

**TMK-ARTROM S.A.**

Draganesti Str. 30, Slatina, jud. OLT, Romania 230119

Tel: +40 (249) 436862, 434640, 434641

Fax: +40 (249) 434330, 437288

E-mail: office.slatina@tmk-artrom.eu www.tmk-artrom.eu

J 28/9/1991; VAT No. RO 1510210/1992

Subscribed and Paid Share Capital: 291.587.538,34 lei

INSPECTION CERTIFICATE - EN 10204: 2004 / 3.1

No : I 6942 Date: 03.09.2015	Sigla fabricii: Manufacturer's mark:		Comanda client nr.: 22 Customer Order No. : 22	PL: 2600
Specificatii / Specification: PED 97/23/EC+ EN10210-1&2:06/ EN 10216-3:13/ AD 2000W4+ EN 10216-2:13/ EN 10216-1:13/ ISO 3183:12		Dimensiune/Dimensions: 57.0 x 4 x 6 000+100/-0 mm Otel / Steel: S275J2H/ P275NL1 TC1/ P265GH TC1/ P265TR2/ L245 PSL1		
Description: Hot rolled seamless steel pipes; marking by painting at one end: manufacturer's mark, standard, steel grade, dimension, LENGTH(m), SMLS, heat no., lot, mill inspector no. 5, technical control sign				
Nr. Sarja / Heat No. : 10490				
Cantitatea livrata/ Quantity delivered	Bucati / Pcs.	Lungime/length - (m)	Greutate / Weight- Kg	
	44	266.0	1392	

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

Heat no.	C	Mn	S	P	Si	Ni	Cr	Mo	Cu	Al	Nb	Ti	N	V	CE
10490	0.16	1.12	.001	.014	0.25	0.07	0.04	0.01	0.20	.026	.001	.024	.009	.020	0.379

Cr+Cu+Mo= 0.25

Nb+V=0.021

Nb+V+Ti=0.045

Compozitia chimica pe produs / Product Chemical Analyse (%)

Heat no.	C	Mn	S	P	Si	Ni	Cr	Mo	Cu	Al	Nb	Ti	V
10490	0.15	1.12	0.003	0.016	0.25	0.08	0.04	0.02	0.20	0.028	0.003	0.026	0.020
10490	0.16	1.12	0.003	0.016	0.24	0.08	0.05	0.02	0.21	0.027	0.002	0.026	0.019

Caracteristici mecanice / Mechanical Properties

INCERCAREA LA TRACTIUNE / TENSILE TEST (EN ISO 6892-1)			Rp0,2	Rt0,5	Rm	A
Tip epruveta / Test Specimen			N/mm ²	N/mm ²	N/mm ²	%
Fasie - longitudinal / Strip-longitudinal						
Dimensiune / Dimension (mm) : 10.80 x 4						
Sectiune / Section (mm ²) : 45.42			388	391	509	36
Lungime / Length - (Lo) (mm) : 40						
Test largire 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]	Test tractiune inel Ring tensile test (EN ISO 8496)			
OK	OK	34 (36; 31; 34) J (-10 ⁰ C)	-			
Hydraulic test pressure (2470 PSI for) 5 sec: OK Heat treatment: normalized			Melting process: electric arc furnace, fully killed Hardness BHN: 153-156-153-156 Hardness HRC max 22 (acc to NACE MR01.75/ISO 15156)			

Visual inspection and dimensional check: OK

The manufacturer of pipes is certified by LRQA in accordance with: ISO 9001:08

(certificate no. 6007159 issued by 2015-08-10, valid until 2018-08-10), ISO 14001:04

(certificate no.6007157 issued by 2015-08-16, valid until 2018-08-10), OHSAS

18001:07 (certificate no.6007158 issued by 2015-08-12, valid until 2018-08-10).

"TEVILE CERTIFICATE NU AU FOST REMANIMATE PRIN SUDURA "

" NO WELD REPAIR ON HEREBY CERTIFIED TUBES "

Sef serviciu CTC Laboratoare

QC & LABORATORIES CHIEF

Dipl. Eng. Silviu Barbulescu

**INSPECTOR CTC****MILL INSPECTOR**

Eng. Constantin Lupu



Ausgestellt im Einvernehmen mit dem TÜV SÜD (02/98)

Issued in agreement with TÜV SÜD (02/98)



0036- CPR-M-008-2007

TMK-ARTROM S.A. Draganesti
Street, No.30, 230119, SLATINA, OLT, ROMANIA
15

No. 4-1 / CPR 04-06-14

EN 10210-1:2006

S275J2H / 1.0138

intended to be used in metal structures or in composite metal and concrete structures

Tolerances:**Elongation:****Tensile strength:****Yield strength:****Impact strength:****Weldability:****Durability:****Dangerous substance: No performance determined**expressed as indicated
in the DoP

THIS IS FOR CERTIFY THAT THE MATERIAL HEREIN DESCRIBED HAS BEEN MANUFACTURED WITH THE ORDERED SPECIFICATION AND THAT INFORMATION IS CORRECT, THEY MEET THE SPECIFICATION'S REQUIREMENTS AND ARE RECORDS IN THE COMPANY DOCUMENTS.



