

MATERIAL FILE
DOSSIER MATIERES

He Vessel

DRAWING N° N° PLAN	ITEM N° Repère N°	CERTIFICATE N° Certificat N°
317111-JLA-703-002	703-002	62220
317111-JLA-703-003	703-003	62221
317111-JLA-703-004	703-004	62218-62352-62434-60983-60337
317111-JLA-703-005	703-005	62218-62352-62434-60983
317111-JLA-703-013	703-013	63106-62330-63105
317111-JLA-703-046	703-046	62366-62331-63099
317111-JLA-703-042	703-042	62220
317111-JLA-703-048	703-048	62220
317111-JLA-703-050	703-050	62367
317111-JLA-703-039	703-039	62317
317111-JLA-703-041	703-041	62317
317111-JLA-703-040	703-040	62325-62326-62327-62328
317111-JLA-703-049	703-049	62317

He Vessel neck S/A

DRAWING N° N° PLAN	ITEM N° Repère N°	CERTIFICATE N° Certificat N°
317111-JLA-703-017	703-017	62330
317111-JLA-703-018	703-018	62409
317111-JLA-703-020	703-020	62368
317111-JLA-703-021	703-021	customer supply
317111-JLA-703-022	703-022	62409
317111-JLA-703-023	703-023	62409
317111-JLA-703-024	703-024	62330
317111-JLA-703-025	703-025	customer supply
/	9009	62329

Welding wires

Material Désignation	CERTIFICATE N° Certificat N°
ER316L - Wire Ø2 (heat N°U2TG142297)	62880
ER316L - Coil Ø1,2 (heat N°217640-45344)	62900

91154/31649

OUTOKUMPU

CERTIFICATE - ZEUGNIS - CERTIFICAT
EN 10204-3.1
2183218-EN

Invoice No. Page
 Rechnung Nr. Seite
 N° du certificat Page
 6610/1352212 1/1

Business Unit / OCM
 Avesta Works / Johan Nordström

Date Datum Date
 25-Apr-2013

Load, Ladung, Charge No
 FR/FR30-0103

Acknowledged ID, Bestätigung, Commande ID
 6610/320827

Your ref. Ihre Ref., Votre ref 206375/NB		Requirements, Anforderungen, Exigences ASTM A 240-11a ASME SEC II PART A SA-240/SA-240M 2011a EN 10088-2:2005 EN 10028-7:2007 AD 2000 W2, W10 & EN 10028-7 NACE MR0175/ISO 15156-2009 EN ISO 9444-2 / ASTM A480M	
Buyer, Besteller, Acheteur OUTOKUMPU SAS 100, RUE PETIT FR FR-75165, PARIS CEDEX 19 FRANCE		SDMS n° 60337	
Consignee, Empfänger, Lieu de livraison OUTOKUMPU SAS			

Mark of Manufacturer Zeichen des Lieferwerkes Signe de producteur OUTOKUMPU	Process Erschmelzungsart Mode de fusion E+AOD	Inspector's stamp Zeichen des Sachverständigen Poison de l'expert AJA	Grade, Werkstoff, Nuance Outokumpu 18-8L TYPE 304 TYPE 304L 1.4301 1.4307
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Product, Erzeugnisform, Produkt
 Stainless Steel Hot Rolled, Coil
 finish 1D, cut edge

Line Reihe Ligne	Item Position Poste	Heat-Lot No Schmelz-Lot Nr Coulée n° - Lot No	Size Abmessungen Dimensions	Pieces Stückzahl Nombre	Quantity / Unit Menge / Einheit Quantité / Unité
1	3	431102-001	8,00 X 2000 mm	1	7390 KG

Chemical composition - Chemische Zusammensetzung - Composition chimiques

	C	Si	Mn	P	S	Cr	Ni	Nb	Cu	Co	N
Heat	.017	.31	1.59	.029	.002	18.22	8.10	.008	.37	.130	.064

Radioactive contamination check acc. IAEA recommendations: Satisfactory

Test results - Prüfergebnisse - Résultats desseis (1N/mm² = 1 MPa) F = Front - Anfan - Debut B = Back - Ende - Fin T = Transverse - Quer - Travers

Test Ref	Temp	RP 0.2	RP 1.0	RM	A5	2"	HB
	°C	N/MM2	N/MM2	N/MM2	%	£	HB
Min	+20	230	260	520	45	40	
Max				700			201
	F T	+20	321	375	630	54	55
	B T		316	369	620	54	55

Material conforms to NACE MR0175/ISO 15156 in supplied condition
 Corrosion acc. ASTM A 262-E, EN ISO 3651-2A: Satisfactory
 Heat treatment / Solution annealed: Material temperature 1100 °C / Quenched (forced air + water)
 Steel grade verification (PMI-spectroscopic): OK
 Marking, visual insp. and gauge measurement: Satisfactory
 Approved acc. AD 2000 Merkblatt W0 by TÜV NORD Systems with renounce of countersignment
 Certified acc. Pressure Equipment Directive (97/23/EC) by TÜV CERT-Certification body
 for pressure equipment of the TÜV NORD Systems; notified body, reg-no. 0045.



SDMS
[Signature]

Outokumpu Stainless AB Telephone: + 46 (0)226 814 77
 Business Unit Special Coil Fax: + 46 (0)226 813 16
 BOX 74, S-774 22 AVESTA V.A.T no: SE558001874801
 SWEDEN
 Regoffice: Stockholm SWEDEN, Regno: 556001-8748

This material is found to comply with order requirements

Mats Hjelm

Mats Hjelm
 Authorized Inspector



Nr cde: 92137/31838



CERTIFICATE - ZEUGNIS - CERTIFICAT
EN 10204-3.1
 2207972-EN

Invoice No. Page
 Rechnung Nr. Seite
 N° du certificat Page
 6610/1354655 1/1

Business Unit / QCM Avesta Works / Johan Nordström Date Datum Date 27-Sep-2013 Load, Ladung, Charge No FR/FR30-0198 Acknowledged ID, Bestätigung, Commande ID 6610/321818

Your ref, Ihre Ref., Votre ref 206612/NB	Requirements, Anforderungen, Exigences ASTM A 240-13a ASME SEC II PART A SA-240/SA-240M 2011a EN 10088-2:2005 EN 10028-7:2007 AD 2000 W2, W10 & EN 10028-7 NACE MR0175/ISO 15156-2009 EN ISO 9444-2 / ASTM A480M
Buyer, Besteller, Acheteur OUTOKUMPU SAS 100, RUE PETIT FR FR-75165, PARIS CEDEX 19 FRANCE	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> SDMS n° 60983 </div>
Consignee, Empfänger, Lieu de livraison OUTOKUMPU SAS	

Mark of Manufacturer Zeichen des Lieferwerkes Signe de producteur outokumpu	Process Erschmelzungsart Mode de fusion E+AOD	Inspector's stamp Zeichen des Sachverständigen Poisson de l'expert 	Grade, Werkstoff, Nuance Outokumpu 18-8L TYPE 304 TYPE 304L 1.4301 1.4307
--	--	--	--

Product, Erzeugnisform, Produit
 Stainless Steel Hot Rolled, Coil-Plate
 finish 1D, cut edge

Line Reihe Ligne	Item Position Poste	Heat-Lot No Schmelze-Lot Nr Coulée n° - Lot No	Size Abmessungen Dimensions	Pieces Stückzahl Nombre	Quantity / Unit Menge / Einheit Quantité / Unité
1	8	432445-002	10,00 X 2000 X 4000 mm	10	6338 KG

Chemical composition - Chemische Zusammensetzung - Composition chimiques

Heat	C	Si	Mn	P	S	Cr	Ni	Nb	Cu	Co	N
	.020	.36	1.56	.030	.001	18.28	8.13	.012	.34	.140	.060

Radioactive contamination check acc. IAEA recommendations: Satisfactory

Test results - Prüfgergebnisse - Résultats des essais (1N/mm² = 1 MPa) F = Front - Anfan - Debut B = Back - Ende - Fin T = Transverse - Quer - Travers

Test Ref	Temp	RP 0.2	RP 1.0	RM	A5	2"	HB
	°C	N/MM2	N/MM2	N/MM2	%	½	HB
Min	+20	230	260	520	45	40	
Max				700			201
F T	+20	318	370	623	56	58	174
B T		318	367	619	58	60	174

Material conforms to NACE MR0175/ISO 15156 in supplied condition
 Corrosion acc. ASTM A 262-E, EN ISO 3651-2A: Satisfactory
 Heat treatment / Solution annealed: Material temperature 1100 °C / Quenched (forced air + water)
 Steel grade verification (PMI-spectroscopic): OK
 Marking, visual insp. and gauge measurement: Satisfactory
 Approved acc. AD 2000 Merkblatt W0 by TÜV NORD Systems with renounce of countersignment
 Certified acc. Pressure Equipment Directive (97/23/EC) by TÜV CERT-Certification body
 for pressure equipment of the TÜV NORD Systems; notified body, reg-no. 0045.

SDMS

Outokumpu Stainless AB Telephone: +46 (0)226 614 77
 Business Unit Special Coil Fax: +46 (0)226 613 16
 BOX 74, S-774 22 AVESTA V.A.T no: SE558001874801
 SWEDEN
 Regoffice: Stockholm SWEDEN, Regno: 556001-8748

This material is found to comply with order requirements

Joakim Johansson
 Joakim Johansson
 Authorized Inspector



ACERINOX EUROPA
 FABRICA DEL CAMPO DE GIBRALTAR
 PALMONES (LOS BARRIOS)
 T.FNO. (34) - 956 62 93 00
 FAX (34) - 956 62 93 11
 P.O. BOX 03
 11370 LOS BARRIOS (CADIZ)



INSPECTION CERTIFICATE

CERTIFICAT D'INSPECTION

3.1

ACCORDING TO EN 10204
 SUIVANT

CERTIFICATE N° F0 2014 877345 40002 *
 N° CERTIFICAT

CUSTOMER CLIENTE JACQUET SAS Rue Michel Jacquet-BP 61 69802 SAINT-PIERRE CEDEX FRANCIA	OUR ORDER N° NOTRE N° CO RW 549	YOUR ORDER N° NOTRE N° COM 76687 REV 01
N° JACQUET : 091344	TRADE MARK SIGLE DU PRODUCTEUR 	INSPECTOR'S STAMP POINÇON DE L'INSPECTEUR
		STEELMAKING PROCESS PROCÉDÉ D'ÉLABORATION A.O.D.

REQUIREMENTS EXIGENCES	INTERGRANULAR CORROSION CORROSION INTERGRANULAIRE	GRADE MATIÈRE	FINISH FINI
EN 10088-2:2005, EN-ISO-18286(Thickness Tolerances) ASTM A240Ed12a/A480Ed12-ASME SectIIA SA240/SA480Ed13 EN 10088-2:2005 EN-ISO-18286(Thickness Tolerances) ASTM A240Ed12a/A480Ed12-ASME SectIIA SA240/SA480Ed13	ASTM-A-262 PRACTICA E ASTM-A-262 PRACTICA E	Acx 150 1.4301 Acx 150 TP-304 Acx 150 1.4307 Acx 150 TP-304L	1D N°1 1D N°1

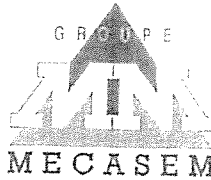
COIL / BOX BOBINE/CAISSE	CONTENT CONTENU	DIMENSIONS DIMENSIONS			MARKS MARQUE	QUANTITY QUANTITÉ	TEST N° ÉCHANTILLON
		THICKNESS ÉPAISSEUR	WIDTH LARGEUR	LENGTH LONGUEUR			
C1038A	01HOLZ DB	30,000	1500,00	6000,00	15	1	01HOLZ D C

SDMS n° 62218
43

CHEMICAL ANALYSIS / COMPOSITION CHIMIQUE (%)										
HEAT N° COULÉE	C	CR	MN	N	NI	P	S	SI	CO	
HOLZ	0,024	17,590	1,764	0,079	8,030	0,035	0,001	0,414	0,122	

MECHANICAL PROPERTIES / CARACTERISTIQUES MECANIKES										
TEST N° ÉCHANTILLON	PROBE SIT TYPE	Rm N/mm2	Rp 0.2 N/mm2	Rp 1.0 N/mm2	A50 %	A5 %	HRB	A200 %		
01HOLZ D	C T	596,84	285,41	322,73	58,15	59,15	76,00	57,15		

RE MARKS / REMARQUES The delivery is in accordance with the order Temperatura de hipertemple entre 1050 y 1100° C.	SURFACE AND DIMENSIONAL CONTROL INSPECTION DIMENSIONNELLE ET VISUELLE <div style="text-align: center; padding: 20px;"> <p style="font-weight: bold; font-size: 18px;">SATISFACTORY</p> <p style="font-weight: bold; font-size: 18px;">SATISFAISANT</p> </div>
	WORK INSPECTOR INSPECTEUR <div style="text-align: center; padding: 20px;"> <p style="font-size: 24px; font-weight: bold;">A. Heredia</p> </div>



RAPPORT D'ESSAI / TESTING REPORT
N° EMM/LY/15/ 0007 E (1/1)

SDMS n° 62218

ESSAIS MECANIQUES / MECHANICAL TESTS

2/3

Client: SDMS
Customer ZI Les Condaminnes RN 532 BP 4 35160 SAINT-ROMANS
N° Commande: 94667
Order Nr

Repère client: Coulée HOLK / Affaire 32107
Customer reference
Repère labo: 0007 E
Internal reference

Objet: Tôle ép. 30 mm
Object

Matériau de base: 304 L
Parent material

Spécification: ASME SA 240
Specification

RESULTATS / RESULTS

FLEXION PAR CHOC <i>Impact test / Kerbschlagsversuch</i>		Machine d'essai: S-KVU-003 <i>Testing device</i>		Type: Charpy V-notch <i>Shape</i>		Mini imposé: / <i>Mini required</i>		
Energie nominale: 300J <i>Nominal energy</i>		Méthode d'essai: ASTM E 23 (#) <i>Standard / Norm</i>		Dimensions (mm): 10 x 10 <i>Dimensions (mm)</i>		Moy. Imposée: / <i>Average required</i>		
N°	T (°C)	Prélèvement (2) <i>Sample position Probenlage</i>	J	S (cm ²)	J / cm ²	Moyenne <i>Average / Mittelwert</i>	Expansion latérale <i>Lateral expansion / (mm)</i>	Ductilité (%)
1	-269	ST	135	0,80	/	140,7 J	1,55	95
2	-269	Mi-épaisseur	142	0,80	/		1,61	95
3	-269	(Mid-Thickness)	145	0,80	/		1,69	95

(2) SL: sens de laminage (longitudinal / längs); ST: sens travers laminage (transverse / quer); P: peau (surface); E: épaisseur (thickness / Dicke)

Observation(s):

Date essai(s) / Test(s) Date: 29/01/2015

Chargé(e) d'essai / Testing staff
R. FRICK

Responsable Technique



Date Emission: 29/01/2015
Emission date

L'accréditation du COFRAC atteste que l'objet soumis à l'essai est conforme à ce rapport. Toute reproduction partielle est interdite sans l'approbation écrite du laboratoire.

ESS-MEC-POF-020

PROCES-VERBAL DE CONTROLE
INSPECTION REPORT

N° AFFAIRE : 32157
Job n°

CLIENT : SIGMAPHI
Customer

N° CDE CLIENT : B410/8550
Customer order

DESIGNATION : ENCEINTE HELIUM DIPOLE
Designation

Documents de référence / *reference Documents* : Spécification technique 318711ind B
Références des appareils utilisés / *Reference of used apparatus* :

TYPE DE CONTROLE REALISE : Contrôle de reception des tôles
Type of inspection carried out :

RESULTATS OBTENUS/ *Achieved results* :

Toles ep	N° coulée /N° lot	Ep mesurée (10 points)	Permabilité magnétique (10 points)
12 mm	288663 / 10792 HA	11.88 à 11.94 mm	1.07 à 1.09
12 mm	288663 / 10792 HB	11.82 à 11.90 mm	1.06 à 1.10
20 mm	288642 / 51148	19.90 à 20.10 mm	1.10 à 1.12
20 mm	02E8MK / B9922R	20.06 à 20.10 mm	1.04 à 1.05
20 mm	02E8MK / B9922T	20.04 à 20.11 mm	1.03 à 1.05
20 mm	02E8MK / B9922P	19.93 à 20.08 mm	1.04 à 1.06
20 mm	02E8MK / B9922N	19.95 à 20.10 mm	1.02 à 1.06
30 mm	HOLZ	29.90 à 30.05 mm	1.02 à 1.07


CONCLUSION :

CONFORME CONFORM	NON CONFORME NO CONFORM
---------------------	--

CONTROLEUR / INSPECTOR :

Date : 25/11/11

Visa :

 SDMS
C. DREVETON
Inspection

ede 94398/32157

ACRONI

ACRONI d.o.o., Cesta Borisa Kidriča 44, SI-4270 Jesenice

Izdajatelj certifikata
Aussteller der Bescheinigung
Originator of the document

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http://www.acroni.si
E-mail: miran.pirnat@acroni.si

Potrdilo o prevzemu 3.1/ Abnahmeprüfzeugnis 3.1/ Inspection certificate 3.1

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St. / Nr. / No.

EN 10 204 3.1
Datum / Datum / Date

310080215-1

05.05.2014

Narocnik / Kunde / Customer

N° JACQUET:

**090771
090772**

JACQUET SAS

RUE MICHEL JACQUET BP 61
69802 ST-PRIEST CEDEX

Narocilo / Bestellung Nr. / Order No.

76507 disp.38510

Dobavni list / Lieferschein / Despatch note

310080215 z/vom/from 28.04.2014

FRANCE

SDMS n° 62220

Izdelek / Erzeugnis / Product

BLECH

Vrsta peči / Erschmelzungsart / Melting furnace

E+VOD

Znak izvedenca TK

Zeichen des sachverständigen
Inspectors' stamp



Znak proizvajalca

Zeichen des Herstellwerkes
Mark of the Manufacturer



Specifikacije / Vorschriften / Specifications

ASTM A240/A 240 M/ED.12

ASME SA240/SA240M, BPVC, Sect. II, Part A, Ed. 2013

PED/97/23/EC

Tip / W.nr. / Type

304L/304

304L/304

Pov. / Fläche / Finish

No.:1

No.:1

Koroz. test / Int. krist. kor. / Corrosion test

ASTM A262 PRACTICE E:OK

NACE MR 0175-2012

NACE MR 0103-2012

EN 10028-7/ED.2007, EN 10088-2/ED.05

X5CrNi18/10/

X2CrNi18/9

W.Nr.1.4301/1.4307

1D

EN ISO 3651-2: OK

AD 2000 Regelwerk W2/ED.01 und W10/ED.01

X2CrNi18/9

W.Nr.1.4307

Obseg dobave / Umfang der Lieferung / Extent of material delivery

Poz. Pos. Item	St. sarze Schmelzen Nr. Heat No.	St. plosce Walztafel Plate No.	Teza neto Gewicht Weight kg	Dimenzije Abmessungen Dimensions mm	St. kom. Stückzahl Quantity	St. vzorca Probe Nr. Sample No.
81	288642	51148	1910	20.00 / 2000 / 6000	1	51148 T
81	288642	51148	1920	20.00 / 2000 / 6000	1	51148 T
81	288642	51149	1910	20.00 / 2000 / 6000	1	51148 T
81	288642	51149	1920	20.00 / 2000 / 6000	1	51148 T

Mehanske lastnosti / Mechanische Eigenschaften / Mechanical properties

St. vzorca Probe Nr. Sample No.	Smer vzorca Proben lage Position	Nap.tecenja Dehn grenze Yield 0.2% MPa	Nap.tecenja Dehn grenze Yield 1% MPa	Nat.trdnost Zugfestigkeit Tensile str. MPa	Raztezek / Bruchdehnung / Elongation AS % AS0 % AS3 %			Kontrakt. Einschnurung g	Trdota Harte Hardness HB	Zilavost / Kerbschlag / Impact pri /smer bei /lage at/posit. J	St. vzorca Probe Nr. Sample No.
Zahteva Anforderung.	MIN	210	250	520	45				201	60	20
51148 T	P	297	362	606	52.0	55.0			170	317	344 350 20

G - Glava / Kopf / Top N - Noga / Fuss / Bottom V - Vzdolžno / Langs / Longitudinal P - Precno / Quer / Transverse Upogib / Biege / Bend: 0.5a

C. D. DAVELON
SDMS
C. D. DAVELON
Inspector

ACRONI Zig in podpis
Unterstempel und Unterschrift
ACRONI, d.o.o. stamp and signature
Cesta Borisa Kidriča 44, 4270 Jesenice
Član skupine SII
Member of Slovenian Steel Group

ACRONI

ACRONI d.o.o., Cesta Borisa Kidriča 44, SI-4270 Jesenice

Izdajatelj certifikata
Aussteller der Bescheinigung
Originator of the documentKONTROLA KAKOVOSTI
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http://www.acroni.si
E-mail: miran.pirnat@acroni.si

SDMS n° 62220

2/4

Potrdilo o prevzemu 3.1/ Abnahmeprüfzeugnis 3.1/ Inspection certificate 3.1

Sl./Nr./No. 310080215-1

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Kemična analiza / Chemische Zusammensetzung / Chemical Composition

Sarza/Schmelzen Nr / %C	%Si	%Mn	%P	%S	%Cr	%Ni	%B	%N	%Co	Ferrite
288642	0.027	0.27	1.80	0.037	0.001	18.10	8.08	<0.0005	0.0717	0.14

Opombe / Bemerkungen / Remarks

WARMBEHANDLUNG : LOSUNGSGLUGEN BEI MIN. 1050°C, WASSER ABGESCHRECKT !

- OBERFLÄCHEN UND MASSPRÜFUNG : OHNE BEANSTANDUNG NACH EN 10029 DICKE CLASS B UND EN 10163-2 B3

- PRÜFUNG AUF WERKSTOFFVERWECHSLUNG : OHNE BEANSTANDUNG

- PRÜFUNG AUF BESTÄNDIGKEIT GEGEN INTERKRISTALLINE KORROSION NACH EN ISO 3651-2 : OHNE BEANSTANDUNG

HEAT TREATMENT : SOLUTION ANNEALED AT MIN. 1050°C, WATER QUENCHED

- VISUAL AND DIMENSIONAL CHECK : OK

- SPECTROMETER SORTING TEST : OK

- INTERGRANULAR CORROSION TEST ACCORDING TO

ASTM A 262 PRACTICE E : No cracks were observed at 20X magnification!

