

EN 10204:2004 type 3.1



Outeiro
Ctra. Outeiro-Castro, Km 2,8
27150 Matela, Outeiro de Rei - LUGO
Tfno.: 982.39.25.70
Fax.: 982.39.31.84
rabade@inoxidablesderabade.com
www.inoxidablesderabade.com

Pedido/Delivery/Commande
0001738227

Fecha/Date/Date
29/07/2013

Expedición/Package/Expedition Su pedido/Your order/Votre commande
7437074

Cliente/Customer/Client

**TUBOS SOLDADOS POR TIG DE ACERO INOXIDABLE
TIG WELDED STAINLESS STEEL TUBES
TUBES ROULES SOUDES TIG EN ACIER INOXYDABLE**

AQUAP Nº-0087...0092/BCE
PED 97/23/EC CE0035 TÜV CERT Nº 01 202 E/Q-03 7555
AD 2000 - Merkblatt W0/TRD 100 TÜV CERT 35108099
DVGW DV-7301BS0316
CERTIF TAC-005/2009

Descripción del material/Extent of delivery/Description de la livraison

Pos Item Pos	Cantidad Quantity (m) Quantité	Dimensiones Dimensions Dimensions	Requerimientos técnicos Technical requirements Exigences techniques	Calidad Material Nuance	Nº de colada Heat nº N° coulée
1	1.728,00	304L SPA 8,00 x 1,00 x 6000,00	EN 10217-7 TC1	1.4307	C4KH

Composición química %/ Chemical composition %/ Analyse chimique % (S/Cert. de origen)

Pos Item Pos	C	Si	Mn	P	S	Cr	Ni	Mo	Ti	N	Cu	Observaciones
1	0,018	0,303	1,707	0,032	0,001	17,750	8,060			0,088		

Características mecánicas/Mechanical properties/Caractéristiques mécaniques (S/Cert. de origen)

Pos Item Pos	Rp0,2 N/mm²	Rp 1,0 N/mm²	Rm N/mm²	A50 %	HV	HRB	Ensayos tecnológicos Technological test Essais technologiques	Ensayo corrosión intergranular Intergranular corrosion test Essai de corrosion intergranulaire	Ensayo de identificación Identification test Essai d'identification
1	306,86	344,82	616,27	53,24	166		FLATTENING TEST	ASTM-A-262 PRACTICA E:OK	OK

Pos Item Pos	Tratamiento térmico Heat treatment Traitement thermique	Prueba de corrientes inducidas Eddy Current test Essai par courants de Foucault	Inspección visual Visual inspection Contrôle visuel	Inspección dimensional Dimensional inspection Contrôle dimensions
1	-	100%: OK	OK	ISO 1127 D3/T3: OK

MARCAS: IRSA - NORMA - ACABADO - MEDIDAS - CALIDAD - COLADA - OF - CÓDIGO OPERARIO
MARKS: IRSA - STANDARD - FINISH - DIMENSIONS - MATERIAL - HEAT Nº - OF - WORKER Nº
MARQUES: IRSA - NORME - FINITION - DIMENSIONS - NUANCE - Nº COLUÉE - OF - CODE OPERATEUR

Material conforme a las condiciones del pedido
The requirements stipulated are fulfilled
Conforme aux prescriptions de la commande

INOXIDABLES DE RABADE, S.A. J.Ares
DEPARTAMENTO DE CALIDAD/QUALITY DEPARTMENT/SERVICE QUALITÉ
Responsable/Inspector/Responsable

Sello del Inspector
Inspector's stamp
Marque de l'Inspecteur

IRSA





BEBITZ

Bereich Stabstahl / Bright Bar Division

Flanschenwerk Bebitz GmbH - Lebendorfer Str. 1 - 06420 Bebitz / GERMANY (A01)
Tel. +49 34691 40 0 - Fax +49 3469140 329 - Email: flanges@bebitz.de



Abnahmeprüfzeugnis 3.1 / Inspection certificate 3.1 / Certificat de reception 3.1
nach (A02) / acc. DIN EN 10204 : 2005 Nr. (A03) / No.13-17605 Datum (Z02) / Date 10.06.2013

Zeichen des Herstellers (A04)
Manufacturer's brand



Stempel des Abnehmers (Z03)
Stamp of the testing engineer



Überprüft als Hersteller nach AD-Merkblatt W0 / TRD100. / Approved as manufacturer acc. AD-Merkblatt W0 / TRD100.
Zertifiziert nach DGR 97/23/EG durch TÜV CERT Zertifizierungsst. für Druckgeräte der TÜV NORD GmbH Co KG, Benannte Stelle Nr. 0045. / Certified acc. to PED 97/23/EC, certifying body for pressure equipment TÜV NORD GmbH Co KG, registration no. 0045.