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EUID: ROONRCJ28/9/1991; J28/9/31.01.1991

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- Tip epruveta / Test Specimen // Fasie – longitudinal / Strip–longitudinal			Rp0,2 N/mm²	Rt0,5 N/mm²	Rm N/mm²	A %
Dimensiune / Dimension (mm) : 1. 15.25 x 4.25 / 2. 19.30 x 4.25			1. 358	-	465	37
Sectiune / Section (mm²) : 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]	Test Charpy - crestatura V Charpy V – Notch (EN ISO 148-1) KVc/Longitudinal 10 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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 VAT No. RO 1510210/1992
 Subscribed and Paid Share Capital: 291.587.538,34 lei

INSPECTION CERTIFICATE - EN 10204: 2004 / 3.1

No: I 4341 Date: 31.05.2022	Manufacturer's mark:	Customer Order No.: 161	PL: 0790
CUSTOMER: NIMFA-COM SRL			
Specification: PED 2014/68/EU + EN10210-1:06/ EN10210-2:19/ EN 10216-2:13/ EN 10216-1:13		Dimensions: 88.9 x 4 x 6 000+100/-0 mm Steel: S355J2H / P265GH TC1 / P265TR2	
Description: Hot rolled seamless steel pipes with bevelled ends; unprotected; marking by painting at one end: manufacturer's mark, standard, steel grade, heat no, LOT, mill inspector no. 5, technical control sign			
Heat No.: R58462		Steel melt and rolled in ROMANIA	
Quantity delivered	Pcs.	Length - m	Weight- Kg
	74	444.00	3850

Ladle Chemical Analysis [%]

C	Mn	S	P	Si	Ni	Cr	Mo	Cu	Al	Nb	Ti	V	CE
0.19	1.22	0.003	0.010	0.19	0.09	0.06	0.03	0.18	0.025	0.001	0.001	0.002	0.430

Mechanical Properties

TENSILE TEST (EN ISO 6892-1) - at room temperature- Test Specimen / Strip-longitudinal			Rp0.2 N/mm ²	Rm N/mm ²	A %
Dimension (mm): 15.25 x 4.25			411	537	31
Section (mm ²): 65.16					
Length - (Lo) (mm): 45					
Drift expanding test (EN ISO 8493)	Flattening test (EN ISO 8492)	Charpy V - Notch (EN ISO 148-1)	Ring tensile test (EN ISO 8496)		
OK	OK	-	-		
Heat treatment: normalized during hot rolling process with temperature between 880-940°C Hydraulic test pressure - 70 bar for 5 sec: OK			Hardness HRB: 84-85 Hardness HRC max 22 (acc to NACE MR0175/ISO 15156) NACE MR0103/ISO 17945 Grain size ASTM E 112: 9.0		

Visual inspection and dimensional check: OK

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

NO WELD REPAIR ON HEREBY CERTIFIED TUBES

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

Chief of QC & Testing of the Metallurgical Tubes Products

Dipl. Eng. Silviu Barbulescu

MILL INSPECTOR

Eng. Constantin Lupu

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

 0036- CPR-M-008-2007 TMK-ARTROM S.A. Draganesti Street, No.30, 230119, SLATINA, OLT, ROMANIA 22 No. 6-5E / CPR 18-05-22	
EN 10210-1:2006 S355J2H / 1.0576 intended to be used in metal structures or in composite metal and concrete structures	
Tolerances: Elongation: Tensile strength: Yield strength: Impact strength: Weldability: Durability: Dangerous substance: No performance determined	expressed as indicated in the DoP

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INSPECTION CERTIFICATE - EN 10204: 2004 / 3.1

No: I 6891 Date: 24.10.2022	Manufacturer's mark:	Customer Order No.: 183	PL: 1449
CUSTOMER: NIMFA-COM SRL			
Specification: EN10210-1:06/ EN10210-2:19/ P10216-3:13/ EN 10216-2:13/ EN 10216-1:13		Dimensions: 108 x 4 x 6 000+100/-0 mm Steel: S355J2H/ P355NL1 TC1/ P265GH TC1/ P265TR2	
Description: Hot rolled seamless steel pipes; unprotected; marking by painting at one end: manufacturer's mark, standard, steel grade, heat no, LOT, LENGTH (m), mill inspector no. 5, technical control sign			
Heat No.: R59543		Steel melt and rolled in ROMANIA	
Quantity delivered	Pcs.	Length - m	Weight- Kg
	51	306.0	3242

Ladle Chemical Analysis [%]

C	Mn	S	P	Si	Ni	Cr	Mo	Cu	Al	Nb	Ti	V	CE
0.17	1.23	0.003	0.017	0.21	0.09	0.13	0.02	0.22	0.030	0.002	0.001	0.003	0.426

Cr+Cu+Mo+Ni=0.46

Nb+V=0.005

Nb+V+Ti=0.006

N=0.009

Mechanical Properties

TENSILE TEST (EN ISO 6892-1) - at room temperature- Test Specimen / Strip-longitudinal		Rp0.2 N/mm ²	Rm N/mm ²	A %
Dimension (mm): 15.90 x 4.30		404	552	30
Section (mm ²): 68.64				
Length - (Lo) (mm): 45				
Drift expanding test (EN ISO 8493)	Flattening test (EN ISO 8492)	Charpy V - Notch (EN ISO 148-1)		
OK	OK	-		
Heat treatment: normalized temperature between 880-940°C Test Eddy Current cf. EN ISO 10893-1: OK		Melting process: electric arc furnace, fully killed		

Visual inspection and dimensional check: OK

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

NO WELD REPAIR ON HEREBY CERTIFIED TUBES

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

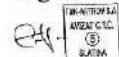
Chief of QC & Testing of the Metallurgical Tubes Products

