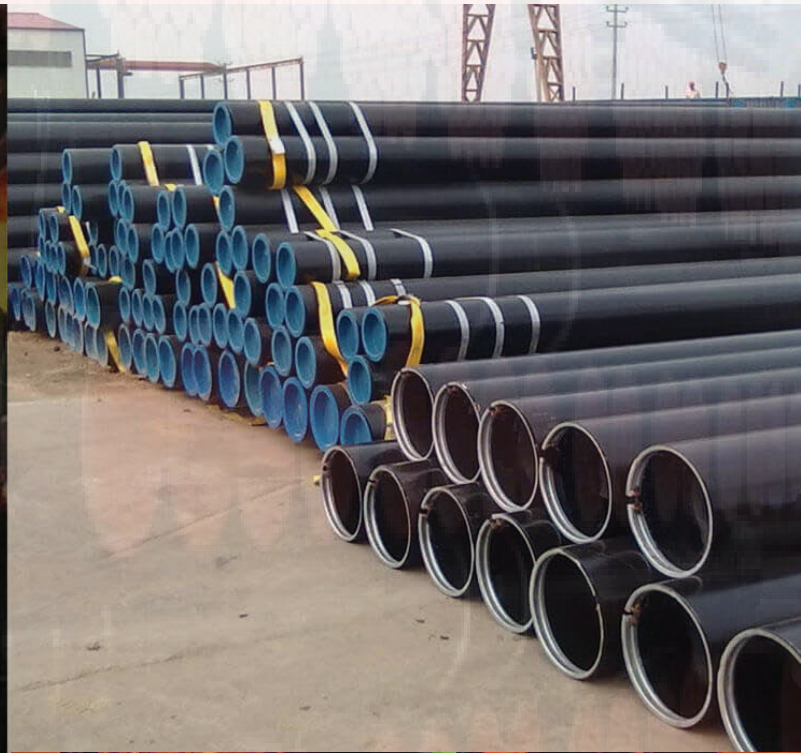




GAMA STEELS (INDIA)



Seamless Pipes and Tubes



Seamless world
to be more easy

info@gamasteels.in

www.gamasteels.in

Company Profile

GAMA STEELS was established to provide the fire protection and building services industries a large assortment of competitively priced, quality-guaranteed products. Our products are tested for performance and safety, and we are able to meet all international standards for quality assurance. Gama Steels can supply tubes in accordance with many international standards, the most popular of which are ASTM, DIN, EN, IS, BIS, and BS. In addition to these standards, we may supply tubes based on the particular requirements of the customer, including tighter tolerances, certain heat treatment parameters, surface treatments, etc.

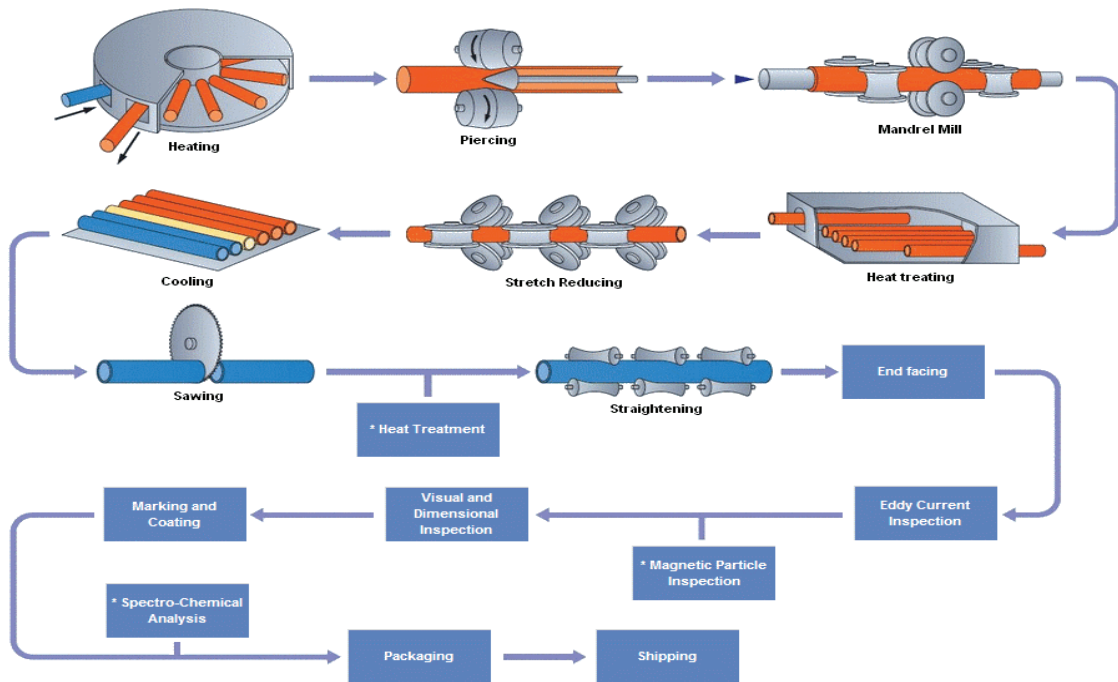
Furthermore, the company takes pride in its adaptability and promises to produce pipes that specifically meet the needs of each particular customer. Every product that Gama Steels supplies is rigorously inspected at several stages, from the first step to the last shipment to guarantee that the customers only receive the best products. In addition to implementing a strong quality control system, Gama Steels places a high value on prompt product delivery. Since our founding, we have built a vast global network of clients and have always offered them dependable services.

