



production programme

Tube Plant



Mittal Steel Ostrava a.s.



certification

The Tube Plant of Mittal Steel Ostrava a.s. manufactures top quality products, which have been certified by a number of reputable foreign and inland institutions.



Plain-end seamless tubes and pipes

Dimensional standards

EN 10220:2002	“Seamless and welded steel tubes - General tables of dimensions and masses per unit length”
ISO 4200:1991	“Plain-end steel tubes, welded and seamless”
CSN 42 5715:1981	“Hot-rolled seamless steel tube”
CSN 42 5716:1981	“Hot-rolled seamless steel tube with small tolerances”
DIN 2448:1981	“Seamless steel tubes”
GOST 8732:1978	“Hot-rolled seamless steel pipes”
ASME B36.10M:2004	“Welded and hot-rolled seamless steel pipes”
KN 45 1103:1997 ¹	“Type III casings” - seamless for deep drilling - sizes

Technical delivery regulations for tubes and pipes of carbon steel

CSN 42 0250:1988	“Hot rolled seamless tubes of class 10 to 16 steels”
CSN 42 0165:1990	“Sheets and pipes of ferrite-pearlite steels with guaranteed impact properties at low temperatures”
DIN 1629:1984	“Seamless circular tubes of non-alloy steels with special quality requirements”
DIN 1630:1984	“Seamless circular tubes of non-alloy steels for extra-high requirements”
DIN 17 121:1984	“Seamless structural steel circular tubes for structural engineering purposes”
ASTM A 53:2004 + ASME SA 53:2004	“Seamless and welded black tubes suitable for zinc dipping”
ASTM A 501:2001	“Hot-formed welded and seamless carbon steel structural tubing”
ASTM A 519:2003	“Seamless carbon and alloy steel mechanical tubing”
NF A 49-112:1987	“Plain-end seamless hot rolled steel tubes with guaranteed room temperature properties and with special delivery conditions”, all sizes that comply with DIN 2448
GOST 8731:1974	“Hot-rolled seamless steel pipes”
EN 10216-1:2002 + A1:2004	“Seamless steel tubes for pressure purposes” - Technical delivery conditions - Part 1: Non-alloy steel tubes with specified room temperature properties
EN 20224:2002	“Non-alloy steel tubes and fittings for the conveyance of water and other aqueous liquids”
EN 10297-1:2003	“Seamless steel tubes for mechanical and general engineering purposes”

For tubes and pipes of high-grade carbon steel - for boilers

CSN 42 0251:1989	“Seamless steel tubes with guaranteed properties at elevated temperatures”
DIN 17175:1979	“Seamless steel tubes for elevated temperatures” quality grade I
ASTM A 106:2004 + ASME SA 106:2004	“Standard specification for seamless carbon steel pipe for high temperature service”
ASTM A 192:2002 ¹	“Standard specification for seamless carbon steel boiler tubes for high-pressure service”
ASTM A 210:2004 ¹	“Standard specification for seamless medium-carbon steel boiler and super heater tubes”
ASTM A 333:2004 + ASME SA 333:2001	“Standard specification for seamless and welded steel pipes for low-temperature service”
ASTM A 530:2004 + ASME SA 530M:2001	“Standard specification for general requirements for specialized carbon and alloy steel pipe”
ASTM A 450:2004	“Standard specification for seamless carbon steel pipe for high temperature service”
NF A 49 - 211:1989 ¹	“Seamless plain-end tubes of non-alloy steels for the conveyance of liquids at elevated temperatures”
EN 10208-1.2:1997, 1996	“Steel pipes for pipelines for combustible fluids”
EN 10210-1.2:1994, 1997	“Hot finished structural hollow sections of no-alloy and fine grain steels”
EN 10216-2:2002 + A1:2004	“Seamless steel tubes for pressure purposes” - Technical delivery conditions - Part 2: Non-alloy and alloy steel tubes with specified elevated temperature properties
EN 10216-3:2002 +A1:2004	“Seamless steel tubes for pressure purposes” Part 3 - Alloy and fine grain steel tubes
KN 45 1108:1997 ¹	“Casing type III” - seamless for deep drilling - Technical delivery conditions”

Subject to agreement, the Tube Plant is able to deliver plain-end seamless tubes of both carbon steel and high-grade carbon steel complying with other foreign standards as long as their dimensions correspond to the dimensional range of tubes made in accordance with DIN 2448, ASME B36.10M and CSN 42 5715 or CSN 42 5716.

