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INDUSTRY OUTLOOK

ENGINEERING GOODS INDUSTRY: PROSPECTS AND CHALLENGES

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Introduction

The engineering sector is the largest of the industrial sectors in India. It accounts for 27 per cent of the total factories in the industrial sector and represents 63 per cent of the overall foreign collaborations. India is among the few nations in the world, whose exports are dominated by capital goods and engineering items. In 2021, more than 25 per cent of the total export basket of India was dominated by the engineering industry. With the revival of the macro-economy in 2022 from the disruptions caused by the pandemic, the engineering good sector started on an optimistic growth and investment note.

India has comparative advantage over its peers in terms of low cost of manufacturing led by cheaper labour force, raw material and resources, marketing knowledge, innovation, and technology. All these factors drive greater investment in the industry- an industry, which is here to stay and become increasingly more important in the future.

Unlike the demand in other sectors, the demand in the engineering sector is a derived demand from other sectors, such as, infrastructure, power, mining, oil and gas, refinery, steel, automotive, capital goods and consumer durables. Therefore, the rise in the demand in these sectors will salubriously influence the demand in the engineering sector. India's capital goods industry serves as a strong base for its engagement across sectors, such as, engineering, construction, infrastructure, and consumer goods, amongst others.

Trade Position of Engineering Sector

During April-July 2022-23, the cumulative engineering exports recorded 8.10 percent growth as it went up to $38.31 billion from $35.44 billion during Apr-Jul 2021-22. The Government of India has set a target of US$ 127 billion for engineering exports for the FY 23. In line with the target for entire fiscal, the cumulative target for April-July 2022-23 on a pro-rata basis was 42.33 billion. This achievement, however, fell short by US$ 4.03 billion registered during the first four months.

As per the Quick Estimates of the Ministry of Commerce and Industry, Government of India, the share of engineering in total merchandise exports was 25.77 per cent in July 2022 while the share was 24.34 percent on a cumulative basis (See Table 1).

Table 1: Export figures of India's Engineering Sector

Trade Flow	*Export figures (in $ billion)*			
	Jul-21	Jul-22	April - July 2021-22	April - July 2022-23
Engineering Exports	9.55	9.56	35.44	38.31
Overall exports	35.51	36.27	131.06	157.44
Share of engineering (%)	26.88%	25.77%	27.10%	24.34%

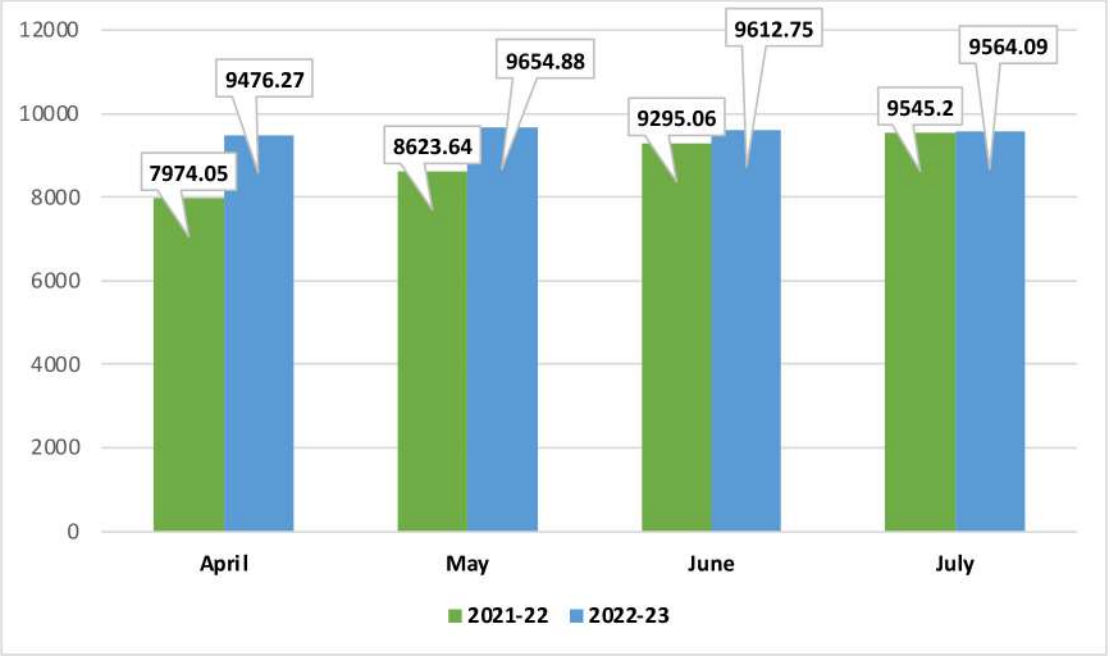
Source: Compiled from data by DGCI&S and Quick Estimates published by the Government of India

Out of the total 34 engineering panels, 24 panels witnessed positive year-on-year (yoy) growth in exports during July 2022 vis-a-vis July 2021. Major decline occurred in iron and steel, copper and its products, aluminium and its products and lead and products etc. On a cumulative basis, 27 out of 34 engineering panels recorded positive growth during April-July 2022-23 over the corresponding period of the last fiscal.

