



INSPECTION CERTIFICATE
CERTIFICAT DE INSPECTIE
 (UNI EN 10204 3.1 / ISO 10474 3.1)

Number / Numar:

02-21-36491

Page / Pagina:

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Date / Data: **December 30, 2021**

Silcotub S.A. Plant
 93, Mihai Viteazul Blvd.
 450131 Zalau, Sălaj
 România
 Tel: + 40 260 620720
 Fax: + 40 260 661581

Customer / Client: FEON OY		Customer's Order Item / Comanda clientului - Item: 38113	Customer's Reference / Referinta clientului: 2100180	Manufacturer's Works Order N° / Comanda de vanzare: 2280541/001
Manufacture Process / Proces de fabricatie: STRESS RELIEVED TRATAMENT TERMIC DE DETENSIONARE,		Product Type / Tip de produs: COLD DRAWN HOLLOW BARS BARE TUBULARE PENTRU PRELUCRARE TRASE LA RECE		Surface / Suprafata: INT AND EXT BARE INTERIOR SI EXTERIOR NEPROTEJATE
Standard or Specification / Norma sau specificatie: ACC. TO NORM EN 10294-1 SPEC.TN 294-04 VER.0 ACC. TO NORM EN 10294-1 SPEC.TN 294-04 VER.0		Steel Grade / Grad de otel: STEEL HB 470 AR / E 470 ACCIAIO HB 470 AR / E 470		Ends / Capete: SQUARE CUT CAPETE NETEDE (TAIATE DREPT)
Dimensions / Dimensiuni: ø 1.772" O.D. x .295" W.T. 30id, 45.00od, 7.50wt in mm	Schedule / Program:	Length / Lungime: 19.685 ft ÷ 29.528 ft 6000 mm ÷ 9000 mm	Quantity / Cantitate: 90Pcs/buc. 2204'01" ft 11968,8 lb 671.8 mt 5429 kg	Nominal Weight / Greutate nominala: 4.66 lb/ft 6.93 Kg/m

DELIVERY NOTES / NOTE DE LIVRARE

Delivery Notes Note de livrare	Delivery Notes Note de livrare
Job Number / Nr. Comanda internă: 00000031301917 / 000010 Shipping Note / Aviz de expeditie: 0103197123 - 30/12/2021 Address / Adresa: TEOLLISUUSKATU 33	Town / Oras: FI-005 HELSINKI Country / Tara: Finland

TENSILE TEST / TEST DE TRACTIUNE

Heat N° Sarja N°	Sample N° Proba N°	Specimen condition Conditie epruveta				Specimen dimensions Dimensiuni epruvetelor		Test temp Temp de incercare °C	Y.S. Offset 0.2%		U.T.S. Req.		Elongation / Alungire			
		Ls	Sc	Type Tip	Ori	Size Dimensiune mm	Area Sectiune mm2		Min: 470.00 Max: 999.00 MPa	Min: 650.00 Max: 999.00 MPa	Lo 5D = 5.65√So cal.	Min.	Min.	Obt.		
															%	%
904406	D0174/T	B	AM	Ss	L	12.71 x 8.80	114.50	+20	712.00	816.00	5D	60.0	17.0%	18.0%		
910669	D0173/T	B	AM	Ss	L	12.66 x 8.87	114.90	+20	751.00	814.00	5D	60.0	17.0%	18.0%		

AM: As manufactured / Ca fabricat	Ls: Location of sample / Locatia probei	Ori: Orientation / Orientare	U.T.S: Ultimate Tensile Strength / Rezistenta la rupere
B: Body / Corp	Max: Maximum / Maxim	Req: Required / Cerinta	Y.S: Yield Strength / Rezistenta la curgere
L: Longitudinal / Longitudinal	Min: Minimum / Minim	Sc: Specimen condition / Starea epruvetei	
Lo: Initial length / Lungime initiala	Obt: Obtained / Obtinut	Ss: Strip specimen / Rectangular	

This certificate is issued by a computerized system and it is valid with electronic signature. On the original certificate the trade-mark green colored "Tenaris" is stamped. In case the owner of the original certificate would release a copy of it, he must attest its conformity to the original one taking upon himself the responsibility for any unlawful or not allowed use. Any alteration and/or falsification will be subjected to the law.

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				Nominal Weight / Greutate nominala: 4.66 lb/ft 6.93 Kg/m			

CHEMICAL COMPOSITION / COMPOZITIE CHIMICA

		Composition % / Compozitie %													
		X 100						X 1000							
		C	Mn	Si	Cr	V	Cu	Ni	Mo	Ce LF	S	P	Al		
Heat N° Sarja N°	Sample N° Proba N°	P	Max	20	170	40	30	15	--	--	--	57	35	25	40
			Min	17	130	10	--	10	--	--	--	--	20	--	20
904406		H	19	155	34	22	14	12	10	8	55	28	14	24	
904406	D0174/T	P	18	155	33	20	14	13	9	8	--	25	15	24	

		Composition % / Compozitie %													
		X 100						X 1000							
		C	Mn	Si	Cr	V	Cu	Ni	Mo	Ce LF	S	P	Al		
Heat N° Sarja N°	Sample N° Proba N°	P	Max	20	170	40	30	15	--	--	--	57	35	25	40
			Min	17	130	10	--	10	--	--	--	--	20	--	20
910669		H	20	153	35	21	13	14	12	6	55	29	11	27	
910669	D0173/T	P	18	152	33	19	13	14	11	6	--	26	12	26	

