

**MATERIAL FILE**  
**DOSSIER MATIERES**

He Vessel

317111-JLA-703-001 rev P

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-703-008	He Vessel neck S/A	see next board
317111-JLA-703-013	703-013	63106-62330-63105
317111-JLA-703-020	703-020	62368
317111-JLA-703-021	703-021	customer supply
317111-JLA-703-025	703-025	62329
317111-JLA-703-039	703-039	62317
317111-JLA-703-040	703-040	62325-62326-62327-62328
317111-JLA-703-041	703-041	62317
317111-JLA-703-042	703-042	62220
317111-JLA-703-046	703-046	62366-62331-63099
317111-JLA-703-048	703-048	62220
317111-JLA-703-049	703-049	62317
317111-JLA-703-050	703-050	62367
317111-JLA-703-051	703-051	63636
317111-JLA-703-052	703-052	62060
317111-JLA-703-055	703-055	46602
317111-JLA-703-065	703-065	62429
	9026	62329

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-703-020	703-020	60983
317111-JLA-703-023	703-023	63636
317111-JLA-703-024	703-024	62330
317111-JLA-703-053	703-053	63636
317111-JLA-703-054	703-054	62330
317111-JLA-703-018	703-018	63636 / 62411
317111-JLA-703-065	703-065	62429

**MATERIAL IDENTIFICATION**  
**Identification matières****Welding wires**

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



81154/31649

**OUTOKUMPU**

**CERTIFICATE - ZEUGNIS - CERTIFICAT**


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

Business Unit / QCM  
 Avesta Works / Johan Nordström

Date Datum Date  
 25-Apr-2013

Load, Ladung, Charge No Acknowledged ID, Bestätigung, Commande ID  
 FR/FR30-0103 6610/320827

Your ref. Ihre Ref., Votre ref 206375/NB	Requirements, Anforderungen, Exigences <b>ASTM A 240-11a</b> <b>ASME SEC II PART A SA-240/SA-240M 2011a</b> <b>EN 10088-2:2005</b> <b>EN 10028-7:2007</b> <b>AD 2000 W2, W10 &amp; EN 10028-7</b> <b>NACE MR0175/ISO 15156-2009</b> <b>EN ISO 9444-2 / ASTM A480M</b>
Buyer, Besteller, Acheteur <b>OUTOKUMPU SAS</b> <b>100, RUE PETIT</b> <b>FR FR-75165, PARIS CEDEX 19</b> <b>FRANCE</b>	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>SDMS n° 60337</b> </div>
Consignee, Empfänger, Lieu de livraison <b>OUTOKUMPU SAS</b>	

Mark of Manufacturer Zeichen des Lieferwerkes Signe de producteur <b>OUTOKUMPU</b>	Process Erschmelzungsart Mode de fusion <b>E+AOD</b>	Inspector's stamp Zeichen des Sachverständigen Poison de l'expert 	Grade, Werkstoff, Nuance <b>Outokumpu 18-8L</b> <b>TYPE 304</b> <b>TYPE 304L</b> <b>1.4301</b> <b>1.4307</b>
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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 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	%	%	HB
Min	+20	230	260	520	45	40	
Max				700			201
F T	+20	321	375	630	54	55	178
B T		316	369	620	54	55	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.



*Handwritten signature*

Outokumpu Stainless AB Telephone: +46 (0)228 814 77  
 Business Unit Special Coil Fax: +46 (0)228 813 18  
 BOX 74, S-774 22 AVESTA V.A.T no: SE558001874801  
 SWEDEN  
 Regoffice: Stockholm SWEDEN, Regno: 558001-8748

This material is found to comply with order requirements  
*Mats Hjelm*  
 Mats Hjelm  
 Authorized Inspector



N<sup>o</sup> Cde: 92137/31838

**outokumpu**  
stainless steel & high performance alloys



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

Invoice No.  
Rechnung Nr.  
N<sup>o</sup> du certificat  
6610/1354655  
Page  
Seite  
Page  
1/1

Business Unit / QCM      Date Datum Date      Load, Ladung, Charge No      Acknowledged ID, Bestätigung, Commande ID  
Avesta Works / Johan Nordström      27-Sep-2013      FR/FR30-0198      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		SDMS n° 60983	
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 Poicon 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 Schmelz-Lot Nr Coulée n° - Lot No	Sbs 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 - Prüfergebnisse - 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	%	%	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  
Business Unit Special Coil  
BOX 74, S-774 22.AVESTA  
SWEDEN  
Regoffice: Stockholm SWEDEN, Regno: 556001-8748

Telephone: + 46 (0)228 814 77  
Fax: + 46 (0)228 813 16  
V.A.T no: SE568001874801

This material is found to comply with order requirements

*Joakim Johansson*  
Joakim Johansson  
Authorized Inspector



A06 CUSTOMER : LE METAL CENTRE  
 A07 P.O NUMBER : 960680  
 B02 STEEL GRADE : TP316L/1.4401/1.4404  
 B01 GOODS : SEAMLESS STAINLESS STEEL PIPE  
 B02 SPECIFICATION : ASTM A312/EN 10216-5 TC1

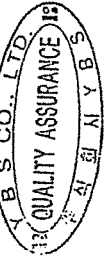
# MILL CERTIFICATE OF TEST

PED Certificate no:07-202-1326WZ-1669/12/ISO 9001:2008/KS Q ISO 9001:2009:108K00542  
 A03 CERT. NO. : TS130829-62  
 (According to EN 10204 TYPE 3.1)

**YBS CO., LTD.**  
 #1171 Jisa-Dong,  
 Gangseo-Gu, Busan, Korea  
 Tel. +82-51-831-1586

807 Heat No.		C71-C92 Chemical Composition (%)										Z05-Z99 Additional Remarks:													
		C	Si	Mn	P	S	Cr	Ni	Mo	Ti	N	1. Country of Origin : The Republic of Korea.	2. 100% PMI	3. No weld repair											
Spec	Min	-	-	-	-	-	16.50	10.00	2.00	-	-														
	Max	0.030	1.00	2.00	0.040	0.015	18.00	13.00	2.50	-	0.11														
Ladle Analysis	J1304-429	0.015	0.33	0.80	0.031	0.001	16.58	10.08	2.06	-	0.07														
Product Analysis		0.019	0.38	0.83	0.035	0.006	16.63	10.12	2.09	-	0.07														
807 Batch No.		B 08 Quantity										Non-destructive Testing													
		809 x 810 x 811 Size		W.T		Q'ty(Pcs)		W't(kg)		Total Length (M)		D 03 Eddy Current Test Acc to ASTM E426 (ISO 10893-1)		D 04 Ultrasonic Test Acc to ASTM E213 (EN 10246-7)		D 02 Hydrostatic Test Acc. to ASTM A1016 (EN10216-5)		C 54 Intergranular Corrosion Test. Acc to ASTM A262-E (ISO 3651-2 : A)							
C130318045		1" x 80S / 166205		-		8		162		49.28		GOOD		/		/		GOOD							
807 Test No.		Tensile Test (ISO 6892-1)										C 52 Flaring Test A999 (ISO 8493)		C 55 Mechanical Properties Charpy Impact Test (ISO 148-1)											
		C12 T.S (MPa)		C11 Y.S (MPa) Rp 0.2%		C11 Y.S (MPa) Rp 1.0%		C13 E.L (%) G.L: 50mm A C02, * L		C 30 Hardness Test (HRB)		C 53 Grain Size (ISO 643)		C 50 Flattening Test A999 (ISO 8492)		C 56 Ring Tensile Test (ISO 8496)		C 02 *		C 40 **		C 41 Min 600)		C 42 C 43 Min 600)	
Spec		Min		190		225		40		-		A999		/		GOOD									
Max		690		-		-		-		90		-		GOOD		/									
L79		575		245		285		55		73.7		/		GOOD		/									

Z 01 We here by certify that the material described above has been tested and complies with the terms of the order contract.  
 "Approved acc. to AD 2000-Merkblatt W0 and certified acc. to PED (97/23/EC) by Certification Body for pressure Equipment of TÜV NORD System GmbH & Co., KG (notified body, re. no:0045)."



*Jung-Pil, Seo*


Manager of Quality Assurance Team  
 DATE : 29-Aug-2013

YBS CO., LTD.

cd. 94007/32063  
 62060  
 A4

Inspection  
 02/08/14  
 YBS

<b>ACERINOX EUROPA</b> <small>FABRICA DEL CAMPO DE GIBRALTAR PALMONES (LOS BARRIOS) TFO. (34) - 956 62 93 00 FAX. (34) - 956 62 93 11 P.O. BOX 83 11370 LOS BARRIOS (CADIZ)</small>	 <small>by Accredited Body</small>	<h1 style="margin:0;">INSPECTION CERTIFICATE</h1> <h2 style="margin:0;">CERTIFICAT D'INSPECTION</h2>	3.1
ACCORDING TO <b>EN 10204</b>		CERTIFICATE N° <b>F0 2014 877345 40002*</b> <small>* CERTIFICAT</small>	

<b>CUSTOMER</b> <small>CLIENT</small> <b>JACQUET SAS</b> <small>Rue Michel Jacquet BP 61.69802 SAINT-PIERRE CEDEX FRANCIA</small>	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>N° JACQUET</b>  <b>091344</b> </div>	<b>OUR ORDER N°</b> <small>NOTRE N° CD</small> <b>RW 549</b>	<b>YOUR ORDER N°</b> <small>VOTRE N° COM</small> <b>76687 REV 01</b>
<b>TRADE MARK</b> <small>SIGLE DU PRODUCTEUR</small> 		<b>INSPECTOR'S STAMP</b> <small>POINÇON DE L'INSPECTEUR</small>	<b>STEELMAKING PROCESS</b> <small>PROCEDE D'ELABORATION</small> <b>A.O.D.</b>