Im Einvernehmen mit dem TÜV Bayern e. V. (08/1965). Gegenzeichnungsverzicht durch TÜV Bayern Sachsen e. V. mit Schreiben vom 20.06.1996. Zertifiziert nach DGRL 97/23/EG, Anhang I, Abschnitt 4.3 durch TÜV SÜDDEUTSCHLAND Bau und Betrieb GmbH, Benannte Stelle-Kennnummer 0036 (Oktober 2002).

As agreed with TÜV Bayern e. V. (08/1965). Countersignature by TÜV Bayern Sachsen e. V. is not required (letter of 20 June 1996). Certified according to PED 97/23/EC, Annex I, Paragraph 4.3 by TÜV SÜDDEUTSCHLAND Bau und Betrieb GmbH, notified body-registration number 0036 (October 2002).

THE MATERIAL COMPLIES WITH THE REQUIREMENTS OF THE ORDER.

NO WELD REPAIR

RADIOACTIVITY CONTAMINATION MEASURED WITH EXPLORANIUM

GR - 320 LAB: NO CONTAMINATION

Es wird bestätigt, daß die Lieferung den Bestellanforderungen entspricht.

We confirm herewith that the delivered material complies with the terms of the order.

N° JACQUET :

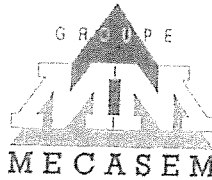
090771

090772

Zig in podpis

Firmenstempel und Unterschrift
Stamp and signatureACRONI, d.o.o.
Cesta Borisa Kidriča 44, 4270 Jesenice
Član skupine SSI
Member of Slovenian Steel Group

MECASEM
8, rue J. Monod - BP 46
69684 CHASSIEU
Tél : 04.78.40.19.73
Fax : 04.78.90.83.34



ACCREDITATION
N° 1-1129
PORTÉE
DISPONIBLE SUR
WWW.COFRAC.FR



RAPPORT D'ESSAI / TESTING REPORT
N° EMM/LY/15/ 0007 B (1/1)

SDMS n° 62220

ESSAIS MECANQUES / MECHANICAL TESTS

3/4

Client: SDMS <i>Customer</i> ZI Les Condamines RN 532 BP 4 38160 SAINT-ROMANS	N° Commande: 94667 <i>Order Nr</i>
Repère client: Coulée 288642 / Affaire 32157 <i>Customer reference</i>	Repère labo: 0007 B <i>Internal reference</i>
Objet: Tôle ép. 20 mm <i>Object</i>	
Matériau de base: 304 L <i>Parent material</i>	
Spécification: ASME SA 240 <i>Specification :</i>	

RESULTATS / RESULTS

FLEXION PAR CHOC <i>Impact test / Kerbschlagversuch</i>			Machine d'essai: S-KVU-003 <i>Testing device</i>			Type: Charpy V-notch <i>Shape</i>		Mini imposé: / <i>Mini required</i>	
Energie nominale: 300J <i>Nominal energy</i>			Méthode d'essai: ASTM E 23 (#) <i>Standard / Norm</i>			Dimensions (mm): 10 x 10 <i>Dimensions (mm) :</i>		Moy. Imposée: / <i>Average required</i>	
N°	T (°C)	Prélèvement (2) <i>Sample position</i> <i>Probenlage</i>	J	S (cm ²)	J / cm ²	Moyenne <i>Average / Mittelwert</i>	Expansion latérale <i>Lateral expansion / (mm)</i>	Ductilité (%)	
1	-269	ST	241	0,80	/	233,3 J	2,23	95	
2	-269	Mi-épaisseur (Mid-Thickness)	242	0,80	/		2,26	95	
3	-269		217	0,80	/		2,25	95	

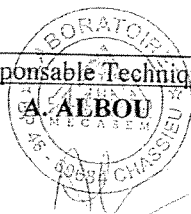
(2) SL : sens de laminage (longitudinal / längs) ; ST : sens travers laminage (transverse / quer) ; P : peau (surface) ; E : épaisseur (thickness / Dicke)

Observation(s) :

Date essai(s) / Test(s) Date : 29/01/2015

Chargé(e) d'essai / Testing staff
R. FRICK

Responsable Technique



Date Emission : 29/01/2015
Emission date

L'accréditation du COFRAC atteste que la présence des laboratoires pour les seuls essais couverts par l'accréditation, sont identifiés par le symbole #. Seul l'objet soumis à l'essai est concerné par ce rapport. Reproduction partielle interdite sans l'approbation écrite du laboratoire.

ESS-MEC-DOF-020

4/4

**PROCES-VERBAL DE CONTROLE
INSPECTION REPORT**

N° AFFAIRE : 32157
Job n°

CLIENT : SIGMAPHI
Customer

N° CDE CLIENT : B410/8550
Customer order

DESIGNATION : ENCEINTE HELIUM DIPOLE
Designation

Documents de référence / reference Documents : Spécification technique 318711 ind B
Références des appareils utilisés / Reference of used apparatus :

TYPE DE CONTROLE REALISE : Contrôle de reception des tôles
Type of inspection carried out :

RESULTATS OBTENUS/ Achieved results :

Toles ep	N° coulée /N° lot	Ep mesurée (10 points)	Permabilité magnétique (10 points)
12 mm	288663 / 10792 HA	11.88 à 11.94 mm	1.07 à 1.09
12 mm	288663 / 10792 HB	11.82 à 11.90 mm	1.06 à 1.10
20 mm	288642 / 51148	19.90 à 20.10 mm	1.10 à 1.12
20 mm	02E8MK / B9922R	20.06 à 20.10 mm	1.04 à 1.05
20 mm	02E8MK / B9922T	20.04 à 20.11 mm	1.03 à 1.05
20 mm	02E8MK / B9922P	19.93 à 20.08 mm	1.04 à 1.06
20 mm	02E8MK / B9922N	19.95 à 20.10 mm	1.02 à 1.06
30 mm	HOLZ	29.90 à 30.05 mm	1.02 à 1.07

CONCLUSION :

CONFORME CONFORM	NON CONFORME NO CONFORM
---------------------	--

CONTROLEUR / INSPECTOR :

Date : 25/11/11

Visa :


SDMS
C. DREVETON
Inspection

Ode 94395/94396-32107 v 32157

ACRONI

ACRONI d.o.o., Cesta Borisa Kidriča 44, SI-4270 Jesenice

Izdajatelj certifikata
Aussteller der Bescheinigung
Originator of the document

KONTROLA KAKOVOSTI
Telefon: +386 4 584 10 40
Telefax: +386 4 584 10 68
http://www.acroni.si
E-mail: miran.pirnat@acroni.si

Potrdilo o prevzemu 3.1/ Abnahmeprüfzeugnis 3.1/ Inspection certificate 3.1

Stran/Seite/Page 1 / 2
St. / Nr. / No.

EN 10 204 3.1
Datum / Datum / Date

310083234-1

19.06.2014

Narocnik / Kunde / Customer

QUARTO DEUTSCHLAND GMBH

BAHNSTRASSE 38
D-44793 BOCHUM

DMS n° 62221

Narocilo / Bestellung Nr. / Order No.

Dobavni list / Lieferschein / Despatch note

10003 disp.39315

310083234 z/vom/vrom 12.06.2014

GERMANY

Izdelek / Erzeugnis / Product

Vrsta pecl / Erschmelzungsart / Melting furnace

Znak izvedenca TK

Zelchen des sachverständigen
Inspectors' stamp



Znak proizvajalca

Zelchen des Herstellerwerks
Mark of the Manufacturer



BLECH

E+VOD

Specifikacije / Vorschriften / Specifications

ASTM A240/A 240 M/ED.12

ASME SA240/SA240M, BPVC, Sect. II, Part A, Ed. 2013

PED/97/23/EC

Tip / W.nr. / Type

304L/304

304L/304

Pov. / Fläche / Finish

No.:1

No.:1

Koroz. test / Int.krist.korr. / Corrosion test

ASTM A262 PRACTICE E:OK

NACE MR 0175-2012

NACE MR 0103-2012

EN 10028-7/ED.2007, EN 10088-2/ED.05

X5CrNi18/10/

X2CrNi18/9

1D

EN ISO 3651-2: OK

W.Nr.1.4301/1.4307

AD2000 Merkblatt W10 Ed. 2008

AD2000 Merkblatt W2 Ed. 2011

X2CrNi18/9

W.Nr.1.4307

Obseg dobave / Umfang der Lieferung / Extent of material delivery

Poz. Pos. Item	St. sarze Schmelzen Nr. Heat No.	St. plosce Waltztafel Plate No.	Teza neto Gewicht Weight kg	Dimenzije Abmessungen Dimensions mm	St. kom. Stuckzahl Quantity	St. vzorca Probe Nr. Sample No.
181	288633	51285	1420	12.00 / 2500 / 6000	1	51287 T
181	288633	51285	1440	12.00 / 2500 / 6000	1	51287 T
182	288635	51280	1660	14.00 / 2500 / 6000	1	51281 T
182	288635	51280	1680	14.00 / 2500 / 6000	1	51281 T
183	288633	51278	1800	15.00 / 2500 / 6000	1	51276 T
183	288633	51279	1800	15.00 / 2500 / 6000	1	51276 T
183	288633	51279	1800	15.00 / 2500 / 6000	1	51276 T
184	288634	51269	1835	16.00 / 2500 / 6000	1	51268 T

Mehanske lastnosti / Mechanische Eigenschaften / Mechanical properties

St.vzorca Probe Nr. Sample No.	Smer vzorca Proben lage Position	Nap.tecenja Dehn grenze Yield 0.2% MPa	Nap.tecenja Dehn grenze Yield 1% MPa	Nat.Irdnost Zuglestigkeit Tensile str. MPa	Raztezok / Bruchdehnung / Elongation AS % A50 % A60 %	Kontrakt. Einschnurung Q %	Trdota Harte Hardness HB	Zilavost / Kerbschlag / Impact pri / smer bei / lage J	at/posit. at/posit.	°C
Zahteva Anforderung.	MIN MAX	210 250	250 309	520 605	45 700		201	60		20
51276 T	P	271	309	605	57.5 60.5		170	350	351	346 20
51287 T	P	300	339	617	57.0 60.0		170	340	350	329 20
51268 T	P	277	340	599	58.0 61.0		170	366	352	359 20
51281 T	P	309	351	610	54.0 57.0		170	389	379	375 20

G - Glava / Kopf / Top N - Noga / Fuss / Bottom V - Vz dolzno / Langs / Longitudinal P - Precno / Quer / Transverse Upogib / Biege / Bend: 0.5a

20690/20691/20692/20693/20694

Original
Stamp
C. DRAGON
Innovation

ACRONI
Zig in podpis
ACRONI d.o.o. Miran Pirnat, Upravitelj
Cesta Borisa Kidriča 44, SI-4270 Jesenice
Stamp and signature
Član skupine SI
Member of Slovenian Steel Group

19/72

Potrdilo o prevzemu 3.1/ Abnahmeprüfzeugnis 3.1/ Inspection certificate 3.1

Sl./Nr./No. 310083234-1

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Kemická analýza / Chemische Zusammensetzung / Chemical Composition

Sarža/Schmelzen Nr./ %C	%Si	%Mn	%P	%S	%Cr	%Ni	%B	%N	%Co	Ferite
288633	0.028	0.35	1.82	0.040	0.001	18.41	8.03	<0.0005	0.0933	0.12
288634	0.024	0.36	1.83	0.039	0.001	18.18	8.00	<0.0005	0.0989	0.12
288635	0.030	0.32	1.65	0.038	0.001	18.07	8.02	<0.0005	0.0893	0.12

SDMS n° 62221

Opombe / Bemerkungen / Remarks

WARMBEHANDLUNG : LOSUNGSGLUGEN BEI MIN. 1050°C, WASSER ABGESCHRECKT !

- OBERFLACHEN UND MASSPRUFUNG : OHNE BEANSTANDUNG NACH EN 10029 DICKE CLASS B UND EN 10163-2 B3

- PRUFUNG AUF WERKSTOFFVERWECHSLUNG : OHNE BEANSTANDUNG

- PRUFUNG AUF BESTANDIGKEIT GEGEN INTERKRISTALLINE KORROSION NACH EN ISO 3651-2 : OHNE BEANSTANDUNG

HEAT TREATMENT : SOLUTION ANNEALED AT MIN. 1050°C, WATER QUENCHED

- VISUAL AND DIMENSIONAL CHECK : OK

- SPECTROMETER SORTING TEST : OK

- INTERGRANULAR CORROSION TEST ACCORDING TO

ASTM A 262 PRACTICE E : No cracks were observed at 20X magnification!

Im Einvernehmen mit dem TÜV Bayern e. V. (08/1965). Gegenzeichnungsverzicht durch TÜV Bayern Sachsen e. V. mit Schreiben vom 20.06.1996. Zertifiziert nach DGRL 97/23/EG, Anhang I, Abschnitt 4.3 durch TÜV SÜDDEUTSCHLAND Bau und Betrieb GmbH, Benannte Stelle-Kennnummer 0036 (Oktober 2002).

As agreed with TÜV Bayern e. V. (08/1965). Countersignature by TÜV Bayern Sachsen e. V. is not required (letter of 20 June 1996). Certified according to PED 97/23/EC, Annex I, Paragraph 4.3 by TÜV SÜDDEUTSCHLAND Bau und Betrieb GmbH, notified body-registration number 0036 (October 2002).

THE MATERIAL COMPLIES WITH THE REQUIREMENTS OF THE ORDER.

NO WELD REPAIR

RADIOACTIVITY CONTAMINATION MEASURED WITH EXPLORANIUM

GR - 320 LAB: NO CONTAMINATION

Es wird bestätigt, daß die Lieferung den Bestellanforderungen entspricht.

We confirm herewith that the delivered material complies with the terms of the order.

20690/20691/20692/20693/20694

ACRONI

19/72
ACRONI d.o.o. in podpis
Cesta Borisa Kidriča 44, 4270 Jesenice
Hilfenstempel und Unterschrift
Danilo Pirnat and signature
Member of Slovenian Steel Group

[Handwritten Signature]

PROCES-VERBAL DE CONTROLE
INSPECTION REPORT

N° AFFAIRE : 32157
Job n°

CLIENT : SIGMAPHI
Customer

N° CDE CLIENT : B410/8550
Customer order

DESIGNATION : ENCEINTE HELIUM DIPOLE
Designation

Documents de référence / *reference Documents* : Spécification technique 318711 ind B
Références des appareils utilisés / *Reference of used apparatus* :

TYPE DE CONTROLE REALISE : Contrôle de reception des tôles
Type of inspection carried out :

RESULTATS OBTENUS/ *Achieved results :*

Toles ep	N° coulée /N° lot	Ep mesurée (10 points)	Permabilité magnétique (10 points)
12 mm	288663 / 10792 HA	11.88 à 11.94 mm	1.07 à 1.09
12 mm	288663 / 10792 HB	11.82 à 11.90 mm	1.06 à 1.10
20 mm	288642 / 51148	19.90 à 20.10 mm	1.10 à 1.12
20 mm	02E8MK / B9922R	20.06 à 20.10 mm	1.04 à 1.05
20 mm	02E8MK / B9922T	20.04 à 20.11 mm	1.03 à 1.05
20 mm	02E8MK / B9922P	19.93 à 20.08 mm	1.04 à 1.06
20 mm	02E8MK / B9922N	19.95 à 20.10 mm	1.02 à 1.06
30 mm	01HOLZ	29.90 à 30.05 mm	1.02 à 1.07
30 mm	C9 LZ	30.20 à 30.34 mm	1.04 à 1.07

CONCLUSION :

CONFORME CONFORM	NON CONFORME NO CONFORM
---------------------	--

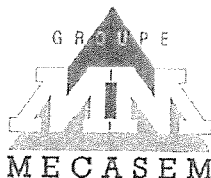
CONTROLEUR / INSPECTOR :

Date : 25/01/11

Visa :

SDMS
C. DEBRETTON
Inspector

MECASEM
8, rue J. Monod - BP 46
69684 CHASSIEU
Tél : 04.78.40.19.73
Fax : 04.78.90.83.34



ACCREDITATION
N° 1-1129
PORTÉE
DISPONIBLE SUR
WWW.COFRAC.FR



RAPPORT D'ESSAI / TESTING REPORT
N° EMM/LY/15/ 0007 A (1/1)

SDMS n° 62221

ESSAIS MECANQUES / MECHANICAL TESTS

Client: SDMS	N° Commande: 94667
<i>Customer</i> ZI Les Condomines RN 532 BP 4 38160 SAINT-ROMANS	<i>Order Nr</i>
Repère client: Coulée 288633 / Affaire 32157	Repère labo: 0007 A
<i>Customer reference</i>	<i>Internal reference</i>
Objet: Tôle ép. 12 mm	
<i>Object</i>	
Matériau de base: 304 L	
<i>Parent material</i>	
Spécification: ASME SA 240	
<i>Specification</i>	

RESULTATS / RESULTS

FLEXION PAR CHOC <i>Impact test / Kerbschlagversuch</i>		Machine d'essai: S-KVU-003 <i>Testing device</i>		Type: Charpy V-notch <i>Shape</i>		Mini imposé: / <i>Mini required</i>		
Energie nominale: 300J <i>Nominal energy</i>		Méthode d'essai: ASTM E 23 (#) <i>Standard / Norm</i>		Dimensions (mm): 10 x 10 <i>Dimensions (mm):</i>		Moy. Imposée: / <i>Average required</i>		
N°	T (°C)	Prélèvement (2) <i>Sample position Probenlage</i>	J	S (cm²)	J / cm²	Moyenne <i>Average / Mittelwert</i>	Expansion latérale <i>Lateral expansion / (mm)</i>	Ductilité (%)
1	-269	ST	181	0,80	/	187,7 J	1,92	90
2	-269	Mi-épaisseur	181	0,80	/		2,09	90
3	-269	(Mid-Thickness)	201	0,80	/		2,32	90

(2) SL : sens de laminage (longitudinal / längs) ; ST : sens travers laminage (transverse / quer) ; P : peau (surface) ; E : épaisseur (thickness / Dicke)

Observation(s) :

Date essai(s) / Test(s) Date : 29/01/2015

Chargé(e) d'essai / Testing Staff
R. FRICK

Responsable Technique

A. ALBOU

Date Emission : 29/01/2015
Emission date

L'accréditation du COFRAC atteste que les seuls essais couverts par l'accréditation ont été effectués par le laboratoire. Seul l'objet soumis à l'essai est concerné par ce rapport. Reproduction partielle interdite sans l'approbation écrite du laboratoire.

ESS-MEC-DOP-020



TEL: +380(0)65.3021 - FAX: 30.15.207256
 CAR. SOC. 100.000.000 E
 C.F. 0218786087
 VAT: IT00571320076 - R.E.A. n. 40/50474

PAR IGD selon ISO 8001. SOUS LE SYSTEME CERTIFIE
 14001.

CERTIFICAT DE RECEPTION 3.1 (EN 10204:2004)
 (A03) NUMERO DE DOCUMENT 2014046267
 PAGE 1/2

(A06) CLIENT :
 (A07) N. DE LA COMMANDE DU CLIENT :
 (A01) USINE PRODUCTRICE :
 (A05) AUTEUR DU DOCUMENT :
 (A08) NUMERO DE LA COMMANDE DE L'USINE
 LES PRODUITS CERTIFIES SONT CONFORMES A LA COMMANDE

COGNE FRANCE S.A.
 CDA50575
 AOSTA, VIA PARAVERA 16... ITALIA
 SERVICE QUALITE
 25184936 /10

085170

(A04) SIGLE DU PRODUCTEUR : COGNE

SPECIFICATION INTERNE :

(B01) PRODUIT : STOCKHARENWZ REGLE TECHNIQUE : AD2000
 (B03) FINITION SUPERFICIELLE : 3333 PEL Eciroté RONDS TOLLERANCE : ISOK11
 (B04) ETAT DE LIVRAISON : 2B
 (B11) DIMENSIONS DU PRODUIT (MM) : RS HYPERTREMPE
 (B02) NUANCE : 90,000
 (B07) IDENTIFICATION N. DE COULER : AISI 304/304L EN 1.4301/1.4307 (B12) LONGUEUR DU PRODUIT (MM) : 04000 /06200
 472732 NUANCE INTERNE : F304LI IMCO
 1.4301 MARQUAGE DU PRODUIT : (B07) IDENTIFICATION N. DE LOT : 514210
 MARQUAGE PIECES : 421

LE PRODUIT EST CONFORME A LA SPECIFICATION ET A LA REGLE AD2000-MERKBLATT W0/W2.
 NORMES DE REFERENCE: EN10086-3, EN10272, ASTM A276, ASTM A479, ASME SA479(10), ASTM A193 B8 CLASS 1D, AMS 5647H, AMS 5639H, NACE MR0175, NACE MR0103.
 NORMES DE REFERENCE CONCERNANT L'ANALYSE CHIMIQUE ET PROPRIETES MECANIQUES: ASTM A182, ASME SAI82(10).
 ASTM A484 NE S'APPLIQUE PAS POUR LES TOLERANCES DE DIAMETRE ET DE LONGUEUR.
 ELABORATION AU FOUR ELECTRIQUE + AOD + COULEE CONTINUE.
 LAMINE A CHAUD
 TAUX DE CORROYAGE 3,7

(C71) COMP. CHIMIQUE - DE COULEE SELON ASTM E1019-A751-E1086-E415-A580
 Lot de control - Poids : 020000548304 - 82.198 KG
 ELEMENT C Si Mn P S N Al Cr Mo Ni
 OBTENU 0,017 0,31 1,29 0,034 0,027 0,086 0,004 18,05 0,30 8,11
 ELEMENT Cu Co
 OBTENU 0,40 0,16

ESSAI DE DURETE AU ETAT DE FOURNITURE
 Lot de control - Poids : 020000549065 - 3.784 KG
 SPECIFICATION ENISO6506
 OBTENU 178 ESSAI DE DURETE HB METHODE D'ESSAI : 10/3000

BSSAI DE RESILIENCE AU ETAT DE FOURNITURE
 Lot de control - Poids : 020000549055 - 3.784 KG
 SPECIFICATION EN ISO 148-1-KV2
 (C40) EPROUVEITE KV 20
 (C03) TEMPERATURE D'ESSAI °C
 UNITE DE MESURE
 OBTENU 264 262 267 268 264 261 255 259
 261 268

SDMS n° 62317

15/11/2005
 C. DRAGON
 1/2



TEL: +39 0785 302111
 FAX: +39 0785 302296
 CAP. SOC. 100.000.000
 C.F. 02187388867
 VAT: IT00571320070 - R.E.A. n. AO 50476

entreprise avec les systèmes de gestion certifiés
 par ISO selon ISO 9001, ISO/TS 16949 et ISO
 14001.

