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**Structural Hollow
Section**

Stainless Steel Tube



Structural Hollow Section



Precision Tube



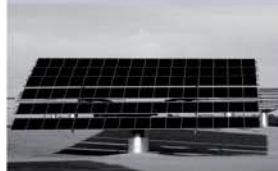
Cold Drawn Tube



Profile Tube



Open Sections



Tubes and Profiles for Greenhouses



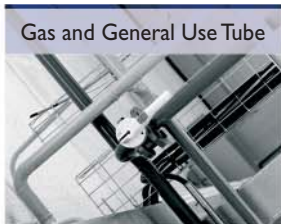
Carpentry Tube



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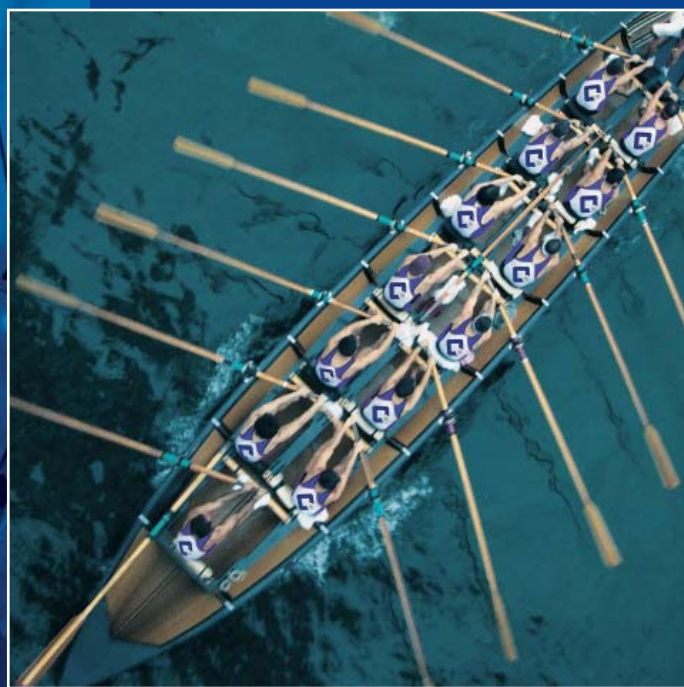
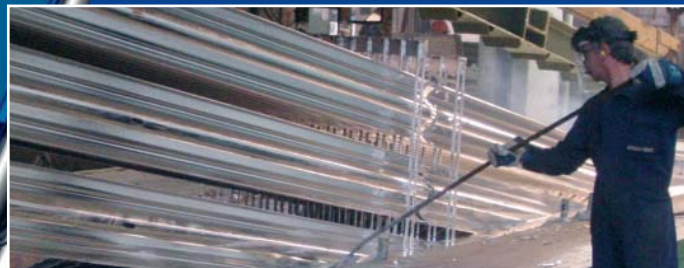
Gas and General Use Tube

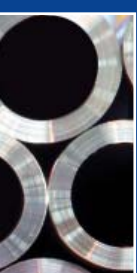


Equipment and Crash Barriers



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Evolution means there is no going back. Progress and a will to succeed urge us to move forward just a little bit more every day. For that reason, Grupo Condesa wishes to share its international growth and convey a new and unified image as the leading company in this sector, with an increasing range of products with better features at the service of our customers.

The parent company of Grupo Condesa was founded in 1954, based on the Spanish company Conducciones y Derivados S.A. Today, this is a solid and expanding Group, the result of a combination of several initiatives based on a number of clear objectives: To become a leading international company through excellence, quality, experience and know-how, to resolve the problems of our customers and in this way, move forward and develop together.

Collaboration and coordination between the different members of the Group generate synergies that allow us to tackle large markets with guarantees and with an excellent capacity to respond to our customers' needs. Thanks to our large international network, we are always very close to our customers, attending to their needs and providing solutions at each moment in time.

Twelve manufacturing companies throughout Europe.

Our sales offices can be found in Spain, France, Portugal, Italy, Germany, United Kingdom, Sweden, Belgium, the Netherlands and Morocco. Agents in Gran Canaria (Spain), Ireland and Switzerland.

The Group is engaged in the manufacture of carbon steel tubes and profiles and stainless steel tubes also offering high value added solutions and products for many of the leading brand names in the most important sectors: automotive, construction, furniture, public works, etc.

What it consists of

Grupo Condesa has a wide range of tubes of different shapes (round, square, rectangular and elliptical). These tubular sections can equally be manufactured according to different processes according to the application:

- Cold formed manufactured with the initial "black" material, in other words, with material obtained directly from the rolling process and without subsequent heat treatment.
- Cold formed and hot-finished.
- Hot formed.

The use of steel tubular sections provides for strong, light and profitable structures and as a result offer a host of possibilities in terms of application (expressive capacity). The use of these products also facilitates designs with a greater aesthetic appeal.

• Their main advantages are as follows:

Design

Lighter and more diaphanous structures. Pieces of greater length with fewer joints.

Large spans. More transparent trusses and purlins with the possibility of eliminating transversal bracing.

More slender supports. Fewer sections, which can be reduced even more with the use of tubular sections filled with concrete.

Economical solution. Easily executed direct joints, shorter construction times and easy maintenance, are the results of a correct design and the guarantee of a competitive delivery date and price.

Expressive capacity. Circular, square, rectangular and elliptical sections, a range of wall thicknesses for every dimension of tubular section, absence of sharp edges, etc. These are the elements that provide innovating, wide ranging possibilities for architects and engineers.





Strength

Compression. For the same centred compression load and under the same conditions tubular sections allow for the use of longer elements than possible should open sections be used. If pillars are involved, a concrete fill permits to reduce further the amount of sections used.

Torsion. Their stiffness is the highest of all commercial steel sections. For this reason, their behaviour is unbeatable in the case of lateral bulging or warpage.

Bending. Due to the distribution of material on two axes, their behaviour in bending in two directions, is close to that of a beam and better than that of open sections.

Tensile. The use of welded joints throughout their extension means that the resistant section in the joints is used completely, unlike bolted joints or those with gusset plates.

Fatigue. The wide range of mechanical applications in which we can find steel tubular sections are eloquent proof of their perfect behaviour in these conditions.

Fluid-dynamic. Their low opposition to the thrust of fluids allows lighter sections to be used and makes them the perfect element in outdoor or underwater structures, such as posts, masts, towers, cranes, etc.

Fire resistance. Protecting steel tubular sections by means of surface coating is easier and more economical than open sections due to the absence of cavities and the lower surface area to be covered.

Passive protection:

Structures made from Tubular Sections offer higher fire resistance than open sections due to a lower surface area exposed to fire in relation to mass (lower form factor/mass).

Mixed structures based on tubular sections filled with concrete, show excellent behaviour in the presence of fire because of a delay due to the higher thermal inertia.

Active protection:

Filled with water, or when water flows through them due to the thermal-siphon effect, irrigated structures provide almost unlimited fire resistance. Maintenance of water circulation, with the replacement of any losses that might occur due to vaporisation, ensures that the structure is cooled in such a way that gradually the temperature stabilises at values not very much higher than the water status change temperature and very much lower, therefore, than the critical temperature of steel.

In addition to:

- Introducing longer elements in structures.
- Reducing the number of joints.
- Eliminating struts.
- Stiffeners and plate brackets, to reduce weight.
- A concrete fill increases the surface area per floor.
- Their shape facilitates maintenance and represents an economic solution.

General product characteristics

Chemical composition and mechanical properties

Cast analysis for thick products $T \leq 40$ mm. according to EN 10219 y $T \leq 120$ mm. according to EN 10210.

STEEL NAME	MAXIMUM % OF MASS							
	C			Si	Mn	P	S	N
	COLD	HOT						
		≤40	<40≤120					
S 275 J0H	0.20	0.20	0.22	-	1.50	0.035	0.035	0.009
S 355 J2H		0.22		0.55	1.60	0.030	0.030	-

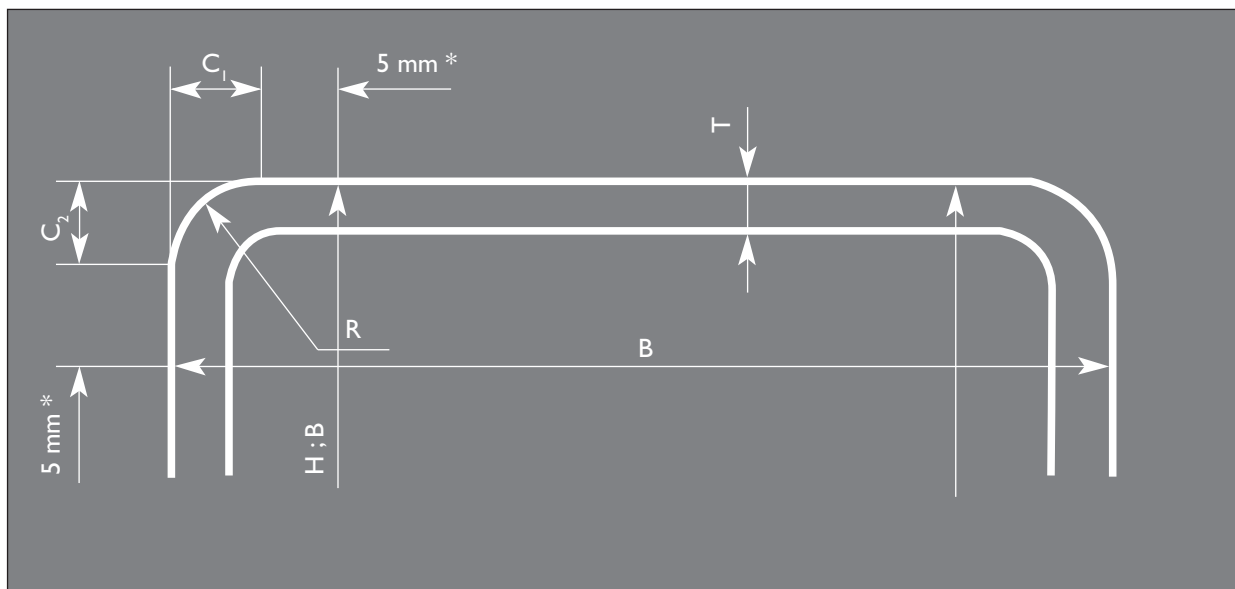
Mechanical characteristics of Structural Tubes in non alloy structural hollow sections according to EN 10219 and EN 10210 standards.

STEEL NAME	MINIMUM YIELD STRENGTH N/mm ²	TENSILE STRENGTH N/mm ²			MINIMUM ELONGATION %		IMPACT PROPERTIES	
	NOMINAL THICKNESS $T \leq 16$ mm	NOMINAL THICKNESS			NOMINAL THICKNESS $T \leq 40$ mm		TEST TEMPERATURE °C	MINIMUM AVERAGE ABSORBED ENERGY FOR STANDARD TEST PIECES J
		$T < 3$ mm	COLD	HOT				
			$3 \text{ mm} \leq T \leq 40 \text{ mm}$	$3 \text{ mm} \leq T \leq 40 \text{ mm}$	COLD	HOT		
S 275 J0H	275	430/580	410/560		20 ^a	23	0	27
S 355 J2H	355	510/680	470/630		20 ^a	22	-20	27

a. For profile sizes $D/T < 15$ (circular section) and $(B+H)/2T < 12,5$ (square and rectangular section) the minimum elongation is halved.



Dimensional tolerances



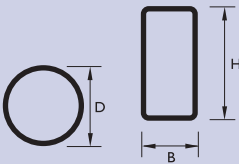
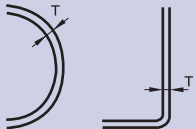
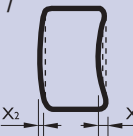
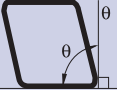
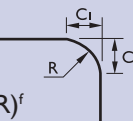
* Maximum distance to the angle to measure B or H and minimum to measure T.

The cold manufacture of tubes allows for products with tighter tolerances than in the case of hot-formed tubes. With regard to the thickness of the tube, the section retains almost completely the thickness of the rolled strip used for manufacture. Regarding the geometry of the product the cold-formed tubes are closer to the theoretic profile than hot-formed tubes.



General product characteristics

Dimensional tolerances. Standards EN 10210 and EN 10219

CHARACTERISTICS	ROUND TUBE		SQUARE AND RECTANGULAR TUBES	
	HOT FINISHED	COLD FINISHED	HOT FINISHED	COLD FINISHED
Outside dimensions D, H, B 	$\pm 1\%$ with min. $\pm 0.5\text{ mm}$ and max. of $\pm 10\text{ mm}$	$\pm 1\%$ with min. $\pm 0.5\text{ mm}$ and max. of $\pm 10\text{ mm}$	$\pm 1\%^a$ with min. $\pm 0.5\text{ mm}$. • $H, B < 100\text{ mm}$ $\pm 1\%$ with min. $\pm 0.5\text{ mm}$ • $100 \leq H, B \leq 200\text{ mm}$ $\pm 0.8\%$ • $H, B > 200\text{ mm}$ $\pm 0.6\%$	
Thickness T 	- 10 % ^{bc}	• $D \leq 406.4\text{ mm}$ $T \leq 5\text{ mm} \pm 10\%$ $T > 5\text{ mm} \pm 0.50\text{ mm}$ • $D > 406.4\text{ mm}$ $\pm 10\%$ with max. of $\pm 2\text{ mm}$	- 10 % ^{bc}	• $T \leq 5\text{ mm} \pm 10\%$ • $T > 5\text{ mm} \pm 0.50\text{ mm}$
Out of roundness  $\frac{D_{\text{max}} - D_{\text{min}}}{D} \times 100$	2 % max. D nominal if $D/T \leq 100^d$	2 % max. D nominal if $D/T \leq 100^d$		
Concavity / convexity $(x_1, x_2)^e$ 			1 %	0.8 % max. with 0.5 mm min.
Squareness of side θ 			$90^\circ \pm 1^\circ$	
External corner profile $(C_1, C_2 \text{ o } R)^f$ 			$R \leq 3T$	• $T \leq 6\text{ mm}$ $R = 1.6T \text{ a } 2.4T$ • $6 < T \leq 10\text{ mm}$ $R = 2.0T \text{ a } 3.0T$ • $10\text{ mm} < T$ $R = 2.4T \text{ a } 3.6T$
Twist V 			$2\text{ mm}^a + 0.5\text{ mm/m}$ in length ^a	
Straightness e 	$0.20\%^a$ total length and 3 mm in 1 m lengths		0.20% total length	0.15% total length
			and 3 mm in 1 m lengths	
Mass M	$\pm 6\%$ in individual lengths ^g		$\pm 6\%$ in individual lengths ^g	

a. Only in hot tubes: for hollow elliptical section profiles of size $H < 250\text{ mm}$, the admissible tolerance is double the value indicated in this table.

b. The positive tolerance is limited by the mass tolerance.

c. In hollow seamless profiles, thicknesses of under 10% are available but not less than 12.5% of the nominal thickness in smooth transition areas without exceeding 25% of the circumference.

d. Where the diameter/thickness ratio exceeds 100, the oval tolerance must be agreed upon.

e. The concavity and convexity tolerance is irrespective of the outside dimensions tolerance.

f. Only in hot tubes: the sides do not have to be tangential to the arcs of the corner.

g. The positive tolerance in mass of hollow seamless profiles is 8%.

Tolerances on lengths

EN 10219 and EN 10210

TYPE OF LENGTH	RANGE (mm)		TOLERANCE	
Random length	From 4,000 to 24,000 at intervals of 2,000 per order unit		10 % maximum quantity above the minimum ordered, but never under 75 % of the minimum	
Approximate length	EN 10210	EN 10219	EN 10210	EN 10219
	$4,000 \leq L \leq 16,000$	$\geq 4,000$	$\pm 500 \text{ mm}$	$+ 50 \text{ mm}$ 0
Exact length	$2,000 \leq L \leq 6,000$	$\leq 6,000$	$+ 10 \text{ mm}$ 0	$+ 5 \text{ mm}$ 0
	$> 6,000$	$> 6,000 \text{ a } < 10,000$	$+ 15 \text{ mm}$ 0	$+ 15 \text{ mm}$ 0
	—	$> 10,000$	—	$+ 5 \text{ mm} + 1 \text{ mm/m}$ 0

The buyer should indicate both in the inquiry and in the order, the length or range required, as well as the length selected from the range.

The tolerances that can be obtained are more exact on the cold lines than for tubes obtained through a hot reduction process, this is due to the fact that the length measurement is less fortuitous at low temperatures than at high temperatures.

The cold lines are equipped with cutting means using carbide mill saws which cut with a high level of precision and limit the formation of burrs

When tubes are cut away from the production line, the length tolerances will depend on the cutting means used and their precision.



Advantages of cold finished and hot finished tubular section

Tubes for the building industry are divided into two groups, welded and non-welded tubes. The Grupo Condesa manufactures welded tubular sections in the three possible manufacturing modes, as follows:

- Cold finished.
- Cold finished and hot-finished.
- Hot profiled and drawn from a stamped section, cold-formed, welded and hot rolled.

Welded tubes are generally welded longitudinally, without filling with material, by means of the high frequency process.

Advantages of the different existing products:

TYPE OF TUBE	ADVANTAGES
Cold finished tube	• Flat surface status, the result of the rolling operation. • Few calamine deposits in the surface and better suited to painting. • Regularity of thickness and tolerances of under 5 mm. • Tighter tolerances on external dimensions of over 100, on the concavity and convexity of faces and on the straightness of rectangular and square tubes. • Manufacturing mode adapted to high yield point requirements. • Conservation of fine granular structure obtained in the rolling operation. • Can satisfy high strength requirements (HLE) in excess of the limits set in the product standard. • Wide range available. • Economically attractive.
Cold finished tube and heat-treated	• Uniform thickness. • Absence of residual stress. • Guarantees better properties for drawing.
Hot finished tube	• Welded area (ZAT) certified by heat treatment. • Absence of residual stress. • Guarantees better properties for drawing. • Higher thickness/diameter ratio. • Possibility of smaller angle radio.



Cold finished

EUROPEAN STANDARDS

The cold-formed structural tubes without subsequent heat treatment manufactured by Grupo Condesa are made in accordance with the EN 10219 standards.

For motives of service and end use of product, the cold manufacture of structural tube is based on two types and qualities of steel: S 275 J0H and S 355 J2H.

Hot dip galvanised tube is made in accordance with the EN 10240 standard and is shot blasted in accordance with the EN 10238 standard, grade SA 2.5 with or without primer.

OTHER STANDARDS

Cold-finished structural tube is made according to the American standard ASTM A-500 and Canadian standard G40 21 Class C. Hot-finished structural tubes according to the Canadian standard G 40 21 Class H.

QUALITY CERTIFICATES

SQS; ISO 9001 LT; AENOR SAFETY AND HEALTH IN THE WORKPLACE CERTIFICATE; STRUCTURAL TUBE CERTIFICATION (EN-10219) UNDER THE GERMAN Ü MARK.



Hot finished

The ranges of tubular sections/structural hollow sections of Grupo Condesa are made up of welded tubes manufactured in accordance with European standard EN 10210, parts 1 and 2. This standard has replaced the following national standards: NFA 49-501; DIN 59410; DIN 17120; BS 4848 part 2; UNI 7806 and (7807-08-09).

These hot-finished structural hollow sections are normally manufactured in the standard type of hot rolled steels for building, which is as follows: S355 J2 of the EN 10025 standard.

They are supplied together with a 3.1 reception certificate as set out in the EN 10204:2005 standard.

Supply conditions

The normal supply lengths are 6.000 to 12.000 mm, although upon request they can be supplied at other lengths of between 4.000 and 16.000 mm.

In addition, other lengths can be supplied upon request.

Other possibilities subject to enquiry

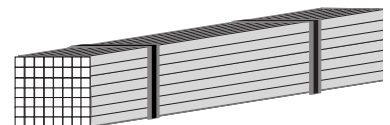
The options indicated below are on an inquiry basis.

- **Inside weld bead removed**
- **Positioning of weld**
- **Tolerances on size of edges, inside and outside dimensions**
- **Finishes and surface treatments**
 - Finish of ends of long tube
 - Beveling (only on round tube).
 - Shot blasting and painting
 - By means of this process, calamine and any other contaminants in the material are eliminated. This is the most advanced technique for cleaning cold and hot-rolled steels. For this reason we have shot blasting and painting installations ("shopprimer"), which protect the product until it is used. Our control process is based on the EN 10238 standard grade SA 2 1/2 with or without priming.
 - Primed or painted tubes are perfectly weldable and do not generate fumes or toxins.
 - Hot dip galvanising
 - Once they have been shaped, the tubes are submerged in the molten zinc tank to provide them with anticorrosion protection.

Packaging and strapping

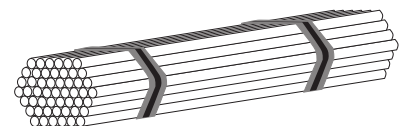
Package format rectangular (standard)

Rectangular or square tubes, packages are made with metal slings in the form of a rectangle.



Hexagonal package (standard)

Round tubes, and these are tied together with metal slings in a hexagonal form to optimise their protection and handling.



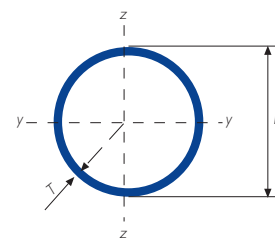
The most typical applications are:

- Metal construction
 - Industrial buildings
 - Bridges
 - Stadiums
 - Etc.
- Mechanical construction
 - Farming machinery
 - Cranes
 - Telescopic jib cranes
 - Etc.
- Automotive
 - Truck bus chassis
 - Chassis of trains and underground trains
 - Etc.



Product range: COLD FINISHED

COLD-FINISHED TUBE RANGE. Measurements in millimetres



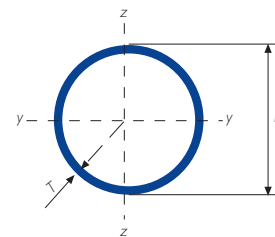
Cold-finished tubular profile range - rounded

SPECIFIC OUTSIDE DIAMETER	THICKNESS T (mm)																			
D (mm)	1.5	2	2.3	2.5	2.9	3	3.2	3.6	4	5	6	6.3	7	8	10	12	12.5	14.2	16	
17.2																				
21.3																				
25																				
26.9																				
28																				
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82.5																				
83																				
84																				
88.9																				
89																				
90																				
95																				
96																				

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

COLD-FINISHED TUBE RANGE. Measurements in millimetres



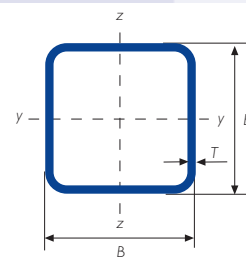
Cold-finished tubular profile range - rounded

SPECIFIC OUTSIDE DIAMETER	THICKNESST (mm)																			
D (mm)	1.5	2	2.3	2.5	2.9	3	3.2	3.6	4	5	6	6.3	7	8	10	12	12.5	14.2	16	
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101.6																				
108																				
110																				
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200																				
219.1																				
244.5																				
273																				
273.1																				
323.9																				
339.7																				
355.6																				
406.4																				
457																				
508																				

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

COLD-FINISHED TUBE RANGE. Measurements in millimetres



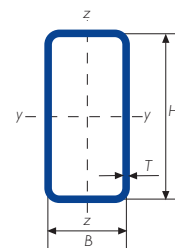
Cold-finished tubular profile range - square

SPECIFIC DIMENSION OF SIDES		THICKNESS T (mm)														
B (mm)	B (mm)	1.5	2	2.5	3	4	5	6	6.3	7	8	10	12	12.5	14.2	16
20	20															
22	22															
25	25															
30	30															
35	35															
38	38															
40	40															
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180	180															
200	200															
220	220															
250	250															
260	260															
300	300															
325	325															
350	350															
400	400															

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

COLD-FINISHED TUBE RANGE. Measurements in millimetres



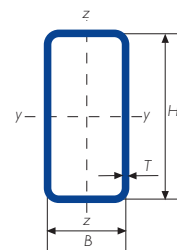
Cold-finished tubular profile range - rectangular

SPECIFIC DIMENSION OF SIDES		THICKNESS T (mm)														
H (mm)	B (mm)	1.5	2	2.5	3	4	5	6	6.3	7	8	10	12	12.5	14.2	16
25	15															
25	20															
30	10															
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Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

COLD-FINISHED TUBE RANGE. Measurements in millimetres



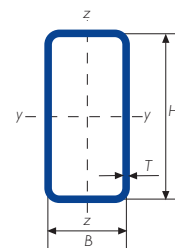
Cold-finished tubular profile range - rectangular

SPECIFIC DIMENSION OF SIDES		THICKNESS T (mm)														
H (mm)	B (mm)	1.5	2	2.5	3	4	5	6	6.3	7	8	10	12	12.5	14.2	16
60	34															
60	35															
60	40															
60	45															
60	48															
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80	25															
80	30															
80	40															
80	45															
80	50															
80	60															
90	20															
90	30															
90	40															
90	50															
90	60															
90	70															
100	20															
100	30															
100	40															
100	50															
100	60															
100	70															
100	80															
110	20															
110	30															
110	50															
110	60															
110	70															
110	100															

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

COLD-FINISHED TUBE RANGE. Measurements in millimetres



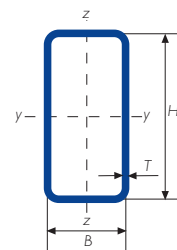
Cold-finished tubular profile range - rectangular

SPECIFIC DIMENSION OF SIDES		THICKNESS T (mm)														
H (mm)	B (mm)	1.5	2	2.5	3	4	5	6	6.3	7	8	10	12	12.5	14.2	16
120	30															
120	40															
120	50															
120	55															
120	60															
120	80															
120	100															
130	50															
140	40															
140	60															
140	70															
140	80															
140	100															
140	120															
150	30															
150	50															
150	70															
150	75															
150	90															
150	100															
150	130															
160	40															
160	50															
160	60															
160	80															
160	90															
160	100															
160	120															
160	140															
180	40															
180	60															
180	70															
180	80															
180	100															
180	120															
180	140															
185	65															
200	80															
200	100															
200	120															
200	150															
200	160															
220	100															
220	120															

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

COLD-FINISHED TUBE RANGE. Measurements in millimetres



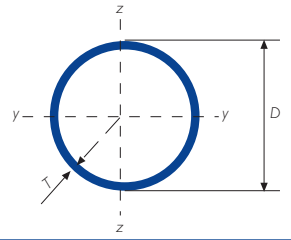
Cold-finished tubular profile range - rectangular

SPECIFIC DIMENSION OF SIDES		THICKNESS T (mm)														
H (mm)	B (mm)	1.5	2	2.5	3	4	5	6	6.3	7	8	10	12	12.5	14.2	16
220	130															
220	140															
220	180															
240	80															
250	50															
250	100															
250	150															
250	180															
250	200															
260	100															
260	140															
260	180															
300	50															
300	100															
300	150															
300	200															
300	220															
350	150															
350	250															
400	100															
400	200															
400	250															
400	300															
450	250															
500	200															
500	300															

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

COLD-FINISHED TUBE RANGE. Measurements in inches



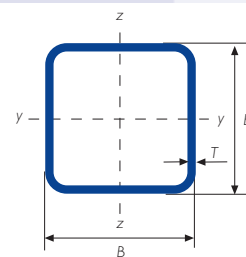
Cold-finished tubular profile range - rounded

SPECIFIC OUTSIDE DIAMETER	THICKNESST (inches)										
	0.1	0.12	0.125	0.134	0.1875	0.25	0.3125	0.375	0.5	0.5625	0.625
D											
(inches)											
1											
1 1/2											
2											
2 1/2											
3											
3 1/2											
4											
5											
6											
7											
8											
9											
10											
12											
14											
16											

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

COLD-FINISHED TUBE RANGE. Measurements in inches



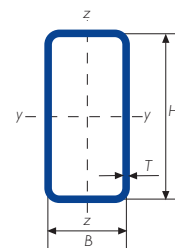
Cold-finished tubular profile range - square

SPECIFIC DIMENSION OF SIDES		THICKNESS T (inches)										
B (inches)	B (inches)	0.1	0.12	0.125	0.134	0.1875	0.25	0.3125	0.375	0.5	0.5625	0.625
4	4											
4.5	4.5											
5	5											
5.5	5.5											
6	6											
7	7											
8	8											
9	9											
10	10											
12	12											
14	14											
16	16											

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

COLD-FINISHED TUBE RANGE. Measurements in inches



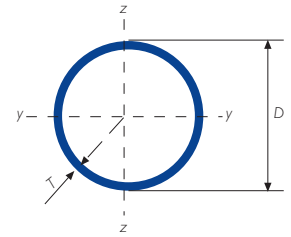
Cold-finished tubular profile range - rectangular

SPECIFIC DIMENSION OF SIDES		THICKNESST (inches)									
H (inches)	B (inches)	0.12	0.125	0.134	0.1875	0.25	0.3125	0.375	0.5	0.5625	1.625
4	3.5										
4	4.5										
4.5	3.5										
5	3.5										
5	4										
5	4.5										
5.5	3.5										
6	3.5										
6	4										
6	4.5										
6	5										
7	3.5										
7	4										
7	4.5										
7	5										
7	6										
8	3.5										
8	4										
8	4.5										
8	5										
8	6										
9	3.5										
9	5										
9	7										
10	2										
10	3.5										
10	4										
10	6										
10	8										
12	2										
12	4										
12	6										
12	8										
14	4										
14	6										
14	10										
16	4										
16	8										
16	12										
18	6										
18	10										
20	4										
20	8										
20	12										

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

COLD-FINISHED TUBE RANGE

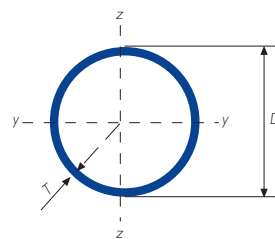


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{s/v} m ⁻¹
17.2	1.5	0.581	0.740	0.230	0.558	0.267	0.371	0.460	0.535	0.054	1,722	730
17.2	2	0.750	0.955	0.281	0.542	0.326	0.465	0.561	0.653	0.054	1,334	566
17.2	2.3	0.845	1.08	0.306	0.533	0.356	0.515	0.612	0.711	0.054	1,183	502
17.2	2.5	0.906	1.15	0.321	0.527	0.373	0.545	0.642	0.746	0.054	1,103	468
21.3	1.5	0.732	0.933	0.460	0.702	0.432	0.589	0.920	0.864	0.067	1,365	717
21.3	2	0.952	1.21	0.571	0.686	0.536	0.748	1.14	1.07	0.067	1,050	552
21.3	2.3	1.08	1.37	0.629	0.677	0.590	0.834	1.26	1.18	0.067	928	487
21.3	2.5	1.16	1.48	0.664	0.671	0.623	0.889	1.33	1.25	0.067	863	453
21.3	2.9	1.32	1.68	0.727	0.659	0.683	0.990	1.45	1.37	0.067	760	399
21.3	3	1.35	1.72	0.741	0.656	0.696	1.01	1.48	1.39	0.067	739	388
25	1.5	0.869	1.11	0.768	0.833	0.614	0.830	1.54	1.23	0.079	1,150	709
25	2	1.13	1.45	0.963	0.816	0.770	1.06	1.93	1.54	0.079	882	543
25	2.3	1.29	1.64	1.07	0.807	0.854	1.19	2.13	1.71	0.079	777	479
25	2.5	1.39	1.77	1.13	0.800	0.906	1.27	2.26	1.81	0.079	721	444
25	2.9	1.58	2.01	1.25	0.788	1.00	1.42	2.50	2.00	0.079	633	390
25	3	1.63	2.07	1.28	0.785	1.02	1.46	2.56	2.04	0.079	614	379
26.9	1.5	0.940	1.20	0.969	0.900	0.720	0.969	1.94	1.44	0.085	1,064	706
26.9	2	1.23	1.56	1.22	0.883	0.907	1.24	2.44	1.81	0.085	814	540
26.9	2.3	1.40	1.78	1.36	0.874	1.01	1.40	2.71	2.02	0.085	717	475
26.9	2.5	1.50	1.92	1.44	0.867	1.07	1.49	2.88	2.14	0.085	665	441
26.9	2.9	1.72	2.19	1.60	0.855	1.19	1.68	3.19	2.38	0.085	583	386
26.9	3	1.77	2.25	1.63	0.852	1.21	1.72	3.27	2.43	0.085	566	375
28	1.5	0.980	1.25	1.10	0.938	0.786	1.05	2.20	1.57	0.088	1,020	704
28	2	1.28	1.63	1.39	0.922	0.992	1.35	2.78	1.98	0.088	780	538
28	2.3	1.46	1.86	1.55	0.912	1.10	1.52	3.09	2.21	0.088	686	474
28	2.5	1.57	2.00	1.64	0.906	1.17	1.63	3.29	2.35	0.088	636	439
28	2.9	1.80	2.29	1.82	0.893	1.30	1.84	3.65	2.61	0.088	557	385
28	3	1.85	2.36	1.87	0.890	1.33	1.88	3.73	2.67	0.088	541	373
30	1.5	1.05	1.34	1.37	1.01	0.912	1.22	2.73	1.82	0.094	949	702
30	2	1.38	1.76	1.73	0.992	1.16	1.57	3.47	2.31	0.094	724	536
30	2.3	1.57	2.00	1.93	0.983	1.29	1.77	3.87	2.58	0.094	636	471
30	2.5	1.70	2.16	2.06	0.976	1.37	1.90	4.12	2.74	0.094	590	436
30	2.9	1.94	2.47	2.29	0.964	1.53	2.14	4.59	3.06	0.094	516	382
30	3	2.00	2.54	2.35	0.960	1.56	2.20	4.69	3.13	0.094	501	370
32	1.5	1.13	1.44	1.68	1.08	1.05	1.40	3.35	2.09	0.101	886	699
32	2	1.48	1.88	2.13	1.06	1.33	1.80	4.26	2.66	0.101	676	533
32	2.3	1.68	2.15	2.38	1.05	1.49	2.03	4.76	2.98	0.101	594	468
32	2.5	1.82	2.32	2.54	1.05	1.59	2.18	5.08	3.17	0.101	550	434
32	2.9	2.08	2.65	2.83	1.03	1.77	2.46	5.67	3.54	0.101	480	379
32	3	2.15	2.73	2.90	1.03	1.82	2.53	5.81	3.63	0.101	466	368
33.7	1.5	1.19	1.52	1.97	1.14	1.17	1.56	3.94	2.34	0.106	840	698
33.7	2	1.56	1.99	2.51	1.12	1.49	2.01	5.02	2.98	0.106	640	532
33.7	2.3	1.78	2.27	2.81	1.11	1.67	2.27	5.62	3.34	0.106	561	467
33.7	2.5	1.92	2.45	3.00	1.11	1.78	2.44	6.00	3.56	0.106	520	432

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

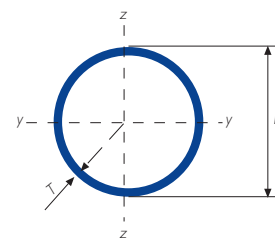


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{sv} m ²
33.7	2.9	2.20	2.81	3.36	1.09	1.99	2.76	6.71	3.98	0.106	454	377
33.7	3	2.27	2.89	3.44	1.09	2.04	2.84	6.88	4.08	0.106	440	366
33.7	3.2	2.41	3.07	3.60	1.08	2.14	2.99	7.21	4.28	0.106	415	345
33.7	3.6	2.67	3.40	3.91	1.07	2.32	3.28	7.82	4.64	0.106	374	311
33.7	4	2.93	3.73	4.19	1.06	2.49	3.55	8.38	4.97	0.106	341	284
35	1.5	1.24	1.58	2.22	1.19	1.27	1.68	4.44	2.54	0.110	807	697
35	2	1.63	2.07	2.83	1.17	1.62	2.18	5.67	3.24	0.110	614	530
35	2.3	1.85	2.36	3.17	1.16	1.81	2.46	6.35	3.63	0.110	539	465
35	2.5	2.00	2.55	3.39	1.15	1.94	2.65	6.78	3.87	0.110	499	431
35	2.9	2.30	2.92	3.80	1.14	2.17	3.00	7.60	4.34	0.110	436	376
35	3	2.37	3.02	3.89	1.14	2.23	3.08	7.79	4.45	0.110	422	365
35	3.2	2.51	3.20	4.08	1.13	2.33	3.25	8.16	4.67	0.110	398	344
35	3.6	2.79	3.55	4.43	1.12	2.53	3.57	8.87	5.07	0.110	359	310
35	4	3.06	3.90	4.76	1.11	2.72	3.87	9.51	5.44	0.110	327	282
37.5	1.5	1.33	1.70	2.75	1.27	1.47	1.95	5.51	2.94	0.118	751	694
37.5	2	1.75	2.23	3.52	1.26	1.88	2.52	7.05	3.76	0.118	571	528
37.5	2.3	2.00	2.54	3.96	1.25	2.11	2.85	7.91	4.22	0.118	501	463
37.5	2.5	2.16	2.75	4.23	1.24	2.26	3.07	8.46	4.51	0.118	463	429
37.5	2.9	2.47	3.15	4.75	1.23	2.53	3.48	9.50	5.07	0.118	404	374
37.5	3	2.55	3.25	4.87	1.22	2.60	3.58	9.75	5.20	0.118	392	362
37.5	3.2	2.71	3.45	5.12	1.22	2.73	3.78	10.2	5.46	0.118	369	342
37.5	3.6	3.01	3.83	5.57	1.21	2.97	4.15	11.1	5.94	0.118	332	307
37.5	4	3.30	4.21	5.99	1.19	3.19	4.51	12.0	6.39	0.118	303	280
38	1.5	1.35	1.72	2.87	1.29	1.51	2.00	5.74	3.02	0.119	741	694
38	2	1.78	2.26	3.68	1.27	1.93	2.59	7.35	3.87	0.119	563	528
38	2.3	2.02	2.58	4.13	1.26	2.17	2.94	8.25	4.34	0.119	494	463
38	2.5	2.19	2.79	4.41	1.26	2.32	3.16	8.83	4.65	0.119	457	428
38	2.9	2.51	3.20	4.96	1.25	2.61	3.58	9.92	5.22	0.119	398	373
38	3	2.59	3.30	5.09	1.24	2.68	3.68	10.2	5.36	0.119	386	362
38	3.2	2.75	3.50	5.34	1.24	2.81	3.89	10.7	5.62	0.119	364	341
38	3.6	3.05	3.89	5.82	1.22	3.06	4.28	11.6	6.12	0.119	327	307
38	4	3.35	4.27	6.26	1.21	3.29	4.65	12.5	6.59	0.119	298	279
38	5	4.07	5.18	7.22	1.18	3.80	5.49	14.4	7.60	0.119	246	230
39	1.5	1.39	1.77	3.11	1.33	1.60	2.11	6.22	3.19	0.123	721	693
39	2	1.82	2.32	3.99	1.31	2.05	2.74	7.98	4.09	0.123	548	527
39	2.3	2.08	2.65	4.48	1.30	2.30	3.10	8.96	4.60	0.123	480	462
39	2.5	2.25	2.87	4.80	1.29	2.46	3.34	9.59	4.92	0.123	444	427
39	2.9	2.58	3.29	5.39	1.28	2.77	3.79	10.8	5.53	0.123	387	373
39	3	2.66	3.39	5.53	1.28	2.84	3.90	11.1	5.68	0.123	375	361
39	3.2	2.83	3.60	5.81	1.27	2.98	4.11	11.6	5.96	0.123	354	340
39	3.6	3.14	4.00	6.34	1.26	3.25	4.53	12.7	6.50	0.123	318	306
39	4	3.45	4.40	6.82	1.25	3.50	4.92	13.6	7.00	0.123	290	279
40	1.5	1.42	1.81	3.37	1.36	1.68	2.22	6.73	3.37	0.126	702	693
40	2	1.87	2.39	4.32	1.35	2.16	2.89	8.64	4.32	0.126	534	526

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

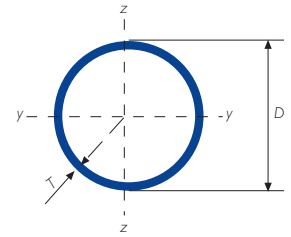


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D	T	M	A	I	i	W_{el}	W_{pl}	I_t	C_t	A_s	m	$A_{s/v}$
mm	mm	kg/m	cm ²	cm ⁴	cm	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
40	2.3	2.14	2.72	4.86	1.34	2.43	3.27	9.72	4.86	0.126	468	461
40	2.5	2.31	2.95	5.20	1.33	2.60	3.52	10.4	5.20	0.126	433	427
40	2.9	2.65	3.38	5.85	1.32	2.93	4.00	11.7	5.85	0.126	377	372
40	3	2.74	3.49	6.01	1.31	3.00	4.12	12.0	6.01	0.126	365	360
40	3.2	2.90	3.70	6.31	1.31	3.15	4.34	12.6	6.31	0.126	344	340
40	3.6	3.23	4.12	6.88	1.29	3.44	4.79	13.8	6.88	0.126	309	305
40	4	3.55	4.52	7.42	1.28	3.71	5.21	14.8	7.42	0.126	282	278
41.5	1.5	1.48	1.88	3.78	1.42	1.82	2.40	7.55	3.64	0.130	676	692
41.5	2	1.95	2.48	4.85	1.40	2.34	3.12	9.71	4.68	0.130	513	525
41.5	2.3	2.22	2.83	5.46	1.39	2.63	3.54	10.9	5.26	0.130	450	460
41.5	2.5	2.40	3.06	5.85	1.38	2.82	3.81	11.7	5.64	0.130	416	426
41.5	2.9	2.76	3.52	6.59	1.37	3.17	4.33	13.2	6.35	0.130	362	371
41.5	3	2.85	3.63	6.76	1.37	3.26	4.46	13.5	6.52	0.130	351	359
41.5	3.2	3.02	3.85	7.11	1.36	3.43	4.70	14.2	6.85	0.130	331	339
41.5	3.6	3.36	4.29	7.77	1.35	3.74	5.19	15.5	7.49	0.130	297	304
41.5	4	3.70	4.71	8.38	1.33	4.04	5.65	16.8	8.07	0.130	270	277
42	1.5	1.50	1.91	3.92	1.43	1.87	2.46	7.84	3.73	0.132	667	691
42	2	1.97	2.51	5.04	1.42	2.40	3.20	10.1	4.80	0.132	507	525
42	2.3	2.25	2.87	5.67	1.41	2.70	3.63	11.3	5.40	0.132	444	460
42	2.5	2.44	3.10	6.07	1.40	2.89	3.91	12.1	5.79	0.132	411	425
42	2.9	2.80	3.56	6.84	1.39	3.26	4.44	13.7	6.52	0.132	358	370
42	3	2.89	3.68	7.03	1.38	3.35	4.57	14.1	6.69	0.132	347	359
42	3.2	3.06	3.90	7.39	1.38	3.52	4.83	14.8	7.04	0.132	327	338
42	3.6	3.41	4.34	8.08	1.36	3.85	5.32	16.2	7.69	0.132	293	304
42	4	3.75	4.78	8.71	1.35	4.15	5.80	17.4	8.30	0.132	267	276
42.4	1.5	1.51	1.93	4.04	1.45	1.90	2.51	8.07	3.81	0.133	661	691
42.4	2	1.99	2.54	5.19	1.43	2.45	3.27	10.4	4.90	0.133	502	525
42.4	2.3	2.27	2.90	5.84	1.42	2.76	3.70	11.7	5.51	0.133	440	460
42.4	2.5	2.46	3.13	6.26	1.41	2.95	3.99	12.5	5.91	0.133	407	425
42.4	2.9	2.82	3.60	7.06	1.40	3.33	4.53	14.1	6.66	0.133	354	370
42.4	3	2.91	3.71	7.25	1.40	3.42	4.67	14.5	6.84	0.133	343	359
42.4	3.2	3.09	3.94	7.62	1.39	3.59	4.93	15.2	7.19	0.133	323	338
42.4	3.6	3.44	4.39	8.33	1.38	3.93	5.44	16.7	7.86	0.133	290	304
42.4	4	3.79	4.83	8.99	1.36	4.24	5.92	18.0	8.48	0.133	264	276
42.4	5	4.61	5.87	10.5	1.33	4.93	7.04	20.9	9.86	0.133	217	227
42.4	6	5.39	6.86	11.7	1.30	5.51	8.02	23.3	11.0	0.133	186	194
42.4	6.3	5.61	7.14	12.0	1.30	5.66	8.29	24.0	11.3	0.133	178	186
44.5	1.5	1.59	2.03	4.69	1.52	2.11	2.77	9.38	4.21	0.140	629	690
44.5	2	2.10	2.67	6.04	1.50	2.72	3.62	12.1	5.43	0.140	477	524
44.5	2.3	2.39	3.05	6.81	1.49	3.06	4.10	13.6	6.12	0.140	418	458
44.5	2.5	2.59	3.30	7.30	1.49	3.28	4.42	14.6	6.56	0.140	386	424
44.5	2.9	2.98	3.79	8.24	1.47	3.70	5.03	16.5	7.41	0.140	336	369
44.5	3	3.07	3.91	8.46	1.47	3.80	5.18	16.9	7.61	0.140	326	357
44.5	3.2	3.26	4.15	8.91	1.46	4.00	5.47	17.8	8.00	0.140	307	337

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

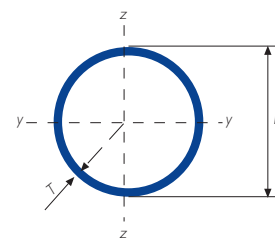


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{sv} m ²
44.5	3.6	3.63	4.63	9.75	1.45	4.38	6.04	19.5	8.76	0.140	275	302
44.5	4	4.00	5.09	10.5	1.44	4.74	6.58	21.1	9.47	0.140	250	275
45	1.5	1.61	2.05	4.85	1.54	2.16	2.84	9.71	4.32	0.141	621	690
45	2	2.12	2.70	6.26	1.52	2.78	3.70	12.5	5.56	0.141	472	523
45	2.3	2.42	3.09	7.05	1.51	3.13	4.20	14.1	6.27	0.141	413	458
45	2.5	2.62	3.34	7.56	1.51	3.36	4.52	15.1	6.72	0.141	382	424
45	2.9	3.01	3.84	8.54	1.49	3.79	5.15	17.1	7.59	0.141	332	369
45	3	3.11	3.96	8.77	1.49	3.90	5.30	17.5	7.80	0.141	322	357
45	3.2	3.30	4.20	9.23	1.48	4.10	5.60	18.5	8.21	0.141	303	336
45	3.6	3.68	4.68	10.1	1.47	4.49	6.19	20.2	8.98	0.141	272	302
45	4	4.04	5.15	10.9	1.46	4.86	6.75	21.9	9.71	0.141	247	274
45	5	4.93	6.28	12.8	1.43	5.67	8.04	25.5	11.3	0.141	203	225
45	6	5.77	7.35	14.3	1.40	6.36	9.20	28.6	12.7	0.141	173	192
45	6.3	6.01	7.66	14.7	1.39	6.54	9.52	29.4	13.1	0.141	166	185
48	1.5	1.72	2.19	5.93	1.64	2.47	3.24	11.9	4.94	0.151	581	688
48	2	2.27	2.89	7.66	1.63	3.19	4.23	15.3	6.38	0.151	441	522
48	2.3	2.59	3.30	8.64	1.62	3.60	4.81	17.3	7.20	0.151	386	457
48	2.5	2.81	3.57	9.28	1.61	3.86	5.18	18.6	7.73	0.151	356	422
48	2.9	3.23	4.11	10.5	1.60	4.37	5.91	21.0	8.74	0.151	310	367
48	3	3.33	4.24	10.8	1.59	4.49	6.08	21.6	8.99	0.151	300	356
48	3.2	3.54	4.50	11.4	1.59	4.73	6.43	22.7	9.46	0.151	283	335
48	3.6	3.94	5.02	12.5	1.57	5.19	7.11	24.9	10.4	0.151	254	300
48	4	4.34	5.53	13.5	1.56	5.62	7.77	27.0	11.2	0.151	230	273
48.3	1.5	1.73	2.21	6.04	1.66	2.50	3.29	12.1	5.01	0.152	578	688
48.3	2	2.28	2.91	7.81	1.64	3.23	4.29	15.6	6.47	0.152	438	522
48.3	2.3	2.61	3.32	8.81	1.63	3.65	4.87	17.6	7.30	0.152	383	457
48.3	2.5	2.82	3.60	9.46	1.62	3.92	5.25	18.9	7.83	0.152	354	422
48.3	2.9	3.25	4.14	10.7	1.61	4.43	5.99	21.4	8.86	0.152	308	367
48.3	3	3.35	4.27	11.0	1.61	4.55	6.17	22.0	9.11	0.152	298	355
48.3	3.2	3.56	4.53	11.6	1.60	4.80	6.52	23.2	9.59	0.152	281	335
48.3	3.6	3.97	5.06	12.7	1.59	5.26	7.21	25.4	10.5	0.152	252	300
48.3	4	4.37	5.57	13.8	1.57	5.70	7.87	27.5	11.4	0.152	229	273
48.3	5	5.34	6.80	16.2	1.54	6.69	9.42	32.3	13.4	0.152	187	223
48.3	6	6.26	7.97	18.2	1.51	7.53	10.8	36.4	15.1	0.152	160	190
48.3	6.3	6.53	8.31	18.7	1.50	7.76	11.2	37.5	15.5	0.152	153	183
48.6	1.5	1.74	2.22	6.16	1.67	2.54	3.33	12.3	5.07	0.153	574	688
48.6	2	2.30	2.93	7.96	1.65	3.28	4.35	15.9	6.55	0.153	435	521
48.6	2.3	2.63	3.35	8.99	1.64	3.70	4.93	18.0	7.40	0.153	381	456
48.6	2.5	2.84	3.62	9.65	1.63	3.97	5.32	19.3	7.94	0.153	352	422
48.6	2.9	3.27	4.16	10.9	1.62	4.49	6.06	21.8	8.98	0.153	306	367
48.6	3	3.37	4.30	11.2	1.62	4.62	6.25	22.4	9.23	0.153	296	355
48.6	3.2	3.58	4.56	11.8	1.61	4.86	6.61	23.6	9.73	0.153	279	335
48.6	3.6	4.00	5.09	13.0	1.60	5.34	7.31	25.9	10.7	0.153	250	300
48.6	4	4.40	5.60	14.0	1.58	5.78	7.98	28.1	11.6	0.153	227	272