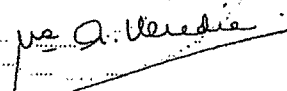
<b>REQUIREMENTS</b> <small>EXIGENCES</small> <b>EN 10088-2:2005, EN-ISO-18286(Thickness Tolerances)</b> <b>ASTM A240Ed12a/A480Ed12-ASME SectII SA240/SA480Ed13</b> <b>EN 10088-2:2005 EN-ISO-18286(Thickness Tolerances)</b> <b>ASTM A240Ed12a/A480Ed12-ASME SectII SA240/SA480Ed13</b>	<b>INTERGRANULAR CORROSION</b> <small>CORROSION INTERGRANULAIRE</small> <b>ASTM-A-262 PRACTICA E</b> <b>ASTM-A-262 PRACTICA E</b>	<b>GRADE</b> <small>MATIERE</small> <b>Acx 150 1.4301</b> <b>Acx 150 TP-304</b> <b>Acx 150 1.4307</b> <b>Acx 150 TP-304L</b>	<b>FINISH</b> <small>FINI</small> <b>1D</b> <b>1D</b> <b>1D</b>
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COIL / BOX <small>BOULE/CAISSE</small>	CONTENT <small>CONTENU</small>	DIMENSIONS <small>DIMENSIONS</small>			MARKS <small>MARQUE</small>	QUANTITY <small>QUANTITE</small>	TEST N° <small>ECHANTILLON</small>	FINISH <small>FINI</small>
		THICKNESS <small>EPAISSEUR</small>	WIDTH <small>LARGEUR</small>	LENGTH <small>LONGUEUR</small>				
C1038A	01HOLZ DB	30,000	1500,00	6000,00	15	1	01HOLZ D	C

SDMS n° 62218 1/3

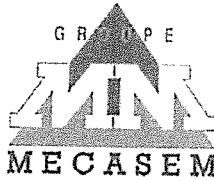
CHEMICAL ANALYSIS / COMPOSITION CHIMIQUE (%)											
HEAT N° <small>COULEE</small>	C	CR	MN	N	NI	P	S	SI	CO		
HOLZ	0,024	17,590	1,764	0,079	8,030	0,035	0,001	0,414	0,122		

MECHANICAL PROPERTIES / CARACTERISTIQUES MECANIKUES											
TEST N° <small>ECHANTILLON</small>	PROBE SITE	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	78,00	57,15			

<b>REMARKS / REMARQUES</b> The delivery is in accordance with the order Temperatura de hipertemple entre 1050 y 1100° C.	<b>SURFACE AND DIMENSIONAL CONTROL</b> <small>INSPECTION DIMENSIONNELLE ET VISUELLE</small> <div style="text-align: center; padding: 20px;"> <b>SATISFACTORY</b>  <b>SATISFAISANT</b> </div>
 <b>SDMS</b> C. DREYER Inspection	<div style="text-align: center;">   <b>A. Heredia</b> </div>



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 E (1/1)

SDMS n° 62218

**ESSAIS MECANQUES / MECHANICAL TESTS**

**Client:** SDMS **N° Commande:** 94667  
*Customer* ZI Les Condamines RN 532 BP 4 38160 SAINT-ROMANS *Order Nr*  
**Repère client:** Coulée HOLK / Affaire 32107 **Repère labo:** 0007 E  
*Customer reference* *Internal reference*  
**Objet:** Tôle ép. 30 mm  
*Object*  
**Matériau de base:** 304 L  
*Parent material*  
**Spécification:** ASME SA 240  
*Specification:*

**RESULTATS / RESULTS**

<b>FLEXION PAR CHOC</b> <i>Impact test / Kerbschlagversuch</i>		<b>Machine d'essai:</b> S-KVU-003 <i>Testing device</i>		<b>Type:</b> Charpy V-notch <i>Shape</i>		<b>Mini imposé:</b> / <i>Mini required</i>		
<b>Energie nominale: 300J</b> <i>Nominal energy</i>		<b>Méthode d'essai:</b> ASTM E 23 (#) <i>Standard / Norm</i>		<b>Dimensions (mm):</b> 10 x 10 <i>Dimensions (mm):</i>		<b>Moy. Imposée:</b> / <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	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 de la compétence des laboratoires pour les seuls essais couverts par l'accréditation. 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

**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	<del>NON CONFORME</del> <del>NO CONFORM</del>
---------------------	--

CONTROLEUR / INSPECTOR :

Date : 25/11/14

Visa :

*[Signature]*  
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

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/ Abnahmeprufzeugnis 3.1/ Inspection certificate 3.1

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

EN 10 204 3.1

Datum / Datum / Date

**310080215-1**

05.05.2014

Narocnik / Kunde / Customer

N° JACQUET:

JACQUET SAS

090777  
090772

RUE MICHEL JACQUET BP 61  
69802 ST-PRIEST CEDEX

Narocilo / Bestellung Nr. / Order No.

76507 disp. 38510

Dobavni list / Lieferschein / Despatch note

310080215 z/vornj/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 Herstellwerks  
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 Waltztafel 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% LP <sub>0.2</sub>	Nap. tecenja Dehn grenze Yield 1% LP <sub>1</sub>	Nat. trdnost Zugfestigkeit Tensile str. LP <sub>2</sub>	Raztezek / Bruchdehnung / Elongation AS % A50 % A80 %	Kontrakt. Einschnurung q	Trdota Harte Hardness HB	Zilavost / Kerbschlag / Impact pri / smer bei / fage J	St. vzorca Probe Nr. Sample No.
Zahteva Anforderung.	MIN MAX	210 250	250 250	520 700	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 / Längs / Longitudinal P - Precno / Quer / Transverse Upogib / Biege / Bend : 0.5a

04/12/14  
SDMS  
C. DREYFUS  
Inspection

ACRONI Zg in podpis  
Richterstempel und Unterschrift  
ACRONI, d.o.o. stamp and signature  
Cesta Borisa Kidriča 44, 4270 Jesenice  
Član skupine SSI  
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  
Telefon: +386 4 584 10 40  
Telefax: +386 4 584 10 68  
http://www.acroni.si  
E-mail: miran.pirnat@acroni.si

SDMS n° 62220

2/4

## Potrdilo o prevzemu 3.1/ Abnahmeprufzeugnis 3.1/ Inspection certificate 3.1

Sl./Nr./No. 310080215-1

Stran/Seite/Page 2/2

### Kemická analýza / Chemische Zusammensetzung / Chemical Composition

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

Opomba / Bemerkungen / Remarks

N° JACQUET :  
090771  
090772

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). Gegenzeichnungsvorzicht 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

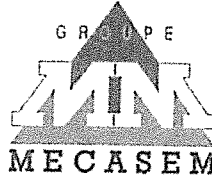
GR - 320 LAB: NO CONTAMINATION

Es wird bestätigt, daß die Lieferung den Bestellanforderungen entspricht.

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

Zig in podpis  
Firmenstempel und Unterschrift  
Stamp and signature 72  
ACRONI, 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** SDMS n° **62220**  
N° EMM/LY/15/ 0007 B (1/1)

**ESSAIS MECANIKES / MECHANICAL TESTS**

3/4

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

**RESULTATS / RESULTS**

<b>FLEXION PAR CHOC</b> <i>Impact test / Kerbschlagversuch</i>		<b>Machine d'essai:</b> S-KVU-003 <i>Testing device</i>		<b>Type:</b> Charpy V-notch <i>Shape</i>		<b>Mini imposé:</b> / <i>Mini required</i>		
<b>Energie nominale:</b> 300J <i>Nominal energy</i>		<b>Méthode d'essai:</b> ASTM E 23 (#) <i>Standard / Norm</i>		<b>Dimensions (mm):</b> 10 x 10 <i>Dimensions (mm):</i>		<b>Moy. Imposée:</b> / <i>Average required</i>		
N°	T (°C)	Prélèvement (2) <i>Sample position Probenlage</i>	J	S (cm <sup>2</sup> )	J / cm <sup>2</sup>	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

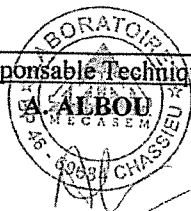
(2) SL : sens de laminage (longitudinal / längs) ; ST : sens travers laminage (transverse / quer) ; P : peau (surface) ; E : épaisseur (thickness / Dicke)

**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 de la présence des laboratoires pour les seuls essais couverts par l'accréditation. 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

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 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

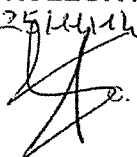
CONCLUSION :

CONFORME CONFORM	<del>NON CONFORME</del> <del>NO CONFORM</del>
---------------------	--

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/ Abnahmeprufzeugnis 3.1/ Inspection certificate 3.1

Narocnik / Kunde / Customer

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

EN 10 204 3.1

Datum / Datum / Date

310083234-1

19.06.2014

QUARTO DEUTSCHLAND GMBH

BAHNSTRASSE 38  
D-44793 BOCHUM

DMS n° 62221

Narocilo / Bestellung Nr. / Order No.

10003 disp.39315

Dobavni list / Lieferschein / Despatch note

310083234 z/vom/from 12.06.2014

GERMANY

Izdelek / Erzeugnis / Product

BLECH

Vrsta pecl / 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

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

W.Nr.1.4301/1.4307

1D

EN ISO 3651-2: OK

AD2000 Merkblatt W10 Ed. 2008

X2CrNi18/9

AD2000 Merkblatt W2 Ed. 2011

W.Nr.1.4307

### Obseg dobave / Umfang der Lieferung / Extent of material delivery

Poz. Pos. Item	St. sarze Schmelzen Nr. Heat No.	St. plosce Walfztafel Plate No.	Teza neto Gewicht Weight kg	Dimenzije Abmessungen Dimensions mm	St. kom. Stückzahl 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

Sl.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 % A50 % A80 %	Kontrak. Einschnurung q %	Trdota Harte Hardness HB	Zilavost / Kerbschlag / Impact pri /smer bei /age J	al/posit. °C
Zahteve Anforderung.	MIN MAX	210	250	520	45		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

Stamp and signature  
C. DREVATON

ACRONI 1972  
Zig in podpis  
ACRONI d.o.o.  
Cesta Borisa Kidriča 44, SI-4270 Jesenice  
Stamp and signature  
Član skupine SSI  
Member of Slovenian Steel Group

## Potrdilo o prevzemu 3.1/ Abnahmeprüfzeugnis 3.1/ Inspection certificate 3.1

Sl./Nr./No. 310083234-1

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
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° 62 221

### Opomba / Bemerkungen / Remarks

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

- 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.