Besteller (A06)	Aceros Bergara, SA	Bestell-Nr. (A07) / Order-No.	9020741
Customer	Ctra. Reial 130	Auftrag (A08) / Order	3320468
	08960 SANT JUST DESVERN (BARCELONA)	Lieferschein / Delivery No.	3293
		Position(B07.1) / Item	1K

Gewicht (B01; B09 - B11)	Bezeichnung (B01; B09 - B11)	Schmelze/Prüflos (B07)
Mass [kg]	Product	Heat no./Test no.
378	round bar, drawn (chamfered, roller polished) - 5 mm, inventory length 3000 mm	25706-53664

Material (B02; B05) 1.4305 (X8CrNiS18-9)
austenitizing (min. 1040 °C, water)



2013007629

Anford. (B03) surface condition smooth and clean
Requirements tolerance grade h9 acc. EN 10278 (ISO 286-2)
EN 10088-3 : 2005 / PMI tested

Schmelzenanalyse (C71 - C92) / Ladle analysis Erschmelzung (C70) / Melting proces E+AOD

C	Si	Mn	P	S	Cr	Ni	Ti	Mo	Nb	V	N	Cu	Al	Co
0,047	0,38	1,88	0,034	0,250	17,38	8,14		0,08	0,003		0,041	0,12		0,050
PREN	$CEV = C + \frac{Mn}{6} + \frac{V + Mo + Cr}{5} + \frac{Ni + Cu}{15}$ $PREN = Cr + 3,3 \times Mo + 16 \times N$													
18,30														

Mechanische Prüfungen / Mechanical tests

Probenlage (C02): L / Position of Specimen: L					Kerbschlagbiegeversuch / Impact test			Härte (C32)	
Zugversuch / Tensile Test - DIN EN ISO 6892-1					DIN EN ISO 148-1 (V-Kerb / V-notch)			Hardness	
Temp (C03)	Streckgrenze (C11) / Yield		Zugfestigkeit (C12) Tensile	Dehnung (C13)	Einschnürg.	Temp. (C03)	Einzelwerte (C42)	MW (C42)	ISO 6506-1
° C	0,2%	1,0%	MPa (N/mm ²)	Elongation	Red. of area	° C	Single values	Average	HBW
	MPa (N/mm ²)	MPa (N/mm ²)	MPa (N/mm ²)	%	%		J	J	2,5/187,5
20	min 400		600	15,0		20			
	max		950	5d ₀	4d ₀				
20	878	915	924	16,3	20,4	39			284

Besichtigung und Ausmessung ohne Beanstandungen. (D01) / Results of inspection and dimension without objections.
Die gestellten Anforderungen sind erfüllt. (Z01) / The product meets the requirements.

R. Sparing,

Abnahmebeauftragter des Herstellers (Z02)
Inspection Representative of the Manufacturer

APZ wurde mit EDV erstellt und ist ohne Unterschrift gültig. / This MTR was electronically generated and is valid without a signature.



36100 VICENZA (Italia) - Viale della scienza, 25 z.f.
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Avviso di Spedizione: D-V/13027668
Lieferanzeige/Packing list/B.L.

Certificato nr: MEST402053/2013/
Prüfung/Test/Essai

Produttore: **ACCIAIERIE VALBRUNA S.P.A.**
Hersteller/Item/Usine productrice

Ordine nr: 0209
Bestell/Your order/Commande

Conferma ordine nr: E/13007053
Werks/Dur Order/Raf nr.