Tube dimensions²

EN 10220:2002 (ISO 4200:1991)	See the relevant chart
CSN 42 5715 (42 5716):1981	See the relevant chart
DIN 2448:1981, EN 10210-1.2:1994,1997	See the relevant chart
ASTM A 53:2004, ASTM A 106:2004,	
ASTM A 333:2004	See the relevant chart
ASTM A 192:2002 ¹	ø 21.3 - 127.0 mm, W.T. 2.3 - 20.0 mm
ASTM A 210:2004 ¹	ø 21.3 - 127.0 mm, W.T. 2.3 - 12.7 mm
ASTM 519:2003	ø 21.3 - 273.1 mm, W.T. 2.77 - 18.26 mm
NF A 49 - 112:1987, NF A 49 - 211:1989 ¹	See the relevant chart, W.T. max. 20
GOST 8732:1978	See the relevant chart
ASME B36.10 M:2004	ø 21.3 - 273.1 mm, W.T. 2.3 - 20.0 mm

¹ The products in compliance with this standard are subject to prior agreement with 15/TT.

² If agreed, unnormalized outside diameters can also be produced.



Steel grades

CSN 42 0250:1988	11 353.0, 11 353.1, 11 453.0, 11 453.1, 11 523.0, 11 523.1 ³ , 11 550.0, 11 550.1, 11 650.0, 11 650.1
CSN 42 0251:1989	12 021.1, 12 022.1
CSN 42 0165:1990	11 369.1, 11 503.1 ¹
DIN 1629:1984	St 37.0, St 44.0, St 52.0
DIN 1630:1984	St 37.4, St 44.4, St 52.4
DIN 17121:1984 ⁴	RSt 37-2, St 37-3, St 44-2, St 44-3, St 52-3
DIN 17175:1979 - Grade I	St 35.8, St 45.8
GOST 8731:1974	10, 20, St2, St4
ASTM A 53:2004, ASTM A 106:2004	A, B, C
ASTM A 333:2004	Gr. 1, Gr. 6
ASTM A 192:2002 ¹	A
ASTM A 210:2002 ¹	A1
ASTM A 501:2001	without marking
ASTM A 519:2003	MT 1010, MT 1015, MT 1020, 1010, 1012, 1015, 1017, 1020, 1518
NF A 49-112:1987	TU E 220A, TU E 235A
NF A 49-211:1989 ¹	TU E 220, TU E 250, TU E 275
	with each grade 3 variations are possible:
	- B (notch toughness testing at +20°C)
	- B1 (notch toughness testing at 0°C)
	- B2 (notch toughness testing at -20°C)
EN 10208-1,2:1997 ¹ , 1996 ¹	L210GA, L235GA, L245GA, L290GA, L360GA, L245NB, L290NB ¹ , L360NB
EN 10210-1,2:1994, 1997	S235JRH, S275JRH, S275J2H, S355JRH, S355J2H, S275 NH ¹ , S355NH ¹
EN 10216-1,2,3:2002 + A1:2004	P195TR1, P195TR2, P235TR1, P235TR2, P265TR2, P195GH, P235GH, P265GH
EN 10297-1:2003	E235, E275, E315, E355, P355N, P355NH ¹ , E275K2 ¹ , E355K2 ¹

Lengths

Plain-end tubes of carbon or high-grade carbon steels are delivered in the following lengths:

Production lengths - 4 - 14 m, length is determined by the producer with respect to the technological potential

Approximate lengths - nominal length is chosen by the customer within the range of production lengths with the maximum tolerance of ± 500 mm (in compliance with DIN 1629, DIN 17 121 and DIN 17 175).

Exact lengths - nominal length is chosen by the customer on the basis of the agreement with the producer.

Max. length of tubes:	< \varnothing 60.3 mm	9.5 m
	\geq \varnothing 60.3 mm	12.5 m in compliance with the technological potential

Pipe finish and end workmanship

Pipes are delivered with the following types of finish:

- scaled outside and inside
- with outside and/or inside zinc coating according to DIN EN 10240:1998 (diameters up to 114.3 mm only and maximum length 7.1 m) - subject to prior agreement
- with outside protective paint for short-term protection

Pipes are delivered with the ends cut off perpendicularly to the pipe axis and de-burred. Other types of finish are subject to agreement with the producer.

Pipes are also delivered with the following types of insulation:

All combinations of the outside and inside finish including surface free of protection can be delivered.