20690/20691/20692/20693/20694

ACRONI

ACRONI d.o.o. in podpis  
Cesta Borisa Kidriča 44, 4270 Jesenice  
Član skupine in podpis  
Member of Slovenian Steel Group

19/72

*[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 318711ind B

Références des appareils utilisés / *Reference of used apparatus* : .....

M 61

**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 <del>NO CONFORM</del>
---------------------	---------------------------------------

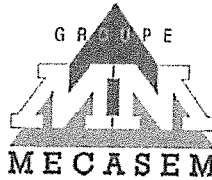
CONTROLEUR / INSPECTOR :

Date : 25/11/11

Visa :

SDMS  
C. DREVETON  
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  
*Customer* ZI Les Condomines RN 532 BP 4 38160 SAINT-ROMANS  
**N° Commande:** 94667  
*Order Nr*

**Repère client:** Coulée 288633 / Affaire 32157  
*Customer reference*  
**Repère labo:** 0007 A  
*Internal reference*

**Objet:** Tôle ép. 12 mm  
*Object*

**Matériau de base:** 304 L  
*Parent material*

**Spécification:** ASME SA 240  
*Specification:*

**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 (cm <sup>2</sup> )	J / cm <sup>2</sup>	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 (Mid-Thickness)	181	0,80	/		2,09		90
3	-269		201	0,80	/		2,32		90

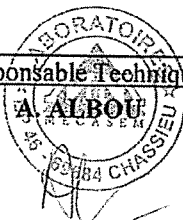
(2) SL : sens de laminage (longitudinal / längs) ; ST : sens travers laminage (transverse / quer) ; P : peau (surface) ; E : épaisseur (thickness / Dicke)

**Observation(s) :**

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

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

Responsable Technique



Date Emission : 29/01/2015  
Emission date

L'accréditation du COFRAC atteste de la compétence des laboratoires pour les seuls essais couverts par l'accréditation. 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: +33(0)163-3021 - FAX: +33(0)163-202286  
 C.A. N° 100.000.000 RUR INT "S"  
 VAT: 02187360867  
 VAT: 000571328076 - R.E.A. n. A050474

ENREGISTRÉ EN FRANCE  
 N° 150 150 150  
 DÉPOSÉ EN FRANCE  
 N° 150 150 150

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

085170

(A06) CLIENT : COGNE FRANCE S.A.  
 (A07) N. DE LA COMMANDE DU CLIENT : CDA50575  
 (A01) USINE PRODUCTRICE : AOSTA, VIA PARAVERA, 16... ITALIA  
 (A05) AUTEUR DU DOCUMENT : SERVICE QUALITE  
 (A08) NUMERO DE LA COMMANDE DE L'USINE 25184936 / 10 (A04) SIGLE DU PRODUCTEUR : COGNE  
 LES PRODUITS CERTIFIES SONT CONFORMES A LA COMMANDE

SPECIFICATION INTERNE : STOCKBARREW2  
 (E01) PRODUIT : 3333 PEL Eciouté ROUNDS TOLLERANCE : ISOK11 AD2000  
 (B03) FINITION SUPERFICIELLE :  
 (B04) ETAT DE LIVRAISON : RS HYPERTREMPE  
 (B11) DIMENSIONS DU PRODUIT (MM) : AISI 304/304L EN 1.4301/1.4307 (B12) LONGUEUR DU PRODUIT (MM) : 04000 / 06200  
 (B02) NUANCE : 472732 NUANCE INTERNE : F304L1 IMCO  
 (B07) IDENTIFICATION N. DE COULER : 1.4301 (B07) IDENTIFICATION N. DE LOT : 514210  
 (B06) MARQUAGE DU PRODUIT : 421

LE PRODUIT EST CONFORME A LA SPECIFICATION ET A LA REGLE AD2000-MERKBLATT W0/W2.  
 NORMES DE REFERENCE: EN10088-3, 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 ANALYSE CHIMIQUE ET PROPRIETES MECANIQUES: ASTM A182, ASME SA182(10).  
 NORMES DE REFERENCE CONCERNANT SEULEMENT L'ANALYSE CHIMIQUE: EN10222-5, ASTM A484, ASTM A403, ASTM A314, AMS-QQ-S-763B.  
 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  
 OBTENU C Si Mn P S  
 ELEMENT OBTENU 0,017 0,31 1,29 0,034 0,027 0,086 0,004 18,05 0,30 Ni  
 0,40 0,16 CO 0,16

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

ESSAI DE RESILIENCE AU ETAT DE FOURNITURE  
 Lot de control - Poids : 020000549065 - 3.784 KG  
 SPECIFICATION EN ISO 148-1-KV2  
 (C40) EPROUVETTE KV 20  
 (C03) TEMPERATURE D'ESSAI °C J  
 UNITÉ DE MESURE 264 262 268  
 OBTENU 261 267 268 262 261 255 259

SDMS n° 62317

15/11/05  
 S. LAMAS  
 C. DREYFUS  
 Inspection

Cde 94587/32157

112



TEL : 33 04 65 36 21 - FAX : 33 30 22 86  
 C.F. : 100.009.000 EUR  
 C.A. : 02187280857  
 VAT : 1100571320076 - R.E.A. n. AO 50476

entreprises 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

UNITE DE MESURE OBTENU	RM		MPA		RP02		MPA		A5		%		Z		%		RP1		MPA		
	MPA	KSI	MPA	KSI	MPA	KSI	MPA	KSI	MPA	KSI	MPA	KSI	MPA	KSI	MPA	KSI	MPA	KSI	MPA	KSI	
	604	87	264	38	5.0 D	72,8	10,5	72,8	10,5	66,9	9,6	66,9	9,6	304	43,8	304	43,8	304	43,8	304	43,8
	605	87	267	38	5.0 D	72,2	10,3	72,2	10,3	65,5	9,3	65,5	9,3	293	42,2	293	42,2	293	42,2	293	42,2
	595	86	266	38	5.0 D	74,0	10,6	74,0	10,6	66,8	9,4	66,8	9,4	302	43,4	302	43,4	302	43,4	302	43,4
	598	86	261	38	5.0 D	74,2	10,6	74,2	10,6	67,5	9,5	67,5	9,5	296	42,6	296	42,6	296	42,6	296	42,6

085170

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

ESSAI DE TRACTION  
 Lot de control - Poids : 020000549065 - 3.784 KG  
 SPECIFICATION

ASTMA370-EB-0.5"SPEC

UNITE DE MESURE OBTENU	RME		KSI		RP02B		KSI		ZB		%		AL2B		%		
	KSI	MPA	KSI	MPA	KSI	MPA	KSI	MPA	KSI	MPA	KSI	MPA	KSI	MPA	KSI	MPA	
	87	12,0	38	5,3	74,2	10,5	74,2	10,5	4,0 D	70,5	9,8	70,5	9,8	70,5	9,8	70,5	9,8
	87	12,0	37	5,2	76,8	10,8	76,8	10,8	4,0 D	70,8	9,8	70,8	9,8	70,8	9,8	70,8	9,8
	86	11,9	38	5,3	74,7	10,6	74,7	10,6	4,0 D	70,6	9,8	70,6	9,8	70,6	9,8	70,6	9,8
	86	11,9	38	5,3	75,6	10,6	75,6	10,6	4,0 D	68,8	9,6	68,8	9,6	68,8	9,6	68,8	9,6

(C02) ORIENTATION DE L'EPROUVETTE: L

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 ULTRASONNS 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(RoHS) 2003/11 - 2005/618 ET PED 97/23/CE.  
 LE MATERIEL EST EXEMPT DE TOUTES COMPOSES DU MERCURE ET/OU LA CONTAMINATION AU RADIUM AU MOMENT DE L'EXPEDITION ET A ETE PRODUIT SANS  
 L'UTILISATION DE SUBSTANCES APPAUVRISSENT LA COUCHE D'OZONE DE CLASSE I ET II.  
 MARQUAGE: MARQUAGE DU PRODUCTEUR, N. WERKSTOFF, N. COULÉE, 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 'ECROUTEES'  
 RECTIFIEES' ET FONDRES METALLIQUES ATOMISEES), CERTIFIE PAR ISO.  
 TOUTES LES NORMES MENTIONNEES SONT EN ACCORD AVEC LES DERNIERES REVISIONS.  
 Pays d'origine: Italie. le matériel est conforme aux normatives FAR DFARS 252.225-7014 AUI 1.

