

ERW PIPES & HOLLOW SECTIONS

PRODUCT CATALOG

PIPES 13

1	Water and Gas Pipes	15
2	Natural Gas and Oil Line Pipes	29
3	Industrial Pipes	41
4	Scaffolding Pipes	49
5	Boiler Pipes	57
6	Casing, Tubing and Drill Rod Pipes	63
7	Galvanized Pipes	73
8	Threaded Pipes	79
9	Heat Treated and Hot-Finished Pipes	87
10	Primer Coated Pipes	95
11	Polyethylene, Polypropylene and Epoxy Coated Pipes	101

HOLLOW SECTIONS 109

12	Rectangular and Square Hollow Sections	111
13	Special Shaped Hollow Sections	119
14	Heat Treated and Hot-Finished Hollow Sections	127
15	Galvanized Hollow Sections	135
16	Primer Coated Hollow Sections	145



PIPES

Our products are produced to meet all production, test and control requirements defined by national and international standards, customer demands, industrial expectations and legal requirements.

- 1** Water and Gas Pipes
- 2** Natural Gas and Oil Line Pipes
- 3** Industrial Pipes
- 4** Scaffolding Pipes
- 5** Boiler Pipes
- 6** Casing, Tubing and Drill Rod Pipes
- 7** Galvanized Pipes
- 8** Threaded Pipes
- 9** Heat Treated and Hot-Finished Pipes
- 10** Primer Coated Pipes
- 11** Polyethylene, Polypropylene and Epoxy Coated Pipes



PIPES

WATER AND GAS PIPES

It is generally used in the transmission and distribution of non-flammable light gases and liquids. It is used in applications such as water installation lines, light gas lines, fire safety lines, water well lines, sleeve manufacturing, elbow manufacturing, greenhouse constructions, irrigation systems.



PRODUCTION
RANGE

Outside Diameter : $\varnothing$ 17,2 - 339,7 mm (3/8" - 13 3/8")
Wall Thickness : 1,2 - 13,0 mm (0,047" - 0,512")
Length : 4,0 - 14,0 m

PRODUCTION RANGE FOR WATER AND GAS PIPES

Outside Diameter		Wall Thickness (mm)																				
(mm)	(inch)	1,2	1,5	2,0	2,3	2,6	2,9	3,2	3,5	3,6	4,0	4,5	5,0	5,4	6,0	7,0	8,0	10,0	11,0	12,5	13,0	
		Mass Per Unit Length (kg/m)																				
Ø17,2	3/8	-	0,58	0,75	0,85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ø21,3	1/2	0,59	0,73	0,95	1,08	1,20	1,32	1,43	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ø26,7	3/4	0,75	0,93	1,22	1,38	1,55	1,70	1,85	2,00	2,05	-	-	-	-	-	-	-	-	-	-	-	
Ø26,9	3/4	0,76	0,94	1,23	1,40	1,56	1,72	1,87	2,02	2,07	2,26	2,49	-	-	-	-	-	-	-	-	-	
Ø33,4	1	0,95	1,18	1,55	1,76	1,97	2,18	2,38	2,58	2,65	2,90	3,21	3,50	-	-	-	-	-	-	-	-	
Ø33,7	1	0,96	1,19	1,56	1,78	1,99	2,20	2,41	2,61	2,67	2,93	3,24	3,54	-	-	-	-	-	-	-	-	
Ø42,2	1 1/4	1,21	1,51	1,98	2,26	2,54	2,81	3,08	3,34	3,43	3,77	4,18	4,59	4,90	5,36	-	-	-	-	-	-	
Ø42,4	1 1/4	1,22	1,51	1,99	2,27	2,55	2,82	3,09	3,36	3,44	3,79	4,21	4,61	4,93	5,39	-	-	-	-	-	-	
Ø48,3	1 1/2	1,39	1,73	2,28	2,61	2,93	3,25	3,56	3,87	3,97	4,37	4,86	5,34	5,71	6,26	7,13	-	-	-	-	-	
Ø60,3	2	-	2,18	2,88	3,29	3,70	4,10	4,51	4,90	5,03	5,55	6,19	6,82	7,31	8,03	9,20	-	-	-	-	-	
Ø73,0	2 7/8	-	2,64	3,50	4,01	4,51	5,01	5,51	6,00	6,16	6,81	7,60	8,38	9,00	9,91	11,39	-	-	-	-	-	
Ø76,1	2 1/2	-	2,76	3,65	4,19	4,71	5,23	5,75	6,27	6,44	7,11	7,95	8,77	9,41	10,37	11,93	13,43	-	-	-	-	
Ø88,9	3	-	3,23	4,29	4,91	5,53	6,15	6,76	7,37	7,57	8,37	9,37	10,34	11,12	12,27	14,14	15,96	-	-	-	-	
Ø101,6	3 1/2	-	-	-	-	6,35	7,06	7,76	8,47	8,70	9,63	10,78	11,91	12,81	14,14	16,33	18,47	22,59	-	-	-	
Ø114,3	4	-	-	-	-	7,16	7,97	8,77	9,56	9,83	10,88	12,18	13,48	14,50	16,02	18,52	20,97	25,72	-	-	-	
Ø139,7	5	-	-	-	-	-	9,78	10,77	11,76	12,08	13,39	15,00	16,61	17,88	19,78	22,91	25,98	31,98	-	-	-	
Ø141,3	5	-	-	-	-	-	9,90	10,90	11,89	12,22	13,54	15,18	16,81	18,10	20,02	23,18	26,30	32,38	-	-	-	
Ø165,1	6	-	-	-	-	-	11,60	12,78	13,95	14,34	15,89	17,82	19,74	21,27	23,54	27,29	30,99	38,25	-	-	-	
Ø168,3	6	-	-	-	-	-	11,83	13,03	14,22	14,62	16,21	18,18	20,13	21,69	24,01	27,84	31,62	39,04	42,67	48,03	49,79	
Ø177,8	7	-	-	-	-	-	12,51	13,78	15,04	15,46	17,14	19,23	21,31	22,96	25,42	29,48	33,50	41,38	45,25	50,95	52,83	
Ø193,7	7 5/8	-	-	-	-	-	-	-	16,42	16,88	18,71	21,00	23,27	25,07	27,77	32,23	36,63	45,30	49,56	55,85	57,93	
Ø219,1	8	-	-	-	-	-	-	-	18,61	19,13	21,22	23,81	26,40	28,46	31,53	36,61	41,65	51,56	56,45	63,68	66,07	
Ø244,5	9	-	-	-	-	-	-	-	20,80	21,39	23,72	26,63	29,53	31,84	35,29	41,00	46,66	57,83	63,34	71,51	74,21	
Ø273,0	10	-	-	-	-	-	-	-	-	-	26,53	29,80	33,04	35,63	39,51	45,92	52,28	64,86	71,07	80,30	83,35	
Ø323,9	12	-	-	-	-	-	-	-	-	-	-	-	39,32	42,41	47,04	54,70	62,32	77,41	84,88	95,99	99,67	
Ø339,7	13 3/8	-	-	-	-	-	-	-	-	-	-	-	41,27	44,52	49,37	57,43	65,44	81,30	89,16	100,86	104,73	

Length Range

	4,0 - 8,5 m
	4,0 - 9,0 m
	5,0 - 14,0 m

WATER AND GAS PIPE / EN 10255 PRODUCTION RANGE

Outside Diameter			Heavy Series		Medium Series		Type L*		Type L1		Type L2	
DN	(inch)	(mm)	Wall Thickness (mm)	Mass Per Unit Length (kg/m)	Wall Thickness (mm)	Mass Per Unit Length (kg/m)	Wall Thickness (mm)	Mass Per Unit Length (kg/m)	Wall Thickness (mm)	Mass Per Unit Length (kg/m)	Wall Thickness (mm)	Mass Per Unit Length (kg/m)
10	3/8	Ø17,2	-	-	2,30	0,84	2,00	0,75	2,00	0,74	1,80	0,67
15	1/2	Ø21,3	3,20	1,44	2,60	1,21	2,30	1,08	2,30	1,08	2,00	0,95
20	3/4	Ø26,9	3,20	1,87	2,60	1,56	2,30	1,40	2,30	1,39	2,30	1,38
25	1	Ø33,7	4,00	2,93	3,20	2,41	2,90	2,20	2,90	2,20	2,60	1,98
32	1 1/4	Ø42,4	4,00	3,79	3,20	3,10	2,90	2,82	2,90	2,82	2,60	2,54
40	1 1/2	Ø48,3	4,00	4,37	3,20	3,56	2,90	3,25	2,90	3,24	2,90	3,23
50	2	Ø60,3	4,50	6,19	3,60	5,03	3,20	4,51	3,20	4,49	2,90	4,08
65	2 1/2	Ø76,1	4,50	7,93	3,60	6,42	3,20	5,75	3,20	5,73	3,20	5,71
80	3	Ø88,9	5,00	10,30	4,00	8,36	3,20	6,76	3,60	7,55	3,20	6,72
90	3 1/2	Ø101,6	-	-	-	-	3,60	8,70	-	-	-	-
100	4	Ø114,3	5,40	14,50	4,50	12,20	3,60	9,83	4,00	10,80	3,60	9,75
125	5	Ø139,7	5,40	17,88	5,00	16,60	4,50	15,00	-	-	-	-
150	6	Ø165,1	5,40	21,27	5,00	19,80	4,50	17,80	-	-	-	-

*Heat treatment is mandatory for Type L productions.

WATER AND GAS PIPE / ASTM A53 PRODUCTION RANGE

NPS	DN	Outside Diameter		Wall Thickness		Mass Per Unit Length		Weight Class	SCH no	Grade A Test Pressure		Grade B Test Pressure	
		(inch)	(mm)	(inch)	(mm)	(lb/ft)	(kg/m)			(psi)	(bar)	(psi)	(bar)
3/8	10	0.675	Ø17,1	0,091	2,31	0,57	0,84	STD	40	700	48	700	48
1/2	15	0.840	Ø21,3	0,109	2,77	0,85	1,27	STD	40	700	48	700	48
3/4	20	1.050	Ø26,7	0,113	2,87	1,13	1,69	STD	40	700	48	700	48
				0,154	3,91	1,48	2,20	XS	80	850	59	850	59
1	25	1.315	Ø33,4	0,133	3,38	1,68	2,50	STD	40	700	48	700	48
				0,179	4,55	2,17	3,24	XS	80	850	59	850	59
1 1/4	32	1.660	Ø42,2	0,140	3,56	2,27	3,39	STD	40	1200	83	1300	90
				0,191	4,85	3,00	4,47	XS	80	1800	124	1900	131
				0,250	6,35	3,77	5,61		160	1900	131	2000	138
1 1/2	40	1.900	Ø48,3	0,145	3,68	2,72	4,05	STD	40	1200	83	1300	90
				0,200	5,08	3,63	5,41	XS	80	1800	124	1900	131
				0,281	7,14	4,86	7,25		160	1950	134	2050	141
2	50	2.375	Ø60,3	0,154	3,91	3,66	5,44	STD	40	2300	159	2500	172
				0,218	5,54	5,03	7,48	XS	80	2500	172	2500	172
2 1/2	65	2.875	Ø73,0	0,203	5,16	5,80	8,63	STD	40	2500	172	2500	172
				0,276	7,01	7,67	11,41	XS	80	2500	172	2500	172
3	80	3.500	Ø88,9	0,125	3,18	4,51	6,72			1290	89	1500	100
				0,156	3,96	5,58	8,29			1600	110	1870	129
				0,188	4,78	6,66	9,92			1930	133	2260	156
				0,216	5,49	7,58	11,29	STD	40	2220	153	2500	172
				0,250	6,35	8,69	12,93			2500	172	2500	172
				0,281	7,14	9,67	14,40			2500	172	2500	172
				0,300	7,62	10,26	15,27	XS	80	2500	172	2500	172
3 1/2	90	4.000	Ø101,6	0,125	3,18	5,18	7,72			1120	77	1310	90
				0,156	3,96	6,41	9,53			1400	97	1640	113
				0,188	4,78	7,66	11,41			1690	117	1970	136
				0,226	5,74	9,12	13,57	STD	40	2030	140	2370	163
				0,250	6,35	10,02	14,92			2250	155	2500	172
				0,281	7,14	11,17	16,63			2500	172	2500	172
				0,318	8,08	12,52	18,63	XS	80	2800	193	2800	193
4	100	4.500	Ø114,3	0,125	3,18	5,85	8,71			1000	69	1170	81
				0,156	3,96	7,24	10,78			1250	86	1460	101
				0,188	4,78	8,67	12,91			1500	103	1750	121
				0,219	5,56	10,02	14,91			1750	121	2040	141
				0,237	6,02	10,80	16,07	STD	40	1900	131	2210	152
				0,250	6,35	11,36	16,90			2000	138	2330	161
				0,281	7,14	12,67	18,87			2250	151	2620	181
				0,312	7,92	13,97	20,78			2500	172	2800	193
				0,337	8,56	15,00	22,32	XS	80	2700	186	2800	193
5	125	5.563	Ø141,3	0,156	3,96	9,02	13,41			1010	70	1180	81
				0,188	4,78	10,80	16,09			1220	84	1420	98
				0,219	5,56	12,51	18,61			1420	98	1650	114
				0,258	6,55	14,63	21,77	STD	40	1670	115	1950	134
				0,281	7,14	15,87	23,62			1820	125	2120	146
				0,312	7,92	17,51	26,05			2020	139	2360	163
				0,344	8,74	19,19	28,57			2230	154	2600	179
				0,375	9,52	20,80	30,94	XS	80	2430	168	2800	193

NPS	DN	Outside Diameter		Wall Thickness		Mass Per Unit Length		Weight Class	SCH no	Grade A Test Pressure		Grade B Test Pressure	
		(inch)	(mm)	(inch)	(mm)	(lb/ft)	(kg/m)			(psi)	(bar)	(psi)	(bar)
6	150	6.625	Ø168,3	0,188	4,78	12,94	19,27			1020	70	1190	82
				0,219	5,56	15,00	22,31			1190	82	1390	96
				0,250	6,35	17,04	25,36			1360	94	1580	109
				0,280	7,11	18,99	28,26	STD	40	1520	105	1780	123
				0,312	7,92	21,06	31,32			1700	117	1980	137
				0,344	8,74	23,10	34,39			1870	129	2180	150
				0,375	9,52	25,05	37,28			2040	141	2380	164
				0,432	10,97	28,60	42,56	XS	80	2350	162	2740	189
8	200	8.625	Ø219,1	0,188	4,78	16,96	25,26			780	54	920	63
				0,203	5,16	18,28	27,22			850	59	1000	69
				0,219	5,56	19,68	29,28			910	63	1070	74
				0,250	6,35	22,38	33,31		20	1040	72	1220	84
				0,277	7,04	24,72	36,31		30	1160	78	1350	93
				0,312	7,92	27,73	41,24			1300	90	1520	105
				0,322	8,18	28,58	42,55	STD	40	1340	92	1570	108
				0,344	8,74	30,45	45,34			1440	99	1680	116
				0,375	9,52	33,07	49,20			1570	108	1830	126
				0,406	10,31	35,67	53,08		60	1700	117	2000	138
				0,438	11,13	38,33	57,08			1830	126	2130	147
				0,500	12,70	43,43	64,64	XS	80	2090	144	2430	168
10	250	10.750	Ø273,0	0,188	4,78	21,23	31,62			630	43	730	50
				0,203	5,16	22,89	34,08			680	47	800	55
				0,219	5,56	24,65	36,67			730	50	860	59
				0,250	6,35	28,06	41,75		20	840	58	980	68
				0,279	7,09	31,23	46,49			930	64	1090	75
				0,307	7,80	34,27	51,01		30	1030	71	1200	83
				0,344	8,74	38,27	56,96			1150	79	1340	92
				0,365	9,27	40,52	60,29	STD	40	1220	84	1430	99
				0,438	11,13	48,28	71,87			1470	101	1710	118
				0,500	12,70	54,79	81,52	XS	60	1670	115	1950	134
12	300	12.750	Ø323,8	0,203	5,16	27,23	40,55			570	39	670	46
				0,219	5,56	29,34	43,63			620	43	720	50
				0,250	6,35	33,41	49,71		20	710	49	820	57
				0,281	7,14	37,46	55,75			790	54	930	64
				0,312	7,92	41,48	61,69			880	61	1030	71
				0,330	8,38	43,81	65,18		30	930	64	1090	75
				0,344	8,74	45,62	67,90			970	67	1130	78
				0,375	9,52	49,61	73,78	STD		1060	73	1240	85
				0,406	10,31	53,57	79,70		40	1150	79	1340	92
				0,438	11,13	57,65	85,82			1240	85	1440	99
				0,500	12,70	65,48	97,43	XS		1410	97	1650	114

WATER AND GAS PIPE / SI 530 PRODUCTION RANGE

DN		Outside Diameter		Wall Thickness (mm)	Mass Per Unit Length (kg/m)	Hydrostatic Test Pressure (bar)		
(mm)	(inch)	(mm)	(inch)			530A	530B	530/42
80	3	Ø88,9	3 1/2	2,11	4,52	59	69	
				2,77	5,91	78	91	
				3,18	6,72	89	104	
				3,96	8,32	111	129	
				4,76	9,88	133	155	
				5,56	11,43	155	181	
100	4	Ø114,3	4 1/2	2,77	7,65	60	70	
				3,18	8,72	69	81	
				3,96	10,80	86	101	
				4,76	12,86	103	121	
				5,56	14,91	121	141	
				6,35	16,91	138	161	
125	5	Ø141,3	5 9/16	3,18	10,83	56	65	
				3,96	13,45	70	81	
				4,76	16,03	84	98	
				5,56	18,61	98	114	
				6,35	21,13	112	130	
150	6	Ø168,3	6 5/8	3,18	12,95	47	55	82
				3,96	16,09	59	68	102
				4,76	19,20	70	82	123
				5,56	22,31	82	96	144
				6,35	25,36	94	109	164
				7,14	28,38	105	123	184
				7,94	31,40	117	137	205
				9,52	37,31	141	164	207
200	8	Ø219,1	8 5/8	3,96	21,06	45	52	79
				4,76	25,16	54	63	94
				5,56	29,28	63	73	110
				6,35	33,32	72	84	126
				7,14	37,32	81	94	142
				7,94	41,35	90	105	157
				9,52	49,26	108	126	189
225	9	Ø244,5	9 5/8	3,96	23,55	40	47	71
				4,76	28,14	48	56	85
				5,56	32,76	56	66	99
				6,35	37,30	64	75	113
				7,14	41,80	72	85	127
				7,94	46,32	81	94	141
				9,52	55,23	97	113	169
250	10	Ø273,1	10 3/4	3,96	26,35	36	42	63
				4,76	31,50	43	50	76
				5,56	36,68	51	59	88
				6,35	41,77	58	67	101
				7,14	46,83	65	76	114
				7,94	51,92	72	84	126
				9,52	61,94	87	101	152
				11,11	71,78	101	118	177
300	12	Ø323,9	12 3/4	3,96	31,32	30	36	53
				4,76	37,46	36	43	64
				5,56	43,65	43	50	75
				6,35	49,73	48	57	85
				7,14	55,78	55	64	96
				7,94	61,87	61	71	107
				9,52	73,88	73	85	128
				11,11	85,70	85	99	149



WATER AND GAS PIPE / SI 103 PRODUCTION RANGE

Outside Diameter			Class A		Class B		Class C	
DN	(inch)	(mm)	Wall Thickness (mm)	Mass Per Unit Length (kg/m)	Wall Thickness (mm)	Mass Per Unit Length (kg/m)	Wall Thickness (mm)	Mass Per Unit Length (kg/m)
15	1/2	Ø21,3	3,25	1,45	2,65	1,22	2,25	1,10
20	3/4	Ø26,9	3,25	1,90	2,65	1,58	2,35	1,41
25	1	Ø33,7	4,05	2,97	3,25	2,44	2,90	2,21
32	1 1/4	Ø42,4	4,05	3,84	3,25	3,14	2,90	2,84
40	1 1/2	Ø48,3	4,05	4,43	3,25	3,61	2,90	3,26
50	2	Ø60,3	4,50	6,17	3,65	5,10	3,25	4,56
65	2 1/2	Ø76,1	4,50	7,90	3,65	6,51	3,25	5,81
80	3	Ø88,9	4,85	10,10	4,05	8,47	3,65	7,65
90	3 1/2	Ø101,6	4,85	11,60	4,05	9,72	3,65	8,77
100	4	Ø114,3	5,40	14,40	4,50	12,10	4,05	11,00
125	5	Ø139,7	5,40	17,80	4,85	16,20	-	-
150	6	Ø165,1	5,40	21,20	4,85	19,20	-	-