Tube diameter (mm)	Outside insulation	Inside insulation	Lengths	Producer of insulation
57.0 - 152.4	Extruded polyethylene coating with standard and reinforced thickness (DIN 30670:1991)		8 - 12.5 m	External supplier
159.0 - 273.1	Extruded polyethylene coating with standard and reinforced thickness (DIN 30670:1991 - N-n, N-v, S-n, S-v) ²		8 - 18 m	Mittal Steel Ostrava a.s.
219.0 - 273.1	Concrete-plastic coating according to KN 42 0025:2003, event. FZM-N standard, FZM-S special (for the protection of pipes with PE coating)		6 - 14 m	Mittal Steel Ostrava a.s.
88.9 - 273.1		Cement mortar thickness 5 - 13 mm (DIN 2614:1990 - II-N) ¹	7 - 13 m	Mittal Steel Ostrava a.s.
108.0 - 273.1		Bitumen or other varnish overcoat ³		Mittal Steel Ostrava a.s.
159.0 - 273.1	Protective bitumen varnish painting, bitumen coating reinforced by 1 or 2 layers of fiberglass matt and PVC band acc. to KN 420023:1994 or CSN 420022:1977		8 - 12.5 m	Mittal Steel Ostrava a.s.

¹ This type of insulation should be delivered off the winter period (i.e. approx. from 1st of April to 31st of November).

² Wall thickness > 12 mm by the particular O.D. is subject to agreement.

³ Subject to agreement

Seamless tubes can also be delivered with the following types of coating:

Tubes of diameter ≥ 159 mm outside protective bitumen varnish painting, bitumen coating reinforced by 1 or 2 layers of fiberglass matt and PVC band according to KN 42 0023:1994 or CSN 42 0022:1977.

Bundling

Pipes are tied by wire or tape whereas the number of ties is in compliance with the customer's requirement.

Subject to agreement, the pipes can also be delivered in hexagonal bundles.

¹ The products in compliance with this standard are subject to prior agreement with 15/TT.

² Can be delivered as normalized if agreed.

³ Can be delivered as normalized if agreed. Diameters 159 mm and greater with max. wall thickness 10 mm can only be delivered.



Dimensional range, weight and maximum length according to
EN 10220:2002 (ISO 4200:1991), EN 10216:2002 + A1:2004