SOMS n° 62317

(201) DATE 24.07.2014

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

42



# 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

Cdc 94593132157

SDMS n° 62 325

Client		NOXON STAINLESS B.V.	
Contract / PI No.		MF20140326	
PO No.		14032612	
Product / Produkt		STAINLESS STEEL SEAMLESS FITTINGS (BUTTWELD) EDELSTAHL NATHULOSE FITTINGEN	
Item #	Quantity	Size / Abmessung	
		L	Menge
20	30	1 1/2"	SCH10S
21	500	2"	SCH10S
22	250	2"	SCH10S
23	150	2"	SCH40S
24	91	4"	SCH10S
25	59	4"	SCH10S
26	25	2"	SCH10S
Chemical Composition / Chemische Zusammensetzung (Acc. to insp. cert of steel manufacturer) (Gemäss Vormaterialzeugnis)			
Heat No./Schmelz Nr.	C max	P max	S max
WP304/304L-S	0.030	0.045	0.030
140307T06	0.019	1.34	0.001
13C050908	0.018	1.44	0.002
13A050906	0.022	1.43	0.004
13C050908	0.018	1.44	0.002
130909H06	0.021	1.45	0.002
140306T08	0.025	1.34	0.001
H138030301	0.016	1.38	0.002
Mechanical Test / Mechanischer Test			
Heat No.	YS (Mpa)	EL (%)	Hardness
Schmelz Nr.	Zug Festigkeit	Dehnung	Härte
140307T08	600	59	HRB=79
13C050908	585	57	HRB=75
13A050906	585	56	HRB=77
13C050908	605	59	HRB=75
130909H06	595	55	HRB=78
140306T08	595	57	HRB=81
H138030301	550	51	HRB=76
MARKING / MARKIERUNG: MAX-SPEC-GRADE-CLASS-NPS-SCH-HEAT NO.-QC'S NAME			
Remarks / Bemerkungen			

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 provisions of EN Directive 97/23/EC Annex 1 paragraph 4.3

Wir, Shanghai Max Fittings Co., Ltd, übernehmen unsere eigene Verantwortung, 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 Übereinstimmung mit unserer eigenen Verantwortung, dass die aufgeführten Materialien gemäß den Regeln der Europäischen Richtlinie 97/23/EC Annex 1 § 4.3.

Q.A. Manager: [Signature]  
Date: 16 August 2014

- 1. PMI test / Vverwechslungsprüfung
- 2. Visual inspection / Beschligung
- 3. Dimension / Mass
- 4. Welding Bevels / Schweissphase Gemäß
- 5. Base Material / Vormaterial
- 6. Steel Making Process/Steel productie Proces
- 7. Manufacturer's mark / Herstellerzeichen



SDMS  
C DEVISION  
Inspection

026-33

ISO9001:2008

**GTAI** 巨泰特钢有限公司  
JUTAI SPECIAL STEEL CO., LTD.

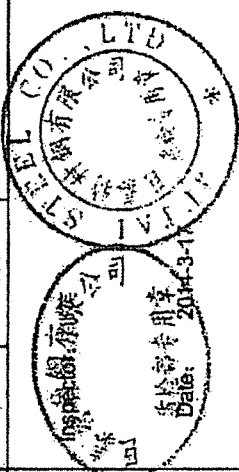
EN 10204 3.1

PED97/23/EC

**INSPECTION CERTIFICATE**

Cer.No: Gtai20140317002

客户 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 A5A312-09							
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							
牌号 Grade	规格 O.DxW.T(mm) 60.33X3.91	长度 Length (Mtrs) 5-7	米数 Meters /	支数 Pieces 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	晶粒度 Intergranular Corrosion
Spec.	Min.					18.00	8.00				HRB≤90	PASSED
	Max.	0.035	2.00	0.045	0.030	1.00	20.00	13.00				
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	断面收缩	扩口试验								
Tensile Strength (Mpa)	Yield Strength (Mpa)	Elongation%	Flattening Test	Flare Test	晶粒度 Grain Size	ET	UT	UT	UT	UT	UT	UT
605	295	59	OK	OK	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



SDMS n° 62325

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

地址: 浙江省龙港市金岗工业园区巨泰路1号 ADD:Jing-gang Industrial Park,1 Julai Road,Longquan City,Zhejiang,China  
 E-MAIL: sales@julaigroup.com

7146133996

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



PED/97/23/EC Cert. No.: MMS-STF-1  
ISO 9001:2008

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

交货情况 Extend of Material Delivery:

NO.	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: [%]

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	0.019	0.48	1.18	0.021	0.001	18.07	8.11			
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	抗拉强度 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	射线检测 Radiography Examination	/
渗透检测 Penetration Examination	/	晶间腐蚀 Corrosion Test	ASTM A262 Practice E
无损检测 PMI	PASSED	硬度测试 Hardness Test	PASSED

D. 备注 Remarks:

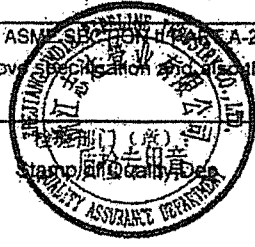
NACE MR-0175 and NACE MR-0103 2010 Material free from mercury and radiation contamination ASME SECTION VIII DIVISION 2 A-2010

We hereby certify that the material has been made and tested in accordance with the above requirements 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



SDMS n° 62326

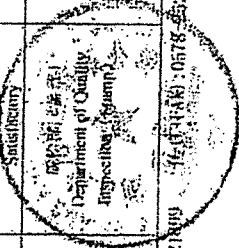
2/2

产品质量证明书  
INSPECTION CERTIFICATE (EN 10204/3.1)

合同编号 (Contract No.): KL110120702-1  
客户 (Customer): 浙江嘉善管业有限公司  
证明书编号 (Certificate No.): KL-008140-404-N3

浙江嘉善管业有限公司  
Zhejiang Kanglong Steel Industry Co., Ltd

产品名称 Stainless Steel Seamless Pipe		产品规格 Product Specification		交货状态 Supply Condition		规格/重量 Solution-Annealed 规格 (kg) 重量 (kg)	
牌号 Heat No.	规格 Steel Grade	批号 Batch No.	尺寸/外径-壁厚-长度 Size (OD) x (t) (mm)	数量/支 Pieces			
S32400	P12041	KL1404042076KL140404208 KL1404042096KL140404210	20.75x3.91/68.7x3.91 60.3x5.54/38.9x5.49		8736.00kg/8780.00kg 8600.00kg/92140.80kg		
化学成分 Chemical Composition (%)							
C	Si	Mn	P	S	Cr	Ni	V
0.021	0.52	1.23	0.019	0.005	18.12	8.06	
拉伸试验 Tensile Test (纵向 Longitudinal) 等级 (AVRT)							
屈服强度 Yield Strength		抗拉强度 Rm (N/mm²)		伸长率 Elongation A%		冲击功 KV (J)	
275	580	590	50	50		/	
外观、尺寸 Visual, Shape and Dimension		厚度公差 (HUB)		晶粒度 Grain Degree		晶间腐蚀 Intergranular Corrosion Test	
注: 符合等级 Good		72		7		ASTM A262-2002 Satisfactory	
<p>我们声明: 上述所列 LROA 按照 PED 证书号: QAC6005863(A) 以下的过程进行生产, 其结果是符合要求的。 We hereby certify that the pipes above have been manufactured in the processes approved by LROA according to PED/07/2013/ECT the certificate No. QAC6005863(A). The results of inspections and tests satisfy the requirements of customer. Steel Making process: cold formed.</p>							
试验结果 Test Results		试验方法 Test Method		试验日期 Test Date		试验地点 Test Location	
合格 Pass		符合标准 Conform to Standard		2014/01/20		浙江嘉善管业有限公司 Zhejiang Kanglong Steel Industry Co., Ltd	
无损检测 Non-destructive Testing		无损检测 Non-destructive Testing		无损检测 Non-destructive Testing		无损检测 Non-destructive Testing	
合格 Pass		合格 Pass		合格 Pass		合格 Pass	
水压试验 Hydraulic Testing		水压试验 Hydraulic Testing		水压试验 Hydraulic Testing		水压试验 Hydraulic Testing	
合格 Pass		合格 Pass		合格 Pass		合格 Pass	
环刚度试验 Ring Tensile		环刚度试验 Ring Tensile		环刚度试验 Ring Tensile		环刚度试验 Ring Tensile	
合格 Pass		合格 Pass		合格 Pass		合格 Pass	



电话 (TEL): 0578-2521888 2521899 2521898 2521887 2521897

地址: 浙江嘉善管业工业园区 351731 号  
Add: No.356, Lygn Avenue, Shuang Industrial Zone, Lishui City, China





MILL TEST CERTIFICATE

SDMS n° 62327

4/2

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 品名/Article: 管件/Fittings 技术条件/Specification: ASME B16.9 材料/Material: ASTM/ASME A/SA403-WP304/304L-S 熔炼方法/Pre-material melting: AOD 加工工艺/Workmanship: 冷成型/Cold Forming 交货状态/Delivery Conditions: Solution, de-scaled, pickled and passivated		标识/Marking: o 管件型式 Manufacture's mark: TOPPER Standard: ASTM/ASME A/SA403 ASME B16.9 Sec. II, Part A, Ed. 07 A08 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 无损探伤, 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: 王润洞  
Inspector: 王润洞

日期 2012-7-4  
Date: July 4, 2012  
QUALITY ASSURANCE APPROVAL  
SPECIAL BADGE OF QUALITY TEST  
21. Aug. 2012  
Approved: 杨志岗  
SANTRADE LTD LUERNEL

Signature: C. DREYFUS  
Inspector

SDMS n° 62327

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**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

Cert No. : ST090319-002

Specification : ASTM A312

Delivery Condition : A & P

Steel Grade : TP304L

Appearance : Solution Treated

Goods : SEAMLESS STAINLESS STEEL PIPES

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						
3P0903D2-110		90.3*3.91			70 PCS		2326.8 KG				
Test No.		Mechanical Properties									
		Yield Strength	Tensile Strength	Elongation	Hardness Test	Flaring Test	Flattening Test	Flange Test	Hydrostatic Test		
		Mpa	Mpa	A(%)	HRB				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		Ultrasonic Test		Acc to ASTM A262 E PRACTICE							
Acc to ASTM E426		Acc to ASTM E213									
GOOD		/		/							
Additional Remarks:											
1.Dimension & Surface: OK				2.Country of Origin: China							
3.Hardness acc to Nemo ME170: 101.03				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  
 浙江青山钢管有限公司  
 质量技术部

cde 94593/32157

F106133016



ISO 9001:2000 AD 2000-Merkblatt W0 PED 97/23/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