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

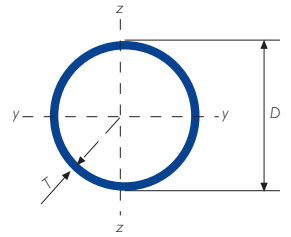


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D	T	M	A	I	i	W_{el}	W_{pl}	I_t	C_t	A_s	m	$A_{s/v}$
mm	mm	kg/m	cm ²	cm ⁴	cm	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
49.4	2	2.34	2.98	8.38	1.68	3.39	4.50	16.8	6.78	0.155	428	521
49.4	2.3	2.67	3.40	9.46	1.67	3.83	5.11	18.9	7.66	0.155	374	456
49.4	2.5	2.89	3.68	10.2	1.66	4.11	5.50	20.3	8.22	0.155	346	421
49.4	2.9	3.33	4.24	11.5	1.65	4.65	6.28	23.0	9.31	0.155	301	366
49.4	3	3.43	4.37	11.8	1.64	4.78	6.47	23.6	9.57	0.155	291	355
49.4	3.2	3.65	4.64	12.5	1.64	5.04	6.84	24.9	10.1	0.155	274	334
49.4	3.6	4.07	5.18	13.7	1.62	5.53	7.57	27.3	11.1	0.155	246	300
49.4	4	4.48	5.71	14.8	1.61	6.00	8.27	29.6	12.0	0.155	223	272
49.4	5	5.47	6.97	17.4	1.58	7.05	9.90	34.8	14.1	0.155	183	223
50	1.5	1.79	2.29	6.73	1.72	2.69	3.53	13.5	5.38	0.157	557	687
50	2	2.37	3.02	8.70	1.70	3.48	4.61	17.4	6.96	0.157	422	521
50	2.3	2.71	3.45	9.83	1.69	3.93	5.24	19.7	7.86	0.157	370	456
50	2.5	2.93	3.73	10.6	1.68	4.22	5.65	21.1	8.44	0.157	341	421
50	2.9	3.37	4.29	11.9	1.67	4.78	6.44	23.9	9.56	0.157	297	366
50	3	3.48	4.43	12.3	1.67	4.91	6.64	24.6	9.82	0.157	288	355
50	3.2	3.69	4.70	12.9	1.66	5.18	7.02	25.9	10.4	0.157	271	334
50	3.6	4.12	5.25	14.2	1.65	5.68	7.77	28.4	11.4	0.157	243	299
50	4	4.54	5.78	15.4	1.63	6.16	8.49	30.8	12.3	0.157	220	272
50	5	5.55	7.07	18.1	1.60	7.25	10.2	36.2	14.5	0.157	180	222
50	6	6.51	8.29	20.4	1.57	8.18	11.7	40.9	16.4	0.157	154	189
50	6.3	6.79	8.65	21.1	1.56	8.43	12.1	42.2	16.9	0.157	147	182
51	1.5	1.83	2.33	7.15	1.75	2.80	3.68	14.3	5.61	0.160	546	687
51	2	2.42	3.08	9.26	1.73	3.63	4.80	18.5	7.26	0.160	414	520
51	2.3	2.76	3.52	10.5	1.72	4.10	5.46	20.9	8.20	0.160	362	455
51	2.5	2.99	3.81	11.2	1.72	4.40	5.89	22.5	8.81	0.160	334	421
51	2.9	3.44	4.38	12.7	1.70	4.99	6.72	25.4	9.98	0.160	291	366
51	3	3.55	4.52	13.1	1.70	5.13	6.92	26.2	10.3	0.160	282	354
51	3.2	3.77	4.81	13.8	1.69	5.41	7.32	27.6	10.8	0.160	265	333
51	3.6	4.21	5.36	15.1	1.68	5.94	8.10	30.3	11.9	0.160	238	299
51	4	4.64	5.91	16.4	1.67	6.44	8.86	32.9	12.9	0.160	216	271
51	5	5.67	7.23	19.3	1.64	7.58	10.6	38.7	15.2	0.160	176	222
51	6	6.66	8.48	21.9	1.61	8.57	12.2	43.7	17.1	0.160	150	189
51	6.3	6.94	8.85	22.5	1.60	8.84	12.7	45.1	17.7	0.160	144	181
52	1.5	1.87	2.38	7.59	1.79	2.92	3.83	15.2	5.84	0.163	535	686
52	2	2.47	3.14	9.83	1.77	3.78	5.00	19.7	7.56	0.163	405	520
52	2.3	2.82	3.59	11.1	1.76	4.27	5.69	22.2	8.55	0.163	355	455
52	2.5	3.05	3.89	11.9	1.75	4.59	6.13	23.9	9.18	0.163	328	420
52	2.9	3.51	4.47	13.5	1.74	5.20	7.00	27.1	10.4	0.163	285	365
52	3	3.63	4.62	13.9	1.74	5.35	7.21	27.8	10.7	0.163	276	354
52	3.2	3.85	4.91	14.7	1.73	5.64	7.63	29.3	11.3	0.163	260	333
52	3.6	4.30	5.47	16.1	1.72	6.20	8.45	32.2	12.4	0.163	233	298
52	4	4.74	6.03	17.5	1.70	6.73	9.24	35.0	13.5	0.163	211	271
52	5	5.80	7.38	20.6	1.67	7.93	11.1	41.2	15.9	0.163	173	221
52	6	6.81	8.67	23.3	1.64	8.97	12.8	46.6	17.9	0.163	147	188

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

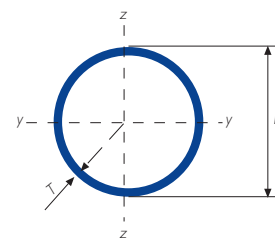


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{s/v} m ⁻¹
52	6.3	7.10	9.04	24.1	1.63	9.25	13.2	48.1	18.5	0.163	141	181
55	1.5	1.98	2.52	9.03	1.89	3.28	4.29	18.1	6.57	0.173	505	685
55	2	2.61	3.33	11.7	1.88	4.26	5.62	23.4	8.52	0.173	383	519
55	2.3	2.99	3.81	13.2	1.87	4.82	6.39	26.5	9.63	0.173	335	454
55	2.5	3.24	4.12	14.2	1.86	5.18	6.90	28.5	10.4	0.173	309	419
55	2.9	3.73	4.75	16.2	1.84	5.87	7.88	32.3	11.7	0.173	268	364
55	3	3.85	4.90	16.6	1.84	6.04	8.12	33.2	12.1	0.173	260	353
55	3.2	4.09	5.21	17.5	1.83	6.38	8.60	35.1	12.8	0.173	245	332
55	3.6	4.56	5.81	19.3	1.82	7.02	9.53	38.6	14.0	0.173	219	297
55	4	5.03	6.41	21.0	1.81	7.62	10.4	41.9	15.2	0.173	199	270
55	5	6.17	7.85	24.8	1.78	9.01	12.5	49.6	18.0	0.173	162	220
55	6	7.25	9.24	28.1	1.75	10.2	14.5	56.3	20.5	0.173	138	187
55	6.3	7.57	9.64	29.1	1.74	10.6	15.0	58.1	21.1	0.173	132	179
56	2	2.66	3.39	12.4	1.91	4.42	5.83	24.8	8.85	0.176	375	519
57	1.5	2.05	2.62	10.1	1.96	3.54	4.62	20.2	7.07	0.179	487	685
57	2	2.71	3.46	13.1	1.95	4.59	6.05	26.2	9.18	0.179	369	518
57	2.3	3.10	3.95	14.8	1.94	5.20	6.89	29.6	10.4	0.179	322	453
57	2.5	3.36	4.28	15.9	1.93	5.59	7.43	31.9	11.2	0.179	298	418
57	2.9	3.87	4.93	18.1	1.92	6.35	8.50	36.2	12.7	0.179	258	363
57	3	4.00	5.09	18.6	1.91	6.53	8.76	37.2	13.1	0.179	250	352
57	3.2	4.25	5.41	19.6	1.91	6.89	9.27	39.3	13.8	0.179	236	331
57	3.6	4.74	6.04	21.6	1.89	7.59	10.3	43.2	15.2	0.179	211	297
57	4	5.23	6.66	23.5	1.88	8.25	11.3	47.0	16.5	0.179	191	269
57	5	6.41	8.17	27.9	1.85	9.78	13.6	55.7	19.6	0.179	156	219
57	6	7.55	9.61	31.7	1.82	11.1	15.7	63.4	22.2	0.179	133	186
57	6.3	7.88	10.0	32.7	1.81	11.5	16.3	65.5	23.0	0.179	127	178
58	2	2.76	3.52	13.8	1.98	4.76	6.27	27.6	9.52	0.182	362	518
58	2.3	3.16	4.02	15.6	1.97	5.39	7.14	31.3	10.8	0.182	317	453
58	2.5	3.42	4.36	16.8	1.96	5.80	7.71	33.6	11.6	0.182	292	418
58	2.9	3.94	5.02	19.1	1.95	6.59	8.81	38.2	13.2	0.182	254	363
58	3	4.07	5.18	19.7	1.95	6.78	9.08	39.3	13.6	0.182	246	352
58	3.2	4.32	5.51	20.8	1.94	7.16	9.62	41.5	14.3	0.182	231	331
58	3.6	4.83	6.15	22.9	1.93	7.88	10.7	45.7	15.8	0.182	207	296
58	4	5.33	6.79	24.9	1.91	8.58	11.7	49.7	17.2	0.182	188	269
58	5	6.54	8.33	29.5	1.88	10.2	14.1	59.0	20.3	0.182	153	219
58	6	7.69	9.80	33.6	1.85	11.6	16.3	67.1	23.2	0.182	130	186
58	6.3	8.03	10.2	34.7	1.84	12.0	16.9	69.4	23.9	0.182	124	178
60	1.5	2.16	2.76	11.8	2.07	3.93	5.13	23.6	7.87	0.188	462	684
60	2	2.86	3.64	15.3	2.05	5.11	6.73	30.7	10.2	0.188	350	517
60	2.3	3.27	4.17	17.4	2.04	5.79	7.66	34.8	11.6	0.188	306	452
60	2.5	3.55	4.52	18.7	2.03	6.23	8.27	37.4	12.5	0.188	282	417
60	2.9	4.08	5.20	21.3	2.02	7.09	9.46	42.5	14.2	0.188	245	362
60	3	4.22	5.37	21.9	2.02	7.29	9.76	43.8	14.6	0.188	237	351
60	3.2	4.48	5.71	23.1	2.01	7.70	10.3	46.2	15.4	0.188	223	330

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

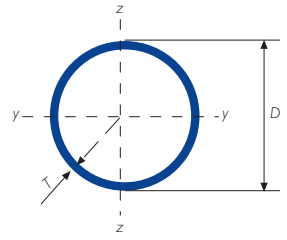


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D	T	M	A	I	i	W_{el}	W_{pl}	I_t	C_t	A_s	m	A_{sv}
mm	mm	kg/m	cm ²	cm ⁴	cm	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
60	3.6	5.01	6.38	25.5	2.00	8.49	11.5	50.9	17.0	0.188	200	296
60	4	5.52	7.04	27.7	1.98	9.24	12.6	55.5	18.5	0.188	181	268
60	5	6.78	8.64	32.9	1.95	11.0	15.2	65.9	22.0	0.188	147	218
60	6	7.99	10.2	37.6	1.92	12.5	17.6	75.1	25.0	0.188	125	185
60	6.3	8.34	10.6	38.8	1.91	12.9	18.3	77.7	25.9	0.188	120	177
60.3	1.5	2.18	2.77	12.0	2.08	3.97	5.19	24.0	7.95	0.189	460	684
60.3	2	2.88	3.66	15.6	2.06	5.17	6.80	31.2	10.3	0.189	348	517
60.3	2.3	3.29	4.19	17.7	2.05	5.85	7.74	35.3	11.7	0.189	304	452
60.3	2.5	3.56	4.54	19.0	2.05	6.30	8.36	38.0	12.6	0.189	281	417
60.3	2.9	4.11	5.23	21.6	2.03	7.16	9.56	43.2	14.3	0.189	244	362
60.3	3	4.24	5.40	22.2	2.03	7.37	9.86	44.4	14.7	0.189	236	351
60.3	3.2	4.51	5.74	23.5	2.02	7.78	10.4	46.9	15.6	0.189	222	330
60.3	3.6	5.03	6.41	25.9	2.01	8.58	11.6	51.7	17.2	0.189	199	295
60.3	4	5.55	7.07	28.2	2.00	9.34	12.7	56.3	18.7	0.189	180	268
60.3	5	6.82	8.69	33.5	1.96	11.1	15.3	67.0	22.2	0.189	147	218
60.3	6	8.03	10.2	38.2	1.93	12.7	17.8	76.4	25.3	0.189	124	185
60.3	6.3	8.39	10.7	39.5	1.92	13.1	18.5	79.0	26.2	0.189	119	177
61.5	2	2.93	3.74	16.6	2.10	5.39	7.08	33.1	10.8	0.193	341	517
61.5	2.3	3.36	4.28	18.8	2.09	6.10	8.06	37.5	12.2	0.193	298	452
61.5	2.5	3.64	4.63	20.2	2.09	6.57	8.71	40.4	13.1	0.193	275	417
61.5	2.9	4.19	5.34	23.0	2.07	7.47	9.97	45.9	14.9	0.193	239	362
61.5	3	4.33	5.51	23.6	2.07	7.69	10.3	47.3	15.4	0.193	231	350
61.5	3.2	4.60	5.86	25.0	2.06	8.12	10.9	50.0	16.2	0.193	217	330
61.5	3.6	5.14	6.55	27.5	2.05	8.96	12.1	55.1	17.9	0.193	195	295
61.5	4	5.67	7.23	30.0	2.04	9.76	13.2	60.0	19.5	0.193	176	267
61.5	5	6.97	8.87	35.7	2.01	11.6	16.0	71.4	23.2	0.193	144	218
61.5	6	8.21	10.5	40.8	1.97	13.3	18.6	81.5	26.5	0.193	122	185
61.5	6.3	8.58	10.9	42.2	1.96	13.7	19.3	84.3	27.4	0.193	117	177
62	1.5	2.24	2.85	13.1	2.14	4.21	5.49	26.1	8.42	0.195	447	683
62	2	2.96	3.77	17.0	2.12	5.48	7.20	34.0	11.0	0.195	338	517
62	2.3	3.39	4.31	19.2	2.11	6.21	8.20	38.5	12.4	0.195	295	452
62	2.5	3.67	4.67	20.7	2.11	6.68	8.86	41.4	13.4	0.195	273	417
62	2.9	4.23	5.38	23.6	2.09	7.60	10.1	47.1	15.2	0.195	237	362
62	3	4.37	5.56	24.3	2.09	7.83	10.5	48.5	15.7	0.195	229	350
62	3.2	4.64	5.91	25.6	2.08	8.27	11.1	51.2	16.5	0.195	216	330
62	3.6	5.18	6.60	28.3	2.07	9.12	12.3	56.5	18.2	0.195	193	295
62	4	5.72	7.29	30.8	2.06	9.93	13.5	61.6	19.9	0.195	175	267
62.2	2	2.97	3.78	17.2	2.13	5.52	7.25	34.3	11.0	0.195	337	517
62.2	2.3	3.40	4.33	19.4	2.12	6.25	8.26	38.9	12.5	0.195	294	451
62.2	2.5	3.68	4.69	20.9	2.11	6.73	8.92	41.9	13.5	0.195	272	417
62.2	2.9	4.24	5.40	23.8	2.10	7.65	10.2	47.6	15.3	0.195	236	362
62.2	3	4.38	5.58	24.5	2.10	7.88	10.5	49.0	15.8	0.195	228	350
62.2	3.2	4.66	5.93	25.9	2.09	8.32	11.2	51.8	16.6	0.195	215	329
62.2	3.6	5.20	6.63	28.6	2.08	9.18	12.4	57.1	18.4	0.195	192	295

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

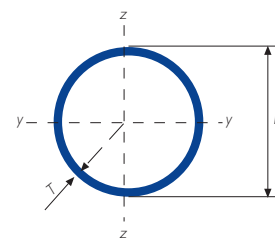


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D	T	M	A	I	i	W_{el}	W_{pl}	I_t	C_t	A_s	m	$A_{s/v}$
mm	mm	kg/m	cm ²	cm ⁴	cm	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
62.2	4	5.74	7.31	31.1	2.06	10.0	13.6	62.2	20.0	0.195	174	267
62.2	5	7.05	8.98	37.0	2.03	11.9	16.4	74.1	23.8	0.195	142	217
62.2	6	8.32	10.6	42.3	2.00	13.6	19.0	84.6	27.2	0.195	120	184
62.2	6.3	8.69	11.1	43.8	1.99	14.1	19.8	87.5	28.1	0.195	115	177
63	1.5	2.28	2.90	13.7	2.18	4.35	5.67	27.4	8.70	0.198	440	683
63	2	3.01	3.83	17.8	2.16	5.67	7.44	35.7	11.3	0.198	332	516
63	2.3	3.44	4.39	20.2	2.15	6.42	8.48	40.5	12.8	0.198	290	451
63	2.5	3.73	4.75	21.8	2.14	6.91	9.16	43.6	13.8	0.198	268	417
63	2.9	4.30	5.48	24.8	2.13	7.87	10.5	49.6	15.7	0.198	233	361
63	3	4.44	5.65	25.5	2.12	8.10	10.8	51.0	16.2	0.198	225	350
63	3.2	4.72	6.01	26.9	2.12	8.56	11.5	53.9	17.1	0.198	212	329
63	3.6	5.27	6.72	29.7	2.10	9.44	12.7	59.5	18.9	0.198	190	295
63	4	5.82	7.41	32.4	2.09	10.3	13.9	64.8	20.6	0.198	172	267
63	5	7.15	9.11	38.6	2.06	12.3	16.9	77.2	24.5	0.198	140	217
63	6	8.43	10.7	44.1	2.03	14.0	19.6	88.2	28.0	0.198	119	184
63	6.3	8.81	11.2	45.7	2.02	14.5	20.3	91.3	29.0	0.198	114	176
63.5	1.5	2.29	2.92	14.0	2.19	4.42	5.77	28.1	8.85	0.199	436	683
63.5	2	3.03	3.86	18.3	2.18	5.76	7.57	36.6	11.5	0.199	330	516
63.5	2.3	3.47	4.42	20.7	2.17	6.53	8.62	41.5	13.1	0.199	288	451
63.5	2.5	3.76	4.79	22.3	2.16	7.03	9.31	44.6	14.1	0.199	266	416
63.5	2.9	4.33	5.52	25.4	2.14	8.00	10.7	50.8	16.0	0.199	231	361
63.5	3	4.48	5.70	26.2	2.14	8.24	11.0	52.3	16.5	0.199	223	350
63.5	3.2	4.76	6.06	27.6	2.13	8.70	11.6	55.3	17.4	0.199	210	329
63.5	3.6	5.32	6.77	30.5	2.12	9.60	12.9	61.0	19.2	0.199	188	294
63.5	4	5.87	7.48	33.2	2.11	10.5	14.2	66.5	20.9	0.199	170	267
63.5	5	7.21	9.19	39.6	2.08	12.5	17.2	79.2	24.9	0.199	139	217
63.5	6	8.51	10.8	45.3	2.04	14.3	19.9	90.6	28.5	0.199	118	184
63.5	6.3	8.89	11.3	46.9	2.03	14.8	20.7	93.7	29.5	0.199	113	176
66	2	3.16	4.02	20.6	2.26	6.25	8.19	41.2	12.5	0.207	317	516
66	2.3	3.61	4.60	23.4	2.25	7.08	9.34	46.8	14.2	0.207	277	450
66	2.5	3.92	4.99	25.2	2.25	7.63	10.1	50.4	15.3	0.207	255	416
66	2.9	4.51	5.75	28.7	2.23	8.69	11.6	57.3	17.4	0.207	222	361
66	3	4.66	5.94	29.5	2.23	8.95	11.9	59.0	17.9	0.207	215	349
66	3.2	4.96	6.31	31.2	2.22	9.46	12.6	62.4	18.9	0.207	202	328
66	3.6	5.54	7.06	34.5	2.21	10.4	14.0	68.9	20.9	0.207	181	294
66	4	6.12	7.79	37.6	2.20	11.4	15.4	75.2	22.8	0.207	164	266
66	5	7.52	9.58	44.9	2.16	13.6	18.6	89.7	27.2	0.207	133	216
66	6	8.88	11.3	51.4	2.13	15.6	21.7	103	31.2	0.207	113	183
66	6.3	9.28	11.8	53.2	2.12	16.1	22.5	106	32.3	0.207	108	175
68	2	3.26	4.15	22.6	2.33	6.65	8.71	45.2	13.3	0.214	307	515
70	1.5	2.53	3.23	18.9	2.42	5.41	7.04	37.9	10.8	0.220	395	681
70	2	3.35	4.27	24.7	2.41	7.06	9.25	49.4	14.1	0.220	298	515
70	2.3	3.84	4.89	28.1	2.39	8.02	10.5	56.1	16.0	0.220	260	450
70	2.5	4.16	5.30	30.2	2.39	8.64	11.4	60.5	17.3	0.220	240	415

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

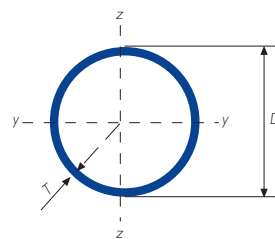


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D	T	M	A	I	i	W_{el}	W_{pl}	I_t	C_t	A_s	m	$A_{s/v}$
mm	mm	kg/m	cm ²	cm ⁴	cm	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
70	2.9	4.80	6.11	34.5	2.37	9.85	13.1	68.9	19.7	0.220	208	360
70	3	4.96	6.31	35.5	2.37	10.1	13.5	71.0	20.3	0.220	202	348
70	3.2	5.27	6.72	37.5	2.36	10.7	14.3	75.1	21.5	0.220	190	327
70	3.6	5.90	7.51	41.5	2.35	11.9	15.9	83.0	23.7	0.220	170	293
70	4	6.51	8.29	45.3	2.34	13.0	17.4	90.7	25.9	0.220	154	265
70	5	8.01	10.2	54.2	2.30	15.5	21.2	108	31.0	0.220	125	215
70	6	9.47	12.1	62.3	2.27	17.8	24.6	125	35.6	0.220	106	182
70	6.3	9.90	12.6	64.6	2.26	18.4	25.6	129	36.9	0.220	101	174
71.5	2	3.43	4.37	26.4	2.46	7.38	9.66	52.8	14.8	0.225	292	514
71.5	2.3	3.93	5.00	30.0	2.45	8.38	11.0	59.9	16.8	0.225	255	449
71.5	2.5	4.25	5.42	32.3	2.44	9.03	11.9	64.6	18.1	0.225	235	414
71.5	2.9	4.91	6.25	36.8	2.43	10.3	13.7	73.7	20.6	0.225	204	359
71.5	3	5.07	6.46	37.9	2.42	10.6	14.1	75.9	21.2	0.225	197	348
71.5	3.2	5.39	6.87	40.1	2.42	11.2	14.9	80.3	22.4	0.225	186	327
71.5	3.6	6.03	7.68	44.4	2.40	12.4	16.6	88.8	24.8	0.225	166	293
71.5	4	6.66	8.48	48.5	2.39	13.6	18.2	97.0	27.1	0.225	150	265
71.5	5	8.20	10.4	58.1	2.36	16.2	22.2	116	32.5	0.225	122	215
71.5	6	9.69	12.3	66.8	2.33	18.7	25.8	134	37.4	0.225	103	182
71.5	6.3	10.1	12.9	69.2	2.32	19.4	26.9	138	38.7	0.225	98.7	174
72	2	3.45	4.40	27.0	2.48	7.49	9.80	53.9	15.0	0.226	290	514
72	2.3	3.95	5.04	30.6	2.47	8.50	11.2	61.2	17.0	0.226	253	449
72	2.5	4.28	5.46	33.0	2.46	9.17	12.1	66.0	18.3	0.226	233	414
72	2.9	4.94	6.30	37.6	2.45	10.5	13.9	75.3	20.9	0.226	202	359
72	3	5.10	6.50	38.8	2.44	10.8	14.3	77.5	21.5	0.226	196	348
72	3.2	5.43	6.92	41.0	2.44	11.4	15.2	82.0	22.8	0.226	184	327
72	3.6	6.07	7.74	45.4	2.42	12.6	16.9	90.7	25.2	0.226	165	292
72	4	6.71	8.55	49.6	2.41	13.8	18.5	99.1	27.5	0.226	149	265
72	5	8.26	10.5	59.4	2.38	16.5	22.5	119	33.0	0.226	121	215
72	6	9.77	12.4	68.3	2.34	19.0	26.2	137	37.9	0.226	102	182
72	6.3	10.2	13.0	70.8	2.33	19.7	27.3	142	39.3	0.226	98.0	174
75.5	2	3.63	4.62	31.2	2.60	8.27	10.8	62.4	16.5	0.237	276	514
75.5	2.3	4.15	5.29	35.5	2.59	9.39	12.3	70.9	18.8	0.237	241	448
75.5	2.5	4.50	5.73	38.2	2.58	10.1	13.3	76.5	20.3	0.237	222	414
75.5	2.9	5.19	6.61	43.6	2.57	11.6	15.3	87.3	23.1	0.237	193	359
75.5	3	5.36	6.83	45.0	2.57	11.9	15.8	89.9	23.8	0.237	186	347
75.5	3.2	5.71	7.27	47.6	2.56	12.6	16.7	95.2	25.2	0.237	175	326
75.5	3.6	6.38	8.13	52.7	2.55	14.0	18.6	105	27.9	0.237	157	292
75.5	4	7.05	8.98	57.6	2.53	15.3	20.5	115	30.5	0.237	142	264
75.5	5	8.69	11.1	69.1	2.50	18.3	24.9	138	36.6	0.237	115	214
75.5	6	10.3	13.1	79.7	2.47	21.1	29.1	159	42.2	0.237	97.2	181
75.5	6.3	10.8	13.7	82.7	2.46	21.9	30.3	165	43.8	0.237	93.0	173
76	1.5	2.76	3.51	24.4	2.63	6.41	8.33	48.7	12.8	0.239	363	680
76	2	3.65	4.65	31.8	2.62	8.38	11.0	63.7	16.8	0.239	274	514
76	2.3	4.18	5.33	36.2	2.61	9.52	12.5	72.4	19.0	0.239	239	448

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

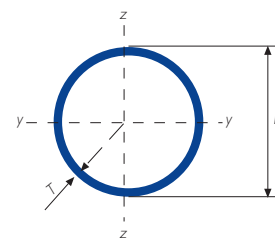


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{s/v} m ⁻¹
76	2.5	4.53	5.77	39.0	2.60	10.3	13.5	78.1	20.5	0.239	221	414
76	2.9	5.23	6.66	44.6	2.59	11.7	15.5	89.1	23.4	0.239	191	359
76	3	5.40	6.88	45.9	2.58	12.1	16.0	91.8	24.2	0.239	185	347
76	3.2	5.75	7.32	48.6	2.58	12.8	17.0	97.2	25.6	0.239	174	326
76	3.6	6.43	8.19	53.8	2.56	14.2	18.9	108	28.3	0.239	156	292
76	4	7.10	9.05	58.8	2.55	15.5	20.8	118	31.0	0.239	141	264
76	5	8.75	11.2	70.6	2.52	18.6	25.2	141	37.2	0.239	114	214
76	6	10.4	13.2	81.4	2.48	21.4	29.5	163	42.8	0.239	96.5	181
76	6.3	10.8	13.8	84.5	2.47	22.2	30.7	169	44.5	0.239	92.3	173
76.1	1.5	2.76	3.52	24.5	2.64	6.43	8.35	48.9	12.9	0.239	362	680
76.1	2	3.65	4.66	32.0	2.62	8.40	11.0	64.0	16.8	0.239	274	513
76.1	2.3	4.19	5.33	36.3	2.61	9.55	12.5	72.7	19.1	0.239	239	448
76.1	2.5	4.54	5.78	39.2	2.60	10.3	13.5	78.4	20.6	0.239	220	414
76.1	2.9	5.24	6.67	44.7	2.59	11.8	15.5	89.5	23.5	0.239	191	358
76.1	3	5.41	6.89	46.1	2.59	12.1	16.0	92.2	24.2	0.239	185	347
76.1	3.2	5.75	7.33	48.8	2.58	12.8	17.0	97.6	25.6	0.239	174	326
76.1	3.6	6.44	8.20	54.0	2.57	14.2	18.9	108	28.4	0.239	155	292
76.1	4	7.11	9.06	59.1	2.55	15.5	20.8	118	31.0	0.239	141	264
76.1	5	8.77	11.2	70.9	2.52	18.6	25.3	142	37.3	0.239	114	214
76.1	6	10.4	13.2	81.8	2.49	21.5	29.6	164	43.0	0.239	96.4	181
76.1	6.3	10.8	13.8	84.8	2.48	22.3	30.8	170	44.6	0.239	92.2	173
80	1.5	2.90	3.70	28.5	2.78	7.13	9.24	57.0	14.3	0.251	344	679
80	2	3.85	4.90	37.3	2.76	9.32	12.2	74.6	18.6	0.251	260	513
80	2.3	4.41	5.61	42.4	2.75	10.6	13.9	84.8	21.2	0.251	227	448
80	2.5	4.78	6.09	45.7	2.74	11.4	15.0	91.5	22.9	0.251	209	413
80	2.9	5.51	7.02	52.3	2.73	13.1	17.2	105	26.1	0.251	181	358
80	3	5.70	7.26	53.9	2.72	13.5	17.8	108	26.9	0.251	176	346
80	3.2	6.06	7.72	57.0	2.72	14.3	18.9	114	28.5	0.251	165	326
80	3.6	6.78	8.64	63.2	2.70	15.8	21.0	126	31.6	0.251	147	291
80	4	7.50	9.55	69.1	2.69	17.3	23.1	138	34.6	0.251	133	263
80	5	9.25	11.8	83.2	2.66	20.8	28.2	166	41.6	0.251	108	213
80	6	10.9	13.9	96.1	2.62	24.0	32.9	192	48.1	0.251	91.3	180
80	6.3	11.5	14.6	99.8	2.62	24.9	34.3	200	49.9	0.251	87.3	172
82.5	2	3.97	5.06	41.0	2.85	9.94	13.0	82.0	19.9	0.259	252	512
82.5	2.3	4.55	5.79	46.6	2.84	11.3	14.8	93.3	22.6	0.259	220	447
82.5	2.5	4.93	6.28	50.3	2.83	12.2	16.0	101	24.4	0.259	203	413
82.5	2.9	5.69	7.25	57.5	2.82	13.9	18.4	115	27.9	0.259	176	357
82.5	3	5.88	7.49	59.3	2.81	14.4	19.0	119	28.7	0.259	170	346
82.5	3.2	6.26	7.97	62.8	2.81	15.2	20.1	126	30.4	0.259	160	325
82.5	3.6	7.00	8.92	69.6	2.79	16.9	22.4	139	33.7	0.259	143	290
82.5	4	7.74	9.86	76.2	2.78	18.5	24.7	152	36.9	0.259	129	263
82.5	5	9.56	12.2	91.8	2.75	22.2	30.1	184	44.5	0.259	105	213
82.5	6	11.3	14.4	106	2.71	25.7	35.2	212	51.5	0.259	88.3	180
82.5	6.3	11.8	15.1	110	2.70	26.7	36.7	220	53.4	0.259	84.5	172

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

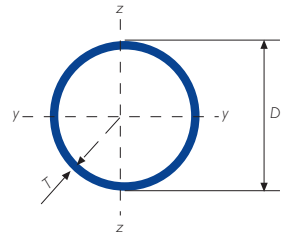


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{sv} m ²
83	1.5	3.01	3.84	31.9	2.88	7.69	9.96	63.8	15.4	0.261	332	679
83	2	4.00	5.09	41.8	2.86	10.1	13.1	83.5	20.1	0.261	250	512
83	2.3	4.58	5.83	47.5	2.85	11.4	15.0	95.0	22.9	0.261	218	447
83	2.5	4.96	6.32	51.3	2.85	12.4	16.2	103	24.7	0.261	201	412
83	2.9	5.73	7.30	58.6	2.83	14.1	18.6	117	28.2	0.261	175	357
83	3	5.92	7.54	60.4	2.83	14.6	19.2	121	29.1	0.261	169	346
83	3.2	6.30	8.02	64.0	2.82	15.4	20.4	128	30.8	0.261	159	325
83	3.6	7.05	8.98	70.9	2.81	17.1	22.7	142	34.2	0.261	142	290
83	4	7.79	9.93	77.6	2.80	18.7	25.0	155	37.4	0.261	128	263
83	5	9.62	12.3	93.6	2.76	22.5	30.5	187	45.1	0.261	104	213
83	6	11.4	14.5	108	2.73	26.1	35.6	216	52.2	0.261	87.8	180
83	6.3	11.9	15.2	112	2.72	27.1	37.1	225	54.2	0.261	83.9	172
84	2	4.04	5.15	43.3	2.90	10.3	13.5	86.7	20.6	0.264	247	512
84	2.3	4.63	5.90	49.3	2.89	11.7	15.4	98.6	23.5	0.264	216	447
84	2.5	5.02	6.40	53.2	2.88	12.7	16.6	106	25.3	0.264	199	412
84	2.9	5.80	7.39	60.8	2.87	14.5	19.1	122	29.0	0.264	172	357
84	3	5.99	7.63	62.7	2.87	14.9	19.7	125	29.9	0.264	167	346
84	3.2	6.38	8.12	66.4	2.86	15.8	20.9	133	31.6	0.264	157	325
84	3.6	7.14	9.09	73.6	2.85	17.5	23.3	147	35.1	0.264	140	290
84	4	7.89	10.1	80.6	2.83	19.2	25.6	161	38.4	0.264	127	263
84	5	9.74	12.4	97.2	2.80	23.1	31.2	194	46.3	0.264	103	213
84	6	11.5	14.7	112	2.77	26.8	36.6	225	53.6	0.264	86.6	179
84	6.3	12.1	15.4	117	2.76	27.8	38.1	234	55.6	0.264	82.8	172
88.9	1.5	3.23	4.12	39.3	3.09	8.85	11.5	78.7	17.7	0.279	309	678
88.9	2	4.29	5.46	51.6	3.07	11.6	15.1	103	23.2	0.279	233	512
88.9	2.3	4.91	6.26	58.7	3.06	13.2	17.3	117	26.4	0.279	204	446
88.9	2.5	5.33	6.79	63.4	3.06	14.3	18.7	127	28.5	0.279	188	412
88.9	2.9	6.15	7.84	72.5	3.04	16.3	21.5	145	32.6	0.279	163	356
88.9	3	6.36	8.10	74.8	3.04	16.8	22.1	150	33.6	0.279	157	345
88.9	3.2	6.76	8.62	79.2	3.03	17.8	23.5	158	35.6	0.279	148	324
88.9	3.6	7.57	9.65	87.9	3.02	19.8	26.2	176	39.5	0.279	132	290
88.9	4	8.38	10.7	96.3	3.00	21.7	28.9	193	43.3	0.279	119	262
88.9	5	10.3	13.2	116	2.97	26.2	35.2	233	52.4	0.279	96.7	212
88.9	6	12.3	15.6	135	2.94	30.4	41.3	270	60.7	0.279	81.5	179
88.9	6.3	12.8	16.3	140	2.93	31.5	43.1	280	63.1	0.279	77.9	171
88.9	7	14.1	18.0	152	2.91	34.2	47.1	304	68.4	0.279	70.7	155
88.9	8	16.0	20.3	168	2.87	37.8	52.5	336	75.6	0.279	62.7	137
88.9	10	19.5	24.8	196	2.81	44.1	62.6	392	88.2	0.279	51.4	113
89	1.5	3.24	4.12	39.5	3.09	8.87	11.5	78.9	17.7	0.280	309	678
89	2	4.29	5.47	51.7	3.08	11.6	15.1	103	23.3	0.280	233	511
89	2.3	4.92	6.26	58.9	3.07	13.2	17.3	118	26.5	0.280	203	446
89	2.5	5.33	6.79	63.6	3.06	14.3	18.7	127	28.6	0.280	188	412
89	2.9	6.16	7.84	72.8	3.05	16.4	21.5	146	32.7	0.280	162	356
89	3	6.36	8.11	75.0	3.04	16.9	22.2	150	33.7	0.280	157	345

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

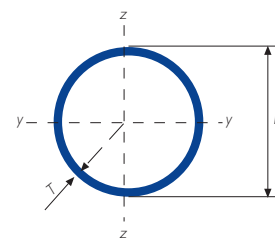


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{s/v} m ⁻¹
89	3.2	6.77	8.63	79.5	3.04	17.9	23.6	159	35.7	0.280	148	324
89	3.6	7.58	9.66	88.2	3.02	19.8	26.3	176	39.6	0.280	132	289
89	4	8.38	10.7	96.7	3.01	21.7	28.9	193	43.5	0.280	119	262
89	5	10.4	13.2	117	2.98	26.2	35.3	234	52.5	0.280	96.5	212
89	6	12.3	15.6	135	2.94	30.4	41.4	271	60.9	0.280	81.4	179
89	6.3	12.8	16.4	141	2.93	31.6	43.2	281	63.3	0.280	77.8	171
90	1.5	3.27	4.17	40.8	3.13	9.08	11.7	81.7	18.2	0.283	305	678
90	2	4.34	5.53	53.6	3.11	11.9	15.5	107	23.8	0.283	230	511
90	2.3	4.97	6.34	61.0	3.10	13.5	17.7	122	27.1	0.283	201	446
90	2.5	5.39	6.87	65.8	3.09	14.6	19.1	132	29.3	0.283	185	411
90	2.9	6.23	7.94	75.3	3.08	16.7	22.0	151	33.5	0.283	161	356
90	3	6.44	8.20	77.7	3.08	17.3	22.7	155	34.5	0.283	155	345
90	3.2	6.85	8.73	82.3	3.07	18.3	24.1	165	36.6	0.283	146	324
90	3.6	7.67	9.77	91.3	3.06	20.3	26.9	183	40.6	0.283	130	289
90	4	8.48	10.8	100	3.04	22.3	29.6	200	44.5	0.283	118	262
95	1.5	3.46	4.41	48.2	3.31	10.1	13.1	96.3	20.3	0.298	289	677
95	2	4.59	5.84	63.2	3.29	13.3	17.3	126	26.6	0.298	218	511
95	2.3	5.26	6.70	72.0	3.28	15.2	19.8	144	30.3	0.298	190	446
95	2.5	5.70	7.26	77.8	3.27	16.4	21.4	156	32.7	0.298	175	411
95	2.9	6.59	8.39	89.1	3.26	18.7	24.6	178	37.5	0.298	152	356
95	3	6.81	8.67	91.8	3.25	19.3	25.4	184	38.7	0.298	147	344
95	3.2	7.24	9.23	97.3	3.25	20.5	27.0	195	41.0	0.298	138	323
95	3.6	8.11	10.3	108	3.23	22.8	30.1	216	45.5	0.298	123	289
95	4	8.98	11.4	119	3.22	25.0	33.1	237	49.9	0.298	111	261
95	5	11.1	14.1	144	3.19	30.2	40.5	287	60.5	0.298	90.1	211
95	6	13.2	16.8	167	3.15	35.1	47.6	334	70.3	0.298	75.9	178
95	6.3	13.8	17.6	174	3.14	36.5	49.6	347	73.1	0.298	72.6	170
96	2	4.64	5.91	65.3	3.32	13.6	17.7	131	27.2	0.302	216	511
96	2.3	5.31	6.77	74.3	3.31	15.5	20.2	149	31.0	0.302	188	445
96	2.5	5.76	7.34	80.3	3.31	16.7	21.9	161	33.5	0.302	173	411
96	2.9	6.66	8.48	92.0	3.29	19.2	25.1	184	38.3	0.302	150	356
96	3	6.88	8.77	94.9	3.29	19.8	26.0	190	39.5	0.302	145	344
96	3.2	7.32	9.33	101	3.28	20.9	27.6	201	41.9	0.302	137	323
96	3.6	8.20	10.5	112	3.27	23.3	30.8	223	46.5	0.302	122	289
96	4	9.08	11.6	123	3.26	25.5	33.9	245	51.1	0.302	110	261
96	5	11.2	14.3	148	3.22	30.9	41.4	297	61.8	0.302	89.1	211
96	6	13.3	17.0	173	3.19	35.9	48.7	345	71.9	0.302	75.1	178
96	6.3	13.9	17.8	179	3.18	37.4	50.8	359	74.8	0.302	71.8	170
96	7	15.4	19.6	195	3.16	40.6	55.6	390	81.2	0.302	65.1	154
96	8	17.4	22.1	216	3.12	45.0	62.1	432	89.9	0.302	57.6	136
96	10	21.2	27.0	253	3.06	52.7	74.3	506	105	0.302	47.2	112
100	1.5	3.64	4.64	56.3	3.48	11.3	14.6	113	22.5	0.314	274	677
100	2	4.83	6.16	74.0	3.47	14.8	19.2	148	29.6	0.314	207	510
100	2.3	5.54	7.06	84.3	3.46	16.9	22.0	169	33.7	0.314	180	445

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

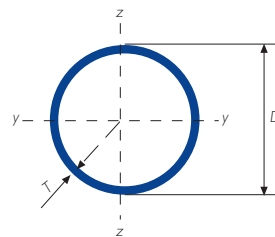


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{sv} m ²
100	2.5	6.01	7.66	91.1	3.45	18.2	23.8	182	36.4	0.314	166	410
100	2.9	6.94	8.85	104	3.43	20.9	27.4	209	41.7	0.314	144	355
100	3	7.18	9.14	108	3.43	21.5	28.2	215	43.0	0.314	139	344
100	3.2	7.64	9.73	114	3.42	22.8	30.0	228	45.6	0.314	131	323
100	3.6	8.56	10.9	127	3.41	25.4	33.5	254	50.7	0.314	117	288
100	4	9.47	12.1	139	3.40	27.8	36.9	278	55.7	0.314	106	260
100	5	11.7	14.9	169	3.36	33.8	45.2	338	67.5	0.314	85.4	211
100	6	13.9	17.7	196	3.33	39.3	53.1	393	78.6	0.314	71.9	177
100	6.3	14.6	18.5	204	3.32	40.9	55.4	409	81.8	0.314	68.7	169
100	7	16.1	20.5	222	3.30	44.5	60.7	445	88.9	0.314	62.3	154
100	8	18.2	23.1	246	3.26	49.3	67.9	493	98.6	0.314	55.1	136
101.6	1.5	3.70	4.72	59.1	3.54	11.6	15.0	118	23.3	0.319	270	677
101.6	2	4.91	6.26	77.6	3.52	15.3	19.8	155	30.6	0.319	204	510
101.6	2.3	5.63	7.18	88.5	3.51	17.4	22.7	177	34.8	0.319	178	445
101.6	2.5	6.11	7.78	95.6	3.50	18.8	24.6	191	37.6	0.319	164	410
101.6	2.9	7.06	8.99	110	3.49	21.6	28.3	219	43.1	0.319	142	355
101.6	3	7.29	9.29	113	3.49	22.3	29.2	226	44.5	0.319	137	343
101.6	3.2	7.77	9.89	120	3.48	23.6	31.0	240	47.2	0.319	129	323
101.6	3.6	8.70	11.1	133	3.47	26.2	34.6	266	52.5	0.319	115	288
101.6	4	9.63	12.3	146	3.45	28.8	38.1	293	57.6	0.319	104	260
101.6	5	11.9	15.2	177	3.42	34.9	46.7	355	69.9	0.319	84.0	210
101.6	6	14.1	18.0	207	3.39	40.7	54.9	413	81.4	0.319	70.7	177
101.6	6.3	14.8	18.9	215	3.38	42.3	57.3	430	84.7	0.319	67.5	169
101.6	7	16.3	20.8	234	3.35	46.1	62.8	468	92.1	0.319	61.2	153
101.6	8	18.5	23.5	260	3.32	51.1	70.3	519	102	0.319	54.2	136
101.6	10	22.6	28.8	305	3.26	60.1	84.2	611	120	0.319	44.3	111
108	1.5	3.94	5.02	71.2	3.77	13.2	17.0	142	26.4	0.339	254	676
108	2	5.23	6.66	93.6	3.75	17.3	22.5	187	34.7	0.339	191	509
108	2.3	6.00	7.64	107	3.74	19.8	25.7	213	39.5	0.339	167	444
108	2.5	6.50	8.29	115	3.73	21.4	27.8	231	42.7	0.339	154	409
108	2.9	7.52	9.58	132	3.72	24.5	32.0	265	49.0	0.339	133	354
108	3	7.77	9.90	136	3.71	25.3	33.1	273	50.6	0.339	129	343
108	3.2	8.27	10.5	145	3.71	26.8	35.2	290	53.6	0.339	121	322
108	3.6	9.27	11.8	161	3.69	29.8	39.3	322	59.7	0.339	108	287
108	4	10.3	13.1	177	3.68	32.8	43.3	354	65.5	0.339	97.5	260
108	5	12.7	16.2	215	3.65	39.8	53.1	430	79.7	0.339	78.7	210
108	6	15.1	19.2	251	3.61	46.5	62.5	502	92.9	0.339	66.3	176
108	6.3	15.8	20.1	261	3.60	48.4	65.2	522	96.8	0.339	63.3	169
108	7	17.4	22.2	285	3.58	52.7	71.5	569	105	0.339	57.4	153
108	8	19.7	25.1	316	3.55	58.5	80.2	632	117	0.339	50.7	135
108	10	24.2	30.8	373	3.48	69.2	96.4	747	138	0.339	41.4	110
110	2	5.33	6.79	99.0	3.82	18.0	23.3	198	36.0	0.346	188	509
110	2.3	6.11	7.78	113	3.81	20.5	26.7	226	41.0	0.346	164	444
110	2.5	6.63	8.44	122	3.80	22.2	28.9	244	44.4	0.346	151	409

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

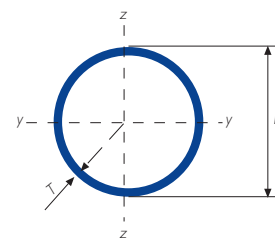


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{s/v} m ²
110	2.9	7.66	9.76	140	3.79	25.5	33.3	280	50.9	0.346	131	354
110	3	7.92	10.1	144	3.78	26.3	34.4	289	52.5	0.346	126	343
110	3.2	8.43	10.7	153	3.78	27.9	36.5	306	55.7	0.346	119	322
110	3.6	9.45	12.0	170	3.76	31.0	40.8	341	62.0	0.346	106	287
110	4	10.5	13.3	187	3.75	34.1	45.0	375	68.1	0.346	95.6	259
113	1.5	4.12	5.25	82	3.94	14.5	18.6	163	28.9	0.355	242	676
113	2	5.47	6.97	107	3.93	19.0	24.6	215	38.0	0.355	183	509
113	2.3	6.28	8.00	123	3.91	21.7	28.2	245	43.4	0.355	159	444
113	2.5	6.81	8.68	133	3.91	23.5	30.5	265	46.9	0.355	147	409
113	2.9	7.87	10.0	152	3.89	26.9	35.2	304	53.8	0.355	127	354
113	3	8.14	10.4	157	3.89	27.8	36.3	314	55.5	0.355	123	342
113	3.2	8.67	11.0	166	3.88	29.5	38.6	333	58.9	0.355	115	322
113	3.6	9.71	12.4	185	3.87	32.8	43.1	371	65.6	0.355	103	287
113	4	10.8	13.7	204	3.86	36.1	47.5	407	72.1	0.355	93.0	259
113	5	13.3	17.0	248	3.82	43.9	58.4	496	87.7	0.355	75.1	209
113	6	15.8	20.2	290	3.79	51.2	68.8	579	102	0.355	63.2	176
113	6.3	16.6	21.1	302	3.78	53.4	71.8	603	107	0.355	60.3	168
113	7	18.3	23.3	329	3.76	58.2	78.8	658	116	0.355	54.6	152
113	8	20.7	26.4	366	3.72	64.7	88.4	732	129	0.355	48.3	135
114	1.5	4.16	5.30	83.9	3.98	14.7	19.0	168	29.4	0.358	240	676
114	2	5.52	7.04	110	3.96	19.4	25.1	221	38.7	0.358	181	509
114	2.3	6.34	8.07	126	3.95	22.1	28.7	252	44.2	0.358	158	444
114	2.5	6.87	8.76	136	3.94	23.9	31.1	272	47.8	0.358	145	409
114	2.9	7.95	10.1	156	3.93	27.4	35.8	313	54.8	0.358	126	354
114	3	8.21	10.5	161	3.93	28.3	37.0	322	56.6	0.358	122	342
114	3.2	8.74	11.1	171	3.92	30.0	39.3	342	60.0	0.358	114	322
114	3.6	9.80	12.5	190	3.91	33.4	43.9	381	66.8	0.358	102	287
114	4	10.9	13.8	209	3.89	36.7	48.4	419	73.5	0.358	92.2	259
114	5	13.4	17.1	255	3.86	44.7	59.4	510	89.4	0.358	74.4	209
114	6	16.0	20.4	298	3.82	52.2	70.1	595	104	0.358	62.6	176
114	6.3	16.7	21.3	310	3.81	54.4	73.2	620	109	0.358	59.8	168
114	7	18.5	23.5	338	3.79	59.3	80.3	676	119	0.358	54.1	152
114	8	20.9	26.6	376	3.76	66.0	90.1	753	132	0.358	47.8	134
114	10	25.6	32.7	446	3.69	78.2	108	892	156	0.358	39.0	110
114.3	1.5	4.17	5.32	84.6	3.99	14.8	19.1	169	29.6	0.359	240	676
114.3	2	5.54	7.06	111	3.97	19.5	25.2	223	38.9	0.359	181	509
114.3	2.3	6.35	8.09	127	3.96	22.2	28.9	254	44.4	0.359	157	444
114.3	2.5	6.89	8.78	137	3.95	24.0	31.3	275	48.0	0.359	145	409
114.3	2.9	7.97	10.1	158	3.94	27.6	36.0	315	55.1	0.359	126	354
114.3	3	8.23	10.5	163	3.94	28.4	37.2	325	56.9	0.359	121	342
114.3	3.2	8.77	11.2	172	3.93	30.2	39.5	345	60.4	0.359	114	322
114.3	3.6	9.83	12.5	192	3.92	33.6	44.1	384	67.2	0.359	102	287
114.3	4	10.9	13.9	211	3.90	36.9	48.7	422	73.9	0.359	91.9	259
114.3	5	13.5	17.2	257	3.87	45.0	59.8	514	89.9	0.359	74.2	209

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

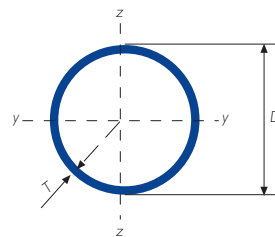


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{s/v} m ⁻¹
114.3	6	16.0	20.4	300	3.83	52.5	70.4	600	105	0.359	62.4	176
114.3	6.3	16.8	21.4	313	3.82	54.7	73.6	625	109	0.359	59.6	168
114.3	7	18.5	23.6	341	3.80	59.7	80.7	682	119	0.359	54.0	152
114.3	8	21.0	26.7	379	3.77	66.4	90.6	759	133	0.359	47.7	134
114.3	10	25.7	32.8	450	3.70	78.7	109	899	157	0.359	38.9	110
120	1.5	4.38	5.58	98.0	4.19	16.3	21.1	196	32.7	0.377	228	675
120	2	5.82	7.41	129	4.17	21.5	27.9	258	43.0	0.377	172	508
120	2.3	6.68	8.50	147	4.16	24.6	31.9	295	49.1	0.377	150	443
120	2.5	7.24	9.23	159	4.16	26.6	34.5	319	53.1	0.377	138	409
120	2.9	8.37	10.7	183	4.14	30.5	39.8	366	61.0	0.377	119	353
120	3	8.66	11.0	189	4.14	31.5	41.1	378	62.9	0.377	116	342
120	3.2	9.22	11.7	200	4.13	33.4	43.7	401	66.8	0.377	108	321
120	3.6	10.3	13.2	223	4.12	37.2	48.8	446	74.4	0.377	96.8	286
120	4	11.4	14.6	245	4.10	40.9	53.8	491	81.8	0.377	87.4	259
120	5	14.2	18.1	299	4.07	49.9	66.2	598	99.7	0.377	70.5	209
120	6	16.9	21.5	350	4.04	58.3	78.0	700	117	0.377	59.3	175
120	6.3	17.7	22.5	365	4.03	60.8	81.5	730	122	0.377	56.6	168
125	2	6.07	7.73	146	4.35	23.4	30.3	292	46.8	0.393	165	508
125	2.3	6.96	8.87	167	4.34	26.7	34.6	334	53.4	0.393	144	443
125	2.5	7.55	9.62	181	4.33	28.9	37.5	361	57.8	0.393	132	408
125	2.9	8.73	11.1	207	4.32	33.2	43.2	415	66.4	0.393	115	353
125	3	9.03	11.5	214	4.31	34.2	44.7	428	68.5	0.393	111	342
125	3.2	9.61	12.2	227	4.31	36.4	47.5	454	72.7	0.393	104	321
125	3.6	10.8	13.7	253	4.29	40.5	53.1	506	81.0	0.393	92.8	286
125	4	11.9	15.2	279	4.28	44.6	58.6	557	89.1	0.393	83.8	258
125	5	14.8	18.8	340	4.25	54.4	72.0	680	109	0.393	67.6	208
125	6	17.6	22.4	398	4.21	63.7	85.0	796	127	0.393	56.8	175
125	6.3	18.4	23.5	415	4.20	66.4	88.8	830	133	0.393	54.2	167
125	7	20.4	25.9	453	4.18	72.5	97.6	906	145	0.393	49.1	151
125	8	23.1	29.4	506	4.15	80.9	110	1,011	162	0.393	43.3	134
125	10	28.4	36.1	602	4.08	96.3	133	1,204	193	0.393	35.3	109
125	12.5	34.7	44.2	708	4.00	113	159	1,415	226	0.393	28.8	89
127	2	6.17	7.85	153	4.42	24.2	31.3	307	48.3	0.399	162	508
127	2.3	7.07	9.01	175	4.41	27.6	35.8	350	55.2	0.399	141	443
127	2.5	7.68	9.78	190	4.40	29.8	38.8	379	59.7	0.399	130	408
127	2.9	8.88	11.3	218	4.39	34.3	44.7	436	68.6	0.399	113	353
127	3	9.17	11.7	225	4.39	35.4	46.1	450	70.8	0.399	109	341
127	3.2	9.77	12.4	239	4.38	37.6	49.1	477	75.1	0.399	102	321
127	3.6	11.0	14.0	266	4.36	41.9	54.8	532	83.7	0.399	91.3	286
127	4	12.1	15.5	293	4.35	46.1	60.5	585	92.2	0.399	82.4	258
127	5	15.0	19.2	357	4.32	56.2	74.5	714	112	0.399	66.5	208
127	6	17.9	22.8	418	4.28	65.9	87.9	837	132	0.399	55.9	175
127	6.3	18.8	23.9	436	4.27	68.7	91.9	872	137	0.399	53.3	167
127	7	20.7	26.4	477	4.25	75.1	101	953	150	0.399	48.3	151

