

# **SUPPLYING THE BEST QUALITY**

STAINLESS STEEL TUBES AND PIPES



### **OUR COMPANY**

Santosh Steel & Pipes India Pvt Ltd is an Indian based company, a renowned Manufacturer and Supplier of Stainless-Steel Pipes and Tubes within and across the country supporting many industrial and architectural projects. Originally from Rajasthan, Shri. Hari Ramji Goyal, planted the seed for his vision in 1967, when he established Santosh Steel & Pipes India Pvt Ltd. We are known for our reliability, dependability and consistency in quality of various products.

The manufacturing unit of Santosh Steels is located at Dadra in UT of Dadra & Nagar Haveli. We are fully equipped with state of art technology. We started with a manufacturing rate of 700 M. Ts per year in 2009 and now it has grown to reach a manufacturing rate of 6000 M. Ts per year. Our manufacturing units are ISO 9001:2000 certified by TUV (RL) Group and accredited by NABCB.

Our Directors are Mr. C.S. Goyal(B.E. -Metallurgical) -Technical & Commercial and Mr. Atul Goyal (B.E., Mechanical) -Technical & Marketing are very well equipped and experienced in their respective fields. The leadership skills of both the directors are very well appreciated in Indian Umbrella Industry, as later has served All India Umbrella Federation, Mumbai as Founder President and have set new standards for this industry. Mr. C.S. Goyal is also a member of Technical Committee of ASTM International – USA & American Welding Society – USA, for last 12 years.

With an insight to provide Quality in Stainless Steel Pipes & Tubes and Strength as a base for the Industrial needs and bring the perception of its use to light. We have now become a leading Stainless Steel Pipes Manufacturer, Supplier and Exporter in India and abroad. Our major production is – ERW and Seamless Stainless Steel Pipes, Tubes, Square and Rectangular Sections (6,000 M.T. P.A.).

The Products Manufactured Are As Follows:

- 1. Welded and Seamless Stainless Steel Pipes
- 2. Welded and Seamless Stainless Steel Tubes
- 3. Welded Square Sections
- 4. Welded Rectangular Sections



To deliver the best quality products with innovative technology and applications and to attain global excellence by continuously providing the best service to our customers in India and in abroad.



To establish a global brand by working with integrity in providing the best quality products. We also aim to broaden our market reach to all parts of India and also abroad.



PRODUCT	OUTER DIAMETER	THICKNESS	SPECIFICATION	TESTING
S.S. Welded Tubes	1/2" to 41/2" O.D. (6.35 mm to 114.30 mm)	0.30 mm to 4 mm	ASTM A249 ASTM A268 ASTM A269 ASTM A554	Tensile Test,Flattering Test, Flare Flange Test, Reverse Bend Test, 100% Hydrostatic Test, Hardness Test
S.S. Welded Pipes	3/8" NPS to 4" NPS	Sch 5s Sch 10s Sch 20S Sch 40S	ASTM A312	Tensile Test, Flattering Test, Flange Test, 100% Hydrostatic Test, Hardness Test
S.S. Seamless Tube	s 6 mm to 101.6 mm	0.80 mm to 4 mm	ASTM A213 ASTM A269 ASTM A270	Tensile Test, Flattering Test, Flare Flange Test, Reverse Bend Test, 100% Hydrostatic Test, Hardness Test
S.S. Seamless Pipes	1/4" NPS to 8" NPS	Sch 5s, Sch 10s, Sch 20s, Sch 40s	ASTM A312	Tensile Test, Reverse Bend Test, 100% Hydrostatic Test, Hardness Test



### **RECTANGULAR SECTION**

Size	Thickness						
10X20 mm	1.00	1.20	1.50				
13X26 mm	1.00	1.20	1.50	2.00			
20X30 mm	1.00	1.20	1.50	2.00			
20X40 mm	1.00	1.20	1.50	2.00	3.00		
25X50 mm	1.00	1.20	1.50	2.00	3.00		
30X50 mm		1.20	1.50	2.00	3.00		
40X60 mm		1.20	1.50	2.00	3.00		
25X75 mm			1.50	2.00	3.00		
40X80 mm			1.50	2.00	3.00		
40X75 mm			1.50	2.00	3.00		
40X100 mm				2.00	3.00		
60X100 mm					3.00		
55X125 mm					3.00		