At GAMA STEELS, our main goal is to provide high-quality products by choosing the best raw materials to use in our final products. Quality is the most important thing to GAMA STEELS. Every one of our products goes through a rigorous inspection and testing process that includes NDT facilities' electromagnetic inspection, hydrotesting, ultrasonic MPI and EDDY current testing, and more. We are able to rank among the best because we have all the testing facilities we need, such as spectrometers for chemical analysis, impact testing, hardness testers, metallurgical microscopes, and UTMs.

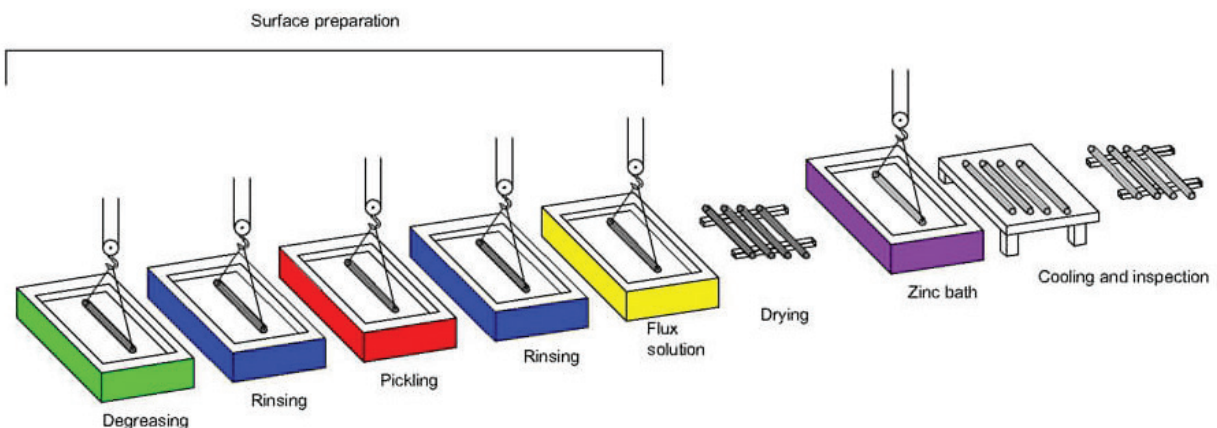
Product Program

Products:	Dimensional Range	Standards of Fabrication:									
<ul style="list-style-type: none"> • Chilled Water Pipes • Fire Fighting Pipes • Heat Exchange Tubes • Super Heater Tubes • Condenser Tubes • Boiler Tubes • Pneumatic Tubes • Automotive Component Tubes • Hydraulic Tubes • Special Alloyed Tubes 	<table border="1" style="margin: auto;"> <thead> <tr> <th></th> <th>Min (mm)</th> <th>Max (mm)</th> </tr> </thead> <tbody> <tr> <td>OD</td> <td>21.3</td> <td>508.0</td> </tr> <tr> <td>WT</td> <td>2.77</td> <td>26.19</td> </tr> </tbody> </table>		Min (mm)	Max (mm)	OD	21.3	508.0	WT	2.77	26.19	<p>Gama Steels (India) can manufacture the tubes as per standards of various norms, the most common being ASTM, DIN, EN, IS, BIS, BS. In addition to these norms we can manufacture tubes as per customer's specific demands like stricter tolerances, heat treatment conditions, surface finishes, etc.</p>
	Min (mm)	Max (mm)									
OD	21.3	508.0									
WT	2.77	26.19									