WATER AND GAS PIPE / SI 4314 / ASTM A 795 PRODUCTION RANGE

Nominal Diameter		Outside Diameter		Sch 10						Sch 30 ve Sch 40					
				Wall Thickness		Mass Per Unit Length		Test Pressure		Wall Thickness		Mass Per Unit Length		Test Pressure	
DN	NPS	(inch)	(mm)	(inch)	(mm)	(lb/ft)	(kg/m)	(psi)	(bar)	(inch)	(mm)	(lb/ft)	(kg/m)	(psi)	(bar)
15	1/2	0.840	Ø21,3	-	-	-	-	-	-	0,109	2,77	0,85	1,27	700	48
20	3/4	1.050	Ø26,7	0,083	2,11	0,86	1,28	700	48	0,113	2,87	1,13	1,69	700	48
25	1	1.315	Ø33,4	0,109	2,77	1,41	2,09	700	48	0,133	3,38	1,68	2,50	700	48
32	1 1/4	1.660	Ø42,2	0,109	2,77	1,81	2,69	1000	69	0,140	3,56	2,27	3,39	1000	69
40	1 1/2	1.900	Ø48,3	0,109	2,77	2,09	3,11	1000	69	0,145	3,68	2,72	4,05	1000	69
50	2	2.375	Ø60,3	0,109	2,77	2,64	3,93	1000	69	0,154	3,91	3,66	5,45	1000	69
65	2 1/2	2.875	Ø73,0	0,120	3,05	3,53	5,26	1000	69	0,203	5,16	5,80	8,64	1000	69
80	3	3.500	Ø88,9	0,120	3,05	4,34	6,46	1000	69	0,216	5,49	7,58	11,29	1000	69
90	3 1/2	4.000	Ø101,6	0,120	3,05	4,98	7,41	1200	83	0,226	5,74	9,12	13,58	1200	83
100	4	4.500	Ø114,3	0,120	3,05	5,62	8,37	1200	83	0,237	6,02	10,80	16,09	1200	83
125	5	5.563	Ø141,3	0,134	3,40	7,78	11,58	1200	83	0,258	6,55	14,63	21,79	1200	83
150	6	6.625	Ø168,3	0,134	3,40	9,30	13,85	1000	69	0,280	7,11	18,99	28,29	1200	83
200	8	8.625	Ø219,1	0,188	4,78	16,96	25,26	800	55	0,277	7,04	24,72	36,82	1200	83
250	10	10.750	Ø273,1	0,188	4,78	21,23	31,62	700	48	0,307	7,80	34,27	51,05	1000	69

PRODUCTION RANGE FOR FM (FACTORY MUTUAL) APPROVED FIRE INSTALLATION PIPES (FM APPROVALS CLASS:1630)

Production Norm	NPS	Outside Diameter (mm)	Weight Class (Schedule No)	Outside Diameter (mm)	Nominal Working Pressure (psi)	Steel Grade	Pipe End
ASTM A53	1/2	Ø21,3	40	2,77	175	Grade A / Grade B	Plain End
	3/4	Ø26,7	40	2,87			
	1	Ø33,4	40	3,38			
	1 1/4	Ø42,2	40	3,56			
	1 1/2	Ø48,3	40	3,68			
	2	Ø60,3	40	3,91			
	1/2	Ø21,3	80	3,73			
	3/4	Ø26,7	80	3,91			
	1	Ø33,4	80	4,55			
	1 1/4	Ø42,2	80	4,85			
	1 1/2	Ø48,3	80	5,08			
	2	Ø60,3	80	5,54			
	1/2	Ø21,3	40	2,77	300		Threaded and Coupled
	3/4	Ø26,7	40	2,87			
	1	Ø33,4	40	3,38			
	1 1/4	Ø42,2	40	3,56			
	1 1/2	Ø48,3	40	3,68			
	2	Ø60,3	40	3,91			
	2 1/2	Ø73,0	40	5,16			
	3	Ø88,9	40	5,49			
	3 1/2	Ø101,6	40	5,74			
	4	Ø114,3	40	6,02			
	1/2	Ø21,3	80	3,73			
	3/4	Ø26,7	80	3,91			
	1	Ø33,4	80	4,55			
	1 1/4	Ø42,2	80	4,85			
	1 1/2	Ø48,3	80	5,08			
	2	Ø60,3	80	5,54			
	2 1/2	Ø73,0	80	7,01			
	3	Ø88,9	80	7,62			
	3 1/2	Ø101,6	80	8,08			
	4	Ø114,3	80	8,56			

PRODUCTION RANGE FOR UL (UNDERWRITERS LABORATORIES) APPROVED FIRE INSTALLATION PIPES (UL 852)

Production Norm	NPS	Outside Diameter (mm)	Schedule No	Wall Thickness (mm)	Steel Grade	Pipe End
ASTM A53 / ASTM A795	8	Ø219,1	30	7,04	Grade A / Grade B	Plain End
	12	Ø323,8	30	8,38		
	4	Ø114,3	40	6,02		
	6	Ø168,3	40	7,11		
	8	Ø219,1	40	8,18		
	10	Ø273,0	40	9,27		
ASTM A53	3	Ø88,9	80	7,62		
	8	Ø219,1	80	12,70		
	12	Ø323,8	Weight Class STD	9,52		

PRODUCTION RANGE FOR ROLL GROOVED PIPES

Outside Diameter		Wall Thickness (mm)																		
(mm)	(inch)	1,80	2,00	2,30	2,40	2,50	2,60	2,70	2,90	3,00	3,20	3,50	3,70	4,00	4,20	4,50	5,00	5,50	6,00	6,30
		Mass Per Unit Length (kg/m)																		
Ø33,7	1	1,42	1,56	1,78	1,85	1,92	1,99	2,06	2,20	2,27	2,41	2,61	2,74	2,93	-	-	-	-	-	-
Ø42,4	1 1/4	1,80	1,99	2,27	2,37	2,46	2,55	2,64	2,82	2,91	3,09	3,36	3,53	3,79	3,96	4,21	-	-	-	-
Ø48,3	1 1/2	2,06	2,28	2,61	2,72	2,82	2,93	3,04	3,25	3,35	3,56	3,87	4,07	4,37	4,57	4,86	5,34	-	-	-
Ø60,3	2	-	2,88	3,29	3,43	3,56	3,70	3,84	4,10	4,24	4,51	4,90	5,16	5,55	5,81	6,19	6,82	-	-	-
Ø76,1	2 1/2	-	-	-	4,36	4,54	4,71	4,89	5,23	5,41	5,75	6,27	6,61	7,11	7,45	7,95	8,77	9,58	-	-
Ø88,9	3	-	-	-	5,12	5,33	5,53	5,74	6,15	6,35	6,76	7,37	7,77	8,37	8,77	9,37	10,34	11,31	12,27	-
Ø114,3	4	-	-	-	-	-	-	7,43	7,97	8,23	8,77	9,56	10,09	10,88	11,40	12,18	13,48	14,76	16,02	16,78
Ø139,7	5	-	-	-	-	-	-	-	9,78	10,11	10,77	11,76	12,41	13,39	14,03	15,00	16,61	18,20	19,78	20,72
Ø165,1	6	-	-	-	-	-	-	-	11,60	11,99	12,78	13,95	14,73	15,89	16,66	17,82	19,74	21,65	23,54	24,67
Ø168,3	6	-	-	-	-	-	-	-	11,83	12,23	13,03	14,22	15,02	16,21	17,00	18,18	20,13	22,08	24,01	25,17
Ø219,1	8	-	-	-	-	-	-	-	-	15,99	17,04	18,61	19,65	21,22	22,26	23,81	26,40	28,97	-	-
Ø273,1	10	-	-	-	-	-	-	-	-	-	-	-	24,58	26,54	27,85	29,81	33,06	36,29	-	-
Ø323,9	12	-	-	-	-	-	-	-	-	-	-	-	-	-	33,11	35,44	39,32	43,18	-	-

Length Range

4,0 - 8,0 m



PIPES WATER AND GAS PIPES



PRODUCTION STANDARDS AND STEEL GRADES

Production Standard	Steel Grade
EN 10255 + A1 (TS EN 10255 + A1) (CE)	: S195T
EN 10224 (TS 9341 EN 10224)	: L235, L275, L355
ASTM A53 (FM, UL)	: Grade A, Grade B
SI 103 (SII)	: S332, S414
SI 530 (SII)	: 530A, 530B, 530/42
SI 4314 (SII)	: Grade A, Grade B
ASTM A795 (UL)	: Grade A, Grade B
EN 10217-1 (TS EN 10217-1) (PED)	: P195TR1, P195TR2, P235TR1, P235TR2, P265TR1, P265TR2



QUALITY CONTROL TESTS

Mechanical Tests

- >Tensile Test
- >Charpy V Notch Impact Test
- >Flattening Test
- >Expanding Test
- >Bending Test

Chemical Analysis

- >Spectral Analysis

Dimensional and Visual Inspection

Leak Tightness Testing / Non-destructive Test

- >Electromagnetic Test (Eddy Current Test)
- >Ultrasonic Test (Weld Seam)
- >Control of Residual Magnetism
- >Hydrostatic Test

On demand

- >Ultrasonic Test (Phased Array Full Body Lamination Control Test)



FINISHING OPERATIONS

- >Plain End (Bevelled)

On demand

- >Plain End (Square Cut)
- >Threaded
- >Threaded and Coupled
- >Roll Grooved



HEAT TREATMENT

On demand

- >Heat Treatment of Weld Seam (Stress Relieving and Normalization)
- >Heat Treatment of Full Body (Stress Relieving and Normalization)



SURFACE PROTECTION

- >Uncoated

On demand

- >Protective Oil
- >Galvanized
- >Primer Coated
- >PE-PP Coated
- >Internal Epoxy Coated
- >External Powder Epoxy Coated



TEST CERTIFICATES

According to EN 10204,
2.1, 2.2, 3.1, 3.2 certificates



QUALITY CERTIFICATES

- >PED Certificate of Conformity (EN 10217-1)
- >CE Certificate (EN 10255+A1)
- >FM Approval Fire Protection Pipes Monogram Certificate (ASTM A53)
- >UL Fire Protection Pipes Monogram Certificate (ASTM A53, ASTM A795)
- >Standards Institute of Israel Certificates of Conformity (SII 530, SII 103, SII 4314)
- >GOST-R R Water and Gas Pipe Certificate of Conformity
- >GOST-R Galvanized Steel Pipes Certificate of Conformity
- >GOST-R Electric Welded Steel Pipes Certificate of Conformity
- >TSE Certificates of Conformity (TS EN 10217-1, TS EN 10255+A1)



NATURAL GAS AND OIL LINE PIPES

It is used in the transmission and distribution of natural gas, petroleum, petroleum-derived and all kinds of combustible and explosive gases, residential and industrial natural gas domestic installation lines, LPG installation lines, oil and natural gas transmission lines and applications.



PRODUCTION RANGE

Outside Diameter : $\varnothing$ 21,3 - 323,9 mm (1/2" - 12")
Wall Thickness : 1,65 - 13,0 mm (0,065" - 0,512")
Length : 5,0 - 14,0 m

PRODUCTION RANGE FOR NATURAL GAS AND OIL LINE PIPES

Outside Diameter		Wall Thickness (mm)																							
(mm)	(inch)	1,65	2,11	2,40	2,60	2,80	2,90	3,20	3,40	3,60	3,70	3,90	4,00	4,37	4,50	5,20	5,50	6,50	7,10	8,00	8,80	9,00	10,00	11,00	13,00
		Mass Per Unit Length (kg/m)																							
Ø21,3	1/2	0,80	1,00	1,12	1,20	1,28	1,32	1,43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø26,7	3/4	1,02	1,28	1,44	1,55	1,65	1,70	1,85	1,95	2,05	2,10	2,19	2,24	-	-	-	-	-	-	-	-	-	-	-	-
Ø33,4	1	1,29	1,63	1,83	1,97	2,11	2,18	2,38	2,52	2,65	2,71	2,84	2,90	3,13	3,21	3,62	-	-	-	-	-	-	-	-	-
Ø42,2	1 1/4	1,65	2,09	2,36	2,54	2,72	2,81	3,08	3,25	3,43	3,51	3,68	3,77	4,08	4,18	4,74	4,98	5,72	-	-	-	-	-	-	-
Ø48,3	1 1/2	1,90	2,40	2,72	2,93	3,14	3,25	3,56	3,76	3,97	4,07	4,27	4,37	4,73	4,86	5,53	5,80	6,70	7,21	-	-	-	-	-	-
Ø60,3	2	2,39	3,03	3,43	3,70	3,97	4,10	4,51	4,77	5,03	5,16	5,42	5,55	6,03	6,19	7,07	7,43	8,62	9,31	-	-	-	-	-	-
Ø73,0	2 1/2	-	-	4,18	4,51	4,85	5,01	5,51	5,84	6,16	6,32	6,65	6,81	7,40	7,60	8,69	9,16	10,66	11,54	12,82	13,93	-	-	-	-
Ø88,9	3	-	-	-	5,53	5,95	6,15	6,76	7,17	7,57	7,77	8,17	8,37	9,11	9,37	10,73	11,31	13,21	14,32	15,96	17,38	-	-	-	-
Ø101,6	3 1/2	-	-	-	-	6,82	7,06	7,76	8,23	8,70	8,93	9,40	9,63	10,48	10,78	12,36	13,03	15,24	16,55	18,47	20,14	20,55	22,59	-	-
Ø114,3	4	-	-	-	-	7,70	7,97	8,77	9,30	9,83	10,09	10,62	10,88	11,85	12,18	13,99	14,76	17,28	18,77	20,97	22,89	23,37	25,72	-	-
Ø141,3	5	-	-	-	-	9,56	9,90	10,90	11,56	12,22	12,55	13,21	13,54	14,76	15,18	17,45	18,42	21,61	23,50	26,30	28,75	29,36	32,38	-	-
Ø168,3	6	-	-	-	-	11,43	11,83	13,03	13,83	14,62	15,02	15,81	16,21	17,67	18,18	20,91	22,08	25,93	28,22	31,62	34,61	35,36	39,04	-	-
Ø219,1	8	-	-	-	-	-	-	-	18,09	19,13	19,65	20,70	21,22	23,14	23,81	27,43	28,97	34,08	37,12	41,65	45,64	46,63	51,56	56,45	66,07
Ø273,0	10	-	-	-	-	-	-	-	-	-	-	-	26,53	28,95	29,80	34,34	36,28	42,72	46,56	52,28	57,33	58,59	64,86	71,07	83,35
Ø323,9	12	-	-	-	-	-	-	-	-	-	-	-	-	-	35,44	40,87	43,18	50,88	55,47	62,32	68,38	69,89	77,41	84,88	99,67

Length Range

	5,0 - 8,5 m
	5,0 - 14,0 m

NATURAL GAS AND OIL LINE PIPES / API 5L & ISO 3183 PRODUCTION RANGE

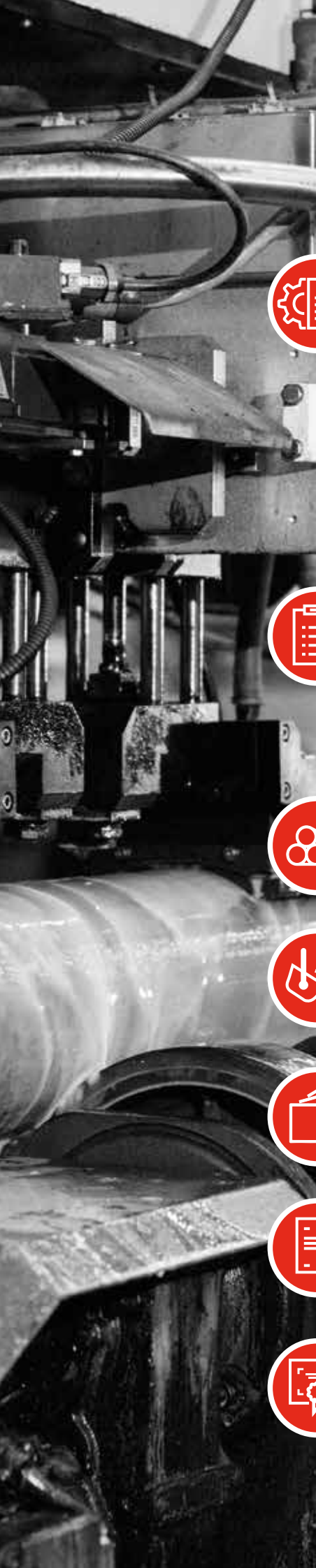
Outside Diameter			Wall Thickness		Mass Per Unit Length	Hydrostatic Test Pressure (bar)							
NPS	(inch)	(mm)	(mm)	(inch)	(kg/m)	A	B	X42	X46	X52	X56	X60	X65
1/2	0,840	Ø21,3	1,65	0,065	0,80	170	170	205	205	205	205	205	205
			2,11	0,083	1,00	170	170	205	205	205	205	205	205
			2,41	0,095	1,12	170	170	205	205	205	205	205	205
			2,77	0,109	1,27	170	170	205	205	205	205	205	205
3/4	1,050	Ø26,7	1,65	0,065	1,02	156	170	205	205	205	205	205	205
			2,11	0,083	1,28	170	170	205	205	205	205	205	205
			2,41	0,095	1,44	170	170	205	205	205	205	205	205
			2,87	0,113	1,69	170	170	205	205	205	205	205	205
			3,91	0,154	2,20	170	170	205	205	205	205	205	205
1	1,315	Ø33,4	1,65	0,065	1,29	124	145	172	190	205	205	205	205
			2,77	0,109	2,09	170	170	205	205	205	205	205	205
			2,90	0,114	2,18	170	170	205	205	205	205	205	205
			3,38	0,133	2,50	170	170	205	205	205	205	205	205
			4,55	0,179	3,24	170	170	205	205	205	205	205	205
1 1/4	1,660	Ø42,2	1,65	0,065	1,65	99	115	136	150	169	183	195	205
			2,77	0,109	2,69	165	170	205	205	205	205	205	205
			2,97	0,117	2,87	170	170	205	205	205	205	205	205
			3,56	0,140	3,39	170	170	205	205	205	205	205	205
			4,85	0,191	4,47	170	170	205	205	205	205	205	205
			6,35	0,250	5,61	170	170	205	205	205	205	205	205
1 1/2	1,900	Ø48,3	1,65	0,065	1,90	86	100	119	131	148	160	170	184
			2,77	0,109	3,11	145	169	200	205	205	205	205	205
			3,18	0,125	3,54	166	170	205	205	205	205	205	205
			3,68	0,145	4,05	170	170	205	205	205	205	205	205
			5,08	0,200	5,41	170	170	205	205	205	205	205	205
			7,14	0,281	7,25	170	170	205	205	205	205	205	205
2	2,375	Ø60,3	1,65	0,065	2,39	69	80	95	105	118	128	136	148
			2,11	0,083	3,03	88	103	122	134	151	164	174	189
			2,77	0,109	3,93	116	135	160	176	198	205	205	205
			3,18	0,125	4,48	133	155	184	203	205	205	205	205
			3,58	0,141	5,01	150	170	205	205	205	205	205	205
			3,91	0,154	5,44	163	170	205	205	205	205	205	205
			4,37	0,172	6,03	170	170	205	205	205	205	205	205
			4,78	0,188	6,54	170	170	205	205	205	205	205	205
			5,54	0,218	7,48	170	170	205	205	205	205	205	205
			6,35	0,250	8,45	170	170	205	205	205	205	205	205
			7,14	0,281	9,36	170	170	205	205	205	205	205	205
2 1/2	2,875	Ø73,0	2,77	0,109	4,80	96	112	132	146	164	178	189	205
			3,05	0,120	5,26	105	123	145	160	180	196	205	205
			3,18	0,125	5,48	110	128	152	167	188	204	205	205
			3,58	0,141	6,13	124	144	171	188	205	205	205	205
			3,96	0,156	6,74	137	159	189	205	205	205	205	205
			4,37	0,172	7,40	151	170	205	205	205	205	205	205
			4,78	0,188	8,04	165	170	205	205	205	205	205	205
			5,16	0,203	8,63	170	170	205	205	205	205	205	205
			5,49	0,216	9,14	170	170	205	205	205	205	205	205
			6,35	0,250	10,44	170	170	205	205	205	205	205	205
			7,01	0,276	11,41	170	170	205	205	205	205	205	205

NATURAL GAS AND OIL LINE PIPES / API 5L & ISO 3183 PRODUCTION RANGE

Outside Diameter			Wall Thickness		Mass Per Unit Length	Hydrostatic Test Pressure (bar)							
NPS	(inch)	(mm)	(mm)	(inch)	(kg/m)	A	B	X42	X46	X52	X56	X60	X65
3	3,500	Ø88,9	2,77	0,109	5,88	79	92	108	120	135	146	155	168
			3,05	0,120	6,46	86	101	119	132	148	161	171	185
			3,18	0,125	6,72	90	105	124	137	155	167	178	193
			3,58	0,141	7,53	101	118	140	155	174	188	201	205
			3,96	0,156	8,29	112	131	155	171	192	205	205	205
			4,37	0,172	9,11	124	145	171	189	205	205	205	205
			4,78	0,188	9,92	135	158	187	205	205	205	205	205
			5,49	0,216	11,29	156	170	205	205	205	205	205	205
			6,35	0,250	12,93	170	170	205	205	205	205	205	205
			7,14	0,281	14,40	170	170	205	205	205	205	205	205
3 1/2	4,000	Ø101,6	7,62	0,300	15,27	170	170	205	205	205	205	205	205
			2,77	0,109	6,75	69	80	95	105	118	128	136	147
			3,05	0,120	7,41	76	88	104	115	130	140	149	162
			3,18	0,125	7,72	79	92	109	120	135	146	156	169
			3,58	0,141	8,65	89	104	123	135	152	165	175	190
			3,96	0,156	9,53	98	115	136	150	168	182	194	205
			4,37	0,172	10,48	108	126	150	165	186	201	205	205
			4,78	0,188	11,41	119	138	164	181	203	205	205	205
			5,74	0,226	13,57	142	166	197	205	205	205	205	205
			6,35	0,250	14,92	158	184	205	205	205	205	205	205
4	4,500	Ø114,3	7,14	0,281	16,63	177	190	205	205	205	205	205	205
			8,08	0,318	18,63	190	190	205	205	205	205	205	205
			2,77	0,109	7,62	61	71	84	93	105	113	121	131
			3,05	0,120	8,37	67	78	93	102	115	125	133	144
			3,18	0,125	8,71	70	82	97	107	120	130	139	150
			3,58	0,141	9,77	79	92	109	120	135	147	156	169
			3,96	0,156	10,78	87	102	121	133	150	162	173	187
			4,37	0,172	11,85	96	112	133	147	165	179	190	205
			4,78	0,188	12,91	105	123	146	161	181	196	205	205
			5,16	0,203	13,89	114	133	157	173	195	205	205	205
			5,56	0,219	14,91	123	143	169	187	205	205	205	205
			6,02	0,237	16,07	133	155	183	202	205	205	205	205
			6,35	0,250	16,90	140	163	193	205	205	205	205	205
5	5,563	Ø141,3	7,14	0,281	18,87	157	184	205	205	205	205	205	205
			7,92	0,312	20,78	175	190	205	205	205	205	205	205
			8,56	0,337	22,32	189	190	205	205	205	205	205	205
			2,77	0,109	9,46	49	58	68	75	85	92	98	106
			3,18	0,125	10,83	57	66	78	86	97	105	112	122
			3,40	0,134	11,56	61	71	84	92	104	113	120	130
			3,96	0,156	13,41	71	82	98	108	121	131	140	151
			4,78	0,188	16,09	85	99	118	130	146	158	168	183
			5,56	0,219	18,61	99	116	137	151	170	184	196	205
			6,55	0,258	21,77	117	136	161	178	200	205	205	205
			7,14	0,281	23,62	127	149	176	194	205	205	205	205
			7,92	0,312	26,05	141	165	195	205	205	205	205	205
			8,74	0,344	28,57	156	182	205	205	205	205	205	205
			9,53	0,375	30,97	170	190	205	205	205	205	205	205