Marchio di Fabbrica:
Zeichen des Lieferwerkes
Trade mark
Sigle de l'usine productrice



Stato di fornitura: Hot rolled - Annealed Cold Drawn
Lieferzustand/Delivery state/Etat de livraison

Tipo di Elaborazione: E+AOD
Erschmelzungsart/Melting process/Mode d'elaboration

Punzone del Collaudatore:
Stempel des Werkssachverständigen
Inspector's stamp/Poinçon de l'assesseur

Specifiche:
Anforderungen / Requirements / Exigences

VAL STOCK 2010 1.4307/304L A,CF
ASME SA276 2010 S30400 A,CF (0)
ASME SA479 2010 S30403 A (3)
ASTM A276 2010 S30403 A,CF
ASTM A479 2012 S30400 A
EN 10088-3 2005 1.4307 A,CF
QQ-S-763 F 304L A,CF

AISI 304
ASME SA276 2010 S30403 A,CF (1)
ASTM A262 2010. PRACTICE E
ASTM A314 2008 S30400
ASTM A479 2012 S30403
EN 10272 2007 1.4301 A,CF

AISI 304L
ASME SA479 2010 S30400 A (2)
ASTM A276 2010 S30400 A,CF
ASTM A314 2008 S30403
EN 10088-3 2005 1.4301 A,CF
EN 10272 2007 1.4307 A,CF

SEC.II PT.A 2010 EDITION ADD. 2011a
SEC.II PT.A 2010 EDITION ADD. 2011a

(1) SEC.II PT.A 2010 EDITION ADD. 2011a
(3) SEC.II PT.A 2010 EDITION ADD. 2011a

Qualità: 1.4301/1.4307/304/304L
Werkstoff/Grade/Nuance

Marca: MVAISL
MAXIVAL

Tolleranza: DIN 671 - h9
Toleranz./Allowance/Tolerance

Punzonatura: 1.4301/7/304/L
Kenzeichnung/Marking/Marquage

Pos. nr. Pos. nr. Item nr. Nr. de poste	Oggetto Gegenstand Product description Descrip. du produit	Dimensioni - mm Abmessungen Dimension Dimension	Lunghezza - mm Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces	Peso - KG Gewicht Weight Poids	Lotto nr. Losnr. Lot nr. Lot nr.
0010	Round	16,000	3017 / 3020	259653		311,0	307106230

TEST ALLO STATO DI FORNITURA

Test on delivery condition Prüfung auf lieferbarem Produkt test a l'état de fourniture Prueba sobre el material así como entregado

TEST	Provetta/Probestab Specimen/Eprauvette Larg diam Spécs Brea Diam. Doble Width Diam. Thickness Larg. diam. épais mm	°C	Posiz. Saggio Probenlage Lage Emplacement	Snervamento Streckgrenze Yield Stress Limite élastique Rp 0,2% N/mm2	Snervamento Streckgrenze Yield Stress Limite élastique Rp 1% N/mm2	Resistenza Zugfestigkeit Tensile strength Resistance à traction Rm N/mm2	Allungamento Bruchdehnung Elongation Allongement		Strizione Einschnürung Reduction of area Striction		Resilienza Kerbschlagarbeit Impact Value Resilience			Durezza Härte Hardness Dureté	
							A5 %	E 4d %	Z %	RA %	KV J			HB	
Valori richiesti 1 Anforderungen/Required values Valeurs demandées		min max		205	225	515 900	20	30	-	40	100			-	
A	10	20	L	564	601	758	38	41	68	68	176	168	174	254	

EST	min	max
A	Grain size for ASTM E112	5

1)L=longitudinale/länge, T=trasversale/quer, Q=Tangenziale/tangentiel

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata /Heat Schmelze/Coulée	min - max 0,030	1,00	2,00	18,00 19,50	1,00	1,00	8,00 10,50	0,045	0,030	0,100	-	-	-	-	-
	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	P %	S %	N %					
259653	0,012	0,51	1,87	18,21	0,52	0,45	8,09	0,030	0,030	0,085					

Intergranular corrosion test per ASTM A262 pract. E: ok.

Absence of cracks at 20 x magnification after bend test.

I.Korrosion nach EN ISO 3651-2A Sensibilisierung : T1 : OK

Corrosion test per EN ISO 3651-2A sensitized T1 : OK

Sono state soddisfatte tutte le condizioni richieste
Die gestellten Anforderungen sind it. Anlage erfüllt
The material has been furnished in accordance with the requirements.
Le matériel a été trouvé conforme aux exigences

Controllo antimiscelanza: OK
Verwechslungsprüfung: spektralanalytisch durchgeführt
Antimixing testing performed: OK
Contrôle antimélange fait: r.a.s.

Controllo visivo e dimensionale: soddisfa le esigenze
Besichtigung und Ausmessung: ohne Beanstandung
Visual inspection and dimensional checks:satisfactory
Contrôle visuel et dimensions: satisfaisant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury contamination
We declare that the finished product is checked for radioactive contamination through Portal System when it leaves the production plant.

