



COMPANY PROFILE

Shree Sponge Steel & Forging Ltd. (An ISO 9001 accredited Company) was incorporated in 1992 to manufacture and supply high quality castings to specialized sectors in industry. The plant is strategically located in Western India at the POR GIDC Region, Vadodara. We have more than 23 years of experience in production of various types of castings for industries like Mining, Pumps, Valves, Turbines, and Pipe fittings. We adhere to the most stringent Indian as well as International Standards, ensuring high levels of product and service quality. We are acknowledged for our efficiency and performance by our discerning customers. We attain this level of excellence by deploying expert technical manpower as well as updated technology to meet and exceed the expectations of all our buyers. The entire process of manufacture follows stringent quality control norms that ensure excellence in all activities.

The Foundry Unit handles various grades- Steel, Alloy Steel, Stainless Steel, Manganese Steel, Ductile Iron etc. The current production capacity is 6000 MT per annum, with a capability to produce single piece casting in a range from 50 to 10000 kg. These could be unmachined, proof machined or finished machined castings.

The Machine Shop has in house machining and fabrication facilities with overhead cranes having a lifting capacity up to 20 metric tonnes. A dedicated facility has been exclusively constructed for this purpose, having an area of 21700 sq. ft, with 35 feet lifting height.



FACILITIES

Land Area Constructed Area Power Supply : 193750 Sq.Ft.

: 60000 Sq. Ft.

: Direct feeder supply from MGVCL. 200 KVA DG Set as standby for emergency.

MELTING

- 1500 KW Solid State Medium Frequency Induction Furnace with two Crucibles of 6 tons each (ABPMake)
- 300 KW Medium Frequency Induction Furnace with two crucibles (one of 500 kg and other one of 100kg)
- 3. Microprocessor- based digital temperature test instrument- Range up to 2000 °C.
- 4. Spectroscope (Spectrometer).





PATTERN SHOP

- Dedicated Covered Shade with locking facility, having a 5T EOT O-Head Crane.
- 2. Two full-time carpenters are employed to make any repairs or small changes to the patterns which may be required.

METHODING

1. Software for Casting Simulation and Solidification.

MOULDING

Equipments

- Continuous Sand Mixing Plant for No-Bake sand (20 Tonnes / Hr) along with Sand reclamation plant (9 Tonnes / Hr).
- 2. Two Nos. Sand Muller batch type, having capacity of 750kg and 500kg each.
- High intensity Sand Mixer Capacity 3000 kg/hr. each – 2 Nos.
- 4. Batch Type Core Sand Mixer (100 kg) 1 No.
- 5. Pneumatic Rammer 24" stroke 2 Nos.

Process

- 1. CO₂ Moulding and Two-Part Moulding
- 2. Type of Sand Moulding Silica, Quartz, Zircon, Chromite & Olivine.

POURING

Equipments

- 1. Bottom Pouring Laddles with Liquid Metal Capacity of 1, 6 & 15 Metric Tonnes respectively.
- 2. Lip Pouring Laddles with Liquid Metal Capacity of 150kgs, 500kgs, 2 M.T (2 nos) & 3 M.T respectively.

FETLING

Equipments

- 1. Shot Blasting Machine with Twin Door Operation.
- 2. Swing Frame Grinders. (14 Nos.)
- 3. Flexible shaft Grinder. (10 Nos.)
- 4. Pneumatic Chipper. (14 Nos.)
- 5. Welding Rectifier. (5 Nos.)



Electric Fired Furnace with PLC Based Controllet & Recorder : 4 MT Capactiy – Chamber size – 2700 x 1500 x 1100mm. (Sandvik make)

2. Fork Lift Crane which can lift the material from the furnace and quench in the water within 45 seconds.



- **3.** Cooling towers for fast cooling of casting to maintain water temperature below 50 °C.
- Oil Fired Furnace with Temperature Indicator, Controller & Recorder – Boggie Type 6000 x 4000 x 3000 mm.

MATERIAL HANDLING EQUIPMENT

1. Total 10 Nos. of Overhead Cranes, ranging from 5 tons to 25 tons.

FOUNDRY

- 1. 1 No. 25 T EOT O-Head Crane
- 2. 1 No. 10+5 T EOT O-Head Crane
- 3. 3 Nos. 5 T EOT O-Head Crane
- 4. 1 No. 2T EOT Hoist
- 5. 1 No. 3 T EOT vertical pillar type circular Crane
- 6. 14 Nos. 1T Capacity Chain Pulley Blocks
- 7. 2 Nos. 200 CFM Air Compressor

QUALITY CONTROL

Equipments

- 1. Sand Sieve Analysis
- 2. Fully equipped laboratory for elements by Wet Analysis
- 3. Compression Testing Machine for Moulding Sand
- 4. Scratch Hardness Tester for Mould
- **5.** Spectroscope (Spectrometer)
- 6. Microprocessor based Digital Pyrometer
- 7. Metalographic Microscope
- Universal Tensile Testing Machine. 40 T Capacity 1 No.
- 9. Extensiometer for 0.2% proof testing
- **10.** Utrasonic Testing Equipment "Einstein II" 1 No.
- 11. Digital Hardness Tester
- 12. Surface Plate

Process

- 1. Incoming Raw Materials Inspection
- 2. Process Control Inspection
- 3. Finished Product Inspection



















SHREE SPONGE STEEL & FORGING LTD.

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