

Hindustan Inox Ltd. Stainless Steel Bright Bars • Wires • Pipes • Tubes • Wire Rods

Office

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Factory

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www.hindustaninox.com



Pioneer in Stainless Steel Long Products

A Commitment as strong as Steel

COMPANY PROFILE

Reliable Manufacturer of Stainless Steel Long Products

Hindustan Inox's Commitment to quality and service has made us grow into a truly global enterprise, with customers in over 60 countries. Our state-of-the art manufacturing facility, an enlightened management and empowered employees work with single minded dedication to emerge as best in every test - be it manufacturing quality, reliable supplies and dedicated customer service.

Quality That Shines Forever

As a result of continuous improvement, with strong emphasis on quality and customer satisfaction, today the company is ISO 9001-2000 certified and has become one of the most reliable sources of quality products in the International Market.

Forging Global Partnerships

As a Global player, Hindustan Inox Ltd. remains committed to maintaining world-class quality, reliable delivery schedules, competitive prices and excellent relationships. Our Company has customer centric ethos and places the customer at the very center of operations. We strongly believe that by consistently serving the needs of our customers we will emerge from being reliable suppliers to Partners in Progress.



THE GROUP

Hindustan Inox Ltd is one of the largest manufacturers of Stainless Steel Round Bars and Wires and have achieved the quality standards to match the need of customers across the globe in more than 60 countries. With its modern facilities, experienced management and employees, Hindustan has established itself as a business partner to its customers and not just being another manufacturer from India.

Hindustan Group has an experience of 35 years in Stainless Steel Long Products & the group is selling approx. 60,000 MT of Stainless Steel Bars & Wires across the globe.

We have undertaken restructuring programme to improve our cost efficiences and maintain our competitive edge

Strong Values

The reason why over the recent years we are being chosen over our competitors are:

- 1. Wide & Deepest Product Range
- 2. Over 80 Grades in Stainless Steel
- 3. Several Specialized Grades as per Specific Applications
- 4. Value Added Services
- 5. Quality Conscious Management

We understand the complexities of traders / stockists as we are still the largest traders within India. With our hands on experience of our trading biz, we are able to offer much better solutions to our customers.

With our domestic base of over 2000 customers within every corner of India spread across different industries like Oil & Gas, Agriculture, Pharmaceuticals etc, make us one of the key partners for any end user in India.



Manufacturing Technology

Our Facilities Include:

Heat Treatment Division

- Solution Annealing and Annealing Furnaces
- Quenching and Tempering Furnace
- Double Tempering / Double Ageing
- Oil and Water Quenching Tanks

Bright Bar Division

- Schumag Combined Drawing Machines
- Bar Peeling Machines
- Centreless Grinding Machines
- Belt Polishing Machines for Round, Square and Hexagon Bars

Wire Division

- Multi Block Drawing Machines
- Strand Annealing Furnace
- Spooling Machines

Pipe Division

- Tube Mills
- Draw benches / Pilger Machines
- Solution Annealing Furnace
- U bend Tube Manufacturing Facility

Material Testing Laboratories Fully equipped Chemical & Physical Inspection Laboratories

TTTM

Material Testing Facilities

The ultra - modern production and testing facilities used at Hindustan Inox Ltd. ensure highest quality standard demanded by the customers.

Testing Facilities available at Quality Assurance Laboratories:

- 100% Ultrasonic Testing Of Internal Defects
- Hydrogen / Oxygen / Nitrogen Testing through LECO Analyzer
- Optical Emission Spectrometers
- Carbon Apparatus
- Radiation Servo Meter
- Material Identification Testing through Mobile Handheld Spectrometer
- Eddy Current Testing
- Surface Testing



Mechanical Tests

- Tensile Strength
- Hardness (HRC, HV, HB)
- Elongation Reduction
- Proof Strength
- Notched Bar Impact Testing
- Torsion Test

Metallographic Tests

- Microstructure
- Macrostructure
- Defect Depth
- Internal Structure
- IGC Testing
- Delta Ferrite Measurement
- Non Metallic Inclusion Rating (as per ASTM E45 & DIN 50602 -K4 Method)



Quality can never be achieved by accident. It is always a result of hard work, intelligent planning and careful execution. Hindustan Inox is committed to Quality and the Procedures for Quality Control are properly identified and implemented.