Vicenza,25/09/13 VCQ008 (Mod. MCE2)	Il collaudatore di stabilimento / der Werkssachverständiger / Works inspector / L'agent d'usine <i>M. Rizzotto</i>	Pagina - 1 di 2
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o/lla/NoBL/DL No/Lief.	o Certificat./Pruf No	rodottere/Usire produc./Manufact./Herstell.
1203446	1217742001	090300

UGITECH

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UGITECH ITALIA S.r.l.

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FAX +39 02.547.34.83



CERTIFICAT DE RECEPTION 3.1
MOD. MO080104

EN 10204/ CMTR Certified Material Test Report

Prodotto Erzeugnisform Produit Product	Cliente e/o destinatario - Client et/ou destinataire - Besteller und/oder Empfänger Purchaser and/or Consignee SCHMOLZ + BICKENBACH IBERICA S E-08840 VILADECANS(BARC.)	No ordine cliente - Votre reference - Ihre Auftrag Nr - Your reference C/N 1449008245 SCHMOLZ + BICKENBACH IBERICA S.A.
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Qualite e specifiche tecniche - Nuance et specifications techniques - Staisorte und Pruefbedingungen - Quality and Specifications
4307 h11 Carre Etiree mate Adouci Solubil.

Stato di fornitura - Etat de livraison - Lieferzustand - As delivered (1) Etiree mate				Stato metallurgico - Etat metallurgique - Heat treatment condition Lieferzustand Adouci Solubil.			
No Conferma d'ordine Accuse de reception Auftragsbest No Acknowledgment No 204146145	Posizione No Poste Post Nr Item No 1	No lotto interno No de lot interne Interne los Nr Internal batch No 1712824 1713404	Profilo Profil Profil Shape Carre	Dimensione Dimension Abmessung Size 4,0000	Tolleranza Tolerance Tolerance Tolerance H11	Lunghezza Longueur Laenge Length 3 mt	Peso netto Masse Gewicht Weight 522,000 494,000

Lotto fornitore Lot producteur Lieferant los Master batch	No Colata No de coulee Schmelz Nr Heat No	Trazione - Traction - Zugversuch - Tensile test				Resilienza - Resilience - Kerbschlagzaehigkeit - Notch Toughness				Durezza Durete Haerte Hardness HB
		Lim. di snervamento Limite d'Elasticite Streckgrenze Yield Strength 0,2 % RP MPA	Carico di rottura Resistance tract. Zugfestigkeit Tensile strength	Allungamento Allongement Bruchdehnung Elongation %	Strizione Striction Bruch einschnuerung Red of Area %	F Type Form Type	Se Senso Richt Direct	temperatura di prova temperature d'essai Pruef temperatur test temperature	Valori Valeurs individuelles Einzelwerte Individual values	
215128 215128	845	936	11	52					279	

215128 215128	C	SI	MN	P	S	N	CR	CU	MO	NI
	0,0200	0,3560	1,0840	0,0268	0,0259	0,0800	18,1170	0,5340	0,4390	8,0700
	0,0200	0,3560	1,0840	0,0268	0,0259	0,0800	18,1170	0,5340	0,4390	8,0700
215128 215128	AL	CO	TI	ZR	NB					
0,0020	0,1170			0,0140						
0,0020	0,1170			0,0140						

Note - Notes - Remarks - Bemerkungen

EN 10088-3



2012006432

Controllo marcatura, visivo e dimensionale : soddisfacente. Si certifica che i prodotti sopra descritti sono conformi alle descrizioni dell'ordine. L'analisi chimica e copia conforme a quella presente sul certificato del produttore
 Contrôle de marquage, d'aspect et de dimensions satisfaisant. Nous certifions que le present document reproduit avec exactitude les données d'inspection et de dimensions satisfaisant. L'analyse chimique a été relevée du certificat de la matière première.
 Zeichnung und Maßstabprüfung : Ohne beanstandung. Wir bestätigen hiermit dass die obengenannten erzeugnisse den technischen Zeichnungen entsprechen. Die chemische Zusammensetzung entspricht den lieferanten analyse.
 Quality control : Quality controls are true and correct copy of the raw material supplier's certificate
 Inspection and measurement : without objections. We certify that the above mentioned products are consistent with the order prescription.

