



**Mineral  
Technologies**

A Downer Company

# Bhushan Power and Steel – Iron Ore

## Iron Ore Tailings Processing.

**In 2010 Mineral Technologies began design of a start-of-the-art solution for a new Iron Ore beneficiation plant for Bhushan Power and Steel in India.**

Bhushan Power & Steel's engineers collaborated closely with Mineral Technologies' metallurgists to review test results and ensure process flowsheets met specific requirements.

- One of India's largest steelmakers selects MD spirals.
- State-of-the-art solution for fine Iron Ore beneficiation.
- 960 spirals order.

# Bhushan Power and Steel – Iron Ore



**Client** Bhushan Power and Steel

**Location** India

**Capability Groups** Mineral Processing

**Commencement** 2010

**Completion** 2012

## Services Provided

- Process equipment supply
- Supervision of process equipment commissioning
- Operator training

## Highlights

- One of India's largest steelmakers selects MD spirals
- State-of-the-art solution for fine Iron Ore beneficiation
- 960 spirals order



## Superior Technology

With a focus on selecting a state-of-the-art solution for a new Iron Ore beneficiation plant, Bhushan Power & Steel, one of India's largest steelmakers, researched the market and selected MD spirals from Mineral Technologies.

The market research included extensive metallurgical testing across a wide range of fine gravity spirals and visits to Iron Ore beneficiation plants worldwide to confirm product quality and reliability.

Bhushan Power & Steel's engineers collaborated closely with Mineral Technologies' metallurgists to review test results and ensure the process flowsheets met specific requirements. Bhushan Power & Steel executives also closely examined Mineral Technologies' manufacturing facility to ensure ISO 9000 standards within the new plant would be met.

Located in the Sambalpur District, the new plant operates at 6.5 mpta. It incorporates a fine Iron Ore beneficiation process including a spiral circuit consisting of: 1 rougher spiral stage to treat 836 tph of feed; 1 scavenger spiral stage to treat 544 tph of feed; and 1 cleaner spiral stage to treat 294 tph of feed.

The beneficiation process required a total of 960 MD spirals which are configured across 40 spiral banks incorporating HG10S 5-turn double start spirals and WW6E 5-turn double start spirals.