Outside Diameter			Wall Thickness		Mass Per Unit Length	Hydrostatic Test Pressure (bar)							
NPS	(inch)	(mm)	(mm)	(inch)	(kg/m)	A	B	X42	X46	X52	X56	X60	X65
6	6,625	Ø168,3	2,77	0,109	11,31	41	48	72	79	89	96	102	111
			3,18	0,125	12,95	48	56	82	91	102	111	118	128
			3,40	0,134	13,83	51	59	88	97	109	118	126	136
			3,58	0,141	14,54	54	63	93	102	115	124	132	144
			3,96	0,156	16,05	59	69	102	113	127	138	146	159
			4,37	0,172	17,67	65	76	113	125	140	152	162	175
			4,78	0,188	19,27	72	84	124	136	153	166	177	192
			5,16	0,203	20,76	77	90	133	147	166	179	191	205
			5,56	0,219	22,31	83	97	144	159	178	193	205	205
			6,35	0,250	25,36	95	111	164	181	204	205	205	205
			7,11	0,280	28,26	106	124	184	203	205	205	205	205
			7,92	0,312	31,32	119	138	205	205	205	205	205	205
			8,74	0,344	34,39	131	153	205	205	205	205	205	205
			9,53	0,375	37,31	143	166	205	205	205	205	205	205
			10,97	0,432	42,56	164	190	205	205	205	205	205	205
			12,70	0,500	48,73	190	190	205	205	205	205	205	205
8	8,625	Ø219,1	3,18	0,125	16,93	37	43	63	70	78	85	90	98
			3,76	0,148	19,97	43	50	75	82	93	100	107	116
			3,96	0,156	21,01	46	53	79	87	98	106	113	122
			4,78	0,188	25,26	55	64	95	105	118	128	136	147
			5,16	0,203	27,22	59	69	102	113	127	138	147	159
			5,56	0,219	29,28	64	75	110	122	137	148	158	171
			6,35	0,250	33,31	73	85	126	139	157	170	180	196
			7,04	0,277	36,81	81	94	140	154	174	188	200	205
			7,92	0,312	41,24	91	106	157	174	195	205	205	205
			8,18	0,322	42,55	94	110	162	179	202	205	205	205
			8,74	0,344	45,34	101	117	174	191	205	205	205	205
			9,53	0,375	49,25	110	128	189	205	205	205	205	205
			10,31	0,406	53,08	119	138	205	205	205	205	205	205
			11,13	0,438	57,08	128	149	205	205	205	205	205	205
			12,70	0,500	64,64	146	170	205	205	205	205	205	205
10	10,750	Ø273,0	3,96	0,156	26,27	37	43	72	79	89	96	102	111
			4,19	0,165	27,77	39	45	76	83	94	102	108	117
			4,78	0,188	31,62	44	51	86	95	107	116	124	134
			5,16	0,203	34,08	48	56	93	103	116	125	133	145
			5,56	0,219	36,67	51	60	100	111	125	135	144	156
			6,35	0,250	41,75	59	68	115	127	142	154	164	178
			7,09	0,279	46,49	65	76	128	141	159	172	183	199
			7,80	0,307	51,01	72	84	141	155	175	189	202	205
			8,74	0,344	56,96	81	94	158	174	196	205	205	205
			9,27	0,365	60,29	86	100	167	185	205	205	205	205
			11,13	0,438	71,87	103	120	201	205	205	205	205	205
			12,70	0,500	81,52	117	137	205	205	205	205	205	205
12	12,750	Ø323,9	3,96	0,156	31,24	31	36	60	67	75	81	86	94
			4,37	0,172	34,43	34	40	67	73	83	89	95	103
			4,57	0,180	35,99	36	41	70	77	86	94	100	108
			4,78	0,188	37,62	37	43	73	80	90	98	104	113
			5,16	0,203	40,56	40	47	79	87	97	106	112	122
			5,56	0,219	43,65	43	50	85	93	105	114	121	131
			6,35	0,250	49,73	49	58	97	107	120	130	138	150
			7,14	0,281	55,77	56	65	109	120	135	146	156	169
			7,92	0,312	61,71	62	72	121	133	150	162	173	187
			8,38	0,330	65,20	65	76	128	141	158	172	183	198
			8,74	0,344	67,93	68	79	133	147	165	179	190	205
			9,53	0,375	73,88	74	87	145	160	180	195	205	205
			10,31	0,406	79,73	80	94	157	173	195	205	205	205
			11,13	0,438	85,84	87	101	169	187	205	205	205	205
			12,70	0,500	97,46	99	115	193	205	205	205	205	205

PIPES NATURAL GAS AND OIL LINE PIPES



PRODUCTION STANDARDS AND STEEL GRADES

Production Standard	Steel Grade
API 5L PSL 1 (API Monogram)	: A25 (L175), A (L210), B (L245), X42 (L290), X46 (L320), X52 (L360), X56 (L390), X60 (L415), X65 (L450)
API 5L PSL 2 (API Monogram)	: BM (L245M), BN (L245N), X42M (L290M), X42N (L290N), X46M (L320M), X46N (L320N), X52M (L360M), X52N (L360N), X56M (L390M), X56N (L390N), X60M (L415M), X60N (L415N), X65M (L450M)
ISO 3183 PSL 1	: A25 (L175), A (L210), B (L245), X42 (L290), X46 (L320), X52 (L360), X56 (L390), X60 (L415), X65 (L450)
ISO 3183 PSL 2	: BM (L245M), BN (L245N), X42M (L290M), X42N (L290N), X46M (L320M), X46N (L320N), X52M (L360M), X52N (L360N), X56M (L390M), X56N (L390N), X60M (L415M), X60N (L415N), X65M (L450M)



QUALITY CONTROL TESTS

Mechanical Tests >Tensile Test >Charpy V Notch Impact Test >Flattening Test >Expanding Test >Bending Test Chemical Analysis >Spectral Analysis Metallographic Examination >Macro Examination >Micro Examination >Micro Hardness Analysis >Grain Size Control	Dimensional and Visual Inspection Leak Tightness Testing / Non-destructive Test >Electromagnetic Test (Eddy Current Test) >Ultrasonic Test (Weld Seam) >Phased Array Full Body Lamination Control Test (PSL2) >Control of Residual Magnetism >Hydrostatic Test
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FINISHING OPERATIONS

>Plain End (Bevelled)
On demand
>Plain End (Square Cut)
>Threaded
>Threaded and Coupled



HEAT TREATMENT

>Heat Treatment of Weld Seam (Stress Relieving and Normalization)
On demand
>Heat Treatment of Full Body (Stress Relieving and Normalization)



SURFACE PROTECTION

>Uncoated
On demand
>Protective Oil
>Primer Coated
>PE-PP Coated
>Internal Epoxy Coated
>External Powder Epoxy Coated



TEST CERTIFICATES

According to EN 10204, 2.1, 2.2, 3.1, 3.2 certificates



QUALITY CERTIFICATES

>API Monogram Certificate (API Spec 5L)
>TSE Certificate of Conformity (TS EN ISO 3183)
>Epoxy Coating Certificate of Conformity (AWWA C210)
>PE Coating Certificate of Conformity (DIN 30670)
>GOST-R Natural Gas Pipes Certificate of Conformity
>GOST-R Electric Welded Steel Pipes Certificate of Conformity







INDUSTRIAL PIPES

It is used in sectors and applications such as construction structures, automotive, machine manufacturing, scaffolding and formwork, conveyor, rack systems, roof systems, furniture, piles and tunnels.



PRODUCTION RANGE

Industrial Pipes (HR)

Outside Diameter :Ø 13,0 - 339,7 mm

Wall Thickness :0,90 - 13,0 mm

Length :4,0 - 14,0 m

Industrial Pipes (CR)

Outside Diameter :Ø 8,0 - 60,3 mm

Wall Thickness :0,50 - 3,0 mm

Length :4,0 - 8,0 m

PRODUCTION RANGE FOR INDUSTRIAL PIPES (HR)

Outside Diameter (mm)	Wall Thickness (mm)																			
	0,90	1,00	1,20	1,50	2,00	2,50	2,60	3,00	3,20	3,60	4,00	4,50	5,00	6,00	6,30	7,00	8,00	9,00	10,00	13,00
	Mass Per Unit Length (kg/m)																			
Ø13,0	0,27	0,30	0,35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø16,0	0,34	0,37	0,44	0,54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø17,2	-	-	-	0,58	0,75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø19,0	0,40	0,44	0,53	0,65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø21,0	0,45	0,49	0,59	0,72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø21,3	-	0,50	0,59	0,73	0,95	1,16	1,20	1,35	1,43	-	-	-	-	-	-	-	-	-	-	-
Ø22,0	0,47	0,52	0,62	0,76	0,99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø25,0	0,53	0,59	0,70	0,87	1,13	1,39	1,44	1,63	-	-	-	-	-	-	-	-	-	-	-	-
Ø26,7	-	0,63	0,75	0,93	1,22	1,49	1,55	1,75	1,85	2,05	2,24	-	-	-	-	-	-	-	-	-
Ø26,9	-	0,64	0,76	0,94	1,23	1,50	1,56	1,77	1,87	2,07	2,26	-	-	-	-	-	-	-	-	-
Ø28,6	0,61	0,68	0,81	1,00	1,31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø32,0	0,69	0,76	0,91	1,13	1,48	1,82	1,89	2,15	-	-	-	-	-	-	-	-	-	-	-	-
Ø33,4	0,72	0,80	0,95	1,18	1,55	1,90	1,97	2,25	2,38	2,65	2,90	3,21	3,50	-	-	-	-	-	-	-
Ø33,7	0,73	0,81	0,96	1,19	1,56	1,92	1,99	2,27	2,41	2,67	2,93	3,24	3,54	-	-	-	-	-	-	-
Ø35,0	0,76	0,84	1,00	1,24	1,63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø38,0	0,82	0,91	1,09	1,35	1,78	2,19	2,27	2,59	2,75	3,05	3,35	3,72	4,07	-	-	-	-	-	-	-
Ø40,0	-	0,96	1,15	1,42	1,87	2,31	2,40	2,74	-	-	-	-	-	-	-	-	-	-	-	-
Ø42,2	0,92	1,02	1,21	1,51	1,98	2,45	2,54	2,90	3,08	3,43	3,77	4,18	4,59	5,36	-	-	-	-	-	-
Ø42,4	0,92	1,02	1,22	1,51	1,99	2,46	2,55	2,91	3,09	3,44	3,79	4,21	4,61	5,39	-	-	-	-	-	-
Ø45,0	-	1,09	1,30	1,61	2,12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø48,3	-	-	1,39	1,73	2,28	2,82	2,93	3,35	3,56	3,97	4,37	4,86	5,34	6,26	6,53	-	-	-	-	-
Ø50,0	-	1,21	1,44	1,79	2,37	2,93	3,04	3,48	-	-	-	-	-	-	-	-	-	-	-	-
Ø51,0	-	-	1,47	1,83	2,42	2,99	3,10	3,55	-	-	-	-	-	-	-	-	-	-	-	-
Ø57,0	-	-	1,65	2,05	2,71	3,36	3,49	3,99	4,25	4,74	5,23	5,83	6,41	7,55	7,88	8,63	-	-	-	-
Ø60,3	-	1,46	1,75	2,18	2,88	3,56	3,70	4,24	4,51	5,03	5,55	6,19	6,82	8,03	8,39	9,20	-	-	-	-
Ø63,0	-	-	1,83	2,27	3,01	3,73	3,87	4,44	4,72	5,27	5,82	6,49	7,15	-	-	-	-	-	-	-
Ø73,0	-	-	-	-	3,50	4,35	4,51	5,18	5,51	6,16	6,81	7,60	8,38	9,91	10,36	11,39	-	-	-	-
Ø76,1	-	1,85	2,22	2,76	3,65	4,54	4,71	5,41	5,75	6,44	7,11	7,95	8,77	10,37	10,84	-	-	-	-	-
Ø80,0	-	-	-	-	3,85	4,78	4,96	5,70	6,06	6,78	7,50	8,38	9,25	-	-	-	-	-	-	-
Ø88,9	-	-	-	-	4,29	5,33	5,53	6,35	6,76	7,57	8,37	9,37	10,34	12,27	12,83	14,14	15,96	-	-	-
Ø96,0	-	-	-	-	4,64	5,76	5,99	6,88	7,32	8,20	9,07	10,15	11,22	13,32	-	-	-	-	-	-
Ø101,6	-	-	-	3,70	4,91	6,11	6,35	7,29	7,76	8,70	9,63	10,78	11,91	14,14	14,81	16,33	18,47	20,55	-	-
Ø114,3	-	-	-	-	5,54	6,89	7,16	8,23	8,77	9,83	10,88	12,18	13,48	16,02	16,78	18,52	20,97	23,37	25,72	-
Ø125,0	-	-	-	-	6,07	7,55	7,85	9,03	9,61	10,78	11,94	13,37	14,80	17,61	18,44	-	-	-	-	-
Ø127,0	-	-	-	-	6,17	7,68	7,98	9,17	9,77	10,95	12,13	13,59	15,04	17,90	18,75	20,71	23,48	26,19	28,85	-
Ø133,0	-	-	-	-	-	8,05	8,36	9,62	10,24	11,49	12,72	14,26	15,78	18,79	19,68	-	-	-	-	-
Ø139,7	-	-	-	-	-	8,46	8,79	10,11	10,77	12,08	13,39	15,00	16,61	19,78	20,72	22,91	25,98	29,01	31,98	-
Ø152,4	-	-	-	-	-	9,24	9,60	11,05	11,77	13,21	14,64	16,41	18,17	21,66	22,70	25,10	28,49	31,83	35,12	-
Ø159,0	-	-	-	-	-	9,65	10,03	11,54	12,29	13,80	15,29	17,14	18,99	22,64	23,72	26,24	29,79	33,29	36,74	-
Ø165,1	-	-	-	-	-	-	-	11,99	12,78	14,34	15,89	17,82	19,74	23,54	24,67	27,29	30,99	34,64	38,25	-
Ø168,3	-	-	-	-	-	10,22	10,62	12,23	13,03	14,62	16,21	18,18	20,13	24,01	25,17	27,84	31,62	35,36	39,04	49,79
Ø177,8	-	-	-	-	-	-	-	12,93	13,78	15,46	17,14	19,23	21,31	25,42	26,64	29,48	33,50	37,46	41,38	52,83
Ø193,7	-	-	-	-	-	-	-	-	-	16,88	18,71	21,00	23,27	27,77	29,11	32,23	36,63	40,99	45,30	57,93
Ø219,1	-	-	-	-	-	-	-	-	-	19,13	21,22	23,81	26,40	31,53	33,06	36,61	41,65	46,63	51,56	66,07
Ø244,5	-	-	-	-	-	-	-	-	-	-	23,72	26,63	29,53	35,29	37,01	41,00	46,66	52,27	57,83	74,21
Ø273,0	-	-	-	-	-	-	-	-	-	-	26,53	29,80	33,04	39,51	41,43	45,92	52,28	58,59	64,86	83,35
Ø323,9	-	-	-	-	-	-	-	-	-	-	-	-	-	39,32	47,04	49,34	54,70	62,32	69,89	99,67
Ø339,7	-	-	-	-	-	-	-	-	-	-	-	-	-	41,27	49,37	51,80	57,43	65,44	73,40	104,73

Length Range

4,0 - 7,5 m	4,0 - 13,0 m
4,0 - 8,0 m	4,5 - 14,0 m
4,0 - 8,5 m	4,8 - 14,0 m
4,0 - 9,0 m	

PRODUCTION RANGE FOR INDUSTRIAL PIPES (CR)

Outside Diameter (mm)	Wall Thickness (mm)											
	0,50	0,60	0,70	0,80	0,90	1,00	1,20	1,40	1,50	2,00	2,50	3,00
	Mass Per Unit Length (kg/m)											
Ø8,0	0,09	0,11	0,13	0,14	0,16	0,17	0,20	0,23	-	-	-	-
Ø9,0	0,10	0,12	0,14	0,16	0,18	0,20	0,23	0,26	0,28	0,35	-	-
Ø10,0	0,12	0,14	0,16	0,18	0,20	0,22	0,26	0,30	0,31	0,39	-	-
Ø13,0	0,15	0,18	0,21	0,24	0,27	0,30	0,35	0,40	0,43	0,54	-	-
Ø16,0	0,19	0,23	0,26	0,30	0,34	0,37	0,44	0,50	0,54	0,69	-	-
Ø19,0	0,23	0,27	0,32	0,36	0,40	0,44	0,53	0,61	0,65	0,84	-	-
Ø21,0	0,25	0,30	0,35	0,40	0,45	0,49	0,59	0,68	0,72	0,94	-	-
Ø22,0	0,27	0,32	0,37	0,42	0,47	0,52	0,62	0,71	0,76	0,99	-	-
Ø25,0	0,30	0,36	0,42	0,48	0,53	0,59	0,70	0,81	0,87	1,13	1,39	1,63
Ø25,4	0,31	0,37	0,43	0,49	0,54	0,60	0,72	0,83	0,88	1,15	-	-
Ø28,0	-	0,41	0,47	0,54	0,60	0,67	0,79	0,92	0,98	1,28	1,57	1,85
Ø28,6	-	0,41	0,48	0,55	0,61	0,68	0,81	0,94	1,00	1,31	1,61	1,89
Ø30,0	-	0,44	0,51	0,58	0,65	0,72	0,85	0,99	1,05	1,38	1,70	2,00
Ø32,0	-	0,46	0,54	0,62	0,69	0,76	0,91	1,06	1,13	1,48	1,82	2,15
Ø35,0	-	0,51	0,59	0,67	0,76	0,84	1,00	1,16	1,24	1,63	2,00	2,37
Ø38,0	-	0,55	0,64	0,73	0,82	0,91	1,09	1,26	1,35	1,78	2,19	2,59
Ø42,0	-	-	0,71	0,81	0,91	1,01	1,21	1,40	1,50	1,97	2,44	2,89
Ø45,0	-	-	0,76	0,87	0,98	1,09	1,30	1,51	1,61	2,12	2,62	3,11
Ø48,0	-	-	0,82	0,93	1,05	1,16	1,38	1,61	1,72	2,27	2,81	3,33
Ø51,0	-	-	-	0,99	1,11	1,23	1,47	1,71	1,83	2,42	2,99	3,55
Ø60,3	-	-	-	1,17	1,32	1,46	1,75	2,03	2,18	2,88	3,56	4,24

Length Range

4,0 - 8,0 m



PRODUCTION STANDARDS AND STEEL GRADES

Production Standard	Steel Grade
EN 10219 (TS EN 10219) (CE)	: S235JRH, S275J0H, S275J2H, S355J0H, S355J2H, S355K2H, S275NH, S275NLH, S275MH, S275MLH, S355NH, S355NLH, S355MH, S355MLH, S420MH, S420MLH
SI 1458-1 (SII)	: S235JRH, S275J0H, S275J2H, S355J0H, S355J2H, S355K2H, S275NH, S275NLH, S275MH, S275MLH, S355NH, S355NLH, S355MH, S355MLH, S420MLH
ASTM A500	: Grade A, Grade B, Grade C, Grade D
EN 10305-3 (TS EN 10305-3)	: E155, E190, E195, E220, E235, E260, E275, E320, E355, E370, E420
AS/NZS 1163	: C250, C350, C450, C250L0, C350L0



QUALITY CONTROL TESTS

Mechanical Tests
>Tensile Test
>Charpy V Notch Impact Test
>Flattening Test
>Expanding Test
Chemical Analysis
>Spectral Analysis
Dimensional and Visual Inspection
Non-destructive Tests
>Electromagnetic Test (Eddy Current Test)
>Ultrasonic Test (Weld Seam)



FINISHING OPERATIONS

>Plain End (Square Cut)
On demand
>Plain End (Bevelled)
>Threaded
>Threaded and Coupled



HEAT TREATMENT

On demand
>Heat Treatment of Weld Seam (Stress Relieving and Normalization)
>Heat Treatment of Full Body (Stress Relieving and Normalization)



SURFACE PROTECTION

>Uncoated
On demand
>Protective Oil
>Galvanized
>Primer Coated
>PE-PP Coated
>Internal Epoxy Coated
>External Powder Epoxy Coated



TEST CERTIFICATES

According to EN 10204,
2.1, 2.2, 3.1, 3.2 certificates



QUALITY CERTIFICATES

>CE Certificate (EN 10219)
>TSE Certificate of Conformity (TS EN 10219, TS EN 10305-3)
>Standards Institute of Israel Certificates of Conformity (SII 1458-1)
>GOST-R Industrial Pipes Certificate of Conformity
>GOST-R Electric Welded Steel Pipes Certificate of Conformity



SCAFFOLDING PIPES

It is used in scaffolding and formwork structures.