SDMS n° 6232R

MILL TEST CERTIFICATE TO EN 10204 3.1 ISSUED BY BENEFICIARY

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

L/C No.: DTNLFM624744

Customer:	NOXON STAINLESS BV	<b>Marking:</b> ● 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 90L/R	1 1/2" * 10S	150	12A10405	121230JN003	
2	ELB 90L/R	2" * 10S	250	12A10405	121230JN004	
3	ELB 90L/R	2" * 40S	150	12A10405	121230JN004	
4	ELB 90L/R	3" * 10S	250	1208C182	121230JN005	
5	ELB 90L/R	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 above are in conformity with the requirements of the ordered standards and confirm that all the test results are acceptable. Tested and inspected in place

Wujiang  
China

Date: 2013-05-27

Work inspector:  
卓作武



1310115  
SDMS  
C. DREVILTON  
Inspection

# MILL TEST CERTIFICATE (EN 10204:3.1)

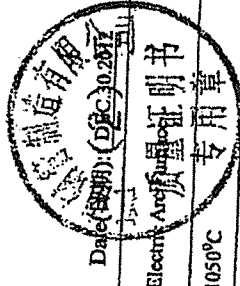
## 质量证明书 (EN 10204:3.1)

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): 121230JND003



No.	Heat No. (炉号)	Grade (钢种)	Elements Specification	Chemical Composition (%) (化学成分)										Steel making process	Electrolytic Annealing (退火)	Date (日期)	Lot No. (炉批号)	
				C	Si	Mn	P	S	Ni	Cr	Ti	Cr	Ti					
1	12A10405	TP304L	Results (批检) Result (Product)	≤0.025 0.023	≤1.00 0.32	≤2.00 1.41	≤0.045 0.039	≤0.030 0.002	8.00-13.0 8.07	18.0-20.0 18.30	18.0-20.0 18.30	18.0-20.0 18.30	18.0-20.0 18.30	18.0-20.0 18.30	1050°C	1050°C		
2	12A10405	TP304L	Results (批检) Result (Product)	0.023 0.023	0.33 0.33	1.38 1.38	0.037 0.037	0.001 0.001	8.06 8.06	18.32 18.32	18.32 18.32	18.32 18.32	18.32 18.32	18.32 18.32	1050°C	1050°C		
Item No.	Size (产品尺寸) (NPS-SCH)	Qty (支)	T.S. (N/mm <sup>2</sup> )	Y.S. (N/mm <sup>2</sup> )	EL. (%)	Intergranular Corrosion test (晶间腐蚀(A262E))	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	≥485	≥170	≥35	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	/	/	/	/						
2	48.3*3.8mm	45	580	235	50	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	/	/	/	/						

SDMS n° 62320

Remarks: (备注)  
AS PER ASTM/ASME A/SAS312-06, A999/A999M-04A, HARDNESS TO NACE MR01-75, I.C. ACC. ASTM A262E  
ET ACC TO E426  
FLATTENING TEST ACC. ASTM A370 100%PMI

1. WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN BEEN MADE IN ACCORDANCE WITH THE RESULTS OF 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.

WENZHOU JIANGNAN STEEL PIPE MANUFACTURING CO., LTD.  
DIRECTOR, TECHNOLOGY (技术部经理)  
ADDRESS: WEST YONGNING ROAD YONGZHONG WENZHOU CHINA  
PHONE: 86-577-86378428/86861557  
FAX: 86-577-86378418

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Cde 94593/32157

F5U6132816

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° 62329



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
	≤0.03	≤1.00	≤2.00	≤0.045	≤0.030	18.0-20.0	8.0-12.0			
88	S32640	0.021	0.52	1.23	0.019	0.005	18.12	8.06		
104	S32640	0.021	0.52	1.23	0.019	0.005	18.12	8.06		
106	S32640	0.021	0.52	1.23	0.019	0.005	18.12	8.06		
130	S32640	0.021	0.52	1.23	0.019	0.005	18.12	8.06		
135	S32640	0.021	0.52	1.23	0.019	0.005	18.12	8.06		
137	S32640	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	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)	
							σ 0.2
88	S32640	275	590	50	72	/	/
104	S32640	275	590	50	72	/	/
106	S32640	275	590	50	72	/	/
130	S32640	275	590	50	72	/	/
135	S32640	275	590	50	72	/	/
137	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:  
Work Inspector

日期: 2014-06-11  
Date

日期: 2014-06-11  
Date

C. DRAYTON  
Inspector





cde 94593/32157

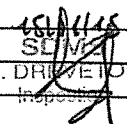



SDMS n° 62330

1/2

**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 - WO 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/2014-15/0218A9								
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	--	--	--						
17	11A247	H	MAX	MAX	MAX	MAX	MAX	13.000	20.000	--	--	--						
			P1	0.025	0.660	1.260	0.024	0.007	8.510	18.300	--	--	--					
			P2	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. DREVEYON Inspector  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

**TUBES COMPANY PVT. LTD.**

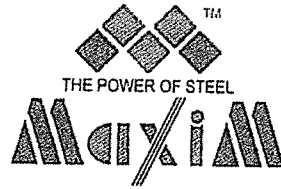
A NORSOK APPROVED & DNV APPROVAL OF MANUFACTURER, AN ISO 9001:2008, ISO 14001:2004,  
BS OHSAS 18001:2007, PED & ADW / AD - 2000 - W0 Certified Company  
MFG. & EXPORTER OF STAINLESS STEEL SEAMLESS & WELDED PIPES | TUBES | U-TUBES  
GOVT. RECOGNISED EXPORT HOUSE

INSPECTION CERTIFICATE										F/QAC/12_REV.01			
<u>CERTIFICATE AS PER EN 10204 - 3.1</u>										T.C.NO :- MTCPL/2014-15/0288A11			
										DATE :- 31.10.2014			
CUSTOMER NAME :- M/s STAPPERT France S.A.S.													
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		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			
<u>CERTIFICATE AS PER EN 10204 - 3.1</u>										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		
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	--	--	--	
15	11A169	H	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	--	--	--
			P2	0.024	0.563	1.178	0.031	0.008	8.256	18.247	--	--	--
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= 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)	--	--	--	--	--	--	--	--	
15	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.

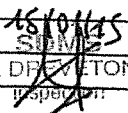
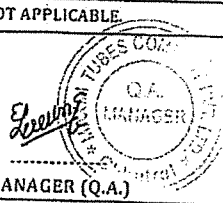
[2] PRODUCT ANALYSIS CARRIED OUT BY MTCPL - FOUND SATISFACTORY.

[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.

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  _____ INSPECTOR'S/SURVEYOR'S SIGN	P.O. ITEM :- COMPLETE	 C. D. FLETCHER 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 94593/32157

**Walzwerke Einsal GmbH**

VAT Reg. No. DE123841325

Walzwerke Einsal GmbH - Post Box 20 - 58765 Nachen/Walzwerke  
**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.

Symbol of Manufacturers: EW  
 Surveyor of Inspection: WEE  
 CE-sign 0045

our works No. AB14-12075	Item 10	Size 14301 Square x 50,00 mm	Weight 1.387 KG
Material Number 1.4301	Standard Grade of Material X5CrNi18-10		1.4301 / 1.4307 / AISI 304 / 304 L
Heat Number 254326	Method of melting: E		

Chemical analysis

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  
 Steelbars, 14301 X5CrNi18-10 hot rolled, DIN EN 10059 tol. 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 %, stamping: WNR/EW/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. 01/2008, AD 2000 data sheet W 2 rev. 02/2008, AD 2000 data sheet W 10 rev. 11/2007, PED 97/23 EG, DIN EN 10998 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 15150 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	PR1114-00845			
<b>Mechanical properties</b>					
Rp 0,2% Mpa	264	258			
Rp 1,0% Mpa	305	299			
Rm Mpa	587	560			
A5%	59,9	58,8			
A50%	59,9				
Z%	63,4				
<b>Impact test</b>					
KCVRT/Longitudinal Jouis	264 / 267 / 202	272 / 268 / 267			
<b>Hardness</b>					
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 21 52 3 02-0 Telefax: 0 21 52 33 21 92

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

24.11.15  
 SDMS  
 C. DRIBETON  
 Inspection

SDMS n° 62358

2/2

<b>Walzwerke Einsal GmbH</b>  VAT Reg. No. DE123841325 Walzwerke Einsal GmbH - Post Box 26 - 40769 Neuss/Walzwerke <b>STAPPERT Deutschland GmbH</b> Postfach 11 11 31 40511 Düsseldorf Deutschland		Inspection Certificate: <span style="float: right;">Page 2</span> DIN EN 10204/3.1	
		No. WZ1214-00725 of 15.12.14	
		Your Order No.: 10-18124BR Shipment No.: VL14-08165 Referenz-Nr.	
		Symbol of Manufacturer: 	Surveyor of Inspection: 
		CE-sign 0345 	
our works No. AB14-12015	Item 10	Size 14301 Square x 90,00 mm	Weight 1,367 KG
Material Number	1.4301		Standard Grade of Material X6C/Ni18-10
Heat Number	254326		1.4301 / 1.4307 / AISI 304 / 304 L
Structure		Method of melting: E	
Structure			
Grain size 8			
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 32 3 32-0 Telefax: 0 23 52 33 21 92	<b>Walzwerke Einsal GmbH</b> QA-department Feldmann / Seeger Surveyor of Inspection
--	--

cde 94565/32157

SDMS n° 62366  
N-Nr-N 1310267417-01 V01

**aperam**  
Aperam - Stainless France  
Aperam Isbergues  
62330 Isbergues  
FRANCE

MILL CERTIFICATE BS EN 10204/3.1  
CERTIFICAT DE RECEPTION NF EN 10204/3.1  
ABNAHMEPRUEFZEUGNIS DIN EN 10204/3.1  
Ausgestellt im Einvernehmen mit dem TÜV SÜD - Auf Gegenzeichnung wird verzichtet  
Issued in accordance with TÜV SÜD - Verification is not required  
Etabli en accord avec le TÜV SÜD - Dispense de contresignature  
A.D.2000 Merkblatt W0 - W2 - W10 - PED 97/23 EC - EN 13445-2  
ISO 9001 V2008 - ISO TS 16949 V2009 - ISO 14001 V 2004

N° JACQUET :  
f. 680.