Ce LF: C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15

Max: Maximum / Maxim

P: Product / Produs

H: Heat / Sarja

Min: Minimum / Minim

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SUPPLEMENTARY INFORMATION / INFORMATIE SUPLIMENTARA

STANDARD EDITIONS EDITIILE NORMELOR	
Standard: EN 10294-1 Year: 2017	Norma: EN 10294-1 An: 2017

Supplementary Information Informatie Suplimentara	
Heat Pz Mt Kg	Sarja Pz Mt Kg
910669-000 78 582,10 4704	910669-000 78 582,10 4704
904406-000 12 89,70 725	904406-000 12 89,70 725
Tube dimens. (Outside diameter x Wall Thick.) : 45,75 x 08,90	Dim. di fabbricazione (Diam esterno x Spessore): 45,75 x 08,90

Supplementary Information Informatie Suplimentara	
NONDESTRUCTIVE TEST (EDDY CURRENT) ACC. TO ISO 10893-1/ISO 10893-2 E2H drill hole 1,2MM; Length<=25.40MM Width<=0.60MM CTRL WT 5% (0.40-1.00MM) : WITHOUT OBJECTIONS 100% PMI CONTROL HAS BEEN CARRIED OUT WITH SATISFACTORY RESULTS. ALL THE PIPES HAVE BEEN INSPECTED BY EDDY CURRENT INSTEAD OF HYDROSTATIC TEST WITH SATISFACTORY RESULTS HEAT TREATMENT: STRESS RELIEVING SEAMLESS HOT FINISHED PIPES VISUAL AND DIMENSIONAL CONTROL HAS BEEN CARRIED OUT WITH SATISFACTORY RESULT STEEL IS FULLY KILLED AND PRODUCED BY ELECTRIC FURNACE TO A FINE GRAIN PRACTICE . THE PRODUCT SUPPLIED IS IN COMPLIANCE WITH THE REQUIREMENTS OF THE ORDER.	CONTROL NEDISTRUCTIV (EDDY CURRENT) CONFORM ISO 10893-1/ISO 10893-2 E2H CU GAURA STRAPUNSA DE 1.20MM LUNG<=25.40MM LATIME<=0.60MM CTRL WT 5% (0.40-1.00MM) : FARA OBIECTII CONTROLUL PMI A FOST FACUT PE 100% DIN TEVI CU REZULTATE SATISFACATOAR TOATE TEVILE AU FOST CONTROLATE EDDY CURRENT IN LOC DE TESTUL HYDROSTATIC TRATAMENT TERMIC: DETENSIONARE TEVI FARA SUDURA LAMINATE LA CALD CONTROLUL VIZUAL DIMENSIONAL S-A REALIZAT CU REZULTATE SATISFACATOARE OTELUL ESTE PRODUS IN CUPTOR ELECTRIC COMPLET CALMAT CONFORM UNEI PRACTICI DE OBTINERE A UNUI GRAUNTE FIN PRODUSUL LIVRAT ESTE IN CONFORMITATE CU CERINTELE COMENZII

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Informatie Suplimentara

Tenaris IT identification number for MTC: 59'f†\e>

Tenaris IT numărul de identificare pentru MTC: 59'f†\e>

MARKING / MARCAJ

Marking
Marcaj

STENCILING

MARCAJ CONTINUU:TENARIS SL_TN 294-04_HB470AR __ 45.00_x_30_EN 10
294-1_E470_HEAT NO: 2280541/_ 001_ 2100180_38113_ 1 INEL_LA 15 CM DE LA
AMBELE CAPETE DE CULOARE: _____ VERDE _____
RAL 6017 ==>> ETICHETE STANDARD <<== C:228 0541/001_ 2100180_38113_

PICTURA

MARCAJ CONTINUU:TENARIS SL_TN 294-04_HB470AR __ 45.00_x_30_EN 10
294-1_E470_HEAT NO: 2280541/_ 001_ 2100180_38113_ 1 INEL_LA 15 CM DE LA
AMBELE CAPETE DE CULOARE: _____ VERDE _____
RAL 6017 ==>> ETICHETE STANDARD <<== C:228 0541/001_ 2100180_38113_

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The product certified herein has been manufactured, sampled, tested and inspected in accordance with the stated specifications and has been found to meet the requirements.
This certificate is not a declaration of origin nor may it be used as a declaration of origin.

Produsul certificat aici a fost fabricat, esantionat, testat si inspectat in conformitate cu specificatiile mentionate si s-a determinat ca indeplineste cerintele.
Acest certificat nu este o declaratie de origine si nici nu poate fi utilizat ca si o declaratie de origine.

CUSTOMER . THIRD PARTY

TENARIS QUALITY DEPARTMENT SIGNATURE

INSPECTION COMPANY
FIRMA TERTA DE INSPECTII

QUALITY CERTIFICATION DEPT.
DEPARTAMENT CERTIFICARE CALITATE
PUSCAS Daniela

QUALITY SENIOR DIRECTOR
DIRECTOR SENIOR CALITATE
CUBLESAN Rares

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