PRODUCTION RANGE

Outside Diameter :Ø 26,9 - 76,1 mm
Wall Thickness :2,0 - 6,0 mm
Length :4,0 - 14,0 m

PRODUCTION RANGE FOR SCAFFOLDING PIPES

Outside Diameter (mm)	Wall Thickness (mm)						
	2,00	2,50	3,00	3,20	4,00	5,00	6,00
	Mass Per Unit Length (kg/m)						
Ø26,9	1,23	1,50	1,77	1,87	2,26	-	-
Ø33,7	1,56	1,92	2,27	2,41	2,93	3,54	-
Ø38,0	1,78	2,19	2,59	2,75	3,35	4,07	-
Ø42,4	1,99	2,46	2,91	3,09	3,79	4,61	5,39
Ø48,3	2,28	2,82	3,35	3,56	4,37	5,34	6,26
Ø60,3	2,88	3,56	4,24	4,51	5,55	6,82	8,03
Ø76,1	3,65	4,54	5,41	5,75	7,11	8,77	10,37

Length Range

	4,0 - 9,0 m
	4,5 - 14,0 m



PRODUCTION STANDARDS AND STEEL GRADES

Production Standard

EN 39 (TS 8481 EN 39)

EN 10219 (TS EN 10219) (CE) : S235JRH, S275J0H, S275J2H, S355J0H, S355J2H, S355K2H, S275NH, S275NLH, S275MH, S275MLH, S355NH, S355NLH, S355MH, S355MLH, S420MH, S420MLH

Steel Grade

: S235GT



QUALITY CONTROL TESTS

Mechanical Tests

- >Tensile Test
- >Charpy V Notch Impact Test
- >Flattening Test
- >Expanding Test

Chemical Analysis

- >Spectral Analysis

Dimensional and Visual Inspection

Non-destructive Test

- >Electromagnetic Test (Eddy Current Test)
- >Ultrasonic Test (Weld Seam)



FINISHING OPERATIONS

- >Plain End (Square Cut)

On demand

- >Plain End (Bevelled)
- >Threaded
- >Threaded and Coupled



HEAT TREATMENT

On demand

- >Heat Treatment of Weld Seam (Stress Relieving and Normalization)
- >Heat Treatment of Full Body (Stress Relieving and Normalization)



SURFACE PROTECTION

- >Uncoated

On demand

- >Protective Oil
- >Galvanized
- >Primer Coated



TEST CERTIFICATES

According to EN 10204,
2.1, 2.2, 3.1, 3.2 certificates



QUALITY CERTIFICATES

- >CE Certificate (EN 10219)
- >TSE Certificate of Conformity (TS EN 10219, TS 8481 EN 39)
- >GOST-R Industrial Pipes Certificate of Conformity
- >GOST-R Electric Welded Steel Pipes Certificate of Conformity
- >GOST-R Scaffolding Pipes Certificate of Conformity



BOILER PIPES

It is used for the transmission of non-combustible and non-explosive liquids at high temperature and pressure.

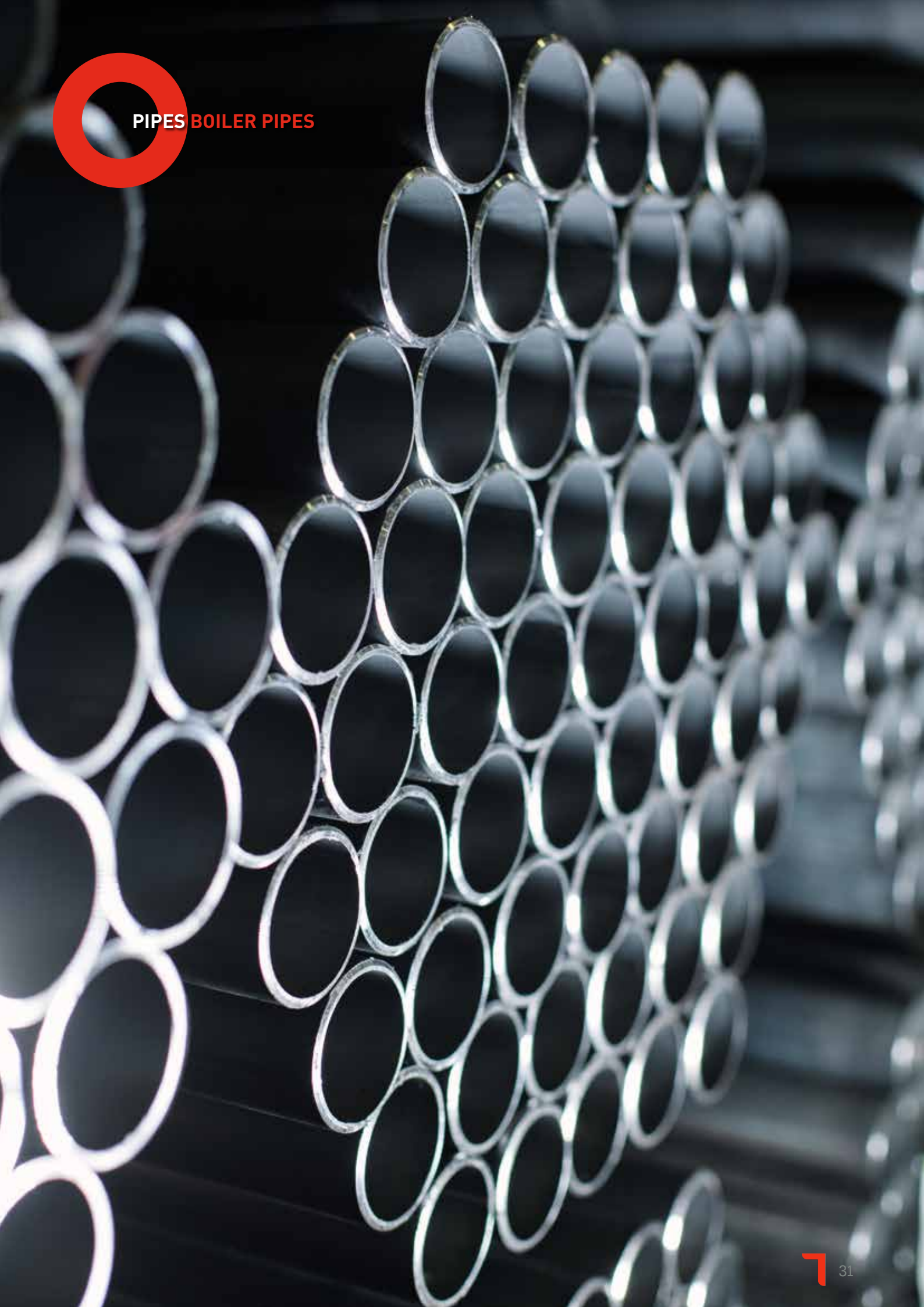


PRODUCTION RANGE

Outside Diameter : $\varnothing$ 21,3 - 339,7 mm [$\frac{1}{2}$ " - 13 $\frac{3}{8}$ "]
Wall Thickness : 2,60 - 13,0 mm
Length : 4,0 - 14,0 m



PIPES BOILER PIPES



PRODUCTION RANGE FOR BOILER PIPES

Outside Diameter		Wall Thickness (mm)																					
(mm)	(inch)	2,60	2,90	3,20	3,60	4,00	4,37	4,50	4,78	5,00	5,20	6,00	6,30	6,50	7,10	8,00	8,80	9,00	10,00	11,00	12,50	13,00	
		Mass Per Unit Length (kg/m)																					
Ø21,3	1/2	1,20	1,32	1,43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ø26,9	3/4	1,56	1,72	1,87	2,07	2,26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ø33,4	1	1,97	2,18	2,38	2,65	2,90	3,13	3,21	3,37	3,50	3,62	-	-	-	-	-	-	-	-	-	-	-	
Ø33,7	1	1,99	2,20	2,41	2,67	2,93	3,16	3,24	3,41	3,54	3,65	-	-	-	-	-	-	-	-	-	-	-	
Ø42,2	1 1/4	2,54	2,81	3,08	3,43	3,77	4,08	4,18	4,41	4,59	4,74	5,36	5,58	5,72	-	-	-	-	-	-	-	-	
Ø42,4	1 1/4	2,55	2,82	3,09	3,44	3,79	4,10	4,21	4,43	4,61	4,77	5,39	5,61	5,75	-	-	-	-	-	-	-	-	
Ø48,3	1 1/2	2,93	3,25	3,56	3,97	4,37	4,73	4,86	5,13	5,34	5,53	6,26	6,53	6,70	7,21	-	-	-	-	-	-	-	
Ø57,0		3,49	3,87	4,25	4,74	5,23	5,67	5,83	6,16	6,41	6,64	7,55	7,88	8,09	8,74	-	-	-	-	-	-	-	
Ø60,3	2	3,70	4,10	4,51	5,03	5,55	6,03	6,19	6,54	6,82	7,07	8,03	8,39	8,62	9,31	-	-	-	-	-	-	-	
Ø73,0	2 7/8	4,51	5,01	5,51	6,16	6,81	7,40	7,60	8,04	8,38	8,69	9,91	10,36	10,66	11,54	12,82	13,93	-	-	-	-	-	
Ø76,1	2 1/2	4,71	5,23	5,75	6,44	7,11	7,73	7,95	8,41	8,77	9,09	10,37	10,84	11,16	12,08	13,43	14,60	-	-	-	-	-	
Ø88,9	3	5,53	6,15	6,76	7,57	8,37	9,11	9,37	9,92	10,34	10,73	12,27	12,83	13,21	14,32	15,96	17,38	-	-	-	-	-	
Ø114,3	4	-	7,97	8,77	9,83	10,88	11,85	12,18	12,91	13,48	13,99	16,02	16,78	17,28	18,77	20,97	22,89	23,37	25,72	-	-	-	
Ø139,7	5	-	9,78	10,77	12,08	13,39	14,58	15,00	15,90	16,61	17,25	19,78	20,72	21,35	23,22	25,98	28,41	29,01	31,98	-	-	-	
Ø165,1	6	-	11,60	12,78	14,34	15,89	17,32	17,82	18,90	19,74	20,50	23,54	24,67	25,42	27,66	30,99	33,92	34,64	38,25	-	-	-	
Ø168,3	6	-	11,83	13,03	14,62	16,21	17,67	18,18	19,27	20,13	20,91	24,01	25,17	25,93	28,22	31,62	34,61	35,36	39,04	-	-	-	
Ø177,8	7	-	12,51	13,78	15,46	17,14	18,69	19,23	20,39	21,31	22,13	25,42	26,64	27,46	29,89	33,50	36,67	37,46	41,38	-	-	-	
Ø193,7	7 5/8	-	-	-	16,88	18,71	20,40	21,00	22,27	23,27	24,17	27,77	29,11	30,01	32,67	36,63	40,12	40,99	45,30	49,56	55,85	57,93	
Ø219,1	8	-	-	-	19,13	21,22	23,14	23,81	25,26	26,40	27,43	31,53	33,06	34,08	37,12	41,65	45,64	46,63	51,56	56,45	63,68	66,07	
Ø244,5	9	-	-	-	-	23,72	25,88	26,63	28,26	29,53	30,69	35,29	37,01	38,15	41,57	46,66	51,15	52,27	57,83	63,34	71,51	74,21	
Ø273,0	10	-	-	-	-	26,53	28,95	29,80	31,62	33,04	34,34	39,51	41,43	42,72	46,56	52,28	57,33	58,59	64,86	71,07	80,30	83,35	
Ø323,9	12	-	-	-	-	31,55	34,43	35,44	37,62	39,32	40,87	47,04	49,34	50,88	55,47	62,32	68,38	69,89	77,41	84,88	95,99	99,67	
Ø339,7	13 3/8	-	-	-	-	33,11	36,14	37,20	39,48	41,27	42,89	49,37	51,80	53,41	58,23	65,44	71,81	73,40	81,30	89,16	100,86	104,73	

Length Range

	4,0 - 9,0 m
	5,0 - 14,0 m



PRODUCTION STANDARDS AND STEEL GRADES

Production Standard

EN 10217-2 (TS EN 10217-2) (PED): P195GH, P235GH, P265GH, 16Mo3

Steel Grade



QUALITY CONTROL TESTS

Mechanical Tests

- >Tensile Test
- >Charpy V Notch Impact Test
- >Flattening Test
- >Expanding Test
- >Bending Test

Chemical Analysis

- >Spectral Analysis

Metallographic Examination

- >Macro Examination
- >Micro Examination
- >Micro Hardness Analysis
- >Grain Size Control

Dimensional and Visual Inspection

Leak Tightness Testing / Non-destructive Test

- >Electromagnetic Test (Eddy Current Test)
- >Ultrasonic Test (Weld Seam)
- >Control of Residual Magnetism
- >Hydrostatic Test

On demand

- >Phased Array Full Body Lamination Control Test



FINISHING OPERATIONS

- >Plain End (Bevelled)

On demand

- >Plain End (Square Cut)
- >Threaded
- >Threaded and Coupled



HEAT TREATMENT

According to delivery condition of Raw Material

- >Heat Treatment of Weld Seam (Normalization)
- >Heat Treatment of Full Body (Normalization)



SURFACE PROTECTION

- >Uncoated

On demand

- >Protective Oil
- >Galvanized
- >Primer Coated



TEST CERTIFICATES

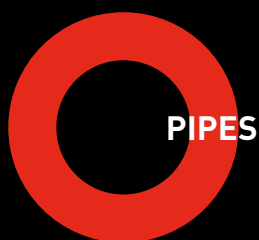
According to EN 10204,
2.1, 2.2, 3.1, 3.2 certificates



QUALITY CERTIFICATES

- >PED Certificate of Conformity (EN 10217-2)
- >TSE Certificate of Conformity (TS EN 10217-2)
- >GOST-R Electric Welded Steel Pipes Certificate of Conformity





PIPES

CASING, TUBING AND DRILL ROD PIPES

It is used in core mining and oil drilling.

Casing Pipes

Outside Diameter: $\varnothing$ 114,3 - 339,72 mm (4 1/2" - 13 3/8")

Wall Thickness : 5,21 - 13,06 mm

Length : 5,0 - 14,0 m

Tubing Pipes

Outside Diameter: $\varnothing$ 26,67 - 114,3 mm (1,050" - 4 1/2")

Wall Thickness : 2,87 - 9,65 mm

Length : 4,5 - 14,0 m

Drill Rod Pipes

Outside Diameter: $\varnothing$ 69,9 - 88,9 - 114,3 mm

Inner Diameter : 60,3 - 77,8 - 101,6 mm

Length : 3,050 m



PRODUCTION
RANGE

PRODUCTION RANGE FOR API 5CT / CASING PIPES

Outside Diameter		Wall Thickness		Mass Per Unit Length	Hydrostatic Test Pressure (bar)		
(inch)	(mm)	(inch)	(mm)	(kg/m)	H40	J55	K55
4 1/2	Ø114,3	0,205	5,21	14,38	201	276	276
		0,224	5,69	15,73	220	302	302
		0,250	6,35	17,38	245	337	337
		0,290	7,37	19,87	285	391	391
		0,337	8,56	22,69	331	454	454
5	Ø127,0	0,220	5,59	17,19	194	267	267
		0,253	6,43	19,69	224	307	307
		0,296	7,52	22,69	261	359	359
		0,362	9,19	27,19	320	439	439
5 1/2	Ø139,7	0,244	6,20	20,91	196	269	269
		0,275	6,98	23,48	221	303	303
		0,304	7,72	25,72	244	335	335
		0,361	9,17	30,05	290	398	398
6 5/8	Ø168,28	0,288	7,32	29,76	192	264	264
		0,352	8,94	35,72	235	322	322
		0,417	10,59	41,67	278	382	382
		0,475	12,06	47,62	316	435	435
7	Ø177,8	0,231	5,87	25,60	146	200	200
		0,272	6,91	29,91	172	236	236
		0,317	8,05	34,67	200	275	275
		0,362	9,19	39,14	228	313	313
		0,408	10,36	43,60	257	353	353
		0,453	11,51	47,92	286	393	393
		0,498	12,65	52,09	314	431	431
7 5/8	Ø193,68	0,300	7,62	35,72	174	239	239
		0,328	8,33	39,29	190	261	261
		0,375	9,52	44,20	217	298	298
		0,430	10,92	50,15	249	342	342
		0,500	12,70	58,04	290	398	398
8 5/8	Ø219,08	0,264	6,71	35,72	135	186	186
		0,304	7,72	41,67	156	214	214
		0,352	8,94	47,62	180	247	247
		0,400	10,16	53,57	205	281	281
		0,450	11,43	59,53	230	316	316
		0,500	12,70	65,48	256	351	351
9 5/8	Ø244,48	0,312	7,92	48,07	143	196	196
		0,352	8,94	53,57	161	222	222
		0,395	10,03	59,53	181	249	249
		0,435	11,05	64,73	200	274	274
		0,472	11,99	69,94	217	297	297
10 3/4	Ø273,05	0,279	7,09	48,74	86	118	118
		0,350	8,89	60,27	108	148	148
		0,400	10,16	67,71	123	169	169
		0,450	11,43	75,90	139	190	190
		0,495	12,57	82,59	152	209	209
13 3/8	Ø339,72	0,330	8,38	71,43	82	112	112
		0,380	9,65	81,10	94	129	129
		0,430	10,92	90,78	106	146	146
		0,480	12,19	101,19	119	163	163
		0,514	13,06	107,15	127	175	175

Length Range

5,0 - 14,0 m



PIPES CASING, TUBING AND DRILL ROD PIPES



PRODUCTION RANGE FOR API 5CT / TUBING PIPES

Outside Diameter		Wall Thickness		Mass Per Unit Length	Hydrostatic Test Pressure (bar)		
(inch)	(mm)	(inch)	(mm)	(kg/m)	H40	J55	K55
1.050	Ø26,67	0,113	2,87	1,70	475	-	-
1.315	Ø33,4	0,133	3,38	2,53	447	-	-
1.660	Ø42,16	0,125	3,18	3,06	333	457	457
		0,140	3,56	3,42	373	-	-
1.900	Ø48,26	0,125	3,18	3,54	291	400	400
		0,145	3,68	4,09	337	462	462
		0,200	5,08	5,43	465	-	-
2 3/8	Ø60,32	0,167	4,24	5,95	310	426	426
		0,190	4,83	6,85	354	486	486
		0,254	6,45	8,63	472	-	-
2 7/8	Ø73,02	0,217	5,51	9,52	333	458	458
		0,276	7,01	11,61	424	-	-
		0,308	7,82	12,80	473	-	-
3 1/2	Ø88,9	0,216	5,49	11,46	273	374	374
		0,254	6,45	13,69	320	440	440
		0,289	7,34	15,18	365	-	-
4	Ø101,6	0,226	5,74	14,14	249	343	343
		0,262	6,65	15,57	289	397	397
		0,330	8,38	19,64	364	500	500
4 1/2	Ø114,3	0,271	6,88	18,75	266	365	365
		0,337	8,56	22,62	331	454	454
		0,380	9,65	25,30	373	-	-

Length Range

	4,5 - 8,5 m
	5,0 - 14,0 m

PRODUCTION RANGE FOR DRILL ROD PIPES

Diameter	Outside Diameter (mm)	Internal Diameter (mm)	Length (mm)
PQ	Ø114,3	Ø101,6	3050
HQ	Ø88,9	Ø77,8	3050
NQ	Ø69,9	Ø60,3	3050



PRODUCTION STANDARDS AND STEEL GRADES

Production Standard

API 5CT PSL 1 (API Monogram) : H40, J55, K55
ASTM A513

Steel Grade

: SAE/AISI 4130



QUALITY CONTROL TESTS

Mechanical Tests

- >Tensile Test
- >Charpy V Notch Impact Test
- >Flattening Test
- >Expanding Test
- >Bending Test

Chemical Analysis

- >Spectral Analysis

Metallographic Examination

- >Macro Examination
- >Micro Examination
- >Micro Hardness Analysis
- >Grain Size Control

Dimensional and Visual Inspection

Leak Tightness Testing / Non-destructive Test

- >Electromagnetic Test (Eddy Current Test)
- >Ultrasonic Test (Weld Seam)
- >Control of Residual Magnetism
- >Hydrostatic Test

On demand

- >Phased Array Full Body Lamination Control Test

Drift Test (for API Spec 5 CT)



FINISHING OPERATIONS

- >Plain End (Square Cut) (Drill Rod Pipes are produced as threaded)

On demand

- >Plain End (Bevelled)
- >Threaded
- >Threaded and Coupled



HEAT TREATMENT

On demand

- >Heat Treatment of Weld Seam (Stress Relieving and Normalization)
- >Heat Treatment of Full Body (Stress Relieving and Normalization)



SURFACE PROTECTION

- >Uncoated

On demand

- >Protective Oil
- >Primer Coated



TEST CERTIFICATES

According to EN 10204,
2.1, 2.2, 3.1, 3.2 certificates



QUALITY CERTIFICATES

- >API Monogram Certificate (API Spec 5CT)
- >GOST-R Casing Pipes Certificate of Conformity
- >GOST-R Electric Welded Steel Pipes Certificate of Conformity





PIPES

GALVANIZED PIPES

It is used in many application areas such as water and installation, greenhouse, construction pipes to protect them against corrosion and to extend their service life.



