

Fast-connection Grooved-end Pipes



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Tenaris black pipes galvanized and coated with epoxy resin from the Dalmine Thermo® range are used for fire-extinguishing systems and gas & water distribution. They can be supplied from 1 to 8 inches in diameter and in lengths ranging from 3.5 to 6 metres. They have grooved ends to be used in fast connection systems.

UNI 5634/97 standard, which covers the identification systems for pipes and ducts conveying fluids in civil and industrial installations, requires each pipe to be colour-coded so as to allow identification of the fluid it carries.

The steel pipes from Dalmine Thermo® are coated with epoxy resin so that the installer does not have to paint them and yet each pipe is easily and securely identified. Paint is applied by fusing epoxy powder on the surface of a metal grit blasted pipe, which is heated to about 200° C.

The coating has a minimum thickness of 50 microns, which allows an operating temperature range of -10 to +110°C. It has excellent adhesion, abrasion and impact resistance properties. This allows the pipes to be bent using standard mandrel bending machines with a minimum bending radius of 6 times the pipe's outer diameter, directly on the installation site.

Thanks to its cutting, grooving, axis and off-axis drilling services, Tenaris provides customised products, ready for assembly, according to the project's specifications. These services are carried out in compliance with the current standards on plumbing and heating systems.

For Dalmine Thermo® pipes, Tenaris performs suitable pre-cutting operations which ensure that after processing the paint coating remains uniform over the entire surface of the pipe, including the cutting areas.

Grooved-end pipes are labour-saving because they are easier to join and assemble on site and do not require the installer to perform complex machining in the installation site



For welded pipes, especially those with large diameters, a seamless pipe ring is welded onto the pipe at the area to be machined, so as to prevent cracking during the grooving operations. Tenaris 21 to 406 mm seamless steel pipes maintain their integrity during grooving, and this guarantees safety and reliability for the installer.

Fields of application:

- Fire-extinguishing systems – sprinklers
- Water and air service systems
- Heating systems, air conditioning and plumbing systems for commercial, industrial, health, educational and sports facilities, tunnels, research centres and laboratories.

BENEFITS

- Reduced design and installation time resulting in lower costs.
- Safety and effectiveness during installation.

APPLICABLE STANDARDS

The minimum thickness of smooth, threaded or grooved steel pipes must comply with the following standards:

ISO 65 M for $DN \leq 150$ mm

ISO 4200 serie D per $i DN > 150$ mm

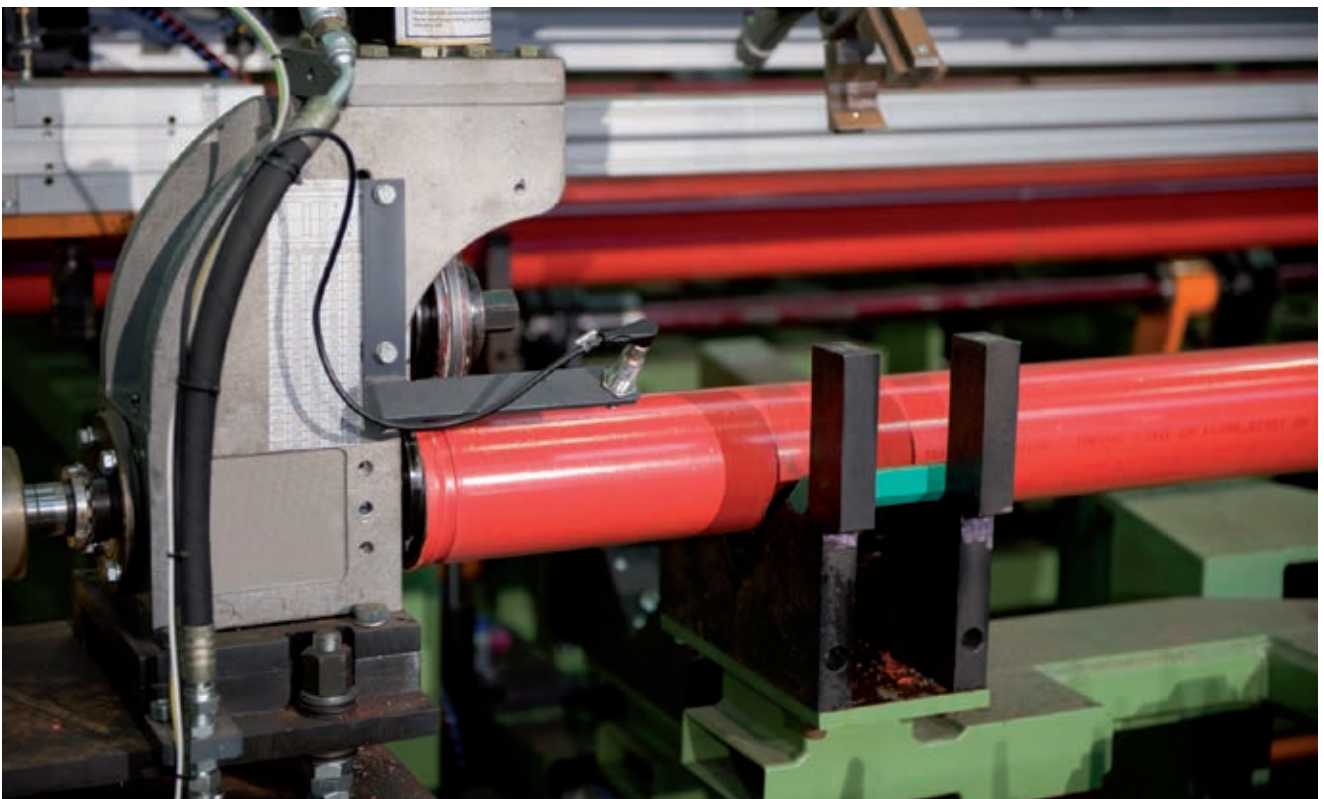
CORRELATION BETWEEN ISO AND EN STANDARDS