CERTIFICAT DE RECEPTION 3.1 (EN 10204:2004)
 (A03) NUMERO DE DOCUMENT 201404621
 PAGE 2/2

ESSAI DE TRACTION AU ETAT DE FOURNITURE
 Lot de control Poids: 020000549065
 SPECIFICATION

EN-ISO6892-1 3.784 KG

(C02) ORIENTATION DE L'EPROUVETTE: L

ORIENTU	RM MPA	RP02 MPA	A5 %	Z %	RP1 MPA
	604	264	5,0 D	72,8	304
	605	267	66,9	72,2	293
	595	266	65,5	74,0	302
	598	261	67,5	74,2	296

085170

DIMENSION DU GRAIN
 Lot de control - Poids : 020000549065 -
 SPECIFICATION
 OBTENU 5 7 3.784 KG
 ASTM E112 --

ESSAI DE TRACTION
 Lot de control - Poids : 020000549065 -
 SPECIFICATION

3.784 KG
 ASTM A370 - EB-0.5" SPEC

(C02) ORIENTATION DE L'EPROUVETTE: L

ORIENTU	RMB KSI	REC2B KSI	ZB %	AL2B %
	87	38	74,2	4,0 D
	87	37	76,8	70,5
	86	38	74,7	70,8
	86	38	75,6	70,6
				68,8

ESSAI DE CORROSION SELON ASTM A262 METHODE E EN ISO 3651-2: CONFORME.
 INSPECTION DE LA SURFACE AVEC COURANTS DE FOUCAULT (CAPTEUR ROTATIF) ET VISUELLE SUIVANT EN 10277-1 CLASSE 4: CONFORME.
 CONTROLE DIMENSIONNEL SUIVANT LA NORME EN 10278: CONFORME.
 MATERIEL 100% TESTE A ULTRASONNAGE KSR: 1.
 AUCUNE REPARATION DE Soudure EXECUTEE.
 CONTROLE ANTIMELANGE AVEC SPECTROMETRE PORTABLE: CONFORME.
 LES PRODUITS SONT CONFORMES AUX DIRECTIVES CE: 2011/65 -2000/53 2002/95 (RHS) 2003/11 - 2005/618 ET PED 97/23/CE.
 L'UTILISATION DE SUBSTANCES APPAUVRISSEMENT LA COUCHE D'OZONE DE CLASSE I ET II.
 MARQUAGE: MARQUAGE DU PRODUCTEUR, N. WERKSTOFF, N. COULEE, N. LOT POINCON DE L'EXPERT
 DOCUMENT PRODUIT EN ACCORD AVEC TUEV BAYERN (11.1972) NE FAISANT PAS L'OBJET D'UNE CONTRE-SIGNATURE (VOIRE DOCUMENT TUEV BAYERN
 17.01.80).
 MATERIEL PRODUIT DANS UN SYSTEME D'ASSURANCE QUALITE EN ACCORD
 AVEC UNI EN ISO 9001:2008 ET ISO/TS 16949:2009 (POUR CETTE DERNIERE SEULEMENT POUR LES BARRES EN ACIER LAMINEES 'ECCROUTEES'.
 RECTIFIEES' ET POUDES METALLIQUES ATOMISEES), CERTIFIE PAR IGO.
 TOUTES LES NORMES MENTIONNEES SONT EN ACCORD AVEC LES DERNIERES REVISIONS.
 Pays d'origine: Italie, le matériel est conforme aux normatives PAR DEARS 252.225-7014 ALT 1.

SDMS n° 62317

(201) DATE 24.07.2014

VANESSA NICONI MV (ESPERT DE L'USINE) - CERTIFICAT CREE ELECTRONIQUEMENT

4/2



SHANGHAI MAX FITTINGS CO., LTD

No. 9885 Puwei Road, Fengxian District, Shanghai, China
Mill test certificate in acc. with EN 10204 3.1

ISO9001:2000 Cert. No.: 01 100 106091
EU Directive 97/23/EC Cert. No.: 01 202 CHI/Q-10 0410
AD2000-MERKBLATT W0 Cert. No.: 01 202 CHI/Q-10 0410

Cert. No. Zeugnis Nr. 20140816-009
Solution annealed, pickled and passivated
Überharte Abgeschreckt Gebelzt

Delivery Condition
Lieferbedingung
Spec./Lieferanschr. ASTM A584/A584M-13 / ASME B16.9-2012

Grade	Heat No.	Heat treatment	Quenching
Werkstoffe	Schmelz Nr.	Wärmebehandlung	Auslöschung
WP304/304L-S	140307T06	1052° 15 min.	RWQ
WP304/304L-S	13C050908	1052° 15 min.	RWQ
WP304/304L-S	13A050906	1052° 15 min.	RWQ
WP304/304L-S	13C050908	1052° 15 min.	RWQ
WP304/304L-S	130909H06	1052° 15 min.	RWQ
WP304/304L-S	140306T08	1052° 15 min.	RWQ
WP304/304L-S	H13B030301	1052° 15 min.	RWQ

Heat No. (Gemäss Vormaterialzeugnis)

Mo	Ti	Ni	Cr	S max	P max	C max	Min max	YS (Mpa)	YS (Mpa)	EL (%)	Hardness	NACE	Corrosion test	Impact Test	Non-destructive Test	100% PMI Test	Visual Inspection	Dimension
		8.0-12.0	18.0 - 20.0	0.030	0.045	0.030	2.00	285	285	59	HRB=79	OK	N/A	PT	OK	OK	OK	Maas
		0.09	18.18	0.001	0.032	0.019	1.34	280	280	57	HRB=75	OK	N/A	Kerbschlag	OK	OK	OK	OK
		8.05	18.19	0.002	0.031	0.018	1.44	300	300	56	HRB=77	OK	N/A		OK	OK	OK	OK
		8.05	18.14	0.004	0.030	0.022	1.43	295	295	59	HRB=75	OK	N/A		OK	OK	OK	OK
		8.05	18.19	0.002	0.031	0.018	1.44	280	280	55	HRB=78	OK	N/A		OK	OK	OK	OK
		8.06	18.19	0.002	0.031	0.025	1.34	285	285	57	HRB=81	OK	N/A		OK	OK	OK	OK
		8.03	18.21	0.001	0.037	0.016	1.38	255	255	51	HRB=76	OK	N/A		OK	OK	OK	OK
		8.06	18.29	0.002	0.029	0.016	1.38	255	255	51	HRB=76	OK	N/A		OK	OK	OK	OK

Chemical Composition / Chemische Zusammensetzung (Acc. to insp. cert of steel manufacturer) (Gemäss Vormaterialzeugnis)

Mechanical Test / Mechanischer Test

Corrosion test / Korrosionstest

Impact Test / Kerbschlag

Non-destructive Test / Verwechslungsprüfung

100% PMI Test

Visual Inspection / Beschichtigung

Dimension / Maas

Remarks/ Bemerkungen

- PMI test / Vverwechslungsprüfung
- Visual inspection / Beschichtigung
- Dimension / Maas
- Corrosion test / Korrosions test
- Welding Bevels / Schweißbohrhase Gemäß
- Base Material / Vormaterial
- Steel Making Process/Staal productie Proces

100% Satisfactory / Ohne Beanstandung
Without complaints / Ohne Beanstandung
Without complaints / Ohne Beanstandung
According to / gemäß ASTM A262-10 pract. E
According to / gemäß ASME B16.25
According to / gemäß ASTM A312
AODVOD

Manufacturer's mark / Herstellerzeichen

MAX FITTINGS

We, Shanghai Max Fittings Co., Ltd. hereby certify that the material have been manufactured, tested, and examined in accordance with all the requirements of the ordered standards and all results are acceptable.

We, Shanghai Max Fittings Co., Ltd. accept our own responsibility, that all fittings herein are manufactured in accordance with the professional EN 10204 3.1 / CE Annex 1 paragraph 4.3

Wir, Shanghai Max Fittings Co., Ltd. attestieren hiermit, dass die hierin beschriebenen Produkte gemäß den Standards und Spezifikationen gefertigt sind und den Anforderungen der Bestellung entsprechen.

Wir, Shanghai Max Fittings Co., Ltd. erklären in unserer eigenen Verantwortung, dass die aufgeführten Materialien gemäß den Regeln der Europäischen Directive 97/23/EC Annex 1 § 4.3.

Q.A. Manager:

Date: 16 August 2014

SDMS n° 62 325

1/2

MAX FITTINGS

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ISO9001:2008

GTAI 巨泰特种钢有限公司

EN 10204 3.1

PED97/23/EC

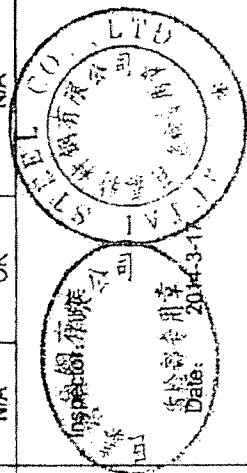
INSPECTION CERTIFICATE

Cert.No: Gtai20140317002

用户 Purchaser	上海众山管件有限公司 Shanghai Max Fittings Co., Ltd.	合同号 Contract No.	PP20140113	生产标准 Specification	ASTM/ASME A/SA312-09							
产品 Products	不锈钢无缝接管 Stainless steel seamless pipes	订单号/PO No.	/	交货状态 Delivery Condition	pickled, Solution annealed at 1050°C min							
型号 Grade	规格 O.DxW.T(mm) 60.33X3.91	长度 Length (Mtrs)	米数 Meters /	支数 Pieces	重量 Weight (KG) 703							
TP304L	5-7	炉号 Heat No.	13C05080B	19	表面情况 Surface Condition GOOD							
化学成分 Chemical Composition %												
Elements	C	Mn	P	S	Si	Cr	Ni	Mo	Ti	Cu	硬度 Hardness HRB	晶间腐蚀 IntergranularCorrosion
Spec.	Min.					18.00	8.00					PASSED
	Max.	0.035	2.00	0.045	0.030	1.00	20.00	13.00			HRB≤90	
Heat Analysis	0.018	1.44	0.031	0.002	0.40	18.19	8.05					
机械性能 Mechanical Properties												
抗拉强度Rm	屈服点 RP0.2	伸长率	屈服试验	扩口试验								
Tensile Strength (Mpa)	Yield Strength (Mpa)	Elongation%	Flattening Test	Flare Test	晶粒度 Grain Size	涡流探伤 ET	超声波探伤 UT	水压试验 Hydrostatic Test				
605	295	59	OK	OK	N/A	N/A	OK	N/A				

Remarks:

- This product complies with the requirements of NACE MR0103-2007, NACE MR0175-First Edition, and ISO15156-2009.
 - No weld repair performed for billet or pipe.
 - Mercury free, free of radioactive contamination
 - The material was heated to above 1050°C, hold more than 2 minutes per millimeter and quenched in cold water.
 - This material has been PMI tested 100%.
 - Hardness to NACE MR0175
- We hereby certify that the product were manufactured and tested strictly acc to specifications and customers' order.



SDMS n° 62325

E-MAIL: sales@julaigroup.com

地址: 浙江省龙港市金港工业园区巨泰路1号 ADD:Jing-gang Industrial Park,1 Jutai Road,Longquan City,Zhejiang,China

2/2

F146133996

ZHEJIANG JNDIA PIPELINE INDUSTRY CO., LTD.

Tel: +86-577-85826161 Fax: +86-577-85826565 Email: Sales@jndia.com.cn
 NO 2 ZIJING ROAD, SHECHENG TOWN, LONGWAN DISTRICT, WENZHOU CHINA

SDMS n° 62326



Mill Test Certificate



ISO 9001:2008
 PED/97/23/EC Cert. No.: MMS-STF-1
 50095-2009-AQ-RGC-RvA/Rev.1

Certificate: EN10204 3.1 证书号 Certificate No.: JNDIA2014-GW099-1 页次 Page 1 of 9

Customer: Stock Services A division of S.E.A.T.S Ltd.
 PO No 558
 Description: BUTT WELDED FITTINGS
 Material: ASTM/ASME A/SA 403/403M-10 WP304/304L
 Heat Treatment: Solution annealed & water quenched(1050°C)
 Steel Making Process: AOD

标识 Marking
 • 制造商标识 Manufacture's Mark
 • 尺寸、壁厚 Dimension Schedule
 • 材质 (S无缝 W有缝) Material S(Seamless)&W(Welded)
 • 炉号/标准 Heat Number&Standard

产品交货情况 Extend of Material Delivery:

NO.	名称 Description	规格 Dimension	材质 Material	数量 Quantity (PCS)	炉号 Heat No.	备注 Remarks
3	CAP	1" SCH10S	WP304/304L-S	150	AR21841	ANSI B16.9-2012
33	90° ELBOW SR	6" SCH10S	WP304/304L-S	50	S23805	ANSI B16.9-2012
35	CON RED	6" 4" SCH10S	WP304/304L-S	25	S23805	ANSI B16.9-2012
15	90° ELBOW LR	1.1/4" SCH40S	WP304/304L-S	130	S32640	ANSI B16.9-2012
19	90° ELBOW LR	2" SCH40S	WP304/304L-S	100	S32640	ANSI B16.9-2012
20	90° ELBOW LR	2" SCH80S	WP304/304L-S	100	S32640	ANSI B16.9-2012

检验结束 (标准要求已符合, 见如下表格) Inspection Results (The Requirements are fulfilled as listed in Annex)

A. 化学分析 Chemical Analysis: [%]

Heat No	C	Si	Mn	P	S	Cr	Ni	Nb	N	Mo
3 AR21841	≤0.03	≤1.00	≤2.00	≤0.045	≤0.030	18.0-20.0	8.0-12.0			
33 S23805	0.019	0.52	1.25	0.026	0.003	18.08	8.12			
35 S23805	0.019	0.48	1.18	0.021	0.001	18.07	8.11			
15 S32640	0.021	0.52	1.23	0.019	0.005	18.12	8.06			
19 S32640	0.021	0.52	1.23	0.019	0.005	18.12	8.06			
20 S32640	0.021	0.52	1.23	0.019	0.005	18.12	8.06			

B. 机械性能 Mechanical Properties & Tensile Inspection:

Heat No.	屈服强度 Yield Strength (MPa) ≥205 σ 0.2	拉伸强度 Tensile Strength (MPa) ≥515	延伸率 Elongation A50 (%) ≥28%	硬度 Hardness (HRB) ≤90	断面收缩率 Reduction of Area (Z%)	冲击试验 Charpy Impact (AK)
3 AR21841	275	605	40	78	/	/
33 S23805	255	600	40	68	/	/
35 S23805	255	600	40	68	/	/
15 S32640	275	590	50	72	/	/
19 S32640	275	590	50	72	/	/
20 S32640	275	590	50	72	/	/

C. 检测及相关数据验证 Inspection and Related Data Verify:

尺寸检查 Dimensional Check	PASSED	压扁试验 Flattening Test	/
表面检查 Surface Quality Inspection	PASSED	射线 Radiography Examination	/
渗透检查 Penetration Examination	/	晶间腐蚀 Corrosion Test	ASTM A262 Practice E
无损检查 PMI	PASSED	硬度测试 Hardness Test	PASSED

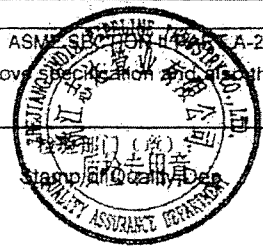
D. 备注 Remarks:

NACE MR-0175 and NACE MR-0103 2010 Material free from mercury and radiation contamination. ASTM A262 Practice E-A-2010
 We hereby certify that the material has been made and tested in accordance with the above specification and the requirement called for on the order

检验工程师: [Signature]
 Work Inspector

日期: 2014-06-13
 Date

[Signature]
 C. DAVENON



产品品质证明书
INSPECTION CERTIFICATE (EN 10204/3.1)

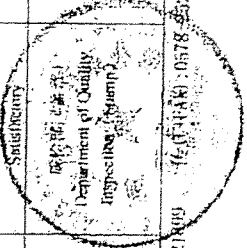
合同编号 (Contract No.): KL110120702-4
客户 (Customer): 浙江三达管业有限公司
证明书编号 (Certificate No.): KL-008140404-03

浙江三达管业有限公司
Zhejiang Kanglong Steel Industry Co., Ltd.

产品名称 Stainless Steel Seamless Pipe	产品标准 Product Specification	ASTM A312	交货状态 Supply Condition	规格/重量 Solution Annealed 重量 (kg) Weight (kg)							
牌号 Steel Grade	批号 Batch No.	尺寸/外径-壁厚 (mm) Size (OD) x (t) (mm)	数量/支 Pieces	重量 (kg) Weight (kg)							
S32401	KL14004207631130094708 KL14004207631130091210	20.75 x 1.01 (68.3) x 0.91 60.3 x 5.54 (88.9) x 5.49		8736.00 (kg) x 8780.00 (kg) 8860.00 (kg) x 9140.00 (kg)							
化学成分 (Chemical Composition %)											
	C	Mn	P	S	Cr	Ni	Mo	N	Nb	Ti	V
炉后分析 (Ladle Analysis)	0.021	0.52	0.019	0.005	18.12	8.06					
纵向拉伸试验 (纵向 Longitudinal) 空载 (ATRT)					化学成分 (Chemical Composition %)						
屈服强度 Yield Strength	屈服强度 R _{eH} (N/mm ²)	延伸率 Elongation A%	断面收缩率 Reduction of Area (RA%)	平均断面收缩率 Average (RA%)	拉伸试验 (Tensile Test)						
275	590	50	7	7	屈服强度 (屈服纵向) Yield Strength (Longitudinal)						
					断面收缩率 (断面收缩率) Reduction of Area (RA%)						
外观、尺寸 Visual, Shape and Dimension	硬度 Hardness (HRB)	晶粒度 Grain Degree	晶间腐蚀 Intergranular Corrosion Test	晶间腐蚀 Satisfactory	晶间腐蚀 Intergranular Corrosion Test						
拉伸/弯曲/冲击 Tensile/Bend/Impact					拉伸试验 (Tensile Test)						
					屈服强度 (屈服纵向) Yield Strength (Longitudinal)						
					断面收缩率 (断面收缩率) Reduction of Area (RA%)						
					晶间腐蚀 Intergranular Corrosion Test						
					晶间腐蚀 Satisfactory						
检验结果 (Test Results)					检验结果 (Test Results)						
					屈服强度 (屈服纵向) Yield Strength (Longitudinal)						
					断面收缩率 (断面收缩率) Reduction of Area (RA%)						
					晶间腐蚀 Intergranular Corrosion Test						
					晶间腐蚀 Satisfactory						
检验结果 (Test Results)					检验结果 (Test Results)						
					屈服强度 (屈服纵向) Yield Strength (Longitudinal)						
					断面收缩率 (断面收缩率) Reduction of Area (RA%)						
					晶间腐蚀 Intergranular Corrosion Test						
					晶间腐蚀 Satisfactory						
检验结果 (Test Results)					检验结果 (Test Results)						
					屈服强度 (屈服纵向) Yield Strength (Longitudinal)						
					断面收缩率 (断面收缩率) Reduction of Area (RA%)						
					晶间腐蚀 Intergranular Corrosion Test						
					晶间腐蚀 Satisfactory						
检验结果 (Test Results)					检验结果 (Test Results)						
					屈服强度 (屈服纵向) Yield Strength (Longitudinal)						
					断面收缩率 (断面收缩率) Reduction of Area (RA%)						
					晶间腐蚀 Intergranular Corrosion Test						
					晶间腐蚀 Satisfactory						
检验结果 (Test Results)					检验结果 (Test Results)						
					屈服强度 (屈服纵向) Yield Strength (Longitudinal)						
					断面收缩率 (断面收缩率) Reduction of Area (RA%)						
					晶间腐蚀 Intergranular Corrosion Test						
					晶间腐蚀 Satisfactory						
检验结果 (Test Results)					检验结果 (Test Results)						
					屈服强度 (屈服纵向) Yield Strength (Longitudinal)						
					断面收缩率 (断面收缩率) Reduction of Area (RA%)						
					晶间腐蚀 Intergranular Corrosion Test						
					晶间腐蚀 Satisfactory						
检验结果 (Test Results)					检验结果 (Test Results)						
					屈服强度 (屈服纵向) Yield Strength (Longitudinal)						
					断面收缩率 (断面收缩率) Reduction of Area (RA%)						
					晶间腐蚀 Intergranular Corrosion Test						
					晶间腐蚀 Satisfactory						
检验结果 (Test Results)					检验结果 (Test Results)						
					屈服强度 (屈服纵向) Yield Strength (Longitudinal)						
					断面收缩率 (断面收缩率) Reduction of Area (RA%)						
					晶间腐蚀 Intergranular Corrosion Test						
					晶间腐蚀 Satisfactory						
检验结果 (Test Results)					检验结果 (Test Results)						
					屈服强度 (屈服纵向) Yield Strength (Longitudinal)						
					断面收缩率 (断面收缩率) Reduction of Area (RA%)						
					晶间腐蚀 Intergranular Corrosion Test						
					晶间腐蚀 Satisfactory						
检验结果 (Test Results)					检验结果 (Test Results)						
					屈服强度 (屈服纵向) Yield Strength (Longitudinal)						
					断面收缩率 (断面收缩率) Reduction of Area (RA%)						
					晶间腐蚀 Intergranular Corrosion Test						
					晶间腐蚀 Satisfactory						
检验结果 (Test Results)					检验结果 (Test Results)						
					屈服强度 (屈服纵向) Yield Strength (Longitudinal)						
					断面收缩率 (断面收缩率) Reduction of Area (RA%)						
					晶间腐蚀 Intergranular Corrosion Test						
					晶间腐蚀 Satisfactory						

SDMS n° 62326

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电话 (TEL): 0578-2521888 3521898 3521899 4521887 2521897

地址: 浙江湖州安吉工业园区 311311 安吉县三达管业有限公司
Add: No.356, Long Avenue, Shuang Industrial Zone, Lishui City, China

我们特此说明: 上述钢管符合 LRQA 标准。LRQA 标准已在生产过程中得到应用。我们特此声明: 上述钢管符合 LRQA 标准。LRQA 标准已在生产过程中得到应用。我们特此声明: 上述钢管符合 LRQA 标准。LRQA 标准已在生产过程中得到应用。

cde 94593/32157

SDMS n° 62327



MILL TEST CERTIFICATE

Topper(Shanghai) Piping Materials Co., Ltd (EN10204 3.1)

检验证书: EN10204:2004	证书号: MTC-TOPPER-SW12045-01	I
Certificate: EN10204:2004	Certificate No.: MTC-TOPPER-SW12045-01	I
客户/Customer: Santrade Ltd	订单号/Order No.: 25186	标识/Marking: 0 管件型式
品名/Article: 管件/Fittings	技术条件/Specification: ASME B16.9	Manufacture's mark: TOPPER
材料/Material: ASTM/ASME A/SA403-WP304/304L-S	熔炼方法/Pre-material melting: AOD	Standard: ASTM/ASME A/SA403 ASME B16.9 Sec. II, Part A, Ed. 07 A08
加工工艺/Workmanship: 冷成型/Cold Forming	交货状态/Delivery Conditions: Solution, de-scaled, pickled and passivated	Specifications Dimension Size
		Grade Material: WP304/304L-S
		Heat Number: 08A2321/ 08C1075
		08A2317/08C2239/ HDJ10-436

产品交货范围/Extend of material delivery					
序号 Item No.	品名 Description	规格 Dimension	数量 Quantity	炉号 Heat No.	备注 Remark
1	90°ELBOW LR	2"×SCH40S	1500	08A2321	--
5	45°ELBOW LR	3/4"×SCH40S	15	08C1075	--
6	45°ELBOW LR	1"×SCH40S	10	08A2317	--
7	CON REDUCER	1"×1/2"×SCH40S	80	08A2317	--
9	CON REDUCER	1 1/4"×1/2"×SCH40S	10	08C2239	--
10	CON REDUCER	1 1/4"×1"×SCH40S	30	08C2239	--
18	ECC REDUCER	1"×1/2"×SCH10S	15	HDJ10-436	--

试验结果/Test Results: 标准要求已符合, 见如下表格/The requirements are fulfilled as listed in Annex.