PRODUCTION
RANGE

Hot-dip Galvanizing

Outside Diameter :Ø 21,3 - 219,1 mm

Wall Thickness :1,8 - 7,11 mm

Length :5,0 - 8,5 m

Pre-Galvanizing

Outside Diameter :Ø 26,9 - 125,0 mm

Wall Thickness :1,0 - 2,0 mm

Length :4,0 - 13,0 m

PRODUCTION RANGE FOR HOT-DIP GALVANIZED PIPES

Outside Diameter		Wall Thickness (mm)															
(mm)	(inch)	1,80	1,90	2,00	2,20	2,40	2,60	3,00	3,20	3,50	4,00	4,50	5,00	5,50	6,00	6,35	7,11
Ø21,3	1/2								-	-	-	-	-	-	-	-	-
Ø26,9	3/4											-	-	-	-	-	-
Ø32,0														-	-	-	-
Ø33,7	1													-	-	-	-
Ø42,4	1 1/4																-
Ø48,3	1 1/2																-
Ø51,0																	-
Ø60,3	2																-
Ø73,0	2 7/8	-	-	-	-												
Ø76,1	2 1/2	-	-	-	-												
Ø88,9	3	-	-	-	-	-											
Ø101,6	3 1/2	-	-	-	-	-	-										
Ø114,3	4	-	-	-	-	-	-										
Ø127,0		-	-	-	-	-	-	-									
Ø139,7	5	-	-	-	-	-	-	-	-	-							
Ø141,3	5	-	-	-	-	-	-	-	-	-							
Ø152,4		-	-	-	-	-	-	-	-	-							
Ø159,0		-	-	-	-	-	-	-	-	-							
Ø165,1	6	-	-	-	-	-	-	-	-	-							
Ø168,3	6	-	-	-	-	-	-	-	-	-	-						
Ø177,8	7	-	-	-	-	-	-	-	-	-	-						
Ø193,7	7 5/8	-	-	-	-	-	-	-	-	-	-						
Ø219,1	8	-	-	-	-	-	-	-	-	-	-						-

Length Range

	5,0 - 8,0 m
	5,0 - 8,5 m

PRODUCTION RANGE FOR PRE-GALVANIZED PIPES

Outside Diameter		Wall Thickness (mm)			
(mm)	(inch)	1,00	1,20	1,50	2,00
Ø26,9	3/4	-	-		
Ø32,0					
Ø33,7	1	-	-		
Ø38,0					
Ø42,4	1 1/4	-	-		
Ø45,0					
Ø48,3	1 1/2	-	-		
Ø60,3	2	-	-		
Ø63,0		-	-	-	
Ø76,1	2 1/2	-	-	-	
Ø80,0		-	-	-	
Ø88,9	3	-	-	-	
Ø96,0		-	-	-	
Ø101,6	3 1/2	-	-	-	
Ø114,3	4	-	-	-	
Ø125,0		-	-	-	

Length Range

	4,0 - 8,5 m
	4,0 - 7,5 m
	4,0 - 13,0 m



GALVANIZING METHOD

>Automatic Hot-dip Galvanizing
>Pre-Galvanizing



HOT-DIP GALVANIZING STANDARDS

EN 10240 (TS 11348 EN 10240)
ASTM A123M
ASTM A53
SI 103
SI 4314
ASTM A795
TS EN ISO 1461



PRE-GALVANIZED SHEET GRADES

Galvanized Sheet Standard	Steel Grade
ASTM A653	CS TYPE B
EN 10346	DX51D+Z
EN 10346	DX52D+Z
EN 10346	DX53D+Z
EN 10346	DX54D+Z
EN 10346	DX56D+Z
EN 10346	HCT590X
EN 10346	HX260LAD+Z
EN 10346	HX300LAD+Z
EN 10346	HX340LAD+Z
EN 10346	HX380LAD+Z
EN 10346	HX420LAD+Z
EN 10346	S220GD+Z
EN 10346	S250GD+Z
EN 10346	S280GD+Z
EN 10346	S320GD+Z
EN 10346	S350GD+Z
EN 10346	S420GD+Z

Galvanized steel sheet coating thickness 40-350 gr/m²



QUALITY CONTROL TESTS

Chemical Analysis for Zinc
>Spectral Analysis
Coating Thickness Testing
>Stripping Test
>Coating Thickness Measurement Device
>Copper Sulphate Test
Coating Adherence Control
>Crushing Test
>Bending Test
Dimensional and Visual Inspection



TEST CERTIFICATES

According to EN 10204,
2.1, 2.2, 3.1, 3.2 certificates



QUALITY CERTIFICATES

>GOST-R Galvanized Steel Pipes Certificate of Conformity





THREADED PIPES

It is used in all installation and construction areas of coupled connections.



PRODUCTION RANGE

Outside Diameter : $\varnothing$ 21,3 - 168,3 mm [$\frac{1}{2}$ " - 6"]
Wall Thickness : 1,8 - 7,11 mm
Length : 5,0 - 8,0 m



PIPES **THREADED PIPES**

PRODUCTION RANGE FOR THREADED PIPES

Outside Diameter		Wall Thickness (mm)															
(mm)	(inch)	1,80	1,90	2,00	2,20	2,60	2,80	3,00	3,20	3,50	4,00	4,50	5,00	5,50	6,00	6,35	7,11
Ø21,3	1/2								-	-	-	-	-	-	-	-	-
Ø26,9	3/4											-	-	-	-	-	-
Ø33,7	1													-	-	-	-
Ø42,4	1 1/4	-	-	-													-
Ø48,3	1 1/2	-	-	-													-
Ø60,3	2	-	-	-													
Ø73,0	2 7/8	-	-	-	-												
Ø76,1	2 1/2	-	-	-	-												
Ø88,9	3	-	-	-	-	-											
Ø114,3	4	-	-	-	-	-	-	-	-								
Ø139,7	5	-	-	-	-	-	-	-	-	-							
Ø141,3	5	-	-	-	-	-	-	-	-	-							
Ø165,1	6	-	-	-	-	-	-	-	-	-	-						
Ø168,3	6	-	-	-	-	-	-	-	-	-	-						

Length Range

	5,0 - 7,5 m
	5,0 - 8,0 m



**PRODUCTION
STANDARDS OF
THREADING**

ISO 7/1
ASTM A53
EN10255,
ANSI B1.20



**QUALITY
CONTROL
TESTS**

>Dimensional and Visual Inspection



**PROTECTIVE
OPERATIONS
FOR THREADED
ENDS OF THE
PIPES**

>Varnished
>Polyethylene Plug



PIPES

HEAT TREATED AND HOT-FINISHED PIPES

It is used in all constructions with its mechanical properties and improved grain structure by cold forming and heat treatment.



PRODUCTION
RANGE

Full Body Heat Treatment

Outside Diameter : $\varnothing$ 21,3 - 339,7 mm

Wall Thickness : 1,5 - 13,0 mm

Length : 5,0 - 14,0 m

Weld Seam + HAZ (Heat Affected Zone) Heat Treatment

Outside Diameter : $\varnothing$ 42,2 - 339,7 mm

Wall Thickness : 2,0 - 13,0 mm

Length : 5,0 - 14,0 m

PRODUCTION RANGE FOR FULL BODY HEAT TREATED AND HOT-FINISHED PIPES

Outside Diameter		Wall Thickness (mm)																						
(mm)	(inch)	1,5	2,0	2,5	2,6	2,9	3,0	3,2	3,5	3,6	4,0	4,5	5,0	5,5	6,0	6,5	7,0	8,0	9,0	10,0	11,0	12,0	13,0	
		Mass Per Unit Length (kg/m)																						
Ø21,3	1/2	0,73	0,95	1,16	1,20	1,32	1,35	1,43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ø22,0		0,76	0,99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ø25,0		0,87	1,13	1,39	1,44	1,58	1,63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ø26,7	3/4	0,93	1,22	1,49	1,55	1,70	1,75	1,85	2,00	2,05	2,24	-	-	-	-	-	-	-	-	-	-	-	-	
Ø26,9	3/4	0,94	1,23	1,50	1,56	1,72	1,77	1,87	2,02	2,07	2,26	-	-	-	-	-	-	-	-	-	-	-	-	
Ø28,6		1,00	1,31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ø32,0		1,13	1,48	1,82	1,89	2,08	2,15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ø33,4	1	1,18	1,55	1,90	1,97	2,18	2,25	2,38	2,58	2,65	2,90	3,21	3,50	-	-	-	-	-	-	-	-	-	-	
Ø33,7	1	1,19	1,56	1,92	1,99	2,20	2,27	2,41	2,61	2,67	2,93	3,24	3,54	-	-	-	-	-	-	-	-	-	-	
Ø35,0		1,24	1,63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ø38,0		1,35	1,78	2,19	2,27	2,51	2,59	2,75	2,98	3,05	3,35	3,72	4,07	-	-	-	-	-	-	-	-	-	-	
Ø40,0		1,42	1,87	2,31	2,40	2,65	2,74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ø42,2	1 1/4	1,51	1,98	2,45	2,54	2,81	2,90	3,08	3,34	3,43	3,77	4,18	4,59	4,98	5,36	5,72	-	-	-	-	-	-	-	
Ø42,4	1 1/4	1,51	1,99	2,46	2,55	2,82	2,91	3,09	3,36	3,44	3,79	4,21	4,61	5,00	5,39	5,75	-	-	-	-	-	-	-	
Ø45,0		1,61	2,12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ø48,3	1 1/2	1,73	2,28	2,82	2,93	3,25	3,35	3,56	3,87	3,97	4,37	4,86	5,34	5,80	6,26	6,70	7,13	-	-	-	-	-	-	
Ø50,0		1,79	2,37	2,93	3,04	3,37	3,48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ø51,0		1,83	2,42	2,99	3,10	3,44	3,55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ø57,0		2,05	2,71	3,36	3,49	3,87	3,99	4,25	4,62	4,74	5,23	5,83	6,41	6,98	7,55	8,09	8,63	-	-	-	-	-	-	
Ø60,3	2	2,18	2,88	3,56	3,70	4,10	4,24	4,51	4,90	5,03	5,55	6,19	6,82	7,43	8,03	8,62	9,20	-	-	-	-	-	-	
Ø63,0		2,27	3,01	3,73	3,87	4,30	4,44	4,72	5,14	5,27	5,82	6,49	7,15	7,80	8,43	9,06	9,67	-	-	-	-	-	-	
Ø73,0	2 7/8	2,64	3,50	4,35	4,51	5,01	5,18	5,51	6,00	6,16	6,81	7,60	8,38	9,16	9,91	10,66	11,39	12,82	-	-	-	-	-	
Ø76,1	2 1/2	2,76	3,65	4,54	4,71	5,23	5,41	5,75	6,27	6,44	7,11	7,95	8,77	9,58	10,37	11,16	11,93	13,43	-	-	-	-	-	
Ø80,0		-	3,85	4,78	4,96	5,51	5,70	6,06	6,60	6,78	7,50	8,38	9,25	10,10	10,95	11,78	12,60	14,20	-	-	-	-	-	
Ø88,9	3	3,23	4,29	5,33	5,53	6,15	6,35	6,76	7,37	7,57	8,37	9,37	10,34	11,31	12,27	13,21	14,14	15,96	-	-	-	-	-	
Ø96,0		-	4,64	5,76	5,99	6,66	6,88	7,32	7,98	8,20	9,07	10,15	11,22	12,27	13,32	14,35	15,36	17,36	-	-	-	-	-	
Ø101,6	3 1/2	-	-	-	-	7,06	7,29	7,76	8,47	8,70	9,63	10,78	11,91	13,03	14,14	15,24	16,33	18,47	20,55	-	-	-	-	
Ø114,3	4	-	-	-	-	7,97	8,23	8,77	9,56	9,83	10,88	12,18	13,48	14,76	16,02	17,28	18,52	20,97	23,37	25,72	-	-	-	
Ø125,0		-	6,07	7,55	7,85	8,73	9,03	9,61	10,49	10,78	11,94	13,37	14,80	16,21	17,61	-	-	-	-	-	-	-	-	
Ø127,0		-	-	-	-	8,87	9,17	9,77	10,66	10,95	12,13	13,59	15,04	16,48	17,90	19,31	20,71	23,48	26,19	28,85	-	-	-	
Ø133,0		-	-	8,05	8,36	9,30	9,62	10,24	11,18	11,49	12,72	14,26	15,78	17,29	18,79	-	-	-	-	-	-	-	-	
Ø139,7	5	-	-	-	-	9,78	10,11	10,77	11,76	12,08	13,39	15,00	16,61	18,20	19,78	21,35	22,91	25,98	29,01	31,98	-	-	-	
Ø152,4		-	-	-	-	10,69	11,05	11,77	12,85	13,21	14,64	16,41	18,17	19,92	21,66	23,39	25,10	28,49	31,83	35,12	-	-	-	
Ø159,0		-	-	-	-	11,16	11,54	12,29	13,42	13,80	15,29	17,14	18,99	20,82	22,64	24,44	26,24	29,79	33,29	36,74	-	-	-	
Ø165,1	6	-	-	-	-	11,60	11,99	12,78	13,95	14,34	15,89	17,82	19,74	21,65	23,54	25,42	27,29	30,99	34,64	38,25	-	-	-	
Ø168,3	6	-	-	-	-	11,83	12,23	13,03	14,22	14,62	16,21	18,18	20,13	22,08	24,01	25,93	27,84	31,62	35,36	39,04	42,67	46,25	49,79	
Ø177,8	7	-	-	-	-	12,51	12,93	13,78	15,04	15,46	17,14	19,23	21,31	23,37	25,42	27,46	29,48	33,50	37,46	41,38	45,25	49,06	52,83	
Ø193,7	7 5/8	-	-	-	-	-	-	-	16,42	16,88	18,71	21,00	23,27	25,53	27,77	30,01	32,23	36,63	40,99	45,30	49,56	53,77	57,93	
Ø219,1	8	-	-	-	-	-	-	-	18,61	19,13	21,22	23,81	26,40	28,97	31,53	34,08	36,61	41,65	46,63	51,56	56,45	61,29	66,07	
Ø244,5	9	-	-	-	-	-	-	-	-	-	23,72	26,63	29,53	32,42	35,29	38,15	41,00	46,66	52,27	57,83	63,34	68,80	74,21	
Ø273,0	10	-	-	-	-	-	-	-	-	-	26,53	29,80	33,04	36,28	39,51	42,72	45,92	52,28	58,59	64,86	71,07	77,24	83,35	
Ø323,9	12	-	-	-	-	-	-	-	-	-	-	-	39,32	43,18	47,04	50,88	54,70	62,32	69,89	77,41	84,88	92,30	99,67	
Ø339,7	13 3/8	-	-	-	-	-	-	-	-	-	-	-	41,27	45,33	49,37	53,41	57,43	65,44	73,40	81,30	89,16	96,97	104,73	

Length Range

	5,0 - 7,5 m
	5,0 - 8,5 m
	5,0 - 13,0 m
	5,0 - 14,0 m

PRODUCTION RANGE FOR WELD SEAM + HAZ HEAT TREATED PIPES

Outside Diameter		Wall Thickness (mm)																				
(mm)	(inch)	2,0	2,5	2,6	2,9	3,0	3,2	3,5	3,6	4,0	4,5	5,0	5,5	6,0	6,5	7,0	8,0	9,0	10,0	11,0	12,0	13,0
		Mass Per Unit Length (kg/m)																				
Ø42,2	1 1/4	1,98	2,45	2,54	2,81	2,90	3,08	3,34	3,43	3,77	4,18	4,59	-	-	-	-	-	-	-	-	-	-
Ø42,4	1 1/4	1,99	2,46	2,55	2,82	2,91	3,09	3,36	3,44	3,79	4,21	4,61	-	-	-	-	-	-	-	-	-	-
Ø48,3	1 1/2	2,28	2,82	2,93	3,25	3,35	3,56	3,87	3,97	4,37	4,86	5,34	-	-	-	-	-	-	-	-	-	-
Ø60,3	2	2,88	3,56	3,70	4,10	4,24	4,51	4,90	5,03	5,55	6,19	6,82	7,43	8,03	8,62	9,20	-	-	-	-	-	-
Ø63,0		3,01	3,73	3,87	4,30	4,44	4,72	5,14	5,27	5,82	6,49	7,15	7,80	8,43	9,06	9,67	-	-	-	-	-	-
Ø73,0	2 7/8	3,50	4,35	4,51	5,01	5,18	5,51	6,00	6,16	6,81	7,60	8,38	9,16	9,91	10,66	11,39	12,82	-	-	-	-	-
Ø76,1	2 1/2	3,65	4,54	4,71	5,23	5,41	5,75	6,27	6,44	7,11	7,95	8,77	9,58	10,37	11,16	11,93	13,43	-	-	-	-	-
Ø88,9	3	4,29	5,33	5,53	6,15	6,35	6,76	7,37	7,57	8,37	9,37	10,34	11,31	12,27	13,21	14,14	15,96	-	-	-	-	-
Ø101,6	3 1/2	-	-	-	7,06	7,29	7,76	8,47	8,70	9,63	10,78	11,91	13,03	14,14	15,24	16,33	18,47	20,55	-	-	-	-
Ø114,3	4	-	-	-	7,97	8,23	8,77	9,56	9,83	10,88	12,18	13,48	14,76	16,02	17,28	18,52	20,97	23,37	25,72	-	-	-
Ø127,0		-	-	-	8,87	9,17	9,77	10,66	10,95	12,13	13,59	15,04	16,48	17,90	19,31	20,71	23,48	26,19	28,85	-	-	-
Ø139,7	5	-	-	-	9,78	10,11	10,77	11,76	12,08	13,39	15,00	16,61	18,20	19,78	21,35	22,91	25,98	29,01	31,98	-	-	-
Ø152,4		-	-	-	10,69	11,05	11,77	12,85	13,21	14,64	16,41	18,17	19,92	21,66	23,39	25,10	28,49	31,83	35,12	-	-	-
Ø159,0		-	-	-	11,16	11,54	12,29	13,42	13,80	15,29	17,14	18,99	20,82	22,64	24,44	26,24	29,79	33,29	36,74	-	-	-
Ø165,1	6	-	-	-	11,60	11,99	12,78	13,95	14,34	15,89	17,82	19,74	21,65	23,54	25,42	27,29	30,99	34,64	38,25	-	-	-
Ø168,3	6	-	-	-	11,83	12,23	13,03	14,22	14,62	16,21	18,18	20,13	22,08	24,01	25,93	27,84	31,62	35,36	39,04	42,67	46,25	49,79
Ø177,8	7	-	-	-	12,51	12,93	13,78	15,04	15,46	17,14	19,23	21,31	23,37	25,42	27,46	29,48	33,50	37,46	41,38	45,25	49,06	52,83
Ø193,7	7 5/8	-	-	-	-	-	-	16,42	16,88	18,71	21,00	23,27	25,53	27,77	30,01	32,23	36,63	40,99	45,30	49,56	53,77	57,93
Ø219,1	8	-	-	-	-	-	-	18,61	19,13	21,22	23,81	26,40	28,97	31,53	34,08	36,61	41,65	46,63	51,56	56,45	61,29	66,07
Ø244,5	9	-	-	-	-	-	-	-	-	23,72	26,63	29,53	32,42	35,29	38,15	41,00	46,66	52,27	57,83	63,34	68,80	74,21
Ø273,0	10	-	-	-	-	-	-	-	-	26,53	29,80	33,04	36,28	39,51	42,72	45,92	52,28	58,59	64,86	71,07	77,24	83,35
Ø323,9	12	-	-	-	-	-	-	-	-	-	-	39,32	43,18	47,04	50,88	54,70	62,32	69,89	77,41	84,88	92,30	99,67
Ø339,7	13 3/8	-	-	-	-	-	-	-	-	-	-	41,27	45,33	49,37	53,41	57,43	65,44	73,40	81,30	89,16	96,97	104,73

Length Range

	5,0 - 8,0 m
	5,0 - 14,0 m



HEAT TREATMENT TYPES

- >Stress Relieving
- >Normalization



HEAT TREATMENT LOCATION OF PRODUCT

- >Weld Seam + Heat Affected Zone (HAZ)
- >Full Body



PRODUCTION STANDARDS AND STEEL GRADES

Production Standard

EN 10210 (TS EN 10210) (CE):

Steel Grade

S235JRH, S275J0H, S275J2H, S355J0H, S355J2H, S355K2H, S275NH, S275NLH, S355NH, S355NLH, S420NH, S420NLH

Not: In order to improve the mechanical properties of the product, heat treatment can also be applied to the other products when demanded.



QUALITY CONTROL TESTS AFTER HEAT TREATMENT

Mechanical Tests

- >Tensile Test
- >Charpy V Notch Impact Test
- >Bending Test

Metallographic Examination

- >Macro Examination
- >Micro Examination
- >Micro Hardness Analysis
- >Grain Size Control

Dimensional and Visual Inspection



TEST CERTIFICATES

According to EN 10204,
2.1, 2.2, 3.1, 3.2 certificates



PRIMER COATED PIPES

It is used in all application areas such as construction and installation, which are intended to increase corrosion resistance and provide protection to the product.