Outside diameter (mm)	Wall thickness (mm)										
	2.3 ¹	2.6	2.9	3.2	3.6	4	4.5	5	5.4	5.6	6.3
	Weight (kg/m)/max. lengths (m)										
21.3	1.08/9.5	1.20/9.5	1.32/9.5	1.43/9.5	1.57/9.5	1.71/9.5					
22	1.12/9.5	1.24/9.5	1.37/9.5	1.48/9.5	1.63/9.5	1.78/9.5					
25	1.29/9.5	1.44/9.5	1.58/9.5	1.72/9.5	1.90/9.5	2.07/9.5					
25.4 ¹	1.31/9.5	1.46/9.5	1.61/9.5	1.75/9.5	1.94/9.5	2.11/9.5					
26.9	1.40/9.5	1.56/9.5	1.72/9.5	1.87/9.5	2.07/9.5	2.26/9.5	2.49/9.5				
30 ¹		1.76/9.5	1.91/9.5	2.11/9.5	2.34/9.5	2.56/9.5	2.83/9.5				
31.8		1.87/9.5	2.07/9.5	2.26/9.5	2.50/9.5	2.74/9.5	3.03/15				
33.7		1.99/9.5	2.20/9.5	2.41/9.5	2.67/9.5	2.93/9.5	3.24/9.5	3.54/9.5			
35		2.08/9.5	2.30/9.5	2.51/9.5	2.79/9.5	3.06/9.5	3.38/9.5	3.70/9.5			
38		2.27/9.5	2.51/9.5	2.75/9.5	3.05/9.5	3.35/9.5	3.72/9.5	4.07/9.5			
40 ¹		2.40/9.5	2.65/9.5	2.90/9.5	3.23/9.5	3.55/9.5	3.94/9.5	4.32/9.5			
42.4		2.55/9.5	2.82/9.5	3.09/9.5	3.44/9.5	3.79/9.5	4.21/9.5	4.61/9.5	4.94/9.5 ¹	5.09/9.5 ¹	5.61/9.5 ¹
44.5 ¹		2.69/9.5	2.98/9.5	3.26/9.5	3.63/9.5	4.00/9.5	4.44/9.5	4.87/9.5	5.22/9.5 ¹	5.38/9.5 ¹	5.94/9.5 ¹
48.3		2.93/9.5	3.25/9.5	3.56/9.5	3.97/9.5	4.37/9.5	4.86/9.5	5.34/9.5	5.72/9.5 ¹	5.91/9.5 ¹	6.53/9.5 ¹
51 ¹			3.44/9.5	3.77/9.5	4.21/9.5	4.64/9.5	5.16/9.5	5.67/9.5	6.08/9.5 ¹	6.28/9.5 ¹	6.96/9.5 ¹
54 ¹			3.65/9.5	4.01/9.5	4.47/9.5	4.93/9.5	5.49/9.5	6.04/9.5	6.47/9.5 ¹	6.68/9.5 ¹	7.41/9.5 ¹
57			3.87/9.5	4.25/9.5	4.74/9.5	5.23/9.5	5.83/9.5	6.41/9.5	6.87/9.5 ¹	7.10/9.5 ¹	7.89/9.5 ¹
60.3			4.11/10	4.51/10	5.03/12	5.56/12	6.19/12	6.82/12	7.31/12	7.55/12	8.39/12
63.5 ¹			4.33/9.0	4.76/9.0	5.32/11.5	5.87/11.5	6.55/12	7.21/12	7.74/12	8.0/12	8.89/12
70 ¹			4.80/8.5	5.27/10	5.90/10	6.51/10	7.27/12	8.01/12	8.60/12	8.89/12	9.90/12
73			5.01/8.5	5.51/12	6.16/12	6.81/12	7.60/12	8.38/12	9.00/12	9.00/12	9.00/12
76.1			5.24/12.5	5.75/12.5	6.44/12.5	7.11/12.5	7.95/12.5	8.77/12.5	9.42/12.5	9.74/12.5	10.8/12.5
82.5 ¹				6.26/12.5	7.00/12.5	7.74/12.5	8.66/12.5	9.56/12.5	10.3/12.5	10.6/12.5	11.8/12.5
88.9				6.76/12.5	7.57/12.5	8.38/12.5	9.37/12.5	10.3/12.5	11.1/12.5	11.5/12.5	12.8/12.5
101.6					8.7/12	9.63/12	10.8/12	11.9/12	12.8/12	13.3/12	14.8/12
108					9.27/11.5	10.3/11.5	11.5/11.5	12.7/11.5	13.7/11.5	14.1/11.5	15.8/11.5
114.3					9.83/11.5	10.9/11.5	12.2/11.5	13.5/12	14.5/12	15.0/12	16.8/12.0
127						12.1/12	13.6/12	15.0/12	16.2/12	16.8/12	18.8/12
133						12.7/12	14.3/12	15.8/12	17.0/12	17.6/12	19.7/12
139.7							13.4/11.5	15.0/11.5	16.6/11.5	17.9/11.5	18.5/11.5
141.3								15.2/12	16.8/12	18.1/12	18.7/12
152.4								16.4/12.5	18.2/12.5	19.6/12	20.3/12
159								17.1/12.5	19.0/12.5	20.5/12.5	21.2/12.5
168.3								18.2/12.5	20.1/12.5	21.7/12.5	22.5/12.5
177.8									21.3/12.5	23.0/12.5	23.8/12.5
193.7										25.1/12	26.0/12.5
219.1											33.1/12.5
244.5											37.0/12
273.0											41.5/11.5

¹ Ordering of the tubes is subject to prior agreement.

Grade in compliance with EN 10208-2, L415NB - diameters 159 mm and greater with max. wall thickness 10 mm can only be delivered.

Dimensional range, weight and maximum length according to
EN 10220:2002 (ISO 4200:1991 continuation), EN 10216:2002 + A1:2004

