

Strojírenský zkušební ústav, s. p., Brno, Česká republika Engineering Test Institute, Brno, Czech Republic

# CERTIFICATE

Number: J-30-20105-11

Manufacturer: BORUSAN MANNESMANN BORU SAN. VE TIC. A.Ş.

Meclis-i Mebusan Cad. No: 103, Salipazarı / İstanbul, Turkey

Product: Non-Alloy steel tubes suitable for welding and threading, according to

EN 10255:2004+A1:2007

Steel Quality: S195T according to EN 10027-1

Product identification and initial-type testing findings:

see Annex 1 (page 2)

Base of certificate: Final Report on Initial Type-Testing No. 30-9486 dated 2011-04-29

Standard applied: ČSN EN 10255+A1:2007(id. EN 10255:2004+A1:2007)

annex ZA fig. ZA 2.1

The Engineering Test Institute confirms that performed the initial-type testing of the said product according to the requirement stated in Directive 89/106/EEC, Annex III, (2) (ii), second possibility (corresponds with Government Order No. 190/2002 Coll. § 5 art. 1 let. b). An integral part of the certificate is a Final Report on Initial Type-Testing containing examination findings and data on product identification.

Brno, Date 2011-04-29



Petr Mašek Director

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Certificate No. J-30-20105-11, Annex 1

## Product identification and the initial-type testing findings:

Non-Alloy steel tubes suitable for welding and threading, according to EN 10255:2004+A1:2007 Steel Quality: S195T according to EN 10027-1.

#### Form of products:

Non-Alloy steel tubes, longitudinally welded (W), bare tube (without coating) or galvanized tube (with coating).

## Application (Intended Use):

- in installations for the transport/distribution/storage of gas/fuel intended for the Supply of building heating/cooling systems from the external storage reservoir or the last pressure reduction unit of the boiler/heater/cooler system(s) of the building(s).

### Series and Types pursuant to EN 10255:2004+A1:2007:

#### Medium series (M)

Dimensions: from ø 21,3 x 2,6 mm up to ø 165,1 x 5,0 mm, Thread Size from 1/2 up to 6, for medium series of product (M according to Table 2 EN 10255:2004+A1:2007).

Heavy series (H)

Dimensions: from Ø 21,3 x 3,2 mm up to Ø 165,1 x 5,4 mm, Thread Size from 1/2 up to 6, for heavy series of product (H according to Table 2 EN 10255:2004+A1:2007).

Type L, L1 and L2

Dimensions: from Ø 21,3 x 2,0 mm up to Ø 165,1 x 4,5 mm, Thread Size from 1/2 up to 6, for type L, L1 and L2 of product (annex B of EN 10255:2004+A1:2007).

## Mechanical properties (Yield strength, 0,2 % proof strength Rp0,2)

Product	Mechanical Properties	
	R <sub>p0,2</sub> [MPa]	
Tube, dimension: ø 165,1 x 5,4 mm	380,12	
Tube, dimension: ø 21,3 x 2,0 mm	393,84	

#### Dimensional tolerances

	Dimensions		
Product	Specified outside diameter (mm)	Wall Thickness (mm)	Length (mm)
Tube, dimension:	max. 166,5	5,4	6000
ø 165,1 x 5,4 mm	min. 163,9	± 10 %	+10/-0 mm
Tube, dimension:	max. 21,4	2,0	5900
ø 21,3 x 2,0 mm	min. 21,0	+10/-8 %	+10/-0 mm

Tightness: Gas and Liquid

Product	Leak tightness test (hydrostatic pressure test) min. 50 bar/5 s
Tube, dimension: ø 165,1 x 5,4 mm	tightness (impermeable) proved
Tube, dimension: ø 21,3 x 2,0 mm	tightness (impermeable) proved

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