

SHREE HANS ALLOYS LIMITED

201/202/203, GIDC ESTATE, Dholka - 387 810;

Dist. Ahmedabad, Gujarat, INDIA.

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E: hansalloys@rediffmail.com; dineshbdaga@hotmail.com W: www.hansalloys.com This document consists of a brief description of Company, its Products & Services, Manufacturing Facilities, Material Specifications and Quality Control Facilities.

COMPANY PROFILE

Corporate Office SHREE HANS ALLOYS LIMITED

"Sangath", Behind State Bank of India, C. G. Road Branch, Navrangpura,

Ahmedabad – 380 009; (INDIA) Phone: +91 79 2656 4146 / 0675 Facsimile: +91 79 2656 5425

Registered Office

& Works 201/202/203, GIDC ESTATE, Dholka - 387

810; Dist. Ahmedabad, Gujarat (INDIA)

Phone: +91 2714 248 350 / 248 251

Fax: +91 2714 248 349

Website www.hansalloys.com

Contact Person

1. DINESH B DAGA

Chairman & Managing Director

Cell #: +91 98240 33291 Email: cmd@hansalloys.com

2. D V DEVANI

Assistant General Manager (Q. A.) Cell #: +91 94260 20102 Email: dvd@hansalloys.com

3. ANURAG D DAGA

Director

Cell #: +91 98252 08825

Email: adaga@hansalloys.com

Nature of Business Manufacturer

Date of Establishment March 21 1984

Capital Investment INR 135 Million

N.S.I.C. No. NSIC/GP/RS/PMT/GUJ/S-144/A-1321

Dtd. 23-Jul-97

S.S.I. No. 04/01/16306/PMT/SSI Dtd. 28 May 1985

Company Reg. No. 04 - 6828

Export Reg. No. RCMC. B.: MFG.6874 2005-06 Dtd. 24

January 2006

GST No. 24074800634

TIN - CST No. 24574800634

Permanent Account No AADCS 0482 Q

Excise C.C. No. AADCS 0482 QXM 001

Factory License No. 098329 Dtd. 18 February 1997

D&B D-U-N-S No. 72-590-8334

Details of the

a) Manufacturing Capacity: 4000 MT per Annum (Capacity in Tones).

b) Quality Control: We have inspection staff at shop floor level.

1. Engineer	06 NOS.
2. Diploma Engineer	01 NO.
3. I.T.I.	05 NOS.
4. Skilled Worker	35 NOS.
5. Unskilled Worker	50 NOS.
6. Administration	18 NOS.

TOTAL 115 NOS.

Business Type Manufacturing of Stainless Steel, Nickel

Base Alloy Castings, Duplex & Super Duplex

Stainless Steel, HRCS, High Alloys,

Ni-Hard, Cast Steel, Mn. Steel confirming to various IS, ASTM, BS, DIN & Other Indian

& International Specifications.

Foundry Set-up We have the following set-up at our foundry:

1. Five Induction Melting Furnaces

2. Four Heat-Treatment Furnaces

3. One Spectrometer with 26 channels with facility for Nitrogen Analysis for Duplex &

Super Duplex Stainless Steel.

4. Digital Micro Hardness Tester etc.

Registration Engineering Export Promotion Council,

India National Small Industries

Corporation Limited (Govt. Of India)

Quality System Our unit is certified by TUV NORD Group

Quality International ISO 9001:2008 with IBR Approval and Dun and

Bradsheet.

We are enclosing herewith the capabilities of our foundry, List of Equipment & Machineries available & List of Laboratory Equipments for your quick reference.

Please feel free to contact us or write to us, we will be very happy to assist you.

Thanking you & looking forward for the valued business with your esteemed organization.

For SHREE HANS ALLOYS LIMITED

Authorized Signatory

Overview

We take pleasure in introducing Shree Hans Alloys Limited as a leading manufacturer and exporters of sand castings from India since 1984.

We have been manufacturing highest quality castings in all metallurgical grades such as Stainless steel, Duplex and Super Duplex Steel, Alloy Steel, Carbon Steel, Nickel based alloys, Hi-chrome, Hadfield Manganese steel, Ni-Hard etc. and have earned a reputation in various core industries such as Pumps, Valves, Cement, Chemical, Marine, Mining, Power and General Engineering.

We have a state-of-the-art manufacturing facility spread over an area of 20,400 sq. meters in the western India with an installed capacity of **4000 MT per annum** for producing a wide range of Steel and Stainless Steel Castings and Machined components ranging from **25 Kgs.** – **3400 Kgs. per piece.**

Our factory has a well-developed infrastructure with an in-house laboratory equipped with all modern testing instruments such as Optical Emission Spectrometer, Ultrasonic Testing Machine and Magnetic Particle Testing Device etc. Our facility is also accredited with TUV NORD DIN EN ISO 9001:2008, IBR certification and DUN & BRADSHEET and supported by technically trained professional work force.