Manufacturer's works order number  
N° de la commande usine productrice  
Werkauftragsnummer  
80168392/01-84828/1

Surveyor's mark  
Cachet de l'expert  
Stempel des  
Werkssachverständigen  
**UI2**

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

Product - Produit - Erzeugnis  
COLD-ROLLED COIL  
BOBINE LAMINEE A FROID  
KALTGEWALZTES BAND

Customer article number  
N. article client  
Artikelnummer des Kunden  
ART031957

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

Finish  
Présentation  
Ausführung  
2B  
2B  
2B  
2B  
2B

Steelmaking process  
Mode d'élaboration de l'acier - Stahlherstellungsverfahren  
Prod. process: Electric arc furnace - VOD/AOD - Continuous casting  
Proc. fabric.: Four à arc - VOD/AOD - Coulée continue  
Fertigungsablauf: Elektro-Ofen - VOD/AOD - Strangussanlage

Any supplementary requirements  
Prescriptions supplémentaires - Zusätzliche Anforderungen

Product delivery condition  
Etat de livraison du produit - Lieferzustand  
Solution treated  
Hypertrempé : 1040-1100 C  
Loessungsgegl+abgeschreckt  
Forced Air  
Air forcé - Gebläse Luft

CORROSION TEST: ASTM A 262-E : OK

Identification of the product  
Identification du produit - Identifizierung des Erzeugnisses  
MELTED IN BELGIUM, MADE IN FRANCE

Dimensions  
Dimensions - Abmessungen  
Thickness  
Epaissur - Staerke  
2,000 mm  
Width  
Largeur - Breite  
1000,00 mm  
Length  
Longueur - Laenge

Number of pieces  
Nb de pièces - Stueckzahl  
1

Coll. n.  
N. Bobine - Band Nr.  
79192

Heat n.  
N. Coulée - Schmelz Nr.  
337076

Net weight  
Poids net - netto Gewicht  
19440 KGS

CHEMICAL ANALYSIS - ANALYSE CHIMIQUE - CHEMISCHE ZUSAMMENSETZUNG

	C	Si	Mn	Ni	Cr	Mo	Ti	N	S	P	Co						
Required - Exigé %mini Anforderung. %maxi	0,030	0,75	2,00	8,00	17,50			0,100	0,0150	0,045							
Cast Analysis Analyse coulée Analyse Schmelze	0,018	0,36	1,56	8,05	18,15			0,078	0,0039	0,031	0,164						
	C71	C72	C73	C74	C75	C76	C77	C78	C79	C80	C81	C82	C83	C84	C85	C86	

Positive material identification carried out : OK  
Tests de vérification de la conformité de la nuance fournie : OK  
Verwechslungsprüfung wurde durchgeführt : OK

Location (1)  
MECHANICAL PROPERTIES - PROPRIETES MECANQUES - MECHANISCHE WERTE

Direction (2)		Room temperature - Température ambiante - Raumtemperatur						Test temperature (°C) :							
Required Exigé Anforderung	mini maxi	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	80mm	50mm	HRB	C30	Rp0.2%	Rp1%	Rm				
1	T	230	260	540	45	40	92								
2	T	326	375	663	48	48	87								
		C11		C14	C12	C13	C15	C31	C16	C17	C18	C19			

Impact strength test  
Essai de résilience  
Kerbschlagzähigkeitstest  
C40 (K°C) C44  
EN ISO 3651-2 : OK  
Internal cleanliness: A: B: C: D: C57

Location of the sample (1)  
Emplacement de l'échantillon  
Lage des Probenabschnittes  
1. Front - Début - Anfang  
2. Back - Fin - Ende  
3. Middle - Milieu - Mitte

The delivery is in accordance with the order  
La fourniture est conforme aux exigences de la commande  
Die Lieferung entspricht den Bestellbedingungen  
Packing list  
Avis d'expédition  
Lieferscheinnummer  
131015102001-100676



Organisation inspection  
Organisme et/ou service contrôle  
Überwachungsabteilung  
Service Métallurgique  
15/10/2013  
M. THOMAS

Direction of the test pieces (2)  
Orientation des éprouvettes  
Probenrichtung  
T. Transverse - Travers - Quer  
L. Longitudinal - Long - Laengs

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  
C. DEBATION  
Inspection

The Inspector  
Le responsable  
Der Werkssachverständige

SDMS n° 62366

 <p>Correspondance address Adresse de correspondance - Adresse für briefwechsel</p> <p>Aperam - Stainless France Aperam Isbergues 62330 Isbergues</p>	<p>Annex to certificate 1310267417-01 V01 Annexe du CCPU Anlage Zum Zeugnis</p>		<p>Certificate CCPU - Zeugnis 1310267417-01 V01</p>		
	<p>Certificatenummer (TÜV) 0036-CPD-42-2011 N° du CCPU (TÜV) Zertifikatnr (TÜV)</p>				
	<p>Year 13 Année Jahr</p>				
<p>Manufacturer's works order number N° de la commande usine productrice Werksauftragsnummer</p> <p>80168392 /01-84828/1</p>	<p>Purchaser and/or consignee Client et/ou destinataire Besteller und/oder Empfänger</p> <p>APERAM SS&amp;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>Customer article number N° d'article client Artikelnummer des Kunden ART031957</p>		
<p>Identification of the product Identifikation du produit - Identifizierung des Erzeugnisses</p>		<p>Dimensions Dimensions - Abmessungen</p>			
<p>Coil n° N° de bobine - Band Nr 79192</p>	<p>Thickness Epaisseur - Dicke 2,000 mm</p>	<p>Width Largeur - Breite 1000,00 mm</p>	<p>Length Longueur - Länge</p>		
<p>Stainless steel / Acier inoxydable / Rostfreier Stahl</p>					
<p>EN 10088-4 /09</p>					
<p>Intended uses : building constructions or civil engineering Usages prévus : construction immobilière ou génie civil Vorgesehene Verwendungen : Hochbauten und Ingenieurbauwerke</p>					
<p>Tolerances on dimensions and shape: Tolérances sur les dimensions et sur forme: Grenzabmasse und Formtoleranzen</p> <p>EN ISO 9445</p>					
<p>Steel Acier 1.4307 Werkstoff</p>					
<p>COLD-ROLLED COIL BOBINE LAMINEE A FROID KALTGEWALZTES BAND</p>					
<p>COIL - BOBINE - BAND</p>					
<p>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</p>					
<p>Regulated substance : no performance determined Substance réglementée : aucune performance déterminée Regulierter Stoff : keine Leistung festgestellt</p>					
<p>N° JACQUET :</p> <p>f. 680</p>				<p>CE23</p>	

ede 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: mlran.pirnat@acroni.si

## Potrdilo o prevzemu 3.1/ Abnahmeprufzeugnis 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 SLYON  
ZA GRAMMONT

n° 62367

9 RUE GARIBALDI  
F-69800 ST PRIEST

FRANCE

Narocilo / Bestellung Nr. / Order No.

46565 disp. 38530

Dobavni list / Lieferschein / Despatch note

310083186 z/vom/from 12.06.2014

Izdelek / Erzeugnis / Product

BLECH

Vrsta peči / 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

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	Sl. sarže / Schmelzen Nr. / Heat No.	St. plošče / Walztafel / Plate No.	Teža neto / Gewicht / Weight kg	Dimenzije / Abmessungen / Dimensions mm	St. korn. / Stückzahl / Quantity	Sl. 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.tečenja / Dehn grenze / Yield 0.2% MPa	Nap.tečenja / Dehn grenze / Yield 1% MPa	Nat.trdnost / Zugfestigkeit / Tensile str. MPa	Raztezek / Bruchdehnung / Elongation AS % A50 % A80 %	Kontrake. / Einschnurung / g	Trdota / Harte / Hardness HB	Zilavost / Kerbschlag / Impact pri / smer bel / age at / posit. °C
Zahteva / Anforderung.	MIN / MAX	210	250	520	45		201	60 20
58964 T P		276	321	590	54.0 57.0		170	345 356 369 20

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

N° JACQUET :

f. 798 - 788

300 - 801

22/01/15  
SLYON  
C. DIEVECHON  
Inspection

ACRONI  
19/72  
ACRONI d.o.o. und Unterschrift  
Cesta Borisa Kidriča 44, SI-4270 Jesenice  
Slamo and signature  
Član skupine SIJ  
Member of Slavonia Steel Group

# 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

Sl./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

Opombe / 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). Gegenzeichnungserzicht 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.