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

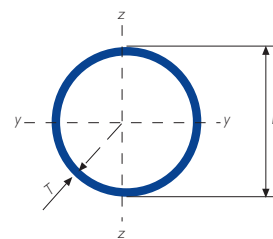


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{sv} m ²
127	8	23.5	29.9	532	4.22	83.7	113	1,064	167	0.399	42.6	133
127	10	28.9	36.8	634	4.15	99.8	137	1,267	200	0.399	34.7	109
133	2	6.46	8.23	177	4.63	26.6	34.3	353	53.1	0.418	155	508
133	2.3	7.41	9.44	202	4.62	30.3	39.3	403	60.7	0.418	135	442
133	2.5	8.05	10.2	218	4.61	32.8	42.6	437	65.6	0.418	124	408
133	2.9	9.30	11.9	251	4.60	37.7	49.1	502	75.5	0.418	107	353
133	3	9.62	12.3	259	4.60	38.9	50.7	518	77.9	0.418	104	341
133	3.2	10.2	13.0	275	4.59	41.4	53.9	550	82.7	0.418	97.6	320
133	3.6	11.5	14.6	307	4.58	46.1	60.3	613	92.2	0.418	87.0	286
133	4	12.7	16.2	338	4.56	50.8	66.6	675	102	0.418	78.6	258
133	5	15.8	20.1	412	4.53	62.0	82.0	825	124	0.418	63.4	208
133	6	18.8	23.9	484	4.50	72.7	96.8	967	145	0.418	53.2	175
133	6.3	19.7	25.1	504	4.49	75.9	101	1,009	152	0.418	50.8	167
133	7	21.8	27.7	552	4.46	82.9	111	1,103	166	0.418	46.0	151
133	8	24.7	31.4	616	4.43	92.6	125	1,232	185	0.418	40.5	133
133	10	30.3	38.6	736	4.36	111	152	1,471	221	0.418	33.0	108
139.7	2	6.79	8.65	205	4.87	29.4	37.9	410	58.7	0.439	147	507
139.7	2.3	7.79	9.93	234	4.86	33.6	43.4	469	67.1	0.439	128	442
139.7	2.5	8.46	10.78	254	4.85	36.3	47.1	507	72.6	0.439	118	407
139.7	2.9	9.78	12.46	292	4.84	41.8	54.3	583	83.5	0.439	102	352
139.7	3	10.1	12.9	301	4.83	43.1	56.1	602	86.2	0.439	98.9	341
139.7	3.2	10.8	13.7	320	4.83	45.8	59.6	640	91.6	0.439	92.8	320
139.7	3.6	12.1	15.4	357	4.81	51.1	66.7	713	102	0.439	82.8	285
139.7	4	13.4	17.1	393	4.80	56.2	73.7	786	112	0.439	74.7	257
139.7	5	16.6	21.2	481	4.77	68.8	90.8	961	138	0.439	60.2	207
139.7	6	19.8	25.2	564	4.73	80.8	107	1,129	162	0.439	50.5	174
139.7	6.3	20.7	26.4	589	4.72	84.3	112	1,177	169	0.439	48.2	166
139.7	7	22.9	29.2	644	4.70	92.2	123	1,288	184	0.439	43.7	150
139.7	8	26.0	33.1	720	4.66	103	139	1,441	206	0.439	38.5	133
139.7	10	32.0	40.7	862	4.60	123	169	1,724	247	0.439	31.3	108
139.7	12.5	39.2	50.0	1,020	4.52	146	203	2,040	292	0.439	25.5	87.9
152	2	7.40	9.42	265	5.30	34.9	45.0	530	69.8	0.478	135	507
152	2.3	8.49	10.8	303	5.29	39.9	51.5	606	79.8	0.478	118	441
152	2.5	9.22	11.7	328	5.29	43.2	55.9	656	86.3	0.478	108	407
152	2.9	10.7	13.6	378	5.27	49.7	64.5	755	99.4	0.478	93.8	352
152	3	11.0	14.0	390	5.27	51.3	66.6	780	103	0.478	90.7	340
152	3.2	11.7	15.0	414	5.26	54.5	70.9	828	109	0.478	85.2	319
152	3.6	13.2	16.8	462	5.25	60.8	79.3	925	122	0.478	75.9	285
152	4	14.6	18.6	510	5.23	67.1	87.6	1,019	134	0.478	68.5	257
152	5	18.1	23.1	624	5.20	82.2	108	1,249	164	0.478	55.2	207
152	6	21.6	27.5	735	5.17	96.6	128	1,469	193	0.478	46.3	174
152	6.3	22.6	28.8	767	5.16	101	134	1,533	202	0.478	44.2	166
152	7	25.0	31.9	840	5.13	111	147	1,680	221	0.478	39.9	150
152	8	28.4	36.2	941	5.10	124	166	1,882	248	0.478	35.2	132

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

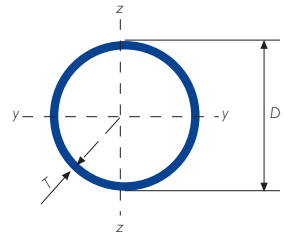


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D	T	M	A	I	i	W_{el}	W_{pl}	I_t	C_t	A_s	m	$A_{s/v}$
mm	mm	kg/m	cm ²	cm ⁴	cm	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
152	10	35.0	44.6	1,130	5.03	149	202	2,260	297	0.478	28.6	107
152	12.5	43.0	54.8	1343	4.95	177	244	2,687	353	0.478	23.3	87.2
152.4	2	7.42	9.45	267	5.32	35.1	45.2	534	70.1	0.479	135	507
152.4	2.3	8.51	10.8	306	5.31	40.1	51.8	611	80.2	0.479	117	441
152.4	2.5	9.24	11.8	331	5.30	43.4	56.2	662	86.8	0.479	108	407
152.4	2.9	10.7	13.6	381	5.29	50.0	64.8	761	99.9	0.479	93.5	352
152.4	3	11.1	14.1	393	5.28	51.6	67.0	786	103	0.479	90.5	340
152.4	3.2	11.8	15.0	418	5.28	54.8	71.2	835	110	0.479	84.9	319
152.4	3.6	13.2	16.8	466	5.26	61.2	79.7	932	122	0.479	75.7	284
152.4	4	14.6	18.6	514	5.25	67.4	88.1	1,027	135	0.479	68.3	257
152.4	5	18.2	23.2	630	5.21	82.6	109	1,259	165	0.479	55.0	207
152.4	6	21.7	27.6	741	5.18	97.2	129	1,481	194	0.479	46.2	173
152.4	6.3	22.7	28.9	773	5.17	101	135	1,546	203	0.479	44.1	166
152.4	7	25.1	32.0	847	5.15	111	148	1,694	222	0.479	39.8	150
152.4	8	28.5	36.3	949	5.11	125	167	1,898	249	0.479	35.1	132
152.4	10	35.1	44.7	1,140	5.05	150	203	2,279	299	0.479	28.5	107
152.4	12.5	43.1	54.9	1,355	4.97	178	245	2,710	356	0.479	23.2	87.1
159	1.5	5.83	7.42	230	5.57	29.0	37.2	460	57.9	0.500	172	673
159	2	7.74	9.86	304	5.55	38.2	49.3	608	76.5	0.500	129	506
159	2.3	8.89	11.3	348	5.54	43.7	56.5	695	87.4	0.500	113	441
159	2.5	9.65	12.3	376	5.53	47.3	61.2	753	94.7	0.500	104	406
159	2.9	11.2	14.2	433	5.52	54.5	70.7	867	109	0.500	89.6	351
159	3	11.5	14.7	447	5.52	56.3	73.0	895	113	0.500	86.6	340
159	3.2	12.3	15.7	475	5.51	59.8	77.7	951	120	0.500	81.3	319
159	3.6	13.8	17.6	531	5.50	66.8	87.0	1,062	134	0.500	72.5	284
159	4	15.3	19.5	585	5.48	73.6	96.1	1,171	147	0.500	65.4	256
159	5	19.0	24.2	718	5.45	90.3	119	1,436	181	0.500	52.7	206
159	6	22.6	28.8	845	5.41	106	141	1,690	213	0.500	44.2	173
159	6.3	23.7	30.2	882	5.40	111	147	1,765	222	0.500	42.2	165
159	7	26.2	33.4	967	5.38	122	162	1,935	243	0.500	38.1	149
159	8	29.8	38.0	1,085	5.35	136	183	2,169	273	0.500	33.6	132
159	10	36.7	46.8	1,305	5.28	164	222	2,610	328	0.500	27.2	107
164	2	7.99	10.2	334	5.73	40.7	52.5	668	81.5	0.515	125	506
164	2.3	9.17	11.7	382	5.72	46.6	60.1	764	93.2	0.515	109	441
164	2.5	9.96	12.7	414	5.71	50.4	65.2	827	101	0.515	100	406
164	2.9	11.5	14.7	476	5.70	58.1	75.3	953	116	0.515	86.8	351
164	3	11.9	15.2	492	5.69	60.0	77.8	984	120	0.515	84.0	340
164	3.2	12.7	16.2	523	5.69	63.7	82.8	1,045	127	0.515	78.8	319
164	3.6	14.2	18.1	584	5.67	71.2	92.6	1,167	142	0.515	70.2	284
164	4	15.8	20.1	644	5.66	78.5	102	1,288	157	0.515	63.4	256
164	5	19.6	25.0	790	5.62	96.3	126	1,580	193	0.515	51.0	206
164	6	23.4	29.8	931	5.59	113	150	1,861	227	0.515	42.8	173
164	6.3	24.5	31.2	972	5.58	119	157	1,944	237	0.515	40.8	165
165.1	3	12.0	15.3	502	5.73	60.8	78.8	1,004	122	0.519	83.4	340

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

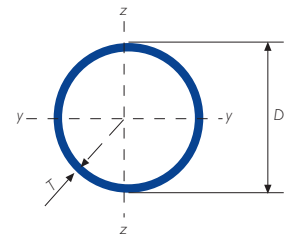


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{sv} m ²
165.1	3.2	12.8	16.3	533	5.73	64.6	83.9	1,067	129	0.519	78.3	319
165.1	3.6	14.3	18.3	596	5.71	72.2	93.9	1,192	144	0.519	69.7	284
165.1	4	15.9	20.2	657	5.70	79.6	104	1,314	159	0.519	62.9	256
165.1	5	19.7	25.1	807	5.66	97.7	128	1,613	195	0.519	50.7	206
165.1	6	23.5	30.0	950	5.63	115	152	1,901	230	0.519	42.5	173
165.1	6.3	24.7	31.4	992	5.62	120	159	1,985	240	0.519	40.5	165
165.1	7	27.3	34.8	1,088	5.60	132	175	2,177	264	0.519	36.6	149
165.1	8	31.0	39.5	1,221	5.56	148	198	2,442	296	0.519	32.3	131
168	2.5	10.2	13.0	445	5.85	53.0	68.5	890	106	0.528	98.0	406
168	2.9	11.8	15.0	513	5.84	61.0	79.1	1,025	122	0.528	84.7	351
168	3	12.2	15.6	529	5.83	63.0	81.7	1,059	126	0.528	81.9	339
168	3.2	13.0	16.6	563	5.83	67.0	86.9	1,125	134	0.528	76.9	319
168	3.6	14.6	18.6	628	5.81	74.8	97.3	1,257	150	0.528	68.5	284
168	4	16.2	20.6	693	5.80	82.5	108	1,387	165	0.528	61.8	256
168	5	20.1	25.6	851	5.77	101.3	133	1,702	203	0.528	49.8	206
168	6	24.0	30.5	1,003	5.73	119.4	158	2,006	239	0.528	41.7	173
168	6.3	25.1	32.0	1,048	5.72	124.7	165	2,095	249	0.528	39.8	165
168.1	2.5	10.2	13.0	446	5.86	53.1	68.6	892	106	0.528	97.9	406
168.1	2.9	11.8	15.1	514	5.84	61.1	79.2	1,027	122	0.528	84.6	351
168.1	3	12.2	15.6	530	5.84	63.1	81.8	1,061	126	0.528	81.9	339
168.1	3.2	13.0	16.6	564	5.83	67.1	87.0	1,127	134	0.528	76.8	319
168.1	3.6	14.6	18.6	630	5.82	74.9	97.4	1,259	150	0.528	68.5	284
168.1	4	16.2	20.6	695	5.80	82.6	108	1,389	165	0.528	61.8	256
168.1	5	20.1	25.6	853	5.77	101	133	1,705	203	0.528	49.7	206
168.1	6	24.0	30.6	1,005	5.74	120	158	2,010	239	0.528	41.7	173
168.3	2.5	10.2	13.0	448	5.86	53.2	68.7	895	106	0.529	97.8	406
168.3	2.9	11.8	15.1	515	5.85	61.3	79.3	1,031	123	0.529	84.5	351
168.3	3	12.2	15.6	532	5.85	63.3	82.0	1,065	127	0.529	81.8	339
168.3	3.2	13.0	16.6	566	5.84	67.2	87.2	1,131	134	0.529	76.8	319
168.3	3.6	14.6	18.6	632	5.82	75.1	97.7	1,264	150	0.529	68.4	284
168.3	4	16.2	20.6	697	5.81	82.8	108	1,394	166	0.529	61.7	256
168.3	5	20.1	25.7	856	5.78	102	133	1,712	203	0.529	49.7	206
168.3	6	24.0	30.6	1,009	5.74	120	158	2,017	240	0.529	41.6	173
168.3	6.3	25.2	32.1	1,053	5.73	125	165	2,107	250	0.529	39.7	165
168.3	7	27.8	35.5	1,156	5.71	137	182	2,312	275	0.529	35.9	149
168.3	8	31.6	40.3	1,297	5.67	154	206	2,595	308	0.529	31.6	131
168.3	10	39.0	49.7	1,564	5.61	186	251	3,128	372	0.529	25.6	106
168.3	12.5	48.0	61.2	1,868	5.53	222	304	3,737	444	0.529	20.8	86.4
177.8	3	12.9	16.5	629	6.18	70.8	91.7	1,259	142	0.559	77.3	339
177.8	3.2	13.8	17.6	669	6.17	75.3	97.6	1,338	151	0.559	72.6	318
177.8	3.6	15.5	19.7	748	6.16	84.1	109	1,495	168	0.559	64.7	284
177.8	4	17.1	21.8	825	6.15	92.8	121	1,650	186	0.559	58.3	256
177.8	5	21.3	27.1	1,014	6.11	114	149	2,028	228	0.559	46.9	206
177.8	6	25.4	32.4	1,196	6.08	135	177	2,392	269	0.559	39.3	172

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

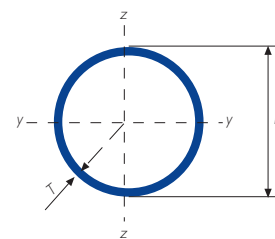


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{s/v} m ⁻¹
177.8	6.3	26.6	33.9	1,250	6.07	141	185	2,499	281	0.559	37.5	165
177.8	7	29.5	37.6	1,372	6.04	154	204	2,744	309	0.559	33.9	149
177.8	8	33.5	42.7	1,541	6.01	173	231	3,083	347	0.559	29.9	131
177.8	10	41.4	52.7	1,862	5.94	209	282	3,724	419	0.559	24.2	106
193.7	3	14.1	18.0	817	6.74	84.4	109	1,634	169	0.609	70.9	339
193.7	3.2	15.0	19.2	869	6.74	89.7	116	1,738	179	0.609	66.5	318
193.7	3.6	16.9	21.5	972	6.72	100	130	1,943	201	0.609	59.3	283
193.7	4	18.7	23.8	1,073	6.71	111	144	2,146	222	0.609	53.4	255
193.7	5	23.3	29.6	1,320	6.67	136	178	2,640	273	0.609	43.0	205
193.7	6	27.8	35.4	1,560	6.64	161	211	3,119	322	0.609	36.0	172
193.7	6.3	29.1	37.1	1,630	6.63	168	221	3,260	337	0.609	34.3	164
193.7	7	32.2	41.1	1,791	6.61	185	244	3,583	370	0.609	31.0	148
193.7	8	36.6	46.7	2,016	6.57	208	276	4,031	416	0.609	27.3	130
193.7	10	45.3	57.7	2,442	6.50	252	338	4,883	504	0.609	22.1	105
193.7	12.5	55.9	71.2	2,934	6.42	303	411	5,869	606	0.609	17.9	85.5
200	3	14.6	18.6	901	6.97	90.1	116	1,802	180	0.628	68.6	338
200	3.2	15.5	19.8	958	6.96	95.8	124	1,916	192	0.628	64.4	318
200	3.6	17.4	22.2	1,071	6.94	107	139	2,143	214	0.628	57.4	283
200	4	19.3	24.6	1,183	6.93	118	154	2,366	237	0.628	51.7	255
200	5	24.0	30.6	1,457	6.90	146	190	2,914	291	0.628	41.6	205
200	6	28.7	36.6	1,722	6.86	172	226	3,444	344	0.628	34.8	172
200	6.3	30.1	38.3	1,800	6.85	180	236	3,600	360	0.628	33.2	164
200	7	33.3	42.4	1,979	6.83	198	261	3,958	396	0.628	30.0	148
200	8	37.9	48.3	2,227	6.79	223	295	4,455	445	0.628	26.4	130
219.1	3	16.0	20.4	1,189	7.64	109	140	2,378	217	0.688	62.5	338
219.1	3.2	17.0	21.7	1,265	7.63	115	149	2,530	231	0.688	58.7	317
219.1	3.6	19.1	24.4	1,415	7.62	129	167	2,830	258	0.688	52.3	282
219.1	4	21.2	27.0	1,564	7.61	143	185	3,128	286	0.688	47.1	255
219.1	5	26.4	33.6	1,928	7.57	176	229	3,856	352	0.688	37.9	205
219.1	6	31.5	40.2	2,282	7.54	208	273	4,564	417	0.688	31.7	171
219.1	6.3	33.1	42.1	2,386	7.53	218	285	4,772	436	0.688	30.2	163
219.1	7	36.6	46.6	2,626	7.50	240	315	5,251	479	0.688	27.3	148
219.1	8	41.6	53.1	2,960	7.47	270	357	5,919	540	0.688	24.0	130
219.1	10	51.6	65.7	3,598	7.40	328	438	7,197	657	0.688	19.4	105
219.1	12.5	63.7	81.1	4,345	7.32	397	534	8,689	793	0.688	15.7	84.8
244.5	4	23.7	30.2	2,186	8.50	179	231	4,371	358	0.768	42.2	254
244.5	5	29.5	37.6	2,699	8.47	221	287	5,397	441	0.768	33.9	204
244.5	6	35.3	45.0	3,199	8.43	262	341	6,397	523	0.768	28.3	171
244.5	6.3	37.0	47.1	3,346	8.42	274	358	6,692	547	0.768	27.0	163
244.5	7	41.0	52.2	3,686	8.40	301	395	7,372	603	0.768	24.4	147
244.5	8	46.7	59.4	4,160	8.37	340	448	8,321	681	0.768	21.4	129
244.5	10	57.8	73.7	5,073	8.30	415	550	10,146	830	0.768	17.3	104
244.5	12.5	71.5	91.1	6,147	8.21	503	673	12,295	1,006	0.768	14.0	84.3
273	4	26.5	33.8	3,058	9.51	224	289	6,116	448	0.858	37.7	254

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

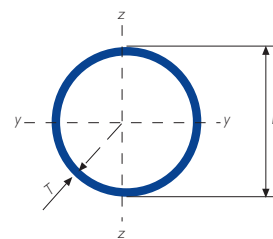


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{sv} m ² /m
273	5	33.0	42.1	3,781	9.48	277	359	7,562	554	0.858	30.3	204
273	6	39.5	50.3	4,487	9.44	329	428	8,974	657	0.858	25.3	170
273	6.3	41.4	52.8	4,696	9.43	344	448	9,392	688	0.858	24.1	162
273	7	45.9	58.5	5,177	9.41	379	495	10,355	759	0.858	21.8	147
273	8	52.3	66.6	5,852	9.37	429	562	11,703	857	0.858	19.1	129
273	10	64.9	82.6	7,154	9.31	524	692	14,308	1,048	0.858	15.4	104
273	12.5	80.3	102	8,697	9.22	637	849	17,395	1,274	0.858	12.5	83.8
273.1	5	33.1	42.1	3,785	9.48	277	359	7,570	554	0.858	30.2	204
273.1	6	39.5	50.3	4,492	9.45	329	428	8,984	658	0.858	25.3	170
273.1	6.3	41.5	52.8	4,701	9.44	344	449	9,402	689	0.858	24.1	162
273.1	7	45.9	58.5	5,183	9.41	380	496	10,366	759	0.858	21.8	147
273.1	8	52.3	66.6	5,858	9.38	429	562	11,717	858	0.858	19.1	129
273.1	10	64.9	82.7	7,162	9.31	525	693	14,324	1,049	0.858	15.4	104
273.1	12.5	80.3	102	8,707	9.22	638	850	17,415	1,275	0.858	12.4	83.8
323.9	4	31.6	40.2	5,143	11.3	318	409	10,286	635	1.02	31.7	253
323.9	5	39.3	50.1	6,369	11.3	393	509	12,739	787	1.02	25.4	203
323.9	6	47.0	59.9	7,572	11.2	468	606	15,145	935	1.02	21.3	170
323.9	6.3	49.3	62.9	7,929	11.2	490	636	15,858	979	1.02	20.3	162
323.9	7	54.7	69.7	8,753	11.2	540	703	17,505	1,081	1.02	18.3	146
323.9	8	62.3	79.4	9,910	11.2	612	799	19,820	1,224	1.02	16.0	128
323.9	10	77.4	98.6	12,158	11.1	751	986	24,317	1,501	1.02	12.9	103
323.9	12.5	96.0	122	14,847	11.0	917	1,213	29,693	1,833	1.02	10.4	83.2
323.9	14.2	108	138	16,599	11.0	1,025	1,363	33,198	2,050	1.02	9.22	73.7
323.9	16	121	155	18,390	10.9	1,136	1,518	36,780	2,271	1.02	8.23	65.7
339.7	5	41.3	52.6	7,364	11.8	434	560	14,727	867	1.07	24.2	203
339.7	6	49.4	62.9	8,758	11.8	516	668	17,517	1,031	1.07	20.3	170
339.7	6.3	51.8	66.0	9,172	11.8	540	700	18,344	1,080	1.07	19.3	162
339.7	7	57.4	73.2	10,128	11.8	596	775	20,255	1,193	1.07	17.4	146
339.7	8	65.4	83.4	11,472	11.7	675	880	22,944	1,351	1.07	15.3	128
339.7	10	81.3	104	14,087	11.7	829	1,087	28,174	1,659	1.07	12.3	103
355.6	5	43.2	55.1	8,464	12.4	476	615	16,927	952	1.12	23.1	203
355.6	6	51.7	65.9	10,071	12.4	566	733	20,141	1,133	1.12	19.3	170
355.6	6.3	54.3	69.1	10,547	12.4	593	769	21,094	1,186	1.12	18.4	162
355.6	7	60.2	76.7	11,650	12.3	655	851	23,299	1,310	1.12	16.6	146
355.6	8	68.6	87.4	13,201	12.3	742	967	26,403	1,485	1.12	14.6	128
355.6	10	85.2	109	16,223	12.2	912	1,195	32,447	1,825	1.12	11.7	103
355.6	12.5	106	135	19,852	12.1	1,117	1,472	39,704	2,233	1.12	9.45	82.9
355.6	14.2	120	152	22,227	12.1	1,250	1,656	44,455	2,500	1.12	8.36	73.4
355.6	16	134	171	24,663	12.0	1,387	1,847	49,326	2,774	1.12	7.46	65.4
406.4	5	49.5	63.1	12,701	14.2	625	806	25,402	1,250	1.28	20.2	202
406.4	6	59.2	75.5	15,128	14.2	745	962	30,257	1,489	1.28	16.9	169
406.4	6.3	62.2	79.2	15,849	14.1	780	1,009	31,699	1,560	1.28	16.1	161
406.4	7	68.9	87.8	17,519	14.1	862	1,117	35,038	1,724	1.28	14.5	145
406.4	8	78.6	100	19,874	14.1	978	1,270	39,748	1,956	1.28	12.7	128

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

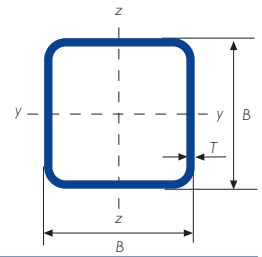


Cold-finished tubular profile range - rounded

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SUPERFICIAL AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{s/v} m ²
406.4	10	97.8	125	24,476	14.0	1,205	1,572	48,952	2,409	1.28	10.2	103
406.4	12.5	121	155	30,031	13.9	1,478	1,940	60,061	2,956	1.28	8.24	82.5
406.4	14.2	137	175	33,685	13.9	1,658	2,185	67,371	3,315	1.28	7.28	73.0
406.4	16	154	196	37,449	13.8	1,843	2,440	74,898	3,686	1.28	6.49	65.1
457	6.3	70.0	89.2	22,654	15.9	991	1,280	45,308	1,983	1.44	14.3	161
457	7	77.7	99.0	25,055	15.9	1,097	1,418	50,111	2,193	1.44	12.9	145
457	8	88.6	113	28,446	15.9	1,245	1,613	56,893	2,490	1.44	11.3	127
457	10	110	140	35,091	15.8	1,536	1,998	70,183	3,071	1.44	9.07	102
508	6.3	77.9	99.3	31,246	17.7	1,230	1,586	62,493	2,460	1.60	12.8	161
508	7	86.5	110	34,574	17.7	1,361	1,757	69,149	2,722	1.60	11.6	145
508	8	98.6	126	39,280	17.7	1,546	2,000	78,560	3,093	1.60	10.1	127
508	10	123	156	48,520	17.6	1,910	2,480	97,040	3,820	1.60	8.14	102

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

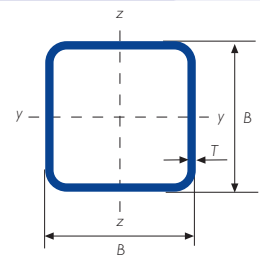


Cold-finished tubular profile range - square

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
B	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elxx}	W _{ely}	W _{plxx}	W _{ply}	I _t	C _t	A _s		A _{s/v}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ⁻¹
20	20	1.5	0.826	1.05	0.583	0.583	0.744	0.744	0.583	0.583	0.715	0.715	0.985	0.884	0.075	1,211	711
20	20	2	1.05	1.34	0.692	0.692	0.720	0.720	0.692	0.692	0.877	0.877	1.21	1.06	0.073	953	547
20	20	2.5	1.25	1.59	0.766	0.766	0.694	0.694	0.766	0.766	1.00	1.00	1.39	1.19	0.071	802	449
20	20	3	1.42	1.81	0.809	0.809	0.669	0.669	0.809	0.809	1.10	1.10	1.52	1.27	0.070	704	385
22	22	1.5	0.920	1.17	0.800	0.800	0.826	0.826	0.727	0.727	0.885	0.885	1.34	1.10	0.083	1,087	707
22	22	2	1.18	1.50	0.961	0.961	0.801	0.801	0.874	0.874	1.09	1.09	1.66	1.33	0.081	851	542
25	25	1.5	1.06	1.35	1.22	1.22	0.949	0.949	0.973	0.973	1.17	1.17	2.01	1.47	0.095	942	702
25	25	2	1.36	1.74	1.48	1.48	0.924	0.924	1.19	1.19	1.47	1.47	2.53	1.80	0.093	733	536
25	25	2.5	1.64	2.09	1.69	1.69	0.899	0.899	1.35	1.35	1.71	1.71	2.96	2.07	0.091	610	438
25	25	3	1.89	2.41	1.84	1.84	0.874	0.874	1.47	1.47	1.91	1.91	3.32	2.27	0.090	529	372
25	25	4	2.31	2.95	2.00	2.00	0.823	0.823	1.60	1.60	2.19	2.19	3.80	2.51	0.086	432	293
30	30	1.5	1.30	1.65	2.20	2.20	1.15	1.15	1.46	1.46	1.74	1.74	3.57	2.21	0.115	771	695
30	30	2	1.68	2.14	2.72	2.72	1.13	1.13	1.81	1.81	2.21	2.21	4.54	2.75	0.113	596	529
30	30	2.5	2.03	2.59	3.16	3.16	1.10	1.10	2.10	2.10	2.61	2.61	5.40	3.20	0.111	492	430
30	30	3	2.36	3.01	3.50	3.50	1.08	1.08	2.34	2.34	2.96	2.96	6.15	3.58	0.110	423	365
30	30	4	2.94	3.75	3.97	3.97	1.03	1.03	2.64	2.64	3.50	3.50	7.30	4.11	0.106	340	284
35	35	1.5	1.53	1.95	3.60	3.60	1.36	1.36	2.05	2.05	2.43	2.43	5.78	3.09	0.135	653	691
35	35	2	1.99	2.54	4.51	4.51	1.33	1.33	2.58	2.58	3.09	3.09	7.41	3.89	0.133	502	525
35	35	2.5	2.42	3.09	5.29	5.29	1.31	1.31	3.02	3.02	3.69	3.69	8.89	4.58	0.131	412	425
35	35	3	2.83	3.61	5.95	5.95	1.28	1.28	3.40	3.40	4.23	4.23	10.2	5.18	0.130	353	359
35	35	4	3.57	4.55	6.93	6.93	1.23	1.23	3.96	3.96	5.11	5.11	12.4	6.09	0.126	280	278
38	38	2	2.18	2.78	5.88	5.88	1.46	1.46	3.10	3.10	3.70	3.70	9.60	4.67	0.145	459	523
38	38	2.5	2.66	3.39	6.94	6.94	1.43	1.43	3.65	3.65	4.44	4.44	11.6	5.53	0.143	376	423
38	38	3	3.12	3.97	7.85	7.85	1.41	1.41	4.13	4.13	5.10	5.10	13.3	6.28	0.142	321	357
40	40	1.5	1.77	2.25	5.49	5.49	1.56	1.56	2.75	2.75	3.22	3.22	8.75	4.13	0.155	566	688
40	40	2	2.31	2.94	6.94	6.94	1.54	1.54	3.47	3.47	4.13	4.13	11.3	5.23	0.153	434	521
40	40	2.5	2.82	3.59	8.22	8.22	1.51	1.51	4.11	4.11	4.97	4.97	13.6	6.21	0.151	355	422
40	40	3	3.30	4.21	9.32	9.32	1.49	1.49	4.66	4.66	5.72	5.72	15.8	7.07	0.150	303	356
40	40	4	4.20	5.35	11.1	11.1	1.44	1.44	5.54	5.54	7.01	7.01	19.4	8.48	0.146	238	273
40	40	5	4.99	6.36	12.3	12.3	1.39	1.39	6.13	6.13	8.02	8.02	22.3	9.48	0.143	200	225
42	42	3	3.49	4.45	11.0	11.0	1.57	1.57	5.22	5.22	6.38	6.38	18.4	7.92	0.158	286	355
42	42	4	4.45	5.67	13.1	13.1	1.52	1.52	6.24	6.24	7.86	7.86	22.8	9.54	0.154	225	272
42	42	5	5.30	6.76	14.6	14.6	1.47	1.47	6.96	6.96	9.04	9.04	26.4	10.7	0.151	189	223
45	45	1.5	2.00	2.55	7.96	7.96	1.77	1.77	3.54	3.54	4.13	4.13	12.6	5.31	0.175	499	685
45	45	2	2.62	3.34	10.1	10.1	1.74	1.74	4.50	4.50	5.32	5.32	16.3	6.77	0.173	382	519
45	45	2.5	3.21	4.09	12.1	12.1	1.72	1.72	5.36	5.36	6.43	6.43	19.8	8.09	0.171	312	419
45	45	3	3.77	4.81	13.8	13.8	1.69	1.69	6.12	6.12	7.44	7.44	23.0	9.27	0.170	265	353
45	45	4	4.83	6.15	16.6	16.6	1.64	1.64	7.38	7.38	9.22	9.22	28.7	11.3	0.166	207	270
45	45	5	5.77	7.36	18.7	18.7	1.59	1.59	8.31	8.31	10.7	10.7	33.3	12.8	0.163	173	221
48	48	3	4.06	5.17	17.0	17.0	1.82	1.82	7.10	7.10	8.58	8.58	28.2	10.7	0.182	246	352
50	50	1.5	2.24	2.85	11.1	11.1	1.97	1.97	4.43	4.43	5.15	5.15	17.4	6.65	0.195	447	683
50	50	2	2.93	3.74	14.1	14.1	1.95	1.95	5.66	5.66	6.66	6.66	22.6	8.51	0.193	341	517
50	50	2.5	3.60	4.59	16.9	16.9	1.92	1.92	6.78	6.78	8.07	8.07	27.5	10.2	0.191	278	417
50	50	3	4.25	5.41	19.5	19.5	1.90	1.90	7.79	7.79	9.39	9.39	32.1	11.8	0.190	236	351

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

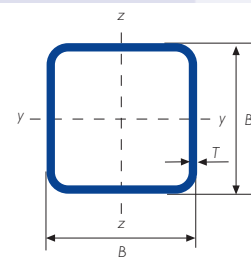


Cold-finished tubular profile range - square

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
B	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elox}	W _{ely}	W _{plox}	W _{ply}	I _t	C _t	A _s	m	A _{s/y}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ²
50	50	4	5.45	6.95	23.7	23.7	1.85	1.85	9.49	9.49	11.7	11.7	40.4	14.4	0.186	183	268
50	50	5	6.56	8.36	27.0	27.0	1.80	1.80	10.8	10.8	13.7	13.7	47.4	16.6	0.183	152	219
50	50	6	7.56	9.63	29.5	29.5	1.75	1.75	11.8	11.8	15.3	15.3	53.2	18.2	0.179	132	186
50	50	6.3	7.57	9.65	27.9	27.9	1.70	1.70	11.2	11.2	14.9	14.9	53.0	18.0	0.173	132	179
52	52	3	4.43	5.65	22.1	22.1	1.98	1.98	8.51	8.51	10.2	10.2	36.4	12.8	0.198	226	350
55	55	3	4.72	6.01	26.5	26.5	2.10	2.10	9.65	9.65	11.6	11.6	43.4	14.6	0.210	212	349
60	60	1.5	2.71	3.45	19.5	19.5	2.38	2.38	6.51	6.51	7.53	7.53	30.5	9.77	0.235	369	680
60	60	2	3.56	4.54	25.1	25.1	2.35	2.35	8.38	8.38	9.79	9.79	39.8	12.6	0.233	281	514
60	60	2.5	4.39	5.59	30.3	30.3	2.33	2.33	10.1	10.1	11.9	11.9	48.7	15.2	0.231	228	414
60	60	3	5.19	6.61	35.1	35.1	2.31	2.31	11.7	11.7	14.0	14.0	57.1	17.7	0.230	193	348
60	60	4	6.71	8.55	43.6	43.6	2.26	2.26	14.5	14.5	17.6	17.6	72.6	22.0	0.226	149	265
60	60	5	8.13	10.4	50.5	50.5	2.21	2.21	16.8	16.8	20.9	20.9	86.4	25.6	0.223	123	215
60	60	6	9.45	12.0	56.1	56.1	2.16	2.16	18.7	18.7	23.7	23.7	98.4	28.6	0.219	106	182
60	60	6.3	9.55	12.2	54.4	54.4	2.11	2.11	18.1	18.1	23.4	23.4	100	28.8	0.213	105	175
64	64	2.5	4.70	5.99	37.2	37.2	2.49	2.49	11.6	11.6	13.7	13.7	59.5	17.5	0.247	213	413
64	64	3	5.56	7.09	43.2	43.2	2.47	2.47	13.5	13.5	16.0	16.0	69.9	20.3	0.246	180	347
65	65	2	3.88	4.94	32.3	32.3	2.56	2.56	9.94	9.94	11.6	11.6	50.9	14.9	0.253	258	513
65	65	2.5	4.78	6.09	39.1	39.1	2.53	2.53	12.0	12.0	14.1	14.1	62.4	18.1	0.251	209	413
65	65	3	5.66	7.21	45.4	45.4	2.51	2.51	14.0	14.0	16.6	16.6	73.3	21.0	0.250	177	346
65	65	4	7.34	9.35	56.6	56.6	2.46	2.46	17.4	17.4	21.0	21.0	93.7	26.3	0.246	136	263
70	70	1.5	3.18	4.05	31.5	31.5	2.79	2.79	9.0	9.0	10.4	10.4	48.8	13.5	0.275	314	678
70	70	2	4.19	5.34	40.7	40.7	2.76	2.76	11.6	11.6	13.5	13.5	64.0	17.5	0.273	239	512
70	70	2.5	5.17	6.59	49.4	49.4	2.74	2.74	14.1	14.1	16.5	16.5	78.5	21.2	0.271	193	412
70	70	3	6.13	7.81	57.5	57.5	2.71	2.71	16.4	16.4	19.4	19.4	92.4	24.7	0.270	163	345
70	70	4	7.97	10.1	72.1	72.1	2.67	2.67	20.6	20.6	24.8	24.8	119	31.1	0.266	126	262
70	70	5	9.70	12.4	84.6	84.6	2.62	2.62	24.2	24.2	29.6	29.6	142	36.6	0.263	103	213
70	70	6	11.3	14.4	95.2	95.2	2.57	2.57	27.2	27.2	33.8	33.8	163	41.4	0.259	88.3	180
70	70	6.3	11.5	14.7	93.8	93.8	2.53	2.53	26.8	26.8	33.8	33.8	168	42.1	0.253	86.7	172
80	80	1.5	3.65	4.65	47.5	47.5	3.19	3.19	11.9	11.9	13.6	13.6	73.4	17.8	0.315	274	677
80	80	2	4.82	6.14	61.7	61.7	3.17	3.17	15.4	15.4	17.8	17.8	96.3	23.2	0.313	208	510
80	80	2.5	5.96	7.59	75.1	75.1	3.15	3.15	18.8	18.8	21.9	21.9	119	28.2	0.311	168	410
80	80	3	7.07	9.01	87.8	87.8	3.12	3.12	22.0	22.0	25.8	25.8	140	33.0	0.310	141	344
80	80	4	9.22	11.7	111	111	3.07	3.07	27.8	27.8	33.1	33.1	180	41.8	0.306	108	261
80	80	5	11.3	14.4	131	131	3.03	3.03	32.9	32.9	39.7	39.7	218	49.7	0.303	88.7	211
80	80	6	13.2	16.8	149	149	2.98	2.98	37.3	37.3	45.8	45.8	252	56.6	0.299	75.7	178
80	80	6.3	13.5	17.2	149	149	2.94	2.94	37.1	37.1	46.1	46.1	261	57.9	0.293	74.0	170
80	80	7	14.7	18.8	158	158	2.90	2.90	39.4	39.4	49.5	49.5	281	61.8	0.290	67.9	155
80	80	8	16.4	20.8	168	168	2.84	2.84	42.1	42.1	53.9	53.9	307	66.6	0.286	61.1	137
90	90	1.5	4.12	5.25	68.2	68.2	3.60	3.60	15.2	15.2	17.4	17.4	105	22.7	0.355	243	676
90	90	2	5.45	6.94	88.9	88.9	3.58	3.58	19.7	19.7	22.8	22.8	138	29.6	0.353	184	509
90	90	2.5	6.74	8.59	109	109	3.56	3.56	24.1	24.1	28.0	28.0	170	36.2	0.351	148	409
90	90	3	8.01	10.2	127	127	3.53	3.53	28.3	28.3	33.0	33.0	201	42.5	0.350	125	343
90	90	4	10.5	13.3	162	162	3.48	3.48	36.0	36.0	42.6	42.6	261	54.2	0.346	95.4	259
90	90	5	12.8	16.4	193	193	3.43	3.43	42.9	42.9	51.4	51.4	316	64.7	0.343	77.9	210

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

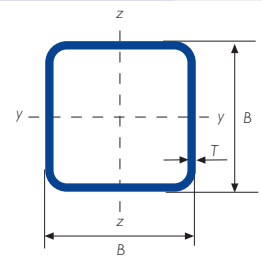


Cold-finished tubular profile range - square

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
B	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elox}	W _{ely}	W _{plx}	W _{ply}	I _t	C _t	A _s		A _{s/v}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ²
90	90	6	15.1	19.2	220	220	3.39	3.39	49.0	49.0	59.5	59.5	368	74.2	0.339	66.2	176
90	90	6.3	15.5	19.7	221	221	3.35	3.35	49.1	49.1	60.3	60.3	382	76.2	0.333	64.6	169
90	90	7	16.9	21.6	236	236	3.31	3.31	52.5	52.5	65.1	65.1	414	81.8	0.330	59.1	153
90	90	8	18.9	24.0	255	255	3.25	3.25	56.6	56.6	71.3	71.3	456	88.8	0.326	53.0	135
100	100	2	6.1	7.7	123	123	3.99	3.99	24.6	24.6	28.3	28.3	191	36.9	0.393	164.6	508
100	100	2.5	7.53	9.59	151	151	3.96	3.96	30.1	30.1	34.9	34.9	235	45.2	0.391	133	408
100	100	3	8.96	11.4	177	177	3.94	3.94	35.4	35.4	41.2	41.2	279	53.2	0.390	112	342
100	100	4	11.7	14.9	226	226	3.89	3.89	45.3	45.3	53.3	53.3	362	68.1	0.386	85.2	258
100	100	5	14.4	18.4	271	271	3.84	3.84	54.2	54.2	64.6	64.6	440	81.7	0.383	69.4	209
100	100	6	17.0	21.6	311	311	3.79	3.79	62.3	62.3	75.1	75.1	514	94.1	0.379	58.9	175
100	100	6.3	17.5	22.2	314	314	3.76	3.76	62.8	62.8	76.4	76.4	536	97.0	0.373	57.3	168
100	100	7	19.1	24.4	337	337	3.72	3.72	67.4	67.4	82.7	82.7	583	105	0.370	52.3	152
100	100	8	21.4	27.2	366	366	3.67	3.67	73.2	73.2	91.1	91.1	645	114	0.366	46.8	134
100	100	10	25.6	32.6	411	411	3.55	3.55	82.2	82.2	105	105	750	130	0.357	39.1	110
100	100	12	28.3	36.1	408	408	3.36	3.36	81.6	81.6	110	110	794	136	0.338	35.3	93.8
100	100	12.5	29.1	37.0	410	410	3.33	3.33	82.1	82.1	111	111	804	137	0.336	34.4	90.6
101.6	101.6	5	14.7	18.7	285	285	3.91	3.91	56.2	56.2	66.8	66.8	463	84.6	0.389	68.2	208
110	110	2	6.70	8.54	165	165	4.40	4.40	30.0	30.0	34.4	34.4	255	45.0	0.433	149	507
110	110	2.5	8.31	10.6	202	202	4.37	4.37	36.8	36.8	42.5	42.5	315	55.2	0.431	120	407
110	110	3	9.90	12.6	238	238	4.35	4.35	43.3	43.3	50.3	50.3	374	65.1	0.430	101	341
110	110	4	13.0	16.5	306	306	4.30	4.30	55.6	55.6	65.2	65.2	486	83.6	0.426	77.0	258
110	110	5	16.0	20.4	368	368	4.25	4.25	66.9	66.9	79.3	79.3	594	101	0.423	62.6	208
110	110	6	18.9	24.0	425	425	4.20	4.20	77.2	77.2	92.5	92.5	695	116	0.419	53.0	175
110	110	6.3	19.4	24.8	430	430	4.17	4.17	78.2	78.2	94.4	94.4	726	120	0.413	51.4	167
110	110	7	21.3	27.2	463	463	4.13	4.13	84.2	84.2	102	102	791	130	0.410	46.9	151
110	110	8	23.9	30.4	506	506	4.08	4.08	91.9	91.9	113	113	879	143	0.406	41.8	133
110	110	10	28.7	36.6	575	575	3.96	3.96	105	105	132	132	1,032	164	0.397	34.8	109
110	110	12	32.1	40.9	585	585	3.78	3.78	106	106	140	140	1,120	175	0.378	31.2	92.6
110	110	12.5	33.0	42.0	591	591	3.75	3.75	107	107	143	143	1,139	178	0.376	30.3	89.3
115	115	5	16.8	21.4	424	424	4.46	4.46	73.7	73.7	87.2	87.2	682	111	0.443	59.6	207
120	120	2	7.33	9.3	215	215	4.80	4.80	35.9	35.9	41.2	41.2	332	54	0.473	136	507
120	120	2.5	9.10	11.6	265	265	4.78	4.78	44.1	44.1	50.8	50.8	411	66	0.471	110	407
120	120	3	10.8	13.8	312	312	4.76	4.76	52.1	52.1	60.2	60.2	488	78	0.470	92.3	340
120	120	4	14.2	18.1	402	402	4.71	4.71	67.0	67.0	78.3	78.3	637	101	0.466	70.2	257
120	120	5	17.5	22.4	485	485	4.66	4.66	80.9	80.9	95.4	95.4	778	122	0.463	57.0	207
120	120	6	20.7	26.4	562	562	4.61	4.61	93.7	93.7	112	112	913	141	0.459	48.2	174
120	120	6.3	21.4	27.3	572	572	4.58	4.58	95.3	95.3	114	114	955	146	0.453	46.7	166
120	120	7	23.5	30.0	617	617	4.54	4.54	103	103	124	124	1,044	158	0.450	42.5	150
120	120	8	26.4	33.6	677	677	4.49	4.49	113	113	138	138	1,163	175	0.446	37.9	132
120	120	10	31.8	40.6	777	777	4.38	4.38	129	129	162	162	1,376	203	0.437	31.4	108
120	120	12	35.8	45.7	806	806	4.20	4.20	134	134	174	174	1,519	219	0.418	27.9	91.6
120	120	12.5	36.9	47.0	817	817	4.17	4.17	136	136	178	178	1,551	223	0.416	27.1	88.3
125	125	2	7.64	9.74	244	244	5.01	5.01	39.1	39.1	44.8	44.8	376	59	0.493	131	506
125	125	2.5	9.49	12.1	300	300	4.98	4.98	48.1	48.1	55.3	55.3	465	72	0.491	105	406

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

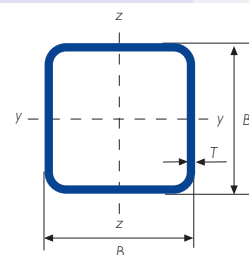


Cold-finished tubular profile range - square

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
B	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elox}	W _{elyy}	W _{plox}	W _{plyy}	I _t	C _t	A _s	m	A _{s/y}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ⁻¹
125	125	3	11.3	14.4	355	355	4.96	4.96	56.7	56.7	65.6	65.6	553	85	0.490	88.4	340
125	125	4	14.9	18.9	457	457	4.91	4.91	73.2	73.2	85.3	85.3	722	110	0.486	67.2	257
125	125	5	18.3	23.4	553	553	4.86	4.86	88.4	88.4	104	104	884	133	0.483	54.5	207
125	125	6	21.7	27.6	641	641	4.82	4.82	103	103	122	122	1,038	154	0.479	46.1	173
125	125	6.3	22.4	28.5	653	653	4.78	4.78	104	104	125	125	1,086	160	0.473	44.6	166
125	125	7	24.6	31.4	706	706	4.74	4.74	113	113	136	136	1,188	174	0.470	40.6	150
125	125	8	27.7	35.2	775	775	4.69	4.69	124	124	151	151	1,325	192	0.466	36.1	132
125	125	10	33.4	42.6	893	893	4.58	4.58	143	143	178	178	1,574	223	0.457	29.9	107
125	125	12	37.7	48.1	934	934	4.41	4.41	149	149	192	192	1,748	243	0.438	26.5	91.2
125	125	12.5	38.9	49.5	949	949	4.38	4.38	152	152	197	197	1,788	248	0.436	25.7	87.9
130	130	2.5	9.88	12.6	339	339	5.19	5.19	52.1	52.1	59.9	59.9	524	78	0.511	101	406
130	130	3	11.8	15.0	400	400	5.16	5.16	61.6	61.6	71.1	71.1	623	92	0.510	84.9	340
130	130	4	15.5	19.7	517	517	5.12	5.12	79.5	79.5	92.6	92.6	815	119	0.506	64.5	256
130	130	5	19.1	24.4	626	626	5.07	5.07	96.3	96.3	113	113	998	145	0.503	52.3	206
130	130	6	22.6	28.8	727	727	5.02	5.02	112	112	133	133	1,174	168	0.499	44.2	173
130	130	6.3	23.4	29.8	741	741	4.99	4.99	114	114	136	136	1,229	175	0.493	42.7	165
130	130	7	25.7	32.8	802	802	4.95	4.95	123	123	148	148	1,345	190	0.490	38.9	150
130	130	8	28.9	36.8	883	883	4.90	4.90	136	136	165	165	1,502	210	0.486	34.6	132
130	130	10	35.0	44.6	1,021	1,021	4.79	4.79	157	157	195	195	1,788	245	0.477	28.6	107
130	130	12	39.6	50.5	1,075	1,075	4.62	4.62	165	165	212	212	1,999	268	0.458	25.2	90.8
130	130	12.5	40.9	52.0	1,093	1,093	4.58	4.58	168	168	217	217	2,047	274	0.456	24.5	87.5
140	140	3	12.7	16.2	503	503	5.57	5.57	71.9	71.9	82.9	82.9	781	108	0.550	78.6	339
140	140	4	16.8	21.3	652	652	5.52	5.52	93.1	93.1	108	108	1,023	140	0.546	59.7	256
140	140	5	20.7	26.4	791	791	5.48	5.48	113	113	132	132	1,256	170	0.543	48.3	206
140	140	6	24.5	31.2	920	920	5.43	5.43	131	131	155	155	1,479	198	0.539	40.8	173
140	140	6.3	25.4	32.3	941	941	5.39	5.39	134	134	160	160	1,550	205	0.533	39.4	165
140	140	7	27.9	35.6	1,021	1,021	5.36	5.36	146	146	174	174	1,698	223	0.530	35.8	149
140	140	8	31.4	40.0	1,127	1,127	5.30	5.30	161	161	194	194	1,901	248	0.526	31.8	131
140	140	10	38.1	48.6	1,312	1,312	5.20	5.20	187	187	230	230	2,274	291	0.517	26.2	106
140	140	12	43.4	55.3	1,398	1,398	5.03	5.03	200	200	253	253	2,568	322	0.498	23.1	90.2
140	140	12.5	44.8	57.0	1,425	1,425	5.00	5.00	204	204	259	259	2,635	329	0.496	22.3	86.9
150	150	3	13.7	17.4	623	623	5.98	5.98	83.0	83.0	96	96	965	125	0.590	73.2	339
150	150	4	18.0	22.9	808	808	5.93	5.93	108	108	125	125	1,265	162	0.586	55.5	255
150	150	5	22.3	28.4	982	982	5.89	5.89	131	131	153	153	1,554	197	0.583	44.9	206
150	150	6	26.4	33.6	1,146	1,146	5.84	5.84	153	153	180	180	1,833	230	0.579	37.9	172
150	150	6.3	27.4	34.8	1,174	1,174	5.80	5.80	156	156	185	185	1,922	239	0.573	36.6	164
150	150	7	30.1	38.4	1,276	1,276	5.77	5.77	170	170	202	202	2,108	260	0.570	33.2	149
150	150	8	33.9	43.2	1,412	1,412	5.71	5.71	188	188	226	226	2,364	289	0.566	29.5	131
150	150	10	41.3	52.6	1,653	1,653	5.61	5.61	220	220	269	269	2,839	341	0.557	24.2	106
150	150	12	47.1	60.1	1,780	1,780	5.44	5.44	237	237	298	298	3,231	380	0.538	21.2	89.6
150	150	12.5	48.7	62.0	1,817	1,817	5.41	5.41	242	242	306	306	3,322	389	0.536	20.5	86.3
160	160	3	14.6	18.6	760	760	6.39	6.39	95.0	95.0	109	109	1,174	142	0.630	68.5	338
160	160	4	19.3	24.5	987	987	6.34	6.34	123	123	143	143	1,541	185	0.626	51.9	255
160	160	5	23.8	30.4	1,202	1,202	6.29	6.29	150	150	175	175	1,896	226	0.623	42.0	205