Dipl. Eng. Silviu Barbulescu



MILL INSPECTOR

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 0036- CPR-M-008-2007 TMK-ARTROM S.A. Draganesti Street, No.30, 230119, SLATINA, OLT, ROMANIA 22 No. 6-5E / CPR 18-10-22 EN 10210-1:2006 S355J2H / 1.0576 intended to be used in metal structures or in composite metal and concrete structures	
Tolerances: Elongation: Tensile strength: Yield strength: Impact strength: Weldability: Durability: Dangerous substance: No performance determined	expressed as indicated in the DoP

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 VAT No. RO 1510210/1992
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INSPECTION CERTIFICATE - EN 10204: 2004 / 3.1

No : I 7602 Date: 31.10.2020	Manufacturer's mark:	Customer Order No. : 099	PL:2433
CUSTOMER- NIMFA-COM SRL			
Specification: API 5L 46 th Ed./ EN 10216-2:13/ ASTM A106:19/ ISO 3183:19		Dimensions: 133.0 x 5.0 x 12 000 to 12 250 mm Steel: Gr. B PSL1/ P235GH TC1/ P265GH TC1/ Gr. B/L245 PSL1	
Description: Seamless steel pipes, unprotected; marking by painting at one end: TMK-ARTROM, standard, dimension, steel grade, LENGTH(m), SMLS, heat no., lot, mill inspector no. 5, technical control sign // standard, steel grade, TEST PRESSURE 17.2 MPa			
Heat No. : 54159			
Quantity delivered	Pcs. 51	Length - m 619.63	Weight- Kg 9782

Ladle Chemical Analysis [%]

Heat no.	C	Mn	S	P	Si	Ni	Cr	Mo	Cu	Al	Nb	Ti	V	B
54159	0.12	0.52	0.003	0.015	0.21	0.09	0.09	0.02	0.23	0.026	0.001	0.001	0.002	.0002

Cr+Cu+Mo+Ni=0.43

Nb+V=0.003

Nb+V+Ti=0.004

Product Chemical Analysis [%]

Heat no.	C	Mn	S	P	Si	Ni	Cr	Mo	Cu	Al	Nb	Ti	V	B
54159	0.12	0.52	0.003	0.015	0.22	0.08	0.10	0.02	0.22	0.027	0.001	0.001	0.002	.0002
54159	0.12	0.52	0.002	0.014	0.21	0.08	0.09	0.02	0.22	0.026	0.001	0.002	0.002	.0002

Mechanical Properties

TENSILE TEST (1. EN ISO 6892-1/ 2. ASTM A370) - at room temperature- Test Specimen / Strip-longitudinal				Rp0.2 N/mm²	Rt0.5 N/mm²	Rm N/mm²	A %
Dimension (mm) : 1. 10.35 x 5.05 / 2. 19.25 x 5.15				1. 332	-	456	35
Section (mm²) : 1. 75.24 / 2. 140.87							
Length - (Lo) (mm) : 1. 50 / 2. 50.8				2. -	331	448	36
Drift expanding test (EN ISO 8493)	Flattening test (EN ISO 8492)	Charpy V - Notch (EN ISO 148-1) KV/Longitudinal 5 x 10 [mm]					
OK	OK	72 (69; 73; 75) J (0° C)		-			
Hydraulic test pressure 17.2 MPa (172.4 bari) for 5 sec: OK Grain size ASTM E 112: 8.5				Heat treatment: normalized during hot rolling process, temperature between 880°C - 940°C and cooled in still air Melting process: electric arc furnace, fully killed			

Visual inspection and dimensional check : OK

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

" NO WELD REPAIR ON HEREBY CERTIFIED TUBES "

QC & LABORATORIES CHIEF

Dipl. Eng. Silviu Barbulescu



MILL INSPECTOR

Eng. Constantin Lupu



This inspection certificate is electronic.

The forgery of this certificate concludes to responsibility mentioned on Romanian Penal Code (art. 290-292).

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Subscribed and Paid Share Capital: 291.587.538,34 lei

INSPECTION CERTIFICATE - EN 10204: 2004 / 3.1

No : I 6524 Date: 05.09.2017	Sigla fabricii: Manufacturer's mark:	Comanda client nr.: 16/2017 Customer Order No. : 16/2017	PL: JS_012116
Specificatii/Specification: API 5L:13/ PED 2014/68/EU (Par. 4.3) +AD 2000W4/ ASTM A106:15/ASTM A53:12/ EN 10216-2:13/ ISO 3183:12		Dimensiune / Dimensions: 159.0 x 5.0 x 6 000+100/-0 mm Otel / Steel: Gr. B PSL1/ Gr.B/ P235GH TC1/P265GH TC1 / L245 PSL1	
Description: Hot rolled seamless steel pipes; marking by painting at one end: TMK-ARTROM, standard, dimension, steel grade, SMLS, heat no., lot, LENGTH(m), mill inspector no. 5 // standard, steel grade, 18.98 Kg/m, TEST PRESSURE 2500 PSI;			
Nr. Sarja / Heat No. : 47578			
Cantitatea livrata/ Quantity delivered	Bucati / Pcs.	Lungime/Length - m	Greutate / Weight- Kg
	43	258.0	4902

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

Heat no.	C	Mn	S	P	Si	Ni	Cr	Mo	Cu	Al	Nb	Ti	V	B
47578	0.12	0.53	0.002	0.007	0.20	0.08	0.05	0.01	0.22	0.022	0.001	0.001	0.002	.0003