Our product range includes Pump Casing, Impellers, Stage Casing, Stuffing Box, Centrifugal Sleeves, Casting for Ball Valve, Check Valve, Globe Valve, Butterfly Valve & other Valve bodies, Crushing Ring, Jaw Plate, Bollards, Mill Liners, Bull Ring Segments, Spares for Crushers, Spares for Pulverizing Mills etc. conform to international Standards such as ASTM, DIN, BS, IS, NACE & MSS-SP55.

Our Vision (CASTING THE FUTURETM)

To emerge as a global market leader in foundry industry and a major player in each of our market segments worldwide by offering world class products. To build loyalty among both our employees & customers' through constant Technological innovations within the bounds of quality work, customer satisfaction & knowledge-transfer.

Specialties

Specialized in providing faster delivery with most competitive prices in Stainless Steel Castings, Duplex & Super Duplex Stainless Steels & Nickel-Based Alloy Castings For Pumps & Valves Industries Up To 3400 Kgs in Single Piece Weight, Ash Handling Spares And Casting Components For Mining Industries as per ASTM, BS, DIN & IS SPECIFICATIONS.

Creating Value for our Customers

SHAL has been focused over many years on providing its globally operating customers with products that support their stainless Steel, Duplex & Super Duplex Stainless Steel, Nickel based alloys, Carbon Steel, Low Alloy Steel, Hadfield Manganese Steel, Ni-Hard, Hi-Chrome, Cast & Machined component requirements.

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Our Mission

- Our mission is to be a reliable global business source for all foundry items such as Pumps, Valves, Mining, Power-plants & all other General Engineering sectors.
- To build long-term relationships with our customers'.

Our Strengths

- Lies in our ability to provide just-in-time delivery.
- Superior Sand Casting quality adhering to various National & International Standards.
- Flexibility in planning and development of Samples for approval.
- Lies in continuous improvement constant learning is supported by the
- Company-wide Knowledge Management Programme.

CASTING THE FUTURE®

SHAL is casting the Future of Steel. But in doing so, we aim to be more than just successful. We wish to be admired both for our culture and for the high standards we set ourselves for quality, service and management.

PRODUCT OVERVIEW



Different Types of Stainless Steel Castings with Metal Testing Laboratory



SHAL possesses experience and expertise in:

Production of stainless Steel and nickel-based alloy castings for pump and valve industries up to 3400 KGS / Piece.

Cast & Machined Components for mining and mineral industries such as bowl liner, mantle liner, jaw plate, ball mill liner, apron pan, mine car wheel, rim liner, impactor hammer, concave liner, bucket lip etc.

Ash handling spares like Inner casing, Wear Plate, Impellers, Bearing Housing and Back Plate etc.

MATERIAL SPECIFICATIONS / METALLURGIES SERVED	ASTM	DIN
Carbon Steel	A216 - WCB	1.0619
	A216 - WCC	
	A352 - LCC	1.1138
	A352 - LCB	
Low Alloy Steels	A217 - WC1	1.5419
·	A217 - WC4	
	A217 - WC5	
	A217 - WC6	1.7356
	A217 - WC9	1.7379
	A217 - WC11	
	A217 - C5	1.7363
	A217 - C12	
	A217 - C12A	
Martensitic Steels	A743 - CA15	1.4008
	A743 - CA40	1.4028
	A743 CA-6NM	1.4313
Heat Resisting Steel	A297 - HF	1.4825
	A297 - HH	1.4837
	A297 - HI	1.4846
	A297 - HK	1.4848
		1.4749
	A297 - HD	1.4823
Austenitic Stainless Steel	A351 - CF8	1.4308
	A351 - CF8M	1.4408
	A351 - CF3	1.4306
	A351 - CF3M	1.4404 / 1.4409
	A351 - CF8C	1.4827
	A351 - CF10	1.4308
	A351 - CK20	1.4843
	A351 - CH20	