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

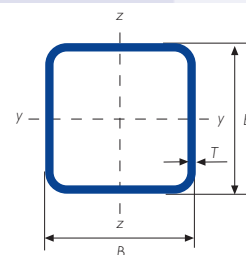


Cold-finished tubular profile range - square

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
B	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elxx}	W _{elyy}	W _{plxx}	W _{plyy}	I _t	C _t	A _s	m	A _{s/v}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ⁻¹
160	160	6	28.3	36.0	1,405	1,405	6.25	6.25	176	176	206	206	2,239	264	0.619	35.4	172
160	160	6.3	29.3	37.4	1,442	1,442	6.21	6.21	180	180	213	213	2,349	275	0.613	34.1	164
160	160	7	32.3	41.2	1,570	1,570	6.18	6.18	196	196	233	233	2,579	300	0.610	31.0	148
160	160	8	36.5	46.4	1,741	1,741	6.12	6.12	218	218	260	260	2,897	334	0.606	27.4	130
160	160	10	44.4	56.6	2,048	2,048	6.02	6.02	256	256	311	311	3,490	395	0.597	22.5	106
160	160	12	50.9	64.9	2,224	2,224	5.86	5.86	278	278	346	346	3,997	443	0.578	19.6	89.1
160	160	12.5	52.6	67.0	2,275	2,275	5.83	5.83	284	284	356	356	4,115	455	0.576	19.0	85.9
175	175	3	16.0	20.4	1,000	1,000	7.00	7.00	114	114	131	131	1,543	172	0.690	62.4	338
175	175	4	21.2	26.9	1,303	1,303	6.95	6.95	149	149	172	172	2,028	224	0.686	47.3	255
175	175	5	26.2	33.4	1,591	1,591	6.91	6.91	182	182	211	211	2,498	273	0.683	38.2	205
175	175	6	31.1	39.6	1,864	1,864	6.86	6.86	213	213	249	249	2,954	320	0.679	32.1	171
175	175	6.3	32.3	41.1	1,917	1,917	6.83	6.83	219	219	257	257	3,100	333	0.673	31.0	164
175	175	7	35.6	45.4	2,090	2,090	6.79	6.79	239	239	282	282	3,409	364	0.670	28.1	148
175	175	8	40.2	51.2	2,325	2,325	6.74	6.74	266	266	316	316	3,836	406	0.666	24.9	130
175	175	10	49.1	62.6	2,751	2,751	6.63	6.63	314	314	379	379	4,641	484	0.657	20.4	105
175	175	12	56.6	72.1	3,020	3,020	6.47	6.47	345	345	425	425	5,354	547	0.638	17.7	88.6
175	175	12.5	58.5	74.5	3,095	3,095	6.44	6.44	354	354	438	438	5,521	562	0.636	17.1	85.3
180	180	3	16.5	21.0	1,091	1,091	7.21	7.21	121	121	139	139	1,681	182	0.710	60.6	338
180	180	4	21.8	27.7	1,422	1,422	7.16	7.16	158	158	182	182	2,210	237	0.706	45.9	255
180	180	5	27.0	34.4	1,737	1,737	7.11	7.11	193	193	224	224	2,724	290	0.703	37.1	205
180	180	6	32.1	40.8	2,037	2,037	7.06	7.06	226	226	264	264	3,223	340	0.699	31.2	171
180	180	6.3	33.3	42.4	2,096	2,096	7.03	7.03	233	233	273	273	3,383	354	0.693	30.0	163
180	180	7	36.7	46.8	2,287	2,287	6.99	6.99	254	254	299	299	3,720	387	0.690	27.2	148
180	180	8	41.5	52.8	2,546	2,546	6.94	6.94	283	283	336	336	4,189	432	0.686	24.1	130
180	180	10	50.7	64.6	3,017	3,017	6.84	6.84	335	335	404	404	5,074	515	0.677	19.7	105
180	180	12	58.5	74.5	3,322	3,322	6.68	6.68	369	369	454	454	5,866	584	0.658	17.1	88.4
180	180	12.5	60.5	77.0	3,406	3,406	6.65	6.65	378	378	467	467	6,051	600	0.656	16.5	85.1
200	200	4	24.3	30.9	1,968	1,968	7.97	7.97	197	197	226	226	3,049	295	0.786	41.2	254
200	200	5	30.1	38.4	2,410	2,410	7.93	7.93	241	241	279	279	3,763	362	0.783	33.2	204
200	200	6	35.8	45.6	2,833	2,833	7.88	7.88	283	283	330	330	4,459	426	0.779	27.9	171
200	200	6.3	37.2	47.4	2,922	2,922	7.85	7.85	292	292	341	341	4,682	444	0.773	26.8	163
200	200	7	41.1	52.4	3,194	3,194	7.81	7.81	319	319	375	375	5,156	486	0.770	24.3	147
200	200	8	46.5	59.2	3,566	3,566	7.76	7.76	357	357	421	421	5,815	544	0.766	21.5	129
200	200	10	57.0	72.6	4,251	4,251	7.65	7.65	425	425	508	508	7,072	651	0.757	17.6	104
200	200	12	66.0	84.1	4,730	4,730	7.50	7.50	473	473	576	576	8,231	743	0.738	15.2	87.8
200	200	12.5	68.3	87.0	4,859	4,859	7.47	7.47	486	486	594	594	8,502	766	0.736	14.6	84.5
200	200	14.2	76.1	96.9	5,261	5,261	7.37	7.37	526	526	651	651	9,376	835	0.727	13.1	75.0
220	220	4	26.8	34.1	2,639	2,639	8.79	8.79	240	240	275	275	4,076	360	0.866	37.3	254
220	220	5	33.2	42.4	3,238	3,238	8.74	8.74	294	294	340	340	5,038	442	0.863	30.1	204
220	220	6	39.6	50.4	3,813	3,813	8.70	8.70	347	347	402	402	5,976	521	0.859	25.3	170
220	220	6.3	41.2	52.5	3,940	3,940	8.66	8.66	358	358	417	417	6,277	543	0.853	24.3	163
220	220	7	45.5	58.0	4,314	4,314	8.63	8.63	392	392	458	458	6,919	595	0.850	22.0	147
220	220	8	51.5	65.6	4,828	4,828	8.58	8.58	439	439	516	516	7,815	668	0.846	19.4	129
220	220	10	63.2	80.6	5,782	5,782	8.47	8.47	526	526	625	625	9,533	804	0.837	15.8	104

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

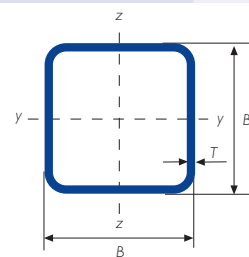


Cold-finished tubular profile range - square

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
B	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elox}	W _{elyy}	W _{plox}	W _{plyy}	I _t	C _t	A _s	m	A _{s/y}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
220	220	12	73.5	93.7	6,487	6,487	8.32	8.32	590	590	712	712	11,149	922	0.818	13.6	87.4
220	220	12.5	76.2	97.0	6,674	6,674	8.29	8.29	607	607	735	735	11,530	951	0.816	13.1	84.0
220	220	14.2	85.0	108	7,264	7,264	8.19	8.19	660	660	809	809	12,767	1,042	0.807	11.8	74.5
250	250	4	30.6	38.9	3,907	3,907	10.0	10.0	313	313	358	358	6,014	469	0.986	32.7	253
250	250	5	38.0	48.4	4,805	4,805	9.97	9.97	384	384	442	442	7,443	577	0.983	26.3	203
250	250	6	45.2	57.6	5,672	5,672	9.92	9.92	454	454	524	524	8,842	681	0.979	22.1	170
250	250	6.3	47.1	60.0	5,873	5,873	9.89	9.89	470	470	544	544	9,290	711	0.973	21.2	162
250	250	7	52.1	66.4	6,443	6,443	9.85	9.85	515	515	599	599	10,251	781	0.970	19.2	146
250	250	8	59.1	75.2	7,229	7,229	9.80	9.80	578	578	676	676	11,598	878	0.966	16.9	128
250	250	10	72.7	92.6	8,707	8,707	9.70	9.70	697	697	822	822	14,197	1,062	0.957	13.8	103
250	250	12	84.8	108	9,859	9,859	9.55	9.55	789	789	944	944	16,692	1,227	0.938	11.8	86.8
250	250	12.5	88.0	112	10,161	10,161	9.52	9.52	813	813	975	975	17,283	1,266	0.936	11.4	83.5
250	250	14.2	98.3	125	11,127	11,127	9.42	9.42	890	890	1,078	1,078	19,222	1,395	0.927	10.2	74.0
250	250	16	109	139	12,047	12,047	9.32	9.32	964	964	1,180	1,180	21,148	1,520	0.918	9.2	66.1
260	260	4	31.8	40.5	4,406	4,406	10.4	10.4	339	339	388	388	6,775	508	1.03	31.4	253
260	260	5	39.5	50.4	5,422	5,422	10.4	10.4	417	417	479	479	8,388	626	1.02	25.3	203
260	260	6	47.1	60.0	6,405	6,405	10.3	10.3	493	493	569	569	9,970	739	1.02	21.2	170
260	260	6.3	49.1	62.6	6,635	6,635	10.3	10.3	510	510	591	591	10,475	772	1.01	20.4	162
260	260	7	54.3	69.2	7,283	7,283	10.3	10.3	560	560	651	651	11,562	849	1.01	18.4	146
260	260	8	61.6	78.4	8,178	8,178	10.2	10.2	629	629	734	734	13,087	955	1.01	16.2	128
260	260	10	75.8	96.6	9,865	9,865	10.1	10.1	759	759	894	894	16,035	1,156	0.997	13.2	103
260	260	12	88.6	113	11,200	11,200	9.96	9.96	862	862	1,028	1,028	18,879	1,338	0.978	11.3	86.7
260	260	12.5	91.9	117	11,548	11,548	9.93	9.93	888	888	1,063	1,063	19,554	1,381	0.976	10.9	83.4
260	260	14.2	103	131	12,666	12,666	9.83	9.83	974	974	1,176	1,176	21,773	1,524	0.967	9.73	73.8
260	260	16	114	145	13,739	13,739	9.73	9.73	1,057	1,057	1,289	1,289	23,988	1,663	0.958	8.77	66.0
300	300	5	45.8	58.4	8,417	8,417	12.0	12.0	561	561	643	643	12,968	842	1.18	21.8	203
300	300	6	54.7	69.6	9,964	9,964	12.0	12.0	664	664	764	764	15,434	997	1.18	18.3	169
300	300	6.3	57.0	72.6	10,342	10,342	11.9	11.9	689	689	795	795	16,218	1,042	1.17	17.5	161
300	300	7	63.1	80.4	11,371	11,371	11.9	11.9	758	758	876	876	17,919	1,147	1.17	15.9	146
300	300	8	71.6	91.2	12,801	12,801	11.8	11.8	853	853	991	991	20,312	1,293	1.17	14.0	128
300	300	10	88.4	113	15,519	15,519	11.7	11.7	1,035	1,035	1,211	1,211	24,966	1,572	1.16	11.3	103
300	300	12	104	132	17,767	17,767	11.6	11.6	1,184	1,184	1,402	1,402	29,515	1,829	1.14	9.65	86.2
300	300	12.5	108	137	18,348	18,348	11.6	11.6	1,223	1,223	1,451	1,451	30,601	1,892	1.14	9.30	82.9
300	300	14.2	121	154	20,232	20,232	11.5	11.5	1,349	1,349	1,612	1,612	34,199	2,096	1.13	8.29	73.3
300	300	16	134	171	22,076	22,076	11.4	11.4	1,472	1,472	1,774	1,774	37,839	2,299	1.12	7.46	65.4
325	325	5	49.7	63.4	10,757	10,757	13.0	13.0	662	662	758	758	16,540	993	1.28	20.1	202
325	325	6	59.4	75.6	12,748	12,748	13.0	13.0	784	784	901	901	19,698	1,177	1.28	16.8	169
325	325	6.3	62.0	78.9	13,244	13,244	13.0	13.0	815	815	938	938	20,700	1,231	1.27	16.1	161
325	325	7	68.6	87.4	14,575	14,575	12.9	12.9	897	897	1,035	1,035	22,882	1,356	1.27	14.6	145
325	325	8	77.9	99.2	16,427	16,427	12.9	12.9	1,011	1,011	1,171	1,171	25,956	1,530	1.27	12.8	128
325	325	10	96.2	123	19,966	19,966	12.8	12.8	1,229	1,229	1,433	1,433	31,950	1,865	1.26	10.4	103
350	350	6	64.1	81.6	16,008	16,008	14.0	14.0	915	915	1,049	1,049	24,683	1,372	1.38	15.6	169
350	350	6.3	66.9	85.2	16,645	16,645	14.0	14.0	951	951	1,093	1,093	25,939	1,436	1.37	14.9	161
350	350	7	74.1	94.4	18,329	18,329	13.9	13.9	1,047	1,047	1,206	1,206	28,684	1,582	1.37	13.5	145

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

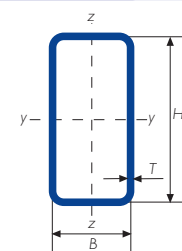


Cold-finished tubular profile range - square

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
B	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elox}	W _{elyy}	W _{plox}	W _{plyy}	I _t	C _t	A _s		A _{s/v}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ⁻¹
350	350	8	84.2	107	20,681	20,681	13.9	13.9	1,182	1,182	1,366	1,366	32,557	1,787	1.37	11.9	127
350	350	10	104	133	25,189	25,189	13.8	13.8	1,439	1,439	1,675	1,675	40,127	2,182	1.36	9.61	102
350	350	12	123	156	29,054	29,054	13.6	13.6	1,660	1,660	1,949	1,949	47,599	2,552	1.34	8.16	85.7
350	350	12.5	127	162	30,045	30,045	13.6	13.6	1,717	1,717	2,020	2,020	49,394	2,642	1.34	7.86	82.4
350	350	14.2	143	182	33,288	33,288	13.5	13.5	1,902	1,902	2,252	2,252	55,373	2,939	1.33	7.00	72.9
350	350	16	159	203	36,511	36,511	13.4	13.4	2,086	2,086	2,488	2,488	61,483	3,238	1.32	6.28	65.0
400	400	8	96.7	123	31,269	31,269	15.9	15.9	1,563	1,563	1,800	1,800	48,934	2,362	1.57	10.3	127
400	400	10	120	153	38,216	38,216	15.8	15.8	1,911	1,911	2,214	2,214	60,431	2,892	1.56	8.35	102
400	400	6	73.5	93.6	24,104	24,104	16.0	16.0	1,205	1,205	1,379	1,379	37,039	1,808	1.58	13.6	169
400	400	6.3	76.8	97.8	25,096	25,096	16.0	16.0	1,255	1,255	1,438	1,438	38,925	1,892	1.57	13.0	161
400	400	7	85.1	108	27,668	27,668	16.0	16.0	1,383	1,383	1,588	1,588	43,072	2,088	1.57	11.8	145
400	400	8	96.7	123	31,269	31,269	15.9	15.9	1,563	1,563	1,800	1,800	48,934	2,362	1.57	10.3	127
400	400	10	120	153	38,216	38,216	15.8	15.8	1,911	1,911	2,214	2,214	60,431	2,892	1.56	8.35	102
400	400	12	141	180	44,319	44,319	15.7	15.7	2,216	2,216	2,587	2,587	71,844	3,395	1.54	7.07	85.4
400	400	12.5	147	187	45,877	45,877	15.7	15.7	2,294	2,294	2,683	2,683	74,599	3,518	1.54	6.81	82.1
400	400	14.2	165	210	51,004	51,004	15.6	15.6	2,550	2,550	2,999	2,999	83,807	3,924	1.53	6.05	72.5
400	400	16	184	235	56,154	56,154	15.5	15.5	2,808	2,808	3,322	3,322	93,281	4,336	1.52	5.43	64.6

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

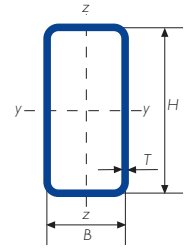


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elox}	W_{elyy}	W_{plox}	W_{plyy}	I_t	C_t	A_s	m	$A_{s/y}$
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
25	15	1.5	0.826	1.05	0.802	0.356	0.873	0.582	0.642	0.475	0.821	0.572	0.845	0.811	0.075	1,211	711
25	15	2	1.05	1.34	0.953	0.418	0.844	0.559	0.763	0.558	1.01	0.698	1.03	0.964	0.073	953	547
25	15	2.5	1.25	1.59	1.05	0.458	0.815	0.537	0.844	0.610	1.15	0.793	1.17	1.07	0.071	802	449
25	15	3	1.42	1.81	1.11	0.478	0.784	0.514	0.888	0.637	1.25	0.861	1.26	1.13	0.070	704	385
25	20	1.5	0.944	1.20	1.01	0.711	0.916	0.769	0.807	0.711	0.997	0.854	1.40	1.14	0.085	1,060	706
25	20	2	1.21	1.54	1.22	0.855	0.890	0.746	0.975	0.855	1.24	1.06	1.74	1.38	0.083	829	541
25	20	2.5	1.44	1.84	1.37	0.959	0.864	0.722	1.10	0.959	1.43	1.22	2.02	1.57	0.081	693	443
25	20	3	1.65	2.11	1.48	1.03	0.837	0.698	1.18	1.03	1.58	1.35	2.23	1.70	0.080	604	378
30	10	1.5	0.826	1.05	0.976	0.160	0.963	0.390	0.651	0.320	0.889	0.392	0.492	0.594	0.075	1,211	711
30	10	2	1.05	1.34	1.15	0.182	0.928	0.368	0.768	0.363	1.09	0.468	0.577	0.681	0.073	953	547
30	15	1.5	0.944	1.20	1.28	0.425	1.03	0.595	0.854	0.567	1.10	0.674	1.09	0.994	0.085	1,060	706
30	15	2	1.21	1.54	1.54	0.503	1.00	0.572	1.03	0.671	1.37	0.828	1.34	1.19	0.083	829	541
30	15	2.5	1.44	1.84	1.73	0.557	0.971	0.550	1.16	0.742	1.58	0.949	1.53	1.33	0.081	693	443
30	15	3	1.65	2.11	1.86	0.588	0.939	0.528	1.24	0.784	1.74	1.04	1.67	1.42	0.080	604	378
30	20	1.5	1.06	1.35	1.59	0.840	1.08	0.788	1.06	0.840	1.32	0.993	1.83	1.40	0.095	942	702
30	20	2	1.36	1.74	1.94	1.02	1.06	0.765	1.29	1.02	1.65	1.24	2.29	1.71	0.093	733	536
30	20	2.5	1.64	2.09	2.21	1.15	1.03	0.742	1.47	1.15	1.92	1.44	2.68	1.95	0.091	610	438
30	20	3	1.89	2.41	2.41	1.25	1.00	0.720	1.60	1.25	2.15	1.61	2.99	2.13	0.090	529	372
30	20	4	2.31	2.95	2.60	1.34	0.940	0.673	1.74	1.34	2.46	1.83	3.37	2.33	0.086	432	293
30	25	1.5	1.18	1.50	1.89	1.42	1.12	0.974	1.26	1.14	1.53	1.35	2.66	1.80	0.105	848	698
30	25	2	1.52	1.94	2.33	1.75	1.10	0.950	1.55	1.40	1.93	1.70	3.37	2.23	0.103	658	532
30	25	2.5	1.84	2.34	2.68	2.01	1.07	0.926	1.79	1.61	2.27	1.99	3.98	2.57	0.101	545	434
30	25	3	2.13	2.71	2.96	2.21	1.04	0.903	1.97	1.76	2.55	2.24	4.50	2.85	0.100	470	368
35	10	1.5	0.944	1.20	1.49	0.187	1.11	0.395	0.851	0.375	1.17	0.456	0.598	0.703	0.085	1,060	706
35	10	2	1.21	1.54	1.78	0.214	1.08	0.373	1.02	0.428	1.44	0.548	0.704	0.812	0.083	829	541
35	15	1.5	1.06	1.35	1.91	0.494	1.19	0.604	1.09	0.658	1.42	0.775	1.35	1.18	0.095	942	702
35	15	2	1.36	1.74	2.33	0.589	1.16	0.582	1.33	0.785	1.77	0.958	1.66	1.42	0.093	733	536
35	20	1.5	1.18	1.50	2.33	0.969	1.25	0.803	1.33	0.969	1.67	1.13	2.28	1.65	0.105	848	698
35	20	2	1.52	1.94	2.87	1.18	1.22	0.781	1.64	1.18	2.10	1.42	2.86	2.03	0.103	658	532
35	20	2.5	1.84	2.34	3.30	1.34	1.19	0.758	1.89	1.34	2.48	1.66	3.36	2.33	0.101	545	434
35	20	3	2.13	2.71	3.64	1.47	1.16	0.736	2.08	1.47	2.79	1.86	3.77	2.57	0.100	470	368
35	20	4	2.63	3.35	4.03	1.60	1.10	0.691	2.30	1.60	3.25	2.15	4.31	2.85	0.096	380	288
35	25	1.5	1.30	1.65	2.75	1.63	1.29	0.994	1.57	1.31	1.92	1.53	3.35	2.13	0.115	771	695
35	25	2	1.68	2.14	3.42	2.01	1.26	0.971	1.95	1.61	2.43	1.93	4.25	2.65	0.113	596	529
35	25	2.5	2.03	2.59	3.97	2.33	1.24	0.948	2.27	1.86	2.88	2.28	5.05	3.08	0.111	492	430
35	25	3	2.36	3.01	4.41	2.57	1.21	0.925	2.52	2.06	3.27	2.57	5.73	3.43	0.110	423	365
35	25	4	2.94	3.75	4.99	2.89	1.15	0.878	2.85	2.31	3.87	3.03	6.76	3.92	0.106	340	284
35	27	3	2.46	3.13	4.72	3.12	1.23	0.998	2.69	2.31	3.46	2.88	6.58	3.78	0.114	407	363
35	27	4	3.07	3.91	5.38	3.53	1.17	0.951	3.07	2.62	4.12	3.42	7.82	4.35	0.110	326	282
35	30	1.5	1.41	1.80	3.17	2.50	1.33	1.18	1.81	1.67	2.18	1.96	4.52	2.61	0.125	707	693
35	30	2	1.83	2.34	3.96	3.11	1.30	1.15	2.26	2.08	2.76	2.49	5.78	3.27	0.123	545	527
35	30	2.5	2.23	2.84	4.63	3.63	1.28	1.13	2.64	2.42	3.29	2.95	6.90	3.83	0.121	449	428
35	30	3	2.60	3.31	5.18	4.05	1.25	1.11	2.96	2.70	3.75	3.36	7.90	4.30	0.120	385	362
35	30	4	3.26	4.15	5.96	4.65	1.20	1.06	3.41	3.10	4.49	4.02	9.48	5.00	0.116	307	280

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

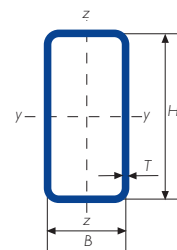


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elxx}	W _{ely}	W _{plxx}	W _{ply}	I _t	C _t	A _s		A _{s/v}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ⁻¹
40	10	1.5	1.06	1.35	2.15	0.215	1.26	0.399	1.08	0.430	1.49	0.519	0.704	0.813	0.095	942	702
40	10	2	1.36	1.74	2.60	0.247	1.22	0.377	1.30	0.494	1.85	0.628	0.831	0.942	0.093	733	536
40	15	1.5	1.18	1.50	2.71	0.562	1.34	0.612	1.35	0.750	1.78	0.876	1.60	1.36	0.105	848	698
40	15	2	1.52	1.94	3.33	0.674	1.31	0.590	1.66	0.898	2.23	1.09	1.98	1.64	0.103	658	532
40	15	2.5	1.84	2.34	3.81	0.755	1.28	0.568	1.91	1.01	2.62	1.26	2.28	1.86	0.101	545	434
40	15	3	2.13	2.71	4.18	0.809	1.24	0.547	2.09	1.08	2.95	1.40	2.50	2.01	0.100	470	368
40	20	1.5	1.30	1.65	3.27	1.10	1.41	0.815	1.63	1.10	2.07	1.27	2.74	1.91	0.115	771	695
40	20	2	1.68	2.14	4.05	1.34	1.38	0.793	2.02	1.34	2.61	1.60	3.45	2.36	0.113	596	529
40	20	2.5	2.03	2.59	4.69	1.54	1.35	0.770	2.35	1.54	3.09	1.88	4.06	2.72	0.111	492	430
40	20	3	2.36	3.01	5.21	1.68	1.32	0.748	2.60	1.68	3.50	2.12	4.56	3.00	0.110	423	365
40	20	4	2.94	3.75	5.87	1.86	1.25	0.704	2.93	1.86	4.13	2.47	5.27	3.37	0.106	340	284
40	25	1.5	1.41	1.80	3.82	1.84	1.46	1.01	1.91	1.47	2.36	1.70	4.06	2.46	0.125	707	693
40	25	2	1.83	2.34	4.77	2.28	1.43	0.988	2.39	1.82	2.99	2.16	5.17	3.07	0.123	545	527
40	25	2.5	2.23	2.84	5.57	2.64	1.40	0.965	2.79	2.11	3.56	2.56	6.15	3.59	0.121	449	428
40	25	3	2.60	3.31	6.24	2.94	1.37	0.942	3.12	2.35	4.06	2.90	7.00	4.01	0.120	385	362
40	27	1.5	1.46	1.86	4.04	2.20	1.47	1.09	2.02	1.63	2.47	1.89	4.63	2.69	0.129	684	692
40	27	2	1.90	2.42	5.06	2.73	1.45	1.06	2.53	2.03	3.15	2.39	5.91	3.36	0.127	527	526
40	27	2.5	2.31	2.94	5.93	3.18	1.42	1.04	2.96	2.36	3.75	2.85	7.05	3.93	0.125	433	427
40	27	3	2.69	3.43	6.65	3.55	1.39	1.02	3.32	2.63	4.28	3.24	8.06	4.42	0.124	372	361
40	27	4	3.38	4.31	7.69	4.07	1.34	0.972	3.85	3.01	5.14	3.88	9.66	5.14	0.120	296	279
40	30	1.5	1.53	1.95	4.38	2.81	1.50	1.20	2.19	1.87	2.64	2.17	5.52	3.02	0.135	653	691
40	30	2	1.99	2.54	5.49	3.51	1.47	1.18	2.75	2.34	3.37	2.77	7.07	3.79	0.133	502	525
40	30	2.5	2.42	3.09	6.45	4.10	1.45	1.15	3.23	2.74	4.03	3.30	8.47	4.46	0.131	412	425
40	30	3	2.83	3.61	7.27	4.60	1.42	1.13	3.63	3.07	4.61	3.77	9.72	5.03	0.130	353	359
40	30	4	3.57	4.55	8.47	5.33	1.36	1.08	4.24	3.55	5.57	4.54	11.76	5.90	0.126	280	278
40	35	1.5	1.65	2.10	4.93	4.02	1.53	1.38	2.47	2.30	2.93	2.68	7.09	3.57	0.145	606	689
40	35	2	2.15	2.74	6.22	5.05	1.51	1.36	3.11	2.89	3.75	3.42	9.12	4.51	0.143	465	523
40	35	2.5	2.62	3.34	7.33	5.95	1.48	1.33	3.67	3.40	4.50	4.10	10.97	5.33	0.141	382	424
40	35	3	3.07	3.91	8.29	6.72	1.46	1.31	4.15	3.84	5.17	4.71	12.65	6.05	0.140	326	357
45	10	1.5	1.18	1.50	2.99	0.242	1.41	0.402	1.33	0.484	1.85	0.583	0.811	0.922	0.105	848	698
45	15	1.5	1.30	1.65	3.70	0.631	1.50	0.618	1.64	0.841	2.17	0.977	1.86	1.54	0.115	771	695
45	15	2	1.68	2.14	4.57	0.759	1.46	0.596	2.03	1.01	2.74	1.22	2.30	1.87	0.113	596	529
45	15	2.5	2.03	2.59	5.28	0.854	1.43	0.574	2.35	1.14	3.24	1.42	2.66	2.12	0.111	492	430
45	15	3	2.36	3.01	5.83	0.919	1.39	0.553	2.59	1.23	3.66	1.58	2.92	2.30	0.110	423	365
45	20	1.5	1.41	1.80	4.41	1.23	1.56	0.825	1.96	1.23	2.50	1.41	3.21	2.17	0.125	707	693
45	20	2	1.83	2.34	5.49	1.51	1.53	0.803	2.44	1.51	3.17	1.78	4.05	2.68	0.123	545	527
45	20	2.5	2.23	2.84	6.41	1.73	1.50	0.781	2.85	1.73	3.77	2.10	4.77	3.10	0.121	449	428
45	20	3	2.60	3.31	7.15	1.90	1.47	0.759	3.18	1.90	4.29	2.37	5.38	3.44	0.120	385	362
45	25	1.5	1.53	1.95	5.12	2.05	1.62	1.02	2.27	1.64	2.83	1.88	4.79	2.79	0.135	653	691
45	25	2	1.99	2.54	6.42	2.54	1.59	1.00	2.85	2.04	3.60	2.39	6.11	3.49	0.133	502	525
45	25	2.5	2.42	3.09	7.54	2.96	1.56	0.979	3.35	2.37	4.30	2.84	7.28	4.09	0.131	412	425
45	25	3	2.83	3.61	8.48	3.30	1.53	0.957	3.77	2.64	4.92	3.23	8.31	4.60	0.130	353	359
45	30	1.5	1.65	2.10	5.83	3.11	1.66	1.22	2.59	2.07	3.15	2.39	6.55	3.42	0.145	606	689
45	30	2	2.15	2.74	7.34	3.90	1.64	1.19	3.26	2.60	4.03	3.05	8.40	4.31	0.143	465	523

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

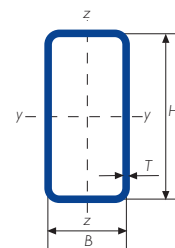


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elxx}	W_{elyy}	W_{plxx}	W_{plyy}	I_t	C_t	A_s	m	$A_{s/v}$
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
45	30	2.5	2.62	3.34	8.67	4.58	1.61	1.17	3.85	3.05	4.83	3.64	10.09	5.09	0.141	382	424
45	30	3	3.07	3.91	9.80	5.15	1.58	1.15	4.36	3.43	5.55	4.17	11.60	5.76	0.140	326	357
45	30	4	3.88	4.95	11.6	6.01	1.53	1.10	5.13	4.01	6.76	5.06	14.12	6.81	0.136	257	275
45	35	1.5	1.77	2.25	6.54	4.44	1.70	1.40	2.90	2.54	3.48	2.93	8.45	4.05	0.155	566	688
45	35	2	2.31	2.94	8.27	5.60	1.68	1.38	3.68	3.20	4.46	3.75	10.89	5.13	0.153	434	521
45	35	2.5	2.82	3.59	9.80	6.61	1.65	1.36	4.35	3.78	5.36	4.51	13.13	6.09	0.151	355	422
45	35	3	3.30	4.21	11.1	7.49	1.63	1.33	4.95	4.28	6.18	5.19	15.18	6.93	0.150	303	356
45	35	4	4.20	5.35	13.2	8.86	1.57	1.29	5.88	5.06	7.58	6.35	18.68	8.28	0.146	238	273
45	40	2	2.46	3.14	9.19	7.66	1.71	1.56	4.09	3.83	4.89	4.51	13.53	5.95	0.163	406	520
45	40	2.5	3.01	3.84	10.9	9.10	1.69	1.54	4.86	4.55	5.90	5.44	16.37	7.09	0.161	332	420
45	40	3	3.54	4.51	12.5	10.35	1.66	1.52	5.54	5.18	6.81	6.28	18.99	8.10	0.160	283	354
45	40	4	4.51	5.75	14.9	12.38	1.61	1.47	6.63	6.19	8.40	7.73	23.55	9.77	0.156	222	272
48	25	1.5	1.60	2.04	6.01	2.17	1.72	1.03	2.50	1.74	3.13	1.98	5.24	2.99	0.141	624	690
48	25	2	2.09	2.66	7.56	2.70	1.69	1.01	3.15	2.16	3.99	2.52	6.68	3.75	0.139	479	524
50	10	1.5	1.30	1.65	4.01	0.270	1.56	0.404	1.60	0.54	2.24	0.647	0.919	1.03	0.115	771	695
50	10	2	1.68	2.14	4.93	0.312	1.52	0.382	1.97	0.62	2.82	0.788	1.09	1.20	0.113	596	529
50	10	2.5	2.03	2.59	5.65	0.338	1.48	0.361	2.26	0.68	3.32	0.896	1.20	1.31	0.111	492	430
50	10	3	2.36	3.01	6.20	0.350	1.44	0.341	2.48	0.70	3.75	0.971	1.25	1.36	0.110	423	365
50	15	1.5	1.41	1.80	4.89	0.699	1.65	0.623	1.96	0.93	2.60	1.08	2.13	1.72	0.125	707	693
50	15	2	1.83	2.34	6.08	0.844	1.61	0.601	2.43	1.13	3.30	1.35	2.63	2.10	0.123	545	527
50	20	1.5	1.53	1.95	5.77	1.35	1.72	0.833	2.31	1.35	2.97	1.55	3.69	2.42	0.135	653	691
50	20	2	1.99	2.54	7.23	1.67	1.69	0.811	2.89	1.67	3.78	1.96	4.66	3.00	0.133	502	525
50	20	2.5	2.42	3.09	8.48	1.92	1.66	0.789	3.39	1.92	4.51	2.32	5.49	3.49	0.131	412	425
50	20	3	2.83	3.61	9.51	2.12	1.62	0.767	3.81	2.12	5.16	2.63	6.20	3.88	0.130	353	359
50	25	1.5	1.65	2.10	6.65	2.25	1.78	1.04	2.66	1.80	3.33	2.05	5.54	3.13	0.145	606	689
50	25	2	2.15	2.74	8.38	2.81	1.75	1.01	3.35	2.25	4.26	2.62	7.06	3.92	0.143	465	523
50	25	2.5	2.62	3.34	9.89	3.28	1.72	0.991	3.95	2.62	5.11	3.12	8.43	4.60	0.141	382	424
50	25	3	3.07	3.91	11.2	3.67	1.69	0.969	4.47	2.93	5.86	3.63	9.63	5.18	0.140	326	357
50	25	4	3.88	4.95	13.1	4.23	1.63	0.924	5.25	3.38	7.13	4.17	11.6	6.05	0.136	257	275
50	27	2	2.21	2.82	8.84	3.36	1.77	1.09	3.54	2.49	4.45	2.89	8.11	4.28	0.147	452	522
50	27	2.5	2.70	3.44	10.5	3.94	1.74	1.07	4.18	2.92	5.34	3.46	9.71	5.05	0.145	370	423
50	27	3	3.16	4.03	11.8	4.42	1.71	1.05	4.73	3.27	6.14	3.96	11.1	5.70	0.144	316	357
50	27	4	4.01	5.11	14.0	5.14	1.65	1.00	5.59	3.81	7.50	4.80	13.5	6.71	0.140	249	275
50	30	1.5	1.77	2.25	7.54	3.42	1.83	1.23	3.01	2.28	3.70	2.60	7.60	3.83	0.155	566	688
50	30	2	2.31	2.94	9.54	4.29	1.80	1.21	3.81	2.86	4.74	3.33	9.77	4.84	0.153	434	521
50	30	2.5	2.82	3.59	11.3	5.05	1.77	1.19	4.52	3.37	5.70	3.98	11.7	5.72	0.151	355	422
50	30	3	3.30	4.21	12.8	5.70	1.75	1.16	5.13	3.80	6.57	4.58	13.5	6.49	0.150	303	356
50	30	4	4.20	5.35	15.3	6.69	1.69	1.12	6.10	4.46	8.05	5.58	16.5	7.71	0.146	238	273
50	30	5	4.99	6.36	16.9	7.33	1.63	1.07	6.75	4.88	9.20	6.34	18.8	8.55	0.143	200	225
50	35	1.5	1.89	2.40	8.42	4.86	1.87	1.42	3.37	2.78	4.06	3.18	9.86	4.53	0.165	530	686
50	35	2	2.46	3.14	10.7	6.14	1.85	1.40	4.28	3.51	5.22	4.08	12.7	5.75	0.163	406	520
50	35	2.5	3.01	3.84	12.7	7.27	1.82	1.38	5.08	4.16	6.29	4.91	15.4	6.84	0.161	332	420
50	35	3	3.54	4.51	14.5	8.26	1.79	1.35	5.80	4.72	7.27	5.67	17.8	7.80	0.160	283	354
50	40	1.5	2.00	2.55	9.30	6.60	1.91	1.61	3.72	3.30	4.42	3.80	12.3	5.24	0.175	499	685

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

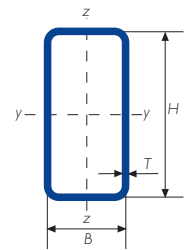


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elox}	W_{ely}	W_{plox}	W_{ply}	I_t	C_t	A_s		$A_{s/v}$
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ²
50	40	2	2.62	3.34	11.8	8.39	1.88	1.59	4.74	4.19	5.70	4.89	15.9	6.67	0.173	382	519
50	40	2.5	3.21	4.09	14.1	9.98	1.86	1.56	5.65	4.99	6.89	5.90	19.2	7.96	0.171	312	419
50	40	3	3.77	4.81	16.1	11.4	1.83	1.54	6.46	5.69	7.98	6.83	22.3	9.12	0.170	265	353
50	40	4	4.83	6.15	19.5	13.7	1.78	1.49	7.80	6.84	9.89	8.45	27.8	11.1	0.166	207	270
50	45	2	2.78	3.54	13.0	11.0	1.92	1.77	5.20	4.91	6.18	5.75	19.2	7.59	0.183	360	518
50	45	2.5	3.41	4.34	15.5	13.2	1.89	1.74	6.21	5.86	7.48	6.96	23.3	9.09	0.181	294	418
50	45	3	4.01	5.11	17.8	15.1	1.87	1.72	7.12	6.71	8.68	8.07	27.1	10.4	0.180	249	352
50	45	4	5.14	6.55	21.6	18.3	1.82	1.67	8.65	8.13	10.8	10.0	34.0	12.7	0.176	195	269
50	48	1.5	2.19	2.79	10.7	10.1	1.96	1.90	4.28	4.19	5.01	4.87	16.4	6.37	0.191	456	684
52	40	4	4.95	6.31	21.5	14.2	1.85	1.50	8.28	7.10	10.51	8.74	29.6	11.6	0.170	202	270
60	10	1.5	1.53	1.95	6.69	0.324	1.85	0.408	2.23	0.649	3.14	0.774	1.13	1.25	0.135	653	691
60	10	2	1.99	2.54	8.32	0.378	1.81	0.386	2.77	0.755	3.99	0.948	1.35	1.46	0.133	502	525
60	15	1.5	1.65	2.10	7.97	0.837	1.95	0.631	2.66	1.12	3.58	1.28	2.66	2.09	0.145	606	689
60	15	2	2.15	2.74	10.0	1.01	1.91	0.609	3.33	1.35	4.57	1.61	3.29	2.55	0.143	465	523
60	15	2.5	2.62	3.34	11.7	1.15	1.87	0.587	3.91	1.53	5.46	1.89	3.81	2.91	0.141	382	424
60	15	3	3.07	3.91	13.2	1.25	1.84	0.566	4.39	1.67	6.26	2.12	4.21	3.18	0.140	326	357
60	20	1.5	1.77	2.25	9.25	1.61	2.03	0.846	3.08	1.61	4.02	1.83	4.66	2.94	0.155	566	688
60	20	2	2.31	2.94	11.7	1.99	1.99	0.824	3.89	1.99	5.15	2.32	5.89	3.65	0.153	434	521
60	20	2.5	2.82	3.59	13.8	2.31	1.96	0.802	4.60	2.31	6.18	2.75	6.96	4.26	0.151	355	422
60	20	3	3.30	4.21	15.6	2.56	1.93	0.780	5.21	2.56	7.11	3.14	7.87	4.75	0.150	303	356
60	20	4	4.20	5.35	18.4	2.90	1.86	0.737	6.14	2.90	8.68	3.75	9.23	5.45	0.146	238	273
60	25	1.5	1.89	2.40	10.5	2.67	2.09	1.05	3.51	2.13	4.46	2.41	7.05	3.79	0.165	530	686
60	25	2	2.46	3.14	13.4	3.34	2.06	1.03	4.45	2.67	5.73	3.08	9.01	4.77	0.163	406	520
60	25	2.5	3.01	3.84	15.9	3.91	2.03	1.01	5.29	3.13	6.90	3.68	10.8	5.61	0.161	332	420
60	25	3	3.54	4.51	18.1	4.40	2.00	0.988	6.02	3.52	7.97	4.22	12.3	6.34	0.160	283	354
60	27	2	2.53	3.22	14.0	3.99	2.09	1.11	4.68	2.95	5.96	3.39	10.4	5.21	0.167	396	520
60	27	2.5	3.09	3.94	16.7	4.69	2.06	1.09	5.57	3.47	7.19	4.07	12.5	6.16	0.165	323	420
60	27	3	3.63	4.63	19.0	5.29	2.03	1.07	6.35	3.92	8.31	4.68	14.3	6.98	0.164	275	354
60	27	4	4.64	5.91	22.8	6.21	1.97	1.02	7.61	4.60	10.3	5.72	17.4	8.29	0.160	216	271
60	30	1.5	2.00	2.55	11.8	4.03	2.15	1.26	3.94	2.68	4.90	3.03	9.77	4.64	0.175	499	685
60	30	2	2.62	3.34	15.0	5.08	2.12	1.23	5.02	3.39	6.31	3.89	12.6	5.88	0.173	382	519
60	30	2.5	3.21	4.09	17.9	6.00	2.09	1.21	5.98	4.00	7.62	4.67	15.1	6.98	0.171	312	419
60	30	3	3.77	4.81	20.5	6.80	2.06	1.19	6.83	4.53	8.82	5.39	17.5	7.95	0.170	265	353
60	30	4	4.83	6.15	24.7	8.06	2.00	1.14	8.23	5.37	10.9	6.62	21.5	9.52	0.166	207	270
60	34	2	2.75	3.50	16.4	6.77	2.17	1.39	5.46	3.98	6.77	4.57	15.7	6.77	0.181	364	518
60	34	2.5	3.37	4.29	19.6	8.03	2.14	1.37	6.53	4.73	8.19	5.51	19.0	8.08	0.179	297	418
60	34	3	3.96	5.05	22.5	9.15	2.11	1.35	7.48	5.38	9.51	6.38	22.0	9.24	0.178	252	352
60	34	4	5.08	6.47	27.2	11.0	2.05	1.30	9.07	6.44	11.8	7.88	27.2	11.2	0.174	197	269
60	35	1.5	2.12	2.70	13.1	5.70	2.20	1.45	4.37	3.26	5.34	3.68	12.8	5.50	0.185	471	684
60	35	2	2.78	3.54	16.7	7.23	2.17	1.43	5.58	4.13	6.89	4.74	16.5	7.00	0.183	360	518
60	35	2.5	3.41	4.34	20.0	8.60	2.15	1.41	6.67	4.91	8.34	5.73	20.0	8.35	0.181	294	418
60	35	3	4.01	5.11	22.9	9.80	2.12	1.39	7.65	5.60	9.68	6.63	23.2	9.56	0.180	249	352
60	40	1.5	2.24	2.85	14.4	7.71	2.25	1.64	4.80	3.86	5.77	4.38	16.0	6.35	0.195	447	683
60	40	2	2.93	3.74	18.4	9.83	2.22	1.62	6.14	4.92	7.47	5.65	20.7	8.12	0.193	341	517

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

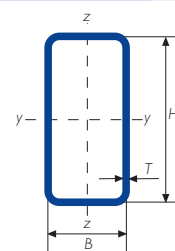


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elxx}	W_{elyy}	W_{plxx}	W_{plyy}	I_t	C_t	A_s	m	$A_{s/v}$
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
60	40	2.5	3.60	4.59	22.1	11.7	2.19	1.60	7.36	5.87	9.06	6.84	25.1	9.72	0.191	278	417
60	40	3	4.25	5.41	25.4	13.4	2.17	1.58	8.46	6.72	10.5	7.94	29.3	11.2	0.190	236	351
60	40	4	5.45	6.95	31.0	16.3	2.11	1.53	10.3	8.14	13.2	9.89	36.7	13.7	0.186	183	268
60	40	5	6.56	8.36	35.3	18.4	2.06	1.48	11.8	9.21	15.4	11.5	42.8	15.6	0.183	152	219
60	40	6	7.56	9.63	38.5	19.9	2.00	1.44	12.8	9.97	17.2	12.8	47.8	17.1	0.179	132	186
60	40	6.3	7.57	9.65	36.2	19.0	1.94	1.40	12.1	9.48	16.6	12.5	47.3	16.8	0.173	132	179
60	45	1.5	2.36	3.00	15.7	10.1	2.28	1.83	5.22	4.48	6.21	5.11	19.4	7.20	0.205	424	682
60	45	2	3.09	3.94	20.1	12.9	2.26	1.81	6.70	5.73	8.05	6.61	25.2	9.23	0.203	324	516
60	45	2.5	3.80	4.84	24.1	15.4	2.23	1.79	8.05	6.87	9.77	8.02	30.6	11.1	0.201	263	416
60	45	3	4.48	5.71	27.8	17.8	2.21	1.76	9.27	7.89	11.4	9.33	35.8	12.8	0.200	223	350
60	48	2	3.18	4.06	21.1	15.0	2.28	1.92	7.03	6.24	8.40	7.21	28.0	9.91	0.209	314	515
60	50	1.5	2.47	3.15	17.0	12.8	2.32	2.02	5.65	5.13	6.65	5.88	22.9	8.06	0.215	404	682
60	50	2	3.25	4.14	21.8	16.5	2.29	1.99	7.26	6.58	8.63	7.62	29.9	10.4	0.213	308	515
60	50	2.5	3.99	5.09	26.2	19.8	2.27	1.97	8.74	7.91	10.5	9.26	36.4	12.5	0.211	250	415
60	50	3	4.72	6.01	30.3	22.8	2.24	1.95	10.1	9.11	12.2	10.8	42.6	14.4	0.210	212	349
60	50	4	6.08	7.75	37.3	28.0	2.19	1.90	12.4	11.2	15.4	13.6	53.9	17.8	0.206	164	266
60	50	5	7.34	9.36	42.9	32.1	2.14	1.85	14.3	12.8	18.1	16.0	63.7	20.6	0.203	136	217
60	50	6	8.50	10.8	47.3	35.3	2.09	1.81	15.8	14.1	20.4	18.0	72.0	22.8	0.199	118	184
65	25	1.5	2.00	2.55	12.9	2.88	2.25	1.06	3.97	2.30	5.08	2.58	7.83	4.12	0.175	499	685
65	25	2	2.62	3.34	16.4	3.60	2.22	1.04	5.06	2.88	6.54	3.31	10.0	5.19	0.173	382	519
65	25	2.5	3.21	4.09	19.6	4.23	2.19	1.02	6.02	3.39	7.89	3.96	12.0	6.12	0.171	312	419
65	25	3	3.77	4.81	22.3	4.76	2.16	0.995	6.87	3.81	9.13	4.55	13.7	6.93	0.170	265	353
65	35	1.5	2.24	2.85	15.9	6.12	2.36	1.47	4.91	3.50	6.03	3.93	14.2	5.98	0.195	447	683
65	35	2	2.93	3.74	20.4	7.78	2.34	1.44	6.28	4.44	7.80	5.07	18.4	7.62	0.193	341	517
65	35	2.5	3.60	4.59	24.4	9.26	2.31	1.42	7.52	5.29	9.45	6.13	22.3	9.10	0.191	278	417
65	35	3	4.25	5.41	28.1	10.6	2.28	1.40	8.65	6.04	11.0	7.11	25.9	10.4	0.190	236	351
65	35	4	5.45	6.95	34.3	12.7	2.22	1.35	10.5	7.27	13.7	8.83	32.2	12.7	0.186	183	268
65	55	2	3.56	4.54	28.3	21.9	2.50	2.20	8.72	7.98	10.3	9.21	39.2	12.5	0.233	281	514
70	20	1.5	2.00	2.55	13.9	1.87	2.33	0.856	3.96	1.87	5.22	2.10	5.64	3.45	0.175	499	685
70	20	2	2.62	3.34	17.6	2.32	2.30	0.834	5.03	2.32	6.72	2.68	7.14	4.30	0.173	382	519
70	20	2.5	3.21	4.09	20.9	2.69	2.26	0.812	5.98	2.69	8.10	3.19	8.44	5.03	0.171	312	419
70	20	3	3.77	4.81	23.8	3.00	2.23	0.790	6.81	3.00	9.37	3.65	9.56	5.63	0.170	265	353
70	25	1.5	2.12	2.70	15.6	3.08	2.40	1.07	4.46	2.47	5.73	2.76	8.60	4.45	0.185	471	684
70	25	2	2.78	3.54	19.9	3.87	2.37	1.05	5.69	3.10	7.40	3.54	11.0	5.61	0.183	360	518
70	25	2.5	3.41	4.34	23.8	4.55	2.34	1.02	6.79	3.64	8.94	4.24	13.2	6.63	0.181	294	418
70	25	3	4.01	5.11	27.2	5.13	2.31	1.00	7.77	4.10	10.4	4.88	15.1	7.51	0.180	249	352
70	27	2	2.84	3.62	20.8	4.61	2.40	1.13	5.95	3.42	7.67	3.89	12.7	6.14	0.187	352	517
70	27	2.5	3.48	4.44	24.9	5.44	2.37	1.11	7.12	4.03	9.28	4.68	15.3	7.27	0.185	287	418
70	27	3	4.10	5.23	28.6	6.16	2.34	1.09	8.16	4.56	10.8	5.40	17.6	8.27	0.184	244	351
70	30	1.5	2.24	2.85	17.4	4.63	2.47	1.27	4.97	3.09	6.25	3.45	12.0	5.45	0.195	447	683
70	30	2	2.93	3.74	22.2	5.86	2.44	1.25	6.35	3.91	8.08	4.45	15.4	6.93	0.193	341	517
70	30	2.5	3.60	4.59	26.6	6.95	2.41	1.23	7.61	4.63	9.79	5.36	18.6	8.24	0.191	278	417
70	30	3	4.25	5.41	30.6	7.90	2.38	1.21	8.74	5.26	11.4	6.20	21.5	9.41	0.190	236	351
70	30	4	5.45	6.95	37.2	9.42	2.31	1.16	10.6	6.28	14.2	7.66	26.5	11.3	0.186	183	268