Seamless Pipes Manufacturing Process



Galvanizing Process



Applications & Specifications



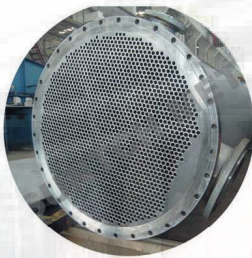
Chilled Water/FireFighting/ Hydrocarbon

ASTM : A-53, A-106, A-333, A-334, A-335
BS : 3602 (Pt-I)



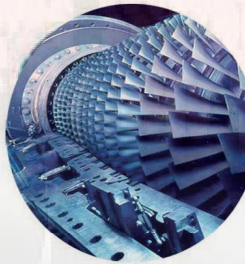
Automotive Industry

ASTM : A - 519
SAE : 1010, 1012, 1020, 1040, 1518, 4130
DIN : 2391, 1629
BS : 980, 6323 (Pt-V)
IS : 3601, 3074



Boiler & Heat Exchanger

ASTM : A-106, A-178, A-179, A-192
A-209, A-210, A-213, A-214
BS : 3059 (Pt-I & Pt-II)
EN 10216 (Pt-I & Pt-III)
3602 (Pt-I)
IS : 1914, 2416, 11714, 4923
DIN : 17175



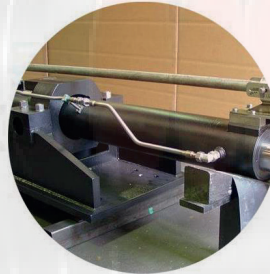
Mechanical, Structural & General Engineering

ASTM : A - 500, A-501, A-519
DIN : 1629, 1630, 2319
BS : 980, 1775, 3601, 6323
IS : 1161, 3601, 9295
EN : 10305-1, 10305-4, 10216-1,
10216-2



Railways

IS : 1239 (Pt-I), 1161
BS : 980



Hydraulic Cylinder

SAE : 1026, 1518
IS : 6631
DIN : 1629



Technical Information for Pipes and Tubes

Technical information

General factors for conversion

General factors for conversion

Lengths		
1 inch	25.4 mm	0.0254 m
1 foot	304.8 mm	0.3048 m
1 yard	914.4 mm	0.9144 m
1 mile	1609 m	1.609 km
1 nautical mile	1852 m	1.852 km

Area		
1 in ²	6.45 cm ²	
1 ft ²	0.0929 m ²	
1 yd ²	0.836 m ²	
1 acre	4047 m ²	
1 sq. mile	2.5899 km ²	

Weight/mass		
1 lb	0.454 kg	
1 cwt	50.80 kg	
1 (long) ton	1016 kg	
1 short ton	907.2 kg	

Volume		
1 in ³	16.3871 cm ³	
1 yd ³	0.7646 m ³	
1 ft ³	0.0283 m ³	

Contents		
1 barrel	159 litres	
1 UK gal	4.55 litres	
1 US gal	3.785 litres	

From metric to imperial multiply

Lengths			
1 mm		0.0394	inch
1 m		3.2808	ft
1 m		1.0936	yd
1 km		0.6215	mile
1 km		0.5399	nautical mile

Area			
cm ²	x	0.155	in ²
m ²	x	10.764	ft ²
m ²	x	1.196	yd ²
m ²	x	0.0002471	acre
km ²	x	0.386	sq. mile

Weight/mass			
1 kg	x	2.2046	lb
1 kg	x	0.0197	cwt
1 kg	x	0.0009842	(long) ton
1 kg	x	0.0011023	short ton

