\$76.2 billion in 2017-18.
- USA remained the top destination for Indian engineering exports in April-March 2018-19 at US\$11.91 billion, a considerable growth of 15.9% compared to the same period last fiscal.
- Singapore recorded the highest import growth of 74.5% during April-March 2018-19 over April-March 2017-18. India's exports to countries such as Indonesia, Thailand and Nigeria recorded over 25% growth during 2018-19 on a year-on-year basis.
- The exports of Ship, Boats and Floating Bodies and Electric Machinery and Equipment grew substantially by 88% and 26% respectively during 2018-19 vis-à-vis 2017-18.
- As a region, the EU remains the largest importer of Indian engineering products with 20% share in 2018-19 followed by North America and ASEAN+2 with shares of 18.9% and 15.3%, respectively.

# KEY TRENDS IN THE ENGINEERING SECTOR

#### INTERNATIONAL COMPANIES IN INDIA

 With 100 percent FDI through the automatic route being permitted, major international companies such as Cummins, ABB, Alfa Laval, SANY Group and Schneider Electric have invested in the Indian engineering sector.

## MIGRATION TO VALUE-ADDED PRODUCTS

- Indian companies have become more quality conscious and are upgrading their technology to meet global market requirements.
- More than 4,000 firms in the engineering sector have the ISO 9000 accreditation. Companies are increasingly focusing on their R&D and product development efforts.

#### **DIVERSIFICATION OF RISK**

 A number of companies in the engineering sector have diversified, either geographically (mainly to West Asian countries) or sectorally.

#### **INDUSTRY 4.0. IN INDIA**

- India's engineering R&D market will increase from US\$28 billion in FY18 to US\$ 42 billion by FY22.
- Against the backdrop of various national policies and programmes and the drive to achieve 5 percent in global trade by 2022, the Ministry of Commerce and Industry, Government of India, has initiated technological upgradation to boost engineering manufacturing and exports with EEPC India as the lead implementing agency.