A 化学分析/Chemical analysis:

炉号/Heat No.	C%	Mn%	Si%	S%	P%	Cr%	Ni%
ASTM/ASME A/SA403 WP304/304L-S	≤ 0.030	≤ 2.00	≤ 1.00	≤ 0.030	≤ 0.045	18.0-20.0	8.0-11.0
08A2321	0.019	0.97	0.55	0.005	0.041	18.19	8.13
08C1075	0.028	1.34	0.59	0.001	0.037	18.26	8.21
08A2317	0.022	0.99	0.46	0.002	0.034	18.30	8.03
08A2317	0.022	0.99	0.46	0.002	0.034	18.30	8.03
08C2239	0.023	0.92	0.45	0.001	0.033	18.09	8.22
08C2239	0.023	0.92	0.45	0.001	0.033	18.09	8.22
HDJ10-436	0.021	0.90	0.37	0.002	0.032	18.40	8.13

B 机械性能/Mechanical Properties test:

试样号 Specimen	试验温度 Test Temp	屈服强度 Yield Strength	拉伸强度 Tensile Strength	延伸率 Elongation	硬度 Hardness	冲击试验 Charpy Impact
Nr./No.		Mpa	Mpa	%	HRB	
ASTM/ASME A/SA403 WP304/304L-S	25°C	≥ 205	≥ 515	≥ 2.8	≤ 90	--
1	08A2321	270	575	57	69	--
5	08C1075	225	535	54	62	--
6	08A2317	245	565	54	64	--
7	08A2317	245	565	54	67	--
9	08C2239	280	570	57	60	--
10	08C2239	280	570	57	63	--
18	HDJ10-436	275	605	64	61	--

C 无损损伤, 尺寸检查及水压试验/Hydrostatic Test, NDT and Dimension check:

试验/Testing	结果/Result	试验/Testing	结果/Results
尺寸检查/Dimension check	OK	水压试验/Hydrostatic pressure test	N/A
表面检查/Surface quality inspection	OK	PMI Test	PASSED
晶腐/IGC to ASTM A262 "E"	PASSED	X 射线/X-ray test	N/A

D 备注/Remarks: MANUFACTURER IS CERTIFIED ISO 9001:2008 ; MATERIAL IS EN10204-3.1 COMPLIANT; MATERIAL IS NACE MR0175 COMPLIANT; MATERIAL IS PED 97/23/EC CERTIFIED

1. 热处理 / Solution (at 1080°C not less than 15.min) and quenched

2. We hereby certify that the product described herein has been manufactured in accordance with the specifications concerned and also with the purchaser's requirements and that the test results shown herein are correct.

地址: 上海
Address: SHANGHAI CHINA
地址: 上海市金山区亭卫公路 3318 号
Factory Add: 3318 Tingwei Ave, Jinshan District, Shanghai, China
制单: 王润润
Inspector: 王润润

QUALITY ASSURANCE APPROVAL
BADGE OF QUALITY TEST
21. Aug. 2012
Approval: 刘少东
SANTRADE LTD LUERNEL

日期 2012-7-4
Date: July 4, 2012
S. C. DRUMMETON
Inspector

SDMS n° 62327



ZHEJIANG TSINGSHAN STEEL PIPE CO., LTD.

XIAOZHI INDUSTRIAL ZONE, QINGTIAN COUNTY, ZHEJIANG PROVINCE CHINA PC:323903

MILL TEST CERTIFICATES to EN 10204/3.1 PED 97/23 CE

Customer : Shanghai Want Industry Co., Ltd.
 Contract No. : T01H0211F005
 Specification : ASTM A312
 Steel Grade : TP304L
 Goods : SEAMLESS STAINLESS STEEL PIPES
 Cert No. : ST090319-002
 Delivery Condition : A & P
 Appearance : Solution Treated

Heat No.	Chemical Composition (%)								
	C	Si	Mn	P	S	Cr	Ni	Mo	Ti
Spec.	min.					18.00	8.00		
	max.	0.035	1.00	2.00	0.045	0.030	20.00	13.00	
08A2321	0.019	0.55	0.97	0.041	0.005	18.19	8.13		

Batch No.	Size	Quantity	
		PCS	KG
3P0903D2-110	90.3*3.91	70	2326.8

Test No.	Mechanical Properties							
	Yield Strength Mpa	Tensile Strength Mpa	Elongation A(%)	Hardness Test HRB	Flaring Test	Flattening Test	Flange Test	Hydrostatic Test Acc to ASTM A530/530M
Spec.	min.	170	485	35				
	max.							
08A2321	270/285	575/585	57/58		/	GOOD	/	GOOD

Nondestructive Examination		Inter-granular Corrosion	
Eddy Current Test Acc to ASTM E426	Ultrasonic Test Acc to ASTM E213	Acc to ASTM A262 E PRACTICE	
GOOD	/	/	

Additional Remarks:
 1.Dimension & Surface: OK
 2.Country of Origin: China
 3.Hardness acc to Method G170: 81.00
 4.100% PMI
 We hereby certify that the material described above has been tested and complies with the terms of the Contract & the specification, and we confirm that P.M.I has been done.

21/04/2011

Date

Quality Technology Director

cde 94593/32157

F106133016



ISO 9001:2000 AD 2000-Merkblatt W0 PED 87/23/EC CE Certificate TS Manufacture License of Special Equipment China National Petroleum Corporation Supplier

Suzhou Yuli Pipeline Industry Co Lt

Mill Test Certificates

NO 800 Chang an Road Youyi Industrial Zone Wujiang China

MILL TEST CERTIFICATE TO EN 10204 3.1 ISSUED BY BENEFICIARY

SDMS n° 6232R

Certificate: EN10204/3.1 Certificate-NO: MC-TYF-6-20130527003 Page 3 of 15

L/C No.: DTNLFM624744

Customer:	NOXON STAINLESS BV	Marking: ● Manufacture's Mark ● Dimension & Schedule ● Material S(Seamless)orW(Welded) ● Heat Number & Standard
Order No.:	13030405	
Description:	Stainless steel fittings	
Specification:	ANSI B16.9	
Material:	ASTM A403M-07/ASME SA403M-2011a SEC II PART A WPS-304/304L	
Workmanship:	Cold forming	
Heat Treatment:	Solution annealing 1070°C ± 10°C and quenched	

Extend of material delivery:

Item No.	Description	Dimension	Quantity	Heat No.	Base Cert.No.	Remarks
1	ELB 90LR	1 1/2" * 10S	150	12A10405	121230JN003	
2	ELB 90LR	2" * 10S	250	12A10405	121230JN004	
3	ELB 90LR	2" * 40S	150	12A10405	121230JN004	
4	ELB 90LR	3" * 10S	250	1208C182	121230JN005	
5	ELB 90LR	4" * 10S	250	1208C182	121230JN006	

Inspection Results (The requirements are fulfilled as listed in Annex):

A. Chemical Analysis:

Heat No.	C%	Mn%	Si%	S%	P%	Cr%	Ni%	Mo%	Cu%	Ti%
1	12A10405	0.025	1.41	0.32	0.002	0.039	18.30	8.07		
2	12A10405	0.025	1.41	0.32	0.002	0.039	18.30	8.07		
3	12A10405	0.025	1.41	0.32	0.002	0.039	18.30	8.07		
4	1208C182	0.016	1.61	0.37	0.002	0.035	18.47	8.18		
5	1208C182	0.016	1.61	0.37	0.002	0.035	18.47	8.18		

B. Mechanical Properties & Tensile Inspection :

Heat No.	Yield Strength		Tensile Strength	Elongation	Hardness HRB ≤ 90	Charpy Impact			
	0.2%	1%							
1	12A10405	235	580	50	OK				
2	12A10405	235	580	50	OK				
3	12A10405	235	580	50	OK				
4	1208C182	255	565	55	OK				
5	1208C182	255	565	55	OK				

C. Inspection and Related Data Verify:

Dimensional check	OK	Hydrostatic pressure test	/
Surface quality inspection	OK	Radiography Examination	/
Penetration examination	OK	IC to ASTM A262 "E"	OK
PMI	OK	HT to NACE MR-0175	OK

D. Remarks:

Delivery Condition: Solution annealing and quenched
 We, Suzhou Yuli Pipeline declare on our own responsibility that the fittings mentioned in this certificate. Tested and inspected in accordance with all the requirement of the ordered standards and confirm that all test results are acceptable.

Wujiang
China

Date: 2013-05-27

Work inspector:
卓作武



15101145
S. DREYFUS
C. DREYFUS
Inspection

MILL TEST CERTIFICATE (EN 10204:3.1)

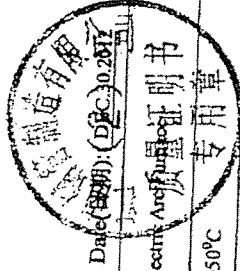
质量证明书 (EN 10204:3.1)

WENZHOU JIANGNAN STEEL PIPE MANUFACTURING CO., LTD.

温州市江南钢管制造有限公司

Messrs. (客户名称): SUZHOU YULI PIPELINE INDUSTRY CO., LTD

No. (编号): 1212301N003



Description (产品名称) Stainless steel seamless pipe 不锈钢无缝钢管		Condition (交货状态) Annealed Quenching & pickled (固溶, 淬火, 酸洗)		Steel making process Heat Treating		Electric Arc 1050°C		Date (日期) (Date) 2017		Manufacturing No. 生产编号		Lot No. 炉批号	
Contract No. (订单号码)		Specification (技术条件) ASTM/ASME A/S312-08		Chemical Composition (%) (化学成分)									
No.	Heat No. (炉号)	Grade (钢种)	Elements	C	Si	Mn	P	S	Ni	Cr	Ti		
1	12A10405	TP304L	Specification	≤0.035	≤1.00	≤2.00	≤0.045	≤0.030	8.00-13.0	18.0-20.0			
			Results (batch)	0.025	0.32	1.41	0.039	0.002	8.07	18.30			
			Result (Product)	0.023	0.33	1.38	0.037	0.001	8.06	18.32			
2	12A10405	TP304L	Result (Product)	0.023	0.33	1.38	0.037	0.001	8.06	18.32			
Item No.	Size (产品尺寸) (NPS-SCH)	Pcs (支)	Qty (kgs)	T.S. (N/mm ²) ≥485	Y.S. (N/mm ²) ≥170	EL. (%) ≥35	Intergranular Corrosion test 晶间腐蚀(A262/E)	Flattening Test 压扁(A370)	P.M.I TEST	Hardness HRB 硬度 (≤90)	Hydrostatic Test 水压	Eddy current Test 涡探(E426)	Ultrasonic Test 超探(E213)
1	48.3*3.0mm	50	1016	580	235	50	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	/	/	ACCEPTABLE	/
2	48.3*3.8mm	45	1137	580	235	50	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	/	/	ACCEPTABLE	/

Remarks: (备注)

AS PER ASTM/ASME A/S312-06, A999/A999M-04A, HARDNESS TO NACE MR01-75, IC ACC ASTM A262/E ET ACC TO E426
FLATTENING TEST ACC ASTM A370 100%P.M.I

1. WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN BEEN MADE IN ACCORDANCE WITH THE RESULTS THE CONTRACT AND CONFORM TO THE SPECIFICATION ABOVE.
2. THE CERTIFICATE SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL OF THE COMPANY.

温州市江南钢管制造有限公司
WENZHOU JIANGNAN STEEL PIPE MANUFACTURING CO., LTD.

DIRECTOR, TECHNOLOGY (技术副经理)
ADDRESS: WEST YONGNING ROAD YONGZHONG WENZHOU CHINA
PHONE: 86-577-86378428/86861557
FAX: 86-577-86378418

SDMS n° 62322

2/2

Cde 94593/32157

F5U6132816

ZHEJIANG JNDIA PIPELINE INDUSTRY CO., LTD.

SDMS n° 62329

Tel: +86-577-85826161 Fax: +86-577-85826565 Email: Sales@jndia.com.cn
NO 2 ZIJING ROAD, SHECHENG TOWN, LONGWAN DISTRICT, WENZHOU CHINA



Mill Test Certificate



PED/97/23/EC Cert. No.: MMS-STF-1
ISO 9001:2008
50095-2009-AQ-RGC-RvA/Rev.1

证书 Certificate: EN10204 3.1

证书号 Certificate No.: JNDIA2014-GW034-8

页次 Page 8 of 37

客户 Customer: Stock Services A division of S.E.A.T.S.Ltd.
订单号 PO No.: 545
产品描述 Description: BUTT WELDED FITTINGS
材质 Material: ASTM/ASME A/SA 403/403M-10 WP304/304L
热处理 Heat Treatment: Solution annealed & water quenched(1050°C)
Steel Making Process: AOD

标识 Marking
• 制造商标识 Manufacture's Mark
• 尺寸、壁厚 Dimension Schedule
• 材质 (S无缝 W有缝) Material S(Seamless)&W(Welded)
• 炉号/标准 Heat Number&Standard

产品交货情况 Extend of Material Delivery:

序号 NO.	品名 Description	规格 Dimension	材质 Material	数量 Quantity (pcs)	炉号 Heat No.	备注 Remarks
88	EQUAL TEE	3/4" SCH40S	WP304/304L-S	25	S32640	ANSI B16.9-2012
104	RED TEE	3"*1.1/2" SCH80S	WP304/304L-S	5	S32640	ANSI B16.9-2012
106	RED TEE	4"*2" SCH40S	WP304/304L-S	15	S32640	ANSI B16.9-2012
130	CON RED	1.1/2"*1" SCH40S	WP304/304L-S	15	S32640	ANSI B16.9-2012
135	CON RED	3"*2" SCH40S	WP304/304L-S	60	S32640	ANSI B16.9-2012
137	CON RED	3"*2.1/2" SCH40S	WP304/304L-S	30	S32640	ANSI B16.9-2012

检测结果 (标准要求已符合, 见如下表格) Inspection Results(The Requirements are fulfilled as listed in Annex)

A. 化学分析 Chemical Analysis:[%]

炉号 Heat No.	C	Si	Mn	P	S	Cr	Ni	Nb	N	Mo
88	≤0.03	≤1.00	≤2.00	≤0.045	≤0.030	18.0-20.0	8.0-12.0			
104	0.021	0.52	1.23	0.019	0.005	18.12	8.06			
106	0.021	0.52	1.23	0.019	0.005	18.12	8.06			
130	0.021	0.52	1.23	0.019	0.005	18.12	8.06			
135	0.021	0.52	1.23	0.019	0.005	18.12	8.06			
137	0.021	0.52	1.23	0.019	0.005	18.12	8.06			

B. 机械性能 Mechanical Properties&Tensile Inspection:

炉号 Heat No.	屈服强度 Yield Strength(MPa) ≥205 σ 0.2	拉伸强度 Tensile Strength(MPa) ≥515	延伸率 Elongation A50(%) ≥28%	硬度 Hardness (HRB) ≤90	断面收缩率 Reduction of Area(Z%)	冲击试验 Charpy Impact(AK)
88	275	590	50	72	/	/
104	275	590	50	72	/	/
106	275	590	50	72	/	/
130	275	590	50	72	/	/
135	275	590	50	72	/	/
137	275	590	50	72	/	/

C. 检测及相关数据验证 Inspection and Related Data Verify:

尺寸检查 Dimensional Check	PASSED	压扁试验 Flattening Test	/
表面检查 Surface Quality Inspection	PASSED	射线 Radiography Examination	/
渗透探伤 Penetration Examination	/	晶间腐蚀 Corrosion Test	/
光谱分析 PMI	PASSED	硬度测试 Hardness Test	PASSED

D. 备注 Remarks:

NACE MR-0175 and NACE MR-0103 2010 Material free from mercury and radiation contamination

We hereby certify that the material has been made and tested in accordance with the above specification and also the requirement called for on the order

检验工程师: 华伍军
Work Inspector

日期: 2014-06-11
Date

日期: 2014-06-11

Date

C. DEPARTMENT



产品质量证明书

INSPECTION CERTIFICATE (EN 10204/3.1)

合同编号 (Contract No.): KL 110140908-1

客户 (Customer): 浙江志达管业有限公司

证明编号 (Certificate No.): KL-034140905-W3

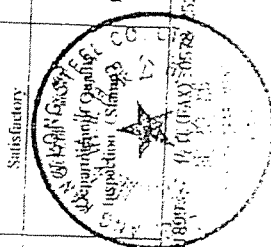
浙江康龙钢业有限公司
Zhejiang Kanglong Steel Industry Co.Ltd

产品名称		产品标准		交货状态		溶液处理	
Stainless Steel Seamless Pipe		ASTM A312		Solution Annealed		退火 (1030° C)	
牌号	批号	尺寸 (外径×壁厚, K.R.)	重量 (支)	重量 (kg)			
Steel Grade	Batch No.	Size (O.D.×T) (mm)	Pieces	Weight (kg)			
S32660	KL14031210K14031211K14031212	88.9*5.49*12.2*1.85/60.3*8.74		8478.00K, 127690.00K, 8830.00K, 8			
		KL14031213K14031214		8765.00K, 88930.00K, 8			
化学成分 Chemical Composition (%)							
C	Si	Mn	P	S	Cr	Ni	Mo
0.021	0.52	1.23	0.019	0.003	18.12	8.06	
力学性能 Tensile Test (纵向 Longitudinal) 室温 (A.R.T)							
屈服强度 Yield Strength		抗拉强度 R _m (N/mm ²)		延伸率 Elongation A%		冲击功 (J)	
R _{eH} (N/mm ²)		R _m (N/mm ²)		50		50	
275		590		80		50	
外形、尺寸		硬度 Hardness (HRB)		晶粒度 Grain Degree		晶间腐蚀 Intergranular Corrosion Test	
Outer, Shape and Dimension		72		/		ASTM A262-2002 Satisfactory	
110140908-1		72		/		ASTM A262-2002 Satisfactory	
无损检测 Non-destructive Test (纵向 Longitudinal)							
射线探伤 Radiography		超声波探伤 Ultrasonic Testing		磁粉探伤 Magnetic Particle Testing		渗透探伤 Penetrant Testing	
RT		UT		MT		PT	
合格		合格		合格		合格	
其他试验 Other Test							
扩口试验 Flange Expansion		卷边试验 Edge Test		水压试验 Hydrostatic Test		金相试验 Metallography	
合格		合格		合格		合格	

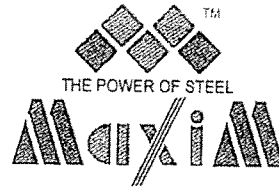
我们特此证明：上述钢管符合 LRQA 按照 PEI/EN 10204 认证的制造过程生产的产品，并经无损检测合格。The results of inspections and tests satisfy the requirements of customer Steel Making process: cold formed

地址: 浙江丽水市莲都区绿谷大道 3556 号
Add: No.3556, Lvgu Avenue, Shuang Industrial Zone, Lishui City, China

电话: (TEL): 0578-2521888 2521898 2521898
电话: (TEL): 0578-2521888 2521898 2521898



NO. 62329



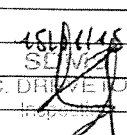
cde 94593/32157

SDMS n° 62330

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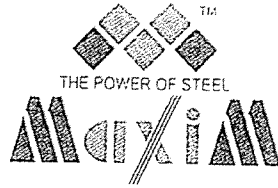
TUBES COMPANY PVT. LTD.