Volume			
cm ³	x	0.06102	in ³
m ³	x	35.3147	ft ³
m ³	x	1.3079	yd ³

Contents			
ltr	x	0.0063	barrel
ltr	x	0.22	UK gal
ltr	x	0.2642	US gal

Pressure and stress

	N/m ² =Pa	N/mm ² =MPa	Bar	Atm=kgf/cm ²	kgf/mm ²	lb/in ² (psi)	Ksi
N/m ² = Pa	1	10 ⁻⁶	10 ⁻⁵	10.2 x 10 ⁻⁶	0.102 x 10 ⁻⁶	145.0 x 10 ⁻⁶	0.145
N/mm ² = Mpa	10 ⁶	1	10	10.2	0.102	145.0	0.145 x 10 ⁶
Bar	10 ⁵	0.10	1	1.02	0.0102	14.5	0.145 x 10 ⁵
atm = kgf/cm ²	98070	0.09807	0.9807	1	0.01	14.22	0.01422
kgf/mm ²	9.807 x 10 ⁶	9.807	98.07	100	1	1422	1.422
lb/in ² (psi)	6895	6895 x 10 ⁻⁶	6895 x 10 ⁻⁵	0.0703	703 x 10 ⁻⁶	1	10 ⁻³
KSI	6.895 x 10 ⁶	6.895	0.6895 x 10 ⁻⁵	70.3	0.703 x 10 ⁻⁶	1000	1

Pipe Schedules and wall thicknesses in inch/mm and weights

ASTM SCHEDULED SIZES

Nominal pipe size	O.D.	Standard	Standard	Extra strong	Extra strong	Double extra strong	Double extra strong	Schedule	Schedule	Schedule	Schedule	Schedule	Schedule
inches	mm	STD Wall	STD Wt	XS Wall	XS Wt	XXS Wall	XXS Wt	10 Wall	10 Wt	20 Wall	20 Wt	30 Wall	30 Wt
1/8"	10.3	1.7	0.357	2.4	0.470								
1/4"	13.7	2.2	0.625	3.0	0.804								
3/8"	17.1	2.3	0.848	3.2	1.10								
1/2"	21.3	2.8	1.26	3.7	1.62	7.5	2.54						
3/4"	26.7	2.9	1.68	3.9	2.19	7.8	3.63						
1"	33.4	3.4	2.50	4.5	3.23	9.1	5.45						
1.1/4"	42.2	3.6	3.38	4.9	4.46	9.7	7.75						
1.1/2"	48.3	3.7	4.05	5.1	5.40	10.2	9.54						
2"	60.3	3.9	5.43	5.5	7.47	11.1	13.4						
2.1/2"	73	5.2	8.62	7.0	11.4	14	20.4						
3"	88.9	5.5	11.3	7.6	15.3	15.2	27.7						
3.1/2"	101.6	5.7	13.6	8.1	18.6	16.2	34						
4"	114.3	6	16.1	8.6	22.3	17.1	41.1						
5"	141.3	6.6	21.8	9.5	30.9	19	57.4						
6"	168.3	7.1	28.2	11.0	42.5	21.9	79.1						
8"	219.1	8.2	42.5	12.7	64.6	22.2	108			6.4	33.3	7	36.7
10"	273	9.3	60.2	12.7	81.5	25.4	155			6.4	41.7	7.8	50.9
12"	323.9	9.5	73.8	12.7	97.4	25.4	187			6.4	49.7	8.4	65.1
14"	355.6	9.5	81.2	12.7	107			6.4	54.6	7.9	68.1	9.5	81.2
16"	406.4	9.5	93.1	12.7	123			6.4	62.6	7.9	77.9	9.5	93.1
18"	457.2	9.5	105	12.7	139			6.4	70.5	7.9	87.8	11.1	122
20"	508	9.5	117	12.7	155			6.4	78.5	9.5	117	12.7	155

Wall = Wallthickness in millimeters

WT = Weights in kilogram per meter

NOTE: Weights are specified for Plain end Pipes

Pipes are available in Grade A or Grade B Standards and in Black and Galvanized Finish

UL listing is Applicable Upto the Size 12 inch in both SCH 40 and SCH 80

Quality Policy & Certifications:

We, Gama Steels are committed to achieve a reputation for quality seamless tubes at competitive price by introducing the latest technologies, deploying trained personnel along with adequate resources in all aspect, striving at continual improvement.

The pipe which we are supplying are UL listed conforming to ASTM A-53 /ASTM A-106 standards. These pipes provide superior performance in durability and longevity under tough conditions. UL listings certify that products have been tested against strict safety regulations and comply with them. This ensures that your equipment is reliable and safe in emergency situations. We are holding Quality Management Certification ISO 9001:2015 also.

We are also committed to fulfill the need and expectation of the customers through active participation at all level of employees and fostering a spirit of pride amongst them.



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