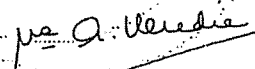
N° JACQUET :

f. 798 - 930

800 - 804

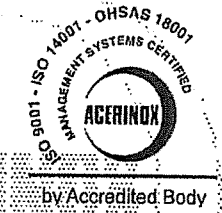
ACRONI 19/72  
ACRONI, o.z.g. in podjetju  
Certified according to PED 97/23/EC, Annex I, Paragraph 4.3 by TÜV SÜDDEUTSCHLAND Bau und Betrieb GmbH, notified body-registration number 0036 (October 2002).  
Član skupine podjetij v Jelenici  
Member of Slovenian Steel Group

Code 84565132157

<b>ACERINOX EUROPA</b> FABRICA DEL CAÑO DE GIBRALTAR PALMONES (LOS BARRIOS) T.FNO. (34) - 956 62 93 00 FAX : (34) - 956 62 93 11 P. O. BOX 23 11370 LOS BARRIOS (CADIZ)		 by Accredited Body		<b>INSPECTION CERTIFICATE</b> <b>CERTIFICAT D'INSPECTION</b>				3.1																				
ACCORDING TO EN 10204 <small>SUIVANT</small>		CERTIFICATE N° 52 2014 4085 20002 * <small>N° CERTIFICAT</small>																										
<b>CUSTOMER</b> <small>CLIENT</small> JACQUET LYON <small>ZA Grammat - 0 rue Gambold</small> <small>69800 SAINT PRIEST</small> FRANCE		<b>OUR ORDER N°</b> <small>NOTRE N° CO</small> VL 2097		<b>YOUR ORDER N°</b> <small>VOTRE N° CGH</small> 47467 REV 00																								
		<b>TRADE MARK</b> <small>SIGLE DU PRODUCTEUR</small> 		<b>INSPECTOR'S STAMP</b> <small>POTICOL DE L'INSPECTEUR</small> 		<b>STEELMAKING PROCESS</b> <small>PROCEDE D'ELABORATION</small> A.D.D.																						
<b>REQUIREMENTS</b> <small>EXIGENCES</small> ASTM A240E14/A480E14a-ASME SectII SA240(SA480E13 EN 10088-2:2005 EN-ISO-9444-2(Thickness Tolerances) ASTM A240E14/A480E14a-ASME SectII SA240(SA480E13				<b>INTERGRANULAR CORROSION</b> <small>CORROSION INTERGRANULAIRE</small> ASTM-A-262 PRACTICA E ASTM-A-262 PRACTICA E		<b>GRADE</b> <small>NATURE</small> Acx 150 TP-304 Acx 150 1,4307 Acx 150 TP-304L																						
				<b>SDMS n° 62368</b>		42																						
<b>COIL / BOX</b> <small>BOITIE/CAISSE</small>		<b>CONTENT</b> <small>CONTENU</small>		<b>DIMENSIONS</b> <small>DIMENSIONS</small>			<b>MARKS</b> <small>MARQUE</small>																					
C2079P C2079R		02H3EH B 02H3EH B		<table border="1"> <tr> <th>THICKNESS</th> <th>WIDTH</th> <th>LENGTH</th> </tr> <tr> <td>EPAISSEUR</td> <td>LARGEUR</td> <td>LONGUEUR</td> </tr> <tr> <td>10,000 10,000</td> <td>1500,00 1500,00</td> <td>6000,00 6000,00</td> </tr> </table>			THICKNESS	WIDTH	LENGTH	EPAISSEUR	LARGEUR	LONGUEUR	10,000 10,000	1500,00 1500,00	6000,00 6000,00	20 21												
THICKNESS	WIDTH	LENGTH																										
EPAISSEUR	LARGEUR	LONGUEUR																										
10,000 10,000	1500,00 1500,00	6000,00 6000,00																										
							QUANTITY <small>QUANTITE</small> 2 2																					
							TEST N° <small>ECHANTILLON</small> 02H3EH 02H3EH																					
							C C																					
<b>CHEMICAL ANALYSIS / COMPOSITION CHIMIQUE (%)</b>																												
<b>HEAT N°</b> <small>COA.EE</small>																												
H3EH		<table border="1"> <tr> <th>C</th> <th>CR</th> <th>MN</th> <th>N</th> <th>NI</th> <th>P</th> <th>S</th> <th>SI</th> <th>CO</th> </tr> <tr> <td>0,017</td> <td>17,770</td> <td>1,622</td> <td>0,092</td> <td>8,060</td> <td>0,033</td> <td>0,002</td> <td>0,337</td> <td>0,182</td> </tr> </table>							C	CR	MN	N	NI	P	S	SI	CO	0,017	17,770	1,622	0,092	8,060	0,033	0,002	0,337	0,182		
C	CR	MN	N	NI	P	S	SI	CO																				
0,017	17,770	1,622	0,092	8,060	0,033	0,002	0,337	0,182																				
<b>MECHANICAL PROPERTIES / CARACTERISTIQUES MECANIQUES</b>																												
<b>TEST N°</b> <small>ECHANTILLON</small>		<b>PROBE</b> <small>SIT TYPE</small>		<b>Rm</b> <small>N/mm2</small>		<b>Rp 0.2</b> <small>N/mm2</small>		<b>Rp 1.0</b> <small>N/mm2</small>		<b>A50</b> <small>%</small>		<b>A5</b> <small>%</small>		<b>HRB</b>		<b>A200</b> <small>%</small>												
02H3EH		C.T		634,38		342,69		391,03		51,68		52,68		91,00		50,68												
<b>REMARKS / REMARQUES</b> Temperatura de hipertemple entre 1050 y 1100 ° C. The delivery is in accordance with the order									<b>SURFACE AND DIMENSIONAL CONTROL</b> <small>INSPECTION DIMENSIONNELLE ET VISUELLE</small> SATISFACTORY SATISFAISANT																			
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>N° JACQUET :</b>            f. 1097            f. 1098         </div>									WORK INSPECTOR <small>INSPECTEUR</small>  A. Heredia																			
									PALMONES, 26 NOVIEMBRE 2014																			



**ACERINOX EUROPA**  
 FABRICA DEL CAÑO DE GIBRALTAR  
 PALMONES (LOS BARRIOS)  
 TFO. (34) - 956 62 93 00  
 FAX (34) - 956 62 93 11  
 P.O. BOX 83  
 11370. LOS BARRIOS. (CADIZ)



# Abnahmeprüfzeugnis

## INSPECTION CERTIFICATE

**SDMS n° 62368**  
 Prüf-Nr. 52 2014 4085 20001 E  
 Inspection No.

ACCORDING TO EN 10204 3.1  
 NACH

\*Zustimmungsschreiben des TÜV Baden vom 21. Februar 1983  
 Letter of approval from the TÜV Baden dated 21-2-83  
 Laut Schreiben des TÜV Baden e.v. vom 26. Juni 1.989 wird auf die Gegenzeichnung verzichtet.  
 TÜV Baden renounce to the counter signature according their letter dated 26-6-89

by Accredited Body

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 18-10X2CnN18-9** Werksbez - Works Grade: **Acx - 150** Erschmelzungsart - Steelmaking Process: **A = AOD Verfahren - AOD Process A**

Anforderungen - Technical requirements: **EN 10028-7 (FR, 100/A0-2000-MERKBLATT W2/W10 DGRL 97/23/EG (PED) EN-ISO-9444-2 (Thickness Tolerances)** Kennzeichnung - Marking: **Schmelznummer - II° of coil**

Zeichen des Lieferwerks - Brand of the manufacturer: **ACERINOX** Stempel des Sachverständigen - Inspector's stamp: **4511**

Pos Nr. Item N°	Stückzahl Quantity	Abmessung - Dimensions mm	Schmelze Nr Heat N°	Probe Nr Test N°
20	2	10,000 x 1.500,00 x 6.000,00	H3EH	02H3EH
21	2	10,000 x 1.500,00 x 6.000,00	H3EH	02H3EH

### 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.K.  
 Surface and dimensions controlled: O.K.

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

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

Wärmebehandlung: Glühen bei 1050 - 1100 °C  
 Heat treatment: Glühen bei 1050 - 1100 °C

Und Abschrecken mit Luft  
 and 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