Raw Material Inspection

Raw material is inspected for Chemical and Mechanical Properties and Surface Defects (if any) before production.

In-Process Inspection

Our team of trained supervisors and quality control inspectors ensure the quality of products manufactured, as per customer requirement. Tolerance, Lobing, Length, Straightness, Surface Finish is checked at different production stages during the production cycle. Our production team is at the Core of the Quality Assurance System.

Finished Goods Inspection

Our Finished goods are inspected from customer's perspective. In this stage surface finish, packing, colour coding, marking, mechanical tests, mercury contamination, macro and micro properties, inter granular and corrosion properties are looked after. Test certifications comply with the specification and requirements of the customers.

For Guaranteeing quality at every step, we ensure that: Perfectly documented work-procedures endorsed by 3rd party accreditations, certifications and approvals ensure utmost correctnessin Hindustan Inox's everyday operations. The ultra-modern facilities used at Hindustan Inox ensure highest quality steel demanded by our customers. These facilities are supported by precise input data and work schedules along with ongoing quality checks of all features relevant to the particular order, tailored to meet individual customer's specification.

- EN 10204 3.1B (Test certificate issued along with all supply)
- EN 10204 3.1 AC (Test certificate issued by an external inspection agency like RMTUV, LLOYDS, Bureau Veritas, DNV, SGS, ITS, etc.)



Material Grades

Austenitic Steels ASTM

Martensitic Steels

ASTM

Ferretic Steels

: 409, 430, 430F, 434 ASTM EURO - NORM : 1.4512, 1.4016, 1.4113, 1.4105 **Precipitation / Hardening Steels** ASTM

EURO - NORM : 1.4542

Stainless Steel available with Hindustan Inox Ltd.

: 301, 302, 303, 304, 304L, 304H, 304LN, 305, 310, 310S, 314, 316, 316L, 316H, 316LH, 316Ti, 317L, 321, 321H, 329, 347, 347H, 201, 202, 204, 204Cu

EURO - NORM : 1.4310, 1.4305, 1.4301, 1.4306, 1.4307, 1.4948, 1.4312, 1.4840, 1.4845, 1.4841, 1.4401, 1.4404, 1.4919, 1.4406, 1.4432, 1.4435, 1.4436, 1.4571, 1.4438, 1.4541, 1.4878, 1.4460, 1.4550

: 410, 416, 420, 420B, 420C, 431

EURO - NORM : 1.4006, 1.4005, 1.4021, 1.4028, 1.4031, 1.4034, 1.4122, 1.4104, 1.4057

: 174ph or 630



Hindustan Inox is one of the largest producers of bright bars. Each bright bar is very carefully controlled during the heat treatment process in order to achieve a superior quality product.

ROUND BARS

: 1.8 mm to 250 mm (1/16" to 10") Size Range Diameter Tolerances : h8, h9, h10, h11, k10, k12, k13 ASTM A484, DIN1013

End Finish : Hot Rolled, Cold Drawn, Peeled & Polished, Forged and Rough Turned Bars

SQUARE & HEXAGON BARS

: 5 mm to (1/4" to 2")
: 3 meter to (10 feet to
: h11, k11, ASTM A4
: As per El ASTM, Al

SUPPLY CONDITIONS

Length

3 to 7 metre, 10 to 24 feet and as per customer requirement of specific length

Specifications

As per EN, DIN, JIS, ASTM, AFNOR, B.S, ASME, NACE, AISI, MILS, AMS

Chamfering

Chamfered Ends (30,45,60 Degrees) End of the Bars above 25 mm are Hard Stamped / Punched with Heat Number and Grade of the material

Heat Treated

Annealed / Solution Annealed, Quenched & Tempered (QT), Quenched & Double Tempered / Double Aged