PRODUCTION RANGE

Outside Diameter : $\emptyset$ 13,0 - 339,7 mm
Wall Thickness : 0,70 - 13,0 mm
Length : 4,0 - 14,0 m

PRODUCTION RANGE FOR PRIMER COATED PIPES

Outside Diameter		Wall Thickness (mm)																					
(mm)	(inch)	0,70	0,80	0,90	1,00	1,20	1,50	2,00	2,50	2,60	3,00	3,20	3,60	4,00	4,50	5,00	6,00	6,30	7,00	8,00	9,00	10,00	13,00
Ø13,0	1/4						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø16,0								-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø17,2	3/8	-	-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø19,0								-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø21,0								-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø21,3	1/2	-	-	-	-								-	-	-	-	-	-	-	-	-	-	-
Ø22,0									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø25,0												-	-	-	-	-	-	-	-	-	-	-	-
Ø26,7	3/4	-	-	-											-	-	-	-	-	-	-	-	-
Ø26,9	3/4	-	-	-											-	-	-	-	-	-	-	-	-
Ø28,6									-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø32,0											-	-	-	-	-	-	-	-	-	-	-	-	-
Ø33,4	1	-															-	-	-	-	-	-	-
Ø33,7	1	-															-	-	-	-	-	-	-
Ø35,0		-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø38,0		-															-	-	-	-	-	-	-
Ø40,0		-	-	-								-	-	-	-	-	-	-	-	-	-	-	-
Ø42,2	1 1/4	-	-															-	-	-	-	-	-
Ø42,4	1 1/4	-	-															-	-	-	-	-	-
Ø45,0		-	-	-					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø48,3	1 1/2	-	-	-	-														-	-	-	-	-
Ø50,0		-	-	-								-	-	-	-	-	-	-	-	-	-	-	-
Ø51,0		-	-	-	-							-	-	-	-	-	-	-	-	-	-	-	-
Ø57,0		-	-	-	-															-	-	-	-
Ø60,3	2	-	-	-																-	-	-	-
Ø63,0		-	-	-	-												-	-	-	-	-	-	-
Ø73,0	2 7/8	-	-	-	-	-														-	-	-	-
Ø76,1	2 1/2	-	-	-																-	-	-	-
Ø80,0		-	-	-	-	-											-	-	-	-	-	-	-
Ø88,9	3	-	-	-	-	-														-	-	-	-
Ø96,0		-	-	-	-	-														-	-	-	-
Ø101,6	3 1/2	-	-	-	-	-															-	-	-
Ø114,3	4	-	-	-	-	-																-	-
Ø125,0		-	-	-	-	-														-	-	-	-
Ø127,0		-	-	-	-	-																-	-
Ø133,0		-	-	-	-	-														-	-	-	-
Ø139,7	5	-	-	-	-	-																-	-
Ø152,4		-	-	-	-	-																-	-
Ø159,0		-	-	-	-	-																-	-
Ø165,1	6	-	-	-	-	-			-	-													-
Ø168,3	6	-	-	-	-	-																	-
Ø177,8	7	-	-	-	-	-			-	-													-
Ø193,7	7 5/8	-	-	-	-	-			-	-	-	-											-
Ø219,1	8	-	-	-	-	-			-	-	-	-											-
Ø244,5	9	-	-	-	-	-			-	-	-	-											-
Ø273,0	10	-	-	-	-	-			-	-	-	-											-
Ø323,9	12	-	-	-	-	-			-	-	-	-		-	-								-
Ø339,7	13 3/8	-	-	-	-	-			-	-	-	-		-	-								-

Length Range

	4,0 - 7,5 m	4,0 - 13,0 m
	4,0 - 8,0 m	4,5 - 14,0 m
	4,0 - 8,5 m	4,8 - 14,0 m
	4,0 - 9,0 m	



QUALITY CONTROL TESTS

Dimensional and Visual Inspection



STANDARD COATING COLORS

>Red (Ral Code 3009)
>Black (Ral Code 9005)
Other colors can be used when demanded.



TEST CERTIFICATES

According to EN 10204,
2.1, 2.2, 3.1, 3.2 certificates



PIPES

POLYETHYLENE, POLYPROPYLENE AND EPOXY COATED PIPES

It is used in application areas such as drinking and utility water, natural gas and petroleum-derived, aviation fuel and transmission of chemical fluids to increase corrosion resistance.



PRODUCTION
RANGE

Outside Diameter : Ø 21,3 - 339,7 mm [½" - 13 3/8"]

Wall Thickness : 2,6 - 13,0 mm

Length : 6,0 - 14,0 m

PRODUCTION RANGE FOR POLYETHYLENE AND POLYPROPYLENE COATED PIPES

Outside Diameter		Wall Thickness (mm)																				
(mm)	(inch)	2,6	2,9	3,2	3,6	4,0	4,4	4,5	4,8	5,0	5,2	6,0	6,3	6,5	7,1	8,0	8,8	9,0	10,0	11,0	12,5	13,0
Ø21,3	1/2				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø26,7	3/4						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø26,9	3/4						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø33,4	1											-	-	-	-	-	-	-	-	-	-	-
Ø33,7	1											-	-	-	-	-	-	-	-	-	-	-
Ø42,2	1 1/4														-	-	-	-	-	-	-	-
Ø42,4	1 1/4														-	-	-	-	-	-	-	-
Ø48,3	1 1/2															-	-	-	-	-	-	-
Ø60,3	2															-	-	-	-	-	-	-
Ø73,0	2 7/8																	-	-	-	-	-
Ø76,1	2 1/2																	-	-	-	-	-
Ø88,9	3																	-	-	-	-	-
Ø114,3	4	-																		-	-	-
Ø139,7	5	-																		-	-	-
Ø165,1	6	-																		-	-	-
Ø168,3	6	-																		-	-	-
Ø177,8	7	-																		-	-	-
Ø193,7	7 5/8	-	-	-																		
Ø219,1	8	-	-	-																		
Ø244,5	9	-	-	-	-																	
Ø273,0	10	-	-	-	-																	
Ø323,9	12	-	-	-	-	-	-															
Ø339,7	13 3/8	-	-	-	-	-	-															

Only External Coating
 Internal and External Coating

Length Range

6,0 - 9,0 m
 6,0 - 14,0 m

PIPES POLYETHYLENE, POLYPROPYLENE AND EPOXY COATED PIPES



PRODUCTION RANGE FOR EXTERNAL POWDER EPOXY COATED PIPES

Outside Diameter		Wall Thickness (mm)																				
(mm)	(inch)	2,6	2,9	3,2	3,6	4,0	4,4	4,5	4,8	5,0	5,2	6,0	6,3	6,5	7,1	8,0	8,8	9,0	10,0	11,0	12,5	13,0
Ø21,3	1/2				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø26,7	3/4						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø26,9	3/4						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ø33,4	1											-	-	-	-	-	-	-	-	-	-	-
Ø33,7	1											-	-	-	-	-	-	-	-	-	-	-
Ø42,2	1 1/4														-	-	-	-	-	-	-	-
Ø42,4	1 1/4														-	-	-	-	-	-	-	-
Ø48,3	1 1/2															-	-	-	-	-	-	-
Ø60,3	2															-	-	-	-	-	-	-
Ø73,0	2 7/8																	-	-	-	-	-
Ø76,1	2 1/2																	-	-	-	-	-
Ø88,9	3																	-	-	-	-	-
Ø114,3	4	-																		-	-	-
Ø139,7	5	-																		-	-	-
Ø165,1	6	-																		-	-	-
Ø168,3	6	-																		-	-	-
Ø177,8	7	-																		-	-	-
Ø193,7	7 5/8	-	-	-																		
Ø219,1	8	-	-	-																		
Ø244,5	9	-	-	-	-																	
Ø273,0	10	-	-	-	-																	
Ø323,9	12	-	-	-	-	-	-															
Ø339,7	13 3/8	-	-	-	-	-	-															

Length Range

	6,0 - 9,0 m
	6,0 - 14,0 m



PRODUCTION STANDARDS

Polyethylene Coating : DIN 30670
Polypropylene Coating : DIN 30678, ISO 21809
Epoxy Coating : AWWA C210, API RP 5L2
Polyurethane Coating : AWWA C222

Standard PE coating colors are Yellow and Black. Other colors can be applied when demanded.



QUALITY CONTROL TESTS

Surface Control After Blasting

- >Surface Quality Visual Control
- >Dust Content Test
- >Roughness Test
- >Measurement of Weather Conditions Test
- >Measurement of Salt Contaminant Test

3 Layer Polyethylene Coating Tests

- >Measurement of Coating Thickness
- >Holiday Test
- >Indentation Hardness Test
- >Percentage Elongation Test
- >Peel Strength Test
- >Impact Strength Test
- >Electrical Resistivity Test
- >Cathodic Disbonding Test
- >PE Brittleness Test
- >MFR Test
- >Vicat Test
- >Shore D Test

Epoxy Coating Tests

- >Measurement of Coating Thickness
- >Holiday Test
- >Cross-Cut Bond Strength Test
- >Curing Test
- >Pinhole Test
- >Water Test
- >Disbonding Test

Polyurethane Coating Tests

- >Measurement of Coating Thickness
- >Holiday Test
- >Conical Bending Test
- >Cross-Cut Bond Strength Test
- >Cathodic Disbonding Test

Dimensional and Visual Inspection



COATING METHODS

External Coating

3-layer Polyethylene and Polypropylene Coating
Powder Epoxy Coating

Internal Coating

Epoxy and Polyurethane Coating



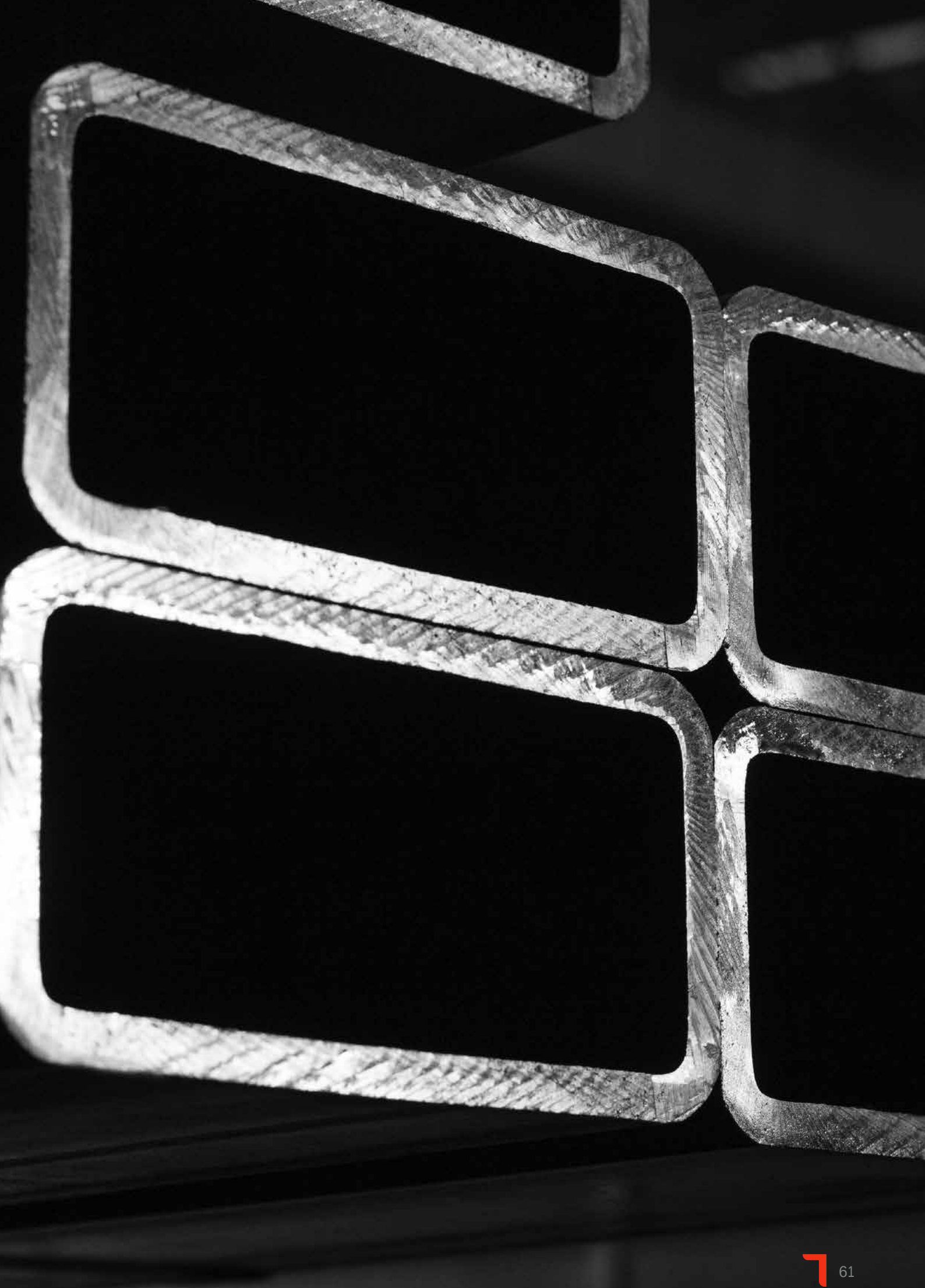
TEST CERTIFICATES

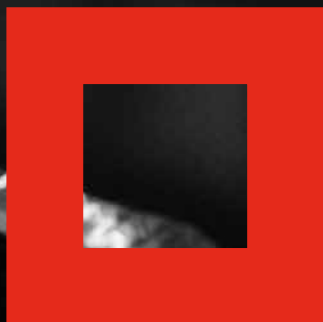
According to EN 10204,
2.1, 2.2, 3.1, 3.2 Certificates



QUALITY CERTIFICATES

- >Epoxy Coating Certificate of Conformity (AWWA C210)
- >Coating Certificate of Conformity (DIN 30670)





HOLLOW SECTIONS

Our products are made to meet all production, testing and control requirements defined by national and international standards, customer demands, industry expectations and legal requirements.

- 1 Rectangular and Square Hollow Sections
- 2 Special Shaped Hollow Sections
- 3 Heat Treated and Hot-Finished Hollow Sections
- 4 Galvanized Hollow Sections
- 5 Primer Coated Hollow Sections



RECTANGULAR AND SQUARE HOLLOW SECTIONS

It is used in sectors and applications which are construction purposes, automotive, construction, machine manufacturing, formwork, shelf systems, roof systems, furniture.

Square Hollow Section (HR)

Outside Diameter :10 x 10 - 250 x 250 mm

Wall Thickness :0,90 - 10,0 mm

Length :4,0 - 14,0 m

Rectangular Hollow Section (HR)

Outside Diameter :10 x 15 - 200 x 300 mm

Wall Thickness :0,90 - 10,0 mm

Length :4,0 - 14,0 m

Square Hollow Section (CR)

Outside Diameter :10 x 10 - 50 x 50 mm

Wall Thickness :0,50 - 3,0 mm

Length :4,0 - 8,0 m

Rectangular Hollow Section (CR)

Outside Diameter :10 x 20 - 40 x 60 mm

Wall Thickness :0,50 - 3,0 mm

Length :4,0 - 8,0 m



**PRODUCTION
RANGE**

PRODUCTION RANGE FOR SQUARE HOLLOW SECTIONS (CR)

Outside Diameter (mm)			Wall Thickness (mm)											
			0,5	0,6	0,7	0,8	0,9	1,0	1,2	1,4	1,5	2,0	2,5	3,0
			Mass Per Unit Length (kg/m)											
10	X	10	0,15	0,18	0,20	0,23	0,26	0,28	0,33	0,37	0,40	-	-	-
15	X	15	0,23	0,27	0,31	0,36	0,40	0,44	0,52	0,59	0,63	0,81	-	-
20	X	20	0,31	0,36	0,42	0,48	0,54	0,59	0,71	0,81	0,87	1,12	1,36	1,45
25	X	25	-	0,46	0,53	0,61	0,68	0,75	0,89	1,03	1,10	1,44	1,76	1,92
30	X	30	-	0,55	0,64	0,73	0,82	0,91	1,08	1,25	1,34	1,75	2,15	2,39
35	X	35	-	-	-	0,86	0,96	1,07	1,27	1,47	1,57	2,07	2,54	2,86
40	X	40	-	-	-	0,98	1,10	1,22	1,46	1,69	1,81	2,38	2,93	3,33
50	X	50	-	-	-	-	-	1,54	1,84	2,13	2,28	3,01	3,72	4,28

Length Range

4,0 - 8,0 m

PRODUCTION RANGE FOR RECTANGULAR HOLLOW SECTIONS (CR)

Outside Diameter (mm)			Wall Thickness (mm)											
			0,5	0,6	0,7	0,8	0,9	1,0	1,2	1,4	1,5	2,0	2,5	3,0
			Mass Per Unit Length (kg/m)											
20	X	10	0,23	0,27	0,31	0,36	0,40	0,44	0,52	0,59	0,63	0,81	-	-
25	X	15	0,31	0,36	0,42	0,48	0,54	0,59	0,71	0,81	0,87	1,12	1,36	1,45
30	X	10	0,31	0,36	0,42	0,48	0,54	0,59	0,71	0,81	0,87	1,12	1,36	1,45
30	X	15	-	0,41	0,48	0,54	0,61	0,67	0,80	0,92	0,99	1,28	1,56	1,69
30	X	20	-	0,46	0,53	0,61	0,68	0,75	0,89	1,03	1,10	1,44	1,76	1,92
35	X	15	-	0,46	0,53	0,61	0,68	0,75	0,89	1,03	1,10	1,44	1,76	1,92
40	X	10	-	0,46	0,53	0,61	0,68	0,75	0,89	1,03	1,10	1,44	1,76	1,92
40	X	20	-	0,55	0,64	0,73	0,82	0,91	1,08	1,25	1,34	1,75	2,15	2,39
40	X	30	-	-	-	0,86	0,96	1,07	1,27	1,47	1,57	2,07	2,54	2,86
50	X	10	-	0,55	0,64	0,73	0,82	0,91	1,08	1,25	1,34	1,75	2,15	2,39
50	X	20	-	-	-	0,86	0,96	1,07	1,27	1,47	1,57	2,07	2,54	2,86
50	X	25	-	-	-	0,92	1,03	1,14	1,37	1,58	1,69	2,22	2,74	3,10
50	X	30	-	-	-	0,98	1,10	1,22	1,46	1,69	1,81	2,38	2,93	3,33
60	X	30	-	-	-	1,11	1,24	1,38	1,65	1,91	2,05	2,69	3,33	3,80
60	X	40	-	-	-	-	-	1,54	1,84	2,13	2,28	3,01	3,72	4,28

Length Range

4,0 - 8,0 m

PRODUCTION RANGE FOR RECTANGULAR HOLLOW SECTIONS (HR)

Outside Diameter (mm)			Wall Thickness (mm)													
			0,9	1,0	1,2	1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	6,0	8,0	10,0
			Mass Per Unit Length (kg/m)													
15	X	10	0,31	0,34	0,40	0,47	-	-	-	-	-	-	-	-	-	-
20	X	10	0,38	0,42	0,49	0,59	0,74	-	-	-	-	-	-	-	-	-
20	X	15	0,45	0,50	0,59	0,71	-	-	-	-	-	-	-	-	-	-
25	X	15	0,52	0,58	0,68	0,83	1,05	-	-	-	-	-	-	-	-	-
25	X	20	0,59	0,65	0,77	0,94	1,21	-	-	-	-	-	-	-	-	-
30	X	10	0,52	0,58	0,68	0,83	1,05	-	-	-	-	-	-	-	-	-
30	X	15	0,59	0,65	0,77	0,94	1,21	-	-	-	-	-	-	-	-	-
30	X	20	0,66	0,73	0,87	1,06	1,36	1,64	1,89	-	-	-	-	-	-	-
35	X	15	0,66	0,73	0,87	1,06	1,36	-	-	-	-	-	-	-	-	-
35	X	25	0,81	0,89	1,06	1,30	1,68	2,03	2,36	-	-	-	-	-	-	-
40	X	20	0,81	0,89	1,06	1,30	1,68	2,03	2,36	-	-	-	-	-	-	-
40	X	25	0,88	0,97	1,15	1,41	1,83	2,23	-	-	-	-	-	-	-	-
40	X	30	0,95	1,05	1,24	1,53	1,99	2,42	2,83	-	-	-	-	-	-	-
50	X	20	0,95	1,05	1,24	1,53	1,99	2,42	2,83	-	-	-	-	-	-	-
50	X	25	-	1,13	1,34	1,65	2,15	2,62	3,07	-	-	-	-	-	-	-
50	X	30	-	1,20	1,43	1,77	2,31	2,82	3,30	3,76	4,20	-	-	-	-	-
50	X	40	-	-	1,62	2,00	2,62	3,21	3,77	-	-	-	-	-	-	-
60	X	20	-	-	1,43	1,77	2,31	2,82	3,30	-	-	-	-	-	-	-
60	X	30	-	-	1,62	2,00	2,62	3,21	3,77	-	-	-	-	-	-	-
60	X	40	-	1,52	1,81	2,24	2,93	3,60	4,25	-	-	-	-	-	-	-
70	X	30	-	-	1,81	2,24	2,93	3,60	4,25	-	-	-	-	-	-	-
70	X	50	-	-	-	2,71	3,56	4,39	5,19	5,96	6,71	7,43	8,13	-	-	-
75	X	50	-	-	-	2,83	3,72	4,58	5,42	6,24	7,02	7,79	8,52	-	-	-
80	X	40	-	1,83	2,19	2,71	3,56	4,39	5,19	5,96	6,71	7,43	8,13	-	-	-
80	X	50	-	-	-	2,95	3,88	4,78	5,66	6,51	7,34	8,14	8,91	-	-	-
80	X	60	-	-	-	3,18	4,19	5,17	6,13	7,06	7,97	8,85	9,70	11,33	-	-
90	X	40	-	-	-	2,95	3,88	4,78	5,66	6,51	7,34	8,14	8,91	-	-	-
90	X	50	-	-	-	3,18	4,19	5,17	6,13	7,06	7,97	8,85	9,70	11,33	-	-
90	X	60	-	-	-	3,42	4,50	5,56	6,60	7,61	8,59	9,55	10,48	12,27	-	-
90	X	70	-	-	-	3,65	4,82	5,96	7,07	8,16	9,22	10,26	11,27	13,21	-	-
100	X	40	-	-	-	3,18	4,19	5,17	6,13	7,06	7,97	8,85	9,70	11,33	-	-
100	X	50	-	-	-	3,42	4,50	5,56	6,60	7,61	8,59	9,55	10,48	12,27	-	-
100	X	60	-	-	-	-	4,82	5,96	7,07	8,16	9,22	10,26	11,27	13,21	-	-
100	X	80	-	-	-	-	5,45	6,74	8,01	9,26	10,48	11,67	12,84	15,10	-	-
120	X	40	-	-	-	-	4,82	5,96	7,07	8,16	9,22	10,26	11,27	13,21	-	-
120	X	60	-	-	-	-	5,45	6,74	8,01	9,26	10,48	11,67	12,84	15,10	-	-
120	X	80	-	-	-	-	6,07	7,53	8,96	10,36	11,73	13,08	14,41	16,98	21,39	-
120	X	100	-	-	-	-	-	8,31	9,90	11,46	12,99	14,50	15,98	18,87	-	-
140	X	60	-	-	-	-	6,07	7,53	8,96	10,36	11,73	13,08	14,41	16,98	-	-
140	X	80	-	-	-	-	-	8,31	9,90	11,46	12,99	14,50	15,98	18,87	-	-
140	X	100	-	-	-	-	-	9,10	10,84	12,56	14,25	15,91	17,55	20,75	-	-
150	X	50	-	-	-	-	6,07	7,53	8,96	10,36	11,73	13,08	14,41	16,98	-	-
150	X	70	-	-	-	-	6,70	8,31	9,90	11,46	12,99	14,50	15,98	18,87	-	-
150	X	100	-	-	-	-	-	9,49	11,31	13,11	14,87	16,62	18,33	21,69	27,67	33,41
160	X	40	-	-	-	-	6,07	7,53	8,96	10,36	11,73	13,08	14,41	16,98	-	-
160	X	80	-	-	-	-	-	9,10	10,84	12,56	14,25	15,91	17,55	20,75	26,41	31,84
160	X	140	-	-	-	-	-	-	13,67	15,85	18,01	20,15	22,26	26,40	33,95	41,26
180	X	100	-	-	-	-	-	-	12,72	14,75	16,76	18,74	20,69	24,52	31,43	38,12
180	X	140	-	-	-	-	-	-	14,61	16,95	19,27	21,56	23,83	28,29	36,46	44,40
200	X	100	-	-	-	-	-	-	13,67	15,85	18,01	20,15	22,26	26,40	33,95	41,26
200	X	120	-	-	-	-	-	-	-	-	19,27	21,56	23,83	28,29	36,46	-
200	X	150	-	-	-	-	-	-	-	18,60	21,15	23,68	26,18	31,11	40,23	49,11
200	X	160	-	-	-	-	-	-	-	19,15	21,78	24,39	26,97	32,05	41,48	50,68
250	X	100	-	-	-	-	-	-	-	-	21,15	23,68	26,18	31,11	40,23	-
250	X	150	-	-	-	-	-	-	-	21,35	24,29	27,21	30,11	35,82	46,51	56,96
300	X	200	-	-	-	-	-	-	-	26,84	30,57	34,28	37,96	45,24	59,07	72,66