In terms of region, maximum growth in exports was witnessed in North America followed by Latin America and Oceania in cumulative terms. Top five countries, which witnessed positive growth during June 2022, were USA, Singapore, Germany, Mexico and UK whereas top destinations with negative export growth in June 2022 include Italy, UAE and Turkey. In the first four months of fiscal 2022-23, engineering exports achieved 30.16 percent of the US$ 127 billion target set by the Government for the entire fiscal. [1]

In the Q1 of FY 2022-23, the export of engineering products registered a higher growth in the month of April with 18.84 per cent growth as compared to April 2021-22. In July 2022, only a meagre growth of 0.20 per cent of engineering product export was achieved as compared to July 2021 (See Chart 1).

Chart 1: Monthly Export Trend in 2022-23



Source: DGCI&S, Government of India and EEPC India

There is a higher demand for Indian engineering products in the USA. The demand for Indian engineering products in the USA registered an uptick of 39.8 per cent from US$ 4955.3 million in the Q1 of FY 2021-22 to US$ 6926.1 million in FY 2022-23. While other countries like Italy, Singapore, Germany, and Mexico faced headwinds, India fairly traded with positive growth in the first quarter as compared to the first quarter of the previous year (See Table 2).

Table 2: Country wise Engineer Exports during April-July 2021-22 and April-July 2022-23

(US$ million)

Countries	Jul-21	Jul-22	Growth (%)	April-July 2021-22	April-July 2022-23	Growth (%)
USA	1364.6	1649.9	20.90%	4955.3	6926.1	39.80%
UAE	521.1	445.6	-14.50%	2026.8	1661.8	-18.00%
ITALY	472.6	315.6	-33.20%	1524.9	1616.8	6.00%
SINGAPORE	235.3	312.2	32.70%	1158.6	1370.1	18.30%
GERMANY	298.7	346.6	16.00%	1137.8	1318.4	15.90%
MEXICO	240.7	296.5	23.20%	841.9	1245.3	47.90%
U K	244.8	400.6	63.60%	891.9	1242.4	39.30%

Source: DGCI&S

Out of the total engineering product export basket, largely steel and iron products are exported from India. It is interesting to note here that the export of Aircrafts and Spacecraft parts and products significantly increased in the first quarter of current financial year 2022-23 in comparison to Q1 of previous financial year (See Table 3). The USA, France, and Singapore were the top three importers of India's 'Aircrafts and Spacecrafts' during April-July 2022-23 in India's total global exports of the product followed by Germany and UK.

Table 3: Product Panel Wise Engineering Exports

(In US$ million)

Product Panels	Jul-21	Jul-22	Growth	April-July 2021-22	April-July 2022-23	Growth
Iron and Steel and Its Products	3121.32	1949.86	-37.50%	10203.74	9401.78	-7.90%
Non-Ferrous Metals and Products	1171.41	1077.7	-8.00%	4422.78	4914.3	11.10%
Industrial Machinery	1439.83	1697.49	17.90%	5242.11	6365.57	21.40%
Electrical Machinery and Equipment	768.63	942.41	22.60%	3101.85	3700.24	19.30%
Auto and auto parts	1738.06	1933.65	11.30%	6236.93	7416	18.90%
Aircrafts and Spacecraft parts and products	91.04	111.91	22.90%	322.24	446.54	38.60%
Ships Boats and Floating products and parts	209.87	649.67	209.60%	2231.89	1679.39	-24.80%

Source: DGCI&S

The major importers of India's iron and steel and its products are USA, UAE, Canada, Nepal, Belgium, Italy, etc. While the Indian industrial machinery products are majorly imported by the USA, Thailand, Germany, China, and Bangladesh. South Africa, Saudi Arabia, Columbia are the major importers of Motor Vehicles/Cars and Two and Three Wheelers in the Automobiles segment. USA, South Korea, and Netherland were the top three importers of India's Non-ferrous metals and products' during April-July 2022-23 whereas USA, France and UK were the three top importers of Indian Electrical Machinery & Components during the same period.

Singapore, Indonesia, and Sri Lanka are the largest importer of Indian ships, boats and floating structures followed by UK and UAE. In auto components product group segment, the USA remained the top importer in the first quarter of FY 2022-23 followed by Brazil, Bangladesh, and Germany.

