Indian engineering
ELECTRIFYING GROWTH

The Indian government is emphasising on the sale of only electric vehicles by 2030, or having a larger percentage of EVs on the road by then.
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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 has the largest number of motorised two-wheelers in the world with an estimated 37 million motorcycles/mopeds.
- The Indian automotive aftermarket may grow at around 10-15% to reach US$16.5 billion by 2021. It could generate up to US$300 billion annually by 2026 and create 65 million more jobs.
- 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

- After all-time highs in two consecutive fiscal years, engineering exports from India dropped by 6.16% in 2019-20 over the previous fiscal mainly due to dismal exports in March 2020 following the Covid-19 pandemic. Engineering exports dropped to US$75.97 billion in 2019-20 from an all-time high of US$80.95 billion in 2018-19.
- In the first four months of 2020-21, engineering exports further declined by 21.68% over the same period last fiscal as Covid-19 continued to take its toll on economic activities. However, gradual improvement has been noticed in shipments over the month.
- USA retained its position as the topmost destination of Indian engineering exports during April-July 2020-21 followed by China and Singapore.
- Exports of Iron and Steel, Zinc and its products, and Copper and its products witnessed substantial growth during April-July 2020-21 over the same period last fiscal at 53%, 62.5% and 39.3% respectively.
- As a region, ASEAN+2 emerged as the topmost destination for Indian engineering exports with 21.8% share in global exports during April-July 2019-20. North America and EU were pushed to second and third position with 16.1% and 15.8% shares, 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.