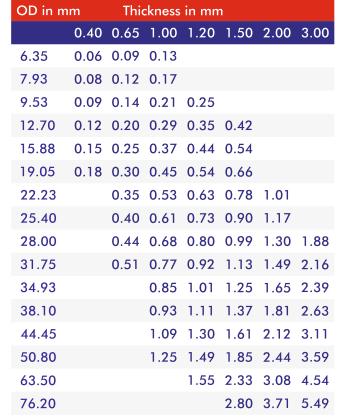
### **SQUARE SECTION**

Size	Thickness							
15X15 mm	1.00	1.20	1.50					
20x20 mm	1.00	1.20	1.50	2.00				
25X25 mm	1.00	1.20	1.50	2.00	3.00			
30X30 mm	1.00	1.20	1.50	2.00	3.00			
40X40 mm	1.00	1.20	1.50	2.00	3.00			
50X50 mm		1.20	1.50	2.00	3.00			
60X60 mm			1.50	2.00	3.00			
70X70 mm					3.00			
80X80 mm					3.00			

### PRODUCT RANGE



#### S. S. ROUND TUBES





S. S. PIPE SERIES

NPS	NPS	O.D.	Wall Thickness & Weight Chart						
Inch	mm	mm	Sch 5S		Sch 10S		Sch 40S		
1/4"	8	13.72			1.65	0.498	2.24	0.643	
1/3"	10	17.15			1.65	0.639	2.31	0.857	
1/2"	15	21.34	1.65	0.812	2.11	1.014	2.77	1.286	
2/4"	20	26.67	1.65	1.032	2.11	1.296	2.87	1.708	
1"	25	33.40	1.65	1.310	2.77	2.121	3.38	2.537	
11/4"	32	42.16	1.65	1.671	2.77	2.728	3.56	3.435	
11/2"	40	18.26	1.65	1.923	2.77	3.150	3.68	4.101	
2"	50	60.33	1.65	2.421	2.77	3.986	3.91	5.515	
21/2"	65	73.03	2.11	3.741	3.05	5.336	5.16	8.755	
3"	80	88.90	2.11	4.578	3.05	6.546	5.49	11.448	
31/2"	90	101.60	2.11	5.248	3.05	7.514	5.74	13.756	
4"	100	114.30	2.11	5.918	3.05	8.483	6.02	16.296	
6"	150	168.28	2.77	11.462	3.40	14.015	7.11	28.648	
8"	200	219.08	2.77	14.979	3.76	20.240	8.18	43.129	

### SPECIAL TUBULAR SHAPES & SURFACE FINISHES

2.28 4.35 6.44 3.75 4.98 7.40



88.90

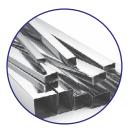
101.60

**Railing Tubes** 





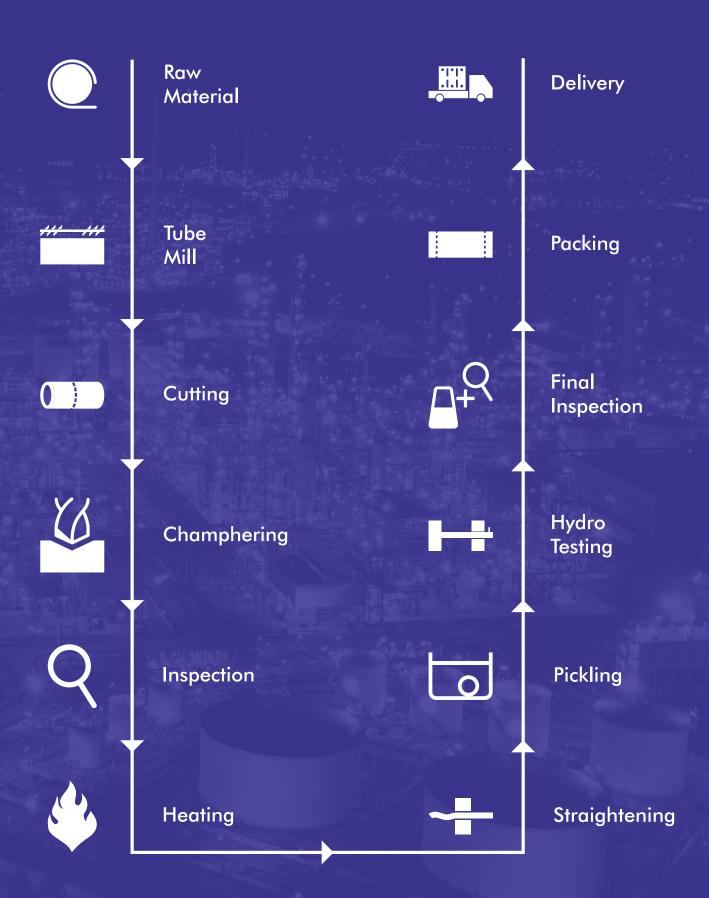
Mirror Finish 800# Mirror Finish Mirror Finish





400# Matt Finish

## MANUFACTURING PROCESS



## **OUR QUALITY ASSURANCE TEST**



#### **FLARING TEST**

The Flaring test serves to establish the forming behavior of tubes & pipes which are expanded to a specific degree in respect of O.D. This test is carried out in conformation to the international standards.