Outside diameter (mm)	Wall thickness (mm)											
	7.1	8	8.8	10	11	12.5	14.2	16	17.5	20	22.2 ¹	25 ¹
	Weight (kg/m)/max. lengths (m)											
60.3	9.32/12	10.3/12	11.2/12									
63.5 ¹	9.88/12	11.0/12	11.89/12									
70.0 ¹	11.0/12	12.8/12	13.3/12									
73.0	11.5/12	12.8/12	13.95/11									
76.1	12.1/12.5	13.4/12	14.6/12	16.3/12								
82.5 ¹	13.2/12.5	14.7/12	16.0/12	17.9/12								
88.9	14.3/12.5	16.0/12	17.4/12	19.5/12	21.1/11.5	23.6/10.5	26.2/8 ¹					
101.6	16.5/12	18.5/12	20.1/12	22.6/11	24.6/10	27.5/8.5						
108	17.7/11.5	19.7/11.5	21.5/11.5	24.2/10	26.3/9.5	29.4/8.5						
114.3	18.8/12	21.0/12	22.9/12	25.7/12	28.0/12	31.4/12	35.1/11	38.8/10 ¹	41.8/9 ¹	46.5/8 ¹		
127	21.0/12	23.5/12	25.7/12	28.9/12	31.5/12	35.3/11	39.5/9.5	43.8/8.5 ¹	47.3/8 ¹	52.8/9 ¹		
133	22.0/12	24.7/12	27.0/12	30.3/12	33.1/11.5	37.1/10.5	41.6/9	46.2/8 ¹	49.9/9.5 ¹	55.7/6.5 ¹		
139.7	23.2/12	26.0/12	28.4/12	32.0/10	34.9/10	39.2/11	43.9/10	48.8/9 ¹	52.7/8 ¹	59.0/7 ¹		
141.3	23.5/12	26.3/12	28.8/12	32.4/12	35.3/12	39.7/11	44.5/10	49.4/8.5 ¹	53.4/8 ¹	59.8/7 ¹		
152.4	25.4/12	28.5/12	31.2/12	35.1/12	38.4/11.5	43.1/10.5	48.4/9.5	53.8/8	58.2/7	65.3/6.5	71.3/6	
159	26.6/12.5	29.8/12.5	32.6/12.5	36.7/12	40.1/12	45.2/12	50.7/11	56.4/10	61.1/9	68.6/8	74.9/7	82.6/6.5
168.3	28.2/12.5	31.6/12.5	34.6/12.5	39.0/12	42.7/12	48.0/12	54.0/10.5	60.1/9.5	65.1/8.5	73.1/7.5	80.0/7	88.4/6.5
177.8	29.9/12.5	33.5/12.5	36.7/12.5	41.4/12	45.2/12	51.0/12	57.3/11	63.8/9.5	69.2/8.5	77.8/7.5	85.2/7	94.2/6
193.7	32.7/12.5	36.6/12.5	40.1/12.5	45.3/12	49.6/12	55.9/12	62.9/12	70.1/11.5	76.0/11	85.7/9.5	93.9/8.5	104/7.5
219.1	37.1/12.5	41.6/12.5	45.6/12.5	51.6/12	56.5/12	63.7/12	71.8/11.5	80.1/10.5	87.0/9.5	98.2/8	108/7	120/6.5
244.5	41.6/12	46.7/12	51.2/12	57.8/12	63.3/12	71.5/11.5	80.6/10	90.2/8.5	98.0/8	111/7.5	122/7	135/6
273	46.6/12	52.3/12	57.3/12	64.9/12	71.1/12	80.3/11	90.6/9.5	101/8.0	110/7.5	125/6.5	137/6	

¹ Ordering of the tubes is subject to prior agreement.

Grade in compliance with EN 10208-2, L415NB - diameters 159 mm and greater with max. wall thickness 10 mm can only be delivered.



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Dimensional range, weight and maximum length according to
DIN 2448:1981, NF A 49 - 112:1987, EN 10210-1, 2:1994, 1997