Length Range

4,0 - 7,5 m	4,0 - 9,0 m	4,0 - 12,2 m	5,0 - 13,0 m
4,0 - 8,0 m	4,0 - 10,0 m	4,0 - 13,0 m	5,0 - 14,0 m
4,0 - 8,5 m	4,0 - 12,0 m	4,0 - 14,0 m	

PRODUCTION RANGE FOR SQUARE HOLLOW SECTIONS (HR)

Outside Diameter (mm)			Wall Thickness (mm)													
			0,9	1,0	1,2	1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	6,0	8,0	10,0
			Mass Per Unit Length (kg/m)													
10	X	10	0,24	0,26	0,30	0,35	-	-	-	-	-	-	-	-	-	-
15	X	15	0,38	0,42	0,49	0,59	0,74	-	-	-	-	-	-	-	-	-
20	X	20	0,52	0,58	0,68	0,83	1,05	1,25	1,42	-	-	-	-	-	-	-
25	X	25	0,66	0,73	0,87	1,06	1,36	1,64	1,89	-	-	-	-	-	-	-
30	X	30	0,81	0,89	1,06	1,30	1,68	2,03	2,36	-	-	-	-	-	-	-
35	X	35	0,95	1,05	1,24	1,53	1,99	2,42	2,83	-	-	-	-	-	-	-
38	X	38	-	1,14	1,36	1,67	2,18	2,66	3,12	-	-	-	-	-	-	-
40	X	40	-	1,20	1,43	1,77	2,31	2,82	3,30	3,76	4,20	-	-	-	-	-
45	X	45	-	-	1,62	2,00	2,62	3,21	3,77	-	-	-	-	-	-	-
50	X	50	-	1,52	1,81	2,24	2,93	3,60	4,25	4,86	5,45	6,02	6,56	-	-	-
60	X	60	-	1,83	2,19	2,71	3,56	4,39	5,19	5,96	6,71	7,43	8,13	9,45	-	-
70	X	70	-	-	-	3,18	4,19	5,17	6,13	7,06	7,97	8,85	9,70	11,33	-	-
75	X	75	-	-	-	3,42	4,50	5,56	6,60	7,61	8,59	9,55	10,48	12,27	-	-
80	X	80	-	-	-	-	4,82	5,96	7,07	8,16	9,22	10,26	11,27	13,21	16,36	-
90	X	90	-	-	-	-	5,45	6,74	8,01	9,26	10,48	11,67	12,84	15,10	18,87	22,42
100	X	100	-	-	-	4,59	6,07	7,53	8,96	10,36	11,73	13,08	14,41	16,98	21,39	25,56
120	X	120	-	-	-	-	-	9,10	10,84	12,56	14,25	15,91	17,55	20,75	26,41	31,84
125	X	125	-	-	-	-	-	9,49	11,31	13,11	14,87	16,62	18,33	21,69	-	-
140	X	140	-	-	-	-	-	-	12,72	14,75	16,76	18,74	20,69	24,52	31,43	38,12
150	X	150	-	-	-	-	-	-	13,67	15,85	18,01	20,15	22,26	26,40	33,95	41,26
160	X	160	-	-	-	-	-	-	14,61	16,95	19,27	21,56	23,83	28,29	36,46	44,40
180	X	180	-	-	-	-	-	-	16,49	19,15	21,78	24,39	26,97	32,05	41,48	50,68
200	X	200	-	-	-	-	-	-	-	-	24,29	27,21	30,11	35,82	46,51	56,96
250	x	250	-	-	-	-	-	-	-	-	-	-	37,96	45,24	59,07	72,66

Length Range

4,0 - 7,5 m	4,0 - 12,0 m
4,0 - 8,0 m	4,0 - 12,2 m
4,0 - 8,5 m	4,0 - 13,0 m
4,0 - 9,0 m	4,0 - 14,0 m
4,0 - 10,0 m	5,0 - 14,0 m



PRODUCTION STANDARDS AND STEEL GRADES

Production Standard

EN 10219 (TS EN 10219) (CE) : S235JRH, S275J0H, S275J2H, S355J0H, S355J2H, S355K2H, S275NH, S275NLH, S275MH, S275MLH, S355NH, S355NLH, S355MH, S355MLH, S420MH, S420MLH

SI 1458-1

: S235JRH, S275J0H, S275J2H, S355J0H, S355J2H, S355K2H, S275NH, S275NLH, S275MH, S275MLH, S355NH, S355NLH, S355MH, S355MLH, S420MH, S420MLH

ASTM A500

: Grade A, Grade B, Grade C, Grade D

EN 10305-5 (TS EN 10305-5)

: E155, E190, E195, E220, E235, E260, E275, E320, E355, E370, E420

AS/NZS 1163

: C250, C350, C450, C250L0, C350L0



QUALITY CONTROL TESTS

Mechanical Tests

- >Tensile Test
- >Charpy V Notch Impact Test
- >Flattening Test
- >Expanding Test

Chemical Analysis

- >Spectral Analysis

Dimensional and Visual Inspection



FINISHING OPERATIONS

- >Plain End (Square Cut)



HEAT TREATMENT

On demand

- >Heat Treatment of Weld Seam (Stress Relieving and Normalization)
- >Heat Treatment of Full Body (Stress Relieving and Normalization)



SURFACE PROTECTION

- >Uncoated

On demand

- >Protective Oil
- >Galvanized
- >Primer Coated



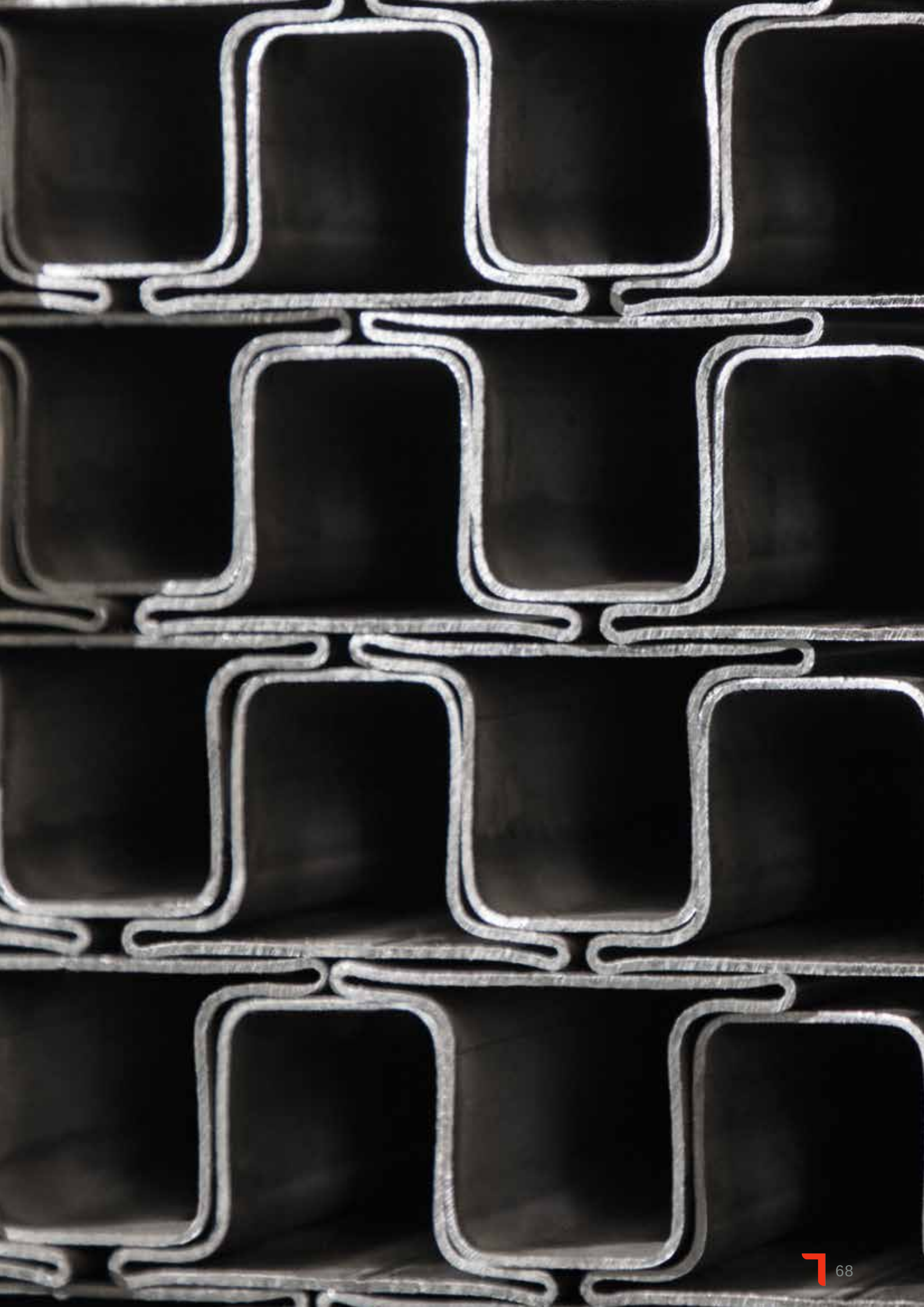
TEST CERTIFICATES

According to EN 10204,
2.1, 2.2, 3.1, 3.2 certificates



QUALITY CERTIFICATES

- >CE Certificate (EN 10219)
- >TSE Certificate of Conformity (TS EN 10219)
- >Standards Institute of Israel Certificates of Conformity (SI 1458-1)
- >GOST-R Galvanized Steel Pipe and Hollow Sections Certificates of Conformity
- >GOST-R Galvanized Steel Hollow Sections Certificates of Conformity





SPECIAL SHAPED HOLLOW SECTIONS

It is used as a special construction element in all constructions.



PRODUCTION RANGE

Oval Profile

Outside Diameter :30x15 - 50x32 mm

Wall Thickness :0,50 - 3,00 mm

Length :4,0 - 8,5 m

Elliptical Profile

Outside Diameter :40x20 mm

Wall Thickness :0,60 - 3,00 mm

Length :4,0 - 8,0 m

D-Profile

Outside Diameter :40x30 mm

Wall Thickness :0,80 - 3,00 mm

Length :4,0 - 8,0 m

L/T/Z

Outside Diameter :28 ve 33 mm

Wall Thickness :1,20 - 3,00 mm

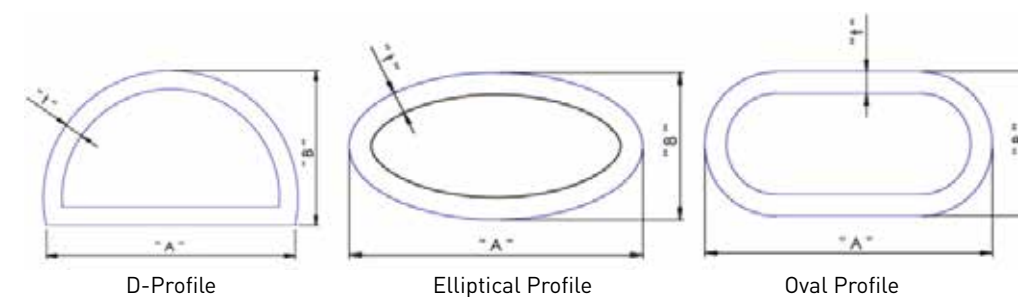
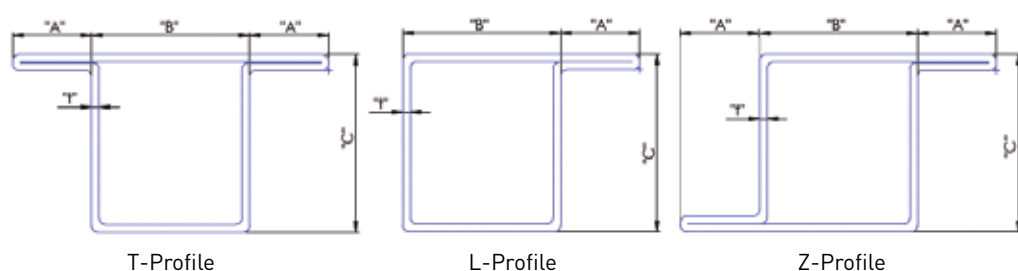
Length :4,0 - 8,5 m

PRODUCTION RANGE FOR SPECIAL SHAPED HOLLOW SECTIONS

Type	Outside Diameter (mm) A X B X C	Wall Thickness (mm)											
		0,5	0,6	0,7	0,8	0,9	1,0	1,2	1,4	1,5	2,0	2,5	3,0
		Mass Per Unit Length (kg/m)											
Oval Profile	30 x 15	0,31	0,38	0,43	0,50	0,55	0,61	0,73	0,84	0,89	1,18	1,45	1,72
Oval Profile	40 x 16	-	0,48	0,55	0,64	0,72	0,80	0,95	1,11	1,19	1,55	1,88	2,21
Oval Profile	40 x 20	-	0,51	0,59	0,68	0,76	0,84	1,00	1,16	1,24	1,63	1,98	2,33
Oval Profile	50 x 25	-	-	-	0,82	0,91	1,01	1,22	1,41	1,51	1,99	2,47	2,94
Oval Profile	50 x 32	-	-	-	0,87	0,97	1,08	1,29	1,49	1,60	2,12	2,63	3,13
Elliptical Profile	40 x 20	-	0,47	0,55	0,62	0,70	0,78	0,92	1,07	1,14	1,51	1,86	2,21
D-Profile	40 x 30	-	-	-	0,80	0,90	0,99	1,19	1,38	1,47	1,95	2,41	2,87
28 L-Profile	12.5 x 25 x 28	-	-	-	-	-	-	1,24	1,41	1,53	2,03	2,46	3,01
28 T-Profile	12.5 x 25 x 28	-	-	-	-	-	-	1,45	1,71	1,80	2,39	2,99	3,56
28 Z-Profile	12.5 x 25 x 28	-	-	-	-	-	-	1,45	1,71	1,80	2,39	2,99	3,56
33 L-Profile	15 x 30 x 33	-	-	-	-	-	-	1,45	1,71	1,80	2,39	2,99	3,56
33 T-Profile	15 x 30 x 33	-	-	-	-	-	-	1,74	2,03	2,16	2,86	3,56	4,26
33 Z-Profile	15 x 30 x 33	-	-	-	-	-	-	1,74	2,03	2,16	2,86	3,56	4,26

Length Range

	4,0 - 8,0 m
	4,0 - 8,5 m





PRODUCTION STANDARDS AND STEEL GRADES

Production Standard

EN 10219 (TS EN 10219) (CE) : S235JRH, S275J0H, S275J2H, S355J0H, S355J2H, S355K2H, S275NH, S275NLH, S275MH, S275MLH, S355NH, S355NLH, S355MH, S355MLH, S420MH, S420MLH

EN 10305-5 (TS EN 10305-5) : E155, E190, E195, E220, E235, E260, E275, E320, E355, E370, E420

Steel Grade



QUALITY CONTROL TESTS

Mechanical Tests

- >Tensile Test
- >Charpy V Notch Impact Test
- >Flattening Test
- >Expanding Test

Chemical Analysis

- >Spectral Analysis

Dimensional and Visual Inspection



FINISHING OPERATIONS

- >Plain End (Square Cut)



HEAT TREATMENT

On demand

- >Full Body Heat Treatment (Stress Relieving or Normalization)



SURFACE PROTECTION

- >Uncoated

On demand

- >Protective oil



TEST CERTIFICATES

According to EN 10204,
2.1, 2.2, 3.1, 3.2 certificates



QUALITY CERTIFICATES

- >CE Certificate (EN 10219)
- >TSE Certificate of Conformity (TS EN 10219)



**HOLLOW
SECTIONS**

HEAT TREATED AND HOT-FINISHED HOLLOW SECTIONS

It is used in all constructions with its mechanical properties and improved grain structure by cold forming and heat treatment.