Cr+Cu+Mo+Ni= 0.36

Nb+V=0.003

Nb+V+Ti=0.004

Compozitia chimica pe otel produs / Product Chemical Analyse [%]

Heat no.	C	Mn	S	P	Si	Ni	Cr	Mo	Cu	Al	Nb	Ti	V	B
47578	0.11	0.53	0.004	0.009	0.19	0.09	0.05	0.02	0.21	0.022	0.001	0.001	0.001	.0003
47578	0.12	0.54	0.003	0.009	0.20	0.09	0.05	0.02	0.21	0.022	0.002	0.002	0.002	.0003

Caracteristici mecanice / Mechanical Properties

INCERCAREA LA TRACTIUNE / TENSILE TEST (EN ISO 6892-1) - at room temperature-		Rp0,2 N/mm ²	Rt0,5 N/mm ²	Rm N/mm ²	A %
Tip epruveta / Test Specimen // Tronson / Full section					
Dimensiune / Dimension (mm) : 26.9 x 5.05					
Sectiune / Section (mm ²) : 135.84		389	391	471	38
Lungime / Length - (Lo) (mm) : 80					
Test largire dom Drift expanding test (EN ISO 8493)	Test aplatizare Flattening test (EN ISO 8492)	Test Charpy - crestatura V Charpy V - Notch (EN ISO 148-1)		Test tractiune inel Ring tensile test (EN ISO 8496)	
OK	OK	-		-	
Hydraulic test pressure (ASTM A530): 2500 PSI for 5 sec: OK		Grain size ASTM E 112: 9.0			
Melting process: electric arc furnace, fully killed		Hardness HRB: 74-75-74-75			
Heat treatment: normalized during hot rolling process.		Hardness HRC max 22 (acc to NACE MR01.75/ISO 15156)			
temperature between 880°C - 940°C and cooled in still air		NACE MR01.03/ISO 17495-1			
Bending test (ASTM A106 point 11): OK					

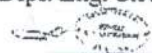
Inspectia vizuala si dimensionala: OK / Visual inspection and dimensional check : OK

The manufacturer of pipes is certified by LRQA in accordance with: ISO 9001:08 (certificate no. 6007159 issued by 2015-08-10, valid until 2018-08-10), ISO 14001:04 (certificate no. 6007157 issued by 2015-08-16, valid until 2018-08-10), OHSAS 18001:07 (certificate no. 6007158 issued by 2015-08-12, valid until 2018-08-10).

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


"TEVILE CERTIFICATE NU AU FOST REMANATE PRIN SUDURA "

" NO WELD REPAIR ON HEREBY CERTIFIED TUBES "


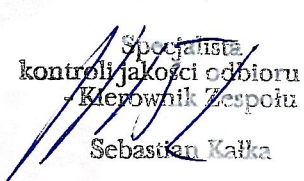
Sef serviciu CTC LaboratoareQC & LABORATORIES CHIEFDipl. Eng. Silviu BarbulescuINSPECTOR CTCMILL INSPECTOREng. Constantin Lupu

Ausgestellt im Einvernehmen mit dem TÜV SÜD (02/98)
Issued in agreement with TÜV SÜD (02/98)

THIS IS FOR CERTIFY THAT THE MATERIAL HEREIN DESCRIBED HAS BEEN MANUFACTURED WITH THE ORDERED SPECIFICATION AND THAT INFORMATION IS CORRECT, THEY MEET THE SPECIFICATION'S REQUIREMENTS AND ARE RECORDS IN F OUR COMPANY DOCUMENTS.

				A01/Nazwa wytwórcy/ Manufacturer's Works/ Herstellerwerk: ALCHEMIA S.A. ul. Aleje Jerozolimskie 92, 00-807 Warszawa Oddział Rurexpol ul. Trochimowskiego 27 42-207 Częstochowa www.alchemiasa.pl								Z02/Data/date/Datum: 20.04.2022																																																					
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Badania / Tests / Prüfung: Kontrola wizualna i wymiarowa/Visual inspection and checking of dimensions/Besichtigung und Messprüfung: Próba szczelności/Hydraulic test at pressure/ Dichtigkeitstest 7,0 MPa Próba spłaszczania/Flattening test/Ringfaltversuch - Wynik pozytywny/Positive results/Pozytyves Ergebnis - Wynik pozytywny/Positive results/Pozytyves Ergebnis - Wynik pozytywny/Positive results/Pozytyves Ergebnis																																																																	
Niniejszym potwierdza się, że dostawa została skontrolowana i odpowiada warunkom zamówienia. / We hereby certify, that the material described above has been tested and complies with terms of the order contract./Es wird bestätigt, das die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellung entspricht.																																																																	
Badany materiał nie wykazywał radioaktywności. Pomiar został wykonany przy użyciu systemu GENIE 2000, produkta Canberra-Packard. The tested material did not show any signs of radioactivity. The measurement was performed with the application of GENIE 2000 system, manufactured by Canberra-Packard. In dem untersuchten Material wurde keine Radioaktivität gefunden. Die Messung wurde mit dem GENIE-2000-System gemacht. Hersteller: Canberra-Packard.																																																																	
D01/Rury oznakowane / Pipes Markings / Kennzeichnung Acc. to: EN10216				Kontrola jakości/Control of Manufacture Fabrikationskontrolle ALCHEMIA S.A. Oddział Rurexpol Dział Kontroli Jakości Rurexpol Branch Quality Control Department				Z02/Z03Specjalista Kontroli/Works Inspector Der Werksachverständigen Specjalista kontroli jakości odbioru rur - Kierownik Zespołu Sebastian Kalka																																																									