A NORSOK APPROVED & DNV APPROVAL OF MANUFACTURER, AN ISO 9001:2008, ISO 14001:2004,
BS OHSAS 18001:2007, PED & ADW / AD - 2000 - W0 Certified Company
MFG. & EXPORTER OF STAINLESS STEEL SEAMLESS & WELDED PIPES | TUBES | U-TUBES
GOVT. RECOGNISED EXPORT HOUSE

INSPECTION CERTIFICATE										F/QAC/12_REV.01			
CERTIFICATE AS PER EN 10204 - 3.1										T.C.NO :-MTCPL/2014-15/0218A9			
CUSTOMER NAME :- M/s STAPPERT France S.A.S.										DATE :- 27.09.2014			
P.O. NO. :- 227702			DATE :- 30.05.2014			L.C.NO :- 23001-00333672LYE			DATE:- 10.10.2014				
O.A.NO. :- 2014/06/7046/EXP						DATE :- 01.06.2014							
PRODUCT :- AUSTENITIC S. S. SEAMLESS PIPES (COLD DRAWN, SOLUTION ANNEALED & PICKLED)													
MAT.SPEC. :- ASTM A 312-13b, TP 304L, (AISI 304L)													
SR. NO.	HEAT NO.	DIMENSIONS								NO. OF PCS	TOTAL METER		
17	11A247	33.40 MM OD X 4.55 MM THK X 5.5 TO 6.3 METER RL								48	282.810		
CHEMICAL TEST													
SR. NO.	HEAT NO.	S	C	Si	Mn	P	S	Ni	Cr	Mo	N	Ti	
			0.035	1.000	2.000	0.045	0.030	8.000	18.000	--	--	--	
			MAX	MAX	MAX	MAX	MAX	13.000	20.000	--	--	--	
17	11A247	H	0.025	0.660	1.260	0.024	0.007	8.510	18.300	--	--	--	
		P1	0.025	0.687	1.274	0.025	0.008	8.586	18.375	--	--	--	
		P2	0.026	0.674	1.265	0.026	0.006	8.552	18.375	--	--	--	
MECHANICAL TESTS													
SR. NO.	TENSILE STRENGTH Rm MPa	YIELD STRENGTH Rp 0.2% MPa	YIELD STRENGTH Rp 1.0% MPa	ELON. A% G.L=50 MM, G.W= FULL SPECIMEN	HARDNESS TEST MAX	FLARING TEST	FLANGE TEST	RING EXPANSION TEST	FLATTENING TEST	REVERSE FLATTENING TEST	REVERSE BEND TEST	OTHER TEST	
REQ.	485 MIN	170 MIN	--	35 % (MIN)	--	--	--	--	--	--	--	--	
17	598.00	324.00	N.A	56	N.A	N.A	N.A	N.A	OK	N.A	N.A	N.A	
REMARKS:-													
MARKING ON PRODUCT :- MAXIM S.S. SEAMLESS PIPE, SPECN, GRADE, SIZE, HEAT NO. (O.A.No/Sr. No.)													
HEAT TREATMENT :- SOLUTION ANNEALED AT TEMP. ABOVE 1040° C AND QUENCHED IN WATER.													
HYDRO TEST PRESSURE :- 2500 psi(g). (WATER USED HAVING CHLORIDE CONTENT LESS THAN 10 ppm & HOLDING TIME 10 SEC. MIN)													
EDDY CURRENT TEST :- N.A													
[1] MECHANICAL TEST CARRIED OUT BY MTCPL - FOUND SATISFACTORY.													
[2] PRODUCT ANALYSIS CARRIED OUT BY MTCPL - FOUND SATISFACTORY.													
[3] 100% HYDRO TEST CARRIED OUT BY MTCPL - FOUND SATISFACTORY.													
[4] 100 % PMI TEST CARRIED OUT BY MTCPL - FOUND SATISFACTORY.													
[5] 100% DIMENSION AND VISUAL CHECKED BY MTCPL - FOUND SATISFACTORY.													
NOTE:- S= SPECIFICATION, P= PRODUCT ANALYSIS, H= HEAT ANALYSIS, G.L.= GAUGE LENGTH, G.W= GAUGE WIDTH, N.A = NOT APPLICABLE.													
INSPECTOR'S/SURVEYOR'S SIGN					P.O. ITEM :- COMPLETE					 C. D. DAVE MANAGER (Q.A.)			
WE HEREBY CERTIFY THAT THE MATERIAL IS AS PER SIZE & SPECIFICATION MENTIONED IN ORDER, ALL TEST RESULT ARE ACCEPTABLE.													

Office & Works

Unit-II, Survey No. 105, Nr. 66 KV Sub-Station, Chhatral-Pansar Road,
Ahmedabad-Mehsana Highway, Chhatral-382729, Ta. Kalol, Dist. Gandhinagar, Gujarat, INDIA.
T : +91 2764 233577, F : +91 2764 234477, E : export@maximtubes.com
www.maximtubes.com




SDMS n° 62330

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TUBES COMPANY PVT. LTD.

A NORSOK APPROVED & DNV APPROVAL OF MANUFACTURER, AN ISO 9001:2008, ISO 14001:2004,
BS OHSAS 18001:2007, PED & ADW / AD - 2000 - W0 Certified Company
MFG. & EXPORTER OF STAINLESS STEEL SEAMLESS & WELDED PIPES | TUBES | U-TUBES
GOVT. RECOGNISED EXPORT HOUSE

INSPECTION CERTIFICATE										F/QAC/12_REV.01								
<u>CERTIFICATE AS PER EN 10204 - 3.1</u>										T.C.NO :- MTCPL/2014-15/0288A11								
CUSTOMER NAME :- M/s STAPPERT France S.A.S.										DATE :- 31.10.2014								
P.O. NO. :- 227702					DATE :- 30.05.2014					L.C.NO :- 23001-00333672LYE					DATE :- 10.10.2014			
O.A.NO. :- 2014/06/7046/EXP										DATE :- 01.06.2014								
PRODUCT :- AUSTENITIC S. S. SEAMLESS PIPES (COLD DRAWN, SOLUTION ANNEALED & PICKLED)																		
MAT.SPEC. :- ASTM A 312-13b, TP 304L, (AISI 304L)																		
SR. NO.	HEAT NO.	DIMENSIONS										NO. OF PCS	TOTAL METER					
16	11A247	33.40 MM OD X 3.38 MM THK X 5.5 TO 6.3 METER RL										17	99.850					
CHEMICAL TEST																		
SR. NO.	HEAT NO.	S	C	Si	Mn	P	S	Ni	Cr	Mo	N	Ti						
16	11A247	S	0.035	1.000	2.000	0.045	0.030	8.000	18.000	--	--	--						
			MAX	MAX	MAX	MAX	MAX	13.000	20.000	--	--	--						
		H	0.025	0.660	1.260	0.024	0.007	8.510	18.300	--	--	--						
			P1	0.025	0.645	1.256	0.025	0.008	8.525	18.356	--	--	--					
	P2	0.024	0.647	1.263	0.024	0.007	8.547	18.356	--	--	--							
MECHANICAL TESTS																		
SR. NO.	TENSILE STRENGTH Rm MPa	YIELD STRENGTH Rp 0.2% MPa	YIELD STRENGTH Rp 1.0% MPa	ELON. A% G.L=50 MM, G.W= FULL SPECIMEN	HARDNESS TEST MAX	FLARING TEST	FLANGE TEST	RING EXPANSION TEST	FLATTENING TEST	REVERSE FLATTENING TEST	REVERSE BEND TEST	OTHER TEST						
REQ.	485 MIN	170 MIN	--	35% (MIN)	--	--	--	--	--	--	--	--						
16	612.00	320.00	N.A	59	N.A	N.A	N.A	N.A	OK	N.A	N.A	N.A						
REMARKS:-																		
MARKING ON PRODUCT :- MAXIM S.S. SEAMLESS PIPE, SPECN. GRADE, SIZE, HEAT NO. (O.A.No/Sr. No.)																		
HEAT TREATMENT :- SOLUTION ANNEALED AT TEMP. ABOVE 1040° C AND QUENCHED IN WATER.																		
HYDRO TEST PRESSURE :- 2500 psi(g), (WATER USED HAVING CHLORIDE CONTENT LESS THAN 10 ppm & HOLDING TIME 10 SEC. MIN)																		
EDDY CURRENT TEST :- N.A																		
[1] MECHANICAL TEST CARRIED OUT BY MTCPL - FOUND SATISFACTORY.																		
[2] PRODUCT ANALYSIS CARRIED OUT BY MTCPL - FOUND SATISFACTORY.																		
[3] 100% HYDRO TEST CARRIED OUT BY MTCPL - FOUND SATISFACTORY.																		
[4] 100% PMI TEST CARRIED OUT BY MTCPL - FOUND SATISFACTORY.																		
[5] 100% DIMENSION AND VISUAL CHECKED BY MTCPL - FOUND SATISFACTORY.																		
NOTE:- S= SPECIFICATION, P= PRODUCT ANALYSIS, H= HEAT ANALYSIS, G.L.= GAUGE LENGTH, G.W= GAUGE WIDTH, N.A = NOT APPLICABLE.																		
INSPECTOR'S/SURVEYOR'S SIGN					P.O. ITEM :- COMPLETE					 MANAGER (Q.A.)								
WE HEREBY CERTIFY THAT THE MATERIAL IS AS PER SIZE & SPECIFICATION MENTIONED IN ORDER, ALL TEST RESULT ARE ACCEPTABLE.																		

Office & Works

Unit-II, Survey No. 105, Nr. 66 KV Sub-Station, Chhatral-Pansar Road,
Ahmedabad-Mehsana Highway, Chhatral-382729, Ta. Kalol, Dist. Gandhinagar, Gujarat, INDIA.
T : +91 2764 233577, F : +91 2764 234477, E : export@maximtubes.com
www.maximtubes.com



SDMS n° 62331

MA

TUBES COMPANY PVT. LTD.

A NORSOK APPROVED & DNV APPROVAL OF MANUFACTURER, AN ISO 9001:2008, ISO 14001:2004,
BS OHSAS 18001:2007, PED & ADW / AD - 2000 - W0 Certified Company
MFG. & EXPORTER OF STAINLESS STEEL SEAMLESS & WELDED PIPES | TUBES | U-TUBES
GOVT. RECOGNISED EXPORT HOUSE

INSPECTION CERTIFICATE		F/QAC/12_REV.01
CERTIFICATE AS PER EN 10204 - 3.1		T.C.NO :- MTCPL/2014-15/0177A13
CUSTOMER NAME :- M/s STAPPERT France S.A.S.		DATE :- 29.08.2014

P.O. NO. :- 227359	DATE :- 03.04.2014
O.A.NO. :- 2014/05/7019/EXP	DATE :- 01.05.2014
PRODUCT :- AUSTENITIC S. S. SEAMLESS PIPES (COLD DRAWN, SOLUTION ANNEALED & PICKLED)	
MAT.SPEC. :- ASTM A 312-13b, TP 304L, (AISI 304L)	

SR. NO.	HEAT NO.	DIMENSIONS	NO. OF PCS	TOTAL METER
15	11A169	1" NB X SCH 10s [33.40 MM OD X 2.77 MM THK] X 5.5 TO 6.3 METER RL	44	254.160

SR. NO.	HEAT NO.	S	CHEMICAL TEST									
			C	Si	Mn	P	S	Ni	Cr	Mo	N	Ti
15	11A169	H	0.035	1.000	2.000	0.045	0.030	8.000	18.000	--	--	--
			MAX	MAX	MAX	MAX	MAX	13.000	20.000	--	--	--
		P1	0.023	0.510	1.190	0.032	0.008	8.250	18.260	--	--	--
		P2	0.023	0.525	1.174	0.030	0.007	8.256	18.263	--	--	--
			0.024	0.563	1.178	0.031	0.008	8.256	18.247	--	--	--

SR. NO.	TENSILE STRENGTH Rm MPa	YIELD STRENGTH Rp 0.2% MPa	YIELD STRENGTH Rp 1.0% MPa	ELON. A% G.L=5.65√A, G.W= FULL SPECIMEN	HARDNESS TEST MAX	FLARING TEST	FLANGE TEST	RING EXPANSION TEST	FLATTENING TEST	REVERSE FLATTENING TEST	REVERSE BEND TEST	OTHER TEST
15	485 MIN	170 MIN	--	35 % (MIN)	--	--	--	--	--	--	--	--
	598.00	302.00	N.A	60	N.A	N.A	N.A	N.A	OK	N.A	N.A	N.A

REMARKS:-

- MARKING ON PRODUCT :- MAXIM S.S. SEAMLESS PIPE, SPECN, GRADE, SIZE, HEAT NO, (O.A.No/Sr. No.)
- HEAT TREATMENT :- SOLUTION ANNEALED AT TEMP. ABOVE 1040° C AND QUENCHED IN WATER.
- HYDRO TEST PRESSURE :- 2500 psi(g), (WATER USED HAVING CHLORIDE CONTENT LESS THAN 10 ppm & HOLDING TIME 10 SEC. MIN)
- EDDY CURRENT TEST :- N.A
- [1] MECHANICAL TEST CARRIED OUT BY MTCPL - FOUND SATISFACTORY.
- [2] PRODUCT ANALYSIS CARRIED OUT BY MTCPL - FOUND SATISFACTORY.
- [3] 100% HYDRO TEST CARRIED OUT BY MTCPL - FOUND SATISFACTORY.
- [4] 100 % PMI TEST CARRIED OUT BY MTCPL - FOUND SATISFACTORY.
- [5] 100% DIMENSION AND VISUAL CHECKED BY MTCPL - FOUND SATISFACTORY.

Handwritten signature and stamp: C. DE VITON

INSPECTOR'S/SURVEYOR'S SIGN	P.O. ITEM :- COMPLETE	MANAGER (Q.A.)
-----------------------------	-----------------------	----------------

WE HEREBY CERTIFY THAT THE MATERIAL IS AS PER SIZE & SPECIFICATION MENTIONED IN ORDER, ALL TEST RESULT ARE ACCEPTABLE.

SDMS n° 62352

112

Cde 94593/32151

Walzwerke Einsal GmbH



VAT Reg. No. DE123841325

Walzwerke Einsal GmbH - Post Box 20 - 59769 Nechenal-Walzenwerk
 STAPPERT Deutschland GmbH
 Postfach 11 11 31
 40511 Düsseldorf
 Deutschland

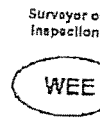
Inspection Certificate:
 DIN EN 10204/3.1

Page 1

No. WZ1214-00725 of 16.12.14

Your Order No.: 10-181248/R

Shipment No.: VL14-08155 Referenz-Nr.



our works No.	Item ID	Size	Weight
AB14-12015		14301 Square x 60,00 mm	1.367 KG

Material Number	1.4301	Standard Grade of Material	X5CrNi18-10
Heat Number	254326		1.4301 / 1.4307 / AISI 304 / 304 L

Chemical analysis	Method of melting: E										
-------------------	----------------------	--	--	--	--	--	--	--	--	--	--

C %	0,024	SI %	0,40	Mn %	1,84	P %	0,025	S %	0,026	Cr %	18,1	Ni %	0,32	Mo %	0,25
Co %	0,091	N %	0,046	Cu %	0,29										

Product Information

Sleebars, 14301 X5CrNi18-10 hot rolled, DIN EN 10059 tot. see below, quenched, pickled, straightened, with short lengths, see below, with stamping see below, with colour marks see below, in bundles

Addition Information

bar length mm: 4000-6000, short lengths: from 1000 mm to max. 10 %, clamping: WNRUEW/HEAT-NO./WEE, colour marking: one end WHITE, packaging size: ca. 1.000 kg, quality: 1.4301 / 1.4307 / AISI 304 / 304 L

Requirements

test certificate: DIN EN 10204/3.1 rev. 01/2005, language of test certificate: german / english, with CE-sign: BauPVO (305/2011/EU) acc. to DIN EN 10088 part 5 rev. 07/2009, delivery instruction: TL028 rev. 4, tolerance of dimension/shape: DIN EN 10059 rev. 02/2004, request of technical delivery specification: DIN EN 10272 rev. 01/2006, AD 2000 data sheet W 2 rev. 02/2008, AD 2000 data sheet W 10 rev. 11/2007, PED 97/23 EG, DIN EN 10088 part 3 rev. 09/2005, ASTM A 479 / A 479 M rev. 2014, ASME SA 479 / SA 479 M SEC. II PART A rev. 07/2011a, NACE Standard MR 0175 / ISO 15156 part 1 rev. 2001, DIN EN ISO 3051 part 2 procedure A rev. 08/1998, ASTM A 182 / A 182 M rev. 2014, ASME SA-182/SA-182M SEC. II PART A rev. 07/2011a, ASTM A 276 rev. 2013, ASME SA-276 SEC. II PART A rev. 07/2011a, NACE Standard MR 0103 rev.

Sample	PR1114-00845	PR1114-00846			
Mechanical properties					
Rp 0,2% Mpa	264	258			
Rp 1,0% Mpa	305	299			
Rm Mpa	587	560			
A5%	59,9	56,0			
A50%	59,9				
Z%	63,4				
Impact test					
KCV/RTA longitudinal Joule	264 / 207 / 202	272 / 268 / 267			
Hardness					
HRC	3				





The delivery corresponds to the requirements mentioned. The certificate has been established by machine and acc. to EN 10204 it is legal without Signature.
 Telephone 0 23 52 3 32-0 Telefax: 0 23 52 33 21 92

Walzwerke Einsal GmbH
 QA-department
 Feldmann / Seeger
 Surveyor of Inspection

211115
 SDMS
 C. DREYER
 Inspection

SDMS n° 62358

2/2

Walzwerke Einsal GmbH		Inspection Certificate: Page 2	
VAT Reg. No. DE123841325		DIN EN 10204/3.1	
 <p>Walzwerke Einsal GmbH - Post Box 20 - 40769 Neubeck-Umbowende STAPPERT Deutschland GmbH Postfach 11 11 31 40511 Düsseldorf Deutschland</p>		No. WZ1214-00725	of 15.12.14
		Your Order No.: 10-18124BR	
		Shipment No.: VL14-08165	Referenz-Nr.
		Symbol of Manufacturers	Surveyor of Inspection
			
		CE-sign 0945	
			
our works No.	Item	Size	Weight
AB14-12015	10	14301 Square x 90,00 mm	1.367 KG
Material Number	1.4301	Standard Grade of Material	X6CrNi18-10
Heat Number	254326	Method of melting:	1.4301 / 1.4307 / AISI 304 / 304 L
Structure			E
Structure			
Grain size			B
Corrosion resistance			
IC-test (Delivery condition)			ok
IC-test (sensitized)			ok
Surface condition:		acc. to DIN EN 10272 charts 6/1D	
Radioactivity:		At the steel mill the raw material has been tested for radioactivity. Radioactivity no complaint.	
Visual Inspection:		Without objection	
Dimension Inspection:		Without objection	
Test of Identity:		Without objection	
Heat Treatment:		From 1050°C quenched	

The delivery corresponds to the requirements mentioned.
The certificate has been established by machine and acc. to EN 10204 it is legal
without Signature.