#### FLATTENING TEST

A sample of tube or pipe in 4" length shall be flattened cold between parallel plates in two steps. The weld shall be placed at 90° from the direction of the applied force. The first step is a test for ductility, no cracks or breaks on the inside surfaces acceptable. During the second step, which is a test for soundness, the flattering shall be continued until the specimen breaks or the opposite walls of the specimen meet.



#### HARDNESS TEST

Samples from each lot of continuously heat-treated tubes & pipes are tested to ensure that the hardness is well within specified limits.



#### **EDDY CURRENT TEST**

This test is carried out to detect any micro-cracks or inhomogeneities in the material, by using the test procedure as described in ASTM E-426 & SEP 1914.



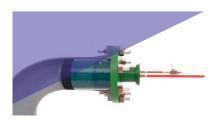
#### **REVERSE BEND TEST**

A Sample of 4" in length shall be split longitudinally 90° on each side of the weld. The sample shall then be opened and bent around a mandrel with a maximum thickness of four times the wall thickness, with the mandrel parallel to the weld and against the original outside surface of the tube. The weld shall be at the point of the maximum bend. There shall be no evidence of cracks or overlaps resulting from the reduction in thickness of the weld areas by cold working.



### **TENSILE TEST**

The tensile test serves to determine the strength and ductile characteristics of the tubes & pipes i.e., yield strength, tensile strength and % elongation.



#### HYDRO-STATIC PRESSURE TEST

All tubes & pipes manufactured by "SANTOSH" are Hydrostatic Pressure tested as per required specification. Our Hydro-static pressure testing machine is capable of carrying out pressure test upto 6000 psi.

If required, customer or deputed inspection agency can witness 100% Hydro-static pressure testing at our plant. The products can also be supplied with third party inspection like Lloyds, SGS, BVQL, PDIL, TUV etc..



## CHEMICAL COMPOSITION

CHEMICAL COMPOSITION										
GRADE	USA-CANADA AISI-ASTM -ASME	° %C (MAX)	%Min (MAX)	%P (MAX)	%S (MAX)	%SI (MAX)	%CR	%NI	%мо	%N (MAX)
AUSTENITIC										
301	301	0.15	2.00	0.045	0.030	1.00	16.00-18.00	6.00-8.00		0.10
304	304	0.08	2.00	0.045	0.030	0.75	18.00-20.00	8.00-10.50		0.10
304L	304L	0.03	2.00	0.045	0.030	0.75	18.00-20.00	8.00-12.00		0.10
310	310	0.25	2.00	0.045	0.030	0.75	24.00-26.00	19.00-22.0		
316	316	0.08	2.00	0.045	0.030	0.75	16.00-18.00	10.00-14.00	2.00-3.00	0.10
316L	316L	0.03	2.00	0.045	0.030	0.75	16.00-18.00	10.00-14.00	2.00-3.00	0.10
321	321	0.08	2.00	0.045	0.030	0.75	17.00-19.00	9.00-12.00		0.10
FERRITIC +	MARTENSITIC									
409	409	0.080	1.00	0.040	0.030	1.00	10.50-11.75	0.50 max		
410	410	0.15	1.00	0.040	0.030	1.00	11.50-13.50	0.75 max		
LOW NICKLE	AUSTENITIC									
201(J4)	201(J4)	0.10	8.5-10.00	0.090	0.030	0.75	15.00-16.00	1.2 max		0.20.10
202(J1)	202(J1)	0.08	7.00-8.00	0.075	0.030	0.75	15.00-17.00	4.00-5.00		

### **APPLICATION**

Stainless Steel Tubes & Pipes manufactured by SANTOSH GROUP of Industries are used in projects of critical national importance like



- Petrochemical
- Chemical
- Fertilizer
- Automobile
- Decorative
- Refrigeration
- Fabrication



- Sugar Mills
- Dairy & Food
- Power Plants
- Oil & Gas
- Water Supply
- Heat Exchanger
- Pharmaceuticals
- Textiles & Many More

## **PACKAGING**

All special finish S.S. Pipes & Tubes are individually wrapped in plastic paper or LDPE tubes, and then in seaworthly packing in wooden boxes for exports or as per customer's request. for domestic customers the packing is done in jute begs/HDPE wooven sacks or in wooden boxes or as per customer's request. The tube ends can be plugged, if required.







(0260) 2669146 (+91) 9687603059



Santosh Steel & Pipes India Pvt Ltd., Survey No. 357/3 & 357/2/1,Behind Dadra Garden, Dadra-396 193. (U.T. of Dadra & N.H.) INDIA.