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

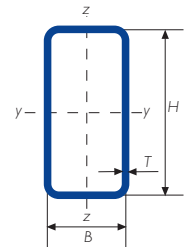


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elxx}	W _{ely}	W _{plx}	W _{ply}	I _t	C _t	A _s		A _{s/v}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ⁻¹
70	30	5	6.56	8.36	42.3	10.5	2.25	1.12	12.1	6.99	16.6	8.84	30.4	12.7	0.183	152	219
70	30	6	7.56	9.63	45.9	11.2	2.18	1.08	13.1	7.45	18.5	9.77	33.3	13.7	0.179	132	186
70	35	1.5	2.36	3.00	19.1	6.54	2.52	1.48	5.47	3.74	6.76	4.19	15.7	6.46	0.205	424	682
70	35	2	3.09	3.94	24.5	8.32	2.50	1.45	7.01	4.76	8.76	5.40	20.4	8.24	0.203	324	516
70	35	2.5	3.80	4.84	29.5	9.92	2.47	1.43	8.42	5.67	10.6	6.54	24.7	9.86	0.201	263	416
70	35	3	4.48	5.71	33.9	11.3	2.44	1.41	9.70	6.48	12.4	7.59	28.7	11.3	0.200	223	350
70	40	1.5	2.47	3.15	20.9	8.83	2.57	1.67	5.97	4.41	7.28	4.95	19.8	7.46	0.215	404	682
70	40	2	3.25	4.14	26.9	11.3	2.55	1.65	7.67	5.64	9.44	6.41	25.7	9.56	0.213	308	515
70	40	2.5	3.99	5.09	32.3	13.5	2.52	1.63	9.23	6.75	11.5	7.78	31.3	11.5	0.211	250	415
70	40	3	4.72	6.01	37.3	15.5	2.49	1.61	10.7	7.75	13.4	9.05	36.5	13.2	0.210	212	349
70	40	4	6.08	7.75	46.0	18.9	2.44	1.56	13.1	9.44	16.8	11.3	45.8	16.2	0.206	164	266
70	40	5	7.34	9.36	52.9	21.5	2.38	1.52	15.1	10.8	19.8	13.3	53.8	18.7	0.203	136	217
70	40	6	8.50	10.8	58.2	23.5	2.32	1.47	16.6	11.7	22.3	14.9	60.2	20.5	0.199	118	184
70	40	6.3	8.56	10.9	55.3	22.6	2.25	1.44	15.8	11.3	21.8	14.6	60.3	20.4	0.193	117	177
70	50	1.5	2.71	3.45	24.4	14.6	2.66	2.06	6.98	5.84	8.30	6.61	28.7	9.47	0.235	369	680
70	50	2	3.56	4.54	31.5	18.8	2.63	2.03	8.99	7.50	10.8	8.58	37.5	12.2	0.233	281	513.8
70	50	2.5	4.39	5.59	38.0	22.6	2.61	2.01	10.9	9.04	13.2	10.4	45.8	14.7	0.231	228	414
70	50	3	5.19	6.61	44.1	26.1	2.58	1.99	12.6	10.4	15.4	12.2	53.6	17.1	0.230	193	348
70	50	4	6.71	8.55	54.7	32.2	2.53	1.94	15.6	12.9	19.5	15.4	68.1	21.2	0.226	149	265
70	50	5	8.13	10.4	63.5	37.2	2.48	1.90	18.1	14.9	23.1	18.2	80.8	24.6	0.223	123	215
70	50	6	9.45	12.0	70.5	41.1	2.42	1.85	20.1	16.5	26.2	20.6	91.7	27.5	0.219	106	182
70	50	6.3	9.55	12.2	68.1	40.0	2.37	1.81	19.5	16.0	25.8	20.4	93.0	27.6	0.213	105	175
75	50	3	5.42	6.91	52.2	27.8	2.75	2.00	13.9	11.1	17.1	12.9	59.3	18.4	0.240	184	347
80	15	1.5	2.12	2.70	17.4	1.11	2.54	0.641	4.36	1.48	5.98	1.69	3.73	2.82	0.185	471	684
80	15	2	2.78	3.54	22.1	1.36	2.50	0.619	5.54	1.81	7.71	2.13	4.63	3.46	0.183	360	518
80	15	2.5	3.41	4.34	26.3	1.55	2.46	0.597	6.58	2.06	9.30	2.51	5.36	3.97	0.181	294	418
80	15	3	4.01	5.11	30.0	1.69	2.42	0.575	7.50	2.25	10.8	2.84	5.94	4.35	0.180	249	352
80	20	1.5	2.24	2.85	19.7	2.13	2.63	0.863	4.94	2.13	6.57	2.38	6.64	3.97	0.195	447	683
80	20	2	2.93	3.74	25.2	2.64	2.60	0.841	6.30	2.64	8.49	3.04	8.40	4.96	0.193	341	517
80	20	2.5	3.60	4.59	30.1	3.08	2.56	0.819	7.52	3.08	10.3	3.63	9.94	5.80	0.191	278	417
80	20	3	4.25	5.41	34.5	3.44	2.52	0.797	8.61	3.44	11.9	4.16	11.3	6.50	0.190	236	351
80	20	4	5.45	6.95	41.7	3.95	2.45	0.754	10.4	3.95	14.8	5.03	13.3	7.54	0.186	183	268
80	20	5	6.56	8.36	46.9	4.24	2.37	0.712	11.7	4.24	17.2	5.67	14.6	8.14	0.183	152	219
80	20	6	7.56	9.63	50.4	4.34	2.29	0.672	12.6	4.34	19.1	6.09	15.1	8.36	0.179	132	186
80	20	6.3	7.57	9.65	45.6	4.07	2.17	0.649	11.4	4.07	18.2	5.82	13.8	7.81	0.173	132	179
80	25	1.5	2.36	3.00	22.1	3.50	2.71	1.08	5.51	2.80	7.16	3.11	10.2	5.12	0.205	424	682
80	25	2	3.09	3.94	28.2	4.40	2.68	1.06	7.06	3.52	9.27	4.00	13.0	6.46	0.203	324	516
80	25	2.5	3.80	4.84	33.8	5.18	2.64	1.04	8.46	4.15	11.2	4.81	15.6	7.65	0.201	263	416
80	25	3	4.48	5.71	38.9	5.86	2.61	1.01	9.73	4.69	13.1	5.54	17.9	8.68	0.200	223	350
80	30	1.5	2.47	3.15	24.4	5.24	2.78	1.29	6.09	3.50	7.75	3.88	14.3	6.27	0.215	404	682
80	30	2	3.25	4.14	31.3	6.65	2.75	1.27	7.82	4.43	10.0	5.01	18.4	7.97	0.213	308	515
80	30	2.5	3.99	5.09	37.6	7.90	2.72	1.25	9.40	5.26	12.2	6.05	22.2	9.50	0.211	250	415
80	30	3	4.72	6.01	43.4	8.99	2.69	1.22	10.8	6.00	14.2	7.01	25.6	10.9	0.210	212	349
80	30	4	6.08	7.75	53.2	10.8	2.62	1.18	13.3	7.19	17.9	8.70	31.7	13.1	0.206	164	266

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

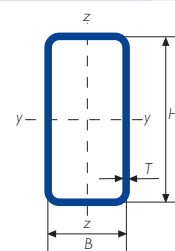


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elxx}	W_{elyy}	W_{plxx}	W_{plyy}	I_t	C_t	A_s	m	$A_{s/y}$
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
80	30	5	7.34	9.36	61.0	12.1	2.55	1.14	15.3	8.05	21.0	10.1	36.4	14.9	0.203	136	217
80	30	6	8.50	10.8	66.9	12.9	2.48	1.09	16.7	8.63	23.6	11.2	40.0	16.1	0.199	118	184
80	30	6.3	8.56	10.9	62.8	12.4	2.40	1.07	15.7	8.27	22.9	11.0	39.2	15.7	0.193	117	177
80	40	1.5	2.71	3.45	29.0	9.9	2.90	1.70	7.25	4.97	8.93	5.53	23.8	8.57	0.235	369	680
80	40	2	3.56	4.54	37.4	12.7	2.87	1.67	9.34	6.36	11.6	7.17	30.9	11.0	0.233	281	514
80	40	2.5	4.39	5.59	45.1	15.3	2.84	1.65	11.3	7.63	14.1	8.72	37.6	13.2	0.231	228	414
80	40	3	5.19	6.61	52.3	17.6	2.81	1.63	13.1	8.78	16.5	10.2	43.9	15.3	0.230	193	348
80	40	4	6.71	8.55	64.8	21.5	2.75	1.59	16.2	10.7	20.9	12.8	55.2	18.8	0.226	149	265
80	40	5	8.13	10.4	75.1	24.6	2.69	1.54	18.8	12.3	24.7	15.0	65.0	21.7	0.223	123	215
80	40	6	9.45	12.0	83.3	27.0	2.63	1.50	20.8	13.5	28.0	16.9	73.0	24.0	0.219	106	182
80	40	6.3	9.55	12.2	79.9	26.2	2.56	1.47	20.0	13.1	27.5	16.7	73.5	24.0	0.213	105	175
80	40	1.5	2.71	3.45	29.0	9.94	2.90	1.70	7.25	4.97	8.93	5.53	23.8	8.57	0.235	369	680
80	40	2	3.56	4.54	37.4	12.7	2.87	1.67	9.34	6.36	11.6	7.17	30.9	11.0	0.233	281	514
80	40	2.5	4.39	5.59	45.1	15.3	2.84	1.65	11.3	7.63	14.1	8.72	37.6	13.2	0.231	228	414
80	40	3	5.19	6.61	52.3	17.6	2.81	1.63	13.1	8.78	16.5	10.2	43.9	15.3	0.230	193	348
80	40	4	6.71	8.55	64.8	21.5	2.75	1.59	16.2	10.7	20.9	12.8	55.2	18.8	0.226	149	265
80	40	5	8.13	10.4	75.1	24.6	2.69	1.54	18.8	12.3	24.7	15.0	65.0	21.7	0.223	123	215
80	40	6	9.45	12.0	83.3	27.0	2.63	1.50	20.8	13.5	28.0	16.9	73.0	24.0	0.219	106	182
80	40	6.3	9.55	12.2	79.9	26.2	2.56	1.47	20.0	13.1	27.5	16.7	73.5	24.0	0.213	105	175
80	45	1.5	2.83	3.60	31.3	12.9	2.95	1.89	7.82	5.74	9.52	6.41	29.1	9.73	0.245	354	680
80	45	2	3.72	4.74	40.4	16.6	2.92	1.87	10.1	7.38	12.4	8.33	37.9	12.5	0.243	269	513
80	45	2.5	4.58	5.84	48.9	20.0	2.89	1.85	12.2	8.88	15.1	10.1	46.2	15.1	0.241	218	413
80	45	3	5.42	6.91	56.7	23.1	2.86	1.83	14.2	10.2	17.7	11.9	54.1	17.5	0.240	184	347
80	45	4	7.02	8.95	70.6	28.4	2.81	1.78	17.6	12.6	22.4	15.0	68.5	21.7	0.236	142	264
80	45	5	8.52	10.9	82.2	32.8	2.75	1.74	20.5	14.6	26.6	17.7	81.1	25.2	0.233	117	214
80	45	6	9.92	12.6	91.6	36.2	2.69	1.69	22.9	16.1	30.2	20.0	91.9	28.1	0.229	101	182
80	45	6.3	10.0	12.8	88.5	35.3	2.63	1.66	22.1	15.7	29.9	19.8	93.2	28.2	0.223	99.5	174
80	50	1.5	2.95	3.8	33.6	16.4	2.99	2.09	8.40	6.54	10.1	7.33	34.7	10.9	0.255	340	679
80	50	2	3.88	4.94	43.4	21.1	2.97	2.07	10.9	8.43	13.2	9.54	45.3	14.0	0.253	258	513
80	50	2.5	4.78	6.09	52.6	25.4	2.94	2.04	13.2	10.2	16.1	11.6	55.4	17.0	0.251	209	413
80	50	3	5.66	7.21	61.1	29.4	2.91	2.02	15.3	11.8	18.8	13.6	65.0	19.7	0.250	177	346
80	50	4	7.34	9.35	76.4	36.5	2.86	1.98	19.1	14.6	24.0	17.2	82.7	24.6	0.246	136	263
80	50	5	8.91	11.4	89.2	42.3	2.80	1.93	22.3	16.9	28.5	20.5	98.4	28.7	0.243	112	214
80	50	6	10.4	13.2	99.8	47.0	2.75	1.88	24.9	18.8	32.5	23.2	112	32.1	0.239	96.3	181
80	50	6.3	10.5	13.4	97.1	46.1	2.69	1.85	24.3	18.4	32.2	23.1	114	32.4	0.233	94.9	173
80	60	1.5	3.18	4.05	38.2	24.7	3.07	2.47	9.56	8.22	11.3	9.28	46.8	13.2	0.275	314	678
80	60	2	4.19	5.34	49.5	31.9	3.05	2.44	12.4	10.6	14.7	12.1	61.2	17.1	0.273	239	512
80	60	2.5	5.17	6.59	60.1	38.6	3.02	2.42	15.0	12.9	18.0	14.8	75.1	20.7	0.271	193	412
80	60	3	6.13	7.81	70.0	44.9	3.00	2.40	17.5	15.0	21.2	17.4	88.3	24.1	0.270	163	345
80	60	4	7.97	10.1	87.9	56.1	2.94	2.35	22.0	18.7	27.0	22.1	113	30.3	0.266	126	262.4
80	60	5	9.70	12.4	103	65.7	2.89	2.31	25.8	21.9	32.2	26.4	136	35.7	0.263	103	212.7
80	60	6	11.3	14.4	116	73.6	2.84	2.26	29.1	24.5	36.9	30.2	156	40.2	0.259	88.3	180
80	60	6.3	11.5	14.7	114	72.7	2.79	2.22	28.6	24.2	36.8	30.2	160	40.9	0.253	86.7	172
90	20	1.5	2.47	3.15	27.1	2.38	2.93	0.870	6.01	2.38	8.1	2.66	7.64	4.48	0.215	404	682

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

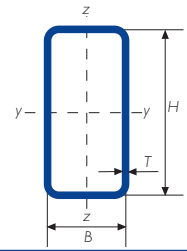


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elxx}	W _{ely}	W _{plxx}	W _{ply}	I _t	C _t	A _s		A _{s/v}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ⁻¹
90	20	2	3.25	4.14	34.6	2.97	2.89	0.847	7.70	2.97	10.5	3.40	9.66	5.61	0.213	308	515
90	20	2.5	3.99	5.09	41.5	3.46	2.86	0.825	9.23	3.46	12.7	4.07	11.4	6.57	0.211	250	415
90	20	3	4.72	6.01	47.8	3.87	2.82	0.803	10.6	3.87	14.8	4.67	13.0	7.38	0.210	212	349
90	30	1.5	2.71	3.45	32.9	5.85	3.09	1.30	7.32	3.90	9.40	4.31	16.6	7.08	0.235	369	680
90	30	2	3.56	4.54	42.4	7.43	3.06	1.28	9.42	4.96	12.2	5.57	21.3	9.02	0.233	281	514
90	30	2.5	4.39	5.59	51.1	8.84	3.02	1.26	11.4	5.90	14.9	6.73	25.8	10.8	0.231	228	414
90	30	3	5.19	6.61	59.1	10.1	2.99	1.24	13.1	6.73	17.4	7.82	29.8	12.3	0.230	193	348
90	30	4	6.71	8.55	73.1	12.1	2.92	1.19	16.2	8.10	21.9	9.74	36.9	15.0	0.226	149	265
90	30	5	8.13	10.4	84.4	13.7	2.86	1.15	18.8	9.11	25.9	11.3	42.5	17.0	0.223	123	215
90	30	6	9.45	12.0	93.3	14.7	2.78	1.11	20.7	9.80	29.3	12.6	46.7	18.4	0.219	106	182
90	40	1.5	2.95	3.75	38.8	11.1	3.22	1.72	8.62	5.53	10.7	6.11	27.8	9.69	0.255	340	679
90	40	2	3.88	4.94	50.1	14.2	3.19	1.69	11.1	7.08	14.0	7.93	36.1	12.4	0.253	258	513
90	40	2.5	4.78	6.09	60.7	17.0	3.16	1.67	13.5	8.51	17.1	9.65	44.0	15.0	0.251	209	413
90	40	3	5.66	7.21	70.5	19.6	3.13	1.65	15.7	9.81	20.0	11.3	51.4	17.3	0.250	177	346
90	40	4	7.34	9.35	87.9	24.1	3.07	1.61	19.5	12.0	25.4	14.2	64.8	21.4	0.246	136	263
90	40	5	8.91	11.4	103	27.7	3.00	1.56	22.8	13.8	30.2	16.8	76.4	24.8	0.243	112	214
90	40	6	10.4	13.2	114	30.5	2.94	1.52	25.4	15.2	34.3	19.0	86.0	27.5	0.239	96	181
90	40	6.3	10.5	13.4	111	29.8	2.87	1.49	24.6	14.9	33.9	18.9	87.0	27.6	0.233	95	173
90	50	1.5	3.18	4.05	44.7	18.1	3.32	2.11	9.93	7.25	12.1	8.06	40.9	12.3	0.275	314	678
90	50	2	4.19	5.34	57.9	23.4	3.29	2.09	12.9	9.35	15.7	10.5	53.4	15.9	0.273	239	512
90	50	2.5	5.17	6.59	70.3	28.2	3.27	2.07	15.6	11.3	19.3	12.8	65.3	19.2	0.271	193	412
90	50	3	6.13	7.81	81.9	32.7	3.24	2.05	18.2	13.1	22.6	15.0	76.7	22.4	0.270	163	345
90	50	4	7.97	10.1	103	40.7	3.18	2.00	22.8	16.3	28.8	19.1	97.7	28.0	0.266	126	262
90	50	5	9.70	12.4	121	47.4	3.12	1.96	26.8	18.9	34.4	22.7	116	32.7	0.263	103	213
90	50	6	11.3	14.4	136	52.8	3.07	1.91	30.1	21.1	39.4	25.9	133	36.8	0.259	88.3	180
90	50	6.3	11.5	14.7	133	52.1	3.01	1.88	29.5	20.9	39.2	25.9	136	37.2	0.253	86.7	172
90	60	2	4.50	5.74	65.6	35.2	3.38	2.48	14.6	11.7	17.5	13.3	72.5	19.3	0.293	222	511
90	60	2.5	5.56	7.09	79.8	42.7	3.36	2.46	17.7	14.2	21.4	16.2	89.0	23.5	0.291	180	411
90	60	3	6.60	8.41	93.2	49.8	3.33	2.43	20.7	16.6	25.2	19.1	105	27.4	0.290	152	345
90	60	4	8.59	10.9	118	62.4	3.28	2.39	26.1	20.8	32.3	24.4	134	34.5	0.286	116	261
90	60	5	10.5	13.4	139	73.2	3.22	2.34	30.8	24.4	38.7	29.1	161	40.7	0.283	95.4	212
90	60	6	12.3	15.6	157	82.4	3.17	2.30	34.9	27.5	44.4	33.4	186	46.1	0.279	81.5	179
90	70	2	4.82	6.14	73.4	50.0	3.46	2.85	16.3	14.3	19.3	16.2	93.2	22.8	0.313	208	510
90	70	2.5	5.96	7.59	89.4	60.8	3.43	2.83	19.9	17.4	23.6	19.9	115	27.7	0.311	168	410
90	70	3	7.07	9.01	105	71.0	3.41	2.81	23.2	20.3	27.8	23.4	135	32.4	0.310	141	344
100	20	1.5	2.71	3.45	35.9	2.64	3.23	0.875	7.19	2.64	9.72	2.94	8.64	5.00	0.235	369	680
100	20	2	3.56	4.54	46.2	3.29	3.19	0.852	9.23	3.29	12.6	3.76	10.9	6.26	0.233	281	514
100	20	2.5	4.39	5.59	55.5	3.85	3.15	0.830	11.1	3.85	15.4	4.50	13.0	7.34	0.231	228	414
100	20	3	5.19	6.61	64.1	4.31	3.11	0.808	12.8	4.31	17.9	5.18	14.7	8.25	0.230	193	348
100	20	4	6.71	8.55	78.8	5.00	3.04	0.764	15.8	5.00	22.6	6.31	17.4	9.63	0.226	149	265
100	20	5	8.13	10.4	90.4	5.40	2.96	0.722	18.1	5.40	26.6	7.17	19.1	10.5	0.223	123	215
100	20	6	9.45	12.0	99.1	5.59	2.87	0.682	19.8	5.59	30.0	7.77	20.0	10.9	0.219	106	182
100	30	1.5	2.95	3.75	43.2	6.46	3.39	1.31	8.64	4.31	11.2	4.74	18.9	7.89	0.255	340	679
100	30	2	3.88	4.94	55.8	8.22	3.36	1.29	11.2	5.48	14.6	6.13	24.3	10.1	0.253	258	513

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

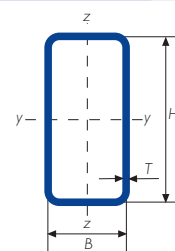


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elox}	W_{ely}	W_{ploxx}	W_{plyy}	I_t	C_t	A_s	m	$A_{s/y}$
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
100	30	2.5	4.78	6.09	67.4	9.79	3.33	1.27	13.5	6.53	17.8	7.42	29.4	12.0	0.251	209	413
100	30	3	5.66	7.21	78.2	11.2	3.29	1.25	15.6	7.46	20.8	8.63	34.0	13.8	0.250	177	346
100	30	4	7.34	9.35	97.3	13.5	3.23	1.20	19.5	9.00	26.4	10.8	42.1	16.8	0.246	136	263
100	40	1.5	3.18	4.05	50.5	12.2	3.53	1.73	10.1	6.08	12.7	6.69	31.9	10.8	0.275	314	678
100	40	2	4.19	5.34	65.4	15.6	3.50	1.71	13.1	7.81	16.5	8.69	41.5	13.9	0.273	239	512
100	40	2.5	5.17	6.59	79.3	18.8	3.47	1.69	15.9	9.39	20.2	10.6	50.5	16.8	0.271	193	412
100	40	3	6.13	7.81	92.3	21.7	3.44	1.67	18.5	10.8	23.7	12.4	59.0	19.4	0.270	163	345
100	40	4	7.97	10.1	116	26.7	3.38	1.62	23.1	13.3	30.3	15.7	74.5	24.0	0.266	126	262
100	40	5	9.70	12.4	136	30.8	3.31	1.58	27.1	15.4	36.1	18.5	87.9	27.9	0.263	103	213
100	40	6	11.3	14.4	152	34.0	3.25	1.53	30.4	17.0	41.3	21.0	99.2	31.0	0.259	88.3	180
100	40	6.3	11.5	14.7	148	33.4	3.17	1.51	29.6	16.7	41.0	21.0	101	31.2	0.253	86.7	172
100	50	1.5	3.42	4.35	57.8	19.9	3.64	2.14	11.6	7.96	14.2	8.79	47.1	13.7	0.295	293	677
100	50	2	4.50	5.74	75.0	25.7	3.62	2.12	15.0	10.3	18.5	11.5	61.6	17.7	0.293	222	511
100	50	2.5	5.56	7.09	91.2	31.1	3.59	2.09	18.2	12.4	22.7	14.0	75.4	21.5	0.291	180	411
100	50	3	6.60	8.41	106	36.1	3.56	2.07	21.3	14.4	26.7	16.4	88.6	25.0	0.290	152	345
100	50	4	8.59	10.9	134	44.9	3.50	2.03	26.8	18.0	34.1	20.9	113	31.3	0.286	116	261
100	50	5	10.5	13.4	158	52.5	3.44	1.98	31.6	21.0	40.8	25.0	135	36.8	0.283	95.4	212
100	50	6	12.3	15.6	179	58.7	3.38	1.94	35.8	23.5	46.9	28.5	154	41.4	0.279	81.5	179
100	50	6.3	12.5	15.9	176	58.2	3.32	1.91	35.1	23.3	46.9	28.6	158	42.1	0.273	79.9	171
100	60	1.5	3.65	4.65	65.0	29.8	3.74	2.53	13.0	9.93	15.6	11.0	64.2	16.6	0.315	274	677
100	60	2	4.82	6.14	84.6	38.6	3.71	2.51	16.9	12.9	20.5	14.4	84.1	21.6	0.313	208	510
100	60	2.5	5.96	7.59	103	46.9	3.69	2.49	20.6	15.6	25.1	17.7	103	26.2	0.311	168	410
100	60	3	7.07	9.01	121	54.6	3.66	2.46	24.1	18.2	29.6	20.8	122	30.6	0.310	141	344
100	60	4	9.22	11.7	153	68.7	3.60	2.42	30.5	22.9	37.9	26.6	156	38.7	0.306	108	261
100	60	5	11.3	14.4	181	80.8	3.55	2.37	36.2	26.9	45.6	31.9	188	45.8	0.303	88.7	211
100	60	6	13.2	16.8	205	91.2	3.49	2.33	41.1	30.4	52.5	36.6	216	51.9	0.299	75.7	178
100	60	6.3	13.5	17.2	203	90.9	3.44	2.30	40.7	30.3	52.8	36.9	223	53.0	0.293	74.0	170
100	60	7	14.7	18.8	216	96.1	3.39	2.26	43.1	32.0	56.7	39.6	240	56.4	0.290	67.9	155
100	60	8	16.4	20.8	230	102	3.32	2.21	46.0	34.1	61.6	43.0	260	60.5	0.286	61.1	137
100	70	2	5.13	6.54	94.2	54.6	3.80	2.89	18.8	15.6	22.4	17.6	109	25.4	0.333	195	510
100	70	2.5	6.35	8.09	115.0	66.5	3.77	2.87	23.0	19.0	27.5	21.6	134	31.0	0.331	157	410
100	70	3	7.54	9.61	135	77.7	3.74	2.84	26.9	22.2	32.5	25.4	158	36.3	0.330	133	343
100	70	4	9.85	12.5	171	98.3	3.69	2.80	34.2	28.1	41.8	32.7	203	46.0	0.326	102	260
100	70	5	12.1	15.4	203	116	3.64	2.75	40.7	33.3	50.3	39.3	246	54.7	0.323	83.0	210
100	70	6	14.2	18.0	232	132	3.59	2.71	46.4	37.8	58.2	45.4	284	62.4	0.319	70.6	177
100	80	1.5	4.12	5.25	79.6	56.7	3.89	3.29	15.9	14.2	18.6	16.0	102	22.4	0.355	243	676
100	80	2	5.45	6.94	104	73.9	3.87	3.26	20.8	18.5	24.4	21.0	135	29.2	0.353	184	509
100	80	2.5	6.74	8.59	127	90.2	3.84	3.24	25.4	22.5	30.0	25.8	166	35.7	0.351	148	409
100	80	3	8.01	10.2	149	106	3.82	3.22	29.8	26.4	35.4	30.4	196	41.9	0.350	125	343
100	80	4	10.5	13.3	189	134	3.77	3.17	37.9	33.5	45.6	39.2	254	53.4	0.346	95.4	259
100	80	5	12.8	16.4	226	160	3.72	3.12	45.2	39.9	55.1	47.2	308	63.7	0.343	77.9	210
100	80	6	15.1	19.2	258	182	3.67	3.08	51.7	45.5	63.8	54.7	357	73.0	0.339	66.2	176
100	80	6.3	15.5	19.7	259	183	3.62	3.04	51.8	45.7	64.6	55.4	371	75.0	0.333	64.6	169
100	80	7	16.9	21.6	276	195	3.58	3.01	55.3	48.8	69.7	59.8	402	80.4	0.330	59.1	153

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

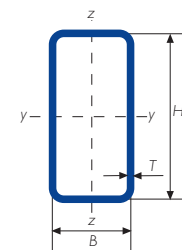


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elxx}	W _{elyy}	W _{plxx}	W _{plyy}	I _t	C _t	A _s	m	A _{s/v}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ⁻¹
100	80	8	18.9	24.0	298	210	3.52	2.96	59.6	52.5	76.3	65.4	442	87.3	0.326	53.0	135
110	20	2	3.88	4.94	60.0	3.62	3.48	0.856	10.9	3.62	15.0	4.12	12.2	6.91	0.253	258	513
110	30	1.5	3.18	4.05	55.4	7.07	3.70	1.32	10.1	4.72	13.2	5.16	21.2	8.71	0.275	314	678
110	30	2	4.19	5.34	71.6	9.00	3.66	1.30	13.0	6.00	17.2	6.69	27.3	11.1	0.273	239	512
110	30	2.5	5.17	6.59	86.8	10.7	3.63	1.28	15.8	7.16	21.0	8.11	33.0	13.3	0.271	193	412
110	30	3	6.13	7.81	101	12.3	3.59	1.25	18.3	8.19	24.6	9.44	38.3	15.3	0.270	163	345
110	30	4	7.97	10.1	126	14.9	3.52	1.21	22.9	9.91	31.3	11.8	47.4	18.6	0.266	126	262
110	30	5	9.70	12.4	147	16.8	3.45	1.17	26.8	11.2	37.3	13.8	54.7	21.2	0.263	103	213
110	30	6	11.3	14.4	165	18.2	3.38	1.12	29.9	12.2	42.5	15.5	60.4	23.1	0.259	88.3	180
110	50	2	4.82	6.14	95.0	28.0	3.93	2.14	17.3	11.2	21.5	12.4	69.9	19.6	0.313	208	510
110	50	2.5	5.96	7.59	116	33.9	3.90	2.11	21.0	13.6	26.3	15.2	85.6	23.7	0.311	168	410
110	50	3	7.07	9.01	135	39.4	3.88	2.09	24.6	15.8	31.0	17.8	101	27.7	0.310	141	344
110	50	4	9.22	11.7	171	49.2	3.82	2.05	31.1	19.7	39.8	22.8	129	34.7	0.306	108	261
110	50	5	11.3	14.4	202	57.5	3.76	2.00	36.8	23.0	47.8	27.2	154	40.9	0.303	88.7	211
110	50	6	13.2	16.8	230	64.5	3.69	1.96	41.8	25.8	55.0	31.2	176	46.1	0.299	75.7	178
110	50	7	14.7	18.8	240	67.6	3.58	1.90	43.6	27.1	59.2	33.6	193	49.7	0.290	67.9	155
110	60	6	14.2	18.0	262	100	3.81	2.35	47.7	33.3	61.3	39.9	248	57.7	0.319	70.6	177
110	70	1.5	4.12	5.25	90.7	45.5	4.16	2.94	16.5	13.0	19.7	14.5	94.6	21.5	0.355	243	676
110	70	2	5.45	6.94	118	59.2	4.13	2.92	21.5	16.9	25.8	19.0	124	28.0	0.353	184	509
110	70	2.5	6.74	8.59	145	72.2	4.10	2.90	26.3	20.6	31.7	23.3	153	34.2	0.351	148	409
110	70	3	8.01	10.2	170	84.5	4.08	2.88	30.8	24.1	37.4	27.5	181	40.1	0.350	125	343
110	70	4	10.5	13.3	216	107	4.02	2.83	39.3	30.6	48.3	35.3	233	51.0	0.346	95.4	259
110	70	5	12.8	16.4	258	127	3.97	2.79	46.8	36.3	58.3	42.6	282	60.8	0.343	77.9	210
110	70	6	15.1	19.2	295	144	3.91	2.74	53.6	41.3	67.5	49.2	327	69.5	0.339	66.2	176
110	70	6.3	15.5	19.7	294	145	3.86	2.71	53.5	41.4	68.2	49.9	339	71.3	0.333	64.6	169
110	100	3	9.43	12.0	221	191	4.29	3.99	40.2	38.2	47.1	44.1	322	58.8	0.410	106	341
110	100	4	12.4	15.7	283	245	4.24	3.94	51.5	49.0	61.0	57.1	419	75.5	0.406	80.9	258
110	100	5	15.2	19.4	340	294	4.19	3.90	61.9	58.7	74.0	69.3	511	90.7	0.403	65.8	208
110	100	6	17.9	22.8	392	338	4.14	3.85	71.3	67.6	86.2	80.7	597	105	0.399	55.8	175
110	100	6.3	18.5	23.5	396	342	4.11	3.81	72.0	68.4	87.8	82.3	623	108	0.393	54.2	167
110	100	7	20.2	25.8	426	367	4.07	3.78	77.4	73.5	95.2	89.2	678	117	0.390	49.5	151
120	30	1.5	3.42	4.35	69.6	7.68	4.00	1.33	11.6	5.12	15.3	5.59	23.6	9.52	0.295	293	677
120	30	2	4.50	5.74	90.1	9.79	3.96	1.31	15.0	6.53	19.9	7.25	30.4	12.2	0.293	222	511
120	30	2.5	5.56	7.09	109	11.7	3.93	1.28	18.2	7.79	24.4	8.80	36.7	14.6	0.291	180	411
120	30	3	6.60	8.41	128	13.4	3.89	1.26	21.3	8.92	28.6	10.2	42.5	16.7	0.290	152	345
120	30	4	8.59	10.9	160	16.2	3.82	1.22	26.7	10.8	36.6	12.9	52.7	20.4	0.286	116	261
120	30	5	10.5	13.4	188	18.4	3.75	1.17	31.3	12.3	43.7	15.1	60.9	23.3	0.283	95.4	212
120	30	6	12.3	15.6	211	20.0	3.67	1.13	35.2	13.3	50.1	17.0	67.3	25.4	0.279	81.5	179
120	40	1.5	3.65	4.65	80.1	14.4	4.15	1.76	13.4	7.19	17.0	7.84	40.2	13.0	0.315	274	677
120	40	2	4.82	6.14	104	18.5	4.12	1.74	17.3	9.25	22.3	10.2	52.3	16.8	0.313	208	510
120	40	2.5	5.96	7.59	127	22.3	4.09	1.71	21.1	11.1	27.3	12.5	63.8	20.3	0.311	168	410
120	40	3	7.07	9.01	148	25.8	4.05	1.69	24.7	12.9	32.2	14.6	74.6	23.5	0.310	141	344
120	40	4	9.22	11.7	187	31.9	3.99	1.65	31.1	15.9	41.2	18.5	94.2	29.2	0.306	108	261
120	40	5	11.3	14.4	221	36.9	3.92	1.60	36.8	18.5	49.4	22.0	111	34.0	0.303	88.7	211

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

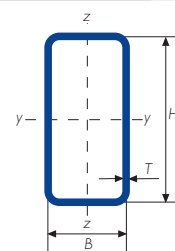


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elox}	W_{elyy}	W_{plox}	W_{plyy}	I_t	C_t	A_s	m	$A_{s/y}$
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
120	40	6	13.2	16.8	250	41.0	3.85	1.56	41.7	20.5	56.9	25.1	126	38.0	0.299	75.7	178
120	40	6.3	13.5	17.2	245	40.7	3.78	1.54	40.9	20.3	56.9	25.2	128	38.5	0.293	74.0	170
120	50	1.5	3.89	4.95	90.6	23.4	4.28	2.17	15.1	9.37	18.8	10.2	60.0	16.5	0.335	257	676
120	50	2	5.13	6.54	118	30.3	4.25	2.15	19.7	12.1	24.6	13.4	78.4	21.4	0.333	195	510
120	50	2.5	6.35	8.09	144	36.7	4.22	2.13	24.0	14.7	30.3	16.4	96.0	26.0	0.331	157	410
120	50	3	7.54	9.61	169	42.7	4.19	2.11	28.1	17.1	35.7	19.3	113	30.3	0.330	133	343
120	50	4	9.85	12.5	214	53.4	4.13	2.06	35.6	21.4	45.8	24.6	144	38.1	0.326	102	260
120	50	5	12.1	15.4	254	62.6	4.07	2.02	42.3	25.0	55.2	29.5	172	44.9	0.323	83.0	210
120	50	6	14.2	18.0	289	70.4	4.00	1.98	48.2	28.1	63.7	33.8	198	50.8	0.319	70.6	177
120	50	6.3	14.5	18.5	286	70.3	3.94	1.95	47.7	28.1	64.1	34.1	203	51.7	0.313	69.0	169
120	55	1.5	4.01	5.10	95.9	28.9	4.34	2.38	16.0	10.5	19.7	11.5	70.8	18.3	0.345	250	676
120	55	2	5.29	6.74	125	37.4	4.31	2.36	20.8	13.6	25.8	15.0	92.8	23.7	0.343	189	509
120	55	2.5	6.55	8.34	153	45.4	4.28	2.33	25.4	16.5	31.7	18.4	114	28.9	0.341	153	409
120	55	3	7.78	9.91	179	52.9	4.25	2.31	29.8	19.2	37.4	21.7	134	33.7	0.340	129	343
120	55	4	10.2	12.9	227	66.5	4.19	2.27	37.9	24.2	48.2	27.8	172	42.6	0.336	98.4	260
120	60	1.5	4.12	5.25	101	34.9	4.39	2.58	16.9	11.6	20.6	12.8	82.3	20.0	0.355	243	676
120	60	2	5.45	6.94	132	45.3	4.36	2.56	22.0	15.1	27.0	16.8	108	26.0	0.353	184	509
120	60	2.5	6.74	8.59	161	55.2	4.33	2.53	26.9	18.4	33.2	20.6	133	31.7	0.351	148	409
120	60	3	8.01	10.2	189	64.4	4.30	2.51	31.5	21.5	39.2	24.2	156	37.1	0.350	125	343
120	60	4	10.5	13.3	241	81.2	4.25	2.47	40.1	27.1	50.5	31.1	201	47.0	0.346	95.4	259
120	60	5	12.8	16.4	287	96.0	4.19	2.42	47.8	32.0	60.9	37.4	242	55.8	0.343	77.9	210
120	60	6	15.1	19.2	328	109	4.13	2.38	54.7	36.3	70.6	43.1	280	63.6	0.339	66.2	176
120	60	6.3	15.5	19.7	327	109	4.07	2.35	54.5	36.4	71.2	43.7	289	65.1	0.333	64.6	169
120	60	7	16.9	21.6	349	116	4.02	2.32	58.1	38.6	76.8	47.0	312	69.5	0.330	59.1	153
120	60	8	18.9	24.0	375	124	3.95	2.27	62.6	41.3	84.1	51.3	340	75.0	0.326	53.0	135
120	80	2	6.07	7.74	160	86.0	4.54	3.33	26.6	21.5	31.7	24.1	175	35.3	0.393	165	508
120	80	2.5	7.53	9.59	196	105	4.52	3.31	32.6	26.3	39.1	29.6	216	43.2	0.391	133	408
120	80	3	8.96	11.4	230	123	4.49	3.29	38.4	30.9	46.2	35.0	255	50.8	0.390	112	342
120	80	4	11.7	14.9	295	157	4.44	3.24	49.1	39.3	59.8	45.2	331	64.9	0.386	85.2	258
120	80	5	14.4	18.4	353	188	4.39	3.20	58.9	46.9	72.4	54.7	402	77.8	0.383	69.4	209
120	80	6	17.0	21.6	406	215	4.33	3.15	67.7	53.8	84.3	63.5	469	89.4	0.379	58.9	175
120	80	6.3	17.5	22.2	408	217	4.28	3.12	68.1	54.3	85.6	64.7	488	92.1	0.373	57.3	168
120	80	7	19.1	24.4	438	232	4.24	3.09	73.0	58.1	92.7	70.0	529	99.1	0.370	52.3	152
120	80	8	21.4	27.2	476	252	4.18	3.04	79.3	62.9	102	76.9	584	108	0.366	46.8	134
120	80	10	25.6	32.6	534	281	4.05	2.94	89.0	70.3	118	88.7	676	122	0.357	39.1	110
120	80	12	28.3	36.1	525	279	3.81	2.78	87.4	69.8	122	92.4	708	127	0.338	35.3	94
120	80	12.5	29.1	37.0	527	281	3.77	2.75	87.8	70.1	124	93.7	715	128	0.336	34.4	91
120	100	2	6.70	8.54	188	142	4.69	4.08	31.3	28.4	36.4	32.2	250	44.6	0.433	149	507
120	100	2.5	8.31	10.6	230	174	4.66	4.06	38.4	34.9	44.9	39.7	309	54.7	0.431	120	407
120	100	3	9.90	12.6	271	205	4.64	4.04	45.2	41.1	53.2	47.0	367	64.5	0.430	101	341
120	100	4	13.0	16.5	348	263	4.59	3.99	58.1	52.6	69.0	61.0	478	82.8	0.426	77.0	258
120	100	5	16.0	20.4	419	316	4.54	3.94	69.9	63.3	83.9	74.1	583	100	0.423	62.6	208
120	100	6	18.9	24.0	484	365	4.49	3.89	80.7	72.9	97.9	86.4	682	115	0.419	53.0	175
120	100	6.3	19.4	24.8	490	370	4.45	3.86	81.7	73.9	99.9	88.2	712	119	0.413	51.4	167

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

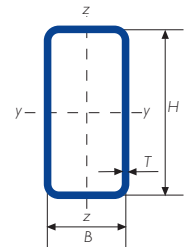


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elox}	W _{ely}	W _{plox}	W _{ply}	I _t	C _t	A _s	m	A _{s/v}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ⁻¹
120	100	7	21.3	27.2	528	398	4.41	3.83	88.0	79.5	108	95.7	776	129	0.410	46.9	151
120	100	8	23.9	30.4	576	434	4.35	3.78	96.1	86.8	120	106	862	141	0.406	41.8	133
120	100	10	28.7	36.6	655	492	4.23	3.67	109	98.5	140	123	1,011	162	0.397	34.8	109
120	100	12	32.1	40.9	665	502	4.03	3.50	111	100	148	131	1,095	173	0.378	31.2	92.6
120	100	12.5	33.0	42.0	672	507	4.00	3.47	112	101	151	133	1,114	176	0.376	30.3	89.3
130	50	2	5.45	6.94	144	32.6	4.56	2.17	22.2	13.0	28.0	14.3	86.9	23.3	0.353	184	509
130	50	2.5	6.74	8.59	176	39.5	4.53	2.15	27.1	15.8	34.4	17.6	107	28.3	0.351	148	409
130	50	3	8.01	10.2	207	46.0	4.50	2.12	31.8	18.4	40.6	20.7	125	33.0	0.350	125	343
130	50	4	10.5	13.3	263	57.7	4.44	2.08	40.4	23.1	52.3	26.4	160	41.5	0.346	95.4	259
130	50	5	12.8	16.4	313	67.7	4.37	2.03	48.2	27.1	63.1	31.7	191	49.0	0.343	77.9	210
130	50	6	15.1	19.2	357	76.2	4.31	1.99	55.0	30.5	73.1	36.4	220	55.4	0.339	66.2	176
140	40	2	5.45	6.94	155	21.4	4.73	1.76	22.1	10.7	28.8	11.7	63.3	19.7	0.353	184	509
140	40	2.5	6.74	8.59	189	25.8	4.69	1.73	27.0	12.9	35.4	14.3	77.2	23.8	0.351	148	409
140	40	3	8.01	10.2	222	29.9	4.66	1.71	31.7	15.0	41.8	16.8	90.3	27.6	0.350	125	343
140	40	4	10.5	13.3	282	37.1	4.59	1.67	40.2	18.6	53.8	21.4	114	34.4	0.346	95.4	259
140	40	5	12.8	16.4	335	43.1	4.52	1.62	47.8	21.5	64.8	25.5	135	40.2	0.343	77.9	210
140	60	2	6.07	7.74	193	52.1	5.00	2.59	27.6	17.4	34.3	19.1	132	30.5	0.393	165	508
140	60	2.5	7.53	9.59	237	63.4	4.97	2.57	33.8	21.1	42.3	23.4	163	37.3	0.391	133	408
140	60	3	8.96	11.4	278	74.2	4.94	2.55	39.7	24.7	50.0	27.6	192	43.6	0.390	112	342
140	60	4	11.7	14.9	356	93.8	4.88	2.51	50.8	31.3	64.6	35.6	247	55.4	0.386	85.2	258
140	60	5	14.4	18.4	426	111	4.82	2.46	60.8	37.1	78.3	42.9	298	65.9	0.383	69.4	209
140	60	6	17.0	21.6	489	126	4.76	2.42	69.9	42.1	91.0	49.6	344	75.3	0.379	58.9	175
140	60	6.3	17.5	22.2	490	127	4.69	2.39	70.0	42.5	92.2	50.5	357	77.3	0.373	57.3	168
140	60	7	19.1	24.4	525	136	4.64	2.36	75.0	45.2	99.8	54.4	385	82.7	0.370	52.3	152
140	60	8	21.4	27.2	569	146	4.57	2.31	81.2	48.6	110	59.6	421	89.5	0.366	46.8	134
140	70	3	9.43	12.0	306	105	5.05	2.95	43.7	29.9	54.1	33.5	252	51.7	0.410	106	341
140	70	4	12.4	15.7	393	133	4.99	2.91	56.1	38.1	70.1	43.2	326	65.9	0.406	80.9	258
140	70	5	15.2	19.4	471	159	4.94	2.86	67.4	45.3	85.1	52.3	395	78.9	0.403	65.8	208
140	70	6	17.9	22.8	543	181	4.88	2.82	77.6	51.8	99.0	60.7	459	90.5	0.399	55.8	175
140	70	6.3	18.5	23.5	546	184	4.82	2.79	78.1	52.4	101	61.9	477	93.2	0.393	54.2	167
140	70	7	20.2	25.8	587	196	4.77	2.76	83.8	56.1	109	67.0	517	100	0.390	49.5	151
140	70	8	22.6	28.8	638	212	4.70	2.71	91.2	60.7	120	73.6	569	109	0.386	44.2	134
140	80	2	6.70	8.54	231	98.2	5.20	3.39	33.0	24.6	39.9	27.2	217	41.4	0.433	149	507
140	80	2.5	8.31	10.6	284	120	5.18	3.37	40.5	30.1	49.2	33.5	268	50.7	0.431	120	407
140	80	3	9.90	12.6	334	141	5.15	3.35	47.8	35.3	58.2	39.6	317	59.7	0.430	101	341
140	80	4	13.0	16.5	430	180	5.10	3.30	61.4	45.1	75.5	51.3	412	76.5	0.426	77.0	258
140	80	5	16.0	20.4	517	216	5.04	3.26	73.9	54.0	91.8	62.2	500	91.8	0.423	62.6	208
140	80	6	18.9	24.0	597	248	4.98	3.21	85.3	62.0	107	72.4	584	106	0.419	53.0	175
140	80	6.3	19.4	24.8	603	251	4.93	3.19	86.1	62.9	109	74.0	609	109	0.413	51.4	167
140	80	7	21.3	27.2	649	270	4.89	3.15	92.7	67.5	118	80.2	661	118	0.410	46.9	151
140	80	8	23.9	30.4	708	293	4.82	3.10	101	73.3	131	88.4	731	129	0.406	41.8	133
140	80	10	28.7	36.6	804	330	4.69	3.01	115	82.6	152	103	851	147	0.397	34.8	109
140	80	12	32.1	40.9	807	335	4.44	2.86	115	83.8	161	109	907	155	0.378	31.2	92.6
140	80	12.5	33.0	42.0	814	338	4.40	2.84	116	84.5	164	111	920	157	0.376	30.3	89.3

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

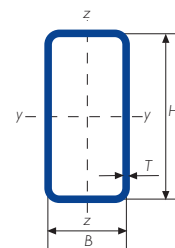


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elxx}	W_{elyy}	W_{plxx}	W_{plyy}	I_t	C_t	A_s	m	$A_{s/y}$
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
140	100	2	7.33	9.34	269	161	5.37	4.16	38.5	32.3	45.4	36.1	313	52.3	0.473	136	507
140	100	2.5	9.10	11.6	331	198	5.35	4.14	47.3	39.6	56.0	44.6	387	64.2	0.471	110	407
140	100	3	10.8	13.8	391	234	5.32	4.11	55.8	46.7	66.4	52.8	460	75.8	0.470	92.3	340
140	100	4	14.2	18.1	504	300	5.27	4.07	71.9	60.0	86.4	68.7	599	97.6	0.466	70.2	257
140	100	5	17.5	22.4	608	361	5.22	4.02	86.9	72.3	105	83.6	732	118	0.463	57.0	207
140	100	6	20.7	26.4	705	418	5.16	3.97	101	83.5	123	97.7	858	136	0.459	48.2	174
140	100	6.3	21.4	27.3	715	425	5.12	3.95	102	85.0	126	100	897	141	0.453	46.7	166
140	100	7	23.5	30.0	773	458	5.08	3.91	110	91.7	137	109	979	153	0.450	42.5	150
140	100	8	26.4	33.6	848	502	5.02	3.86	121	100	152	120	1,089	168	0.446	37.9	132
140	100	10	31.8	40.6	973	574	4.90	3.76	139	115	178	141	1,285	195	0.437	31.4	108
140	100	12	35.8	45.7	1,004	595	4.69	3.61	143	119	191	152	1,411	210	0.418	27.9	91.6
140	100	12.5	36.9	47.0	1,018	603	4.65	3.58	145	121	195	155	1,440	214	0.416	27.1	88.3
140	120	3	11.8	15.0	447	353	5.46	4.85	63.9	58.9	74.6	67.3	615	92	0.510	84.9	340
140	120	4	15.5	19.7	578	456	5.41	4.81	82.5	76.0	97.3	87.6	804	119	0.506	64.5	256
140	120	5	19.1	24.4	699	552	5.36	4.76	99.9	91.9	119	107	985	144	0.503	52.3	206
140	120	6	22.6	28.8	813	640	5.31	4.71	116	107	139	125	1,158	167	0.499	44.2	173
140	120	6.3	23.4	29.8	828	653	5.27	4.68	118	109	143	129	1,213	173	0.493	42.7	165
140	120	7	25.7	32.8	897	707	5.23	4.64	128	118	156	140	1,327	188	0.490	38.9	150
140	120	8	28.9	36.8	987	777	5.18	4.59	141	130	173	156	1,482	208	0.486	34.6	132
140	120	10	35.0	44.6	1,142	898	5.06	4.49	163	150	204	184	1,763	243	0.477	28.6	107
140	120	12	39.6	50.5	1,201	946	4.88	4.33	172	158	222	200	1,969	266	0.458	25.2	90.8
140	120	12.5	40.9	52.0	1,221	962	4.84	4.30	174	160	227	205	2,016	271	0.456	24.5	87.5
150	30	2	5.45	6.94	164	12.1	4.86	1.32	21.8	8.10	29.4	8.93	39.6	15.3	0.353	184	509
150	30	2.5	6.74	8.59	200	14.5	4.82	1.30	26.6	9.69	36.1	10.9	47.8	18.3	0.351	148	409
150	30	3	8.01	10.2	234	16.7	4.78	1.28	31.2	11.1	42.6	12.7	55.4	21.1	0.350	125	343
150	30	4	10.5	13.3	296	20.3	4.71	1.23	39.5	13.5	54.8	16.0	68.7	25.9	0.346	95.4	259
150	50	1.5	4.59	5.85	159	28.7	5.21	2.22	21.2	11.5	26.9	12.4	79.7	20.8	0.395	218	675
150	50	2	6.07	7.74	208	37.2	5.18	2.19	27.7	14.9	35.3	16.3	104	26.9	0.393	165	508
150	50	2.5	7.53	9.59	254	45.2	5.15	2.17	33.9	18.1	43.5	19.9	128	32.8	0.391	133	408
150	50	3	8.96	11.4	299	52.6	5.12	2.15	39.8	21.1	51.4	23.5	150	38.3	0.390	112	342
150	50	4	11.7	14.9	381	66.2	5.05	2.10	50.9	26.5	66.5	30.1	192	48.3	0.386	85.2	258
150	50	5	14.4	18.4	456	77.9	4.99	2.06	60.8	31.1	80.5	36.2	230	57.1	0.383	69.4	209
150	50	6	17.0	21.6	523	87.9	4.92	2.02	69.8	35.2	93.5	41.7	264	64.8	0.379	58.9	175
150	50	6.3	17.5	22.2	523	88.5	4.85	1.99	69.7	35.4	94.6	42.4	272	66.3	0.373	57.3	168
150	70	3	9.90	12.6	363	111	5.37	2.97	48.5	31.8	60.2	35.5	276	55.5	0.430	101	341
150	70	4	13.0	16.5	467	142	5.31	2.93	62.2	40.5	78.1	45.9	358	70.9	0.426	77.0	258
150	70	5	16.0	20.4	561	169	5.25	2.88	74.9	48.4	95.0	55.6	434	84.9	0.423	62.6	208
150	70	6	18.9	24.0	648	194	5.19	2.84	86.4	55.4	111	64.6	504	97.6	0.419	53.0	175
150	75	5	16.4	20.9	588	198	5.31	3.08	78.4	52.9	98.6	60.7	491	91.9	0.433	61.1	208
150	75	6	19.3	24.6	679	228	5.25	3.04	90.5	60.7	115	70.6	572	106	0.429	51.7	174
150	90	2	7.33	9.34	295	135	5.62	3.81	39.4	30.1	47.2	33.3	290	50.3	0.473	136	507
150	90	2.5	9.10	11.6	363	166	5.60	3.78	48.4	36.9	58.3	41.1	359	61.7	0.471	110	407
150	90	3	10.8	13.8	428	195	5.57	3.76	57.1	43.4	69.1	48.7	426	72.8	0.470	92.3	340
150	90	4	14.2	18.1	552	251	5.51	3.72	73.6	55.7	89.8	63.2	554	93.6	0.466	70.2	257

