

Iron and Steel Industry in India

The iron and steel Industry is the basic industry since all the other industries — heavy, medium and light, depend on it for their machinery. Steel is needed to manufacture a variety of engineering goods, construction material, defence, medical, telephonic, scientific equipment and a variety of consumer goods.

Production and consumption of steel is often regarded as the index of a country's development. Iron and steel is a heavy industry because all the raw materials as well as finished goods are heavy and bulky entailing heavy transportation costs. Iron ore, coking coal and lime stone are required in the ratio of approximately 4: 2: 1. Some quantities of manganese are also required to harden the steel.

India was the world's second-largest steel producer with production standing at 111.2 million tonnes (MT) in 2019. The growth in the Indian steel sector has been driven by domestic availability of raw materials such as iron ore and cost-effective labour. Consequently, the steel sector has been a major contributor to India's manufacturing output.

The Indian steel industry is modern with state-of-the-art steel mills. It has always strived for continuous modernisation of older plants and up-gradation to higher energy efficiency levels. Indian steel industry is classified into three categories - major producers, main producers and secondary producers.

All public sector undertakings market their steel through, Steel Authority of India Ltd. (SAIL) while TISCO markets its produce through Tata Steel. In the 1950s China and India produced almost the same quantity of steel. China is the world's largest consumer of steel. In 2004, India was the largest exporter of steel which accounted for 2.25 per cent of the global steel trade. Chotanagpur plateau region has the maximum concentration of iron and steel industries. It is largely, because of the relative advantages this region has for the development of this industry. These include, low cost of iron ore, high grade raw materials in proximity, cheap labour and vast growth potential in the home market.

Though, India is an important iron and steel producing country in the world yet, we are not able to perform to our full potential largely due to:

- High costs and limited availability of coking coal
- Lower productivity of labour
- Irregular supply of energy
- Poor infrastructure.

Hence, the overall production of steel is sufficient to meet our domestic demand. Liberalisation and Foreign Direct Investment have given a boost to the industry with the efforts of private

entrepreneurs. There is a need to allocate resources for research and development to produce steel more computationally.