

SHREE HANS ALLOYS LIMITED

ANNEXURE 'A'

FACILITIES / CAPABILITIES OF OUR FOUNDRY

PATTERN SHOP	Well equipped pattern shop for wooden/metallic patterns
MOULDING SHOP	Equipped with Pneumatic rammers & Sand compactors for hand moulding, employing Sodium-Silicate, NO-BAKE Oil Systems.
MELTING SHOP	Equipped with "ELECTROTHERM" Make 750 KW & 350 KW Medium Frequency Induction Melting Furnace having Five Crucibles each of 2000 KGS, 1500 KGS, 750 KGS, 500 KGS & 200 KGS of nominal capacity.
HEAT TREATMENT SHOP	Equipped with 6' x 5' x 4' electrical & 10' x 8' x 6' oil fired Heat Treatment Furnace with Air, Water & Oil Quenching Facility. Equipped with " ATHENA " Make microprocessor based Digital Temperature indicator & recorder & controller.
FETTLING SHOP	Well equipped fettling shop with heavy-duty swing frame grinders (5 Nos.), Flexible Shaft Grinder (06 Nos.), Sanders (02) Pneumatic Chippers & STEEL BLASTING MACHINE (48" TABLE SIZE), Sand Blasting Machine.
MACHINE SHOP	Available for PROOF/FINAL MACHINING with arrangement for various machine tools like horizontal boring, Vertical lathe, conventional lathes, radial drill, gear hobbing, milling, shaping, grinding, planning & various other machines.

JOB CAPACITY

Weight Range: **10 KGS – 1800 KGS PER PIECE**
(Approx.)

SPECIFICATIONS

- Carbon Steel Casting conforming to **ASTM A 216 / 217 / IS: 1030**
- Cr & Cr-Moly (Low Alloy) Steel Castings conforming to **AISI: 5132**
- Austenitic Mn Steel Casting conforming to **ASTM A 128**
- Wear Resistant (Ni Hard) Castings **ASTM A 532 / IS:4771 / BS: 4844**
- Nickel based super alloys like **CZ-100, CY-40, R-55, HASTE ALLOYS B & C etc.**
- Heat Resistant Steel Castings (HRCS) conforming to **ASTM A 297**
- Stainless Steel Castings like **CF8, CF8M, CF3, CF3M, CA6NM, CD4MCu, CA15, CN7M etc. ASTM A 743 / 351 / 352 / IS: 3444**
- Duplex Stainless Steel Castings as per **ASTM A 890 / 487**
- **Special Alloy Castings as per the specific requirement of CUSTOMER**
- All above specifications are also manufactured in their respective equivalent or nearest overseas standard also (**ASTM, BS, DIN etc.**)

TESTING FACILITIES

- Spectrometer Model OES – 5500 of SHIMADZU (ASIA PACIFIC) Pvt. Ltd., Japan with Fe, Ni & Cu based for testing of C, Si, Mn, Cr, Ni, Mo, Ti, V, W, S, P, **Nitrogen Channel** & other related elements.
- Fully equipped Sand Testing Laboratory for checking its various parameters.
- Well-equipped mechanical testing laboratory with machines like Rockwell Hardness Tester, Digital

Micro Hardness Tester, Bend Test Machine & Universal Testing for checking physical properties like UTS, YS, Elongation etc.

- Metallographic microscope for checking microstructure.
- Arrangement for Radiographic, Ultrasonic, MP Test & Other Non-destructive tests.
- Hydro testing facilities for pressure tight castings.

ANNEXURE 'E'

LIST OF EQUIPMENT & MACHINERIES

(A) MEDIUM FREQUENCY "INDUCTION MELTING FURNACE" –

- 1. 2000 KGS**
- 2. 1500 KGS WITH 750 KW**
- 3. 750 KGS**
- 4. 500 KGS &**
- 5. 200 KGS CRUCIBLES WITH 350 KW WITH NOMINAL CAPACITY**

(B) HEAT TREATMENT FURNACE

1. Size: 10' x 8' x 6' Oil Fired
2. Size: 8' X 5' X 5' electrically operated with PLC Controller
3. Size: 6' x 5' x 4' electrically operated with PLC Controller
4. Size: 3.5' x 2.5' x 2' electrically operated

(C) TEMPERATURE INDICATOR & RECORDER FOR ABOVE

COMPUTERIZED:

1. 8 Channel Scanner &
2. Printing Facility

(D) OIL QUENCHING BATH - SIZE: 9' x 4' x 4'

(E) WATER QUENCHING BATHS (80000 Litres capacity tank) - SIZE: 13' x 10' x 8'

(F) AIR QUENCHING UNIT (2 BLOWERS)

1. TABLE SIZE 6' x 4'

(G) E.O.T. CRANE CAPACITY: 15 TONS – 1 NO., 10 TONS - 1 NO., 5 TONS – 3 NOS., 3 TONS – 2 NOS.; GANTRY CRANE: 2 MT – 1 NO.

(H) STEEL BLASTING MACHINE

1. TABLE SIZE: 48' DIA (500 kgs) per batch max.

(I) PROTOTYPE CHECKING BOWL FOR BRS. : 04 NOS.