Special Delivery Conditions (Available on request)

- Special tolerances e7,g7,h7,f7,h8,f8,e8,g8
- Special cut to length tolerance of 10 mm (0.4")
- Surface finish up to Ra value 0.2 (12 RMS)
- 240 -320 Grit Polished
- Straightness up to 0.5 mm per meter TIR
- Special plastic / tube packing for individual bars
- Rings on individual bars to avoid scratch marks
- Wooden slating, Box packaging
- Straps / Slings on the bundles for easy unloading

50 mm

o 6 meter o 20 feet)

, k12, k13, 184

N, DIN, JIS FNOR, B.S

Himax Bars

HIMAX Bars are Improved Machining Quality (IMQ) bars produced by Hindustan Inox.

The machinability characteristics are primarily influenced by:

- Work hardening rate of chips generated in machining operation
- Nature of sulphide inclusion and their morphology

The three main advantages of IMQ bars:

- Increases Productivity
- Betters Tool Life
- Helps achieve excellence in Chip Control (Machinability)

HIMAX BRAND

HIMAX Stainless Grades HIMAX 303, HIMAX 304, HIMAX 304L, HIMAX 316, HIMAX 316L, HIMAX 430F, HIMAX 416

Equivalent DIN - EN Grades 1.4305, 1.4301, 1.4307, 1.4401, 1.4404, 1.4104, 1.4005

Precision Ground Bars

Precision Ground Bars is one of Hindustan Inox's premium product lines. These super finished precision bars are processed using the ultra-modern combined lines and the most up-to-date equipments. The bars are then finished using the specially designed finishing machines which ensure that the size, tolerances and surface roughness are achieved as desired.

These bars are packed using a variety of protective materials and distance rings and then placed in strong plywood boxes.





Size Range 4mm to 100mm (1/4" - 4")

Diameter Tolerance h8, h9, f7, f8, e7, e8

Ovality Half of the Tolerance of the Diameter

Surface Finish Up to Ra value 0.2 (12 RMS max)

Straightness 0.5 mm per meter TIR (0.0015" per feet)

Length Up to 6.7 meter (20 feet 2"- 22 feet) Heat Treatments Annealing, Solution Annealing, Oil Quenching, Tempering - as per requirement

Grades AISI 303, 304L, 316L, 410, 416, 420, 430F, 431, 174PH

Werkstoff No. 1.4305, 1.4307, 1.4404, 1.4005, 1.4006, 1.4021, 1.4104, 1.4028, 1.4057, 1.4542, 1.4462

Wires

Size Range 0.9 mm to 22.00 mm dia

Grades

303, 304, 304L, 316, 316L, 302HQ, 304HC, 321, 316Ti, 308L, 309L, 316LER, 430, 430L, 409Ti, 420B, 310S, 314, 347, 301, 204Cu, 201, 202

Applications

Nails, Staples, Rivets, Wedge Screen, Springs, Bicycle and Umbrella Spokes, Conveyor belts, Steel balls and Wall ties, Welding Electrodes

Size	Condition		
1.00 mm to 4.76 mm 0.0393" to 0.1874"	Bright Washed or with residual lube on surface		
	Matte finish (Soap Drawn, Soap Drawn and Washed)		
4.80 mm to 22.00 mm 0.189" to 0.8661"	Bright finish Washed with residual lube Matte finish		

(Soap Drawn,

Soap Drawn

and Washed)

Packing Coils of 50 kgs

1/8 hard

1/4 hard

1/2 hard

(soft)

1/8 hard

1/4 hard

1/2 hard

3/4 hard

1/8 hard

1/4 hard

1/2 hard

1/2 hard

3/4 hard

Soft

Bright Annealed

Coils of 350 kgs on tabular carriers On metal reels On tubular carriers 1000 kgs Coils of 300 - 500 kgs on tubular carrier On Metal reels