Le 16/05/12

Signature de l'inspecteur
L. DIFRANCIA

G. CHRISTOFORIDIS S.A.
 STAINLESS STEEL COMMERCE
 P.O. BOX 188 - P.C. 570 08
 THESSALONIKI - GREECE
 TEL. 00302510 781366 - FAX: 00302510 783674
 VAT EL. 094257536

140120024

INSPECTION CERTIFICATE

Customer	G.CHRISTOFORIDIS SA	Customer No.		Certificate No.	120727C0329
Production	PRIME COLD ROLLED STAINLESS STEEL COIL	Commercial Invoice No.		Date of Issue	2012/07/26
Specification	ASTM A240M/A480M-11b	PO No.	A10105170	Order No.	
Steel Grade	304	Weight No.	C12070393	P.I. P.I.NO.	A10105170

Item No.	Heat No.	Product Description					Chemical Composition (%)								G.L. Tension Test			*01	*02	C/No.
		Dimension	Quantity Pcs	Weight kgs	Finish	Protect	C	Si	Mn	P	S	Ni	Cr	N	0.2%Y.S.	T.S.	E.L.			
Specification					Min.	70	75	200	45	30	1050	1950	100	800	1750	205	515	40	92	1040
1	J1790C	0.4mm x 1,250.0mm x C	1	4,592	BA	PI	44	50	119	31	5	806	1810	55	361	704	53	86	1050	11
2	J7787A	0.4mm x 1,250.0mm x C	1	5,631	BA	PI	52	50	114	31	4	801	1804	59	319	666	52	82	1050	12
3	J6458A	0.5mm x 1,250.0mm x C	1	4,157	BA	PI	44	47	117	31	3	805	1806	54	296	654	55	81	1050	21
4	J6458B	0.5mm x 1,250.0mm x C	1	4,111	BA	PI	44	47	117	31	3	805	1806	54	296	654	55	81	1050	22
5	J6459A	0.5mm x 1,250.0mm x C	1	4,228	BA	PI	45	48	115	30	3	803	1804	58	288	648	55	81	1050	23
6	J6459B	0.5mm x 1,250.0mm x C	1	4,228	BA	PI	45	48	115	30	3	803	1804	58	288	648	55	81	1050	24
7	J6459C	0.5mm x 1,250.0mm x C	1	4,218	BA	PI	45	48	115	30	3	803	1804	58	288	648	55	81	1050	25
8	J7794A	0.6mm x 1,250.0mm x C	1	4,880	BA	PI	41	50	122	29	4	804	1814	60	287	649	55	79	1050	15
9	J7794B	0.6mm x 1,250.0mm x C	1	4,879	BA	PI	41	50	122	29	4	804	1814	60	287	649	55	79	1050	16
10	J7794C	0.6mm x 1,250.0mm x C	1	4,950	BA	PI	41	50	122	29	4	804	1814	60	287	649	55	79	1050	17
11	J7802A	0.6mm x 1,250.0mm x C	1	4,797	BA	PI	42	52	117	28	4	814	1814	57	287	646	55	79	1050	18
12	J9720B	0.7mm x 1,000.0mm x C	1	4,339	BA	PI	45	46	121	29	6	809	1820	59	292	645	55	83	1050	26
13	J7799A	0.7mm x 1,250.0mm x C	1	4,715	BA	PI	43	46	120	32	4	801	1811	58	290	644	55	80	1050	13
14	J5335B	1.2mm x 1,000.0mm x C	1	4,225	BA	PI	44	47	117	26	6	808	1823	56	273	630	56	82	1050	27
15	J7329A	1.2mm x 1,250.0mm x C	1	5,236	BA	PI	40	45	123	33	5	804	1821	61	283	622	57	82	1050	14
TOTAL:			15	69,186																

*01= Hardness Test
 *02= Heat Treatment
 *G.L.=Gauge Length: 50mm



- 1. Quality management system by TÜV
 - 1.1 ISO 9001:2008 Certificate (No.01 100 056299)
 - 1.2 PED Certificate (No.01 202 ROC/Q-05 0105)
- 2. Laboratory management system by TAF
 - 2.1 ISO 17025:2005 Certificate (Laboratory Accreditation Code:1894)

1MPa=1N/mm²=10bar=145psi=10.2kgf/cm²

Visual Inspection(Surface) and Dimension Check : OK The material described above has been detected with free irradiation by the raw material supplier.

Surveyor By _____

We Herby Certify that Material Described Herein has Been Manufactured and Tested with Satisfactory Results in Accordance with the Requirement of the Above Material Specification.