A351 - CN7M	1.4500
A351 - CG8M	1.4431
A351 - CG3M	

	ASTM	DIN
Austenitic Ferrite Duplex Steels	A351 - CF3MN	1.4435
	A351 - CD4MCu	
	A351 - CG6MMN	1.3964
	A351 - CK3MCuN	
Super Duplex Stainless	A890 - GR1A	
Steel	A890 - GR2A	
	A890 - GR3A	
	A890 - GR4A	
	A890 - GR5A	
	A890 - GR6A	
Nickel Based Super Alloys	A494 - M-35-1	2.4365
	A494 - M-35-2	
	A494 - M 30 C	
	A494 - N-12MV	
	A494 - N-7M	
	A494 - CY40	2.4816
	A494 - CW12MW	2.4686
	A494 - CW6M	
	A494 - CW2M	2.4610
	A494 - CW6MC	2.4856
	A494 - CX2MW	2.4602
	A494 - Cu5MCuC	2.4858
	A560 - 50Cr50Ni	
	A560 - 50Cr50Ni-Nb	2.4813
	A560 - 60Cr40Ni	
Ni- Hard / Hi – Chrome	ASTM A 532 / IS: 4771/BS:4844	

SPECIAL ALLOY CASTINGS GRADES CAN BE DEVELOPED AS PER THE SPECIFIC REQUIREMENT OF CUSTOMER.

LIST OF MANUFACTURING FACILITIES		
Sr.	ODED A WION	EACH MILEC
No.	OPERATION PATTERN SHOP	FACILITIES Well equipped pattern shop for wooden/metallic patterns.
1	FAITERN SHOP	wen equipped pattern snop for wooden/metanic patterns.
2	MELTING SHOP	Equipped with "ELECTROTHERM" Make 750 KW & 350 KW
		Medium Frequency Induction Melting Furnace Capacity each of: 2000 KGS, 1500 KGS, 750 KGS, 500 KGS & 200 KGS.
3	MOULDING & CORE	Equipped with Pneumatic rammers & Sand compactors for hand
	MAKING	moulding, employing Sodium-Silicate, NO-BAKE Oil Systems.
4	HEAT TREATMENT	
	SHOP	(a) Equipped with 8' x 5' x 5', 6' x 5' x 4' electrical & 10' x 8' x 6' oil fired Heat Treatment Furnace.
		(b) Annealing, Air, Water & Oil Quenching, Tempering Heat treatment Facilities are available.
		(c) Equipped with "ATHENA" Make microprocessor based Digital Temperature indicator & recorder & controller.
5	FETTLING SHOP	(a) Well equipped fettling shop with heavy-duty swing frame
		grinders (6 Nos.) Flexible Shaft Grinder (11 Nos.), Sanders (02 Nos.) (b) Pneumatic Chippers & STEEL BLASTING MACHINE (48"
		TABLE SIZE), Sand Blasting Machine.
		(c) Well Qualified Welders & welding procedure as per ASME, Section IX.
6	MACHINING	(a) Available for PROOF/FINAL MACHINING with arrangement for
0	FACILITIES	various machine tools like horizontal boring, Vertical lathe, conventional lathes, radial drill, gear hobbing, milling, shaping, grinding, planning & various other machines.
7	JOB CAPACITY	Weight Range: 25 KGS – 3400 KGS PER PIECE (Approx.)
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8	STAND BY POWER	250 KVA GREAVES DG SET
9	CRANES	15 MT - 1 NO.
		10 MT - 1 NO. 05 MT - 4 NOS.
		03 MT - 4 NOS. 03 MT - 3 NOS.
		01 MT - 1 NO.

QUALITY CONTROL FACILITIES			
TYPES OF CHECKS	EQUIPMENTS	CAPACITY / CAPABILITY	
DESTRUCTIVE	CHECKS		
CHEMICAL	Spectrometer Model OES - 5500 of SHIMADZU, JAPAN	With Fe, Ni & Cu base for testing of C, Si, Mn, Cr, Ni, Mo, Ti, V, W, S, P, Nitrogen Channel (25 Channels) & other related elements are checked upto three decimal accuracy	
MECHANICAL PROPERTIES	UNIVERSAL TESTING MACHINE	40 T	
TOUGHNESS	IMPACT TESTING MACHINE	Outsourced	
Liquid Metal Temperature	PYROMETERS	1700° C Contact Type, 1000° C Non Contact Laser Gun	
Hardness	Bench type & Portable Brinell Hardness Tester	Up to 700 BHN	
Micro Structure	Metallurgical Microscope	Checking microstructures	
Non Destructive	e Test Checks (NDT)		
RG	Radiography	Outsourced	
MPT	Magnetic Particle Testing	In House	
DPT	Dye Penetrating Test	In House	
UT	Ultrasonic Testing	Outsourced	
Raw Materials	Sand Testing Machine	Grain size distribution, Permeability, Compression and Shear Strength	
Chemical Analysis	SPECTROMETER – Metal Testing Lab	TESTING OF RAW MATERIAL SCRAP, FERRO ALLOYS & In Process Liquid metal testing	

COMMITMENT TO PUMPS & VALVES MARKET

We are strongly committed to satisfy needs of pump & valve industries. We manufacture valve casting for gate, globe, swing check, ball valve, butterfly, control valve (single and double seat, mixing and diverting type), glandless valves, diaphragm valves, bucket valves, strainers of various types, Y type valves and many other as per the design & patterns at our customers.

