



Structurals and Standard Pipe

TMK produces hot finished structural hollow sections of non-alloy and fine grain steel according to the standard DIN EN 10210-1,2 and cold-formed seamless and welded carbon steel structural tubing in rounds in accordance with ASTM A500.

For standard uses such as steam, gas and water supply, TMK manufactures seamless and welded tube and pipe according to ASTM A53, EN 10208-1,2, DIN EN 10224 and EN 10255 specifications.

Producers

Plant Location	Standards	OD	Wall Thickness	Method
Structurals				
Volzhsky Pipe Plant /Russia/	EN 10210 1,2	57 - 245 mm	6,0 - 50 mm	Seamless, hot rolled
Sinarsky Pipe Plant /Russia/	EN 10210 1,2	33,7 - 168,3 mm	2,9 - 16 mm	Seamless, hot rolled
	ASTM A500	23 - 76 mm	2,0 - 10 mm	Seamless, cold drawn
TAGMET /Russia/	EN 10210 1	114,3 - 273 mm	8,0 - 20 mm	Seamless hot rolled
Artrom /Romania/	EN 10210-1,2	21,3 - 219,1 mm	2,3 - 60 mm	Seamless hot rolled
Standard pipe				
Volzhsky Pipe Plant /Russia/	ASTM A53	219,1 - 406,4 mm	7,92 - 34,8 mm	Seamless
Seversky Tube Works /Russia/	ASTM A53	219,1-323,8 mm	7,92 - 23,32 mm	Seamless
	EN 10208-1, 10255, 10224, ASTM A53	21,3 - 530 mm	2,9 - 13 mm	ERW
Sinarsky Pipe Plant /Russia/	EN 10255	33,7 - 88,9 mm	4,05 - 4,85 mm	Seamless, hot rolled
	EN 10255, ASTM A53	10,2 - 76,1 mm	1,73 - 9,53 mm	Seamless, cold drawn
TAGMET /Russia/	EN 10255	21,3 - 60,3 mm	2,65 - 3,65 mm	ERW
Artrom /Romania/	ASTM A53	21,3 - 219,1 mm	2,3 - 25,4 mm	Seamless hot rolled
	EN 10255	21,3 - 114,3 mm	2,3 - 5,4 mm	Seamless hot rolled
	EN 10208-1,2	21,3 - 219,1 mm	2,3 - 60 mm	Seamless hot rolled

List of Standards and Ranges for Structural and Standard Application

Standarts	OD	WT	Steel Grade
Structurals			
DIN EN 10210-1 Hot finished structural hollow sections of nonalloy and fine grain steels - Part 1: Technical delivery conditions DIN EN 10210-2 Hot finished structural hollow sections of non-alloy and fine grain steels - Part 2: Tolerances, dimensions and sectional properties	21,3 - 273	2,3 - 60	S235JRH; S275J0H; S275J2H; S355J0H; S355J2H; S355K2H
ASTM A500-13 Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes	23 - 76	2-10	Grade A, Grade B, Grade C, Grade D
DIN EN 10210-1 Hot finished structural hollow sections of nonalloy and fine grain steels - Part 1: Technical delivery conditions	10,2 - 193,7	0 C\J CD rH	St 37.2, St 44.2, St 52.3, St 37.3, St 44.3
DIN EN 10210-1 Hot finished structural hollow sections of nonalloy and fine grain steels - Part 1: Technical delivery conditions	21,3 - 229	2,3 - 60	St 52.3
Standard pipe			
ASTM A53-12 Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless	21,3 - 530	2,3 - 34,8	Grade A, Grade B
DIN EN 10224 Non-alloy steel tubes and fittings for the conveyance of water and other aqueous liquids - Technical delivery conditions	21,3-219,1	2,9 - 8,0	L235, L275, L355
DIN EN 10208 P1 STEEL PIPES FOR PIPE LINES FOR COMBUSTIBLE FLUIDS; TECHNICAL DELIVERY CONDITIONS; PART 1: PIPES OF REQUIREMENT CLASS A	21,3 - 508	2,76 - 25,4	L210GA, L235GA, L245GA, L290GA, L360GA
DIN EN 10255 NON-ALLOY STEEL TUBES SUITABLE FOR WELDING AND THREADING - TECHNICAL DELIVERY CONDITIONS	10,2 - 114,3	2,0 - 5,4	S195T

Chemical Compositon DIN EN 10210

Steel Grade	Material Number	Contents %, not less						
		C WT, mm		Si	Mn	P	S	N
		≤40	>40 ≤120					
S235JRH	1,003	0,17	0,2	-	1,4	0,04	0,04	0,009
S275J0H	1,014	0,2	0,22	-	1,5	0,035	0,035	0,009
S275J2H	1,013	0,2	0,22	-	1,5	0,03	0,03	-
S355J0H	1,054	0,22	0,22	0,55	1,6	0,035	0,035	0,009
S355J2H	1,057	0,22	0,22	0,55	1,6	0,03	0,03	-
S355K2H	1,051	0,22	0,22	0,55	1,6	0,03	0,03	-

Steel Grade	Material Number	Carbon Equivalent, CEV, %, not less			
		WT, mm			
		≤16	>16 ≤40	>40 ≤65	>65 ≤ 120
S235JRH	1,003	0,37	0,39	0,41	0,44
S275J0H	1,014	0,41	0,43	0,45	0,48
S275J2H	1,013	0,41	0,43	0,45	0,48
S355J0H	1,054	0,45	0,47	0,5	0,53
S355J2H	1,057	0,45	0,47	0,5	0,53
S35K2H	1,051	0,45	0,47	0,5	0,53

Mechanical Properties DIN EN 10210

Steel Grade	Material Number	Yield Strength ReH Mpa, not less						Tensile Strength Rm, Mpa			Elongation %, not less			Impact Strength, not less			
		Wall thickness, mm						Wall thickness, mm			Wall thickness, mm			T, °C			
		<16	>16 <40	>40 <63	>63 <80	>80 <100	>100 <120	<3	>3 <65	>100 <120	<40	>40 <63	>63 <80	>100 <120	-20	0	20
S235JRH	1,003	235	225	215	215	215	195	360-510	360-510	350-500	26	25	24	22	-	-	27
S275J0H	1,014	275	265	255	245	235	225	430-580	410-560	400-540	23	22	21	19	-	27	-
S275J2H	1,013																
S355J0H	1,054	355	345	335	325	315	295	510-680	470-630	450-600	22	21	20	18	-	27	-
S355J2H	1,057																
S355K2H	1,051													40	-	-	-