G. CHRISTOFORIDIS S.A.
 STAINLESS STEEL COMMERCE
 P.O. BOX 188 - P.C. 570 08
 THESSALONIKI - GREECE
 TEL. 00302510 781366 - FAX: 00302510 783674
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COGNE ACCIAI SPECIALI S.p.a.

11100 AOSTA - VIA PARAVERA, 16
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CAP. SOC. 143.550.000 EUR INT. VERS.
C.F. 02187360967
VAT: IT00571320076 - R.E.A. n. AO-50474

Company with management systems IGO
approved and certified according to ISO 9001,
ISO/TS 16949 e ISO 14001.

INSPECTION CERTIFICATE 3.1 (EN 10204:2004)
(A03) DOCUMENT NUMBER 2013021132
PAGE 1/2

(A06) CUSTOMER : COGNE ACCIAI SPECIALI IBERICA, S.L
(A07) CUSTOMER'S ORDER : 9020659
(A01) MANUFACTURER'S WORKS : AOSTA, VIA PARAVERA 16 - ITALY
(A05) PRODUCER OF THE DOC: QUALITY DEPARTMENT
(A08) MANUFACTURER'S WORKS ORDER NO: 25159821 /10 (A04) MARK OF THE MANUFACTURER : COGNE
THE CERTIFIED PRODUCTS ARE COMPLYING TO THE PURCHASE ORDER

INTERNAL SPEC. :	STOCKBARREWZ	TECHNICAL RULE :	AD2000
(B01) PRODUCT :	13840 PEL PEELED	ROUND BARS TOLERANCE :	ISOH10
(B03) SURFACE FINISH :	2B Cold Finished		
(B04) PRODUCT DELIVERY CONDITION:	RS SOLUTION ANNEALED		
(B09) PRODUCT DIMENSIONS (mm) :	28,000	(B10) LENGTH (mm)	06000 /06200
(B02) GRADE :	AISI 304/304L EN 1.4301/1.4307	INTERNAL GRADE :	F304L1 IMCO
(B07) IDENTIFICATION HEAT NO:	372201	(B07) IDENTIFICATION LOT NO.:	756520
(B06) MARKING OF THE PRODUCT :	1.4301	TEST PIECE N. :	652

THE PRODUCT IS CONFORMING TO THE CONTRACT AGREEMENT AND TO THE RULE AD2000-MERKBLATT W0/W2.
REFERENCE NORMS: EN10088-3, EN10272, ASTM A276, ASTM A479, ASME SA479(10), ASTM A193 B8 CLASS 1D, AMS 5647H, AMS 5639H, ISO15156-3
NACE MR0175, NACE MR0103.

REFERENCE NORMS FOR CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES: ASTM A182, ASME SA182(10).
REFERENCE NORMS FOR CHEMICAL COMPOSITION ONLY: EN10222-5, ASTM A484, ASTM A403, ASTM A314, AMS-QQ-S-763B
ASTM A484 DOES NOT APPLY FOR SIZE AND LENGTH TOLERANCES.

STEELMAKING AEF + AOD + CONTINUOUS CASTING

HOT ROLLED

REDUCTION RATIO 37,5

(C71) CHEM. COMP. - LADLE ANALYSIS ACCORDING ASTM E1019-A751-E1086-E415-A580

Control lot No. - Weight	:020000487109	-	78.000	KG								
ELEMENTS			C	Si	Mn	P	S	N	Cr	Mo	Ni	Cu
OBTAINED			0,013	0,38	1,30	0,030	0,026	0,076	18,07	0,37	8,06	0,37
ELEMENTS			Co									
OBTAINED			0,12									

HARDNESS TEST IN AS DELIVERED CONDITION

Control lot No. - Weight	:020000488306	-	4.012	KG							
SPECIFICATION			ENISO6506	HARDNESS TEST	HB	TESTING METHOD	: 10/3000				
OBTAINED			184								



2013006532

IMPACT TEST IN AS DELIVERY CONDITION

Control lot No. - Weight	:020000488306	-	4.012	KG								
SPECIFICATION			EN ISO 148-1-KV2									
(C40) TYPE OF TEST PIECE			KV									
(C03) TEST TEMPERATURE °C			20									
MEASUREMENT UNIT			J									
OBTAINED			291	287	286	286	292	291	288	288	289	290
			290	291								

(C02) DIRECTION OF THE TEST PIECE: L



Sede Legale e amministrativa:
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**COPIA CONF. ORIGINALE
PROFILINOX S.p.A.**