We manufacture pump castings for various pump industries like centrifugal, high pressure (single & double volutes), multistage, sewage (open and S type impellers) pulp handling, heavy chemicals (mud type), sea water handling, Ash slurry handling, raw acid handling (with slurry), rotary, gear, oil, twin lobe, piston and many other positive displacement and metering and dosing pumps.

We have developed castings in various metallurgies like WCB, CF8M, Alloy 20, CA15, CA6NM, CD4MCu, Ni Resist, High Chrome Steel (28% Cr). Abrasion resistant Cast Irons like High Chrome, Ni-Hard (type II IV M & I). Nickel and Nickel based Alloys like Haste Alloys etc. We manufacture casting as per ASTM, IS, BS, DIN and other international specifications. Developing new metallurgies within stipulated delivery period is our strongest forte.

In manufacturing we concentrate on following points -

- 1) SURFACE IRREGULARITIES checked as per MSS SP-55.
- 2) <u>SURFACE BLASTING</u> All internal water passages is sand blasted thoroughly and external surfaces are shot blasted thoroughly.
- 3) <u>PASSIVATION</u> All stainless steel castings are activated and then passivated by 3 tank acid pickling as per <u>ASTM A 967-96</u> for <u>surface cleanliness</u> and <u>improved corrosion resistance</u>.
- 4) <u>EXCELLENT INTERNAL SURFACE FINISH</u> without any burrs, fins, high spots or dents for enhancing performance of pumps & valves. Internal water passage finished as per ISO 8501-1: 1988 (E).
- 5) <u>AESTHETIC LOOKS</u> and castings free of dents, rough patches, runner & riser cut marks. External finishes Sa 2½ min. Finishing of castings done exactly as per patterns. We do not keep any riser pads on the castings. This not only improves aesthetic looks but also reduces extra weight and hence the cost of the item.
- 6) <u>UNIFORM SMOOTHNESS & FINISH</u> clean & clear letters, customers' logos, direction arrows etc.
- 7) <u>PRESSURE TIGHTNESS</u> by sound methoding and moulding practices. Pressure testing of samples from each lot is done at our end as internal quality check.
- 8) <u>ACCURATE CHEMISTRY</u> controlled by SPECTROMETER. Chemistry is checked & adjusted before pouring the castings.
- 9) <u>SPECIAL CARES FOR IMPELLERS</u> is taken for very smooth internal finish, vane profile and vane tips without any burrs, fins, high spots or dents.
- 10) <u>CARE OF CUSTOMERS PATTERNS</u> is taken by proper storage. Internal nos. are given to patterns for quick identification & controls. All patterns are thoroughly checked for dimensions and surface finish. Our pattern shop takes care of any dents or unnecessary marks on surface due to previous production or storage before releasing for production.
- 11) <u>ISO 9001:2008 CONTROL SYSTEMS</u> strictly followed for internal quality control. We are approved by TUV NORD DIN EN ISO 9001:2008.
- 12) <u>RETRACEABILITY</u> Each individual item is given cast no. which is indicative of batch. Each heat is considered as separate batch. The cast no. directly correlates to the heat in which it is poured. The no. is as cast no., the casting and recorded in the production records. Thus the heat no. of each and every casting on the floor and the dispatched ones can be retraced. This cast no. is recorded in the Test Certificates given to customers for their identification of casting supplied. Heat no. is also punched on the castings.

CERTIFICATE TUV NORD



Management system as per DIN EN ISO 9001: 2008

In accordance with TÜV NORD CERT procedures, it is hereby certified that

SHREE HANS ALLOYS LIMITED 201, 202, 203, GIDC Estate, Dholka, Dist. Ahmedabad – 387 810, Gujarat, India



applies a management system in line with the above standard for the following scope $% \left\{ 1,2,...,n\right\}$

Manufacture & Supply of Carbon Steel & Stainless Steel Alloys, Nickel Alloys and Duplex Stainless Steel Castings up to 3400 Kgs

Certificate Registration No. 44 100 104194-E3 Audit Report No. 2.5-4638/2010 Valid until 26.05.2013

Certification Body

at TÜV NORD CERT GmbH

Mumbai, 27.05.2010

This certification was conducted in accordance with the TÜV NORD CERT auditing and certification procedures and is subject to regular surveillance audits.

TÜV NORD CERT GmbH Langemarckstrasse 20 45141 Essen www.tuev-nord-cert.com



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