**PRODUCTION
RANGE**

Full Body Heat Treatment

Square Hollow Section

Outside Diameter :40x40 - 250x250 mm

Wall Thickness :2,00 - 10,0 mm

Length :4,0 - 14,0 m

Rectangular Hollow Section

Outside Diameter :30x40 - 200x300 mm

Wall Thickness :2,00 - 10,0 mm

Length :4,0 - 14,0 m

Weld Seam + HAZ (Heat Affected Zone) Heat Treatment

Square Hollow Section

Outside Diameter :70x70 - 250x250 mm

Wall Thickness :2,5 - 10,0 mm

Length :4,0 - 14,0 m

Rectangular Hollow Section

Outside Diameter :60x80 - 200x300 mm

Wall Thickness :2,5 - 10,0 mm

Length :4,0 - 14,0 m

PRODUCTION RANGE FOR FULL BODY HEAT-TREATED AND HOT-FINISHED SQUARE HOLLOW SECTIONS

Outside Diameter (mm)			Wall Thickness (mm)									
			2,0	2,5	3,0	3,5	4,0	4,5	5,0	6,0	8,0	10,0
			Mass Per Unit Length (kg/m)									
40	x	40	2,35	2,89	3,41	3,91	4,39	-	-	-	-	-
45	x	45	2,67	3,28	3,88	-	-	-	-	-	-	-
50	x	50	2,98	3,68	4,35	5,01	5,64	6,26	6,85	-	-	-
60	x	60	3,61	4,46	5,29	6,11	6,90	7,67	8,42	9,87	-	-
70	x	70	4,24	5,25	6,24	7,21	8,15	9,08	9,99	11,75	-	-
75	x	75	4,55	5,64	6,71	7,75	8,78	9,79	10,78	12,70	-	-
80	x	80	4,86	6,03	7,18	8,30	9,41	10,50	11,56	13,64	17,55	-
90	x	90	5,49	6,82	8,12	9,40	10,67	11,91	13,13	15,52	20,06	24,28
100	x	100	6,12	7,60	9,06	10,50	11,92	13,32	14,70	17,41	22,57	27,42
120	x	120	-	9,17	10,95	12,70	14,43	16,15	17,84	21,17	27,60	33,70
125	x	125	-	9,56	11,42	13,25	15,06	16,86	18,63	22,12	-	-
140	x	140	-	-	12,83	14,90	16,95	18,98	20,98	24,94	32,62	39,98
150	x	150	-	-	13,77	16,00	18,20	20,39	22,55	26,83	35,13	43,12
160	x	160	-	-	-	-	19,46	21,80	24,12	28,71	37,64	46,26
180	x	180	-	-	-	-	21,97	24,63	27,26	32,48	42,67	52,54
200	x	200	-	-	-	-	24,48	27,45	30,40	36,25	47,69	58,82
250	x	250	-	-	-	-	-	-	38,25	45,67	60,25	74,52

Length Range

	4,0 - 9,0 m
	4,0 - 10,0 m
	4,0 - 12,2 m
	4,5 - 13,0 m
	4,5 - 14,0 m
	5,0 - 14,0 m

PRODUCTION RANGE FOR FULL BODY HEAT-TREATED AND HOT-FINISHED RECTANGULAR HOLLOW SECTIONS

Outside Diameter (mm)			Wall Thickness (mm)									
			2,0	2,5	3,0	3,5	4,0	4,5	5,0	6,0	8,0	10,0
			Mass Per Unit Length (kg/m)									
40	x	30	2,04	2,50	2,94	-	-	-	-	-	-	-
50	x	20	2,04	2,50	2,94	-	-	-	-	-	-	-
50	x	25	2,20	2,69	3,17	-	-	-	-	-	-	-
50	x	30	2,35	2,89	3,41	3,91	4,39	-	-	-	-	-
50	x	40	2,67	3,28	3,88	-	-	-	-	-	-	-
60	x	20	2,35	2,89	3,41	-	-	-	-	-	-	-
60	x	30	2,67	3,28	3,88	-	-	-	-	-	-	-
60	x	40	2,98	3,68	4,35	-	-	-	-	-	-	-
70	x	30	2,98	3,68	4,35	-	-	-	-	-	-	-
70	x	50	3,61	4,46	5,29	6,11	6,90	7,67	8,42	-	-	-
75	x	50	3,77	4,66	5,53	6,38	7,21	8,02	8,82	-	-	-
80	x	40	3,61	4,46	5,29	6,11	6,90	7,67	8,42	-	-	-
80	x	50	3,92	4,85	5,76	6,66	7,53	8,38	9,21	-	-	-
80	x	60	4,24	5,25	6,24	7,21	8,15	9,08	9,99	11,75	-	-
90	x	40	3,92	4,85	5,76	6,66	7,53	8,38	9,21	-	-	-
90	x	50	4,24	5,25	6,24	7,21	8,15	9,08	9,99	11,75	-	-
90	x	60	4,55	5,64	6,71	7,75	8,78	9,79	10,78	12,70	-	-
90	x	70	4,86	6,03	7,18	8,30	9,41	10,50	11,56	13,64	-	-
100	x	40	4,24	5,25	6,24	7,21	8,15	9,08	9,99	11,75	-	-
100	x	50	4,55	5,64	6,71	7,75	8,78	9,79	10,78	12,70	-	-
100	x	60	4,86	6,03	7,18	8,30	9,41	10,50	11,56	13,64	-	-
100	x	80	5,49	6,82	8,12	9,40	10,67	11,91	13,13	15,52	-	-
120	x	40	4,86	6,03	7,18	8,30	9,41	10,50	11,56	13,64	-	-
120	x	60	5,49	6,82	8,12	9,40	10,67	11,91	13,13	15,52	-	-
120	x	80	6,12	7,60	9,06	10,50	11,92	13,32	14,70	17,41	22,57	-
120	x	100	-	8,39	10,00	11,60	13,18	14,74	16,27	19,29	-	-
140	x	60	6,12	7,60	9,06	10,50	11,92	13,32	14,70	17,41	-	-
140	x	80	-	8,39	10,00	11,60	13,18	14,74	16,27	19,29	-	-
140	x	100	-	9,17	10,95	12,70	14,43	16,15	17,84	21,17	-	-
150	x	50	6,12	7,60	9,06	10,50	11,92	13,32	14,70	17,41	-	-
150	x	70	6,75	8,39	10,00	11,60	13,18	14,74	16,27	19,29	-	-
150	x	100	-	9,56	11,42	13,25	15,06	16,86	18,63	22,12	28,85	35,27
160	x	40	6,12	7,60	9,06	10,50	11,92	13,32	14,70	17,41	-	-
160	x	80	-	9,17	10,95	12,70	14,43	16,15	17,84	21,17	27,60	33,70
160	x	140	-	-	13,77	16,00	18,20	20,39	22,55	26,83	35,13	43,12
180	x	100	-	-	12,83	14,90	16,95	18,98	20,98	24,94	32,62	39,98
180	x	140	-	-	14,71	17,10	19,46	21,80	24,12	28,71	37,64	46,26
200	x	100	-	-	13,77	16,00	18,20	20,39	22,55	26,83	35,13	43,12
200	x	120	-	-	-	-	19,46	21,80	24,12	28,71	37,64	-
200	x	150	-	-	-	18,74	21,34	23,92	26,48	31,54	41,41	50,97
200	x	160	-	-	-	19,29	21,97	24,63	27,26	32,48	42,67	52,54
250	x	100	-	-	-	-	21,34	23,92	26,48	31,54	41,41	-
250	x	150	-	-	-	21,49	24,48	27,45	30,40	36,25	47,69	58,82
300	x	200	-	-	-	26,99	30,76	34,52	38,25	45,67	60,25	74,52

Length Range

4,0 - 7,5 m	4,0 - 12,0 m	4,0 - 14,0 m
4,0 - 8,5 m	4,0 - 12,2 m	5,0 - 13,0 m
4,0 - 9,0 m	4,0 - 13,0 m	5,0 - 14,0 m
4,0 - 10,0 m		

PRODUCTION RANGE FOR WELD SEAM AND HAZ HEAT-TREATED SQUARE HOLLOW SECTIONS

Outside Diameter (mm)			Wall Thickness (mm)								
			2,5	3,0	3,5	4,0	4,5	5,0	6,0	8,0	10,0
			Mass Per Unit Length (kg/m)								
70	x	70	5,17	6,13	7,06	7,97	8,85	9,70	11,33	-	-
80	x	80	5,96	7,07	8,16	9,22	10,26	11,30	13,20	16,40	-
90	x	90	6,74	8,01	9,26	10,50	11,67	12,80	15,10	18,90	22,42
100	x	100	-	8,96	10,36	11,70	13,08	14,40	17,00	21,40	25,60
120	x	120	-	10,80	12,56	14,20	15,91	17,50	20,70	26,40	31,80
140	x	140	-	12,72	14,75	16,80	18,74	20,70	24,50	31,40	38,10
150	x	150	-	13,67	15,85	18,00	20,15	22,30	26,40	33,90	41,30
160	x	160	-	-	-	19,30	21,56	23,80	28,30	36,50	44,40
180	x	180	-	-	-	21,80	24,39	27,00	32,10	41,50	50,70
200	x	200	-	-	-	24,30	27,21	30,10	35,80	46,50	57,00
250	x	250	-	-	-	-	-	38,00	45,20	59,10	72,70

Length Range

	4,0 - 14,0 m
	5,0 - 14,0 m

PRODUCTION RANGE FOR WELD SEAM AND HAZ HEAT-TREATED RECTANGULAR HOLLOW SECTIONS

Outside Diameter (mm)			Wall Thickness (mm)								
			2,5	3,0	3,5	4,0	4,5	5,0	6,0	8,0	10,0
			Mass Per Unit Length (kg/m)								
80	x	60	5,17	6,13	7,06	7,97	8,85	9,70	11,33	-	-
100	x	40	5,17	6,13	7,06	7,97	-	-	-	-	-
100	x	50	5,56	6,60	7,61	8,59	9,55	10,50	-	-	-
100	x	60	5,96	7,07	8,16	9,22	10,26	11,30	13,21	-	-
120	x	60	6,74	8,01	9,26	10,50	11,67	12,80	15,10	-	-
120	x	80	-	8,96	10,36	11,70	13,08	14,40	17,00	21,40	-
150	x	100	-	11,31	13,11	14,90	16,62	18,30	21,70	27,70	33,40
160	x	80	-	10,84	12,56	14,20	15,91	17,50	20,70	26,40	31,80
160	x	140	-	13,67	15,85	18,01	20,15	22,26	26,40	34,38	41,26
180	x	100	-	12,72	14,75	16,80	18,74	20,70	24,50	31,40	38,10
180	x	140	-	14,61	16,95	19,27	21,56	23,83	28,29	36,46	44,40
200	x	100	-	13,67	15,85	18,00	20,15	22,30	26,40	33,90	41,30
200	x	120	-	-	-	19,30	21,56	23,80	28,30	36,50	44,40
200	x	150	-	-	18,60	21,15	23,68	26,18	31,11	40,66	49,11
200	x	160	-	-	19,15	21,78	24,39	26,97	32,05	41,91	50,68
250	x	100	-	-	-	21,15	23,68	26,18	31,11	40,23	49,11
250	x	150	-	-	21,35	24,29	27,21	30,10	35,80	46,50	57,00
300	x	200	-	-	26,84	30,57	34,28	37,96	45,20	59,10	72,70

Length Range

	4,0 - 14,0 m
	5,0 - 14,0 m
	5,0 - 13,0 m



HEAT TREATMENT TYPES

- >Stress Relieving
- >Normalization



HEAT TREATMENT LOCATION OF PRODUCT

- >Weld Seam + Heat Affected Zone (HAZ)
- >Full Body



PRODUCTION STANDARDS AND STEEL GRADES

Production Standard

EN 10210 (TS EN 10210) (CE) : S235JRH, S275J0H, S275J2H, S355J0H, S355J2H, S355K2H, S275NH, S275NLH, S355NH, S355NLH, S420NH, S420NLH

Steel Grade

Note: In order to improve the mechanical properties of the product, heat treatment can also be applied to the other products when demanded.



QUALITY CONTROL TESTS AFTER HEAT TREATMENT

Mechanical Tests

- >Tensile Test
- >Charpy V Notch Impact Test
- >Bending Test

Metallographic Examination

- >Macro Examination
- >Micro Examination
- >Micro Hardness Analysis
- >Grain Size Control

Dimensional and Visual Inspection



TEST CERTIFICATES

According to EN 10204,
2.1, 2.2, 3.1, 3.2 certificates



GALVANIZED HOLLOW SECTIONS

It is used in many application areas to ensure protection against corrosion and to extend its lifetime.

Hot-dip Galvanizing

Outside Diameter :20 x 20 - 100 x 100 mm

Wall Thickness :2,0 - 7,11 mm

Length :5,0 - 8,0 m

Pre-Galvanizing

Square Hollow Section

Outside Diameter :20 x 20 - 125 x 125 mm

Wall Thickness :1,0 - 3,0 mm

Length :4,0 - 13,0 m

Rectangular Hollow Section

Outside Diameter :20 x 30 - 80 x 160 mm

Wall Thickness :1,0 - 3,0 mm

Length :4,0 - 13,0 m



**PRODUCTION
RANGE**

PRODUCTION RANGE FOR PRE-GALVANIZED RECTANGULAR HOLLOW SECTIONS

Outside Diameter (mm)			Wall Thickness (mm)					
			1,00	1,20	1,50	2,00	2,50	3,00
30	x	20					-	-
35	x	15					-	-
35	x	25					-	-
40	x	20					-	-
40	x	30						
50	x	20						
50	x	30	-				-	-
60	x	40	-	-	-			
75	x	50	-	-	-			
80	x	40	-	-	-			
80	x	50	-	-	-			
80	x	60	-	-	-			
90	x	40	-	-	-			
90	x	50	-	-	-			
90	x	60	-	-	-			
90	x	70	-	-	-			
100	x	40	-	-	-			
100	x	50	-	-	-			
100	x	60	-	-	-			
100	x	80	-	-	-			
120	x	40	-	-	-			
120	x	60	-	-	-			
120	x	80	-	-	-			
120	x	100	-	-	-	-		
140	x	60	-	-	-			
140	x	80	-	-	-	-		
140	x	100	-	-	-	-		
150	x	50	-	-	-			
150	x	70	-	-	-	-		
150	x	100	-	-	-	-		
160	x	40	-	-	-			
160	x	80	-	-	-	-		

Length Range

	4,0 - 8,5 m
	4,0 - 7,5 m
	4,0 - 13,0 m

PRODUCTION RANGE FOR PRE-GALVANIZED SQUARE HOLLOW SECTIONS

Outside Diameter (mm)			Wall Thickness (mm)					
			1,00	1,20	1,50	2,00	2,50	3,00
20	x	20					-	-
25	x	25					-	-
30	x	30					-	-
35	x	35						
40	x	40	-				-	
50	x	50	-	-	-			
60	x	60	-	-	-			
70	x	70	-	-	-			
75	x	75	-	-	-			
80	x	80	-	-	-			
90	x	90	-	-	-			
100	x	100	-	-	-			
120	x	120	-	-	-	-		
125	x	125	-	-	-	-		

Length Range

	4,0 - 8,5 m
	4,0 - 7,5 m
	4,0 - 13,0 m

PRODUCTION RANGE FOR HOT-DIP GALVANIZED HOLLOW SECTIONS

Outside Diameter (mm)			Wall Thickness (mm)													
			2,00	2,20	2,50	2,60	3,00	3,20	3,50	4,00	4,50	5,00	5,50	6,00	6,35	7,11
20	x	20									-	-	-	-	-	-
25	x	25									-	-	-	-	-	-
30	x	30										-	-	-	-	-
40	x	40										-	-	-	-	-
50	x	50	-										-	-	-	-
60	x	60	-	-									-	-	-	-
70	x	70	-	-	-										-	-
80	x	80	-	-	-	-										-
90	x	90	-	-	-	-										
100	x	100	-	-	-	-	-									

Length Range

	5,0 - 7,0 m
	5,0 - 8,0 m



HOLLOW SECTIONS GALVANIZED HOLLOW SECTIONS





GALVANIZING METHOD

- >Automatic Hot-dip Galvanizing
- >Pre-Galvanizing



HOT-DIP GALVANIZING STANDARDS

EN 10240 (TS 11348 EN 10240)
ASTM A123M
ASTM A53
SI 103
SI 4314
ASTM A795
TS EN ISO 1461



PRE-GALVANIZED SHEET GRADES

Galvanized Sheet Standard	Steel Grade
ASTM A653	CS TYPE B
EN 10346	DX51D+Z
EN 10346	DX52D+Z
EN 10346	DX53D+Z
EN 10346	DX54D+Z
EN 10346	DX56D+Z
EN 10346	HCT590X
EN 10346	HX260LAD+Z
EN 10346	HX300LAD+Z
EN 10346	HX340LAD+Z
EN 10346	HX380LAD+Z
EN 10346	HX420LAD+Z
EN 10346	S220GD+Z
EN 10346	S250GD+Z
EN 10346	S280GD+Z
EN 10346	S320GD+Z
EN 10346	S350GD+Z
EN 10346	S420GD+Z

Galvanized steel sheet coating thickness 40-350 gr/m²



QUALITY CONTROL TESTS

- Chemical Analysis for Zinc**
>Spectral Analysis
- Coating Thickness Testing**
>Stripping Test
>Coating Thickness Measurement Device
>Copper Sulphate Test
- Coating Adherence Control**
>Crushing Test
>Bending Test
- Dimensional and Visual Inspection**



TEST CERTIFICATES

According to EN 10204,
2.1, 2.2, 3.1, 3.2 certificates



QUALITY CERTIFICATES

- >GOST-R Galvanized Steel Pipes Certificate of Conformity



PRIMER COATED HOLLOW SECTIONS

It is used in all constructions aimed to increase corrosion resistance and provide protection to the product.



**PRODUCTION
RANGE**

Square Hollow Sections

Outside Diameter :10 x10 - 250 x 250 mm

Wall Thickness :0,70 - 10,0 mm

Length :4,0 - 14,0 m

Rectangular Hollow Sections

Outside Diameter :10 x15 - 200 x 300 mm

Wall Thickness :0,70 - 10,0 mm

Length :4,0 - 14,0 m

PRODUCTION RANGE FOR PRIMER COATED SQUARE HOLLOW SECTIONS

Outside Diameter (mm)			Wall Thickness (mm)															
			0,7	0,8	0,9	1,0	1,2	1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	6,0	8,0	10,0
10	X	10							-	-	-	-	-	-	-	-	-	-
15	X	15								-	-	-	-	-	-	-	-	-
20	X	20										-	-	-	-	-	-	-
25	X	25										-	-	-	-	-	-	-
30	X	30	-									-	-	-	-	-	-	-
35	X	35	-	-								-	-	-	-	-	-	-
38	X	38	-	-	-							-	-	-	-	-	-	-
40	X	40	-	-	-									-	-	-	-	-
45	X	45	-	-	-	-						-	-	-	-	-	-	-
50	X	50	-	-	-												-	-
60	X	60	-	-	-													-
70	X	70	-	-	-	-	-											-
75	X	75	-	-	-	-	-											-
80	X	80	-	-	-	-	-	-										-
90	X	90	-	-	-	-	-	-										-
100	X	100	-	-	-	-	-	-										-
120	X	120	-	-	-	-	-	-	-									-
125	X	125	-	-	-	-	-	-	-									-
140	X	140	-	-	-	-	-	-	-	-								-
150	X	150	-	-	-	-	-	-	-	-	-							-
160	X	160	-	-	-	-	-	-	-	-	-	-						-
180	X	180	-	-	-	-	-	-	-	-	-	-	-					-
200	X	200	-	-	-	-	-	-	-	-	-	-	-	-				-
250	X	250	-	-	-	-	-	-	-	-	-	-	-	-	-			-

Length Range

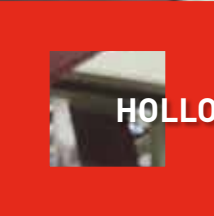
	4,0 - 7,5 m		4,0 - 12,0 m
	4,0 - 8,0 m		4,0 - 12,2 m
	4,0 - 8,5 m		4,0 - 13,0 m
	4,0 - 9,0 m		4,0 - 14,0 m
	4,0 - 10,0 m		5,0 - 14,0 m

PRODUCTION RANGE FOR PRIMER COATED RECTANGULAR HOLLOW SECTIONS

Outside Diameter (mm)			Wall Thickness (mm)															
			0,7	0,8	0,9	1,0	1,2	1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	6,0	8,0	10,0
15	X	10							-	-	-	-	-	-	-	-	-	-
20	X	10								-	-	-	-	-	-	-	-	-
20	X	15							-	-	-	-	-	-	-	-	-	-
25	X	15								-	-	-	-	-	-	-	-	-
25	X	20								-	-	-	-	-	-	-	-	-
30	X	10								-	-	-	-	-	-	-	-	-
30	X	15								-	-	-	-	-	-	-	-	-
30	X	20																
35	X	15								-	-	-	-	-	-	-	-	-
35	X	25	-															
40	X	20	-															
40	X	25	-	-							-	-	-	-	-	-	-	-
40	X	30	-	-								-	-	-	-	-	-	-
50	X	20	-	-								-	-	-	-	-	-	-
50	X	25	-	-	-							-	-	-	-	-	-	-
50	X	30	-	-	-													
50	X	40	-	-	-	-						-	-	-	-	-	-	-
60	X	20	-	-	-	-						-	-	-	-	-	-	-
60	X	30	-	-	-	-						-	-	-	-	-	-	-
60	X	40	-	-	-							-	-	-	-	-	-	-
70	X	30	-	-	-	-						-	-	-	-	-	-	-
70	X	50	-	-	-	-	-									-	-	-
75	X	50	-	-	-	-	-									-	-	-
80	X	40	-	-	-											-	-	-
80	X	50	-	-	-	-	-									-	-	-
80	X	60	-	-	-	-	-										-	-
90	X	40	-	-	-	-	-									-	-	-
90	X	50	-	-	-	-	-										-	-
90	X	60	-	-	-	-	-										-	-
90	X	70	-	-	-	-	-										-	-
100	X	40	-	-	-	-	-										-	-
100	X	50	-	-	-	-	-										-	-
100	X	60	-	-	-	-	-										-	-
100	X	80	-	-	-	-	-										-	-
120	X	40	-	-	-	-	-										-	-
120	X	60	-	-	-	-	-										-	-
120	X	80	-	-	-	-	-											-
120	X	100	-	-	-	-	-										-	-
140	X	60	-	-	-	-	-										-	-
140	X	80	-	-	-	-	-										-	-
140	X	100	-	-	-	-	-										-	-
150	X	50	-	-	-	-	-										-	-
150	X	70	-	-	-	-	-										-	-
150	X	100	-	-	-	-	-										-	-
160	X	40	-	-	-	-	-										-	-
160	X	80	-	-	-	-	-										-	-
160	X	140	-	-	-	-	-		-									
180	X	100	-	-	-	-	-		-									
180	X	140	-	-	-	-	-		-									
200	X	100	-	-	-	-	-		-									
200	X	120	-	-	-	-	-		-		-							-
200	X	150	-	-	-	-	-		-		-							
200	X	160	-	-	-	-	-		-		-							
250	X	100	-	-	-	-	-		-		-							-
250	X	150	-	-	-	-	-		-		-							
300	X	200	-	-	-	-	-		-		-							

Length Range

	4,0 - 7,5 m		4,0 - 9,0 m		4,0 - 12,2 m		5,0 - 13,0 m
	4,0 - 8,0 m		4,0 - 10,0 m		4,0 - 13,0 m		5,0 - 14,0 m
	4,0 - 8,5 m		4,0 - 12,0 m		4,0 - 14,0 m		



HOLLOW SECTIONS PRIMER COATED HOLLOW SECTIONS





QUALITY CONTROL TESTS

Dimensional and Visual Inspection



STANDARD COATING COLORS

>Red (Ral Code 3009)
>Black (Ral Code 9005)
Other colors can be used when demanded.



TEST CERTIFICATES

According to EN 10204,
2.1, 2.2, 3.1, 3.2 certificates

GLOBALSTEEL

Profile & Sheet

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