Improving operational excellence in Steel making - Jalna district

"The integration of cutting-edge technologies in the steel industry amplifies manufacturing capabilities and elevates the quality of steel products, fostering competitiveness in the global market" – Shri. Nitin Kabra, President, Jalna Steel Manufacturers' Association

Problem Statement

- Steel manufacturers in the district were facing issues of production cycle delays and inconsistent quality arising due to manual processes.
- Low ratio of scrap to DRI.
- Limited facilities are available for steel making units to improve product quality and benchmark it against international standards.

Key Intervention

- For enhancing operational capabilities and shifting from manual to automated processes, the below mentioned key interventions are being used in the steel industries of the district,
  - For TMT bar production, use of Ladle Refining Furnaces (LRF) to raise the temperature and adjust the chemical composition.
  - Stationary grabs are installed on the furnace platforms.
  - Installation of a scrap poker machine for pushing the scrap into the furnace during the melting operation.
  - Installation of a scrap shearing machine for squashing and shearing.
  - For making manageable strips, use of multi-strand slitting machines.

Impact

- Improving the calibre of industrial output, reducing manufacturing expenses, and establishing long-term global competitiveness in industrial production.
- Enabling remote operations from the pulpit for the melting processes.
- Enhancing product quality facilitates quality certification accreditations from concerned global certification agencies.
- Enabling the highest ratio of scrap to DRI.