T- Poprzeczna/ Transverse/ Quer L- Wzdłużna/ Longitudinal/ Längs

 A01/Nazwa wytwórcy/ Manufacturer's Works/ Herstellerwerk: ALCHEMIA S.A. Oddział Rurexpol ul. Trochimowskiego 27 42-207 Częstochowa www.alchemiasa.pl		Z02/Data/date/Datum: 20.04.2022																																																																																	
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C70/Sposób wytopu stali. / Way of casting. / Ehrschnmelzungsverfahren. : EAF – Oxygen Electric Arc Furnace//Stal uspokojona/Fully killed/Beruhigter Stahl Huta/Steelworks/Stahlwerk: ArcelorMittal Poland S.A.																																																																																			
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Badania / Tests / Prüfung: Kontrola wizualna i wymiarowa/Visual inspection and checking of dimensions/Besichtigung und massprüfung: Próba szczelności/Hydraulic test at pressure/ Dichtigkeitstest 7,0 MPa (5s) Próba spłaszczania/Flattening test/Ringfaltversuch																																																																																			
Niniejszym potwierdza się, że dostawa została skontrolowana i odpowiada warunkom zamówienia. / We hereby certify, that the material described above has been tested and complies with terms of the order contract./Es wird bestätigt, das die Lieferung geprüft wurde und den Vereinberungen bei der Bestellung entspricht. Badany materiał nie wykazał radioaktywności. Pomiar został wykonany przy użyciu systemu GENIE 2000, produkca Canberra-Packard.The tested material did not show any signs of radioactivity. The measurement was performed with the application of GENIE 2000 system, manufactured by Canberra-Packard.In dem untersuchten Material wurde keine Radioaktivität gefunden. Die Messung wurde mit dem GENIE-2000-System gemacht, Hersteller: Canberra-Packard.																																																																																			
D01/Rury oznakowano / Pipes Markings / Kennzeichnu Acc. to: ASTM A106M/EN10216-2		Kontrola Jakości/Control of Manufacture Fabrikationskontrolle ALCHEMIA S.A. Oddział Rurexpol Dział Kontroli Jakości Rurexpol Branch Quality Control Department																																																																																	
		Z02/Z03Specjalista Kontroli/Works Inspector Der Werksachverständigen  Sebastian Kalka																																																																																	
T- Poprzeczna/ Transverse/ Quer L- Wzdłużna/ Longitudinal/ Längs																																																																																			



Karadenizler Mah. Ördülü Cad. No: 62, 41140 PK334 Başiskele KOCAELİ / TÜRKİYE
Tel: 444 78 52 (444 - PTKB) +90 (262) 349 37 90 / 91 +90 (262) 349 25 50 / 51
Fax: +90 262 349 37 59
petekboru.com.tr info@petekboru.com.tr

MILLTEST CERTIFICATE
EN 10204 3.1

Date/Tarih : 6.02.2022
Certificate/Sertifika No : 5397

Customer/Müşteri: S.C. NIMFA - COM S.R.L.

Standart No/Norm: TS EN 10217- 5

Order No-LC No/Sipariş No: 6478

Pipe Type/Boru Tipi: SAWH

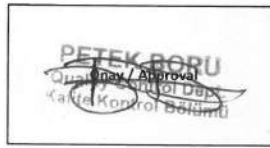
Item Pos. Sıra No:	Dimensions OdxWtxL Ölçüler	Pieces Adet	Total Length Metre
1	530,00 X 8,00	9	108,00
2	820,00 X 10,00	5	60,00
3	920,00 X 10,00	9	108,00
4	1020,00 X 10,00	5	60,00

HT bar/sec	BD	GBT	NDT	VD	US
70/5	30	OK	OK	OK	OK
57/10	30	OK	OK	OK	OK
46/10	30	OK	OK	OK	OK
37/10	30	OK	OK	OK	OK

Item Pos. Sıra No:	Bant N°-Heat No Döküm No:	V	Cu	Ni	Cr	Mo	Al	Nb	Ti	S	P	Mn	Si	C	Steel Grade	Temp.	Material		Weld			
		X100														Kalite	Sıcaklık 9C	Re(N/mm²)	Rm(N/mm²)	A (%)	Re(N/mm²)	Rm(N/mm²)
1	124922	0,6	2,2	2,7	1,3	0,0	-	0,0	0,2	0,5	1,3	90,2	19,3	16,6	P265GH TC1	23 9C	382,6	552,3	36,8	472,84	592,5	22,5
2	915598	0,3	2,9	3,1	3,5	0,3	-	0,3	0,2	0,5	1,6	46,4	6,3	9,3	P235GH TC1	23 9C	326,7	435,6	37,4	326,67	483,6	26,0
3	235402	0,1	1,6	2,9	2,2	0,0	-	0,0	0,1	0,3	1,6	108,7	18,5	15,7	P265GH TC1	23 9C	406,1	532,7	32,9	418,89	550,3	26,3
4	235402	0,1	1,6	2,9	2,2	0,0	-	0,0	0,1	0,3	1,6	108,7	18,5	15,7	P265GH TC1	23 9C	432,6	560,2	35,3	453,22	590,6	25,3

OD: Dış Çap / Outside Diameter
WT: Et Kalınlığı / Wall Thickness
BD: Havşa Açısı / Bevel Degree
VD: Göz/Ebat Kontrol / Visual Dimension

Re: Akma dayanımı / Yield Stress
Rm: Çekme Dayanımı / Tensile Strength
A%: Uzama / Elongation
GBT: Eğme testi/Guided Bend Test
HT: Hidrotest / Hydrostatic Test
N.D.T.:Tahribatsız test / Non-Destructive Testing
US : Ultrasonic test: as per TS EN ISO 10893-11



ISO 9001:2015
ISO 14001:2015
ISO 45001:2018





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TMK-ARTROM S.A.

