

Seamless and welded pipes

pipes suitable for plumbing installations and other applications

according to EN 10255

ΓΑΛΒΑΝΙΣΜΕΝΟΙ ΧΑΛΥΒΔΟΣΩΛΗΝΕΣ ΧΩΡΙΣ ΡΑΦΗ



Dalmine production standards:



seamless medium series pipes

Other series can be manufactured on request

MATERIAL - CARBON STEEL

STEEL NAME	STEEL NUMBER	MECHANICAL PROPERTIES			CHEMICAL COMPOSITION % (LADLE ANALYSIS)			
		TENSILE STRENGTH	YIELD STRENGTH	ELONGATION	C	Mn	P	S
		R	R _{eH}	A	MAX	MAX	MAX	MAX
		N/mm ²	N/mm ²	%				
S 195T	1.0026	320 ÷ 520	195	20	0.20	1.40	0.035	0.030

TOLERANCES

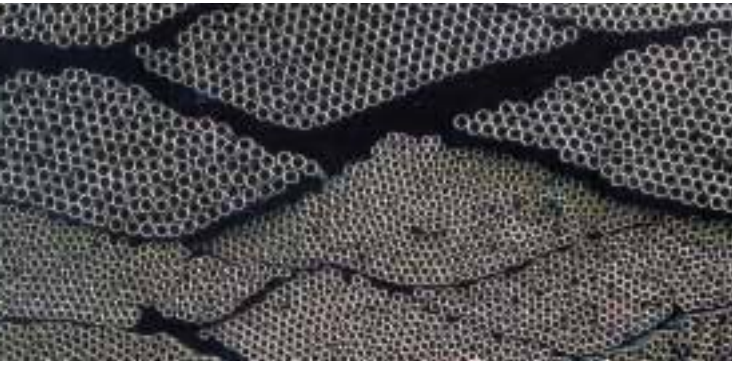
TYPE	SERIES	OUTSIDE DIAMETER	WALL THICKNES	MASSES	LENGTH
SEAMLESS	MEDIUM - HEAVY - L1	See table	± 12,5%*		± 500 mm

* The maximum tolerance does not apply if the actual weight of a bundle does not exceed the theoretical weigh




MEDIUM SERIES EN 10255 THREADABLE UNI-ISO 7/1, WITH UNI-ISO 50 COUPLING

THREAD NOMINAL DIAMETER Inches	OUTSIDE DIAMETER		W.T. mm	NOMINAL WEIGHT- kg/m			
	MAX	MIN		PLAIN ENDS		THREADED WITH COUPLING	
	mm	mm		BLACK	GALVANISED	BLACK	GALVANISED
3/8	17.5	16.7	2.3	0.839	0.876	0.845	0.882
1/2	21.8	21.0	2.6	1.21	1.26	1.22	1.27
3/4	27.3	26.5	2.6	1.56	1.62	1.57	1.63
1	34.2	33.3	3.2	2.41	2.49	2.43	2.51
1 1/4	42.9	42.0	3.2	3.10	3.20	3.13	3.23
1 1/2	48.8	47.9	3.2	3.56	3.67	3.60	3.71
2	60.8	59.7	3.6	5.03	5.17	5.10	5.24
2 1/2	76.6	75.3	3.6	6.42	6.60	6.54	6.72
3	89.5	88.0	4.0	8.36	8.57	8.53	8.74
4	115.0	113.1	4.5	12.2	12.48	12.50	12.8
5	140.8	138.5	5.0	16.6	16.94	17.10	17.3



Standard length

6 m.

End finishing

- with conical thread and coupling;
- with conical thread, senza without coupling;
- plain ends

Inspection and testing

Hydrostatic test at 50 bars or equivalent non destructive test (Eddy Current).

- tensile test;
- bending test;
- bending test on Frezt Moon pipes.

Certification

Unless option is specified, a certificate can be issued to demonstrate compliance with EN 10204,

Surpeface finishing

- Black;
- hot dipped galvanised EN 10240 A.1
- external epoxy coating Thermo;
- external polyethylene coating - Polycoat.

Marking black pipes (Hot finishing)

FM welded pipes

Hot die stamped at around every 80 cm with TDL FMW

Seamless pipes

Marked in continuous with indelible: black or white TENARISDALMINE EN 10255 SM.



Seamless steel tubes for pressure purposes

in according with EN 10216-1

MATERIAL - FULLY KILLED CARBON STEEL										
STEEL NAME	STEEL NUMBER	MECHANICAL PROPERTIES				CHEMICAL COMPOSITION % (LADLE ANALYSIS)				
		TENSILE STRENGTH R MPa*	YIELD STRENGTH R _{eH} MIN N/mm ²	ELONGATION A MIN % l t		C MAX	Mn MAX	Si MAX	P MAX	S MAX
P235TR1	1.0254	360 ÷ 500	235	25	23	0.16	1.20	0.35	0.025	0.020

* 1MPa = 1N/mm²

Tolerances

Outside diameter

(including ovality)

± 1% or ± 0,5 mm whichever is the greater.

Wall thickness

O.D. ≤ 219,1 mm ± 12,5%

or ± 0,4 mm whichever is the greater.

O.D. > 219,1 mm:

± 20% for a W.T./O.D.

ratio ≤ 0,025

± 15% for a W.T./O.D.

ratio > 0,025

Length

Normally supplied in production lengths of between 4 and 8 m.

Surfaces

Normally the pipes are supplied hot finished, without any surface protection.

If requested, for O.D. up to 273 mm, they can be done in an external epoxy coating - Thermo.

End finishing

Plain, square cut.

Testing

Normally following the tests required by EN 10216-1.

Other tests can be agreed upon.

Certification

If requested at time of ordering, a test report according to EN 10204-2.2 can be issued.

DIMENSIONS AND WEIGHT

OUTSIDE DIAMETER mm	W.T. mm	NOMINAL WEIGHT kg/m
33.7	2.6	1.99
42.4	2.6	2.55
48.3	2.6	2.93
60.3	2.9	4.11
76.1	2.9	5.24
88.9	3.2	6.76
114.3	3.6	9.83
139.7	4.5	15.00
168.3	4.5	18.18
219.1	6.3	33.06
273	6.3	41.44



Galvanized pipes



Galvanizing is done according to the EN 10240 standard which requires the pipes to meet various qualitative levels of use, being produced by hot-dipping in a completely automated plant.

Galvanizing carried out by Dalmine conforms to the A.1 level, qualitatively the highest required by the European standards.

The zinc used is an electrolytic type with 99.995 percent purity. Pipes galvanized in this manner are suitable for carrying drinkable water.

TenarisDalmine galvanized tubes using the new 'lead-free galvanization' technology are conform to the EN 10240-A1 norm and the Ministry of

Health Decree 6 April 2004 N.174, affecting materials and objects used to distribute water for human consumption.

Examples of marking

Welded FM pipe

Marked in green paint about every 40 cm:

TENARISDALMINE
FM EN 10255 WL1
EN 10240 A.1

Seamless pipe

Marked in green paint about every 40 cm:

TENARISDALMINE
EN 10255 SM
EN 10240 A.1



W = welded

S = seamless

L1 = light weight series

M = medium weight series

P = s heavy weight series



- Pipes up to an external diameter of 6" can be supplied

- In addition to being carried out in accordance with the European standard EN 10240 A.1.

galvanizing can also be carried out in compliance with the American standard ASTM A53.