Outside diameter (mm)	Wall thickness (mm)										
	2.3 ¹	2.6	2.9	3.2	3.6	4	4.5	5	5.6	6 ³	6.3
	Weight (kg/m)/max. lengths (m)										
21.3	1.08/9.5	1.2/9.5	1.32/9.5	1.43/9.5	1.57/9.5	1.71/9.5					
25 ²	1.29/9.5	1.44/9.5	1.58/9.5	1.72/9.5	1.9/9.5	2.07/9.5					
26.9	1.4/9.5	1.56/9.5	1.72/9.5	1.87/9.5	2.07/9.5	2.26/9.5	2.49/9.5				
31.8 ¹		1.87/9.5	2.07/9.5	2.26/9.5	2.5/9.5	2.74/9.5	3.03/9.5				
33.7		1.99/9.5	2.2/9.5	2.41/9.5	2.67/9.5	2.93/9.5	3.24/9.5	3.54/9.5			
38		2.27/9.5	2.51/9.5	2.75/9.5	3.05/9.5	3.35/9.5	3.72/9.5	4.07/9.5			
42.4		2.55/9.5	2.82/9.5	3.09/9.5	3.44/9.5	3.79/9.5	4.21/9.5	4.61/9.5	5.09/9.5 ¹	5.39/9.5 ¹	5.61/9.5 ¹
44.5 ¹		2.69/9.5	2.98/9.5	3.26/9.5	3.63/9.5	4.00/9.5	4.44/9.5	4.87/9.5	5.38/9.5 ¹	5.71/9.5 ¹	5.94/9.5 ¹
48.3		2.93/9.5	3.25/9.5	3.56/9.5	3.97/9.5	4.37/9.5	4.86/9.5	5.34/9.5	5.91/9.5 ¹	6.27/9.5 ¹	6.53/9.5 ¹
51 ¹			3.44/9.5	3.77/9.5	4.21/9.5	4.64/9.5	5.16/9.5	5.67/9.5	6.28/9.5 ¹	6.67/9.5 ¹	6.96/9.5 ¹
57			3.87/9.5	4.25/9.5	4.74/9.5	5.23/9.5	5.83/9.5	6.41/9.5	7.10/9.5 ¹	7.56/9.5 ¹	7.89/9.5 ¹
60.3			4.11/9	4.51/10	5.03/12	5.55/12	6.19/12	6.82/12	7.55/12	8.05/12	8.39/12
63.5 ¹			4.33/9.5	4.76/9.5	5.32/10	5.87/10.5	6.55/11.5	7.21/11.5	8/11.5	8.52/11.5	8.89/11.5
70 ¹			4.80/8.5	5.27/12	5.90/12	6.51/12	7.27/12	8.02/12	8.89/12	9.48/12	9.90/12
73 ²			5.01/8.5	5.51/12	6.16/12	6.81/12	7.6/12	8.38/12	9.31/12	9.93/12	10.4/12
76.1			5.24/12.5	5.75/12.5	6.44/12.5	7.11/12.5	7.95/12.5	8.77/12.5	9.74/12.5	10.39/12.5	10.8/12.5
82.5 ^{1,2}				6.26/12.5	7.00/12.5	7.74/12.5	8.66/12.5	9.56/12.5	10.6/12.5	11.34/12.5	11.8/12.5
88.9				6.76/12.5	7.57/12.5	8.38/12.5	9.37/12.5	10.37/12.5	11.5/12.5	12.29/12.5	12.8/12.5
101.6					8.7/12	9.63/12	10.8/12	11.9/12	13.3/12	14.17/12	14.8/12
108					9.27/11.5	10.3/11.5	11.5/11.5	12.7/11.5	14.1/11.5	15.12/11.5	15.8/11.5
114.3					9.83/11.5	10.9/11.5	12.2/11.5	13.5/12	15/12	16.05/12	16.8/12
127						12.1/12	13.6/12	15/12	16.8/12	17.93/12	18.8/12
133						12.7/12	14.3/12	15.8/12	17.6/12	18.82/12	19.7/12
139.7						13.4/11.5	15/11.5	16.6/11.5	18.5/11.5	19.81/11.5	20.7/11.5
152.4 ²							16.4/12.5	18.2/12.5	20.3/12	21.70/12	22.7/12
159							17.1/12.5	19/12.5	21.2/12.5	22.67/12.5	23.7/12.5
168.3							18.2/12.5	20.1/12.5	22.5/12.5	24.05/12.5	25.2/12.5
177.8 ²								21.3/12.5	23.8/12.5	25.46/12.5	26.6/12.5
193.7									26/12.5	27.82/12.5	29.1/12.5
219.1											33.1/12.5
244.5											37/12
273											41.5/11.5 ¹

¹ Ordering of the tubes is subject to prior agreement.

² Ordering of the tubes except for the NF A 49 - 112 size range is subject to prior agreement.

³ The wall thickness according to EN 10210 only.

Grade in compliance with EN 10208-2, L415NB - diameters 159 mm and greater with max. wall thickness 10 mm can only be delivered.

Dimensional range, weight and maximum length according to
DIN 2448:1981, NF A 49 - 112:1987, EN 10210-1, 2:1994, 1997 (continuation)

