

## Productivity & Efficiency Gaps in Indian Capital Goods sector

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As identified from the above analysis of Indian Capital Goods sector, the major gaps that exist have been discussed below.

### Issues in availability of critical input material- raw material, manpower and technology

- **Availability and high costs of critical raw materials is a major issue in Indian Capital Goods sector.**
  - Cold Rolled Grain Oriented (CRGO) electrical steel is a critical raw material for manufacturing of transformers, which is fully imported as it is not manufactured in India. Other important raw materials such as CRGO Steel and Amorphous Steel are also imported because of their limited availability and volatile raw material prices in India.
  - The raw materials available in India are costlier than the Chinese and Middle East products.
  - In the case of plant equipment and machinery, the price of machine tools is high due to higher input costs and local factors such as ED, VAT, and Entry Tax/Octroi, service tax.
  - Unavailability of certified components in India.
  - Unavailability of high alloy materials for pressure parts in India.
  - Custom duty on raw materials increase the cost of product by 7-10% making Indian companies less competitive

**Hence India faces an acute shortage of critical raw materials and components leading to dependence on imports from other countries. This increases the production costs, making India less competitive as compared to other countries.**

- **India also faces a major disadvantage with respect to high interest rates**
  - The Indian Capital Goods industry suffers a major disadvantage on interest rates. Interest rates in India are around 14- 16% whereas interest abroad is 2-4%, which adds to the cost of Indian Capital Goods sector making them non-competitive against imports by at least 10%.
- **Shortage of skilled and efficient workforce**
  - There exist inflexible and restrictive labour laws and policies in India thus making the labour force less productive. A high number of inspections (labour, factory, excise etc.) discourage workers to participate actively.
  - Huge gaps exist in the availability of skilled manpower in the power equipment manufacturing industry. Also the available workers lack the required skills in welding and fitting.
  - Inflexible contract labour laws
  - Qualified supervisors and engineers are not available in significant numbers
  - Lack of strong understanding of metallurgy
- **Lack of efficient technological processes**



- Lack of supporting process technologies such as precision measuring, material engineering and process control.
- Dependence on imports of technology components from Europe, USA and Japan
- Huge technology gap exists in high productivity, multi-spindle, high precision with 5 and more axes, heavy duty machine tools and metal forming machines of modern design leading to dependence on imports in this sub-sector.
- For certain class of equipment, such as high capacity dump trucks, underground mining equipment like Long wall & continuous miner, technology is not available hence imported from abroad.
- Very few Indian firms use technology to make their business processes like procurement, distribution, marketing and servicing more efficient. Also the use of techno-managerial processes like JIT, TQM, TPM etc. are limited to large firms only.
- Lack of strong quality control mechanisms at some Indian manufacturers to test their sub-vendors 'product quality leads to the final product being of poor quality.

### **Inadequate Support Infrastructure**

- **Inadequate R&D support**

- Limited government support for R&D. The existing labs and centres for performing tests and R&D are not well equipped and lack modernization; often the machines are old and not working.
- Costs of testing of different equipment and components in order to conform to the relevant standards of Indian Standards (IS) or International Electro technical Commission (IEC) is very high in India, hence for testing purpose many companies are forced to go to Holland or Korea to get their products tested.

- **Transport and Logistics Issues**

- The electrical equipment and process plant equipment are bulky and heavy to be carried, so they can be exported only through ports. In India, Congestion at ports and lack of modernization impact the delivery cycles.
- Limited availability of vehicles with hydraulic axles in India which are efficient in carrying bulky electrical equipment because there are not many manufacturers of such vehicles in India thus leading to delays in production process.