Telephone 0 23 52 3 32-0 Telefax: 0 23 52 33 21 92

Walzwerke Einsal GmbH
QA-Department


Feldmann / Seeger

Surveyor of Inspection



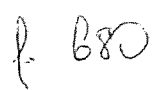
cde 94565/32157

SDMS n° 62366

1/2

 <p>Aperam - Stainless France Aperam Isbergues 62330 Isbergues FRANCE</p>		<p>MILL CERTIFICATE BS EN 10204/3.1 CERTIFICAT DE RECEPTION NF EN 10204/3.1 ABNAHMEPRUEFZEUGNIS DIN EN 10204/3.1</p>				<p>N-Nr-N 1310267417-01 V01</p>																																																							
<p>ISO 9001 V2008 - ISO TS 16949 V2009 - ISO 14001 V 2004</p>		<p>Ausgestellt im Einvernehmen mit dem TÜV SÜD - Auf Gegenzeichnung wird verzichtet Issued in accordance with TÜV SÜD - Verification is not required Établi en accord avec le TÜV SÜD - Dispense de contresignature A.D.2000 Merkblatt W0 - W2 - W10 - PED 97/23 EC - EN 13445-2</p>				<p>N° JACQUET : f. 680.</p>																																																							
<p>Manufacturer's works order number N° de la commande usine productrice Werksauftragsnummer 80168392 /01-84828/1</p>		<p>Surveyor's mark Cachet de l'expert Stempel des Werkssachverständigen UI2</p>		<p>Purchaser and/or consignee Client et/ou destinataire Besteller und/oder Empfänger APERAM SS&S FRANCE CENTRE DE SERVICE BP 53 RUE R.SALENGRO 62330 ISBERGUES FRANCE</p>		<p>Purchaser's order number N° de commande client Kundenbestellnummer 309163724</p>																																																							
<p>Product - Produit - Erzeugnis COLD-ROLLED COIL BOBINE LAMINEE A FROID KALTGEWALZTES BAND</p>		<p>Product delivery condition État de livraison du produit - Lieferzustand Solution treated Hypertemps : 1040-1100 C Lösungsgeglt+abgeschreckt</p>				<p>Customer article number N.article client Artikelnummer des Kunden ART031957</p>																																																							
<p>Steel designation Désignation de l'acier Stahlbezeichnung EN 10028-7 / 08 - 1.4307 - 1.4301 ASTM A 240 / 13 - TYPE 304L - TYPE 304 ASME SA 240 / 13 - TYPE 304L - TYPE 304 EN 10088-2 / 05 - 1.4307 - 1.4301 EN 10088-4 / 09 - 1.4307 - 1.4301</p>		<p>Finish Présentation Ausführung 2B 2B 2B 2B 2B</p>		<p>Steelmaking process Mode d'élaboration de l'acier - Stahlherstellungsverfahren Prod. proces: Electric arc furnace - VOD/AOD - Continuous casting Proc. fabric.: Four à arc - VOD/AOD - Coulée continue Fertigungsablauf: Elektro-Ofen - VOD/AOD - Stranggussanlage</p>		<p>Product delivery condition État de livraison du produit - Lieferzustand Solution treated Hypertemps : 1040-1100 C Lösungsgeglt+abgeschreckt</p>																																																							
<p>CORROSION TEST:ASTM A 262-E :OK</p>		<p>Any supplementary requirements Prescriptions supplémentaires - Zusätzliche Anforderungen</p>				<p>Forced Air Air forcé Gebläse Luft</p>																																																							
<p>Identification of the product Identification du produit - Identifizierung des Erzeugnisses MELTED IN BELGIUM, MADE IN FRANCE</p>		<p>Dimensions Dimensions - Abmessungen Thickness Épaisseur - Staerke 2,000 mm</p>		<p>Width Largeur - Breite 1000,00 mm</p>		<p>Length Longueur - Laenge</p>																																																							
<p>Coll n. N.Bobine - Band Nr. 79192</p>		<p>Heat n. N.Coulée - Schmelz Nr. 337076</p>		<p>Number of pieces Nb de pièces - Stueckzahl 1</p>		<p>Net weight Poids net - netto Gewicht 19440 KGS</p>																																																							
<p>CHEMICAL ANALYSIS - ANALYSE CHIMIQUE - CHEMISCHE ZUSAMMENSETZUNG</p>																																																													
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<p>Positive material identification carried out : OK Tests de vérification de la conformité de la nuance fournie : OK Verwechslungsprüfung wurde durchgeführt : OK</p>																																																													
<p>Location (1) MECHANICAL PROPERTIES - PROPRIETES MECANQUES - MECHANISCHE WERTE</p>																																																													
<p>Room temperature - Température ambiante - Raumtemperatur</p>																																																													
<table border="1"> <thead> <tr> <th rowspan="2">Direction (2)</th> <th rowspan="2">Yield or proof strength Limite d'élasticité Dehngrenze MPa</th> <th rowspan="2">Tensile Strength Résistance à la traction Zugfestigkeit MPa</th> <th colspan="2">Elongation after fracture Allongement après rupt. Bruchdehnung %</th> <th rowspan="2">Hardness Dureté Haerte</th> <th rowspan="2">Yield or proof strength Limite d'élasticité Dehngrenze MPa</th> <th rowspan="2">Tensile str. Résist. MPa Zugfestigkeit</th> <th rowspan="2">Elongation % Allongement. Bruchdehnung</th> </tr> <tr> <th>Rp0.2%</th> <th>Rp1%</th> <th>Rm</th> <th>Rm</th> </tr> </thead> <tbody> <tr> <td rowspan="2">1</td> <td rowspan="2">T</td> <td rowspan="2">326</td> <td rowspan="2">375</td> <td rowspan="2">663</td> <td rowspan="2">48</td> <td rowspan="2">48</td> <td rowspan="2">87</td> <td rowspan="2">88</td> </tr> <tr> <td>230</td> <td>260</td> <td>540</td> <td>700</td> </tr> <tr> <td>2</td> <td>T</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>								Direction (2)	Yield or proof strength Limite d'élasticité Dehngrenze MPa	Tensile Strength Résistance à la traction Zugfestigkeit MPa	Elongation after fracture Allongement après rupt. Bruchdehnung %		Hardness Dureté Haerte	Yield or proof strength Limite d'élasticité Dehngrenze MPa	Tensile str. Résist. MPa Zugfestigkeit	Elongation % Allongement. Bruchdehnung	Rp0.2%	Rp1%	Rm	Rm	1	T	326	375	663	48	48	87	88	230	260	540	700	2	T																										
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<p>Corrosion test Test de corrosion Korrosionstest</p>																																																													
<p>EN ISO 3651-2 :OK</p>																																																													
<p>Internal cleanliness: A: B: C: D: C57</p>																																																													
<p>Location of the sample (1) Emplacement de l'échantillon Lage des Probenabschnitte 1. Front - Début - Anfang 2. Back - Fin - Ende 3. Middle - Milieu - Mitte</p>		<p>The delivery is in accordance with the order La fourniture est conforme aux exigences de la commande Die Lieferung entspricht den Bestellbedingungen</p>			<p>Organisation inspection Organisme et/ou service contrôle Überwachungsabteilung Service Métallurgique</p>																																																								
<p>Direction of the test pieces (2) Orientation des éprouvettes Probenrichtung T. Transverse - Travers - Quer L. Longitudinal - Long - Laengs</p>		<p>Marking, inspection and measurement : without objection Contrôle de marquage, d'aspect et de dimensions : satisfaisants Prüfung der Stempelung, des Oberflächenaspekts und der Abmessungen : ohne Beanstandung</p>			<p>15/10/2013 M. THOMAS The inspector Le responsable Der Werkssachverständige</p>																																																								

SDMS n° 62366

 <p>Correspondance address Adresse de correspondance - Adresse für briefwechsel</p> <p>Aperam - Stainless France Aperam Isbergues 62330 Isbergues</p>	Annex to certificate 1310267417-01 V01 Annexe du CCPU Anlage zum Zeugnis		Certificate CCPU - Zeugnis 1310267417-01 V01	
	Certificatenummer (TÜV) 0036-CPD-42-2011 N° du CCPU (TÜV) Zertifikatnr (TÜV)			
	Year 13 Année Jahr			
Manufacturer's works order number N° de la commande usine productrice Werksauftragsnummer 80168392 /01-84828/1	Purchaser and/or consignee Client et/ou destinataire Besteller und/oder Empfänger APERAM SS&S FRANCE CENTRE DE SERVICE BP 53 RUE R.SALENGRO 62330 ISBERGUES FRANCE		Purchaser's order number N° de commande client Kundenbestellnummer 309163724	
			Customer article number N° d'article client Artikelnummer des Kunden ART031957	
Identification of the product Identifikation du produit - Identifizierung des Erzeugnisses	Dimensions Dimensions - Abmessungen			
Coil n° N° de bobine - Band Nr 79192	Thickness Epaisseur - Dicke 2,000 mm	Width Largeur - Breite 1000,00 mm	Length Longueur - Lacuge	
Stainless steel / Acier inoxydable / Rostfreier Stahl				
EN 10088-4 /09				
Intended uses : building constructions or civil engineering Usages prévus : construction immobilière ou génie civil Vorgesehene Verwendungen : Hochbauten und Ingenieurbauwerke				
Tolerances on dimensions and shape: Tolérances sur les dimensions et sur forme: Grenzabmasse und Formtoleranzen EN ISO 9445				
Steel Acier Werkstoff 1.4307				
COLD-ROLLED COIL BOBINE LAMINEE A FROID KALTGEWALZTES BAND				
COIL - BOBINE - BAND				
Elongation / Allongement / Bruchdehnung Tensile strength / Résistance à la traction / Zugfestigkeit Yield Strength / Limite d'élasticité / Dehngrenze Impact strength / Résistance au choc / Kerbschlagzähigkeit Weldability / Aptitude au soudage / Schweisseignung Durability / Durabilité / Dauerhaftigkeit				
Regulated substance : no performance determined Substance réglementée : aucune performance déterminée Regulierter Stoff : keine Leistung festgestellt				
N° JACQUET : 				

ed 94565/32157

ACRONI

ACRONI d.o.o., Cesta Borisa Kidriča 44, SI-4270 Jesenice

Izdajatelj certifikata
Aussteller der Bescheinigung
Originator of the document

KONTROLA KAKOVOSTI
Telefon: +386 4 584 10 40
Telefax: +386 4 584 10 68
http://www.acroni.si
E-mail: miran.pirnat@acroni.si

Potrdilo o prevzemu 3.1/ Abnahmeprüfzeugnis 3.1/ Inspection certificate 3.1

Stran/Seite/Page 1 / 2
Sl. / Nr. / No.

EN 10 204 3.1
Datum / Datum / Date

310083186-3

12.06.2014

Narocnik / Kunde / Customer

JACQUET
ZA GRAMMONT

SYONS n° 62367

9 RUE GARIBALDI
F-69800 ST PRIEST

Narocilo / Bestellung Nr. / Order No.

46565 disp. 38530

Dobavni list / Lieferschein / Despatch note

310083186 z/vom/from 12.06.2014

FRANCE

Izdelek / Erzeugnis / Product

BLECH

Vrsta peci / Erschmelzungsart / Melting furnace

E+VOD

Znak izvedenca TK

Zeichen des sachverständigen
Inspectors' stamp



Znak proizvajalca

Zeichen des Herstellerwerks
Mark of the Manufacturer



Specifikacije / Vorschriften / Specifications

ASTM A240/A 240 M/ED.12

ASME SA240/SA240M, BPVC, Sect. II, Part A, Ed. 2013

PED/97/23/EC

EN 10028-7/ED.2007, EN 10088-2/ED.05

AD2000 Merkblatt W10 Ed. 2008

AD2000 Merkblatt W2 Ed. 2011

Tip / W.nr. / Type

304L/304

304L/304

X5CrNi18/10/

X2CrNi18/9

W.Nr.1.4301/1.4307

X2CrNi18/9

W.Nr.1.4307

Pov. / Fläche / Finish

No.:1

No.:1

1D

Koroz. test / Int. krist. kor. / Corrosion test

ASTM A262 PRACTICE E:OK

NACE MR 0175-2012

NACE MR 0103-2012

EN ISO 3651-2: OK

Obseg dobave / Umfang der Lieferung / Extent of material delivery

Poz. Pos. Item	St. sarze Schmelzen Nr. Heat No.	St. plošce Waltztafel Plate No.	Teža neto Gewicht Weight kg	Dimenzije Abmessungen Dimensions mm	St. korn. Stückzahl Quantity	St. vzorca Probe Nr. Sample No.
72	289096	58963	755	8.00 / 2000 / 6000	1	58964 T
72	289096	58963	760	8.00 / 2000 / 6000	1	58964 T
72	289096	58964	760	8.00 / 2000 / 6000	1	58964 T
72	289096	58964	768	8.00 / 2000 / 6000	1	58964 T

Mehanske lastnosti / Mechanische Eigenschaften / Mechanical properties

St. vzorca Probe Nr. Sample No.	Smer vzorca Proben lage Position	Nap.tecenja Dehn grenze Yield 0.2% MPa	Nap.tecenja Dehn grenze Yield 1% MPa	Nat.lrdnost Zugfestigkeit Tensile str. MPa	Raztezok / Bruchdehnung / Elongation A5 % A50 % A80 %	Kontrakt. Einschnurung g	Trdota Härte Hardness HB	Zilavost / Kerbschlag / Impact pri / smer bei lage at/posit.	at/posit. °C
Zahteve Anforderung.	MIN MAX	210	250	520	45			60	20
58964 T	P	276	321	590	54.0 57.0		201	345 356	369 20

G - Glava / Kopf / Top N - Noga / Fuss / Bottom V - Vz dolzno / Längs / Longitudinal P - Precno / Quer / Transverse Upogib / Biege / Bend : 0.5a

N° JACQUET :

f. 798-788

300-804

22/10/14
SYONS
G. DIEVECH
Inspection

ACRONI
ACRONI d.o.o.
Cesta Borisa Kidriča 44
SI-4270 Jesenice
Member of Slovenian Steel Group

19/72

ACRONI

ACRONI d.o.o., Cesta Borisa Kidriča 44, SI-4270 Jesenice

Izdajatelj certifikata
Aussteller der Bescheinigung
Originator of the document

KONTROLA KAKOVOSTI
Telefon: +386 4 584 10 40
Telefax: +386 4 584 10 68
http://www.acroni.si
E-mail: miran.pirnat@acroni.si

Potrdilo o prevzemu 3.1/ Abnahmeprüfzeugnis 3.1/ Inspection certificate 3.1

St./Nr./No. 310083186-3

Stran/Seite/Page 2 / 2

Kemická analýza / Chemische Zusammensetzung / Chemical Composition

Sarža/Schmelzen Nr. / %C	%Si	%Mn	%P	%S	%Cr	%Ni	%B	%N	%Co	Ferrite
289096	0.026	0.32	1.88	0.040	0.001	18.30	8.17	<0.0005	0.0836	0.12

Opomba / Bemerkungen / Remarks

SDMS n° 62357

WARMBEHANDLUNG : LOSUNGSGLUGEN BEI MIN. 1050°C, WASSER ABGESCHRECKT !

- OBERFLÄCHEN UND MASSPRÜFUNG : OHNE BEANSTANDUNG NACH EN 10029 DICKE CLASS B UND EN 10163-2 B3

- PRÜFUNG AUF WERKSTOFFVERWECHSLUNG : OHNE BEANSTANDUNG

- PRÜFUNG AUF BESTÄNDIGKEIT GEGEN INTERKRISTALLINE KORROSION NACH EN ISO 3651-2 : OHNE BEANSTANDUNG

HEAT TREATMENT : SOLUTION ANNEALED AT MIN. 1050°C, WATER QUENCHED

- VISUAL AND DIMENSIONAL CHECK : OK

- SPECTROMETER SORTING TEST : OK

- INTERGRANULAR CORROSION TEST ACCORDING TO

ASTM A 262 PRACTICE E : No cracks were observed at 20X magnification!

Im Einvernehmen mit dem TÜV Bayern e. V. (08/1965). Gegenzeichnungsverzicht durch TÜV Bayern Sachsen e. V. mit Schreiben vom 20.06.1996. Zertifiziert nach DGRL 97/23/EG, Anhang I, Abschnitt 4.3 durch TÜV SÜDDEUTSCHLAND Bau und Betrieb GmbH, Benannte Stelle-Kennnummer 0036 (Oktober 2002).

As agreed with TÜV Bayern e. V. (08/1965). Countersignature by TÜV Bayern Sachsen e. V. is not required (letter of 20 June 1996). Certified according to PED 97/23/EC, Annex I, Paragraph 4.3 by TÜV SÜDDEUTSCHLAND Bau und Betrieb GmbH, notified body-registration number 0036 (October 2002).

THE MATERIAL COMPLIES WITH THE REQUIREMENTS OF THE ORDER.

NO WELD REPAIR

RADIOACTIVITY CONTAMINATION MEASURED WITH EXPLORANIUM

GR - 320 LAB: NO CONTAMINATION

Es wird bestätigt, daß die Lieferung den Bestellanforderungen entspricht.

We confirm herewith that the delivered material complies with the terms of the order.

N° JACQUET :

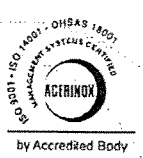
p. 798 - 799

800 - 801

ACRONI 19/72
ACRONI, cija lo področje
Certifikat in podpis
Člen skupine
Member of the Steel Group

cd 94565132157

ACERINOX EUROPA
 FABRICA DEL CAMPO DE GIBRALTAR
 PALMONES (LOS BARRIOS)
 T.FNO.: (34) - 956 62 93 00
 FAX: (34) - 956 62 93 11
 P.O.: BOX 83
 11370 LOS BARRIOS (CADIZ)



INSPECTION CERTIFICATE
CERTIFICAT D'INSPECTION

3.1

ACCORDING TO EN 10204

CERTIFICATE N° 52 2014 4085 20002 *
 N° CERTIFICAT

CUSTOMER CLIENT: JACQUET LYON ZA Grammont, G rue Garibaldi 69800 SAINT PRIEST FRANCE	OUR ORDER N° NOTRE N° CO: VL 2097	YOUR ORDER N° VOTRE N° COY: 47467 REV 00
TRADE MARK SIGLE DU PRODUCTEUR 	INSPECTOR'S STAMP POUR LE N° INSPECTEUR	STEELMAKING PROCESS PROCEDE D'ELABORATION A.O.D.

REQUIREMENTS EXIGENCES ASTM A240E014/A480E014a-ASME SecIIA SA240/SA480E013 EN 10088-2:2005 EN ISO 9444-2(Thickness, Tolerances) ASTM A240E014/A480E014a-ASME SecIIA SA240/SA480E013	INTERGRANULAR CORROSION CORROSION INTERGRANULAIRE ASTM-A-262 PRACTICA E ASTM-A-262 PRACTICA E	GRADE MATERIE Acs 150 TP-304 Acs 150 1,4307 Acs 150 TP-304L	FINISH FINI N°1 10 N°1
--	---	--	---

SDMS n° 62368

COIL / BOX BOBINE/CAISSE	CONTENT CONTENU	DIMENSIONS DIMENSIONS			MARKS MARQUE	QUANTITY QUANTITE	TEST N° ECHANTILLON	FINISH FINI
		THICKNESS EPAISSEUR	WIDTH LARGEUR	LENGTH LONGUEUR				
C2079P	02H3EH B	10,000	1500,00	6000,00	20	2	02H3EH	C
C2079R	02H3EH B	10,000	1500,00	6000,00	21	2	02H3EH	C

CHEMICAL ANALYSIS / COMPOSITION CHIMIQUE (%)											
HEAT N° COULEE	C	CR	MN	N	NI	P	S	SI	CO		
H3EH	0,017	17,770	1,622	0,092	8,060	0,033	0,002	0,337	0,182		

MECHANICAL PROPERTIES / CARACTERISTIQUES MECANIQUEES										
TEST N° ECHANTILLON	PROBE SIT TYPE	Rm N/mm2	Rp 0.2 N/mm2	Rp 1.0 N/mm2	A50 %	A5 %	HRB	A200 %		
02H3EH	C.T	634,38	342,69	391,03	51,68	52,68	91,00	50,68		

REMARKS / REMARQUES Temperatura de hipertemple entre 1050 y 1100 ° C. The delivery is in accordance with the order	SURFACE AND DIMENSIONAL CONTROL INSPECTION DIMENSIONNELLE ET VISUELLE SATISFACTORY SATISFAISANT
WORK INSPECTOR INSPECTEUR A. Heredia	

N° JACQUET :
f. 1097
f. 1098

22/10/14
SDMS
C. DRAVEON
Inspection

ACERINOX EUROPA
 FABRICA DEL CAI'PO DE GIBRALTAR
 PALMONES (LOS BARRIOS)
 T.FNO. (34) - 956 62 93 00
 FAX (34) - 956 62 93 11
 P.O. BOX 83
 11370. LOS BARRIOS. (CADIZ)



by Accredited Body

Abnahmeprüfzeugnis
INSPECTION CERTIFICATE

SDMS n° 62368 2/2

ACCORDING TO EN 10204 3.1
 NACH:

Prüf-Nr. 52 2014 4085 20001 E
 Inspection No.

*Zustimmungsschreiben des TÜV Baden vom 21. Februar 1993
 Letter of approval from the TÜV Baden dated 21-2-93
 Laut Schreiben des TÜV Baden e.v. vom 26. Juni 1 999 wird auf die Gegenzeichnung verzichtet.
 TÜV Baden renounce to the countersignature according to their letter dated 26-6-99

Besteller - Customer JACQUET LYON		Auftrags Nr - Our order n° VL 2097	Bestellung Nr - Your order n° 47467 REV 00
Prüfgegenstand - Article BLECH-AUS BAND (SHEET)		Werkstoff Nr und Lieferzustand - Material n° and Condition of Delivery 1.4301/1.4307 1D	
Werkstoff - Normbez Standard - Grade of Material X5 CRNI 18-10(X2CrNi18-9)		Werksbez - Works Grade Acx - 150	Erschmelzungsart - Steelmaking Process A = AOD Verfahren - AOD Process
Anforderungen - Technical requirements EN 10028-7/TRB 100/AD-2000-MERKBLATT WZ/WIO OGRI 97/23EG (PED) EN-ISO-9444-2(Thickness Tolerances)		Kennzeichnung - Marking Schmelznummer - IP of coil	
Zeichen des Lieferwerks - Brand of the manufacturer 		Stempel des Sachverständigen - Inspector's stamp 	
Pos Nr. Item N°	Stückzahl Quantity	Abmessung - Dimensions mm	Schmelze Nr Heat N°
20	2	10,000 x 1.500,00 x 6.000,00	H3EH
21	2	10,000 x 1.500,00 x 6.000,00	H3EH
			Probe Nr Test N°
			02H3EH
			02H3EH
			C
			C

Chemische Analyse - Chemical Composition (%)

Schmelze Nr Heat N°	C	CR	MN	N	NI	P	S	SI	CO
Anforderungen Requirements	0,030	17,500 19,500	2,000	0,100	8,000 10,500	0,045	0,015	1,000	
H3EH	0,017	17,770	1,622	0,092	8,060	0,033	0,002	0,337	0,182

Mechanische Eigenschaften - Mechanical Properties Pr. Temp/T. Temp. 20° C

Probe Nr Test N°	Prob.-Lage Pos of Test	Abmessungen des Probestabs Dim. of specimen	Rm N/mm2	Rp 0.2 N/mm2	Rp 1.0 N/mm2	A5 %
Anforderungen Requirements		Breite x Dicke Width x Thickness mm	520,00 720,00	210,00	250,00	45,00
02H3EH	C T	26,000 x 10,00	634,38	342,69	391,03	52,68

Besichtigung und Masskontrolle wurden durchgeführt: O.B.
 Surface and dimensions controlled: O.K.

Der Werkstoff ist beständig gegen interkristalline Korrosion gemäß ISO 3651-2
 The material is resistant to intergranular corrosion test according to EN ISO 3651-2

Spektroskopische Identitätsprüfung: O.B.
 Spectrometrical identity test: O.K.

Wärmebehandlung: Glühen bei 1050 - 1100 °C.

Heat treatment:
 Und Abschrecken mit Luft cooling with air.

Die Lieferung entspricht der Bestellung.
 The delivery is in accordance with the order

Issued in agreement with TÜV SÜD Industrie Service GmbH (02/1983)

N° JACQUET :
 p. 1097
 1098.

WERKSACHVERSTÄNDIGER
 WORK INSPECTOR
 A. Heredia

Palmones, 26-NOVIEMBRE 2014

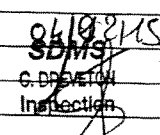


SDMS n° 62409

ede 94593/32154

TUBES COMPANY PVT. LTD.