Outside diameter (mm)	Wall thickness (mm)												
	7.1	8	8.8	10	11	12 ³	12.5	14.2	16	17.5	20	22.2 ¹	25 ¹
	Weight (kg/m)/max. lengths (m)												
60.3	9.32/12	10.3/12	11.2/12										
63.5 ¹	9.88/12	10.9/12	11.89/12										
73 ²	11.5/12	12.8/12	13.95/11										
76.1	12.1/12.5	13.4/12	14.6/12	16.3/12									
82.5 ^{1,2}	13.2/12.5	14.7/12	16.0/12	17.9/12									
88.9	14.3/12.5	16/12	17.4/12	19.5/12	21.1/11.5	22.79/11	23.6/10.5	26.2/8 ¹					
101.6	16.5/12	18.5/12	20.1/12	22.6/11	24.6/10	26.56/9.2	27.5/9						
108	17.7/11.5	19.7/11.5	21.5/11.5	24.2/10	26.3/9.5	28.45/8.7	29.4/8.5						
114.3	18.8/12	21/12	22.9/11	25.7/12	28/9.12	30.32/12	31.4/12	35.1/11	38.8/10 ¹	41.8/9 ¹	46.5/8 ¹		
127	21/12	23.5/12	25.7/12	28.9/12	31.5/12	34.09/11.2	35.3/11	39.5/9.5	43.8/6.5 ¹	47.3/8 ¹	52.8/7 ¹		
133	22/12	24.7/12	27/12	30.3/12	33.1/11.5	35.86/10.8	37.2/10.5	41.6/9	46.2/8 ¹	49.9/7.5 ¹	55.7/6.5 ¹		
139.7	23.2/12	26/12	28.4/12	32/12	34.9/12	37.85/11	39.2/11	44.0/10	48.8/8.5 ¹	52.7/8 ¹	59.0/7 ¹		
152.4 ²	25.4/12	28.5/12	31.2/12	35.1/12	38.4/11.5	41.61/10.5	43.1/10.5	48.4/9.5	53.8/8	58.2/7	65.3/6.5	71.3/6	
159	26.6/12.5	29.8/12.5	32.6/12.5	36.7/12	40.1/12	43.57/12	45.2/12	50.7/11	56.4/10	61.1/9	68.6/8	74.9/7	82.6/6.5
168.3	28.2/12.5	31.6/12.5	34.6/12.5	39/12	42.7/12	46.33/12	48/12	54/10.5	60.1/9.5	65.1/8.5	73.1/7.5	80.0/7	88.4/6.5
177.8 ²	29.9/12.5	33.5/12.5	36.7/12.5	41.4/12	45.2/12	49.14/12	51/12	57.3/11	63.8/9.5	69.2/8.5	77.8/7.5	85.2/7	94.2/6
193.7	32.7/12.5	36.6/12.5	40.1/12.5	45.3/12	49.6/12	53.86/12	55.9/12	62.9/12	70.1/11.5	76/11	85.7/9.5	93.9/8.5	104/7.5
219.1	37.1/12.5	41.6/12.5	45.6/12.5	51.6/12	56.5/12	61.38/12	63.7/12	71.8/11.5	80.1/10.5	87/9.5	98.2/8	108/7	120/6.5
244.5	41.6/12	46.7/12	51.2/12	57.8/12	63.3/12	68.91/11.5	71.5/11.5	80.6/10	90.2/8.5	98/8	111/7.5	122/7	135/6
273	46.6/12	52.3/12	57.3/12	64.9/12	71.1/12	77.36/11	80.3/11	90.6/9.5	101/8	110/7.8	125/6.5	137/6	

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³ The wall thickness according to EN 10210 only.
Grade in compliance with EN 10208-2, L415NB - diameters 159 mm and greater with max. wall thickness 10 mm can only be delivered.



Dimensional range, weight and maximum length according to
ASTM A 53:2004, ASTM A 106:2004, ASTM A 333:2004

Size	Outside diameter		Wall thickness		Weight		Weight class	Schedule No.	Max. length	
	NPS	in	mm	in	mm	lb/ft			kg/m	Ft	m
1/2	0.840	21.3	0.109	2.77	0.85	1.27	STD	40	31.17	9.5
			0.147	3.73	1.09	1.62	XS	80	31.17	9.5
3/4	1.050	26.7	0.113	2.87	1.13	1.69	STD	40	31.17	9.5
			0.154	3.91	1.48	2.20	XS	80	31.17	9.5
1	1.315	33.4	0.133	3.38	1.68	2.50	STD	40	31.17	9.5
			0.179	4.55	2.17	3.24	XS	80	31.17	9.5
1 ¼	1.660	42.2	0.140	3.56	2.27	3.39	STD	40	31.17	9.5
			0.191	4.85	3.00	4.47	XS	80	31.17	9.5
1 ½	1.900	48.3	0.145	3.68	2.72	4.05	STD	40	31.17	9.5
			0.200	5.08	3.63	5.41	XS	80	31.17	9.5
2	2.375	60.3	0.154	3.91	3.66	5.44	STD	40	37.73	12.0
			0.218	5.54	5.03	7.48	XS	80	37.73	12.0
2 ½	2.875	73.0	0.203	5.16	5.80	8.63	STD	40	39.37	12.0
			0.276	7.01	7.67	11.41	XS	80	39.37	12.0
3	3.500	88.9	0.125	3.18	4.51	6.72	...	...	39.37	12.0
			0.156	3.96	5.58	8.29	...	...	39.37	12.0
			0.188	4.78	6.66	9.92	...	...	39.37	12.0
			0.216	5.49	7.58	11.29	STD	40	41.01	12.5
			0.250	6.35	8.69	12.93	...	...	41.01	12.5
			0.281	7.14	9.67	14.40	...	...	41.01	12.5
			0.300	7.62	10.26	15.27	XS	80	41.01	12.5
			0.438	11.13	14.34	21.35	...	160	36.09	11.5
3 ½	4.000	101.6	0.125	3.18	5.18	7.72	...	...	37.73	11.5
			0.156	3.96	6.41	9.53	...	...	39.37	12.0
			0.188	4.78	7.66	11.41	...	...	39.37	12.0
			0.226	5.74	9.12	13.57	STD	40	39.37	12.0
			0.250	6.35	10.02	14.92	...	...	39.37	12.0
			0.281	7.14	11.17	16.63	...	...	39.37	12.0
			0.318	8.08	12.52	18.63	XS	80	39.37	12.0
			0.438	11.13	14.34	21.35	...	160	36.09	11.5
4	4.500	114.3	0.156	3.96	7.24	10.78	...	...	37.73	11.5
			0.188	4.78	8.67	12.91	...	...	37.73	11.5
			0.219	5.56	10.02	14.91	...	...	39.37	12.0
			0.237	6.02	10.80	16.07	STD	40	41.01	12.5
			0.250	6.35	11.36	16.90	...	...	41.01	12.5
			0.281	7.14	12.67	18.87	...	...	41.01	12.5
			0.312	7.92	13.97	20.78	...	...	41.01	12.5
			0.337	8.56	15.00	22.32	XS	80	41.01	12.5
			0.438	11.13	19.02	28.32	...	120	41.01	12.5