On tubular carriers Coils of 500 kgs

On coils of 500 kgs On tubular carriers

STAINLESS STEEL WIRE FOR **GENERAL PURPOSE**

Special Characteristics

- Produced from wire rods that meet international standards
- Supplied in Annealed, 1/4 Hard, 1/2 Hard
- Drawn in very close Tolerance Limits
- Excellent Surface Finish
- Suitable for Electropolishing
- Quality Checked at each Process Stage Available in complete range as per AISI, DIN, BS AND JIS standards

FREE CUTTING STAINLESS STEEL WIRE

Special Characteristics

- For specific work requirements, free-cutting wire of stainless must be selected taking into consideration factors such as fatigue, usage, strength, corrosion resistance, impact resistance, etc.
- TYPE 303, 416, 430F, 316F, 420F
- Sulphur(s%) is added by about 0.15 to 0.35% to improve machinablity



STAINLESS STEEL WIRE FOR COLD **HEADING QUALITY**

Special Characteristics

- Excellent corrosion resistance and mechanical strength
- Most suitable material for bolts, nuts, screws, Philips head screw and other types of fasteners
- Marked work hardening characteristics

Supply Conditions

- Wires are Vicafil coated to ensure smooth heading operations
- Cold Drawn and Annealed / Cold Drawn and Annealed and Skin Pass or as per customers requirement with very fine tolerance



Hindustan Inox has one of the most experienced production and Q.C team for SS Pipes/Tubes that enables them to produce high quality products, consistently.

S.S WELDED PIPES

Outer Diameter 1/8" NB to 10" NB

Thickness SCH5S, 10S, 40S & 80S SCH5S, 10S & 40S, SCH 5S, 10S & 40S

Specifications ASTM A-312, A-554, A-530

S.S WELDED TUBES

Outer Diameter 6.00 mm to 114.30 mm

Thickness 0.9 mm to 6 mm

Specification ASTM A-249, A-269 & A-270 TUBES

Thickness

SPECIAL DELIVERY CONDITIONS

Length

Random Length / Fixed lengths up to 15 Meter in Straight Length

Grades

TP-304/L/LN/H, TP-316/L/LN/H/Ti, TP-317L, TP-321/H, TP-347/H, TP-409, TP-410, TP-430Ti, TP-439

Packing

Material is packed in hessain cloth, jute cloth, plastic wrapping or wooden boxes packaging is also done as per customer requirement.

Products Manufactured

- Heat Exchanger Straight & U Tubes
- Instrumentation Tubes
- Tubes and Pipes for General Engineering and Process Industries
- Exhaust Tubes for Automobile Industry

Our Plant Facilities Include the following:

- Draw Benches
- Tubes Mills
- Solution Annealing Furnace •
- U Bend Tube Manufacturing Facility
- Sophisticated Laboratory Equipment (Spectro, PMI, UT, Eddy Current, etc)

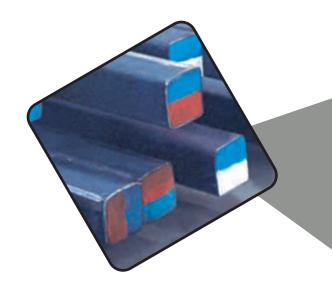
S.S SEAMLESS

Outer Diameter 6.00 mm to 114.30 mm

0.7 mm to 0.8 mm max. Range-0.8 mm

Specification ASTM A-213, A-269 & A-270

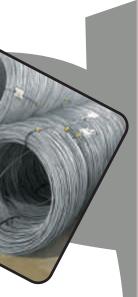




Application	Round Bars and Wire Rods by Rolling, Forged Bars, Forged Flanges by Forging
Grades	201, 202, 303, 304, 304L, 310, 316, 316L, 321, 410, 416, 420, 430F, 431, etc.
Sizes	: 100x100, 120x120, 140x140, 160x160, 200x200, 250x250
Condition	Concast Blooms & Billets
Surface	: As Cast
Size	: 40 mm to 160 mm
Condition	Round Corner Squares (RCS)
Surface	As Rolled