A NORSEK APPROVED & DNV APPROVAL OF MANUFACTURER, AN ISO 9001:2008, ISO 14001:2004,
BS OHSAS 18001:2007, PED & ADW / AD - 2000 - W0 Certified Company
MFG. & EXPORTER OF STAINLESS STEEL SEAMLESS & WELDED PIPES | TUBES | U-TUBES
GOVT. RECOGNISED EXPORT HOUSE

INSPECTION CERTIFICATE										F/QAC/12_REV.01			
CERTIFICATE AS PER EN 10204 - 3.1										T.C.NO :-MTCPL/2014-15/0177A20_REV.01			
CUSTOMER NAME :- M/s STAPPERT France S.A.S.										DATE :- 04.02.2015			
P.O. NO. :- 227359										DATE :- 03.04.2014			
O.A.NO. :- 2014/05/7019/EXP										DATE :- 01.05.2014			
PRODUCT :- AUSTENITIC S. S. SEAMLESS PIPES (COLD DRAWN, SOLUTION ANNEALED & PICKLED)													
MAT.SPEC. :- ASTM A 312-13b, TP 304L, (AISI 304L)													
SR. NO.	HEAT NO.	DIMENSIONS								NO. OF PCS	TOTAL METER		
22	11A178	2" NB X SCH 40s [60.33 MM OD X 3.91 MM THK] X 5.5 TO 6.3 METER RL								58	340.260		
CHEMICAL TEST													
SR. NO.	HEAT NO.	S	C	Si	Mn	P	S	Ni	Cr	Mo	N	Ti	
			0.035	1.000	2.000	0.045	0.030	8.000	18.000	--	--	--	
22	11A178	H	MAX	MAX	MAX	MAX	MAX	13.000	20.000	--	--	--	
			P1	0.026	0.560	1.120	0.029	0.006	8.250	18.310	--	--	--
			P2	0.027	0.568	1.236	0.027	0.008	8.247	18.263	--	--	--
				0.028	0.596	1.254	0.027	0.008	8.274	18.260	--	--	--
MECHANICAL TESTS													
SR. NO.	TENSILE STRENGTH Rm MPa	YIELD STRENGTH Rp 0.2% MPa	YIELD STRENGTH Rp 1.0% MPa	ELON. A% G.L.=5.65√A, G.W= 12.70 MM	HARDNESS TEST MAX	FLARING TEST	FLANGE TEST	RING EXPANSION TEST	FLATTENING TEST	REVERSE FLATTENING TEST	REVERSE BEND TEST	OTHER TEST	
REQ.	485 MIN	170 MIN	--	35 % (MIN)	--	--	--	--	--	--	--	--	
22	612.00	307.00	N.A	59	N.A	N.A	N.A	N.A	OK	N.A	N.A	N.A	
REMARKS:-													
MARKING ON PRODUCT :- MAXIM S.S. SEAMLESS PIPE, SPECN, GRADE, SIZE, HEAT NO, (O.A.No/Sr. No.)													
HEAT TREATMENT :- SOLUTION ANNEALED AT TEMP. ABOVE 1040° C AND QUENCHED IN WATER.													
HYDRO TEST PRESSURE :- 2000 psi(g), (WATER USED HAVING CHLORIDE CONTENT LESS THAN 10 ppm & HOLDING TIME 10 SEC. MIN)													
EDDY CURRENT TEST :- N.A													
[1] MECHANICAL TEST CARRIED OUT BY MTCPL - FOUND SATISFACTORY.													
[2] PRODUCT ANALYSIS CARRIED OUT BY MTCPL - FOUND SATISFACTORY.													
[3] 100% HYDRO TEST CARRIED OUT BY MTCPL - FOUND SATISFACTORY.													
[4] 100 % PMI TEST CARRIED OUT BY MTCPL - FOUND SATISFACTORY.													
[5] 100% DIMENSION AND VISUAL CHECKED BY MTCPL - FOUND SATISFACTORY.													
NOTE:- S= SPECIFICATION, P= PRODUCT ANALYSIS, H= HEAT ANALYSIS, G.L.= GAUGE LENGTH, G.W= GAUGE WIDTH, N.A = NOT APPLICABLE.													
INSPECTOR'S/SURVEYOR'S SIGN					P.O. ITEM :- COMPLETE				 MANAGER (Q.A.)				
WE HEREBY CERTIFY THAT THE MATERIAL IS AS PER SIZE & SPECIFICATION MENTIONED IN ORDER, ALL TEST RESULT ARE ACCEPTABLE.													

Office & Works

Unit-II, Survey No. 105, Nr. 66 KV Sub-Station, Chhatral-Pansar Road,
Ahmedabad-Mehsana Highway, Chhatral-382729, Ta. Kalol, Dist. Gandhinagar, Gujarat, INDIA.
T : +91 2764 233577, F : +91 2764 234477, E : export@maximtubes.com
www.maximtubes.com

34716138157

ABNAHMEPRÜFZEUGNIS
INSPECTION CERTIFICATE
CERTIFICAT DE RECEPTION

ISO 9001:2008 certification
EN ISO 14001:2004 certification



EN 10204-3.1

Cert. No.: 164039 / 2014.09.16
Blatt/Sheet/Page: 1 / 7

Besteller/Purchaser/Acheteur:

Rolled Alloys Inc. - US
125 W Sterns Rd
US-48182 Temperance
United States

Empfänger/Consignee/Destinaire:

Rolled Alloys
9818 E. Hardy Road
US-77093 Houston
United States

SDMS n° 62434

Bestell-Nr./Purchaser order No./No. de commande:

0112301-HOU / 2014.05.12

Empfängerref.-Nr./Receiver reference-No./Référence destinaire:

-

Werksauftrags-Nr./Works order-No./No. de la commande de l'usine:

1646604 / 2014.05.12

Lieferschein-Nr./Delivery note-No./Avisd'expedition du client:

51164808 / 2014.08.28

Prüfgegenstand/Subject of test/Object d'examen:

BÖHLER P511
bar, forged, solution annealed, quenched
IBO ECOMAX ISO 286/2 ITK12

Anforderungen/Requirements/Exigence:

ASTM A276-13a
ASTM A479/A479M-14
ASME BPVC 2013 Section II Part A SA-479/SA-479M
ASTM A193/A193M-12b Class 1C
NACE MR 0175 / ISO 15156-3:2009
UNS S20910, XM-19

Cust.Code: 0010992

Volume of delivery

Pos./Lot	Dimensions	Length	No. of Pieces	Weight kgs	Mat. ID	Test No.	Heat No.
10/1	RD 139,7 MM 5,500 inch	3.000 - 6.000 MM	3	1448,0 3192,3 lbs	DXQB	1394895-1	K10006

Reduction ratio

Reduction ratio = 9,3:1

Quality heat treatment

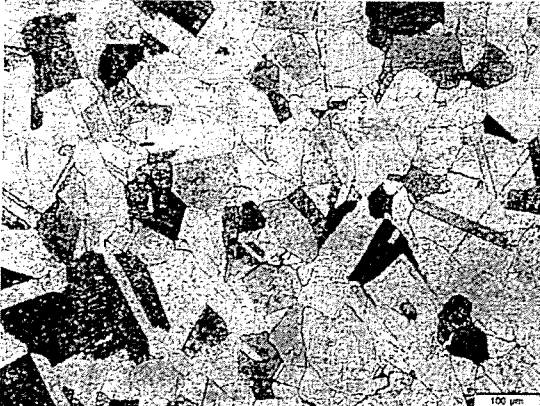
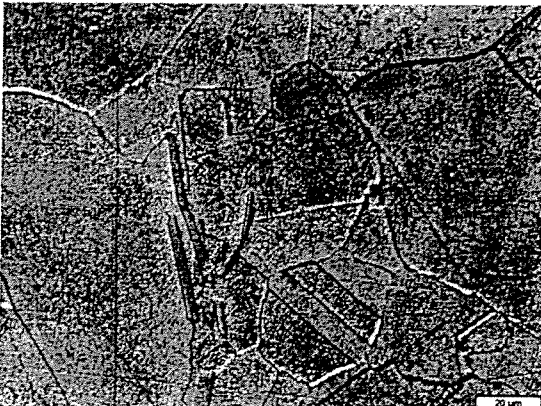
	Temperature	Soak time	Cooling
Solution annealed	1065°C	1:24 h T	Water
T ...holding time at nominal temperature after furnace has reached the tolerance limit.			

TRACER # 04356174

14102145
SDMS
C. DREYER
Inspection

EN 10204-3.1

Cert. No.: 164039 / 2014.09.16
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Chemical Composition (%)										
Chemical Composition										Heat No.
Steelmaking Process: Airmelt										
C	Si	Mn	P	S	Cr	Mo	Ni	V	Nb	K10006
0,015	0,36	5,02	0,024	<0,0003	20,75	2,08	13,00	0,14	0,14	
N										K10006
0,32										
Steelmaking Process = Airmelt (EAF+AOD)										
SDMS n° 62434										
<u>Ferrite content evaluation</u>										
The ferrite content was determined similar to ASTM E45-13 using the worst field method.										
			Rim		1/2 Radius					Center
Ferrite content			0%		0%					0%
<u>Grain size evaluation</u>										
The grain size was determined acc.to ASTM E112-13										
Structur			Grindingdirection			1/2 Radius				
Uniform			longitudinal			ASTM No.(4)				
<u>Micrographic examination</u>										
Austenitic microstructure										
The microstructure was examined at 50x, 100x and 500x magnification.										
The material is free from precipitations.										
<u>Photomicrographs</u>										
The microstructural photographs were examined at 100x and 500x using light microscopy.										
										
original photo: 100x					original photo: 500x					

TRACER # BU 3561745

Date 10/25/14

Approved

Rolled Alloys Quality Assurance

EN 10204-3.1

Cert. No.: 164039 / 2014.09.16
Blatt/Sheet/Page: 3 / 7

Mechanical Properties					SDMS n° 62434 3/7			
Tensile test in delivery condition					Yield Strength	Ultimate Tensile Strength	Elongation	Reduction of Area
Test no.	Piece no.	Testing standard	Location	Temp. °F	YS0.2 KSI	UTS KSI	A4 %	RoA %
1394895-1	367S	ASTM A370-12a	L2	73	>=55 61.496	>=100 110.722	>=35 47	>=55 69
Impact test in delivery condition					Impact energy			
Test no.	Piece no.	Testing standard	Location	Temp. °F	Charpy-V ft-lbf			
1394895-1	367S	ASTM E23-12c	L2	73	Info 154 162 150			
1394895-1	367S	ASTM E23-12c	L2	-76	Info 127 119 129			
Hardness test in delivery condition								
Test no.	Piece no.	Testing standard	Location		HBW10/3000	HRC		
1394895-1	-	ASTM E10-12	Bars		<=293 201	<=35		
1394895-1	367S	ASTM E18-12	Tensile test			<21.0		

EN 10204-3.1

Cert. No.: 164039 / 2014.09.16
Blatt/Sheet/Page: 4 / 7

Corrosion examination

Intergranular corrosion acc.to ASTM A262 Practice E: Satisfactory

SDMS n° 62434

Physical examination

Permeability test: $\mu r = 1,002-1,003$ (80000 A/m)

Nondestructive examination

Positive Material Identification: Satisfactory

100% Ultrasonic test acc.to ASTM A388/A388M-11.
The material fulfils the requirements.

100% Surface Inspection
A Visual test was performed.
The bars are without unacceptable surface defects.

Statements

The material is free of mercury, free of mercury compounds and / or radioactive contamination at time of shipment.
The material was produced without ozone depleting substances.
No weld repair has been performed on this material.
Country of origin and melt = AUSTRIA

The above are true and correct results of tests on samples of the material.
Results conform to the specification(s) applicable and are on record.

The recording of false, fictitious or fraudulent statements or entries on the document may be punished by Austrian law (Austrian Penal Code 223F).

Austria is listed as a qualified country in DFARS 225.872 because the United States and Austria have signed reciprocal defence procurement MoU.

Austrian material may be used in "Buy America" applications where the total value of Austrian material is less than 50% of the value of the component.

BOHLER EDELSTAHL is an eligible supply source according to DEFARS 252.225-7014.

Attachment

Furnace chart

UT Report

Operators qualification

Radioaktivitätskontrolle/Radioactivity inspection: Co-60<0,1Bq/g;

hiermit kleiner als Grenzwert in der anzuwendenden Spezifikation IAEA RS-G-1.7 für unbedenkliche Stoffe.
therefore smaller than upper limit required according to specification IAEA RS-G-1.7 for inoffensive material.

Wir bestätigen hiermit, dass die obengehanneten Erzeugnisse den Bestellvorschriften entsprechen.

We hereby certify that the above mentioned products are consistent with the order prescriptions.

Nous certifions que les produits énumérés ci-dessus sont conformes aux prescriptions de la commande.

Zelchen des Lieferwerks:

Brand of Manufacturer:

Marques de l'usine:



Besichtigung und Nachmessung: Keine Beanstandung

Inspection and Checking of Dimensions: Satisfactory

Inspection of Control des dimensions: Satisfaisant

Zelchen des Prüfers:

Symbol of Inspector:

Symbole de l'inspecteur:



BOHLER Edelstahl GmbH & Co KG
Marzellerstrasse 25
8605 Kapfenberg, AUSTRIA
www.bohler-edelstahl.com

Christopher.Schmid@bohler-edelstahl.at
**AUSSTELLER/
ORIGINATOR/AUTEUR**

DER ABNAHMEBEAUFTRAGTE/
INSPECTOR REPRESENTATIVE/
DU CONTROLEUR

ABNAHMEPRÜFZEUGNIS
INSPECTION CERTIFICATE
CERTIFICAT DE RECEPTION

ISO 9001:2008 certification
EN ISO 14001:2004 certification



EN 10204-3.1

SDMS n° 62434

Cert. No.: 164039 / 2014.09.16
Blatt/Sheet/Page: 5 / 7

UT PRÜFBERICHT C REPORT C PROCESS-VISUAL TYPE C		Besteller Purchaser Client ROLLED ALLOYS		Werks Auftrag Working Order Commande Interne 1646604 (FA 1384895/1/2)		Pos. Item Réparé 1					
Nr./Article SK-08-262		Bestell-Nr. Order No. No. de commande 0112301-HOU		Prüfobjekt Test object Pièce contrôlée Stabstahl / steel bars							
Seite Page Pages 01 von of sur 01		Stückzahl Quantity Quantité 3		Kennzeichnung Identification Identification Schmelze, Werkstoff, Werks Auftrag Heat, Material, Working Order							
Abmessung Dimension Dimensions RD 139.7mm		Werkstoff Material Matériau P511		Schmelz-Nr. Heat-No. No. de coulée K10006							
Oberflächenzustand Surface cond. État de surface geschält / peeled		Gewicht Weight Poids 1455 kg		Fortgangsstufe Stage of production État d'avancement de fabrication Lieferzustand / delivery condition							
Prüfbereich Inspection area Inspection area Gesamte Stablänge / whole length		Wärmebehandlung Heat treatment Traitement thermique lösungsgeglüht / solution annealed									
Prüfverfahren Inspection Specification Spécification de contrôle ASTM A388/A388M - 11		Prüfung Inspection Coverage Étendue du contrôle Gesamter Umfang / whole circumference									
Beurteilungsstandard Evaluation standard Critères d'acceptation 3mm KSR / DSR		ZFP-Abfallvorschrift NBT-procedure Procédure END AV218/0015/74R01 ScanPlan-ASTM-A388-CT Rev00									
Transferrer (FF / WF) Nr. No. de fiche ultérieure ---		Zeichnungs-Nr., Schmelz-Nr. oder Einsatz-Nr. Drawing No., forging No. or rolling No. No. de plan, No. de forgeage ou No. de laminage ---									
Registriergröße Recording level Seuil d'enregistrement 100% of reference amplitude		Schritt / Prüf-Nr. Step / Test no. No. d'opération ---									
<p>Sketch Esquisses</p>											
Prüfgerät-Nr. Equipment No. Appareil No. EPOCH 600 120381007		Koppelmittel Couplant Produit de couplage Kielster / paste		Justierung Adjustment Ajustage AVG / DGS							
Justierkörper Testblock Bloc d'alignement Bauteil / Part		Referenzreflektor Reference reflector Réflecteur de référence BT-RWE / Part-BWE		SN-Abstand Signal-to-noise distance Rapport signal sur bruit >6 dB							
Transferkorrektur (weitere Korr.) (Transfer correction (further corr.) Correction de transfert (correction supplémentaire)				--- dB							
Einstrahl-Pos. Position of incidence Direction d'incidence	Prüfobjekt Pièce Pièce	Frequenz Frequency kHz/MHz	Einstrahlwinkel Angle of incidence Angle d'incidence	Schallweg Sound path Parcours du son mm	Schallschw.-Anstieg Sound at. Attenuation du son dB/m	Anzeigebreite Indication width Profondeur de l'indication mm	Anzeigelänge Indication length Longueur de l'indication mm	KSR-Wert DSR value Réflecteur diague de référence	dB zu Referenz dB to reference dB à la référence	Echelonform Type of echo Type d'écho	RWE-Abstand Loss of BWE dB Appareil de l'écho de fond dB
A	B2S SN 67741	2	0°	139.7	<2	keine registrierpflichtigen Anzeigen no indications above diam level				<6	
Prüfresultat Test result Résultat: <input checked="" type="checkbox"/> Entspricht Wohn Conforme <input type="checkbox"/> Entspricht nicht der Vorschrift Not within specification Pas conforme de la spécification		Prüfart Place of inspection Lieu de contrôle Kapfenberg, Abt. / Dep. EHB		Datum Date Date 21.08.2014							
Kunde Customer Client		Prüfer / Stufe Operator / Level Opérateur / Niveau de qualification Holzer K. II		ISO 9712							
Geprüfter / Sachverständiger Authorized Inspector Agent de l'organisme de contrôle		Prüfverantwortlicher / Stufe Supervisor / Level Responsable de contrôle / Niveau de qualification Westermayer F. II		ISO 9712							

REGISTERED OFFICE OF THE COMPANY: KAPFENBERG; REGISTER COURT LANDESGERICHT LOEBEN FN 294435v

TRACER # 043561745

EN 10204-3.1

SDMS n° 62434

6/7



Akkreditierte Konformitätsbewertungsstelle nach EN ISO/IEC 17024
Accredited Conformity assessment body to EN ISO/IEC 17024
Organisme de évaluation de la conformité à la EN ISO/IEC 17024
Identifikationsnummer: 909

ANERKANNTE UNABHÄNGIGE PRÜFSTELLE
gemäß Art. 13 Druckgeräterichtlinie 97/23/EG



CERTIFICATE ZERTIFIKAT CERTIFICAT

We hereby certify the competence

Hiermit zertifizieren wir die Kompetenz

Nous certifions la compétence

Herrn Karl Holzer

geboren am 08.01.1971
date of birth
né (e) le

Registrier Nr. 03/24480/2/00571
Registration N°
N° d'immatriculation

Prüfverfahren und Stufe
NDT method and level
Méthode contrôle et niveau

für/för/pour

Ultraschallprüfung UT Stufe 2 (zwei)

Industrie-*/Produktsektoren**
Industrial-*/Product sectors**
Secteurs industriels-*/produits**

Herstellung

nach den Normen
based on the Standards
en selon des normes

ONORMEN: EN ISO 9712, M 3042, M 3041

Validity of the certification

Gültigkeit der Zertifizierung

Validité de la certification

23.04.2014 bis 22.04.2019

Austrian Society for Nondestructive Testing

Österreichische Gesellschaft für Zerstörungsfreie Prüfung

Association d'Autriche des Essais Non Destructifs

A 1015 Wien, 04.03.2014

für den Zentralen Programmausschuss der Zertifizierungsstelle
for the Steering Committee of the Certifying Body
Comité de Direction de l'organisme de certification

für die Zertifizierungsstelle
for the Certifying Body
pour l'organisme de certification

[Signature]

der Präsident
the president le président
Dipl.-Ing. Dr. H. Eberhardt



[Signature]
der Prüfungsbeauftragte
the examiner l'examinateur
Dipl.-Ing. (FH) Gerald Idinger (0238)

- *) Herstellung (enthält c, f, i, w, vsp)
- Dienstleistungsprüfung bei Fertigung und Instandhaltung, eingeschlossen Herstellung (enthält c, f, i, w, vsp, u.o)
- Eisenbahn-Instandhaltung (enthält c, f, i, w, vsp, u.o)
- Luft- und Raumfahrt (enthält c, f, i, w, l, vsp, p, u.o)
- ***) Produktsektoren gemäß ONORM EN ISO 9712

[Signature]
Unterschrift des Inhabers
Signature of holder: Signature du titulaire

Der Zertifikatsinhaber verpflichtet sich zur Einhaltung der Ethischen Regeln (RÖZ.760/Rev.04)
Jede missbräuchliche Verwendung dieses Zertifikates und inkorrekte Hinweise darauf werden gesetzlich geahndet
Copyright ÖGfZP Austria (Nr. RÖZ 757e-Rev. 07 0113)

SDMS n° 62434

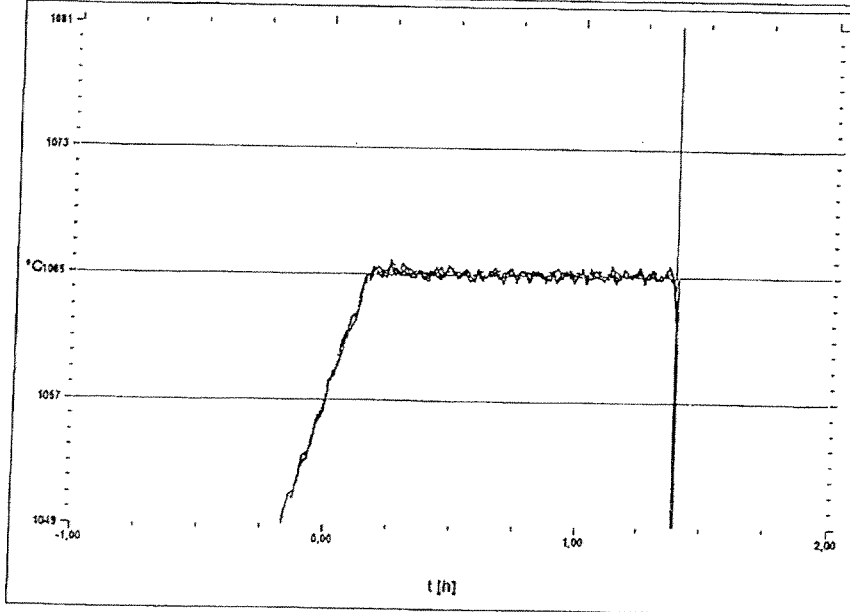
Abteilung/Department: **EHW**
Wärmebehandlungsprotokoll
Heat treatment report
BÖHLER
EDELSTAHL

Kunde/customer: **USA ROLLED ALLOYS 9818**
WA/Pos/Los/works order:: **646604 / 1 / 1** FA/Los/Split/Internal order: **394895 / 1 / 2**
Marke/material: **P511** Charge/heat no.: **K10006 / 0**
Abmessungen/dimension: **0 x 147 [mm]** Einsatzgewicht/weight: **705 KG**
Einsatzmenge/quantity: **1 STK/PCS**

Arbeitsgang/process: **LOESUNGSGLUEHEN / SOLUTION ANNEALING**
Ofen/furnace no.: **46** Einsatznummer/lot no.: **3368464**
Einsatzzeitpunkt/start of process: **07.08.2014 13:09** Austrittszeitpunkt/end of process: **07.08.2014 17:40**

	Solldaten / nominal values	Istdaten / actual data
Ofenstarttemperatur/set temperature:	1065 °C	1065 °C
Ofenklasse/furnace class *:	3 und besser/and better	3
Haltezeit / Typ **/holding time/type:	1:00-2:00 h / T	1:24 h / T
Abkühlung/cooling:	Wasser / water	Wasser / water
Wasseranfangstemp. / water start temp.:		25.4°C
Wasserendtemp. / water end temp.:		26.2°C

*... Ofenqualifizierung lt./furnace qualification in accordance with: AMS 2750 aktuelle Rev./current revision
*... Ofenklasse/furnace class: 2 (+/-5°C) / 3 (+/-8°C) / 4 (+/-10°C) / 5 (+/-14°C)
**... M = Materialzeit/material time / T = Ofenzeit/furnace time



Die Richtigkeit der durchgeführten Wärmebehandlung wird bestätigt:
The correctness of the performed heat treatment is confirmed:
Datum: 8.8.2014
Unterschrift/signature: Schmitzberger Josef / EHW



Certificat de Réception 3.1

SDMS n° 62880



Produit ER316LCF
 Diamètre 2.0mm
 Item No. TER316LCF-20
 Lot/Batch U2TG142297
 Ligne produits TIG
 Classification AWS A5.9M : ER316L
 EN ISO 14343-A : W 19 12 3 L
 ASME SFA 5.9 : ER316L

N°Cde Client. 95326
 Notre réf. 807102521
 Quantité 20.0 KG
 Client S.D.M.S

Route de Valence 761
 ST ROMANS 38160
 France

Analyse Chimique (%) According to EN10204 3.1

C	Si	Mn	P	S	Cr	Ni	Mo	Cu	N
0.017	0.34	1.84	0.016	0.011	18.1	12.7	2.59	0.12	0.06

Caractéristiques Mécaniques

According to EN10204 3.1

Essai de traction

Essai de resilience

Cond.	Temp. °C	Rp0.2 MPa	Rm MPa	A4 %	A5 %	Z %	Temp. °C	C1a J	C1b J	C1c J	L1a mm	L1b mm	L1c mm
AW	20	398	571	38	36	61	-196	52	56	43	0.65	0.72	0.61

Ferrite

According to EN10204 3.1

FN WRC92

4

Remarques

SDMS
 CONSUMABLE

Le produit identifié ci-dessus a été fabriqué, testé et fourni en accord avec un programme d'assurance qualité certifié ISO 9001.