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

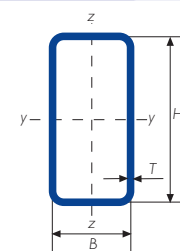


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elox}	W _{elyy}	W _{plox}	W _{plyy}	I _t	C _t	A _s	m	A _{s/v}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ⁻¹
150	90	5	17.5	22.4	667	301	5.46	3.67	88.9	67.0	109	76.9	676	113	0.463	57.0	207
150	90	6	20.7	26.4	772	348	5.41	3.63	103	77.3	128	89.8	791	131	0.459	48.2	174
150	90	6.3	21.4	27.3	783	354	5.36	3.60	104	78.6	131	91.9	826	135	0.453	46.7	166
150	90	7	23.5	30.0	846	381	5.31	3.57	113	84.7	142	99.9	901	146	0.450	42.5	150
150	90	8	26.4	33.6	927	416	5.25	3.52	124	92.6	158	111	1,000	160	0.446	37.9	132
150	90	10	31.8	40.6	1,064	475	5.12	3.42	142	105	185	129	1,176	185	0.437	31.4	108
150	90	12	35.8	45.7	1,092	491	4.89	3.28	146	109	198	139	1,282	199	0.418	27.9	91.6
150	90	12.5	36.9	47.0	1,107	497	4.85	3.25	148	111	202	142	1,306	202	0.416	27.1	88.3
150	100	2	7.64	9.74	317	171	5.71	4.19	42.3	34.2	50.1	38.1	345	56.1	0.493	131	506
150	100	2.5	9.49	12.1	390	210	5.68	4.17	52.0	42.0	62.0	47.0	427	69.0	0.491	105	406
150	100	3	11.3	14.4	461	248	5.65	4.15	61.4	49.5	73.5	55.8	507	81.4	0.490	88.4	340
150	100	4	14.9	18.9	595	319	5.60	4.10	79.3	63.7	95.7	72.5	662	105	0.486	67.2	257
150	100	5	18.3	23.4	719	384	5.55	4.05	95.9	76.8	117	88.3	809	127	0.483	54.5	207
150	100	6	21.7	27.6	835	444	5.50	4.01	111	88.8	137	103	948	147	0.479	46.1	173
150	100	6.3	22.4	28.5	848	453	5.45	3.98	113	90.5	140	106	992	152	0.473	44.6	166
150	100	7	24.6	31.4	917	489	5.41	3.95	122	97.7	152	115	1,083	165	0.470	40.6	150
150	100	8	27.7	35.2	1,008	536	5.35	3.90	134	107	169	128	1,206	182	0.466	36.1	132
150	100	10	33.4	42.6	1,162	614	5.22	3.80	155	123	199	150	1,426	211	0.457	29.9	107
150	100	12	37.7	48.1	1,207	642	5.01	3.65	161	128	215	163	1,573	229	0.438	26.5	91.2
150	100	12.5	38.9	49.5	1,225	651	4.97	3.63	163	130	220	166	1,607	233	0.436	25.7	87.9
150	130	3	12.7	16.2	558	449	5.87	5.26	74.4	69.0	86.7	78.7	773	107	0.550	78.6	339
150	130	4	16.8	21.3	723	580	5.82	5.21	96.3	89.3	113	103	1,012	139	0.546	59.7	256
150	130	5	20.7	26.4	877	704	5.77	5.17	117	108	138	126	1,242	169	0.543	48.3	206
150	130	6	24.5	31.2	1,021	819	5.72	5.12	136	126	163	147	1,462	197	0.539	40.8	173
150	130	6.3	25.4	32.3	1,044	837	5.68	5.09	139	129	167	152	1,532	204	0.533	39.4	165
150	130	7	27.9	35.6	1,132	908	5.64	5.05	151	140	182	165	1,679	222	0.530	35.8	149
150	130	8	31.4	40.0	1,250	1,002	5.59	5.00	167	154	203	184	1,879	246	0.526	31.8	131
150	130	10	38.1	48.6	1,456	1,165	5.48	4.90	194	179	241	219	2,247	289	0.517	26.2	106
150	130	12	43.4	55.3	1,551	1,243	5.30	4.74	207	191	265	240	2,535	319	0.498	23.1	90.2
150	130	12.5	44.8	57.0	1,580	1,267	5.26	4.71	211	195	271	246	2,601	327	0.496	22.3	86.9
160	40	3	8.96	11.4	316	34.0	5.26	1.73	39.5	17.0	52.6	19.0	106	31.7	0.390	112	342
160	50	3	9.43	12.0	353	56.0	5.42	2.16	44.1	22.4	57.3	24.9	163	40.9	0.410	106	341
160	60	3	9.90	12.6	390	83.9	5.56	2.58	48.7	28.0	62.0	31.1	228	50.1	0.430	101	341
160	60	4	13.0	16.5	500	106	5.50	2.54	62.5	35.5	80.4	40.0	294	63.8	0.426	77.0	258
160	60	5	16.0	20.4	602	126	5.44	2.49	75.2	42.1	97.7	48.4	355	76.0	0.423	62.6	208
160	60	6	18.9	24.0	694	144	5.37	2.45	86.7	48.0	114	56.1	410	87.0	0.419	53.0	175
160	60	6.3	19.4	24.8	698	146	5.31	2.43	87.2	48.6	116	57.2	426	89.4	0.413	51.4	167
160	60	7	21.3	27.2	750	155	5.25	2.39	93.7	51.8	126	61.9	460	95.9	0.410	46.9	151
160	60	8	23.9	30.4	816	168	5.18	2.35	102	55.9	139	67.9	503	104	0.406	41.8	133
160	80	2	7.33	9.34	320	110	5.85	3.44	40.0	27.6	48.8	30.3	260	47.5	0.473	136	507
160	80	2.5	9.10	11.6	393	135	5.82	3.42	49.1	33.8	60.3	37.4	321	58.2	0.471	110	407
160	80	3	10.8	13.8	464	159	5.80	3.39	58.0	39.8	71.4	44.3	380	68.6	0.470	92.3	340
160	80	4	14.2	18.1	598	204	5.74	3.35	74.7	50.9	92.9	57.4	494	88.0	0.466	70.2	257
160	80	5	17.5	22.4	722	244	5.68	3.30	90.2	61.0	113	69.7	601	106	0.463	57.0	207

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

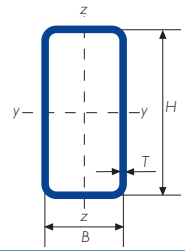


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elxx}	W_{elyy}	W_{plxx}	W_{plyy}	I_t	C_t	A_s	m	$A_{s/y}$
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
160	80	6	20.7	26.4	836	281	5.62	3.26	105	70.2	132	81.3	702	122	0.459	48.2	174
160	80	6.3	21.4	27.3	846	286	5.57	3.24	106	71.4	135	83.3	732	126	0.453	46.7	166
160	80	7	23.5	30.0	914	307	5.52	3.20	114	76.8	147	90.4	797	136	0.450	42.5	150
160	80	8	26.4	33.6	1,001	335	5.46	3.16	125	83.7	163	100	882	150	0.446	37.9	132
160	80	10	31.8	40.6	1,146	380	5.32	3.06	143	95.0	191	117	1,031	172	0.437	31.4	108
160	80	12	35.8	45.7	1,171	391	5.06	2.93	146	97.8	204	125	1,112	183	0.418	27.9	91.6
160	80	12.5	36.9	47.0	1,185	396	5.02	2.90	148	98.9	208	127	1,130	185	0.416	27.1	88.3
160	90	2	7.64	9.74	345	143	5.95	3.83	43.1	31.8	52.0	35.1	317	53.7	0.493	131	506
160	90	2.5	9.49	12.1	424	176	5.92	3.81	53.0	39.0	64.2	43.3	392	66.0	0.491	105	406
160	90	3	11.3	14.4	501	207	5.90	3.79	62.6	46.0	76.1	51.3	465	77.8	0.490	88.4	340
160	90	4	14.9	18.9	646	266	5.84	3.74	80.8	59.0	99.1	66.7	606	100	0.486	67.2	257
160	90	5	18.3	23.4	782	320	5.79	3.70	97.7	71.0	121	81.2	740	121	0.483	54.5	207
160	90	6	21.7	27.6	907	369	5.73	3.65	113	82.0	142	94.8	866	140	0.479	46.1	173
160	90	6.3	22.4	28.5	921	376	5.68	3.63	115	83.5	145	97.2	905	145	0.473	44.6	166
160	90	7	24.6	31.4	996	405	5.64	3.60	124	90.1	158	106	987	157	0.470	40.6	150
160	90	8	27.7	35.2	1,094	443	5.57	3.55	137	98.5	175	117	1,097	172	0.466	36.1	132
160	90	10	33.4	42.6	1,259	507	5.44	3.45	157	113	206	137	1,291	199	0.457	29.9	107
160	90	12	37.7	48.1	1,302	528	5.21	3.31	163	117	222	148	1,414	215	0.438	26.5	91.2
160	90	12.5	38.9	49.5	1,321	535	5.16	3.29	165	119	227	152	1,442	219	0.436	25.7	87.9
160	100	2.5	9.88	12.6	455	222	6.01	4.20	56.9	44.4	68.1	49.5	468	73.7	0.511	101	406
160	100	3	11.8	15.0	538	262	5.99	4.18	67.2	52.4	80.8	58.7	555	87.0	0.510	84.9	340
160	100	4	15.5	19.7	695	337	5.93	4.13	86.9	67.4	105	76.3	725	112	0.506	64.5	256
160	100	5	19.1	24.4	842	407	5.88	4.09	105	81.3	129	93.1	886	136	0.503	52.3	206
160	100	6	22.6	28.8	978	471	5.83	4.04	122	94.1	151	109	1,040	158	0.499	44.2	173
160	100	6.3	23.4	29.8	995	480	5.78	4.01	124	96.1	154	112	1,088	163	0.493	42.7	165
160	100	7	25.7	32.8	1,078	519	5.74	3.98	135	104	168	122	1,188	177	0.490	38.9	150
160	100	8	28.9	36.8	1,186	570	5.67	3.93	148	114	187	135	1,324	195	0.486	34.6	132
160	100	10	35.0	44.6	1,372	655	5.55	3.83	171	131	221	159	1,568	227	0.477	28.6	107
160	100	12	39.6	50.5	1,434	689	5.33	3.69	179	138	239	173	1,738	247	0.458	25.2	90.8
160	100	12.5	40.9	52.0	1,457	699	5.29	3.67	182	140	245	177	1,777	252	0.456	24.5	87.5
160	120	3	12.7	16.2	612	394	6.14	4.93	76.5	65.7	90.3	74.3	749	106	0.550	78.6	339
160	120	4	16.8	21.3	792	510	6.09	4.89	99.1	85.0	118	96.9	980	137	0.546	59.7	256
160	120	5	20.7	26.4	962	618	6.04	4.84	120	103	144	118	1,201	166	0.543	48.3	206
160	120	6	24.5	31.2	1,121	718	5.99	4.80	140	120	169	139	1,413	193	0.539	40.8	173
160	120	6.3	25.4	32.3	1,144	735	5.95	4.77	143	122	174	143	1,481	200	0.533	39.4	165
160	120	7	27.9	35.6	1,242	796	5.91	4.73	155	133	190	156	1,622	218	0.530	35.8	149
160	120	8	31.4	40.0	1,371	878	5.85	4.68	171	146	211	174	1,814	241	0.526	31.8	131
160	120	10	38.1	48.6	1,597	1,019	5.73	4.58	200	170	251	206	2,166	283	0.517	26.2	106
160	120	12	43.4	55.3	1,698	1,087	5.54	4.43	212	181	275	226	2,439	312	0.498	23.1	90.2
160	120	12.5	44.8	57.0	1,730	1,107	5.51	4.41	216	185	282	232	2,502	319	0.496	22.3	86.9
160	140	3	13.7	17.4	686	560	6.28	5.67	85.7	80.0	99.7	91.1	956	124	0.590	73.2	339
160	140	4	18.0	22.9	890	726	6.23	5.62	111	104	130	119	1,253	161	0.586	55.5	255
160	140	5	22.3	28.4	1,082	882	6.18	5.58	135	126	160	146	1,539	196	0.583	44.9	206
160	140	6	26.4	33.6	1,263	1,028	6.13	5.53	158	147	188	171	1,815	229	0.579	37.9	172

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

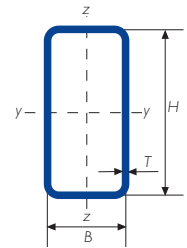


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elox}	W _{ely}	W _{plbx}	W _{ply}	I _t	C _t	A _s	m	A _{s/v}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ⁻¹
160	140	6.3	27.4	34.8	1,293	1,054	6.09	5.50	162	151	193	176	1,903	238	0.573	36.6	164
160	140	7	30.1	38.4	1,406	1,145	6.05	5.46	176	164	211	193	2,087	259	0.570	33.2	149
160	140	8	33.9	43.2	1,556	1,266	6.00	5.41	195	181	236	215	2,341	287	0.566	29.5	131
160	140	10	41.3	52.6	1,822	1,481	5.89	5.31	228	212	281	256	2,810	339	0.557	24.2	106
160	140	12	47.1	60.1	1,961	1,596	5.71	5.15	245	228	311	284	3,196	378	0.538	21.2	89.6
160	140	12.5	48.7	62.0	2,002	1,629	5.68	5.12	250	233	319	291	3,285	387	0.536	20.5	86.3
180	40	3	9.90	12.6	433	38.1	5.86	1.74	48.1	19.1	64.6	21.3	122	35.9	0.430	101	341
180	40	4	13.0	16.5	554	47.5	5.79	1.69	61.6	23.8	83.7	27.2	155	44.8	0.426	77.0	258
180	40	5	16.0	20.4	665	55.4	5.71	1.65	73.9	27.7	102	32.5	183	52.5	0.423	62.6	208
180	40	6	18.9	24.0	764	62.0	5.64	1.61	84.9	31.0	118	37.3	208	59.0	0.419	53.0	175
180	60	2	7.33	9.34	364	65.5	6.24	2.65	40.4	21.8	51.4	23.7	182	39.5	0.473	136	507
180	60	2.5	9.10	11.6	447	80.0	6.21	2.63	49.6	26.7	63.5	29.2	224	48.3	0.471	110	407
180	60	3	10.8	13.8	527	93.7	6.18	2.60	58.5	31.2	75.2	34.5	265	56.6	0.470	92.3	340
180	60	4	14.2	18.1	678	119	6.11	2.56	75.4	39.6	97.7	44.5	341	72.2	0.466	70.2	257
180	60	5	17.5	22.4	818	141	6.05	2.52	90.9	47.2	119	53.9	412	86.1	0.463	57.0	207
180	60	6	20.7	26.4	946	161	5.98	2.47	105	53.8	139	62.6	477	98.7	0.459	48.2	174
180	60	6.3	21.4	27.3	955	164	5.91	2.45	106	54.6	142	64.0	495	102	0.453	46.7	166
180	60	7	23.5	30.0	1,029	175	5.86	2.42	114	58.4	154	69.3	535	109	0.450	42.5	150
180	60	8	26.4	33.6	1,125	189	5.78	2.37	125	63.1	171	76.2	586	118	0.446	37.9	132
180	60	10	31.8	40.6	1,281	211	5.62	2.28	142	70.3	200	88.1	670	133	0.437	31.4	108
180	60	12	35.8	45.7	1,287	214	5.31	2.16	143	71.2	212	93.3	693	138	0.418	27.9	91.6
180	60	12.5	36.9	47.0	1,298	215	5.25	2.14	144	71.7	216	94.8	698	139	0.416	27.1	88.3
180	70	3	11.3	14.4	574	132	6.31	3.02	63.8	37.6	80.5	41.5	351	67.1	0.490	88.4	340
180	70	4	14.9	18.9	740	168	6.25	2.98	82.2	48.0	105	53.8	454	85.9	0.486	67.2	257
180	70	5	18.3	23.4	894	201	6.19	2.93	99.4	57.4	128	65.3	551	103	0.483	54.5	207
180	70	6	21.7	27.6	1,037	231	6.13	2.89	115	65.9	150	76.1	641	119	0.479	46.1	173
180	70	6.3	22.4	28.5	1,050	235	6.06	2.87	117	67.1	153	77.9	668	122	0.473	44.6	166
180	70	7	24.6	31.4	1,134	252	6.01	2.84	126	72.0	166	84.6	725	132	0.470	40.6	150
180	70	8	27.7	35.2	1,243	274	5.94	2.79	138	78.3	184	93.5	800	144	0.466	36.1	132
180	80	2.5	9.9	12.6	525	150	6.46	3.45	58.4	37.6	72.3	41.3	375	65.8	0.511	101	406
180	80	3	11.8	15.0	621	177	6.43	3.43	69.0	44.2	85.8	48.9	445	77.5	0.510	84.9	340
180	80	4	15.5	19.7	802	227	6.37	3.39	89.1	56.7	112	63.5	578	100	0.506	64.5	256
180	80	5	19.1	24.4	971	272	6.31	3.34	108	68.1	137	77.2	704	120	0.503	52.3	206
180	80	6	22.6	28.8	1,128	314	6.25	3.30	125	78.5	160	90.2	823	139	0.499	44.2	173
180	80	6.3	23.4	29.8	1,145	320	6.20	3.28	127	80.0	164	92.5	858	143	0.493	42.7	165
180	80	7	25.7	32.8	1,239	345	6.15	3.24	138	86.2	178	101	934	155	0.490	38.9	150
180	80	8	28.9	36.8	1,362	377	6.08	3.20	151	94.1	198	111	1,036	170	0.486	34.6	132
180	80	10	35.0	44.6	1,570	429	5.94	3.10	174	107	234	131	1,214	196	0.477	28.6	107
180	80	12	39.6	50.5	1,626	447	5.68	2.98	181	112	252	141	1,320	211	0.458	25.2	90.8
180	80	12.5	40.9	52.0	1,650	453	5.63	2.95	183	113	258	144	1,344	214	0.456	24.5	87.5
180	100	3	12.7	16.2	715	290	6.64	4.23	79.4	58.0	96.4	64.5	654	98.3	0.550	78.6	339
180	100	4	16.8	21.3	926	374	6.59	4.18	103	74.8	126	84.0	854	127	0.546	59.7	256
180	100	5	20.7	26.4	1,124	452	6.53	4.14	125	90.4	154	103	1,045	154	0.543	48.3	206
180	100	6	24.5	31.2	1,310	524	6.48	4.10	146	105	181	120	1,227	179	0.539	40.8	173

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

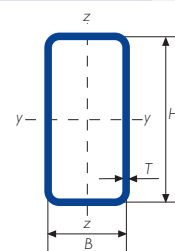


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elxx}	W_{elyy}	W_{plxx}	W_{plyy}	I_t	C_t	A_s	m	$A_{s/v}$
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
180	100	6.3	25.4	32.3	1,335	536	6.43	4.07	148	107	186	124	1,283	185	0.533	39.4	165
180	100	7	27.9	35.6	1,448	580	6.38	4.04	161	116	203	135	1,403	201	0.530	35.8	149
180	100	8	31.4	40.0	1,598	637	6.32	3.99	178	127	226	150	1,565	222	0.526	31.8	131
180	100	10	38.1	48.6	1,859	736	6.19	3.89	207	147	268	177	1,859	260	0.517	26.2	106
180	100	12	43.4	55.3	1,965	782	5.96	3.76	218	156	292	194	2,073	285	0.498	23.1	90.2
180	100	12.5	44.8	57.0	2,001	796	5.92	3.74	222	159	300	199	2,122	291	0.496	22.3	86.9
180	120	3	13.7	17.4	809	436	6.82	5.00	89.9	72.6	107	81.3	886	119	0.590	73.2	339
180	120	4	18.0	22.9	1,050	564	6.76	4.96	117	94.0	140	106	1,160	155	0.586	55.5	255
180	120	5	22.3	28.4	1,277	684	6.71	4.91	142	114	172	130	1,424	188	0.583	44.9	206
180	120	6	26.4	33.6	1,491	796	6.66	4.87	166	133	202	153	1,677	219	0.579	37.9	172
180	120	6.3	27.4	34.8	1,525	816	6.62	4.84	169	136	207	157	1,757	228	0.573	36.6	164
180	120	7	30.1	38.4	1,658	886	6.57	4.81	184	148	227	172	1,926	248	0.570	33.2	149
180	120	8	33.9	43.2	1,835	978	6.51	4.76	204	163	253	192	2,156	275	0.566	29.5	131
180	120	10	41.3	52.6	2,149	1,141	6.39	4.66	239	190	302	228	2,582	323	0.557	24.2	106
180	120	12	47.1	60.1	2,304	1,227	6.19	4.52	256	205	333	252	2,924	359	0.538	21.2	89.6
180	120	12.5	48.7	62.0	2,352	1,252	6.16	4.49	261	209	341	258	3,002	368	0.536	20.5	86.3
180	140	3	14.6	18.6	903	616	6.97	5.75	100	88.0	118	99.3	1,137	140	0.630	68.5	338
180	140	4	19.3	24.5	1,174	800	6.92	5.71	130	114	154	130	1,491	182	0.626	51.9	255
180	140	5	23.8	30.4	1,431	973	6.86	5.66	159	139	189	159	1,834	222	0.623	42.0	205
180	140	6	28.3	36.0	1,673	1,136	6.81	5.61	186	162	223	187	2,164	259	0.619	35.4	172
180	140	6.3	29.3	37.4	1,715	1,166	6.78	5.59	191	167	229	193	2,269	270	0.613	34.1	164
180	140	7	32.3	41.2	1,867	1,269	6.74	5.55	207	181	251	212	2,491	294	0.610	31.0	148
180	140	8	36.5	46.4	2,072	1,406	6.68	5.50	230	201	281	236	2,797	327	0.606	27.4	130
180	140	10	44.4	56.6	2,438	1,650	6.57	5.40	271	236	336	282	3,366	387	0.597	22.5	106
180	140	12	50.9	64.9	2,644	1,793	6.38	5.26	294	256	373	314	3,849	434	0.578	19.6	89.1
180	140	12.5	52.6	67.0	2,704	1,833	6.35	5.23	300	262	383	323	3,960	445	0.576	19.0	85.9
185	65	5	18.3	23.4	919	174	6.27	2.73	99.4	53.6	129	61.0	497	97.4	0.483	54.5	207
200	80	3	12.7	16.2	808	195	7.06	3.47	80.8	48.7	101	53.5	510	86.4	0.550	78.6	339
200	80	4	16.8	21.3	1,046	250	7.00	3.42	105	62.4	132	69.6	664	111	0.546	59.7	256
200	80	5	20.7	26.4	1,269	300	6.94	3.38	127	75.1	162	84.7	808	134	0.543	48.3	206
200	80	6	24.5	31.2	1,477	347	6.88	3.33	148	86.7	190	99.1	945	155	0.539	40.8	173
200	80	6.3	25.4	32.3	1,503	354	6.82	3.31	150	88.6	195	102	986	161	0.533	39.4	165
200	80	7	27.9	35.6	1,629	382	6.77	3.28	163	95.5	212	111	1,074	174	0.530	35.8	149
200	80	8	31.4	40.0	1,796	418	6.70	3.23	180	105	237	123	1,192	191	0.526	31.8	131
200	80	10	38.1	48.6	2,083	478	6.55	3.14	208	120	280	145	1,399	221	0.517	26.2	106
200	80	12	43.4	55.3	2,182	503	6.28	3.02	218	126	305	158	1,531	239	0.498	23.1	90.2
200	80	12.5	44.8	57.0	2,219	511	6.24	2.99	222	128	312	161	1,561	243	0.496	22.3	86.9
200	100	3	13.7	17.4	924	318	7.29	4.28	92.4	63.6	113	70.3	754	110	0.590	73.2	339
200	100	4	18.0	22.9	1,200	411	7.23	4.23	120	82.2	148	91.7	985	142	0.586	55.5	255
200	100	5	22.3	28.4	1,459	497	7.17	4.19	146	99.4	181	112	1,206	172	0.583	44.9	206
200	100	6	26.4	33.6	1,703	577	7.12	4.14	170	115	213	132	1,417	200	0.579	37.9	172
200	100	6.3	27.4	34.8	1,739	591	7.06	4.12	174	118	219	135	1,483	208	0.573	36.6	164
200	100	7	30.1	38.4	1,890	640	7.02	4.09	189	128	240	148	1,622	226	0.570	33.2	149
200	100	8	33.9	43.2	2,091	705	6.95	4.04	209	141	267	165	1,811	250	0.566	29.5	131

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

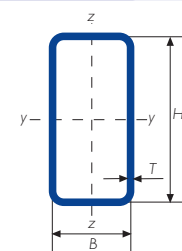


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elox}	W _{ely}	W _{plox}	W _{ply}	I _t	C _t	A _s	m	A _{s/v}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ⁻¹
200	100	10	41.3	52.6	2,444	818	6.82	3.94	244	164	318	195	2,154	292	0.557	24.2	106
200	100	12	47.1	60.1	2,607	876	6.59	3.82	261	175	350	215	2,415	322	0.538	21.2	89.6
200	100	12.5	48.7	62.0	2,659	892	6.55	3.79	266	178	359	221	2,474	329	0.536	20.5	86.3
200	120	3	14.6	18.6	1,041	477	7.48	5.06	104	79.4	125	88.3	1,027	133	0.630	68.5	338
200	120	4	19.3	24.5	1,353	618	7.43	5.02	135	103	164	115	1,345	172	0.626	51.9	255
200	120	5	23.8	30.4	1,649	750	7.37	4.97	165	125	201	141	1,652	210	0.623	42.0	205
200	120	6	28.3	36.0	1,929	874	7.32	4.93	193	146	237	166	1,947	245	0.619	35.4	172
200	120	6.3	29.3	37.4	1,976	898	7.27	4.90	198	150	244	172	2,040	255	0.613	34.1	164
200	120	7	32.3	41.2	2,151	975	7.23	4.87	215	163	267	188	2,237	277	0.610	31.0	148
200	120	8	36.5	46.4	2,386	1,079	7.17	4.82	239	180	298	209	2,507	308	0.606	27.4	130
200	120	10	44.4	56.6	2,806	1,262	7.04	4.72	281	210	356	250	3,007	364	0.597	22.5	106
200	120	12	50.9	64.9	3,031	1,368	6.84	4.59	303	228	395	278	3,420	406	0.578	19.6	89.1
200	120	12.5	52.6	67.0	3,099	1,397	6.80	4.57	310	233	406	285	3,515	416	0.576	19.0	85.9
200	120	14.2	58.2	74.2	3,297	1,484	6.67	4.47	330	247	440	309	3,804	446	0.567	17.2	76.4
200	150	3	16.0	20.4	1,215	785	7.72	6.20	122	105	143	118	1,478	168	0.690	62.4	338
200	150	4	21.2	26.9	1,584	1,021	7.67	6.16	158	136	187	154	1,942	219	0.686	47.3	255
200	150	5	26.2	33.4	1,935	1,245	7.62	6.11	193	166	230	189	2,391	267	0.683	38.2	205
200	150	6	31.1	39.6	2,268	1,457	7.56	6.06	227	194	271	223	2,826	313	0.679	32.1	171
200	150	6.3	32.3	41.1	2,330	1,499	7.53	6.04	233	200	280	230	2,965	325	0.673	31.0	164
200	150	7	35.6	45.4	2,542	1,634	7.49	6.00	254	218	307	252	3,259	356	0.670	28.1	148
200	150	8	40.2	51.2	2,829	1,816	7.43	5.95	283	242	344	283	3,665	396	0.666	24.9	130
200	150	10	49.1	62.6	3,348	2,143	7.31	5.85	335	286	413	339	4,428	471	0.657	20.4	105
200	150	12	56.6	72.1	3,668	2,353	7.14	5.71	367	314	463	380	5,100	532	0.638	17.7	88.6
200	150	12.5	58.5	74.5	3,759	2,410	7.10	5.69	376	321	476	392	5,256	547	0.636	17.1	85.3
200	150	14.2	64.9	82.7	4,033	2,583	6.98	5.59	403	344	519	426	5,746	591	0.627	15.4	75.8
200	160	3	16.5	21.0	1,274	908	7.79	6.57	127	113	149	128	1,638	179	0.710	60.6	338
200	160	4	21.8	27.7	1,661	1,182	7.74	6.53	166	148	195	168	2,153	234	0.706	45.9	255
200	160	5	27.0	34.4	2,030	1,443	7.69	6.48	203	180	240	206	2,653	286	0.703	37.1	205
200	160	6	32.1	40.8	2,381	1,690	7.64	6.43	238	211	283	243	3,138	335	0.699	31.2	171
200	160	6.3	33.3	42.4	2,449	1,740	7.60	6.41	245	217	292	251	3,293	349	0.693	30.0	163
200	160	7	36.7	46.8	2,672	1,898	7.56	6.37	267	237	321	275	3,621	382	0.690	27.2	148
200	160	8	41.5	52.8	2,976	2,111	7.50	6.32	298	264	359	309	4,076	426	0.686	24.1	130
200	160	10	50.7	64.6	3,528	2,498	7.39	6.22	353	312	432	371	4,933	507	0.677	19.7	105
200	160	12	58.5	74.5	3,881	2,751	7.22	6.08	388	344	485	417	5,697	574	0.658	17.1	88.4
200	160	12.5	60.5	77.0	3,979	2,820	7.19	6.05	398	353	500	429	5,875	590	0.656	16.5	85.1
220	100	3	14.6	18.6	1,169	346	7.92	4.31	106	69.3	131	76.1	856	121	0.630	68.5	338
220	100	4	19.3	24.5	1,519	448	7.87	4.27	138	89.5	172	99.4	1,119	157	0.626	51.9	255
220	100	5	23.8	30.4	1,851	542	7.81	4.23	168	108	211	122	1,370	190	0.623	42.0	205
220	100	6	28.3	36.0	2,164	630	7.75	4.18	197	126	248	143	1,610	221	0.619	35.4	172
220	100	6.3	29.3	37.4	2,213	647	7.70	4.16	201	129	255	147	1,685	230	0.613	34.1	164
220	100	7	32.3	41.2	2,408	701	7.65	4.13	219	140	279	161	1,844	250	0.610	31.0	148
220	100	8	36.5	46.4	2,670	773	7.58	4.08	243	155	312	179	2,060	277	0.606	27.4	130
220	100	10	44.4	56.6	3,134	899	7.44	3.99	285	180	373	213	2,454	325	0.597	22.5	106
220	100	12	50.9	64.9	3,368	969	7.21	3.87	306	194	412	236	2,761	359	0.578	19.6	89.1

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

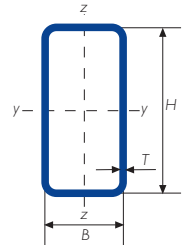


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elxx}	W_{elyy}	W_{plxx}	W_{plyy}	I_t	C_t	A_s	m	$A_{s/v}$
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ²
220	100	12.5	52.6	67.0	3,441	989	7.16	3.84	313	198	424	243	2,831	367	0.576	19.0	85.9
220	120	4	20.5	26.1	1,706	672	8.08	5.07	155	112	189	125	1,534	190	0.666	48.7	255
220	120	5	25.4	32.4	2,082	816	8.02	5.02	189	136	232	153	1,885	232	0.663	39.4	205
220	120	6	30.2	38.4	2,439	952	7.97	4.98	222	159	274	180	2,222	271	0.659	33.1	172
220	120	6.3	31.3	39.9	2,501	979	7.92	4.95	227	163	282	186	2,329	282	0.653	31.9	164
220	120	7	34.5	44.0	2,726	1,065	7.87	4.92	248	177	309	203	2,554	307	0.650	29.0	148
220	120	8	39.0	49.6	3,029	1,179	7.81	4.87	275	197	346	227	2,864	342	0.646	25.7	130
220	120	10	47.5	60.6	3,576	1,383	7.68	4.78	325	231	415	272	3,440	404	0.637	21.0	105
220	120	12	54.7	69.7	3,888	1,508	7.47	4.65	353	251	462	304	3,925	452	0.618	18.3	88.7
220	120	12.5	56.6	72.0	3,980	1,543	7.43	4.63	362	257	476	312	4,036	464	0.616	17.7	85.5
220	120	14.2	62.7	79.8	4,252	1,644	7.30	4.54	387	274	517	339	4,380	499	0.607	16.0	76.0
220	130	3	16.0	20.4	1,381	618	8.22	5.50	126	95.1	151	105	1,339	159	0.690	62.4	338
220	130	4	21.2	26.9	1,799	803	8.17	5.46	164	124	198	138	1,757	207	0.686	47.3	255
220	130	5	26.2	33.4	2,198	977	8.12	5.41	200	150	243	169	2,160	253	0.683	38.2	205
220	130	6	31.1	39.6	2,577	1,142	8.06	5.37	234	176	287	200	2,550	296	0.679	32.1	171
220	130	6.3	32.3	41.1	2,645	1,175	8.02	5.34	240	181	296	206	2,674	308	0.673	31.0	164
220	130	7	35.6	45.4	2,885	1,279	7.97	5.31	262	197	324	226	2,935	336	0.670	28.1	148
220	130	8	40.2	51.2	3,209	1,419	7.91	5.26	292	218	363	253	3,296	374	0.666	24.9	130
220	130	10	49.1	62.6	3,796	1,671	7.79	5.17	345	257	436	303	3,971	444	0.657	20.4	105
220	130	12	56.6	72.1	4,148	1,830	7.59	5.04	377	281	487	339	4,552	499	0.638	17.7	88.6
220	130	12.5	58.5	74.5	4,249	1,873	7.55	5.01	386	288	501	349	4,687	512	0.636	17.1	85.3
220	140	3	16.5	21.0	1,451	729	8.31	5.89	132	104	157	116	1,513	172	0.710	60.6	338
220	140	4	21.8	27.7	1,893	948	8.26	5.84	172	135	206	152	1,988	224	0.706	45.9	255
220	140	5	27.0	34.4	2,313	1,155	8.21	5.80	210	165	254	186	2,447	274	0.703	37.1	205
220	140	6	32.1	40.8	2,714	1,352	8.15	5.75	247	193	299	220	2,891	321	0.699	31.2	171
220	140	6.3	33.3	42.4	2,789	1,392	8.11	5.73	254	199	309	227	3,032	334	0.693	30.0	163
220	140	7	36.7	46.8	3,044	1,516	8.07	5.69	277	217	339	249	3,332	365	0.690	27.2	148
220	140	8	41.5	52.8	3,389	1,685	8.01	5.65	308	241	380	279	3,746	407	0.686	24.1	130
220	140	10	50.7	64.6	4,017	1,989	7.89	5.55	365	284	457	334	4,523	484	0.677	19.7	105
220	140	12	58.5	74.5	4,408	2,187	7.69	5.42	401	312	512	376	5,206	546	0.658	17.1	88.4
220	140	12.5	60.5	77.0	4,519	2,241	7.66	5.39	411	320	527	387	5,365	561	0.656	16.5	85.1
220	180	4	24.3	30.9	2,266	1,670	8.56	7.34	206	186	241	210	2,985	292	0.786	41.2	254
220	180	5	30.1	38.4	2,776	2,043	8.51	7.30	252	227	297	259	3,684	358	0.783	33.2	204
220	180	6	35.8	45.6	3,264	2,400	8.46	7.25	297	267	351	306	4,364	421	0.779	27.9	171
220	180	6.3	37.2	47.4	3,364	2,476	8.42	7.22	306	275	363	317	4,583	439	0.773	26.8	163
220	180	7	41.1	52.4	3,679	2,706	8.38	7.19	334	301	399	348	5,045	480	0.770	24.3	147
220	180	8	46.5	59.2	4,109	3,020	8.33	7.14	374	336	448	391	5,689	537	0.766	21.5	129
220	180	10	57.0	72.6	4,900	3,595	8.22	7.04	445	399	541	472	6,915	644	0.757	17.6	104
220	180	12	66.0	84.1	5,447	4,001	8.05	6.90	495	445	612	534	8,042	734	0.738	15.2	87.8
220	180	12.5	68.3	87.0	5,596	4,109	8.02	6.87	509	457	631	551	8,306	756	0.736	14.6	84.5
240	80	3	14.6	18.6	1,282	230	8.30	3.52	107	57.6	136	62.7	644	104	0.630	68.5	338
240	80	4	19.3	24.5	1,665	296	8.24	3.47	139	74.0	178	81.7	837	134	0.626	51.9	255
240	80	5	23.8	30.4	2,027	357	8.17	3.43	169	89.2	219	99.7	1,020	162	0.623	42.0	205
240	80	6	28.3	36.0	2,369	413	8.11	3.38	197	103	257	117	1,193	188	0.619	35.4	172

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

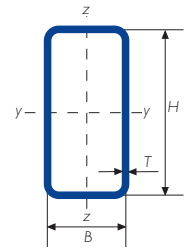


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elox}	W _{ely}	W _{plox}	W _{ply}	I _t	C _t	A _s	m	A _{s/v}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ⁻¹
240	80	6.3	29.3	37.4	2,418	423	8.04	3.36	201	106	264	120	1,245	195	0.613	34.1	164
240	80	7	32.3	41.2	2,629	457	7.99	3.33	219	114	289	131	1,357	211	0.610	31.0	148
240	80	8	36.5	46.4	2,911	502	7.92	3.29	243	125	323	146	1,508	233	0.606	27.4	130
240	80	10	44.4	56.6	3,408	577	7.76	3.19	284	144	385	173	1,774	270	0.597	22.5	106
240	80	12	50.9	64.9	3,635	616	7.49	3.08	303	154	425	190	1,959	295	0.578	19.6	89.1
240	80	12.5	52.6	67.0	3,709	626	7.44	3.06	309	157	436	195	2,000	300	0.576	19.0	85.9
250	50	4	18.0	22.9	1,486	109	8.05	2.18	119	43.4	161	48.5	356	82.2	0.586	55.5	255
250	50	5	22.3	28.4	1,803	129	7.97	2.13	144	51.5	197	58.7	427	97.7	0.583	44.9	206
250	50	6	26.4	33.6	2,099	146	7.90	2.09	168	58.5	232	68.1	491	111	0.579	37.9	172
250	50	6.3	27.4	34.8	2,130	149	7.82	2.07	170	59.6	237	69.9	508	115	0.573	36.6	164
250	50	7	30.1	38.4	2,308	159	7.76	2.04	185	63.6	259	75.7	546	123	0.570	33.2	149
250	50	8	33.9	43.2	2,542	171	7.67	1.99	203	68.6	289	83.3	595	133	0.566	29.5	131
250	100	3	16.0	20.4	1,606	389	8.87	4.36	128	77.8	161	84.9	1,012	138	0.690	62.4	338
250	100	4	21.2	26.9	2,092	503	8.81	4.32	167	101	210	111	1,323	179	0.686	47.3	255
250	100	5	26.2	33.4	2,554	610	8.75	4.28	204	122	259	136	1,620	217	0.683	38.2	205
250	100	6	31.1	39.6	2,992	710	8.69	4.23	239	142	305	160	1,905	253	0.679	32.1	171
250	100	6.3	32.3	41.1	3,066	730	8.63	4.21	245	146	314	165	1,993	263	0.673	31.0	164
250	100	7	35.6	45.4	3,342	792	8.58	4.18	267	158	344	180	2,182	286	0.670	28.1	148
250	100	8	40.2	51.2	3,714	875	8.51	4.13	297	175	385	201	2,439	317	0.666	24.9	130
250	100	10	49.1	62.6	4,384	1,021	8.37	4.04	351	204	462	240	2,910	373	0.657	20.4	105
250	100	12	56.6	72.1	4,757	1,109	8.13	3.92	381	222	515	268	3,288	415	0.638	17.7	88.6
250	100	12.5	58.5	74.5	4,868	1,133	8.08	3.90	389	227	530	275	3,374	425	0.636	17.1	85.3
250	150	4	24.3	30.9	2,697	1,234	9.33	6.32	216	165	260	183	2,665	275	0.786	41.2	254
250	150	5	30.1	38.4	3,304	1,508	9.28	6.27	264	201	320	225	3,285	337	0.783	33.2	204
250	150	6	35.8	45.6	3,886	1,768	9.23	6.23	311	236	378	266	3,886	396	0.779	27.9	171
250	150	6.3	37.2	47.4	4,001	1,825	9.18	6.20	320	243	391	276	4,078	412	0.773	26.8	163
250	150	7	41.1	52.4	4,375	1,992	9.14	6.17	350	266	429	303	4,485	451	0.770	24.3	147
250	150	8	46.5	59.2	4,886	2,219	9.08	6.12	391	296	482	340	5,050	504	0.766	21.5	129
250	150	10	57.0	72.6	5,825	2,634	8.96	6.02	466	351	582	409	6,121	602	0.757	17.6	104
250	150	12	66.0	84.1	6,458	2,925	8.77	5.90	517	390	658	463	7,089	684	0.738	15.2	87.8
250	150	12.5	68.3	87.0	6,633	3,002	8.73	5.87	531	400	678	477	7,315	704	0.736	14.6	84.5
250	150	14.2	76.1	96.9	7,174	3,240	8.61	5.78	574	432	743	523	8,036	766	0.727	13.1	75.0
250	180	4	26.2	33.3	3,060	1,855	9.58	7.46	245	206	289	231	3,594	333	0.846	38.2	254
250	200	4	27.4	34.9	3,302	2,352	9.72	8.20	264	235	309	266	4,254	372	0.886	36.5	254
250	200	5	34.0	43.4	4,055	2,886	9.67	8.16	324	289	381	328	5,257	457	0.883	29.4	204
250	200	6	40.5	51.6	4,779	3,397	9.62	8.11	382	340	451	388	6,237	538	0.879	24.7	170
250	200	6.3	42.2	53.7	4,937	3,513	9.58	8.08	395	351	468	402	6,551	562	0.873	23.7	162
250	200	7	46.6	59.4	5,409	3,846	9.55	8.05	433	385	514	442	7,221	616	0.870	21.5	147
250	200	8	52.8	67.2	6,057	4,304	9.49	8.00	485	430	579	498	8,156	691	0.866	18.9	129
250	200	10	64.8	82.6	7,266	5,154	9.38	7.90	581	515	702	603	9,950	832	0.857	15.4	104
250	200	12	75.4	96.1	8,159	5,792	9.22	7.77	653	579	801	688	11,640	955	0.838	13.3	87.3
250	200	12.5	78.1	99.5	8,397	5,960	9.18	7.74	672	596	827	711	12,039	985	0.836	12.8	83.9
250	200	14.2	87.2	111	9,150	6,489	9.08	7.64	732	649	911	783	13,333	1,080	0.827	11.5	74.4
260	100	3	16.5	21.0	1,771	403	9.18	4.38	136	80.6	171	87.8	1,064	144	0.710	60.6	338

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

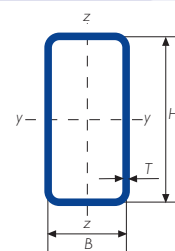


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elxx}	W_{elyy}	W_{plxx}	W_{plyy}	I_t	C_t	A_s	m	$A_{s/y}$
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
260	100	4	21.8	27.7	2,309	521	9.12	4.33	178	104	224	115	1,391	186	0.706	45.9	255
260	100	5	27.0	34.4	2,821	632	9.06	4.29	217	126	275	141	1,704	226	0.703	37.1	205
260	100	6	32.1	40.8	3,307	736	9.00	4.25	254	147	325	165	2,004	264	0.699	31.2	171
260	100	6.3	33.3	42.4	3,390	757	8.94	4.23	261	151	335	171	2,097	274	0.693	30.0	163
260	100	7	36.7	46.8	3,697	822	8.89	4.19	284	164	367	187	2,295	298	0.690	27.2	148
260	100	8	41.5	52.8	4,112	909	8.82	4.15	316	182	411	209	2,566	331	0.686	24.1	130
260	100	10	50.7	64.6	4,862	1,062	8.68	4.06	374	212	494	249	3,063	390	0.677	19.7	105
260	100	12	58.5	74.5	5,291	1,156	8.43	3.94	407	231	552	279	3,465	434	0.658	17.1	88.4
260	100	12.5	60.5	77.0	5,417	1,181	8.39	3.92	417	236	568	286	3,557	444	0.656	16.5	85.1
260	140	4	24.3	30.9	2,833	1,096	9.57	5.95	218	157	265	173	2,504	267	0.786	41.2	254
260	140	5	30.1	38.4	3,471	1,338	9.51	5.91	267	191	326	213	3,084	326	0.783	33.2	204
260	140	6	35.8	45.6	4,082	1,567	9.46	5.86	314	224	386	252	3,646	383	0.779	27.9	171
260	140	6.3	37.2	47.4	4,202	1,617	9.41	5.84	323	231	399	261	3,825	398	0.773	26.8	163
260	140	7	41.1	52.4	4,594	1,764	9.37	5.80	353	252	438	286	4,205	436	0.770	24.3	147
260	140	8	46.5	59.2	5,129	1,964	9.30	5.76	395	281	492	321	4,731	487	0.766	21.5	129
260	140	10	57.0	72.6	6,113	2,328	9.18	5.66	470	333	594	386	5,724	580	0.757	17.6	104
260	140	12	66.0	84.1	6,768	2,581	8.97	5.54	521	369	671	437	6,614	659	0.738	15.2	87.8
260	140	12.5	68.3	87.0	6,950	2,648	8.94	5.52	535	378	692	450	6,821	677	0.736	14.6	84.5
260	140	14.2	76.1	96.9	7,512	2,854	8.81	5.43	578	408	758	493	7,479	736	0.727	13.1	75.0
260	180	4	26.8	34.1	3,358	1,917	9.92	7.49	258	213	306	239	3,801	347	0.866	37.3	254
260	180	5	33.2	42.4	4,121	2,350	9.86	7.45	317	261	377	294	4,695	426	0.863	30.1	204
260	180	6	39.6	50.4	4,856	2,763	9.81	7.40	374	307	447	348	5,566	501	0.859	25.3	170
260	180	6.3	41.2	52.5	5,013	2,856	9.77	7.38	386	317	463	361	5,844	523	0.853	24.3	163
260	180	7	45.5	58.0	5,490	3,125	9.73	7.34	422	347	509	396	6,438	573	0.850	22.0	147
260	180	8	51.5	65.6	6,145	3,493	9.68	7.29	473	388	573	446	7,267	642	0.846	19.4	129
260	180	10	63.2	80.6	7,363	4,174	9.56	7.20	566	464	694	540	8,850	772	0.837	15.8	104
260	180	12	73.5	93.7	8,245	4,679	9.38	7.07	634	520	790	615	10,329	884	0.818	13.6	87.4
260	180	12.5	76.2	97.0	8,482	4,812	9.35	7.04	652	535	815	635	10,677	911	0.816	13.1	84.0
260	180	14.2	85.0	108	9,230	5,229	9.23	6.95	710	581	897	698	11,802	998	0.807	11.8	74.5
300	50	5	26.2	33.4	2,977	154	9.45	2.15	198	61.6	274	70.0	527	118	0.683	38.2	205
300	50	6	31.1	39.6	3,480	176	9.37	2.10	232	70.2	323	81.3	606	135	0.679	32.1	171
300	50	6.3	32.3	41.1	3,548	179	9.29	2.09	237	71.7	332	83.7	628	139	0.673	31.0	164
300	50	7	35.6	45.4	3,858	192	9.22	2.06	257	76.7	364	90.8	675	149	0.670	28.1	148
300	50	8	40.2	51.2	4,272	207	9.13	2.01	285	82.8	407	100	736	161	0.666	24.9	130
300	100	4	24.3	30.9	3,320	595	10.4	4.39	221	119	283	130	1,668	216	0.786	41.2	254
300	100	5	30.1	38.4	4,065	723	10.3	4.34	271	145	348	160	2,044	262	0.783	33.2	204
300	100	6	35.8	45.6	4,777	842	10.2	4.30	318	168	411	188	2,403	306	0.779	27.9	171
300	100	6.3	37.2	47.4	4,907	868	10.2	4.28	327	174	425	194	2,515	318	0.773	26.8	163
300	100	7	41.1	52.4	5,360	944	10.1	4.25	357	189	466	213	2,754	347	0.770	24.3	147
300	100	8	46.5	59.2	5,978	1,045	10.0	4.20	399	209	523	238	3,080	385	0.766	21.5	129
300	100	10	57.0	72.6	7,106	1,224	9.90	4.11	474	245	631	285	3,681	455	0.757	17.6	104
300	100	12	66.0	84.1	7,808	1,343	9.64	4.00	521	269	710	321	4,178	509	0.738	15.2	87.8
300	100	12.5	68.3	87.0	8,010	1,374	9.59	3.97	534	275	732	330	4,292	521	0.736	14.6	84.5
300	150	4	27.4	34.9	4,197	1,447	11.0	6.44	280	193	342	212	3,417	332	0.886	36.5	254