Tipo 3.1 CERTIFICATO DI COLLAUDO EN 10204
Numero 10212006994
Creato il 09/01/2012

Cliente
SPETT.LE ND C/O PROFILINOX - MARCEGAGLI
VIA NOBEL 3A Q.RE IND.LE S.P.
43100 PARMA IT

Destinatario Merci
SPETT.LE ND C/O PROFILINOX - MARCEGAGLI
VIA NOBEL 3A Q.RE IND.LE S.P.
43100 PARMA IT

N° Consegna 8202200054
Del 09/01/2012
N° doc. di trasp. 2502000006
Controllo Qualità
RESP. A. Dal Prato
Stab. Contino
Pagine 3/12

N° Partita	Q.tà	Colata	C (%)	Si (%)	Mn (%)	P (%)	S (%)	Cr (%)	Ni (%)	Cu (%)	N (%)	Co (%)	Rm [N/mm ²]	Rp 0.2 [N/mm ²]	A (%)	
			0.07	1	2	0.045	0.03	17.5	8	10.5	1	0.11	0.19	600	190	30
								19.5	10.5	1	0.11	0.19	850			

55200012 UXS 22.00x3000 A304 EN.14301 h9/ 1.4301 - A276 / A479 h9 EN100883 1521850019/30 . Data 09/01/2012

TONDI SGROSSATI DI RETTIFICA TOLLERANZA SECONDO UNI EN 10278

11QJ005006	511 KG	23620	.022	.460	1.750	.0340	.0220	18.0908.010	.530	.0680	.1600	725	539	33.3
11QJ005007	511 KG	23620	.022	.460	1.750	.0340	.0220	18.0908.010	.530	.0680	.1600	725	540	33.6
11QJ005008	511 KG	23620	.022	.460	1.750	.0340	.0220	18.0908.010	.530	.0680	.1600	725	540	33.6
11QJ005009	511 KG	23620	.022	.460	1.750	.0340	.0220	18.0908.010	.530	.0680	.1600	725	540	33.3
11QJ005010	511 KG	23620	.022	.460	1.750	.0340	.0220	18.0908.010	.530	.0680	.1600	725	540	33.3
11QJ005015	511 KG	23620	.022	.460	1.750	.0340	.0220	18.0908.010	.530	.0680	.1600	725	540	33.7

55200148 UXS 30.00x6000 A304 EN.14301 h9/ 1.4301 - A276 / A479 h9 EN100883 1521850019/60 . Data 09/01/2012

TONDI SGROSSATI DI RETTIFICA TOLLERANZA SECONDO UNI EN 10278

11QF005763	507 KG	X6M7	.023	.399	1.540	.0340	.0300	18.2508.030	.291	.0750	.1100	724	540	34.6
11QF005768	507 KG	X6M7	.023	.399	1.540	.0340	.0300	18.2508.030	.291	.0750	.1100	725	540	34.2

Note:

Noi certifichiamo che il prodotto fornito e' conforme ai requisiti dell'ordinazione
Controllo visivo e dimensionale OK



Registered seat and Administration offices:
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Type Inspection Certificate 3.1 EN 10204
 Number 10513414394
 Issued On 07/08/2013

Delivery Nn	8305311226	Quality Control	Pages 2/4
Of	07/08/2013	Q.M.D./Q.M. A.Dal Prato	
Delivery note nr	1005010940	Plant Of Contino	

Identification Nr	Quantity	Heat	C (%)	Si (%)	Mn (%)	P (%)	S (%)	Cr (%)	Ni (%)	Cu (%)	N (%)	Co (%)	Rm [N/mm ²]	Rp 0.2 [N/mm ²]	A (%)
			0.03	1	2	0.045	0.03	17.5	8				600	400	25
								19.5	10.5	1	0.11	0.19	930		

55200035 UXS 8.00x3000 304/304L 4301/4307 h9/ 1.4307/1.4301 AISI304L/AISI304 X2CrNi18-9/X5CrNi18-10 - A276 / A479 h9 EN100883 1131065859/10 270613 Date 05/07/2013

COLD CENTERLESS GROUND DRAWN BARS TOLERANCE EN 10278

13QB005173 502 KG 29226 .020 .450 1.340 .0360 .0240 17.7808.020 .590 .0840 .1300 782 598 30.8

55200037 UXS 10.00x3000 304/304L 4301/4307 h9/ 1.4307/1.4301 AISI304L/AISI304 X2CrNi18-9/X5CrNi18-10 - A276 / A479 h9 EN100883 1131065859/20 270613 Date 05/07/2013