Dimensional range, weight and maximum length according to
ASTM A 53:2004, ASTM A 106:2004, ASTM A 333:2004 (continuation)

Size	Outside diameter		Wall thickness		Weight		Weight class	Schedule No.	Max. length	
	NPS	in	mm	in	mm	lb/ft			kg/m	ft	m
5	5.563	141.3	0.156	3.96	9.02	13.41	...	...	37.73	11.5
			0.188	4.78	10.80	16.09	...	...	39.37	12.0
			0.219	5.56	12.51	18.61	...	...	39.37	12.0
			0.258	6.55	14.63	21.77	STD	40	39.37	12.0
			0.281	7.14	15.87	23.62	...	...	39.37	12.0
			0.312	7.92	17.51	26.05	...	...	37.73	12.0
			0.344	8.74	19.19	28.57	...	...	37.73	12.0
			0.375	9.52	20.80	30.94	XS	80	36.09	12.0
			0.500	12.70	27.04	40.28	...	120	36.09	11.0
6	6.625	168.3	0.188	4.78	12.94	19.27	...	...	39.37	12.0
			0.219	5.56	15.00	22.31	...	...	39.37	12.0
			0.250	6.35	17.04	25.36	...	...	39.37	12.0
			0.280	7.11	18.99	28.26	STD	40	39.37	12.0
			0.312	7.92	21.06	31.32	...	...	39.37	12.0
			0.344	8.74	23.10	34.39	...	...	39.37	12.0
			0.375	9.52	25.05	37.28	...	...	39.37	12.0
			0.432	10.97	28.60	42.56	XS	80	39.37	12.0
			0.500	12.70	32.74	48.73	...	...	36.09	11.0
			0.562	14.27	36.43	54.20	...	120	32.80	10.0
0.719	18.26	45.39	67.56	...	160	26.25	8.0			
8	8.625	219.1	0.250	6.35	22.38	33.31	...	20	39.37	12.0
			0.277	7.04	24.72	36.81	...	30	39.37	12.0
			0.312	7.92	27.73	41.24	...	...	39.37	12.0
			0.322	8.18	28.58	42.55	STD	40	39.37	12.0
			0.344	8.74	30.45	45.34	...	...	39.37	12.0
			0.375	9.52	33.07	49.20	...	...	39.37	12.0
			0.406	10.31	35.67	53.08	...	60	39.37	12.0
			0.438	11.13	38.33	57.08	...	...	39.37	12.0
			0.500	12.70	43.43	64.64	XS	80	39.37	12.0
			0.562	15.09	51.00	75.92	...	100	36.09	11.0
			0.719	18.26	60.77	90.44	...	120	31.17	9.0
10	10.750	273.1	0.250	6.35	28.06	42.09	...	20	39.37	12.0
			0.279	7.09	31.23	46.49	...	...	39.37	12.0
			0.307	7.80	34.27	51.01	...	30	39.37	12.0
			0.344	8.74	38.27	56.96	...	...	39.37	12.0
			0.365	9.27	40.52	60.29	STD	40	39.37	12.0
			0.438	11.13	48.28	71.87	...	...	39.37	12.0
			0.500	12.70	54.79	81.52	XS	60	36.09	10.5
			0.594	15.09	64.49	95.97	...	80	31.17	8.5
			0.719	18.26	77.10	114.70	...	100	23.95	7.0