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

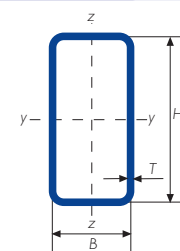


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elox}	W _{elyy}	W _{plox}	W _{plyy}	I _t	C _t	A _s	m	A _{s/v}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ⁻¹
300	150	5	34.0	43.4	5,153	1,771	10.9	6.39	344	236	422	262	4,214	407	0.883	29.4	204
300	150	6	40.5	51.6	6,074	2,080	10.8	6.35	405	277	500	309	4,988	479	0.879	24.7	170
300	150	6.3	42.2	53.7	6,266	2,150	10.8	6.32	418	287	517	321	5,234	499	0.873	23.7	162
300	150	7	46.6	59.4	6,863	2,350	10.8	6.29	458	313	569	353	5,760	546	0.870	21.5	147
300	150	8	52.8	67.2	7,684	2,623	10.7	6.25	512	350	640	396	6,491	612	0.866	18.9	129
300	150	10	64.8	82.6	9,209	3,125	10.6	6.15	614	417	776	479	7,879	733	0.857	15.4	104
300	150	12	75.4	96.1	10,298	3,498	10.4	6.03	687	466	883	546	9,154	837	0.838	13.3	87.3
300	150	12.5	78.1	99.5	10,594	3,595	10.3	6.01	706	479	912	563	9,453	862	0.836	12.8	83.9
300	150	14.2	87.2	111	11,526	3,897	10.2	5.92	768	520	1,003	619	10,412	941	0.827	11.5	74.4
300	200	4	30.6	38.9	5,073	2,737	11.4	8.38	338	274	401	305	5,527	449	0.986	32.7	253
300	200	5	38.0	48.4	6,241	3,361	11.4	8.34	416	336	496	376	6,836	552	0.983	26.3	203
300	200	6	45.2	57.6	7,370	3,962	11.3	8.29	491	396	588	446	8,115	651	0.979	22.1	170
300	200	6.3	47.1	60.0	7,624	4,104	11.3	8.27	508	410	610	463	8,524	680	0.973	21.2	162
300	200	7	52.1	66.4	8,366	4,498	11.2	8.23	558	450	671	510	9,400	746	0.970	19.2	146
300	200	8	59.1	75.2	9,389	5,042	11.2	8.19	626	504	757	574	10,627	838	0.966	16.9	128
300	200	10	72.7	92.6	11,313	6,058	11.1	8.09	754	606	921	698	12,987	1,012	0.957	13.8	103
300	200	12	84.8	108	12,788	6,854	10.9	7.96	853	685	1,056	801	15,236	1,167	0.938	11.8	86.8
300	200	12.5	88.0	112	13,179	7,060	10.8	7.94	879	706	1,091	828	15,768	1,205	0.936	11.4	83.5
300	200	14.2	98.3	125	14,428	7,717	10.7	7.85	962	772	1,206	915	17,507	1,325	0.927	10.2	74.0
300	220	4	31.8	40.5	5,423	3,386	11.6	9.14	362	308	425	345	6,448	496	1.03	31.4	253
300	220	5	39.5	50.4	6,676	4,163	11.5	9.09	445	378	525	426	7,981	610	1.02	25.3	203
300	220	6	47.1	60.0	7,889	4,913	11.5	9.05	526	447	623	505	9,481	720	1.02	21.2	170
300	220	6.3	49.1	62.6	8,168	5,091	11.4	9.02	545	463	647	525	9,960	752	1.01	20.4	162
300	220	7	54.3	69.2	8,967	5,585	11.4	8.99	598	508	712	577	10,990	826	1.01	18.4	146
300	220	8	61.6	78.4	10,072	6,267	11.3	8.94	671	570	804	651	12,434	929	1.01	16.2	128
300	220	10	75.8	96.6	12,154	7,548	11.2	8.84	810	686	979	793	15,222	1,124	0.997	13.2	103
300	220	12	88.6	113	13,784	8,566	11.1	8.71	919	779	1,125	912	17,900	1,299	0.978	11.3	86.7
300	220	12.5	91.9	117	14,213	8,829	11.0	8.69	948	803	1,163	942	18,535	1,342	0.976	10.9	83.4
350	150	5	38.0	48.4	7,544	2,034	12.5	6.49	431	271	537	298	5,169	477	0.983	26.3	203
350	150	6	45.2	57.6	8,907	2,391	12.4	6.44	509	319	636	353	6,121	562	0.979	22.1	170
350	150	6.3	47.1	60.0	9,202	2,475	12.4	6.42	526	330	660	366	6,422	586	0.973	21.2	162
350	150	7	52.1	66.4	10,093	2,708	12.3	6.39	577	361	726	403	7,068	642	0.970	19.2	146
350	150	8	59.1	75.2	11,322	3,027	12.3	6.34	647	404	818	453	7,968	719	0.966	16.9	128
350	150	10	72.7	92.6	13,626	3,616	12.1	6.25	779	482	995	549	9,681	864	0.957	13.8	103
350	150	12	84.8	108	15,339	4,071	11.9	6.14	877	543	1,138	629	11,269	990	0.938	11.8	86.8
350	150	12.5	88.0	112	15,800	4,187	11.9	6.11	903	558	1,176	649	11,642	1,020	0.936	11.4	83.5
350	150	14.2	98.3	125	17,266	4,554	11.7	6.03	987	607	1,299	716	12,846	1,116	0.927	10.2	74.0
350	250	6	54.7	69.6	12,457	7,458	13.4	10.3	712	597	843	671	14,554	967	1.18	18.3	169
350	250	6.3	57.0	72.6	12,923	7,744	13.3	10.3	738	620	876	698	15,291	1,010	1.17	17.5	161
350	250	7	63.1	80.4	14,211	8,510	13.3	10.3	812	681	966	769	16,889	1,112	1.17	15.9	146
350	250	8	71.6	91.2	16,001	9,573	13.2	10.2	914	766	1,092	869	19,136	1,253	1.17	14.0	128
350	250	10	88.4	113	19,407	11,588	13.1	10.1	1,109	927	1,335	1,062	23,500	1,522	1.16	11.3	103
350	250	12	104	132	22,197	13,261	13.0	10.0	1,268	1,061	1,544	1,229	27,750	1,770	1.14	9.65	86.2
350	250	12.5	108	137	22,922	13,690	12.9	9.99	1,310	1,095	1,598	1,272	28,764	1,830	1.14	9.30	82.9

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED

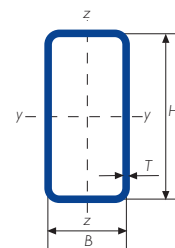


Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elxx}	W_{elyy}	W_{plxx}	W_{plyy}	I_t	C_t	A_s	m	$A_{s/y}$
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
350	250	14.2	121	154	25,277	15,079	12.8	9.91	1,444	1,206	1,776	1,413	32,117	2,026	1.13	8.29	73.3
350	250	16	134	171	27,580	16,434	12.7	9.81	1,576	1,315	1,954	1,554	35,499	2,220	1.12	7.46	65.4
400	100	5	38.0	48.4	8,589	949	13.3	4.43	429	190	565	207	2,909	353	0.983	26.3	203
400	100	6	45.2	57.6	10,132	1,108	13.3	4.38	507	222	670	244	3,421	412	0.979	22.1	170
400	100	6.3	47.1	60.0	10,447	1,145	13.2	4.37	522	229	694	253	3,579	429	0.973	21.2	162
400	100	7	52.1	66.4	11,449	1,247	13.1	4.33	572	249	763	278	3,920	468	0.970	19.2	146
400	100	8	59.1	75.2	12,827	1,384	13.1	4.29	641	277	860	312	4,387	521	0.966	16.9	128
400	100	10	72.7	92.6	15,396	1,631	12.9	4.20	770	326	1,044	375	5,251	617	0.957	13.8	103
400	100	12	84.8	108	17,213	1,811	12.6	4.09	861	362	1,191	427	5,989	695	0.938	11.8	86.8
400	100	12.5	88.0	112	17,712	1,856	12.6	4.07	886	371	1,230	440	6,159	714	0.936	11.4	83.5
400	200	5	45.8	58.4	12,490	4,312	14.6	8.60	624	431	762	474	10,159	742	1.18	21.8	203
400	200	6	54.7	69.6	14,789	5,092	14.6	8.55	739	509	906	562	12,068	877	1.18	18.3	169
400	200	6.3	57.0	72.6	15,330	5,286	14.5	8.53	766	529	942	585	12,673	916	1.17	17.5	161
400	200	7	63.1	80.4	16,855	5,803	14.5	8.50	843	580	1,038	645	13,983	1,007	1.17	15.9	146
400	200	8	71.6	91.2	18,974	6,517	14.4	8.45	949	652	1,173	728	15,820	1,133	1.17	14.0	128
400	200	10	88.4	113	23,003	7,864	14.3	8.36	1,150	786	1,434	888	19,368	1,373	1.16	11.3	103
400	200	12	104	132	26,248	8,977	14.1	8.24	1,312	898	1,656	1,027	22,783	1,591	1.14	9.65	86.2
400	200	12.5	108	137	27,100	9,260	14.1	8.22	1,355	926	1,714	1,062	23,595	1,644	1.14	9.30	82.9
400	200	14.2	121	154	29,858	10,173	13.9	8.14	1,493	1,017	1,904	1,178	26,264	1,815	1.13	8.29	73.3
400	250	5	49.7	63.4	14,440	7,056	15.1	10.6	722	565	861	626	14,773	937	1.28	20.1	202
400	250	6	59.4	75.6	17,118	8,352	15.0	10.5	856	668	1,024	744	17,580	1,110	1.28	16.8	169
400	250	6.3	62.0	78.9	17,771	8,679	15.0	10.5	889	694	1,066	775	18,469	1,160	1.27	16.1	161
400	250	7	68.6	87.4	19,558	9,544	15.0	10.5	978	763	1,176	854	20,404	1,277	1.27	14.6	145
400	250	8	77.9	99.2	22,048	10,744	14.9	10.4	1,102	860	1,330	966	23,127	1,440	1.27	12.8	128
400	300	6	64.1	81.6	19,447	12,557	15.4	12.4	972	837	1,142	941	23,651	1,342	1.38	15.6	169
400	300	6.3	66.9	85.2	20,213	13,060	15.4	12.4	1,011	871	1,190	980	24,852	1,404	1.37	14.9	161
400	300	7	74.1	94.4	22,262	14,376	15.4	12.3	1,113	958	1,313	1,082	27,477	1,547	1.37	13.5	145
400	300	8	84.2	107	25,122	16,212	15.3	12.3	1,256	1,081	1,487	1,224	31,179	1,747	1.37	11.9	127
400	300	10	104	133	30,609	19,726	15.2	12.2	1,530	1,315	1,824	1,501	38,407	2,132	1.36	9.61	102
400	300	12	123	156	35,284	22,747	15.0	12.1	1,764	1,516	2,122	1,747	45,528	2,492	1.34	8.16	85.7
400	300	12.5	127	162	36,489	23,517	15.0	12.0	1,824	1,568	2,198	1,810	47,238	2,580	1.34	7.86	82.4
400	300	14.2	143	182	40,431	26,036	14.9	12.0	2,022	1,736	2,451	2,018	52,927	2,869	1.33	7.00	72.9
400	300	16	159	203	44,350	28,535	14.8	11.9	2,218	1,902	2,708	2,228	58,732	3,159	1.32	6.28	65.0
450	250	6	64.1	81.6	22,724	9,245	16.7	10.6	1,010	740	1,221	817	20,687	1,253	1.38	15.6	169
450	250	6.3	66.9	85.2	23,606	9,615	16.6	10.6	1,049	769	1,271	851	21,730	1,310	1.37	14.9	161
450	250	7	74.1	94.4	25,998	10,577	16.6	10.6	1,155	846	1,403	939	24,012	1,442	1.37	13.5	145
450	250	8	84.2	107	29,335	11,916	16.5	10.5	1,304	953	1,588	1,063	27,222	1,628	1.37	11.9	127
450	250	10	104	133	35,737	14,470	16.4	10.4	1,588	1,158	1,948	1,302	33,473	1,983	1.36	9.61	102
450	250	12	123	156	41,137	16,662	16.2	10.3	1,828	1,333	2,264	1,515	39,592	2,314	1.34	8.16	85.7
450	250	12.5	127	162	42,536	17,219	16.2	10.3	1,890	1,377	2,346	1,569	41,058	2,394	1.34	7.86	82.4
450	250	14.2	143	182	47,111	19,031	16.1	10.2	2,094	1,523	2,615	1,748	45,921	2,658	1.33	7.00	72.9
450	250	16	159	203	51,652	20,822	16.0	10.1	2,296	1,666	2,887	1,929	50,859	2,921	1.32	6.28	65.0
500	200	6	64.1	81.6	25,690	6,221	17.7	8.73	1,028	622	1,284	679	16,188	1,103	1.38	15.6	169
500	200	6.3	66.9	85.2	26,668	6,468	17.7	8.71	1,067	647	1,336	707	16,994	1,153	1.37	14.9	161

Other measurements can be manufactured in other steels. Please consult us.

Product range: COLD FINISHED



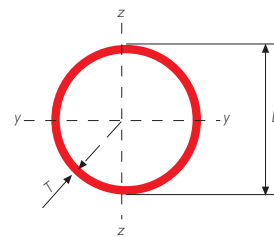
Cold-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elxx}	W_{elyy}	W_{plx}	W_{ply}	I_t	C_t	A_s		$A_{s/v}$
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ⁻¹
500	200	7	74.1	94.4	29,363	7,107	17.6	8.68	1,175	711	1,475	780	18,755	1,268	1.37	13.5	145
500	200	8	84.2	107	33,122	7,992	17.6	8.63	1,325	799	1,669	882	21,225	1,428	1.37	11.9	127
500	200	10	104	133	40,321	9,671	17.4	8.54	1,613	967	2,047	1,078	26,005	1,734	1.36	9.61	102
500	200	12	123	156	46,312	11,101	17.2	8.43	1,852	1,110	2,377	1,252	30,621	2,016	1.34	8.16	85.7
500	200	12.5	127	162	47,874	11,461	17.2	8.41	1,915	1,146	2,462	1,297	31,722	2,084	1.34	7.86	82.4
500	200	14.2	143	182	52,973	12,629	17.1	8.33	2,119	1,263	2,743	1,442	35,353	2,306	1.33	7.00	72.9
500	300	8	96.7	123	42,805	19,624	18.6	12.6	1,712	1,308	2,063	1,458	42,767	2,202	1.57	10.3	127
500	300	10	120	153	52,328	23,933	18.5	12.5	2,093	1,596	2,537	1,791	52,736	2,693	1.56	8.35	102
500	300	12	141	180	60,603	27,726	18.3	12.4	2,424	1,848	2,962	2,093	62,582	3,156	1.54	7.07	85.4
500	300	12.5	147	187	62,731	28,687	18.3	12.4	2,509	1,912	3,071	2,169	64,954	3,269	1.54	6.81	82.1
500	300	14.2	165	210	69,734	31,840	18.2	12.3	2,789	2,123	3,433	2,424	72,866	3,642	1.53	6.05	72.5
500	300	16	184	235	76,763	34,995	18.1	12.2	3,071	2,333	3,802	2,683	80,974	4,019	1.52	5.43	64.6

Other measurements can be manufactured in other steels. Please consult us.

Product range: HOT FINISHED

HOT-FINISHED TUBE RANGE. Measurements in millimetres

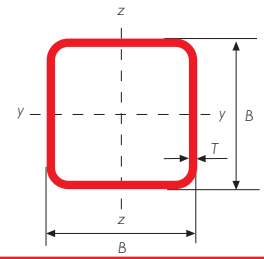


Hot-finished tubular profile range - round

OUTSIDE DIAMETER	THICKNESST (mm)								
D (mm)	3.2	4	5	6.3	8	10	12.5	14.2	16
48.3									
51									
57									
60.3									
76.1									
82.5									
88.9									
101.6									
114.3									
121									
127									
133									
139.7									
159									
168.3									
177.8									
193.7									
219.1									
244.5									
273									
323.9									
355.6									
406.4									

Other measurements can be manufactured in other steels. Please consult us.

HOT-FINISHED TUBE RANGE. Measurements in millimetres



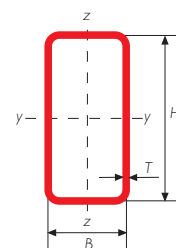
Hot-finished tubular profile range - square

SIDES		THICKNESS T (mm)								
B (mm)	B (mm)	3.2	4	5	6.3	8	10	12.5	14.2	16
40	40									
50	50									
60	60									
70	70									
80	80									
90	90									
100	100									
110	110									
120	120									
130	130									
140	140									
150	150									
160	160									
180	180									
200	200									
220	220									
250	250									
260	260									
300	300									
350	350									
400	400									

Other measurements can be manufactured in other steels. Please consult us.

Product range: HOT FINISHED

HOT-FINISHED TUBE RANGE. Measurements in millimetres

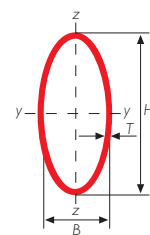


Hot-finished tubular profile range - rectangular

SIDES		THICKNESST (mm)								
H (mm)	B (mm)	3.2	4	5	6.3	8	10	12.5	14.2	16
60	40									
70	40									
80	40									
80	50									
80	60									
90	50									
100	40									
100	50									
100	60									
100	80									
110	60									
120	60									
120	80									
120	100									
140	70									
140	80									
150	100									
160	80									
160	90									
180	80									
180	100									
180	120									
200	100									
200	120									
200	150									
220	120									
250	50									
250	100									
250	150									
250	200									
260	140									
260	180									
300	50									
300	100									
300	150									
300	200									
350	150									
350	250									
400	100									
400	200									
400	300									
450	250									
500	200									
500	300									

Other measurements can be manufactured in other steels. Please consult us.

HOT-FINISHED TUBE RANGE. Measurements in millimetres



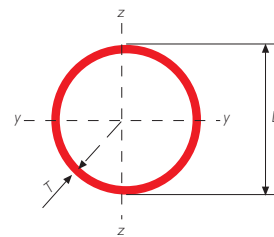
Hot-finished tubular profile range - elíptico

SIDES		THICKNESS T (mm)							
H mm	B mm	3.2	4	5	6.3	8	10	12.5	14.2
120	60								
150	75								
180	90								
220	110								
250	125								
320	160								
400	200								
480	240								

Other measurements can be manufactured in other steels. Please consult us.

Product range: HOT FINISHED

HOT-FINISHED TUBE RANGE. Measurements in inches

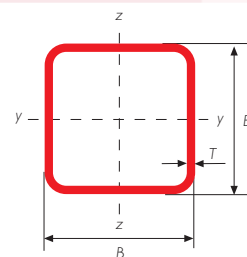


Hot-finished tubular profile range - round

OUTSIDE DIAMETER	THICKNESST (inches)								
D (inches)	0.125	0.134	0.1875	0.25	0.3125	0.375	0.5	0.5625	0.625
6									
7									
8									
9									
10									
12									
14									
16									

Other measurements can be manufactured in other steels. Please consult us.

HOT-FINISHED TUBE RANGE. Measurements in inches



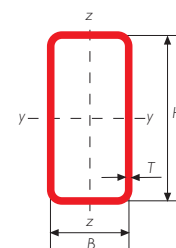
Hot-finished tubular profile range - square

SIDES		THICKNESST (inches)										
B (inches)	B (inches)	0.1	0.12	0.125	0.134	0.1875	0.25	0.3125	0.375	0.5	0.5625	1.625
4	4											
5	5											
5,5	5,5											
6	6											
7	7											
8	8											
9	9											
10	10											
12	12											
14	14											
16	16											

Other measurements can be manufactured in other steels. Please consult us.

Product range: HOT FINISHED

HOT-FINISHED TUBE RANGE. Measurements in inches

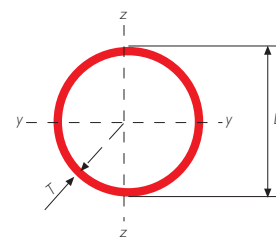


Hot-finished tubular profile range - rectangular

SIDES		THICKNESST (inches)									
H (inches)	B (inches)	0.12	0.125	0.134	0.1875	0.25	0.3125	0.375	0.5	0.5625	0.625
5	2,5										
5	3										
6	4										
7	5										
8	4										
8	6										
10	2										
10	4										
10	6										
10	8										
12	2										
12	4										
12	6										
12	8										
14	4										
14	6										
14	10										
16	4										
16	8										
16	12										
18	6										
18	10										
20	4										
20	8										
20	12										

Other measurements can be manufactured in other steels. Please consult us.

HOT-FINISHED TUBE RANGE

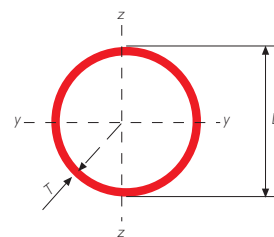


Hot-finished tubular profile range - round

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D	T	M	A	I	i	W_{el}	W_{pl}	I_t	C_t	A_s	m	$A_{s/v}$
mm	mm	kg/m	cm ²	cm ⁴	cm	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
48.3	4	4.37	5.57	13.8	1.57	5.70	7.87	27.5	11.4	0.152	229	273
48.3	5	5.34	6.80	16.2	1.54	6.69	9.42	32.3	13.4	0.152	187	223
48.3	6.3	6.53	8.31	18.7	1.50	7.76	11.2	37.5	15.5	0.152	153	183
48.3	8	7.95	10.1	21.4	1.45	8.85	13.2	42.7	17.7	0.152	126	150
51	3.2	3.77	4.81	13.8	1.69	5.41	7.32	27.6	10.8	0.160	265	333
51	4	4.64	5.91	16.4	1.67	6.44	8.86	32.9	12.9	0.160	216	271
51	5	5.67	7.23	19.3	1.64	7.58	10.6	38.7	15.2	0.160	176	222
51	6.3	6.94	8.85	22.5	1.60	8.84	12.7	45.1	17.7	0.160	144	181
51	8	8.48	10.8	25.8	1.55	10.1	15.0	51.7	20.3	0.160	118	148
57	3.2	4.25	5.41	19.6	1.91	6.89	9.27	39.3	13.8	0.179	236	331
57	4	5.23	6.66	23.5	1.88	8.25	11.3	47.0	16.5	0.179	191	269
57	5	6.41	8.17	27.9	1.85	9.78	13.6	55.7	19.6	0.179	156	219
57	6.3	7.88	10.0	32.7	1.81	11.5	16.3	65.5	23.0	0.179	127	178
57	8	9.67	12.3	37.9	1.76	13.3	19.4	75.9	26.6	0.179	103	145
57	10	11.6	14.8	42.6	1.70	15.0	22.4	85.2	29.9	0.179	86.3	121
60.3	3.2	4.51	5.74	23.5	2.02	7.78	10.4	46.9	15.6	0.189	222	330
60.3	4	5.55	7.07	28.2	2.00	9.34	12.7	56.3	18.7	0.189	180	268
60.3	5	6.82	8.69	33.5	1.96	11.1	15.3	67.0	22.2	0.189	147	218
60.3	6.3	8.39	10.7	39.5	1.92	13.1	18.5	79.0	26.2	0.189	119	177
60.3	8	10.3	13.1	46.0	1.87	15.3	22.1	92.0	30.5	0.189	96.9	144
60.3	10	12.4	15.8	52.0	1.81	17.2	25.6	104	34.5	0.189	80.6	120
76.1	3.2	5.75	7.33	48.8	2.58	12.8	17.0	97.6	25.6	0.239	174	326
76.1	4	7.11	9.06	59.1	2.55	15.5	20.8	118	31.0	0.239	141	264
76.1	5	8.77	11.2	70.9	2.52	18.6	25.3	142	37.3	0.239	114	214
76.1	6.3	10.8	13.8	84.8	2.48	22.3	30.8	170	44.6	0.239	92.2	173
76.1	8	13.4	17.1	101	2.42	26.4	37.3	201	52.9	0.239	74.4	140
76.1	10	16.3	20.8	116	2.36	30.5	44.0	232	61.0	0.239	61.3	115
76.1	12.5	19.6	25.0	131	2.29	34.5	51.2	262	68.9	0.239	51.0	95.7
82.5	3.2	6.26	7.97	62.8	2.81	15.2	20.1	126	30.4	0.259	160	325
82.5	4	7.74	9.86	76.2	2.78	18.5	24.7	152	36.9	0.259	129	263
82.5	5	9.56	12.2	91.8	2.75	22.2	30.1	184	44.5	0.259	105	213
82.5	6.3	11.8	15.1	110	2.70	26.7	36.7	220	53.4	0.259	84.5	172
82.5	8	14.7	18.7	131	2.65	31.9	44.6	263	63.7	0.259	68.0	138
82.5	10	17.9	22.8	152	2.59	37.0	52.9	305	73.9	0.259	55.9	114
82.5	12.5	21.6	27.5	174	2.51	42.1	61.9	347	84.2	0.259	46.3	94.3
88.9	3.2	6.76	8.62	79.2	3.03	17.8	23.5	158	35.6	0.279	148	324
88.9	4	8.38	10.7	96.3	3.00	21.7	28.9	193	43.3	0.279	119	262
88.9	5	10.3	13.2	116	2.97	26.2	35.2	233	52.4	0.279	96.7	212
88.9	6.3	12.8	16.3	140	2.93	31.5	43.1	280	63.1	0.279	77.9	171
88.9	8	16.0	20.3	168	2.87	37.8	52.5	336	75.6	0.279	62.7	137
88.9	10	19.5	24.8	196	2.81	44.1	62.6	392	88.2	0.279	51.4	113
88.9	12.5	23.6	30.0	225	2.74	50.6	73.6	450	101	0.279	42.5	93.1
101.6	3.2	7.77	9.89	120	3.48	23.6	31.0	240	47.2	0.319	129	323
101.6	4	9.63	12.3	146	3.45	28.8	38.1	293	57.6	0.319	104	260

Other measurements can be manufactured in other steels. Please consult us.

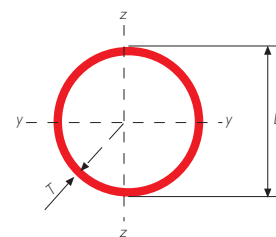
Product range: HOT FINISHED



Hot-finished tubular profile range - round

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{sy} m ²
101.6	5	11.9	15.2	177	3.42	34.9	46.7	355	69.9	0.319	84.0	210
101.6	6.3	14.8	18.9	215	3.38	42.3	57.3	430	84.7	0.319	67.5	169
101.6	8	18.5	23.5	260	3.32	51.1	70.3	519	102	0.319	54.2	136
101.6	10	22.6	28.8	305	3.26	60.1	84.2	611	120	0.319	44.3	111
101.6	12.5	27.5	35.0	354	3.18	69.7	99.9	708	139	0.319	36.4	91.2
114.3	3.2	8.77	11.2	172	3.93	30.2	39.5	345	60.4	0.359	114	322
114.3	4	10.9	13.9	211	3.90	36.9	48.7	422	73.9	0.359	91.9	259
114.3	5	13.5	17.2	257	3.87	45.0	59.8	514	89.9	0.359	74.2	209
114.3	6.3	16.8	21.4	313	3.82	54.7	73.6	625	109	0.359	59.6	168
114.3	8	21.0	26.7	379	3.77	66.4	90.6	759	133	0.359	47.7	134
114.3	10	25.7	32.8	450	3.70	78.7	109	899	157	0.359	38.9	110
114.3	12.5	31.4	40.0	526	3.63	92.0	130	1,051	184	0.359	31.9	89.8
114.3	14.2	35.1	44.7	571	3.57	99.8	143	1,141	200	0.359	28.5	80.4
121	3.2	9.30	11.8	206	4.17	34.0	44.4	411	68.0	0.380	107.6	321
121	4	11.5	14.7	252	4.14	41.6	54.8	504	83.3	0.380	86.6	259
121	5	14.3	18.2	307	4.11	50.8	67.3	614	102	0.380	69.9	209
121	6.3	17.8	22.7	374	4.06	61.9	83.0	749	124	0.380	56.1	167
121	8	22.3	28.4	456	4.01	75.3	102	911	151	0.380	44.9	134
121	10	27.4	34.9	541	3.94	89.5	124	1,083	179	0.380	36.5	109
121	12.5	33.4	42.6	635	3.86	105	148	1,271	210	0.380	29.9	89.2
121	14.2	37.4	47.6	691	3.81	114	163	1,383	229	0.380	26.7	79.8
127	3.2	9.77	12.4	239	4.38	37.6	49.1	477	75.1	0.399	102.4	321
127	4	12.1	15.5	293	4.35	46.1	60.5	585	92.2	0.399	82.4	258
127	5	15.0	19.2	357	4.32	56.2	74.5	714	112	0.399	66.5	208
127	6.3	18.8	23.9	436	4.27	68.7	91.9	872	137	0.399	53.3	167
127	8	23.5	29.9	532	4.22	83.7	113	1,064	167	0.399	42.6	133
127	10	28.9	36.8	634	4.15	99.8	137	1,267	200	0.399	34.7	109
127	12.5	35.3	45.0	746	4.07	117	165	1,491	235	0.399	28.3	88.7
127	14.2	39.5	50.3	813	4.02	128	182	1,626	256	0.399	25.3	79.3
133	3.2	10.2	13.0	275	4.59	41.4	53.9	550	82.7	0.418	97.6	320
133	4	12.7	16.2	338	4.56	50.8	66.6	675	102	0.418	78.6	258
133	5	15.8	20.1	412	4.53	62.0	82.0	825	124	0.418	63.4	208
133	6.3	19.7	25.1	504	4.49	75.9	101	1,009	152	0.418	50.8	167
133	8	24.7	31.4	616	4.43	92.6	125	1,232	185	0.418	40.5	133
133	10	30.3	38.6	736	4.36	111	152	1,471	221	0.418	33.0	108
133	12.5	37.1	47.3	868	4.28	131	182	1,736	261	0.418	26.9	88.3
133	14.2	41.6	53.0	948	4.23	143	201	1,897	285	0.418	24.0	78.8
139.7	3.2	10.8	13.7	320	4.83	45.8	59.6	640	91.6	0.439	92.8	320
139.7	4	13.4	17.1	393	4.80	56.2	73.7	786	112	0.439	74.7	257
139.7	5	16.6	21.2	481	4.77	68.8	90.8	961	138	0.439	60.2	207
139.7	6.3	20.7	26.4	589	4.72	84.3	112	1,177	169	0.439	48.2	166
139.7	8	26.0	33.1	720	4.66	103	139	1,441	206	0.439	38.5	133
139.7	10	32.0	40.7	862	4.60	123	169	1,724	247	0.439	31.3	108
139.7	12.5	39.2	50.0	1,020	4.52	146	203	2,040	292	0.439	25.5	87.9

Other measurements can be manufactured in other steels. Please consult us.

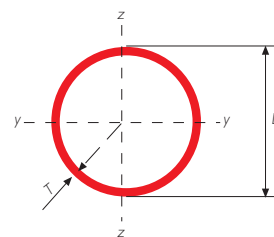


Hot-finished tubular profile range - round

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{sv} m ²
139.7	14.2	43.9	56.0	1,116	4.47	160	225	2,233	320	0.439	22.8	78.4
159	3.2	12.3	15.7	475	5.51	59.8	77.7	951	120	0.500	81.3	319
159	4	15.3	19.5	585	5.48	73.6	96.1	1,171	147	0.500	65.4	256
159	5	19.0	24.2	718	5.45	90.3	119	1,436	181	0.500	52.7	206
159	6.3	23.7	30.2	882	5.40	111	147	1,765	222	0.500	42.2	165
159	8	29.8	38.0	1,085	5.35	136	183	2,169	273	0.500	33.6	132
159	10	36.7	46.8	1,305	5.28	164	222	2,610	328	0.500	27.2	107
159	12.5	45.2	57.5	1,555	5.20	196	269	3,109	391	0.500	22.1	86.8
159	14.2	50.7	64.6	1,709	5.14	215	299	3,419	430	0.500	19.7	77.3
168.3	3.2	13.0	16.6	566	5.84	67.2	87.2	1,131	134	0.529	76.8	319
168.3	4	16.2	20.6	697	5.81	82.8	108	1,394	166	0.529	61.7	256
168.3	5	20.1	25.7	856	5.78	102	133	1,712	203	0.529	49.7	206
168.3	6.3	25.2	32.1	1,053	5.73	125	165	2,107	250	0.529	39.7	165
168.3	8	31.6	40.3	1,297	5.67	154	206	2,595	308	0.529	31.6	131
168.3	10	39.0	49.7	1,564	5.61	186	251	3,128	372	0.529	25.6	106
168.3	12.5	48.0	61.2	1,868	5.53	222	304	3,737	444	0.529	20.8	86.4
168.3	14.2	54.0	68.7	2,058	5.47	245	338	4,116	489	0.529	18.5	76.9
177.8	3.2	13.8	17.6	669	6.17	75.3	97.6	1,338	151	0.559	72.6	318
177.8	4	17.1	21.8	825	6.15	92.8	121	1,650	186	0.559	58.3	256
177.8	5	21.3	27.1	1,014	6.11	114	149	2,028	228	0.559	46.9	206
177.8	6.3	26.6	33.9	1,250	6.07	141	185	2,499	281	0.559	37.5	165
177.8	8	33.5	42.7	1,541	6.01	173	231	3,083	347	0.559	29.9	131
177.8	10	41.4	52.7	1,862	5.94	209	282	3,724	419	0.559	24.2	106
177.8	12.5	51.0	64.9	2,230	5.86	251	342	4,460	502	0.559	19.6	86.0
177.8	14.2	57.3	73.0	2,460	5.81	277	381	4,920	553	0.559	17.5	76.5
193.7	3.2	15.0	19.2	869	6.74	89.7	116	1,738	179	0.609	66.5	318
193.7	4	18.7	23.8	1,073	6.71	111	144	2,146	222	0.609	53.4	255
193.7	5	23.3	29.6	1,320	6.67	136	178	2,640	273	0.609	43.0	205
193.7	6.3	29.1	37.1	1,630	6.63	168	221	3,260	337	0.609	34.3	164
193.7	8	36.6	46.7	2,016	6.57	208	276	4,031	416	0.609	27.3	130
193.7	10	45.3	57.7	2,442	6.50	252	338	4,883	504	0.609	22.1	105
193.7	12.5	55.9	71.2	2,934	6.42	303	411	5,869	606	0.609	17.9	85.5
193.7	14.2	62.9	80.1	3,245	6.37	335	458	6,491	670	0.609	15.9	76.0
219.1	3.2	17.0	21.7	1,265	7.63	115	149	2,530	231	0.688	58.7	317
219.1	4	21.2	27.0	1,564	7.61	143	185	3,128	286	0.688	47.1	255
219.1	5	26.4	33.6	1,928	7.57	176	229	3,856	352	0.688	37.9	205
219.1	6.3	33.1	42.1	2,386	7.53	218	285	4,772	436	0.688	30.2	163
219.1	8	41.6	53.1	2,960	7.47	270	357	5,919	540	0.688	24.0	130
219.1	10	51.6	65.7	3,598	7.40	328	438	7,197	657	0.688	19.4	105
219.1	12.5	63.7	81.1	4,345	7.32	397	534	8,689	793	0.688	15.7	84.8
219.1	14.2	71.8	91.4	4,820	7.26	440	597	9,640	880	0.688	13.9	75.3
244.5	5	29.5	37.6	2,699	8.47	221	287	5,397	441	0.768	33.9	204
244.5	6.3	37.0	47.1	3,346	8.42	274	358	6,692	547	0.768	27.0	163
244.5	8	46.7	59.4	4,160	8.37	340	448	8,321	681	0.768	21.4	129

Other measurements can be manufactured in other steels. Please consult us.

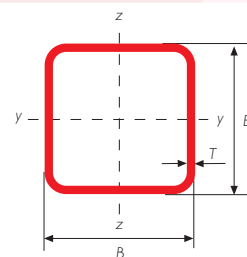
Product range: HOT FINISHED



Hot-finished tubular profile range - round

OUTSIDE DIAMETER	THICKNESS	MASS PER UNIT LENGTH	CROSS-SECTIONAL AREA	SECOND MOMENT OF AREA	RADIUS OF GYRATION	ELASTIC SECTION MODULUS	PLASTIC SECTION MODULUS	TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
D mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m	A _{sv} m ²
244.5	10	57.8	73.7	5,073	8.30	415	550	10,146	830	0.768	17.3	104
244.5	12.5	71.5	91.1	6,147	8.21	503	673	12,295	1,006	0.768	14.0	84.3
244.5	14.2	80.6	103	6,837	8.16	559	754	13,674	1,119	0.768	12.4	74.8
273	5	33.0	42.1	3,781	9.48	277	359	7,562	554	0.858	30.3	204
273	6.3	41.4	52.8	4,696	9.43	344	448	9,392	688	0.858	24.1	162
273	8	52.3	66.6	5,852	9.37	429	562	11,703	857	0.858	19.1	129
273	10	64.9	82.6	7,154	9.31	524	692	14,308	1,048	0.858	15.4	104
273	12.5	80.3	102	8,697	9.22	637	849	17,395	1,274	0.858	12.5	83.8
273	14.2	90.6	115	9,695	9.16	710	952	19,390	1,421	0.858	11.0	74.3
323.9	5	39.3	50.1	6,369	11.3	393	509	12,739	787	1.02	25.4	203
323.9	6.3	49.3	62.9	7,929	11.2	490	636	15,858	979	1.02	20.3	162
323.9	8	62.3	79.4	9,910	11.2	612	799	19,820	1,224	1.02	16.0	128
323.9	10	77.4	98.6	12,158	11.1	751	986	24,317	1,501	1.02	12.9	103
323.9	12.5	96.0	122	14,847	11.0	917	1,213	29,693	1,833	1.02	10.4	83.2
323.9	14.2	108	138	16,599	11.0	1,025	1,363	33,198	2,050	1.02	9.22	73.7
323.9	16	121	155	18,390	10.9	1,136	1,518	36,780	2,271	1.02	8.23	65.7
355.6	6.3	54.3	69.1	10,547	12.4	593	769	21,094	1,186	1.12	18.4	162
355.6	8	68.6	87.4	13,201	12.3	742	967	26,403	1,485	1.12	14.6	128
355.6	10	85.2	109	16,223	12.2	912	1,195	32,447	1,825	1.12	11.7	103
355.6	12.5	106	135	19,852	12.1	1,117	1,472	39,704	2,233	1.12	9.45	82.9
355.6	14.2	120	152	22,227	12.1	1,250	1,656	44,455	2,500	1.12	8.36	73.4
355.6	16	134	171	24,663	12.0	1,387	1,847	49,326	2,774	1.12	7.46	65.4
406.4	6.3	62.2	79.2	15,849	14.1	780	1,009	31,699	1,560	1.28	16.1	161
406.4	8	78.6	100	19,874	14.1	978	1,270	39,748	1,956	1.28	12.7	128
406.4	10	97.8	125	24,476	14.0	1,205	1,572	48,952	2,409	1.28	10.2	103
406.4	12.5	121	155	30,031	13.9	1,478	1,940	60,061	2,956	1.28	8.24	82.5
406.4	14.2	137	175	33,685	13.9	1,658	2,185	67,371	3,315	1.28	7.28	73.0
406.4	16	154	196	37,449	13.8	1,843	2,440	74,898	3,686	1.28	6.49	65.1

Other measurements can be manufactured in other steels. Please consult us.

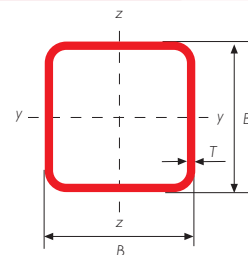


Hot-finished tubular profile range - square

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elxx}	W_{elyy}	W_{plx}	W_{ply}	I_t	C_t	A_s	m	$A_{s/v}$
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ²
40	40	3.2	3.61	4.60	10.2	10.2	1.49	1.49	5.11	5.11	6.28	6.28	16.5	7.42	0.152	277	330
40	40	4	4.39	5.59	11.8	11.8	1.45	1.45	5.91	5.91	7.44	7.44	19.5	8.53	0.150	228	268
40	40	5	5.28	6.73	13.4	13.4	1.41	1.41	6.68	6.68	8.66	8.66	22.5	9.59	0.147	189	219
40	40	6.3	6.33	8.07	14.7	14.7	1.35	1.35	7.34	7.34	9.90	9.90	25.3	10.5	0.144	158	178
50	50	3.2	4.62	5.88	21.2	21.2	1.90	1.90	8.49	8.49	10.2	10.2	33.8	12.4	0.192	217	326
50	50	4	5.64	7.19	25.0	25.0	1.86	1.86	10.0	10.0	12.3	12.3	40.4	14.5	0.190	177	264
50	50	5	6.85	8.73	28.9	28.9	1.82	1.82	11.6	11.6	14.5	14.5	47.5	16.7	0.187	146	214
50	50	6.3	8.31	10.6	32.8	32.8	1.76	1.76	13.1	13.1	17.0	17.0	55.1	18.8	0.184	120	174
50	50	8	10.0	12.8	36.0	36.0	1.68	1.68	14.4	14.4	19.5	19.5	62.1	20.5	0.179	99.9	141
50	50	10	11.7	14.9	37.6	37.6	1.59	1.59	15.0	15.0	21.4	21.4	66.2	21.3	0.174	85.3	117
60	60	3.2	5.62	7.16	38.2	38.2	2.31	2.31	12.7	12.7	15.2	15.2	60.2	18.6	0.232	178	324
60	60	4	6.90	8.79	45.4	45.4	2.27	2.27	15.1	15.1	18.3	18.3	72.5	22.0	0.230	145	261
60	60	5	8.42	10.7	53.3	53.3	2.23	2.23	17.8	17.8	21.9	21.9	86.4	25.7	0.227	119	212
60	60	6.3	10.3	13.1	61.6	61.6	2.17	2.17	20.5	20.5	26.0	26.0	102	29.6	0.224	97.2	171
60	60	8	12.5	16.0	69.7	69.7	2.09	2.09	23.2	23.2	30.4	30.4	118	33.3	0.219	79.9	138
60	60	10	14.9	18.9	75.5	75.5	2.00	2.00	25.2	25.2	34.4	34.4	131	35.9	0.214	67.3	113
70	70	3.2	6.63	8.44	62.3	62.3	2.72	2.72	17.8	17.8	21.0	21.0	97.6	26.1	0.272	151	322
70	70	4	8.15	10.4	74.7	74.7	2.68	2.68	21.3	21.3	25.5	25.5	118	31.2	0.270	123	260
70	70	5	9.99	12.7	88.5	88.5	2.64	2.64	25.3	25.3	30.8	30.8	142	36.8	0.267	100	210
70	70	6.3	12.3	15.6	104	104	2.58	2.58	29.7	29.7	36.9	36.9	169	42.9	0.264	81.5	169
70	70	8	15.0	19.2	120	120	2.50	2.50	34.2	34.2	43.8	43.8	200	49.2	0.259	66.5	135
70	70	10	18.0	22.9	133	133	2.41	2.41	38.0	38.0	50.3	50.3	227	54.3	0.254	55.6	111
70	70	12.5	21.3	27.1	142	142	2.29	2.29	40.6	40.6	56.3	56.3	248	57.7	0.248	47.1	91.5
80	80	3.2	7.63	9.72	95.0	95.0	3.13	3.13	23.7	23.7	27.9	27.9	148	34.9	0.312	131	321
80	80	4	9.41	12.0	114	114	3.09	3.09	28.6	28.6	34.0	34.0	180	41.9	0.310	106	258
80	80	5	11.6	14.7	137	137	3.05	3.05	34.2	34.2	41.1	41.1	217	49.8	0.307	86.5	208
80	80	6.3	14.2	18.1	162	162	2.99	2.99	40.5	40.5	49.7	49.7	261	58.7	0.304	70.2	167
80	80	8	17.5	22.4	189	189	2.91	2.91	47.3	47.3	59.5	59.5	312	68.2	0.299	57.0	134
80	80	10	21.1	26.9	214	214	2.82	2.82	53.5	53.5	69.3	69.3	360	76.7	0.294	47.3	109
80	80	12.5	25.2	32.1	234	234	2.70	2.70	58.6	58.6	78.9	78.9	403	83.6	0.288	39.7	89.7
90	90	3.2	8.64	11.0	137	137	3.53	3.53	30.5	30.5	35.7	35.7	213	45.0	0.352	116	320
90	90	4	10.7	13.6	166	166	3.50	3.50	37.0	37.0	43.6	43.6	260	54.2	0.350	93.7	257
90	90	5	13.1	16.7	200	200	3.45	3.45	44.4	44.4	53.0	53.0	315	64.8	0.347	76.1	207
90	90	6.3	16.2	20.7	238	238	3.40	3.40	53.0	53.0	64.3	64.3	382	77.0	0.344	61.6	166
90	90	8	20.1	25.6	281	281	3.32	3.32	62.6	62.6	77.6	77.6	459	90.5	0.339	49.9	133
90	90	10	24.3	30.9	322	322	3.23	3.23	71.6	71.6	91.3	91.3	536	103	0.334	41.2	108
90	90	12.5	29.1	37.1	359	359	3.11	3.11	79.8	79.8	105	105	611	114	0.328	34.4	88.4
90	90	14.2	32.1	40.9	376	376	3.03	3.03	83.6	83.6	113	113	649	119	0.323	31.2	79.1
100	100	3.2	9.64	12.3	191	191	3.94	3.94	38.2	38.2	44.4	44.4	295	56.3	0.392	104	319
100	100	4	11.9	15.2	232	232	3.91	3.91	46.4	46.4	54.4	54.4	361	68.2	0.390	83.9	257
100	100	5	14.7	18.7	279	279	3.86	3.86	55.9	55.9	66.4	66.4	439	81.8	0.387	68.0	207
100	100	6.3	18.2	23.2	336	336	3.80	3.80	67.1	67.1	80.9	80.9	534	97.8	0.384	54.9	166
100	100	8	22.6	28.8	400	400	3.73	3.73	79.9	79.9	98.2	98.2	646	116	0.379	44.3	132
100	100	10	27.4	34.9	462	462	3.64	3.64	92.4	92.4	116	116	761	133	0.374	36.5	107

Other measurements can be manufactured in other steels. Please consult us.

Product range: HOT FINISHED

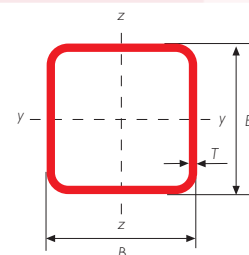


Hot-finished tubular profile range - square

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elxx}	W_{elyy}	W_{plxx}	W_{plyy}	I_t	C_t	A_s	m	A_{sly}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ²
100	100	12.5	33.0	42.1	522	522	3.52	3.52	104	104	135	135	878	150	0.368	30.3	87.4
100	100	14.2	36.6	46.6	553	553	3.44	3.44	111	111	146	146	941	158	0.363	27.4	78.0
110	110	3.2	10.6	13.6	257	257	4.35	4.35	46.7	46.7	54.1	54.1	396	68.9	0.432	93.9	318
110	110	4	13.2	16.8	313	313	4.32	4.32	56.8	56.8	66.5	66.5	485	83.7	0.430	75.9	256
110	110	5	16.3	20.7	378	378	4.27	4.27	68.8	68.8	81.2	81.2	592	101	0.427	61.4	206
110	110	6.3	20.2	25.7	456	456	4.21	4.21	83.0	83.0	99.3	99.3	722	121	0.424	49.6	165
110	110	8	25.1	32.0	547	547	4.14	4.14	99.4	99.4	121	121	878	144	0.419	39.9	131
110	110	10	30.6	38.9	637	637	4.05	4.05	116	116	144	144	1,041	168	0.414	32.7	106
110	110	12.5	37.0	47.1	728	728	3.93	3.93	132	132	169	169	1,212	190	0.408	27.1	86.6
110	110	14.2	41.0	52.3	776	776	3.85	3.85	141	141	184	184	1,310	202	0.403	24.4	77.2
120	120	3.2	11.6	14.8	336	336	4.76	4.76	56.0	56.0	64.8	64.8	517	82.8	0.472	85.8	318
120	120	4	14.4	18.4	410	410	4.72	4.72	68.4	68.4	79.7	79.7	635	101	0.470	69.3	255
120	120	5	17.8	22.7	498	498	4.68	4.68	83.0	83.0	97.6	97.6	777	122	0.467	56.0	205
120	120	6.3	22.2	28.2	603	603	4.62	4.62	100	100	120	120	950	147	0.464	45.1	164
120	120	8	27.6	35.2	726	726	4.55	4.55	121	121	146	146	1,160	176	0.459	36.2	131
120	120	10	33.7	42.9	852	852	4.46	4.46	142	142	175	175	1,382	206	0.454	29.7	106
120	120	12.5	40.9	52.1	982	982	4.34	4.34	164	164	207	207	1,622	236	0.448	24.5	86.0
120	120	14.2	45.5	57.9	1,053	1,053	4.26	4.26	176	176	226	226	1,761	252	0.443	22.0	76.5
130	130	3.2	12.7	16.1	430	430	5.17	5.17	66.2	66.2	76.5	76.5	661	98.0	0.512	79.0	317
130	130	4	15.7	20.0	526	526	5.13	5.13	81.0	81.0	94.1	94.1	813	120	0.510	63.7	255
130	130	5	19.4	24.7	640	640	5.09	5.09	98.5	98.5	115	115	996	145	0.507	51.5	205
130	130	6.3	24.1	30.7	778	778	5.03	5.03	120	120	142	142	1,221	175	0.504	41.4	164
130	130	8	30.1	38.4	941	941	4.95	4.95	145	145	174	174	1,496	211	0.499	33.2	130
130	130	10	36.8	46.9	1,110	1,110	4.86	4.86	171	171	209	209	1,790	248	0.494	27.1	105
130	130	12.5	44.8	57.1	1,288	1,288	4.75	4.75	198	198	248	248	2,114	286	0.488	22.3	85.5
130	130	14.2	49.9	63.6	1,390	1,390	4.67	4.67	214	214	272	272	2,306	308	0.483	20.0	76.0
140	140	3.2	13.7	17.4	541	541	5.58	5.58	77.3	77.3	89.1	89.1	829	114	0.552	73.2	317
140	140	4	16.9	21.6	663	663	5.54	5.54	94.7	94.7	110	110	1,021	140	0.550	59.0	255
140	140	5	21.0	26.7	807	807	5.50	5.50	115	115	135	135	1,253	170	0.547	47.7	205
140	140	6.3	26.1	33.3	984	984	5.44	5.44	141	141	166	166	1,540	206	0.544	38.3	163
140	140	8	32.6	41.6	1,195	1,195	5.36	5.36	171	171	204	204	1,892	249	0.539	30.7	130
140	140	10	40.0	50.9	1,416	1,416	5.27	5.27	202	202	246	246	2,272	294	0.534	25.0	105
140	140	12.5	48.7	62.1	1,653	1,653	5.16	5.16	236	236	293	293	2,695	341	0.528	20.5	85.0
140	140	14.2	54.4	69.3	1,790	1,790	5.08	5.08	256	256	322	322	2,951	369	0.523	18.4	75.5
150	150	4	18.2	23.2	821	821	5.95	5.95	109	109	127	127	1,262	162	0.590	54.9	254
150	150	5	22.6	28.7	1,002	1,002	5.90	5.90	134	134	156	156	1,550	197	0.587	44.3	204
150	150	6.3	28.1	35.8	1,223	1,223	5.85	5.85	163	163	192	192	1,909	240	0.584	35.6	163
150	150	8	35.1	44.8	1,491	1,491	5.77	5.77	199	199	237	237	2,351	291	0.579	28.5	129
150	150	10	43.1	54.9	1,773	1,773	5.68	5.68	236	236	286	286	2,832	344	0.574	23.2	105
150	150	12.5	52.7	67.1	2,080	2,080	5.57	5.57	277	277	342	342	3,374	402	0.568	19.0	84.7
150	150	14.2	58.9	75.0	2,262	2,262	5.49	5.49	302	302	377	377	3,705	435	0.563	17.0	75.2
150	150	16	65.2	83.0	2,430	2,430	5.41	5.41	324	324	411	411	4,023	467	0.559	15.3	67.3
160	160	5	24.1	30.7	1,225	1,225	6.31	6.31	153	153	178	178	1,892	226	0.627	41.5	204
160	160	6.3	30.1	38.3	1,499	1,499	6.26	6.26	187	187	220	220	2,333	275	0.624	33.3	163

Other measurements can be manufactured in other steels. Please consult us.