Compagnie
 Metrode Products Ltd
 Hanworth Lane
 KT16 9LL Chertsey, Surrey
 United Kingdom



Imprimé par
 Par Andrea Lopes
 Fonction Export Sales Co-ordinator
 Date 22/APR/2015

Cert. No.
 00118288
 ZEU_LCF_1

95087

SDMS n° 62 900 42

FP SOUDAGE

Place des forges
90600 GRANDVILLARS - France
Tél : +33 (0)3 84 57 37 77
Fax : +33 (0)3 84 23 57 90

Selectarc[®]
CERTIFICAT DE RECEPTION NF EN 10204 TYPE 3.1
Inspection certificate / Abnahmeprüfzeugnis

N° Déclaration BL448753 1
N° du Contrat <i>Contract nr / Vertragsnummer</i> 32157
12/03/2015
N° et Date BL. <i>Nr and Date of delivery note / N° und datum des lieferscheins</i> BL448753 29/04/2015

S.D.M.S.
RN 1532
LES CONDAMINES
BP 4
38160 SAINT ROMANS

CODE ARTICLE		DESIGNATION	LOT	QUANTITE
IN316LF12	MDEC	MIG 20/10MLF 1.2xBS300 15KG	217640-	285.000

ANALYSES (%)	
FICHE 316L	LOT/COULEE 217640-45344
	NF EN ISO 14343 19.12.3.L 316L)
	AWS A5.9 ER 316 L
	AIR 9117
	C 0.017
	Cr 18.11
	Ni 12.67
	Mo 2.59
	Mn 1.84
	Si 0.34
	P 0.016
	S 0.011
	Cu 0.12
	N 0.06
	Co 0.07
	FERRITE WrcFN: 3.3

SDMS
CLERF
SOLE

Nous certifions que les produits énumérés ci-dessus sont conformes aux exigences de la commande.

We certify hereby that above mentioned products are consistent with the order prescriptions.

Wir bestätigen hiermit dass die obengenannten erzeugnisse den bestellen ungevorschriften entsprechen.

LE MATERIEL LIVRE EST FABRIQUE DANS LE CADRE D'UN SYSTEME QUALITE CERTIFIE ISO 9001

RESPONSABLE QUALITE : Karine BARBIER Edité le 29/04/2015

Quality manager / Qualitätsbeauftragter der Lieferfirma

Ce certificat établi par informatique est valable sans signature

DOCDECLARATION DE CONFORMITE
NF L 00-015C

 N° Déclaration
 448753 / 005

S.D.M.S.
RN 1532
LES CONDAMINES
38160 SAINT ROMANS

NUMERO CONTRAT <i>Contract nr / Vertragsnummer</i>	NUMERO / DATE BON DE LIVRAISON <i>Nr and Date of delivery note / N° und datum des lieferscheins</i>
32157	448753 29/04/2015

CODE ARTICLE	DESIGNATION <i>Designation / Bezeichnung</i>	QUANTITE <i>Quantity / Stuckzahl</i>	LOT <i>Batch nr /</i>
IN316LF12MDEC	MIG 20/10MLF 1.2xBS300 15KG	285	217640-

Nous déclarons que la fourniture citée est conforme aux exigences du contrat et que, après vérifications et essais, elle répond en tout point, aux exigences spécifiées, aux normes et règlements applicables, sauf exceptions, réserves ou dérogations énumérées dans le présent certificat de conformité.

We hereby declare, barring exceptions, reservations, or exemptions listed in this statement of conformity, that the listed supplies comply with the contract requirements and that, after completion of testing and verification, they completely satisfy all specified requirements, and applicable standards and regulations.

Wir erklären, dass die vorliegende Lieferung in Übereinstimmung mit den Vertragsanforderung hergestellt wurde und dass sie, nach Durchführung aller Kontrollen und Prüfungen, in jeder Hinsicht den in den diesbezüglich gültigen Normen und Vorschriften festgelegten Anforderungen, bis auf die in dieser Übereinstimmungserklärung genannten Ausnahmen, Vorbehalte oder Abweichungen, entspricht.

RESPONSABLE QUALITE FOURNISSEUR : Karine BARBIER
Supplier quality manager / Qualitätsbeauftragter der Lieferfirma

Date 29/04/15





TEL +33.0165.3021 - FAX 302286
 C.A. SCS 100 000 000 ELU S.
 VAT: 1106871320076 R.F.A. N. AD-80474

certifiés avec les systèmes de gestion certifiés
 ISO 9001 selon ISO 9001, ISO/TS 16949 et ISO
 14001.

CERTIFICAT DE RECEPTION 3.1 (EN 10204:2004)
 (A03) NUMERO DE DOCUMENT 2015020960
 PAGE 1/2

(A06) CLIENT :
 (A07) N. DE LA COMMANDE DU CLIENT :
 (A01) USINE PRODUCTRICE :
 (A05) AUTEUR DU DOCUMENT :
 (A08) NUMERO DE LA COMMANDE DE L'USINE 25192240/10
 LES PRODUITS CERTIFIES SONT CONFORMES A LA COMMANDE

COGNE FRANCE S.A.
 CDA52262
 AOSTA, VIA PARAVERA 16 - ITALIA
 SERVICE QUALITE

(A04) SIGLE DU PRODUCTEUR : COGNE

086940

SPECIFICATION INTERNE :
 (B01) PRODUIT : STOCKBARREWZ
 (B03) FINITION SUPERFICIELLE : 15261 SRE Rectifié
 (B04) ETAT DE LIVRAISON : 2G RONDS TOLLERANCE : ISOH9
 (B11) DIMENSIONS DU PRODUIT (MM) : RS HYPERTREMPE
 (B02) NUANCE : 40,000
 (B07) IDENTIFICATION N. DE COULEE : AISI 316/316L EN1.4401/4404 (B12) LONGUEUR DU PRODUIT (MM) : 03000 /03100
 (B06) MARQUAGE DU PRODUIT : 572004 NUANCE INTERNE : F316L IMCO
 1.4401/4404 MARQUAGE PIRES : 079 IDENTIFICATION N. DE LOT : 720790

NORMES DE REFERENCE: EN 10088-3(05), EN 10272(08), ASTM A276(08), ASTM A479(08), ASTM A193(09) B8M CLASSELD, ASMR SA 276(10), ASME SA479(10), AMS 563F, AMS 5648K, ISO15156-3/NACE MR0175(09), NACE MR0103(07), NORSOK MESS01rev.3
 NORMES DE REFERENCE CONCERNANT ANALYSE CHIMIQUE ET PROPRIETES MECANIQUES: ASTM A182(10), ASME SA182(10), ASME SA182(10).
 LE PRODUIT EST CONFORME A LA SPECIFICATION ET A LA REGLE AD2000-MERKBLATT W0/W2.
 ELABORATION AU FOUR ELECTRIQUE + AOD + COULER CONTINUE.
 LAMINE A CHAUD
 TAUX DE CORROYAGE 18,5

(C71) COMP. CHIMIQUE. - DE COULEE SELON ASTM E1019-A751, E1086-E415-A580
 Lot de control - Poids : 020000569857
 ELEMENT C Mn P S N Cr Mo Ni Cu
 OBTENU 0,018 0,34 1,80 0,027 0,028 0,075 16,64 2,05 10,37 0,44
 ELEMENT Co
 OBTENU 0,18

ESSAI DE DURETE AU ETAT DE FOURNITURE
 Lot de control - Poids : 020000569929
 SPECIFICATION ENISO6506 1.252 KG ESSAI DE DURETE HB METHODE D'ESSAI : 10/3000
 OBTENU 182

ESSAI DE RESILIENCR AU ETAT DE FOURNITURE
 Lot de control - Poids : 020000569929
 SPECIFICATION EN ISO 148-1-KV2 1.252 KG
 (C40) EPROUVETTE KV 20
 (C03) TEMPERATURE D'ESSAI °C (C02) ORIENTATION DE L'EPROUVETTE: L
 UNITE DE MESURE J 288 286 286 285 287 287 290 290
 OBTENU 287

SDMS n° 63099

SDMS
 CONTRÔLE



11100 AOSTA - VIA PARI
 TEL. - 39.0165.3021 - FAX
 CAP. SOC. 100.000.000 EUR INT.
 C.F. 02187360267
 VAT. IT00571320076 R.E.A. N. AQ-50474

ENREGISTRE AVEC LES SYSTEMES DE GESTION CERTIFIES
 ISO 9001, ISO 14001, ISO 15549 et ISO
 14001.

CERTIFICAT DE RECEPTION 3.1 (EN 10204:2004
 (A03) NUMERO DE DOCUMENT 201502096
 PAGE 2/2

ESSAI DE TRACTION AU ETAT DE FOURNITURE
 Lot de control - Poids : 020000569929 -
 SPECIFICATION

EN-ISO6892-1 1.252 KG

(C02) ORIENTATION DE L'EPROUVETTE: L

UNITE DE MESURE

OBTENU

RM MPA	RP02 MPA	A5 %	Z %	RP1 MPA
615	283	5.0 D	75,7	339
591	282	53,3	75,6	330
611	281	54,0	75,0	335

086940

ESSAI DE TRACTION

Lot de control - Poids : 020000569929 -
 SPECIFICATION

ASTMA370-E8-0.5"SPEC 1.252 KG

(C02) ORIENTATION DE L'EPROUVETTE: L

UNITE DE MESURE

OBTENU

RMB KSI	RP02B KSI	ZB %	AL2B %
87	41	76,6	4,0 D
89	41	74,2	55,5
88	43	76,3	59,1
			56,9

MATERIEL EN CONFORMITE AVEC LA NORME NORSOK M-630 MDS S01
 MATERIEL PRODUIT DANS UN SYSTEME D'ASSURANCE QUALITE EN ACCORD
 AVEC UNI EN ISO 9001:2008 ET ISO/TS 16949:2009 (POUR CETTE DERNIERE SEULEMENT POUR LES BARRES EN ACIER LAMINEES 'RCROUTTES'
 RECTIFIEES' ET POUDES METALLIQUES ATOMISEES); CERTIFIE PAR IQO.
 LES PRODUITS SONT CONFORMES AUX DIRECTIVES CE: 2011/65 -2000/53 2002/95(ROHS) 2003/11 - 2005/618 ET PED 97/23/CE.
 LE MATERIEL EST EXEMPT DE TOUTE COMPOSES DU MERCURE ET/OU LA CONTAMINATION AU RADIUM AU MOMENT DE L'EXPEDITION ET A ETE PRODUIT SANS
 L'UTILISATION DE SUBSTANCES APPAUVRISANT LA COUCHE D'OZONE DE CLASSE I ET II.
 (Z02) POINCON DE L'EXPERT LF

ESSAI DE CORROSION SELON ASTM A262 METHODE E EN ISO 3651-2: CONFORME.
 INSPECTION DE LA SURFACE AVEC COURANTS DE FOUCAULT (CAPTEUR ROTATIF) ET VISUELLE SUIVANT EN 10277-1 CLASSE 4: CONFORME.
 CONTROLE DIMENSIONNEL SUIVANT LA NORME EN 10278: CONFORME.
 CONTROLE PAR ULTRasons SELON LA NORME EN 10308 AND API6A

CLASSE 3, EQUIVALENT A' SEPTEMBRE 1920 LB GROUPE 3 CLASSE C
 (CLASSE B POUR LES TAILLES > 75 MM) ET ASTM A388 FRH 5
 (UNIQUEMENT POUR LES TAILLES > 100 MM): SATISFAISANTE.
 AUCUNE REPARATION DE SOUDURE EXECUTEE.

CONTROLE ANTIMELANGE AVEC SPECTROMETRE PORTABLE: CONFORME.
 MARQUAGE: MARQUAGE DU PRODUCTEUR, N. WERKSTOFF, N. COULEE, N. LOT.
 DOCUMENT PRODUIT EN ACCORD AVEC TUV BAYERN (11.1972) NE FAISANT PAS L'OBJET D'UNE CONTRE-SIGNATURE (VOIRE DOCUMENT TUEV BAYERN
 17.01.80).

Rinuncia alla controfirma della competente organizzazione tecnica di
 controllo (lettera TUV Bayern del 17.01.80)

SDMS n° 63099 2/2

(Z01) DATE 14.04.2015

FOLLASTRELLI ANDREA FC (ESPERT DE L'USINE) - CERTIFICAT CREE ELECTRONIQUEMENT



Rci industries

18110 VASSELAY-France

02 48 69 74 20

02 48 69 74 29

SDMS n° 63105

Système de Management de la Qualité
ISO 9001 certifié par LRQA

System of Quality Management
ISO 9001 LRQA Certified

Reg N° 9917426

ACCEPTANCE CERTIFICATE EN 10204/3.1
CERTIFICAT DE RECEPTION EN 10204/3.1

DISPATCH NOTE # 212820
AVIS EXPEDITION N°

Certificat N°: 212820001
OUR ORDER/NOTRE CDE: 236499

YOUR ORDER: 232859

CUSTOMER / CLIENT: STAPPERT FRANCE SAS

PRODUCT / PRODUIT

ITEM POSTE	QTY QTE	DESCRIPTION & SIZE DESIGNATION & DIMENSION	REQUIREMENTS SPECIFICATIONS	GRADE NUANCE
1	14	COUDES L.R A 90° 1" SCH 80S WP304/304L-S	ASME SA403.B16-9.B16-25.B16-28. ASTM A403-07 / ASME SEC.II PART A SA403-07	304/304L

BASE MATERIAL / MATIERE DE BASE

HEAT COULEE	IDENTIFICATION IDENTIFICATION	MATERIAL SUPPLIER FOURNISSEUR	REQUIREMENTS SPECIFICATIONS	PQR QMOS-AQUAP
ZY33075	14A146	SHANGHAI MAX	COUDES 90° LR 1" Sch 80S 304 L-S	

CHEMICAL COMPOSITION / COMPOSITION CHIMIQUE

HEAT COULEE	%C	%Si	%Mn	%P	%S	%Cr	%Ni										
ZY33075	0.023	0.440	0.990	0.041	0.002	18.260	8.090										

MECHANICAL CHARACTERISTICS - TESTINGS / CARACTERISTIQUES MECANIQUES - ESSAIS

HEAT COULEE	YIELD STRENGTH LIMITE ELASTIQUE		TENSILE STRENGTH RESISTANCE RUPTUR		ELONGATION ALLONGEMENT		HARDNESS DURETE		HEAT TREATMENT HYPERTREMPE		IC TEST CORROSION INTE.		PMI TEST TEST SPECTRO		WELDING FACTOR FACTEUR SOUDAGE	
	0.2% Re Mpa		Rm Mpa		A%		HRC		1040 °C		A262 PRACT.E				Z	
	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT
ZY33075	275		565		51		yes		YES		yes		yes			

ADD ON TESTING(S) / TEST(S) COMPLEMENTAIRE(S)

TESTINGS ESSAIS	REQUIREMENTS SPECIFICATIONS	ORDER REFERENCE REFERENCE COMMANDE	TEST REPORT # PV N°

REMARKS / REMARQUES

DIMENSIONAL & ASPECT / DIMENSION ET ASPECT: GOOD	STATE OF DELIVERY / ETAT DE LIVRAISON: PICKLED AND PASSIVATED
BRAND'S MANUFACTOR SIGLE FABRICANT:	We Certify that delivered products comply requirements's customer. Nous certifions les produits conformes aux spécifications de la commande et de A.M du 24/03/78. Rm <= 760 MPA. A% (Lo=5.65 √So) >16.Rm (A-2) >= 10500.
Manufacturing according to PED 97/23/EC Annex 1 - 4.3	Chemical composition and mechanical characteristics are according to the original's Certificate. This certificate, made from data processing treatment, is applicabled without signing. L'analyse chimique et les caractéristiques mécaniques sont conformes au certificat original. Ce certificat réalisé par traitement informatique est applicable sans signature.
Fabrication conforme PED 97/23/CE Annexe 1 - 4.3	DATE 23/06/2015 FACTORY INSPECTOR EXPERT USINE : P.DESBOIS

SDMS
CONTRÔLE

ACCEPTANCE CERTIFICATE EN 10204/3.1
CERTIFICAT DE RECEPTION EN 10204/3.1

DISPATCH NOTE # 212820 Certificat N° : 212820002
AVIS EXPEDITION N°
YOUR ORDER: 232859 OUR ORDER/NOTRE CDE: 236499
CUSTOMER / CLIENT: STAPPERT FRANCE SAS

PRODUCT / PRODUIT

ITEM POSTE	QTY QTE	DESCRIPTION & SIZE DESIGNATION & DIMENSION	REQUIREMENTS SPECIFICATIONS	GRADE NUANCE
2	6	TES 1" 80S WP304L-S	ASME SA 403/B16.9/B16.25 ASTM A403-07 / ASME SEC.II PART A SA403-07	304L

BASE MATERIAL / MATIERE DE BASE

HEAT NUMBER COULEE	IDENTIFICATION IDENTIFICATION	MATERIAL SUPPLIER FOURNISSEUR	REQUIREMENTS SPECIFICATIONS	PQR QMOS-AQUAP
A48002	13B045	ZHEJIANG INDIA	TES EGAUX 1" Sch 80S WP304/304 L-S	

CHEMICAL COMPOSITION / COMPOSITION CHIMIQUE

HEAT COULEE	%C	%Si	%Mn	%P	%S	%Cr	%Ni										
A48002	0.019	0.520	1.250	0.024	0.001	18.350	8.360										


MECHANICAL CHARACTERISTICS - TESTINGS / CARACTERISTIQUES MECANIQUES - ESSAIS

HEAT COULEE	YIELD STRENGTH LIMITE ELASTIQUE		TENSILE STRENGTH RESISTANCE RUPTUR		ELONGATION ALLONGEMENT		HARDNESS DURETE		HEAT TREATMENT HYPERTREMPE		IC TEST CORROSION INTE.		PMI TEST TEST SPECTRO		WELDING FACTOR FACTEUR SOUDAGE	
	0.2% Re Mpa		Rm Mpa		A%		HRC		1040 °C		A262 PRACT.E		Z			
	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT
A48002	265		590		50		yes		YES	yes	Able to pass	yes				

ADD ON TESTING(S) / TEST(S) COMPLEMENTAIRE(S)

TESTINGS ESSAIS	REQUIREMENTS SPECIFICATIONS	ORDER REFERENCE REFERENCE COMMANDE	TEST REPORT # PV N°

REMARKS / REMARQUES

DIMENSIONAL & ASPECT / DIMENSION ET ASPECT: GOOD	STATE OF DELIVERY / ETAT DE LIVRAISON: PICKLED AND PASSIVATED
<p>BRAND'S MANUFACTOR SIGLE FABRICANT:</p>  <p>Manufacturing according to PED 97/23/EC Annex 1 - 4.3</p> <p>Fabrication conforme PED 97/23/CE Annexe 1 - 4.3</p>	<p>We Certify that delivered products comply requirements's customer. Nous certifions les produits conformes aux spécifications de la commande et de A.M du 24/03/78. Rm <= 760 MPA. A% (Lo=5.65 \So) >16.Rm (A-2) >= 10500.</p> <p>Chemical composition and mechanical characteristics are according to the original's Certificate. This certificate, made from data processing treatment, is applicabled without signing. L'analyse chimique et les caractéristiques mécaniques sont conformes au certificat original. Ce certificat réalisé par traitement informatique est applicable sans signature.</p> <p>DATE 23/06/2015 FACTORY INSPECTOR EXPERT USINE : P.DESBOIS</p> 