COLD CENTERLESS GROUND DRAWN BARS TOLERANCE EN 10278

13QC000992 504 KG C3KD .017 .377 1.448 .0290 .0300 18.1808.050 .356 .0810 .1000 784 601 30.6

Remarks:

We certify that material supplied complies with the requirements agreed on order
 Dimensional and visual check OK



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 www.marcegaglia.com
 Stabilimento di Forlì:
 via E. Mattei, 20 47034 Fontanafredda, Forlì-Cesena
 tel. +39 0543470111 fax +39 0543470105

Inspection Certificate 3.1 EN 10204

Number 10513593113

Issued On 15/11/2013

WELDING PROCESS QUALIFICATION: ALL THE LASER WELDING PROCESS ARE QUALIFIED ACCORDING EUROPEAN PRESSURE EQUIPMENT DIRECTIVE PED 97/23/EC BY THE NOTIFIED BODY N.1233 EUROPE WITH WELDING PROCEDURE QUALIFICATION WPQR N° PM0907A001 Registration no. 10M203 AND WPQR N° PM907A002 Registration no. 11M017.

Delivery Nn	8305316148	Quality Control	Pages 2/4
Of	15/11/2013	Q.M.D./Q.M. S.Toscana	
Delivery note nr	1005015402	Plant Of Forlì	

Material TXT001	Test specification: EN10296-2 Stainless steel grade: TP 304 1.4301 X5CrNi18-10 Tolerances: ISO 1127 D3-T3 / ASTM A554	Welding process	Order Nr 1131069055/10	Client Order 50713
Description TXT001 12x1x6000 TP304 HF G3		HIGH FREQUENCY INDUCTION WELDING	Part Number	Client Date 29/07/2013

Item	Identification Nr	Heat	Quantity MTL	Quantity KG	Quantity PZZ	Delivery conditions	Reworks
1	13Z1000915	SC31534	1625.16	446	271		EXTERNAL TUBE SURFACE POLISHED GRIT 320

Identification Nr	Chemical Type	C (%)	Si (%)	Mn (%)	P (%)	S (%)	N (%)	Cr (%)	Ni (%)
13Z1000915	RAW MATERIAL	0.07	1	2	0.045	0.015	0.11	17	8
		.020	.350	1.450	.0320	.0019	.0478	18.190	8.040

Identification Nr	Type of mechanical test	Rp 0.2 [MPa]	Rp 1.0 [MPa]	Rm [MPa]	A5 (%)
13Z1000915	TUBE	275	305	602	52.2

MARCEGAGLIA FORLÌ PLANT SYSTEM CERTIFICATIONS
 QUALITY SYSTEM CERTIFIED ACCORDING TO EN 9001:2008 AND ISO/TS 16949:009 AND A SAFETY SYSTEM CERTIFIED ACCORDING TO OHASAS 18001:2007.

MARCEGAGLIA FORLÌ PRODUCT CERTIFICATIONS
 DVGW ACCORDING TO GW541 LASER AND TIG WELDED TUBES STAINLESS STEEL GRADE 1.4404 DIA FROM 15.00 TO 108.00MM AND GRADE 1.4521 FROM 15.00 TO 54.00MM.
 TUV AD2000 W2W10 AND PED ANNEX I, PARAGRAPH 4.3 LASER AND TIG WELDED TUBES STAINLESS STEEL GRADE 1.4301, 1.4306, 1.4307, 1.4401, 1.4404, 1.4541, 1.4571, 1.4435, 1.4436 THICKNESS FROM 1.00 TO 4.00MM AND DIAMETERS FROM 8.00 TO 283.00 MM.

NON DESTRUCTIVE TESTS
 ANTIMIXING TEST ACCORDING TO EN 10088-2:2005 AND EN 10296-2:2005: CONFORM
 VISUAL INSPECTION AND DIMENSIONAL CONTROLS: CONFORM

DESTRUCTIVE TESTS
 DRIFT EXPANDING TEST ACCORDING TO EN ISO 8493:2005: CONFORM
 FLATTENING TEST ACCORDING TO EN ISO 8492:2004: CONFORM
 TENSILE TEST ACCORDING TO EN ISO 6892-1:2009

Marking

Remarks:
 THE CHEMICAL COMPOSITION REFERS TO THE RAW MATERIAL USED ACCORDING TO EN 10088, EN 10296-2 AND EN 10296-2