Draganesti Str. 30, Slatina, jud. OLT, Romania 230119
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E-mail: office.slatina@tmk-artrom.eu www.tmk-artrom.eu
EUID: ROONRC.J28/9/1991; J28/9/31.01.1991
VAT No. RO 1510210/1992
Subscribed and Paid Share Capital: 291.587.538,34 lei

INSPECTION CERTIFICATE - EN 10204: 2004 / 3.1

No: I 7441 Date: 18.11.2022	Manufacturer's mark:	Customer Order No.: 192	PL: 1555
CUSTOMER: NIMFA-COM SRL			
Specification: EN 10210-1:06/ EN 10210-2:19/ EN 10216-3:13/ EN 10216-2:13/ EN 10216-1:13		Dimensions: 21.3 x 2.6 x 6 000+100/-0 mm Steel: S355J2H/ P355NH TC1/ P265GH TC1/ P265TR2	
Description: Hot rolled seamless steel pipes; unprotected; marking by painting at one end: manufacturer's mark, standard, steel grade, heat no, LOT, LENGTH (m), mill inspector no. 5, technical control sign			
Heat No.: R59579		Steel melt and rolled in ROMANIA	
Quantity delivered	Pcs.	Length - m	Weight- Kg
	468	2808.0	3404

Ladle Chemical Analysis [%]

C	Mn	S	P	Si	Ni	Cr	Mo	Cu	Al	Nb	Ti	V	CE
0.15	1.06	0.005	0.014	0.21	0.11	0.08	0.03	0.25	0.023	0.002	0.001	0.003	0.373

Cr+Cu+Mo+Ni=0.47

Nb+V=0.005

Nb+V+Ti=0.006

Mechanical Properties

TENSILE TEST (EN ISO 6892-1) – at room temperature- Test Specimen / Strip–longitudinal			Rp0,2 N/mm²	Rm N/mm²	A %
Dimension (mm): 1. 15.20 x 2.55 / 2. 15.30 x 2.65 / 3. 15.35 x 2.60			1. 404	522	36
Section (mm²): 1. 43.09 / 2. 45.19 / 3. 44.48			2. 398	528	38
Length - (Lo) (mm): 1. 35 / 2. 35 / 3. 35			3. 396	520	37
Drift expanding test (EN ISO 8493)	Flattening test (EN ISO 8492)	Charpy V – Notch (EN ISO 148-1) -	Ring tensile test (EN ISO 8496)		
OK	OK	-	-		
Heat treatment: normalized temperature between 880-940°C Test Eddy Current cf. EN ISO 10893-1: OK			Melting process: electric arc furnace, fully killed		

Visual inspection and dimensional check: OK

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

NO WELD REPAIR ON HEREBY CERTIFIED TUBES

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

Chief of QC & Testing of the Metallurgical Tubes Products

Dipl. Eng. Silviu Barbulescu



MILL INSPECTOR

Eng. Constantin Lupu



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 0036- CPR-M-008-2007 TMK-ARTROM S.A. Draganesti Street, No.30, 230119, SLATINA, OLT, ROMANIA 22 No. 6-4E / CPR 15-10-19 EN 10210-1:2006 S355J2H / 1.0576 intended to be used in metal structures or in composite metal and concrete structures	
Tolerances: Elongation: Tensile strength: Yield strength: Impact strength: Weldability: Durability: Dangerous substance: No performance determined	expressed as indicated in the DoP



TMK-ARTROM S.A.

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E-mail: office.slatina@tmk-artrom.eu www.tmk-artrom.eu

EUID: ROONRC.J28/9/1991; J28/9/31.01.1991

VAT No. RO 1510210/1992

Subscribed and Paid Share Capital: 291.587.538,34 lei

INSPECTION CERTIFICATE - EN 10204: 2004 / 3.1

No : I 5093 Date: 30.06.2022	Manufacturer's mark:	Customer Order No. : 169	PL: 0972
CUSTOMER- NIMFA-COM SRL			
Specification: EN10210-1:06/ EN10210-2:19/ ISO 3183:19/ EN 10216-1:13/ EN 10216-2:13/ EN 10297-1:03/ ASTM A106:19/ PED 2014/68/EU		Dimensions: 33.7 x 2.9 x 6 000+100/-0 mm Steel: S355J2H N/ L245/ P265TR2/ P265GH TC1/ E275/ Gr. B	
Description: Hot rolled seamless steel pipes, unprotected: marking by painting at one end: manufacturer's mark, standard, dimension, steel grade, SMLS, heat no., LOT, LENGTH(m), mill inspector no. 5			
Heat No. : R58811		Steel melt and rolled in Romania	
Quantity delivered	Pcs.	Length - (m)	Weight- Kg
	265	1590.0	3532

Ladle Chemical Analysis [%]