Wire Rods



	- , - , , , ,
	303Cu, 304, 304Cu, 304L, 308, 308L, 308LER, 309Lsi 310S, 314, 316, 316L, 316Cu, 316Ti, 317, 403, 409Ti, 410, 416, 420, 430F, 430L, 431
Size	: 5.50 mm to 32.00 mm (0.217" to 1.220")
Tolerance	: + / - 0.03 mm (+ / - 0.011")
Surface Defect	: 1% of Diameter mm and O.D 1200 / 1250 mm
Coil Weight	: 500-1000 kg (I.D 750/800 mm and O.D 1200/1250 mm)
Packing	: HDPE wrapped coils 500 to 1000 kg
Heat Treatment	
Solution Anne	aling for Austenitic Grades.

: 201, 202, 204Cu, 302, 303,

• Solution Annealing for Austenitic Grades, Normal Annealing for Martenistic Grades

Surface Treatment

 Hot Rolled for Hot Rolled Annealed and Pickled (with or without coating)

Applications

Grades

• Bright Bars, Wires, Fasteners, Chains, Threaded Rods, Cutlery, Welding Products



Threaded Bars

Hindustan Inox Ltd. has been the approved supplier for several Threaded Bar Manufacturers across the globe because the company is adept at understanding the quality requirements of the industry. A highly experienced production team and raw material base enable us to produce high quality threaded bars, at competitive prices.

Material Grade

A2, A4, A2-80, A4-80, B8 (Class I & II) B8M (Class I & II)

Size Range 3 mm to 55 mm (1/8" to 2.1/4")

Thread Type Metric, UNC

Length 1 - 6 meter, 3 - 12 feet (or any special length required)

Standard DIN 975 / 976 or ASTM A193/A320

CHEMICAL AND MECHANICAL PROPERTIES

Grade	Material	C MAX	Mn MAX	P MAX	S MAX	Si MAX	Cr MAX	Ni MAX	Мо
Grade A2	AISI 304	0.080	2.000	0.045	0.030	1.000	17.000 20.000	8.000 13.000	
Grade A4	AISI 316	0.080	2.000	0.045	0.030	1.000	16.000 18.500	10.000 14.400	2.000 3.000

Standard Grade

(Din267 Part11) A2 & A4

ISO 3506

Property Class	Tensile Strength Rm	Yield Strength '0.2% Offset min. N/mm ²	Elongation After Fracture AL mm Minimum
70	700	450	0.4d
80	800	600	0.3d

Packaging Process

Hindustan Inox's vision is not restricted to manufacturing good quality products but to safely place these highly finished products on customer shelves.

Before the highly finished bars are carefully packed, each length of the bar goes through the following process:

- · One end of bar is colour coded as per customer's requirement.
- Ends of the bars above 35 mm are Hardened, Stamped / Punched with the heat number and the grade of the material.
- Each length of the bar is thoroughly cleaned to remove the oil or grease from the surface in case of Austenitic Steels and a range of plastic rings (depending on the size and length of the bars) are inserted in each bar to avoid rod to rod contact.
- These bars are then tied with Signode-straps and wrapped with Low Density Plastic sheets. These bundles are over again wrapped with High Density Bio-degradable/ Recyclable laminated sheets in order to ensure complete security during far-off transportation.

Approvals & Recognitions

Company's penchant for quality is seconded by approvals and certifications and several awards from the Government of India for outstanding achievements in the field of exports.

CERTIFICATIONS

EXPORT HOUSE CERTIFICATION from Government of India

AWARDS

Year 2004 - 2005

Awarded the STAR PERFORMER in the Category of Stainless Steel in the All India Category from Engineering Export Promotion Council

Year 2005 - 2006

Awarded the STAR PERFORMER in the Category of Stainless Steel in the All India Category from Engineering Export Promotion Council

Year 2006 - 2007

Awarded the SILVER SHIELD in the Category of Stainless Steel Regional Award in the Western Region from Engineering Export Promotion Council

Year 2007 - 2008

Award for SILVER SHIELD for outstanding contribution to the Industry from India Council of Small and Medium Exporters