Product range: HOT FINISHED

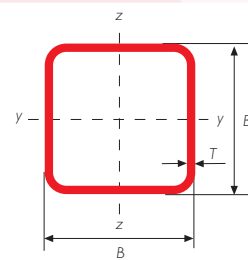


Hot-finished tubular profile range - square

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elxx}	W_{elxy}	W_{plx}	W_{ply}	I_t	C_t	A_s	m	$A_{s/v}$
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ²
160	160	8	37.6	48.0	1,831	1,831	6.18	6.18	229	229	272	272	2,880	335	0.619	26.6	129
160	160	10	46.3	58.9	2,186	2,186	6.09	6.09	273	273	329	329	3,477	398	0.614	21.6	104
160	160	12.5	56.6	72.1	2,576	2,576	5.98	5.98	322	322	395	395	4,157	467	0.608	17.7	84.3
160	160	14.2	63.3	80.7	2,809	2,809	5.90	5.90	351	351	436	436	4,577	508	0.603	15.8	74.8
180	180	5	27.3	34.7	1,765	1,765	7.13	7.13	196	196	227	227	2,718	290	0.707	36.7	204
180	180	6.3	34.0	43.3	2,168	2,168	7.07	7.07	241	241	281	281	3,361	355	0.704	29.4	162
180	180	8	42.7	54.4	2,661	2,661	7.00	7.00	296	296	349	349	4,162	434	0.699	23.4	129
180	180	10	52.5	66.9	3,193	3,193	6.91	6.91	355	355	424	424	5,048	518	0.694	19.0	104
180	180	12.5	64.4	82.1	3,790	3,790	6.80	6.80	421	421	511	511	6,069	612	0.688	15.5	83.8
200	200	5	30.4	38.7	2,445	2,445	7.95	7.95	245	245	283	283	3,756	362	0.787	32.9	203
200	200	6.3	38.0	48.4	3,011	3,011	7.89	7.89	301	301	350	350	4,653	444	0.784	26.3	162
200	200	8	47.7	60.8	3,709	3,709	7.81	7.81	371	371	436	436	5,777	545	0.779	21.0	128
200	200	10	58.8	74.9	4,471	4,471	7.72	7.72	447	447	531	531	7,030	655	0.774	17.0	103
200	200	12.5	72.3	92.1	5,336	5,336	7.61	7.61	534	534	643	643	8,490	778	0.768	13.8	83.4
200	200	14.2	81.1	103	5,872	5,872	7.54	7.54	587	587	714	714	9,416	854	0.763	12.3	73.9
220	220	5	33.5	42.7	3,281	3,281	8.76	8.76	298	298	344	344	5,028	442	0.867	29.8	203
220	220	6.3	41.9	53.4	4,049	4,049	8.71	8.71	368	368	427	427	6,239	544	0.864	23.8	162
220	220	8	52.7	67.2	5,002	5,002	8.63	8.63	455	455	532	532	7,764	669	0.859	19.0	128
220	220	10	65.1	82.9	6,050	6,050	8.54	8.54	550	550	650	650	9,473	807	0.854	15.4	103
220	220	12.5	80.1	102	7,254	7,254	8.43	8.43	659	659	789	789	11,480	963	0.848	12.5	83.1
220	220	14.2	90.1	115	8,007	8,007	8.35	8.35	728	728	879	879	12,763	1,060	0.843	11.1	73.5
250	250	5	38.3	48.7	4,861	4,861	9.99	9.99	389	389	447	447	7,430	577	0.987	26.1	203
250	250	6.3	47.9	61.0	6,014	6,014	9.93	9.93	481	481	556	556	9,238	712	0.984	20.9	161
250	250	8	60.3	76.8	7,455	7,455	9.86	9.86	596	596	694	694	11,525	880	0.979	16.6	128
250	250	10	74.5	94.9	9,055	9,055	9.77	9.77	724	724	851	851	14,105	1,065	0.974	13.4	103
250	250	12.5	91.9	117	10,915	10,915	9.66	9.66	873	873	1,037	1,037	17,163	1,279	0.968	10.9	82.7
250	250	14.2	103	132	12,094	12,094	9.58	9.58	967	967	1,158	1,158	19,138	1,413	0.963	9.67	73.1
260	260	6.3	49.9	63.5	6,788	6,788	10.3	10.3	522	522	603	603	10,417	773	1.02	20.1	161
260	260	8	62.8	80.0	8,423	8,423	10.3	10.3	648	648	753	753	13,006	956	1.02	15.9	127
260	260	10	77.7	98.9	10,242	10,242	10.2	10.2	788	788	924	924	15,931	1,159	1.01	12.9	103
260	260	12.5	95.8	122	12,365	12,365	10.1	10.1	951	951	1,127	1,127	19,408	1,394	1.01	10.4	82.6
260	260	14.2	108	137	13,714	13,714	9.99	9.99	1,055	1,055	1,259	1,259	21,657	1,542	1.00	9.27	73.0
260	260	16	120	153	15,061	15,061	9.91	9.91	1,159	1,159	1,394	1,394	23,939	1,689	0.999	8.30	65.1
300	300	6.3	57.8	73.6	10,547	10,547	12.0	12.0	703	703	809	809	16,136	1,043	1.18	17.3	161
300	300	8	72.8	92.8	13,128	13,128	11.9	11.9	875	875	1,013	1,013	20,194	1,294	1.18	13.7	127
300	300	10	90.2	115	16,026	16,026	11.8	11.8	1,068	1,068	1,246	1,246	24,807	1,575	1.17	11.1	102
300	300	12.5	112	142	19,442	19,442	11.7	11.7	1,296	1,296	1,525	1,525	30,332	1,904	1.17	8.97	82.2
300	300	14.2	126	160	21,637	21,637	11.6	11.6	1,442	1,442	1,708	1,708	33,936	2,114	1.16	7.95	72.6
300	300	16	141	179	23,850	23,850	11.5	11.5	1,590	1,590	1,895	1,895	37,619	2,325	1.16	7.12	64.7
350	350	6.3	67.7	86.2	16,924	16,924	14.0	14.0	967	967	1,109	1,109	25,821	1,436	1.38	14.8	161
350	350	8	85.4	109	21,129	21,129	13.9	13.9	1,207	1,207	1,392	1,392	32,383	1,789	1.38	11.7	127
350	350	10	106	135	25,884	25,884	13.9	13.9	1,479	1,479	1,715	1,715	39,886	2,185	1.37	9.44	102
350	350	12.5	131	167	31,541	31,541	13.7	13.7	1,802	1,802	2,107	2,107	48,933	2,654	1.37	7.62	81.9
350	350	14.2	148	189	35,211	35,211	13.7	13.7	2,012	2,012	2,364	2,364	54,877	2,957	1.36	6.76	72.3

Other measurements can be manufactured in other steels. Please consult us.

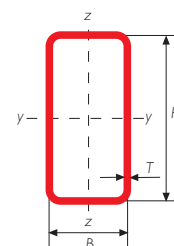
Product range: HOT FINISHED



Hot-finished tubular profile range - square

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I_{xx}	I_{yy}	i_{xx}	i_{yy}	W_{elxx}	W_{elyy}	W_{plxx}	W_{plyy}	I_t	C_t	A_s	m	A_{sv}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
350	350	16	166	211	38,942	38,942	13.6	13.6	2,225	2,225	2,630	2,630	60,987	3,263	1.36	6.04	64.4
400	400	8	97.9	125	31,857	31,857	16.0	16.0	1,593	1,593	1,830	1,830	48,694	2,363	1.58	10.2	127
400	400	10	122	155	39,128	39,128	15.9	15.9	1,956	1,956	2,260	2,260	60,091	2,895	1.57	8.22	102
400	400	12.5	151	192	47,839	47,839	15.8	15.8	2,392	2,392	2,782	2,782	73,905	3,530	1.57	6.63	81.6
400	400	14.2	170	217	53,526	53,526	15.7	15.7	2,676	2,676	3,127	3,127	83,024	3,942	1.56	5.87	72.1
400	400	16	191	243	59,344	59,344	15.6	15.6	2,967	2,967	3,484	3,484	92,440	4,362	1.56	5.24	64.1

Other measurements can be manufactured in other steels. Please consult us.

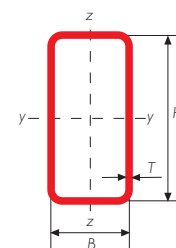


Hot-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elox}	W _{ely}	W _{plox}	W _{ply}	I _t	C _t	A _s	m	A _{sv}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ²
60	40	3.2	4.62	5.88	27.8	14.6	2.18	1.57	9.27	7.29	11.5	8.64	30.8	11.7	0.192	217	326
60	40	4	5.64	7.19	32.8	17.0	2.14	1.54	10.9	8.52	13.8	10.3	36.6	13.7	0.190	177	264
60	40	5	6.85	8.73	38.1	19.5	2.09	1.50	12.7	9.77	16.4	12.2	43.0	15.7	0.187	146	214
60	40	6.3	8.31	10.6	43.4	21.9	2.02	1.44	14.5	11.0	19.2	14.2	49.5	17.6	0.184	120	174
60	40	8	10.0	12.8	47.9	23.7	1.94	1.36	16.0	11.9	22.1	16.1	55.2	19.1	0.179	99.9	141
70	40	3.2	5.12	6.52	40.9	16.7	2.50	1.60	11.7	8.37	14.6	9.8	38.4	13.9	0.212	195	325
70	40	4	6.27	7.99	48.5	19.6	2.46	1.57	13.9	9.82	17.6	11.8	45.8	16.3	0.210	159	263
70	40	5	7.64	9.73	56.8	22.6	2.41	1.52	16.2	11.3	21.0	13.9	53.9	18.8	0.207	131	213
70	40	6.3	9.30	11.8	65.4	25.5	2.35	1.47	18.7	12.8	24.8	16.3	62.4	21.2	0.204	108	172
70	40	8	11.3	14.4	73.4	27.9	2.26	1.39	21.0	14.0	28.9	18.6	70.2	23.2	0.199	88.8	139
80	40	3.2	5.62	7.16	57.2	18.9	2.83	1.63	14.3	9.46	18.0	11.0	46.2	16.1	0.232	178	324
80	40	4	6.90	8.79	68.2	22.2	2.79	1.59	17.1	11.1	21.8	13.2	55.2	18.9	0.230	145	261
80	40	5	8.42	10.7	80.3	25.7	2.74	1.55	20.1	12.9	26.1	15.7	65.0	21.8	0.227	119	212
80	40	6.3	10.3	13.1	93.3	29.2	2.67	1.49	23.3	14.6	31.1	18.4	75.6	24.8	0.224	97.2	171
80	40	8	12.5	16.0	106	32.1	2.58	1.42	26.5	16.1	36.5	21.2	85.6	27.4	0.219	79.9	138
80	40	10	14.9	18.9	115	33.7	2.47	1.33	28.8	16.9	41.3	23.5	92.1	28.8	0.214	67.3	113
80	50	3.2	6.12	7.80	66.6	31.8	2.92	2.02	16.7	12.7	20.5	14.7	68.5	20.8	0.252	163	323
80	50	4	7.53	9.59	79.8	37.7	2.88	1.98	19.9	15.1	24.9	17.8	82.5	24.6	0.250	133	260
80	50	5	9.21	11.7	94.4	44.1	2.84	1.94	23.6	17.7	29.9	21.3	98.3	28.8	0.247	109	211
80	50	6.3	11.3	14.4	110	50.9	2.77	1.88	27.6	20.4	35.7	25.3	116	33.2	0.244	88.7	170
80	50	8	13.8	17.6	127	57.4	2.69	1.81	31.7	23.0	42.2	29.6	134	37.5	0.239	72.6	136
80	50	10	16.4	20.9	140	62.1	2.59	1.72	35.0	24.8	48.3	33.4	149	40.5	0.234	60.9	112
80	60	3.2	6.63	8.44	76.1	48.5	3.00	2.40	19.0	16.2	23.0	18.8	93.3	25.5	0.272	151	322
80	60	4	8.15	10.4	91.3	58.0	2.97	2.36	22.8	19.3	27.9	22.8	113	30.4	0.270	123	260
80	60	5	10.0	12.7	108	68.4	2.92	2.32	27.1	22.8	33.6	27.4	135	35.8	0.267	100	210
80	60	6.3	12.3	15.6	128	79.9	2.86	2.26	31.9	26.6	40.4	32.8	161	41.7	0.264	81.5	169
80	60	8	15.0	19.2	148	91.5	2.78	2.19	36.9	30.5	48.0	38.8	189	47.7	0.259	66.5	135
80	60	10	18.0	22.9	165	101	2.68	2.10	41.1	33.6	55.3	44.4	214	52.5	0.254	55.6	111
90	50	3.2	6.63	8.44	89.1	35.3	3.25	2.04	19.8	14.1	24.6	16.2	80.9	23.6	0.272	151	322
90	50	4	8.15	10.4	107	41.9	3.21	2.01	23.8	16.8	29.8	19.6	97.5	28.0	0.270	123	260
90	50	5	10.0	12.7	127	49.2	3.16	1.97	28.3	19.7	36.0	23.5	116	32.8	0.267	100	210
90	50	6.3	12.3	15.6	150	57.0	3.10	1.91	33.3	22.8	43.2	28.0	138	38.0	0.264	81.5	169
90	50	8	15.0	19.2	174	64.6	3.01	1.84	38.6	25.8	51.4	32.9	160	43.2	0.259	66.5	135
90	50	10	18.0	22.9	194	70.2	2.91	1.75	43.0	28.1	59.3	37.4	179	47.0	0.254	55.6	111
100	40	3.2	6.63	8.44	101	23.3	3.46	1.66	20.2	11.6	25.8	13.3	62.2	20.4	0.272	151	322
100	40	4	8.15	10.4	121	27.4	3.42	1.63	24.2	13.7	31.4	16.1	74.4	24.1	0.270	123	260
100	40	5	10.0	12.7	144	31.9	3.36	1.58	28.8	15.9	37.9	19.2	87.9	28.0	0.267	100	210
100	40	6.3	12.3	15.6	169	36.4	3.29	1.53	33.9	18.2	45.4	22.6	103	32.0	0.264	81.5	169
100	40	8	15.0	19.2	196	40.5	3.20	1.45	39.2	20.2	54.0	26.3	117	35.7	0.259	66.5	135
100	40	10	18.0	22.9	218	43.0	3.08	1.37	43.6	21.5	62.2	29.5	127	38.0	0.254	55.6	111
100	50	3.2	7.13	9.08	116	38.8	3.57	2.07	23.2	15.5	28.9	17.7	93.4	26.4	0.292	140	321
100	50	4	8.78	11.2	140	46.2	3.53	2.03	27.9	18.5	35.2	21.5	113	31.4	0.290	114	259
100	50	5	10.8	13.7	167	54.3	3.48	1.99	33.3	21.7	42.6	25.8	135	36.9	0.287	92.8	209
100	50	6.3	13.3	16.9	197	63.0	3.42	1.93	39.4	25.2	51.3	30.8	160	42.9	0.284	75.4	168

Other measurements can be manufactured in other steels. Please consult us.

Product range: HOT FINISHED

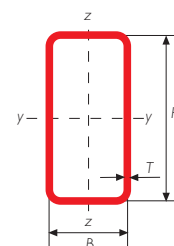


Hot-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elox}	W _{ely}	W _{plox}	W _{ply}	I _t	C _t	A _s	m	A _{sv}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
100	50	8	16.3	20.8	230	71.7	3.33	1.86	46.0	28.7	61.4	36.3	186	48.8	0.279	61.4	135
100	50	10	19.6	24.9	259	78.4	3.22	1.77	51.8	31.4	71.2	41.4	209	53.5	0.274	51.1	110
100	50	12.5	23.2	29.6	281	82.3	3.08	1.67	56.3	32.9	80.7	45.8	225	56.2	0.268	43.1	90.6
100	60	3.2	7.63	9.72	131	58.8	3.67	2.46	26.2	19.6	32.0	22.4	129	32.4	0.312	131	321
100	60	4	9.41	12.0	158	70.5	3.63	2.43	31.6	23.5	39.1	27.3	156	38.7	0.310	106	258
100	60	5	11.6	14.7	189	83.6	3.58	2.38	37.8	27.9	47.4	32.9	188	45.9	0.307	86.5	208
100	60	6.3	14.2	18.1	225	98.1	3.52	2.33	45.0	32.7	57.3	39.5	224	53.8	0.304	70.2	167
100	60	8	17.5	22.4	264	113	3.44	2.25	52.8	37.8	68.7	47.1	265	62.1	0.299	57.0	134
100	60	10	21.1	26.9	299	126	3.33	2.16	59.9	42.1	80.2	54.4	303	69.2	0.294	47.3	109
100	60	12.5	25.2	32.1	329	136	3.21	2.06	65.9	45.2	91.6	61.2	335	74.5	0.288	39.7	89.7
100	80	3.2	8.64	11.0	161	114	3.82	3.22	32.2	28.5	38.2	32.8	207	44.3	0.352	116	320
100	80	4	10.7	13.6	195	138	3.79	3.18	39.0	34.4	46.8	40.1	253	53.4	0.350	93.7	257
100	80	5	13.1	16.7	234	165	3.74	3.14	46.9	41.2	56.9	48.6	307	63.8	0.347	76.1	207
100	80	6.3	16.2	20.7	280	196	3.68	3.08	56.0	49.0	69.1	58.9	371	75.8	0.344	61.6	166
100	80	8	20.1	25.6	332	231	3.60	3.01	66.3	57.7	83.5	71.0	445	88.9	0.339	49.9	133
100	80	10	24.3	30.9	381	263	3.51	2.92	76.2	65.8	98.2	83.3	519	101	0.334	41.2	108
100	80	12.5	29.1	37.1	426	292	3.39	2.81	85.2	73.0	113	95.8	590	112	0.328	34.4	88.4
110	60	3.2	8.13	10.4	165	64.0	4.00	2.49	30.1	21.3	37.1	24.2	147	35.8	0.332	123	320
110	60	4	10.0	12.8	200	76.8	3.96	2.45	36.4	25.6	45.3	29.5	178	42.9	0.330	99.6	258
110	60	5	12.3	15.7	240	91.2	3.91	2.41	43.7	30.4	55.0	35.6	214	50.9	0.327	81.0	208
110	60	6.3	15.2	19.4	287	107	3.84	2.35	52.1	35.8	66.6	42.9	257	59.9	0.324	65.6	167
110	60	8	18.8	24.0	338	124	3.76	2.28	61.5	41.4	80.3	51.2	304	69.4	0.319	53.2	133
110	60	10	22.7	28.9	387	139	3.66	2.19	70.3	46.3	94.2	59.4	349	77.6	0.314	44.0	109
110	60	12.5	27.1	34.6	429	150	3.52	2.08	78.1	50.0	108	67.2	388	84.1	0.308	36.8	89.0
120	60	3.2	8.64	11.0	205	69.2	4.32	2.51	34.2	23.1	42.4	26.1	165	39.2	0.352	116	320
120	60	4	10.7	13.6	249	83.1	4.28	2.47	41.5	27.7	51.9	31.7	201	47.1	0.350	93.7	257
120	60	5	13.1	16.7	299	98.8	4.23	2.43	49.9	32.9	63.1	38.4	242	55.9	0.347	76.1	207
120	60	6.3	16.2	20.7	358	116	4.16	2.37	59.7	38.8	76.7	46.3	290	65.9	0.344	61.6	166
120	60	8	20.1	25.6	425	135	4.08	2.30	70.8	45.0	92.7	55.4	344	76.6	0.339	49.9	133
120	60	10	24.3	30.9	488	152	3.97	2.21	81.4	50.5	109	64.4	395	86.0	0.334	41.2	108
120	60	12.5	29.1	37.1	546	165	3.84	2.11	91.1	54.9	126	73.1	441	93.6	0.328	34.4	88.4
120	80	3.2	9.64	12.3	249	133	4.50	3.29	41.5	33.2	49.9	37.7	270	53.8	0.392	104	319
120	80	4	11.9	15.2	303	161	4.46	3.25	50.4	40.2	61.2	46.1	330	65.0	0.390	83.9	257
120	80	5	14.7	18.7	365	193	4.42	3.21	60.9	48.2	74.6	56.1	401	77.9	0.387	68.0	207
120	80	6.3	18.2	23.2	440	230	4.36	3.15	73.3	57.6	91.0	68.2	487	92.9	0.384	54.9	166
120	80	8	22.6	28.8	525	273	4.27	3.08	87.5	68.1	111	82.6	586	110	0.379	44.3	132
120	80	10	27.4	34.9	609	313	4.18	2.99	102	78.1	131	97.3	687	126	0.374	36.5	107
120	80	12.5	33.0	42.1	692	349	4.05	2.88	115	87.4	153	113	788	140	0.368	30.3	87.4
120	100	3.2	10.6	13.6	292	221	4.64	4.04	48.7	44.2	57.4	50.6	389	68.3	0.432	93.9	318
120	100	4	13.2	16.8	356	269	4.61	4.00	59.4	53.7	70.4	62.1	477	82.9	0.430	75.9	256
120	100	5	16.3	20.7	432	325	4.56	3.96	71.9	64.9	86.1	75.9	581	100	0.427	61.4	206
120	100	6.3	20.2	25.7	521	391	4.50	3.90	86.9	78.2	105	92.7	709	120	0.424	49.6	165
120	100	8	25.1	32.0	626	467	4.43	3.82	104	93.5	129	113	861	143	0.419	39.9	131
120	100	10	30.6	38.9	731	543	4.33	3.74	122	109	153	134	1020	166	0.414	32.7	106

Other measurements can be manufactured in other steels. Please consult us.

Product range: HOT FINISHED

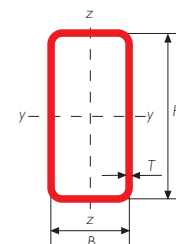


Hot-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elox}	W _{ely}	W _{plox}	W _{ply}	I _t	C _t	A _s		A _{sv}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ²
120	100	12.5	37.0	47.1	837	619	4.22	3.62	139	124	180	157	1187	188	0.408	27.1	86.6
140	70	3.2	10.1	12.9	331	112	5.06	2.95	47.3	32.1	58.4	36.0	267	54.7	0.412	98.6	319
140	70	4	12.6	16.0	404	136	5.02	2.91	57.7	38.8	71.7	44.0	325	66.0	0.410	79.7	256
140	70	5	15.5	19.7	488	163	4.98	2.87	69.8	46.5	87.6	53.5	394	79.0	0.407	64.6	206
140	70	6.3	19.2	24.4	589	194	4.91	2.81	84.2	55.3	107	65.0	477	94.0	0.404	52.1	165
140	70	8	23.8	30.4	707	228	4.82	2.74	101	65.1	130	78.5	572	111	0.399	42.0	132
140	70	10	29.0	36.9	823	260	4.72	2.65	118	74.3	155	92.3	667	126	0.394	34.5	107
140	70	12.5	35.0	44.6	939	289	4.59	2.55	134	82.6	182	107	760	141	0.388	28.6	87.0
140	80	3.2	10.6	13.6	361	152	5.16	3.34	51.6	37.9	62.8	42.6	336	63.2	0.432	93.9	318
140	80	4	13.2	16.8	441	184	5.12	3.31	62.9	46.0	77.1	52.2	411	76.5	0.430	75.9	256
140	80	5	16.3	20.7	534	221	5.08	3.27	76.3	55.3	94.3	63.6	499	91.9	0.427	61.4	206
140	80	6.3	20.2	25.7	646	265	5.01	3.21	92.3	66.2	115	77.5	606	110	0.424	49.6	165
140	80	8	25.1	32.0	776	314	4.93	3.14	111	78.5	141	94.1	733	130	0.419	39.9	131
140	80	10	30.6	38.9	908	362	4.83	3.05	130	90.5	168	111	862	150	0.414	32.7	106
140	80	12.5	37.0	47.1	1,041	407	4.70	2.94	149	102	198	130	993	169	0.408	27.1	86.6
150	100	3.2	12.2	15.5	496	266	5.66	4.14	66.2	53.2	79.1	59.9	538	86.3	0.492	82.3	318
150	100	4	15.1	19.2	607	324	5.63	4.11	81.0	64.8	97.4	73.6	660	105	0.490	66.4	255
150	100	5	18.6	23.7	739	392	5.58	4.07	98.5	78.5	119	90.1	807	127	0.487	53.7	205
150	100	6.3	23.1	29.5	898	474	5.52	4.01	120	94.8	147	110	986	153	0.484	43.2	164
150	100	8	28.9	36.8	1,087	569	5.44	3.94	145	114	180	135	1,203	183	0.479	34.7	130
150	100	10	35.3	44.9	1,282	665	5.34	3.85	171	133	216	161	1,432	214	0.474	28.4	106
150	100	12.5	42.8	54.6	1,488	763	5.22	3.74	198	153	256	190	1,678	245	0.468	23.3	85.7
150	100	14.2	47.7	60.8	1,604	816	5.14	3.66	214	163	280	207	1,820	262	0.463	21.0	76.3
160	80	3.2	11.6	14.8	501	170	5.81	3.39	62.6	42.6	77.0	47.5	403	72.6	0.472	85.8	318
160	80	4	14.4	18.4	612	207	5.77	3.35	76.5	51.7	94.7	58.3	493	88.1	0.470	69.3	255
160	80	5	17.8	22.7	744	249	5.72	3.31	93.0	62.3	116	71.1	600	106	0.467	56.0	205
160	80	6.3	22.2	28.2	903	299	5.66	3.26	113	74.8	142	86.8	730	127	0.464	45.1	164
160	80	8	27.6	35.2	1,091	356	5.57	3.18	136	89.0	175	106	883	151	0.459	36.2	131
160	80	10	33.7	42.9	1,284	411	5.47	3.10	161	103	209	125	1,040	175	0.454	29.7	106
160	80	12.5	40.9	52.1	1,485	465	5.34	2.99	186	116	247	146	1,203	198	0.448	24.5	86.0
160	80	14.2	45.5	57.9	1,598	492	5.25	2.91	200	123	270	159	1,293	210	0.443	22.0	76.5
160	90	3.2	12.2	15.5	540	222	5.91	3.79	67.5	49.3	82.0	55.1	493	82.4	0.492	82.3	318
160	90	4	15.1	19.2	661	270	5.87	3.75	82.6	60.0	101	67.7	605	100	0.490	66.4	255
160	90	5	18.6	23.7	804	326	5.82	3.71	101	72.5	124	82.7	738	121	0.487	53.7	205
160	90	6.3	23.1	29.5	978	393	5.76	3.65	122	87.3	152	101	900	146	0.484	43.2	164
160	90	8	28.9	36.8	1,184	470	5.68	3.58	148	105	187	124	1,095	174	0.479	34.7	130
160	90	10	35.3	44.9	1,397	547	5.58	3.49	175	122	224	147	1,298	203	0.474	28.4	106
160	90	12.5	42.8	54.6	1,622	624	5.45	3.38	203	139	266	173	1,514	231	0.468	23.3	85.7
160	90	14.2	47.7	60.8	1,749	665	5.36	3.31	219	148	291	188	1,637	246	0.463	21.0	76.3
180	80	3.2	12.7	16.1	670	189	6.45	3.43	74.4	47.3	92.5	52.5	471	82	0.512	79.0	317
180	80	4	15.7	20.0	821	230	6.41	3.39	91.2	57.5	114	64.4	577	100	0.510	63.7	255
180	80	5	19.4	24.7	1,000	277	6.36	3.35	111	69.4	140	78.6	703	120	0.507	51.5	205
180	80	6.3	24.1	30.7	1,217	333	6.29	3.29	135	83.4	172	96.1	855	144	0.504	41.4	164
180	80	8	30.1	38.4	1,477	397	6.20	3.22	164	99.4	211	117	1,036	172	0.499	33.2	130

Other measurements can be manufactured in other steels. Please consult us.

Product range: HOT FINISHED

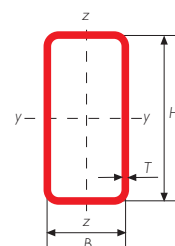


Hot-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elox}	W _{elyy}	W _{plox}	W _{plyy}	I _t	C _t	A _s	m	A _{slv}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ²
180	80	10	36.8	46.9	1,747	461	6.10	3.13	194	115	254	139	1,222	199	0.494	27.1	105
180	80	12.5	44.8	57.1	2,034	522	5.97	3.03	226	131	302	163	1,417	226	0.488	22.3	85.5
180	80	14.2	49.9	63.6	2,198	554	5.88	2.95	244	139	331	177	1,525	241	0.483	20.0	76.0
180	100	3.2	13.7	17.4	770	311	6.65	4.23	85.6	62.2	104	69.2	693	104	0.552	73.2	317
180	100	4	16.9	21.6	945	379	6.61	4.19	105	75.9	128	85.2	852	127	0.550	59.0	255
180	100	5	21.0	26.7	1,153	460	6.57	4.15	128	92.0	157	104	1,042	154	0.547	47.7	205
180	100	6.3	26.1	33.3	1,407	557	6.50	4.09	156	111	194	128	1,276	186	0.544	38.3	163
180	100	8	32.6	41.6	1,713	671	6.42	4.02	190	134	239	157	1,560	224	0.539	30.7	130
180	100	10	40.0	50.9	2,036	787	6.32	3.93	226	157	288	188	1,862	263	0.534	25.0	105
180	100	12.5	48.7	62.1	2,385	908	6.20	3.82	265	182	344	223	2,190	303	0.528	20.5	85.0
180	100	14.2	54.4	69.3	2,589	974	6.11	3.75	288	195	378	244	2,383	325	0.523	18.4	75.5
180	120	4	18.2	23.2	1,068	572	6.79	4.97	119	95.3	142	108	1,158	155	0.590	54.9	254
180	120	5	22.6	28.7	1,306	696	6.74	4.92	145	116	175	132	1,421	188	0.587	44.3	204
180	120	6.3	28.1	35.8	1,597	847	6.68	4.87	177	141	216	163	1,746	228	0.584	35.6	163
180	120	8	35.1	44.8	1,950	1,028	6.60	4.79	217	171	266	200	2,146	276	0.579	28.5	129
180	120	10	43.1	54.9	2,325	1,216	6.51	4.71	258	203	322	241	2,578	327	0.574	23.2	105
180	120	12.5	52.7	67.1	2,736	1,417	6.39	4.60	304	236	386	287	3,060	380	0.568	19.0	84.7
200	100	4	18.2	23.2	1,223	416	7.26	4.24	122	83	150	93	983	142	0.590	54.9	254
200	100	5	22.6	28.7	1,495	505	7.21	4.19	149	101	185	114	1,204	172	0.587	44.3	204
200	100	6.3	28.1	35.8	1,829	613	7.15	4.14	183	123	228	140	1,475	208	0.584	35.6	163
200	100	8	35.1	44.8	2,234	739	7.06	4.06	223	148	282	172	1,804	251	0.579	28.5	129
200	100	10	43.1	54.9	2,664	869	6.96	3.98	266	174	341	206	2,155	295	0.574	23.2	105
200	100	12.5	52.7	67.1	3,136	1,004	6.84	3.87	314	201	408	245	2,540	341	0.568	19.0	84.7
200	100	14.2	58.9	75.0	3,416	1,080	6.75	3.80	342	216	450	268	2,768	367	0.563	17.0	75.2
200	100	16	65.2	83.0	3,678	1,147	6.66	3.72	368	229	491	290	2,979	391	0.559	15.3	67.3
200	120	4	19.5	24.8	1,376	626	7.45	5.02	138	104	166	117	1,343	173	0.630	51.4	254
200	120	5	24.1	30.7	1,685	762	7.40	4.98	168	127	205	144	1,648	210	0.627	41.5	204
200	120	6.3	30.1	38.3	2,065	929	7.34	4.92	207	155	253	177	2,028	255	0.624	33.3	163
200	120	8	37.6	48.0	2,529	1,128	7.26	4.85	253	188	313	218	2,494	310	0.619	26.6	129
200	120	10	46.3	58.9	3,026	1,337	7.17	4.76	303	223	379	263	3,000	367	0.614	21.6	104
200	120	12.5	56.6	72.1	3,576	1,562	7.04	4.66	358	260	455	314	3,568	428	0.608	17.7	84.3
200	120	14.2	63.3	80.7	3,907	1,693	6.96	4.58	391	282	503	346	3,914	464	0.603	15.8	74.8
200	150	4	21.3	27.2	1,607	1,034	7.69	6.17	161	138	190	156	1,938	219	0.690	46.9	254
200	150	5	26.5	33.7	1,970	1,265	7.64	6.12	197	169	234	192	2,386	267	0.687	37.8	204
200	150	6.3	33.0	42.1	2,420	1,549	7.58	6.07	242	207	289	237	2,947	326	0.684	30.3	162
200	150	8	41.4	52.8	2,971	1,894	7.50	5.99	297	253	359	294	3,643	398	0.679	24.1	129
200	150	10	51.0	64.9	3,568	2,264	7.41	5.91	357	302	436	356	4,409	475	0.674	19.6	104
200	150	12.5	62.5	79.6	4,236	2,673	7.30	5.80	424	356	525	428	5,286	559	0.668	16.0	83.9
200	150	14.2	70.0	89.2	4,644	2,919	7.22	5.72	464	389	582	473	5,833	610	0.663	14.3	74.4
220	120	4	20.7	26.4	1,734	679	8.11	5.07	158	113	192	126	1,531	190	0.670	48.3	254
220	120	5	25.7	32.7	2,125	829	8.06	5.03	193	138	236	155	1,881	232	0.667	38.9	204
220	120	6.3	32.0	40.8	2,610	1,010	8.00	4.98	237	168	292	191	2,315	283	0.664	31.2	163
220	120	8	40.2	51.2	3,203	1,229	7.91	4.90	291	205	362	236	2,850	343	0.659	24.9	129
220	120	10	49.4	62.9	3,844	1,459	7.82	4.81	349	243	440	285	3,431	407	0.654	20.2	104

Other measurements can be manufactured in other steels. Please consult us.

Product range: HOT FINISHED

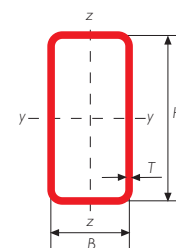


Hot-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elxx}	W _{elhy}	W _{plxx}	W _{ply}	I _t	C _t	A _s	m	A _{sv}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ²
220	120	12.5	60.5	77.1	4,560	1,707	7.69	4.71	415	285	530	341	4,086	476	0.648	16.5	84.1
220	120	14.2	67.8	86.3	4,996	1,853	7.61	4.63	454	309	586	376	4,486	517	0.643	14.8	74.5
250	50	4	18.2	23.2	1,523	110	8.10	2.18	122	43.9	164	49.1	356	82.3	0.590	54.9	254
250	50	5	22.6	28.7	1,859	131	8.04	2.13	149	52.2	202	59.5	427	97.9	0.587	44.3	204
250	50	6.3	28.1	35.8	2,272	154	7.97	2.07	182	61.6	249	72.1	509	115	0.584	35.6	163
250	50	8	35.1	44.8	2,768	179	7.86	2.00	221	71.5	307	86.7	599	134	0.579	28.5	129
250	100	5	26.5	33.7	2,610	618	8.80	4.28	209	124	263	138	1,617	217	0.687	37.8	204
250	100	6.3	33.0	42.1	3,207	751	8.73	4.22	257	150	326	169	1,983	264	0.684	30.3	162
250	100	8	41.4	52.8	3,940	909	8.64	4.15	315	182	404	209	2,429	319	0.679	24.1	129
250	100	10	51.0	64.9	4,733	1,072	8.54	4.06	379	214	491	251	2,907	376	0.674	19.6	104
250	100	12.5	62.5	79.6	5,622	1,245	8.41	3.96	450	249	592	299	3,435	437	0.668	16.0	83.9
250	150	5	30.4	38.7	3,360	1,527	9.31	6.28	269	204	324	228	3,278	337	0.787	32.9	203
250	150	6.3	38.0	48.4	4,143	1,874	9.25	6.22	331	250	402	283	4,054	413	0.784	26.3	162
250	150	8	47.7	60.8	5,111	2,298	9.17	6.15	409	306	501	350	5,020	506	0.779	21.0	128
250	150	10	58.8	74.9	6,174	2,755	9.08	6.06	494	367	611	426	6,090	605	0.774	17.0	103
250	150	12.5	72.3	92.1	7,387	3,265	8.96	5.96	591	435	740	514	7,325	716	0.768	13.8	83.4
250	150	14.2	81.1	103.4	8,141	3,576	8.87	5.88	651	477	823	570	8,101	784	0.763	12.3	73.9
250	200	6.3	42.9	54.7	5,078	3,602	9.64	8.12	406	360	479	411	6,512	562	0.884	23.3	162
250	200	8	54.0	68.8	6,283	4,447	9.56	8.04	503	445	597	512	8,104	693	0.879	18.5	128
250	200	10	66.7	84.9	7,614	5,374	9.47	7.95	609	537	731	626	9,888	835	0.874	15.0	103
250	200	12.5	82.1	105	9,151	6,437	9.35	7.85	732	644	888	760	11,984	997	0.868	12.2	83.0
250	200	14.2	92.3	118	10,117	7,100	9.28	7.77	809	710	990	846	13,325	1,098	0.863	10.8	73.4
260	140	5	30.4	38.7	3,532	1,354	9.55	5.91	272	193	331	216	3,078	326	0.787	32.9	203
260	140	6.3	38.0	48.4	4,355	1,660	9.49	5.86	335	237	411	267	3,803	399	0.784	26.3	162
260	140	8	47.7	60.8	5,373	2,032	9.40	5.78	413	290	511	331	4,704	488	0.779	21.0	128
260	140	10	58.8	74.9	6,490	2,432	9.31	5.70	499	347	624	402	5,698	584	0.774	17.0	103
260	140	12.5	72.3	92.1	7,767	2,876	9.18	5.59	597	411	756	485	6,840	690	0.768	13.8	83.4
260	140	14.2	81.1	103	8,560	3,144	9.10	5.52	658	449	840	537	7,553	754	0.763	12.3	73.9
260	180	5	33.5	42.7	4,182	2,378	9.89	7.46	322	264	382	297	4,686	426	0.867	29.8	203
260	180	6.3	41.9	53.4	5,166	2,929	9.83	7.40	397	325	475	369	5,810	524	0.864	23.8	162
260	180	8	52.7	67.2	6,390	3,608	9.75	7.33	492	401	592	459	7,221	644	0.859	19.0	128
260	180	10	65.1	82.9	7,741	4,351	9.66	7.24	595	483	724	560	8,798	775	0.854	15.4	103
260	180	12.5	80.1	102	9,299	5,196	9.54	7.13	715	577	879	679	10,642	924	0.848	12.5	83.1
260	180	14.2	90.1	115	10,278	5,719	9.46	7.06	791	635	980	755	11,817	1,016	0.843	11.1	73.5
300	50	5	26.5	33.7	3,059	156	9.52	2.15	204	62.4	280	70.8	527	118	0.687	37.8	204
300	50	6.3	33.0	42.1	3,753	184	9.44	2.09	250	73.7	346	85.8	628	140	0.684	30.3	162
300	50	8	41.4	52.8	4,600	215	9.34	2.02	307	85.8	429	104	740	163	0.679	24.1	129
300	100	5	30.4	38.7	4,146	731	10.3	4.34	276	146	354	161	2,040	262	0.787	32.9	203
300	100	6.3	38.0	48.4	5,111	890	10.3	4.29	341	178	439	199	2,504	319	0.784	26.3	162
300	100	8	47.7	60.8	6,305	1,078	10.2	4.21	420	216	546	245	3,069	387	0.779	21.0	128
300	100	10	58.8	74.9	7,613	1,275	10.1	4.13	508	255	666	296	3,676	458	0.774	17.0	103
300	100	12.5	72.3	92.1	9,103	1,486	9.94	4.02	607	297	806	354	4,349	534	0.768	13.8	83.4
300	150	5	34.3	43.7	5,234	1,790	10.9	6.40	349	239	427	264	4,207	407	0.887	29.1	203
300	150	6.3	42.9	54.7	6,470	2,200	10.9	6.34	431	293	531	328	5,206	500	0.884	23.3	162

Other measurements can be manufactured in other steels. Please consult us.

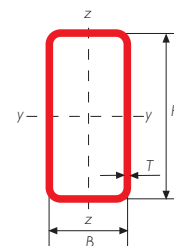
Product range: HOT FINISHED



Hot-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elxx}	W _{elyy}	W _{plxx}	W _{plyy}	I _t	C _t	A _s	m	A _{sv}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m		m ⁻¹
300	150	8	54.0	68.8	8,011	2,702	10.8	6.27	534	360	663	407	6,454	613	0.879	18.5	128
300	150	10	66.7	84.9	9,716	3,246	10.7	6.18	648	433	811	496	7,839	736	0.874	15.0	103
300	150	12.5	82.1	105	11,688	3,858	10.6	6.07	779	514	986	600	9,444	874	0.868	12.2	83.0
300	150	14.2	92.3	118	12,930	4,233	10.5	6.00	862	564	1,099	666	10,457	959	0.863	10.8	73.4
300	200	5	38.3	48.7	6,322	3,396	11.4	8.35	421	340	501	380	6,824	552	0.987	26.1	203
300	200	6.3	47.9	61.0	7,829	4,193	11.3	8.29	522	419	624	472	8,476	681	0.984	20.9	161
300	200	8	60.3	76.8	9,717	5,184	11.3	8.22	648	518	779	589	10,562	840	0.979	16.6	128
300	200	10	74.5	94.9	11,819	6,278	11.2	8.13	788	628	956	721	12,907	1,015	0.974	13.4	103
300	200	12.5	91.9	117	14,273	7,537	11.0	8.02	952	754	1,165	877	15,675	1,217	0.968	10.9	82.7
300	200	14.2	103	132	15,832	8,328	11.0	7.95	1,055	833	1,302	978	17,455	1,343	0.963	9.67	73.1
350	150	5	38.3	48.7	7,655	2,053	12.5	6.49	437	274	543	301	5,161	477	0.987	26.1	203
350	150	6.3	47.9	61.0	9,481	2,525	12.5	6.43	542	337	676	373	6,389	586	0.984	20.9	161
350	150	8	60.3	76.8	11,770	3,105	12.4	6.36	673	414	844	464	7,925	721	0.979	16.6	128
350	150	10	74.5	94.9	14,320	3,737	12.3	6.27	818	498	1,035	566	9,633	867	0.974	13.4	103
350	150	12.5	91.9	117	17,297	4,450	12.2	6.17	988	593	1,263	686	11,618	1,032	0.968	10.9	82.7
350	150	14.2	103	132	19,189	4,890	12.1	6.09	1,097	652	1,411	763	12,873	1,134	0.963	9.67	73.1
350	250	6.3	57.8	73.6	13,203	7,885	13.4	10.4	754	631	892	709	15,214	1,011	1.18	17.3	161
350	250	8	72.8	92.8	16,449	9,798	13.3	10.3	940	784	1,118	888	19,027	1,254	1.18	13.7	127
350	250	10	90.2	115	20,102	11,937	13.2	10.2	1,149	955	1,375	1,091	23,354	1,525	1.17	11.1	102
350	250	12.5	112	142	24,419	14,444	13.1	10.1	1,395	1,156	1,685	1,334	28,525	1,842	1.17	8.97	82.2
350	250	14.2	126	160	27,200	16,046	13.0	10.0	1,554	1,284	1,887	1,492	31,891	2,044	1.16	7.95	72.6
350	250	16	141	179	30,011	17,654	12.9	9.93	1,715	1,412	2,095	1,655	35,322	2,246	1.16	7.12	64.7
400	100	5	38.3	48.7	8,735	957	13.4	4.43	437	191	572	209	2,904	353	0.987	26.1	203
400	100	6.3	47.9	61.0	10,813	1,167	13.3	4.37	541	233	712	258	3,565	430	0.984	20.9	161
400	100	8	60.3	76.8	13,415	1,418	13.2	4.30	671	284	889	319	4,372	523	0.979	16.6	128
400	100	10	74.5	94.9	16,308	1,682	13.1	4.21	815	336	1,090	386	5,242	620	0.974	13.4	103
400	100	12.5	91.9	117	19,675	1,967	13.0	4.10	984	393	1,329	463	6,209	726	0.968	10.9	82.7
400	200	6.3	57.8	73.6	15,696	5,376	14.6	8.55	785	538	960	594	12,612	917	1.18	17.3	161
400	200	8	72.8	92.8	19,562	6,660	14.5	8.47	978	666	1,203	743	15,735	1,135	1.18	13.7	127
400	200	10	90.2	115	23,914	8,084	14.4	8.39	1,196	808	1,480	911	19,258	1,376	1.17	11.1	102
400	200	12.5	112	142	29,063	9,738	14.3	8.28	1,453	974	1,813	1,111	23,437	1,656	1.17	8.97	82.2
400	200	14.2	126	160	32,381	10,784	14.2	8.21	1,619	1,078	2,032	1,242	26,136	1,833	1.16	7.95	72.6
400	300	6.3	67.7	86.2	20,579	13,264	15.5	12.4	1,029	884	1,208	994	24,739	1,405	1.38	14.8	161
400	300	8	85.4	109	25,709	16,540	15.4	12.3	1,285	1,103	1,517	1,247	31,014	1,749	1.38	11.7	127
400	300	10	106	135	31,521	20,233	15.3	12.2	1,576	1,349	1,870	1,536	38,179	2,135	1.37	9.44	102
400	300	12.5	131	167	38,451	24,611	15.2	12.1	1,923	1,641	2,298	1,884	46,809	2,592	1.37	7.62	81.9
400	300	14.2	148	189	42,954	27,441	15.1	12.1	2,148	1,829	2,579	2,113	52,470	2,887	1.36	6.76	72.3
400	300	16	166	211	47,541	30,309	15.0	12.0	2,377	2,021	2,870	2,349	58,284	3,184	1.36	6.04	64.4
450	250	6.3	67.7	86.2	24,071	9,756	16.7	10.6	1,070	781	1,292	863	21,634	1,310	1.38	14.8	161
450	250	8	85.4	109	30,082	12,142	16.6	10.6	1,337	971	1,622	1,081	27,083	1,629	1.38	11.7	127
450	250	10	106	135	36,895	14,819	16.5	10.5	1,640	1,185	2,000	1,331	33,284	1,986	1.37	9.44	102
450	250	12.5	131	167	45,026	17,973	16.4	10.4	2,001	1,438	2,458	1,631	40,718	2,406	1.37	7.62	81.9
450	250	14.2	148	189	50,315	19,999	16.3	10.3	2,236	1,600	2,759	1,827	45,575	2,675	1.36	6.76	72.3
450	250	16	166	211	55,705	22,041	16.2	10.2	2,476	1,763	3,070	2,029	50,542	2,947	1.36	6.04	64.4

Other measurements can be manufactured in other steels. Please consult us.

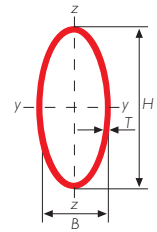


Hot-finished tubular profile range - rectangular

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	NOMINAL LENGTH PER TONNE	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elxx}	W _{elyy}	W _{plxx}	W _{plyy}	I _t	C _t	A _s	m	A _{sv}
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	m ²
500	200	6.3	67.7	86.2	27,243	6,558	17.8	8.72	1,090	656	1,360	716	16,922	1,153	1.38	14.8	161
500	200	8	85.4	109	34,045	8,135	17.7	8.65	1,362	814	1,707	896	21,123	1,430	1.38	11.7	127
500	200	10	106	135	41,755	9,891	17.6	8.56	1,670	989	2,105	1,101	25,871	1,737	1.37	9.44	102
500	200	12.5	131	167	50,956	11,938	17.5	8.45	2,038	1,194	2,586	1,346	31,513	2,096	1.37	7.62	81.9
500	200	14.2	148	189	56,939	13,239	17.4	8.38	2,278	1,324	2,904	1,505	35,164	2,324	1.36	6.76	72.3
500	300	8	97.9	125	43,728	19,951	18.7	12.6	1,749	1,330	2,100	1,480	42,563	2,203	1.58	10.2	127
500	300	10	122	155	53,762	24,439	18.6	12.6	2,150	1,629	2,595	1,826	52,449	2,696	1.57	8.22	102
500	300	12.5	151	192	65,813	29,780	18.5	12.5	2,633	1,985	3,196	2,244	64,388	3,281	1.57	6.63	81.6
500	300	14.2	170	217	73,700	33,245	18.4	12.4	2,948	2,216	3,593	2,519	72,242	3,660	1.56	5.87	72.1
500	300	16	191	243	81,783	36,768	18.3	12.3	3,271	2,451	4,005	2,804	80,326	4,044	1.56	5.24	64.1

Other measurements can be manufactured in other steels. Please consult us.

Product range: HOT FINISHED



Hot-finished tubular profile range - elliptical

SIDES		THICKNESS	MASS PER UNIT LENGTH	CROSS- SECTIONAL AREA	SECOND MOMENT OF AREA		RADIUS OF GYRATION		ELASTIC SECTION MODULUS		PLASTIC SECTION MODULUS		TORSIONAL MODULUS CONSTANT	TORSIONAL MODULUS CONSTANT	SURFACE AREA PER METRE LENGTH	OUTSIDE SURFACE AREA PER METRE
H	B	T	M	A	I _y	I _z	i _y	i _z	W _{ely}	W _{elz}	W _{ply}	W _{plz}	I _t	C _t	A _s	m
mm	mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m
120	60	3.2	6.85	8.73	123	41.4	3.76	2.18	20.5	13.8	28.7	17.6	124	30.8	0.291	146
120	60	4	8.48	10.8	150	49.9	3.73	2.15	25.1	16.6	35.3	21.5	150	36.9	0.291	118
120	60	5	10.5	13.4	182	59.7	3.69	2.12	30.4	19.9	43.2	26.2	180	43.9	0.291	95.4
120	60	6.3	13.0	16.6	221	71.1	3.65	2.07	36.8	23.7	52.9	31.8	216	51.8	0.291	76.9
120	60	8	16.2	20.6	266	83.7	3.59	2.02	44.3	27.9	64.7	38.4	256	60.4	0.291	61.8
150	75	4	10.7	13.6	301	101	4.70	2.72	40.1	26.9	56.1	34.4	303	60.1	0.363	93.4
150	75	5	13.3	16.9	367	122	4.66	2.69	48.9	32.5	68.9	42.0	367	72.2	0.363	75.4
150	75	6.3	16.5	21.0	448	147	4.62	2.64	59.7	39.1	84.9	51.5	443	86.3	0.363	60.6
150	75	8	20.6	26.3	546	176	4.56	2.59	72.8	46.8	105	62.9	533	102	0.363	48.5
180	90	5	16.0	20.4	647	217	5.63	3.26	71.9	48.2	101	61.7	651	107	0.436	62.4
180	90	6.3	20.0	25.5	794	263	5.58	3.21	88.2	58.5	125	75.9	792	130	0.436	50.0
180	90	8	25.1	31.9	974	318	5.52	3.16	108	70.6	154	93.3	961	155	0.436	39.9
180	90	10	30.8	39.3	1,169	375	5.46	3.09	130	83.3	187	112	1,139	182	0.436	32.4
220	110	6.3	24.7	31.4	1,484	497	6.87	3.98	135	90.3	189	116	1,491	201	0.533	40.6
220	110	8	31.0	39.5	1,832	606	6.81	3.92	167	110	235	143	1,824	244	0.533	32.3
220	110	10	38.2	48.7	2,215	722	6.74	3.85	201	131	287	174	2,183	288	0.533	26.2
220	110	12.5	47.0	59.9	2,656	850	6.66	3.77	241	154	349	209	2,584	337	0.533	21.3
250	125	6.3	28.2	35.9	2,205	742	7.84	4.55	176	119	246	151	2,224	265	0.605	35.5
250	125	8	35.4	45.1	2,732	909	7.78	4.49	219	145	307	188	2,734	323	0.605	28.2
250	125	10	43.8	55.8	3,316	1,090	7.71	4.42	265	174	376	228	3,288	385	0.605	22.8
250	125	12.5	53.9	68.7	3,996	1,292	7.63	4.34	320	207	458	276	3,918	453	0.605	18.5
320	160	8	45.8	58.3	5,877	1,978	10	5.82	367	247	513	315	5,928	553	0.775	21.8
320	160	10	56.7	72.3	7,181	2,393	9.97	5.75	449	299	631	385	7,192	665	0.775	17.6
320	160	12.5	70.1	89.3	8,723	2,871	9.88	5.67	545	359	773	469	8,659	793	0.775	14.3
320	160	14.2	79.1	101	9,719	3,172	9.82	5.61	607	396	866	524	9,590	872	0.775	12.6
400	200	8	57.6	73.4	11,689	3,966	12.6	7.35	584	397	811	500	11,858	890	0.969	17.4
400	200	10	71.5	91.1	14,348	4,829	12.5	7.28	717	483	1,001	615	14,473	1,079	0.969	14.0
400	200	12.5	88.6	113	17,531	5,843	12.5	7.19	877	584	1,232	753	17,558	1,299	0.969	11.3
400	200	14.2	100	127	19,609	6,491	12.4	7.14	980	649	1,384	843	19,544	1,438	0.969	9.99
480	240	8	69.4	88.5	20,445	6,973	15.2	8.88	852	581	1,178	728	20,819	1,308	1.16	14.4
480	240	10	86.3	110	25,173	8,529	15.1	8.81	1,049	711	1,457	897	25,512	1,594	1.16	11.6
480	240	12.5	107	136	30,875	10,375	15	8.72	1,286	865	1,798	1,103	31,105	1,931	1.16	9.34
480	240	14.2	121	154	34,624	11,570	15	8.66	1,443	964	2,024	1,238	34,742	2,147	1.16	8.26

Other measurements can be manufactured in other steels. Please consult us.







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