Heat no.	C	Mn	S	P	Si	Ni	Cr	Mo	Cu	Al	Nb	Ti	V	B	CEV
R58811	0.18	1.20	.003	.011	0.23	0.11	0.06	0.05	0.28	.029	.001	.001	.005	0.0005	0.429

Nb+V=0.006

Nb+V+Ti=0.007

Product Chemical Analyse (%)

Heat no.	C	Mn	S	P	Si	Ni	Cr	Mo	Cu	Al	Nb	Ti	V	B
R58811	0.18	1.20	0.002	0.014	0.22	0.11	0.08	0.05	0.29	0.030	0.001	0.002	0.002	0.0005
R58811	0.17	1.22	0.004	0.014	0.23	0.10	0.08	0.05	0.29	0.030	0.001	0.001	0.002	0.0005

Mechanical Properties

TENSILE TEST (1. EN ISO 6892-1/ 2. ASTM A370) -- at room temperature- Test Specimen _ Strip-longitudinal			Rp0,2 N/mm²	Rt0,5 N/mm²	Rm N/mm²	A %
Dimension (mm): 1.1. 15.00 x 2.95 / 1.2. 15.30 x 3.00 / 2. 12.65 x 3.05			1.1. 395	-	523	38
Section (mm²) : 1.1. 46.02 / 1.2. 47.82 / 2. 39.69			1.2. 397	-	520	37
Length - (Lo) (mm) : 1.1. 40 / 1.2. 40 / 2. 50.8			2. -	406	529	37
Drift expanding test (EN ISO 8493)	Flattening test (EN ISO 8492)	Charpy V – Notch (EN ISO 148-1)	Charpy V – Notch (EN ISO 148-1)			
OK	OK	-	-			
Hydraulic test pressure 20.5 MPa for 5 sec: OK Heat treatment: normalized during hot rolling process, temperature between 880°C - 940°C Bending test (ASTM A106 point 11): OK			Melting process: electric arc furnace, fully killed Hardness HRB: 85–86 Hardness HRC max 22 (acc to NACE MR0175/ISO 15156) NACE MR0103/ISO 17945 Grain size ASTM E 112: 9.0			

Visual inspection and dimensional check : OK

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

" NO WELD REPAIR ON HEREBY CERTIFIED TUBES "

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

Chief of QC & Testing of the Metallurgical Tubes Products

Dipl. Eng. Silviu Barbulescu

MILL INSPECTOR

Eng. Constantin Lupu

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 0036- CPR-M-008-2007 TMK-ARTROM S.A. Draganesti Street, No. 30, 230119, SLATINA, OLT, ROMANIA 22 No. 6-5E / CPR 18-05-22 EN 10210-1:2006 S355J2H / 1.0576 intended to be used in metal structures or in composite metal and concrete structures	
Tolerances: Elongation: Tensile strength: Yield strength: Impact strength: Weldability: Durability: Dangerous substance: No performance determined	expressed as indicated in the DoP

THIS IS FOR CERTIFY THAT THE MATERIAL HEREIN DESCRIBED HAS BEEN MANUFACTURED WITH THE ORDERED SPECIFICATION AND THAT INFORMATION IS CORRECT, THEY MEET THE SPECIFICATION'S REQUIREMENTS AND ARE RECORDS IN OUR COMPANY DOCUMENTS.



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EUID: ROONRC.J28/9/1991; J28/9/31.01.1991

VAT No. RO 1510210/1992

Subscribed and Paid Share Capital: 291.587.538,34 lei

INSPECTION CERTIFICATE - EN 10204: 2004 / 3.1

No : I 5096 Date: 30.06.2022	Manufacturer's mark: 	Customer Order No. : 169	PL: 0972
CUSTOMER- NIMFA-COM SRL			
Specification: EN10210-1:06/ EN10210-2:19/ ISO 3183:19/ EN 10216-1:13/ EN 10216-2:13/ EN 10297-1:03/ ASTM A106:19/ PED 2014/68/EU		Dimensions: 42.4 x 3.2 x 6 000+100/-0 mm Steel: S355J2H / L245/ P265TR2/ P265GH TC1/ E275/ Gr. B	
Description: Hot rolled seamless steel pipes, unprotected: marking by painting at one end: manufacturer's mark, standard, dimension, steel grade, SMLS, heat no., LOT, LENGTH(m), mill inspector no. 5			
Heat No. : R58960		Steel melt and rolled in Romania	
Quantity delivered	Pcs.	Length – (m)	Weight– Kg
	204	1224.0	3878

Ladle Chemical Analysis [%]

Heat no.	C	Mn	S	P	Si	Ni	Cr	Mo	Cu	Al	Nb	Ti	V	B	CEV
R58960	0.18	1.19	.002	.015	0.24	0.12	0.08	0.05	0.20	.024	.002	.002	.003	0.0005	0.426

Nb+V=0.004

Nb+V+Ti=0.007

Product Chemical Analyse (%)

Heat no.	C	Mn	S	P	Si	Ni	Cr	Mo	Cu	Al	Nb	Ti	V	B
R58960	0.18	1.20	0.003	0.015	0.23	0.11	0.08	0.05	0.20	0.024	0.001	0.002	0.001	0.0005
R58960	0.17	1.21	0.003	0.014	0.23	0.11	0.08	0.05	0.20	0.023	0.001	0.002	0.001	0.0005

