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 VAT No. RO 1510210/1992
 Subscribed and Paid Share Capital: 291.587.538,34 lei

INSPECTION CERTIFICATE - EN 10204: 2004 / 3.1

No : I 4376 Date: 31.05.2022	Sigla fabricii: Manufacturer's mark:		Comanda client nr.: 4501890774 Customer Order No. : 4501890774	PL: 0783
Specificatii/Specification: EN 10216-2:13/ ASTM A106:19/ISO 3183:19/ PED 2014/68/EU+ AD 2000W4/ Spec. TMK rev. 9/ 15.10.2020		Dimensiune /Dimensions: 76.1 x 4 x 12 000+150/-0 mm Otel / Steel: P235GH TC1/P265GH TC1 / Gr. B/L245 PSL1		
Descriere: Tevi din otel fara sudura laminate la cald, neprotejate, sanfrenate la ambele capete: marcare prin sablonare la un capat: sigla fabricii, standard, otel, dimensiune, 7.11 Kg/m, TEST PRESSURE 17.2 MPa, SMLS, nr. sarja, lot, LENGTH(m), inspector CTC nr. 5; marcare prin poansonare la ambele capete: sigla fabricii, otel, S, nr. sarja, Description: Hot rolled seamless steel pipes, unprotected, with bevelled ends; marking by painting at one end: manufacturer's mark, standard, steel grade, dimension, 7.11 Kg/m, TEST PRESSURE 17.2 MPa, SMLS, heat no., lot, LENGTH(m), mill inspector no. 5, technical control sign; marking at both ends: manufacturer's mark, steel grade, S, heat no.,				
Nr. Sarja / Heat No. : R58868		Otel produs si laminat in Romania/Steel melt and rolled in ROMANIA		
Cantitatea livrata/ Quantity delivered	Bucati / Pcs.	Lungime/Length - m	Greutate / Weight- Kg	
	7	85.0	626	

Compozitia chimica pe otel lichid / Ladle Chemical Analysis [%]

Heat no.	C	Mn	S	P	Si	Ni	Cr	Mo	Cu	Al	Nb	Ti	V	B
R58868	0.12	0.52	0.002	0.010	0.23	0.10	0.06	0.02	0.25	0.020	0.001	0.001	0.001	.0006

Cr+Cu+Mo+Ni=0.43

Nb+V=0.002

Nb+V+Ti=0.003

Compozitia chimica pe produs / Product Chemical Analysis [%]

Heat no.	C	Mn	S	P	Si	Ni	Cr	Mo	Cu	Al	Nb	Ti	V	B
R58868	0.13	0.53	0.001	0.013	0.23	0.10	0.06	0.02	0.27	0.022	0.002	0.001	0.001	.0006
R58868	0.13	0.54	0.002	0.012	0.22	0.10	0.06	0.02	0.27	0.022	0.001	0.001	0.001	.0006

Caracteristici mecanice / Mechanical Properties

TENSILE TEST (1. EN ISO 6892-1/ 2. ASTM A370) - at room temperature-				Rp0.2 N/mm ²	Rt0.5 N/mm ²	Rm N/mm ²	A %
Tip epruveta / Test Specimen // Fasie - longitudinal / Strip-longitudinal							
Dimensiune / Dimension (mm) : 1. 15.25 x 4.25 / 2. 19.30 x 4.25				1. 358	-	465	37
Sectiune / Section (mm ²) : 1. 65.3 / 2. 83.01							
Lungime / Length - (Lo) (mm) : 1. 45 / 2. 50.8				2. -	356	470	38
Test largire pe dorn Drift expanding test (EN ISO 8493)	Test aplatizare Flattening test (EN ISO 8492)	Test Charpy - crestatura V Charpy V - Notch (EN ISO 148-1) KV/Longitudinal 2.5 x 10 [mm]					
OK	OK	31 (27; 31; 34) J (-10 ⁰ C)		123 (108; 124; 136) J (-10 ⁰ C)			
Hydraulic test pressure (ASTM A530): 17.2 MPa for 5 sec: OK Heat treatment: normalized during hot rolling process Melting process: electric arc furnace, fully killed				Hardness HRB: 76-77 Hardness HRC max 22 (acc to NACE MR0175/ISO 15156) NACE MR0103/ISO 17945 Grain size ASTM E 112: 9.0			

Hot yield at 300°C: 287 MPa(strip longitudinal 5.25 x 4.25 = 22.33 mm²);Hot yield at 343°C: 270 MPa(strip longitudinal 5.35 x 4.10 = 21.96 mm²);Hot yield at 538°C: 185 MPa(strip longitudinal 5.65 x 4.20 = 23.75 mm²);

Inspectia vizuala si dimensionala: OK / Visual inspection and dimensional check : OK

Fabrica producatoare de tevi este certificata conform ISO 9001:2015, ISO 14001:2015 si ISO 45001:2018

The manufacturer of pipes is certified in acc. with ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018

The material "not contain intentional additions of elements such as lead, selenium, or sulphur to improve machinability"

"TEVILE CERTIFICATE NU AU FOST REMANIMATE PRIN SUDURA "

"NO WELD REPAIR ON HEREBY CERTIFIED TUBES "

Chief of QC & Testing of the Metallurgical Tubes Products

MILL INSPECTOR

Dipl. Eng. Silviu Barbulescu

Eng. Constantin Lupu

"Issued in agreement with TÜV SÜD Industrie Service GmbH (02/98)"

"QS approved acc. to PED, Annex I, Para. 4.3 by Notified Body 0036"

"(Certification no. DGR-0036-QS-W 62/2002/MUC)"

This MTC is digitally signed and sealed by TMK-ARTROM S.A. IT system. The document is valid without handwritten signatures.

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