State-Wise Engineering Export Analysis

India top 12 states contribute over 90 per cent of the total engineering goods export and around 47.5 per cent of the total exports is done by three states together namely - Maharashtra, Tamil Nadu, and Gujarat (Table 4).

Table 4: Top state wise engineering export performance - April-July 2022-23

(Values in US$ million)

Top States	Cumulative Export April-July 2022-23	Share %
Maharashtra	7,652.5	20.10%
Tamil Nadu	5,859.9	15.40%
Gujarat	4,558.6	12.00%
Odisha	3,302.2	8.70%
Andhra Pradesh	2,435.3	6.40%
Haryana	2,178.5	5.70%
Karnataka	2,110.4	5.50%
Uttar Pradesh	1,749.6	4.60%
West Bengal	1,441.0	3.80%
Rajasthan	1,246.7	3.30%
Delhi	1,070.3	2.80%
Punjab	927.1	2.40%

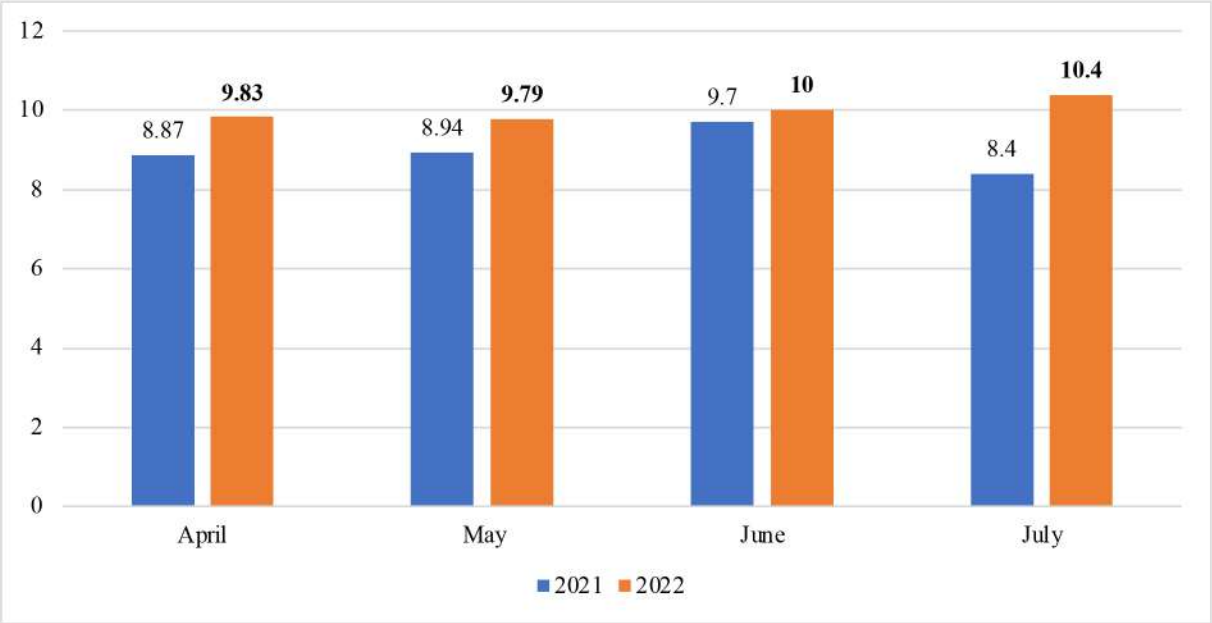
Source: DGCI&S

In the month of July 2022, India's engineering exports were valued at US$ 10417.3 million compared to US$ 8416.5 million in July 2021 registering a positive growth of 23.8 percent in dollar terms. Engineering products, such as, barring medicinal & pharmaceutical products, all other engineering panels like iron & steel, non-ferrous metals, machine tools, machinery, electrical & non-electrical, transport equipment, and professional instrument witnessed an increase in import during July 2022 compared to July 2021.

The share of engineering imports in India's total merchandise imports dropped further during July 2022 in comparison to July 2021, which was estimated at 15.7 per cent. The figure below depicts engineering imports for July 2022 compared to July 2021 (Chart 2).