Mechanical Properties

TENSILE TEST (1. EN ISO 6892-1/ 2. ASTM A370) -- at room temperature- Test Specimen _ Strip-longitudinal			Rp0,2 N/mm²	Rt0,5 N/mm²	Rm N/mm²	A %
Dimension (mm): 1.1. 15.40 x 3.40 / 1.2. 15.60 x 3.30 / 2. 19.20 x 3.35			1.1. 398	-	554	29
Section (mm²) : 1.1. 53.73 / 1.2. 52.82 / 2. 66.93			1.2. 410	-	560	30
Length - (Lo) (mm) : 1.1. 40 / 1.2. 40 / 2. 50.8			2. -	407	559	31
Drift expanding test (EN ISO 8493)	Flattening test (EN ISO 8492)	Charpy V – Notch (EN ISO 148-1) KV/Longitudinal 2.5 x 10 [mm]	Charpy V – Notch (EN ISO 148-1) KVc/Longitudinal 10 x 10 [mm]			
OK	OK	27 (26; 28; 26) J (0 ⁰ C)	107 (104; 112; 104) J (0 ⁰ C)			
Hydraulic test pressure 17.2 MPa for 5 sec: OK Heat treatment: normalized during hot rolling process, temperature between 880°C - 940°C Bending test (ASTM A106 point 11): OK			Melting process: electric arc furnace, fully killed Hardness HRB: 84–85 Hardness HRC max 22 (acc to NACE MR0175/ISO 15156) NACE MR0103/ISO 17945 Grain size ASTM E 112: 9.0			

Visual inspection and dimensional check : OK

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

" NO WELD REPAIR ON HEREBY CERTIFIED TUBES "

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

Chief of QC & Testing of the Metallurgical Tubes Products

Dipl. Eng. Silviu Barbulescu

MILL INSPECTOR

Eng. Constantin Lupu

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0036- CPR-M-008-2007

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Street, No. 30, 230119, SLATINA, OLT, ROMANIA
22

No. 6-5E / CPR 18-05-22

EN 10210-1:2006

S355J2H / 1.0576

intended to be used in metal structures or in composite metal and concrete structures

Tolerances:**Elongation:****Tensile strength:****Yield strength:****Impact strength:****Weldability:****Durability:****Dangerous substance: No performance determined**expressed as indicated
in the DoP

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EUID: ROONRC.J28/9/1991; J28/9/31.01.1991
VAT No. RO 1510210/1992
Subscribed and Paid Share Capital: 291.587.538,34 lei

INSPECTION CERTIFICATE - EN 10204: 2004 / 3.1

No: I 7743 Date: 06.12.2022	Manufacturer's mark:	Customer Order No.: 183	PL: 1611
CUSTOMER: NIMFA-COM SRL			
Specification: EN 10210-1:06/ EN 10210-2:19/ EN 10216-3:13/ EN 10216-2:13/ EN 10216-1:13		Dimensions: 48.3 x 3.2 x 12 000+100/-0 mm Steel: S355J2H/ P355NL1 TC1/ P265GH TC1/ P265TR2	
Description: Hot rolled seamless steel pipes; unprotected; marking by painting at one end: manufacturer's mark, standard, steel grade, heat no, LOT, LENGTH (m), mill inspector no. 5, technical control sign			
Heat No.: R59547		Steel melt and rolled in ROMANIA	
Quantity delivered	Pcs.	Length - m	Weight- Kg
	70	840.0	2970

Ladle Chemical Analysis [%]

C	Mn	S	P	Si	Ni	Cr	Mo	Cu	Al	Nb	Ti	V	CE
0.18	1.20	0.003	0.012	0.24	0.08	0.08	0.02	0.25	0.023	0.001	0.001	0.002	0.422

Cr+Cu+Mo+Ni=0.43

Nb+V=0.003

Nb+V+Ti=0.004

N=0.009

Mechanical Properties

TENSILE TEST (EN ISO 6892-1) - at room temperature- Test Specimen / Strip-longitudinal			Rp0.2 N/mm ²	Rm N/mm ²	A %
Dimension (mm): 15.60 x 3.30			406	548	32
Section (mm ²): 52.52					
Length - (Lo) (mm): 40					
Drift expanding test (EN ISO 8493)	Flattening test (EN ISO 8492)	Charpy V - Notch (EN ISO 148-1)	Ring tensile test (EN ISO 8496)		
OK	OK	-	-		
Heat treatment: normalized temperature between 880-940°C			Melting process: electric arc furnace, fully killed		
Test Eddy Current cf. EN ISO 10893-1: OK					

Visual inspection and dimensional check: OK

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

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Eng. Constantin Lupu



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THIS IS FOR CERTIFY THAT THE MATERIAL HEREIN DESCRIBED HAS BEEN MANUFACTURED WITH THE ORDERED SPECIFICATION AND THAT INFORMATION IS CORRECT, THEY MEET THE SPECIFICATION'S REQUIREMENTS AND ARE RECORDS IN OUR COMPANY DOCUMENTS.

CE 0036- CPR-M-008-2007	
TMK-ARTROM S.A. Draganesti Street, No.30, 230119, SLATINA, OLT, ROMANIA 22 No. 6-5E / CPR 18-10-22	
EN 10210-1:2006	
S355J2H / 1.0576 intended to be used in metal structures or in composite metal and concrete structures	
Tolerances: Elongation: Tensile strength: Yield strength: Impact strength: Weldability: Durability:	expressed as indicated in the DoP
Dangerous substance: No performance determined	