(J) MOULDING SAND MULLERS: 3 NOS.

(K) CORE SAND MULLERS: 2 NOS.

(L) LATHE MACHINE: 4 NOS., C TO C – 7', 4', 3' & 2'.

(M) 1. RADIAL DRILL MACHINE: 1 NO. + PILLAR DRILL MACHINE: 01 NO.

2. RADIAL SHAPING MACHINE: 1 NO.

(N) 1. WELDING RECTIFIER: 04 NO.

2. WELDING MACHINES: 02 NOS.

(O) AIR COMPRESSORS: 4 NOS.

(P) SWING FRAME GRINDERS: 5 NOS.

(Q) FLEXIBLE GRINDERS: 12 NOS./SANDERS – 2 NOS.

(R) BENCH GRINDERS: 1 NO.

(S) PNEUMATIC CHIPPERS

ANNEXURE 'L'

LIST OF TESTING EQUIPMENTS AVAILABLE

- (A) Spectrometer Model OES – 5500 of SHIMADZU (ASIA PACIFIC) Pvt. Ltd.,
Japan with 24 Channels & 3 Bases (Iron, NI & Cu.) with NITROGEN CHANNEL
- (B) METALLOGRAPHY MICROSCOPE
- (C) IMMERSION PYROMETER FOR CHECKING LIQUID METAL TEMPERATURE
- (D) ROCKWELL HARDNESS TESTER
- (E) MICRO HARDNESS TESTER TH-130 (TIME)
- (F) POLDI HARDNESS TESTER
- (G) ULTRASONIC TESTING, RT INSPECTION, M.P.I. ARRANGEMENT FROM OUTSIDE AGENCY
- (H) D. P. TEST SET
- (I) BEND TEST MACHINE
- (J) UNIVERSAL TESTING MACHINE (WITH THIRD PARTY CALIBRATION CERTIFICATE)
- (K) CHARPY V NOTCH IMPACT TESTING MACHINE
- (L) SAND TESTING LABORATORY
 - a) COMPRESSIVE STRENGTH TESTING MACHINE
 - b) RAPID MOISTURE TESTER
 - c) SIEVE ANALYSIS FOR AFS FINENESS NO.
 - d) MOULD HARDNESS TESTER

LIST OF OUR VALUED CUSTOMERS

The Company has a long list of the most reputed customers on regular basis. The few customers of our pumps, valves for mining and mineral industries are:

- ALSTOM Power Projects Ltd. New Delhi
 - Ambuja Cement Raj. Ltd.
 - Bharat Aluminium Co. Ltd., Korba
 - Crane Process Flow Technologies
 - Darling Pumps Pvt. Ltd.
- Dredging Corporation of India Ltd., Vishakhapatnam
 - Electromag Devices – Mumbai
 - Essar Steel Ltd - Surat
 - Electrotherm (India) Ltd. Ahmedabad
 - Flowserve India Controls (P) Ltd.
 - Grasim Industries Ltd.
- Gujarat Alkalies & Chemicals Ltd., Bharuch (Guj)
 - Gujarat Ambuja Cement Ltd.
 - Gujarat Heavy Chemicals Ltd., Veraval
- Gujarat Mineral Development Corp. Ltd., Kadipani
- Gujarat Narmada Valley Fertilizers Co. Ltd., Bharuch (Guj)
 - Gujarat State Fertilizer Company Ltd.
 - Hindalco Industries Ltd., (Renukoot)
 - Hindalco Industries Ltd., (Renusagar)
- Hindustan Zinc Limited – (Four Mining units)
 - Hutti Gold Mines Ltd., Hutti.
 - HZL, Debari Zinc Smelter
 - HZL, Chanderiya Lead Zinc Smelter
 - HZL, Vishakhapatnam

- Indian Rayon and Industries Ltd., Veraval
 - Indo-Gulf Corporation Ltd., Bharuch
 - JVS Engineers, Baroda
 - Johnson Pumps (India) Ltd.
 - Jyoti Ltd - Baroda
 - Kirloskar Ebara Pumps Ltd.
 - KSB Pumps Ltd - Pune
 - Lovson Exports Ltd, Mumbai
 - Microfinish Pumps India Ltd.
 - McNally Bharat Engg. Co. Ltd. - Kumardhubi
 - National Fertilizers Limited, (3 Units)
- National Mineral Development Corp. Ltd., (2 units)
 - Nirma Ltd. Ahmedabad
 - NTPC Ltd. (7 Units)
 - R . K. Control Pvt. Ltd., Mumbai
- Sunflag Iron and Steel Co. Ltd., Bhandara
 - Sulzer Pumps India Ltd.
 - Superflow Pumps Pvt. Ltd. - Mumbai
 - Siemens India Ltd - Baroda
 - Tyco Valves and Controls (P) Ltd.
 - Tata Chemicals Ltd. Mithapur
- Uranium Corporation of India Ltd., Jadugada Mines
 - Voltas Ltd (PPBD DIV). - Thane