EN 10255 SS threaded pipes medium series

$DN \leq 6'$ (165,1 mm)

EN 10216-1 SS pressure pipes

$DN \leq 10'$ (273 mm)



SIZE RANGE COLOUR CODES

- Dalmine Thermo® in red (RAL 3000) and white (RAL 9003) Ø 1" - 8"
For civil, industrial and fire-extinguishing systems - EN 10255; EN 10216-1
- Galvanized pipe EN 10240
Ø 1" ÷ 8"
For civil, industrial and fire-extinguishing systems - EN 10255; EN 10216-1
- Dalmine Thermo® green (RAL 6027)
Ø 1" ÷ 4"
For civil and industrial systems
EN 10255; EN10216-1

MATERIAL

- Carbon steel S195T
for EN 10255 SM standard
- Carbon steel P235 TR2
for EN 10216-1 standard



MEDIUM SERIES EN 10255		
NOMINAL DIAMETER	THICKNESS	LINEAR MASS
Inches	mm	kg/mt
1	3,2	2,410
1 1 /4	3,2	3,100
1 1/2	3,2	3,560
2	3,6	5,030
2 1/2	3,6	6,420
3	4,0	8,360
4	4,5	12,200
5	5,0	16,600
6	5,0	19,800

SERIE EN 10216-1		
NOMINAL DIAMETER	THICKNESS	LINEAR MASS
Inches	mm	kg/mt
42,4	2,6	2,55
48,3	2,6	2,93
60,3	2,9	4,11
70,0	2,9	4,80
76,1	2,9	5,24
88,9	3,2	6,76
101,6	3,6	8,70
108,0	3,6	9,27
114,3	3,6	9,83
133,0	4,0	12,72
139,7	4,0	13,38
159,0	4,5	17,15
168,3	5,0	20,13
193,7	5,4	25,08
219,1	6,3	33,13

Dalmine Thermo® pipes for fire-extinguishing systems and gas & water system connections



Works realized with Dalmine Thermo® grooved pipes for fire-extinguishing systems

Mont Blanc Garage	Aosta
Ligabue Gualtieri Shopping Centre	Reggio Emilia
Monte Piazza Tunnel SS36	Lecco
S. Stefano Tunnel SS 42	Brescia
San Nicolao Tunnel SS340	Como
Somana Tunnel SS36	Lecco
Jet Aircraft Assembly Hangar	Cameri (NO)
Italmondo Transports and Logistics	Lainate
Paganella Logistics Warehouse	Mantua
Luchetti Warehouse	Ancona
Malpensa Airport - Cargo City*	Malpensa
Erbolario Warehouse	Lodi
Magazzino logistica Net Pack	Cesena
Novi Sad Car Park	Modena
Parco della Vittoria Car Park	Milan

* Also for chilled water





www.tenaris.com

For technical assistance please contact:
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