Chart 2: Monthly Engineering Imports for July 2022 vis-a-vis July 2021

(Values in US$ million)



Source: EEPC

The monthly trade balance in the current FY 2022-23 can be depicted as follows (See Table 5):

Table 5: Monthly Trade Balance in FY 2022-23

(US$ billion)

Trade Flow	April	May	June	July
Engineering Exports	9.6	9.8	9.7	9.6
Engineering Imports	9.8	9.8	10.7	10.4
Trade Balance	-0.2	0	-1	-0.8

Source: DGCI&S

Institutional Measures

Infrastructure is one of the major supporting elements for the operation of industries. Accordingly, streamlining and upscaling of infrastructural facilities has been given a renewed thrust to achieve the avowed objectives of both economic growth and distributive equity. The higher budgetary allocation in improving infrastructure would give a major boost to generate more revenues by the engineering sector and the capital goods industry. The Government has allocated ₹99,107 crore (US$ 26.52 billion) in the Union Budget 2022-23 to improve transport infrastructure in the country so that the smooth movement of goods from one place to another can be made cost effective.

To enhance competitiveness in the Indian capital goods sector, the government announced the second phase of the scheme in January this year. Under the scheme, the government provides financial assistance for common technology development and services infrastructure, with a financial outlay of ₹1,207 crore. The outlay includes Budgetary support of ₹975 crore and industry contribution of ₹232 crore. Six major components under the scheme have been considered including identification of technologies through technology innovation portals; setting up of four new Advanced Centres of Excellence and augmentation of existing centres; promotion of skilling in capital goods sector; setting up of four Common Engineering Facility Centres and augmentation of existing centres.[2]

The institutional initiatives of the government have significantly supported the development of the engineering sector in India. Towards this end, the engineering industry has been de-licensed and allows 100 per cent foreign direct investment (FDI). Also, the sector contributes significantly to the merchandise export of the country.

Risks and Challenges

Despite the start on a bright note in 2022, the engineering sector of India faced several headwinds, including rising costs and labour shortages. In the month of October 2022, the exports of engineering good declined by -21.26 per cent. This also posed a challenge to achieving the sectoral export target of $127 billion set by the government for the current financial year 2022-23. [3] As stressed by the Commerce Secretary Sunil Barthwal, both global and domestic factors had an impact on India's exports. He also justifiably emphasised that the tightening of monetary policy in most of the developed world – Europe, the USA and elsewhere- reduces the disposable income of the public. This led to a contraction in consumption, and it would also dampen India's exports in coming months ahead.

Weak demand from China and Europe slowed down India's engineering goods exports drastically in the month of July 2022. Engineering goods exports grew by a meagre 0.20 per cent in July 2022 (year-on-year) to $9.56 billion as weak demand from China and the EU, coupled with export duty on steel items, acted as dampeners.[4] While engineering exports to the European Union (EU) countries registered a 6.3 per cent year-on-year decline, shipments to China slumped 64.5 per cent during this period. The share of engineering goods exports in total merchandise exports declined to 23.69 per cent in September 2022 from 27.85 per cent in the same month last year. Major decline was witnessed in iron and steel, copper and its products, aluminium and its products and lead and products, etc.

The Way Forward

India's engineering sector was reviving post the slowdown triggered by the pandemic. But the engineering exports gradually declined in the first quarter of FY 23. Both external and domestic factors are responsible for this slump in engineering exports. The depreciating rupee also had an impact on the exports of engineering goods. The economies of USA and the UK, which are the major importers of India's engineering produce, are themselves facing a discernible slowdown in their economies.

The evolving geopolitical situation and the dynamics of global economic growth make the course of future events uncertain and uneven. The future global growth will inter-alia be a function of the volatility in the price of oil, the Russia-Ukraine war, the globally synchronized deceleration and the emergence of even stagflation concerns in several parts of the world, including, UK, USA, etc.

The OECD had projected that the slowdown in the exports of key commodities, such as, engineering goods, textiles, handloom products, and plastic products would adversely impact the GDP growth of the country. In some cases of manufacturing exports, India is also supply-constrained. The shortage of key manufacturing inputs from China together with the country's reaffirmation of its commitment to a zero COVID-19 policy[5] also had a disruptive effect on this industry.

The engineering exports growth and manufacturing output growth moved unidirectionally in as many as nine out of twelve months in each of the fiscal years 2019-20 and 2020-21. During the fiscal year 2021-22, engineering export growth and manufacturing growth moved unidirectionally in seven out of twelve months.[6] Given this kind of a strong correlation, it is important not to view engineering goods in isolation, in a silo but as an integral part of the larger manufacturing industry. In sum, there is a symbiotic relationship between engineering goods and manufacturing sector: while engineering goods provides an impetus to the manufacturing sector in India, the growth of the manufacturing sector positively affects the growth of engineering goods.

ENDNOTES

1. https://eepcindia.org/files/Engineering%20Trade%20Analysis%20-%20July%202022.pdf
2. https://economictimes.indiatimes.com/news/economy/policy/government-notifies-phase-ii-of-capital-goods-scheme/articleshow/89184660.cms
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