ede 94760/32245

 <p>Correspondentieadres: Aperam Genk Swinnenwijerweg 5, Poort Genk 7523 3600 Genk, Belgium Tel. +32 (0)89 30 21 11</p>		<b>MILL CERTIFICATE BS EN 10204/3.1</b> <b>CERTIFICAT DE RECEPTION NF EN 10204/3.1</b> <b>ABNAHMEPRUEFZEUGNIS DIN EN 10204/3.1</b>										N-Nr-N 14K0043103-01 V01					
		Certified acc.PED 97/23/EC Annex 1 § 4.3 by Certification Body 0036 of TÜV SÜD Industrie Service GmbH with cert.No.:314/2007/MUC.Renounced of counter signature agreed by TÜV SÜD (9/5/2007).Approved acc.AD 2000-Merkblatt W0/TRD 100 by TÜV SÜD Industrie Service GmbH.Confirmation letter from TÜV SÜD Industrie Service GmbH of 07/05/2010 about the uniformity of coils acc.AD2000 W2 §4.1.1										SDMS n° 6244					
Tech.Reg.:AD 2000 W2 -- AD 2000 W10 -- EN 13445-2																	
Manufacturer's works order number N° de la commande usine productrice Werksauftragsnummer 80223416/01-32196/893/01		Surveyor's mark Cachet de l'expert Stempel des Werkssachverstaendigen 		Purchaser and/or consignee Client et/ou destinataire Besteller und/oder Empfänger APERAM SS&S BENELUX BOSDEL 87 87 3600 GENK BELGIE				Purchaser's order number N° de commande client Kundenbestellnummer 408026244									
Product - Produit - Erzeugnis COIL,COLD ROLLED,UNTRIMMED,FINISH 2B COIL,LAMINE A FROID,BORDS NON REFENDUS, FINI 2B CL,KALTGEW.,GELUEHT+GEBEIZT,LEICHT NACHGEW.,UNBESAUMT								Customer article number N.article client Artikelnummer des Kunden ART033687									
Steel designation Désignation de l'acier Stahlbezeichnung EN 10028-7-2008 1.4404 / 1.4401 EN 10088-2-2005 1.4404 / 1.4401 ASTM A 240-2014 TYPE 316L / 316 ASME SA 240-2013 TYPE 316L / 316 EN 10088-4-2009 1.4404 / 1.4401		Finish Présentation Ausführung 2B 2B 2B 2B 2B		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				Product delivery condition Etat de livraison du produit - Lieferzustand Solution treated: Hypertrempé: 1050 °C Lösungsgegl+abgeschreckt: Forced air-water/air forcé-eau Gebälse Luft-Wasser									
NACE MR 0175 / ISO 15156-1 / ISO 15156-3 -- NACE MR 0103 // NACE MR 0175 / ISO 15156-1 // ISO 15156-3 // ASTM A480 / A480M -- ASME SA480 / SA480M // CORROSION TEST: ASTM A262-E:OK // CORROSION INTERGRANULAIRESELON ISO 3651/2:OK																	
Identification of the product Identification du produit - Identifizierung des Erzeugnisses MELTED IN BELGIUM, MADE IN BELGIUM		Dimensions Dimensions - Abmessungen						Number of pieces Nb de pièces - Stueckzahl 2									
Coil n. N.Bobine - Band Nr. 43703240		Heat n. N.Coulée - Schmelz Nr. 437032		Thickness Epaisseur - Staerke 2.00 mm		Width Largeur - Breite 2000.00 mm		Length Longueur - Lacnge		Net weight Poids net - netto Gewicht 28450 KG							
CHEMICAL ANALYSIS - ANALYSE CHIMIQUE - CHEMISCHE ZUSAMMENSETZUNG																	
Required - Exigé %mini Anforderung. %maxi		C	Si	Mn	Ni	Cr	Mo	Ti	N	S	P	Cu	Co				
Cast Analysis Analyse coulée Analyse Schmelze		0.030	0.75	2.00	10.00 13.00	16.50 18.00	2.00 2.50		0.100	0.015	0.045						
		C71	C72	C73	C74	C75	C76	C77	C78	C79	C80	C81	C82	C83	C84	C85	C86
Positive material identification carried out : OK Tests de vérification de la conformité de la nuance fournie : OK Verwechslungsprüfung wurde durchgeführt : OK																	
Location (1)		MECHANICAL PROPERTIES - PROPRIETES MECANQUES - MECHANISCHE WERTE EN ISO 6892-1 B										Test temperature (°C) :					
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			
Required Exigé Anforderung		Rp0.2% Rp1%		Rm		50mm 80mm		HRB C30		Rp0.2% Rp1%		Rm		50mm			
mini maxi		240 270		530 680		40 40		95		Rp0.2% Rp1%		Rm		50mm			
Obtained Obtenu Ergebnisse		341 374		668		46 43		87 88		Rp0.2% Rp1%		Rm		50mm			
Impact strength test Essai de résilience Kerbschlagzähigkeitstest		C40 (°C)		Corrosion test Test de corrosion Korrosionstest		E0.2(T)/R(T) %		51		C52 C53 C54		C55		Sample Thickness 2.00mm			
C42		C44		EN ISO 3651/2 - A:OK		C50 C51		C52 C53 C54		C55		C57		Internal cleanliness: A: B: C: D:			
Location of the sample (1) Emplacement de l'échantillon Lage des Probenabschnittes 1. Front - Début - Anfang 2. Back - Fin - Ende 3. Middle - Milieu - Mitte		The delivery is in accordance with the order La fourniture est conforme aux exigences de la commande Die Lieferung entspricht den Bestellbedingungen				Packing list Avis d'expédition Lieferscheinnummer 2014046341-100414				Organisation inspection Organisme et/ou service contrôle Ueberwachungsabteilung Quality Department 26/9/2014 The inspector Le responsable Der Werkssachverstaendige D. Raemaekers							
Direction of the test pieces (2) Orientation des éprouvettes Probenrichtung T. Transverse - Travers - Quer L. Longitudinal - Long - Laengs		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				A05				A06 A07 A08 A09 A10 A11 A12 A13 A14 A15 A16 A17 A18 A19 A20 A21 A22 A23 A24 A25 A26 A27 A28 A29 A30 A31 A32 A33 A34 A35 A36 A37 A38 A39 A40 A41 A42 A43 A44 A45 A46 A47 A48 A49 A50 A51 A52 A53 A54 A55 A56 A57 A58 A59 A60 A61 A62 A63 A64 A65 A66 A67 A68 A69 A70 A71 A72 A73 A74 A75 A76 A77 A78 A79 A80 A81 A82 A83 A84 A85 A86 A87 A88 A89 A90 A91 A92 A93 A94 A95 A96 A97 A98 A99 A100							



11,000 AOSTA - VIA PARAVERA  
 TEL +39 0165 3021 - FAX -39 0165 302296  
 CAP. SOC. 1.000.000.000 EUR INT. VERS.  
 C.F. 0218330016  
 VAT: IT0057132078 - R.E.A. n. 4050474

Integrato con i sistemi di gestione certificati  
 per ISO 9001, ISO 14001 e ISO 18001

CERTIFICAT DE RECEPTION 3.1 (EN 10204:2004)  
 (A03) NUMERO DE DOCUMENT 2014044267  
 PAGE 1/2

(A06) CLIENT : COGNE FRANCE S.A.  
 (A07) N. DE LA COMMANDE DU CLIENT : CDA49927

(A01) USINE-PRODUCTRICE : AOSTA, VIA PARAVERA 16 - ITALIA

(A05) AUTEUR DU DOCUMENT : SERVICE QUALITE

(A08) NUMERO DE LA COMMANDE DE L'USINE 25181848 / 50 (A04) SIGLE DU PRODUCTEUR : COGNE

LES PRODUITS CERTIFIES SONT CONFORMES A LA COMMANDE

085211

SPECIFICATION INTERNE :

(B01) PRODUIT : STOCKERSEWZ REGLE TECHNIQUE : AD2000

(B03) FINITION SUPERFICIELLE : 3184 PEL ECIOUTÉ RONDS TOLLERANCE : ISOK11

(B04) ETAT DE LIVRAISON : 2B

(B11) DIMENSIONS DU PRODUIT (MM) : RS HYPERTREMPÉ

(B02) NUANCE : 80,000 (B12) LONGUEUR DU PRODUIT (MM) : 04000 / 06200

(B07) IDENTIFICATION N. DE COULEE : 472732 NUANCE INTERNE : F304L1 IMCO

(B06) MARQUAGE DU PRODUIT : 1.4301 MARQUAGE PIÉCES : 365 (B07) IDENTIFICATION N. DE LOT : 483650

LE PRODUIT EST CONFORME A LA SPÉCIFICATION ET A LA RÈGLE AD2000-MERKBLATT W0/W2.

NORMES DE RÉFÉRENCE: EN10088-3, EN10272, ASTM A276, ASTM A479, ASME SA479 (10), ASTM A193 B8 CLASS 1D, AMS 5647H, AMS 5639H, NACE MR0175, NACE MR0103.

NORMES DE RÉFÉRENCE CONCERNANT L'ANALYSE CHIMIQUE ET PROPRIÉTÉS MÉCANIQUES: ASTM A182, ASME SA182 (10).

NORMES DE RÉFÉRENCE CONCERNANT SEULEMENT L'ANALYSE CHIMIQUE: EN10222-5, ASTM A484, ASTM A403, ASTM A314, AMS-QQ-S-763B.

ASTM A484 NE S'APPLIQUE PAS POUR LES TOLLÉRANCES DE DIAMÈTRE ET DE LONGUEUR.

ELABORATION AU FOUR ÉLECTRIQUE + AOD + COULEE CONTINUE

LAMINE À CHAUD

TAUX DE CORROYAGE 4,6

(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 0,40 0,16

OBTENU

ESSAI DE DURETE AU ETAT DE FOURNITURE

Lot de control - Poids : 020000549057 - 10,051 KG

SPECIFICATION ENISO6506

OBTENU 175

ESSAI DE DURETE HB MÉTHODE D'ESSAI : 10/3000

ESSAI DE RESILIENCE AU ETAT DE FOURNITURE

Lot de control - Poids : 020000549057 - 10,051 KG

SPECIFICATION EN ISO 148-1-KV2

OBTENU KV 20

(C40) EPROUVEITE J 264 270 264 260 265 262 263 270 266 269

(C03) TEMPERATURE D'ESSAI °C

UNITE DE MESURE

OBTENU

SDMS n° 62429

1110214  
 SDMS  
 570081070  
 11/08/07

4/2



11100 AOSTA - VIA PARAVICINO  
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 C.F. 02187360967  
 VAT: IT00571320074 - S.E.A. n. AD.50474

Exempté avec les systèmes de gestion certifiés  
 par ISO selon ISO 9001, ISO/TS 18849 et ISO  
 14001.

CERTIFICAT DE RECEPTION 3.1 (EN 10204:2004  
 (A03) NUMERO DE DOCUMENT 201404426  
 PAGE 2/2

ESSAI DE TRACTION-AU-ETAT-DE-FURNITURE  
 Lot de control - Poids : 020000549057 -  
 SPECIFICATION

EN-ISO6892-1  
 10.051 KG

(C02) ORIENTATION DE L'EPROUVETTE: L

UNITE DE MESURE	RM MPA	RP02 MPA	A5 %	Z %	RP1 MPA
OBTENU	594	258	5,0 D	78,0	302
	593	254	67,3	79,8	310
	602	259	65,2	79,2	282
	609	252	64,6	77,5	290

085211

DIMENSION DU GRAIN  
 Lot de control - Poids : 020000549057 -  
 SPECIFICATION  
 OBTENU

10.051 KG  
 ASTM E112 --

ESSAI DE TRACTION  
 Lot de control - Poids : 020000549057 -  
 SPECIFICATION

10.051 KG  
 ASTM A370-E8-0.5" SPEC

(C02) ORIENTATION DE L'EPROUVETTE: L

UNITE DE MESURE	RMB KSI	RP02B KSI	ZB %	AL2B %
OBTENU	86	36	77,2	4,0 D
	85	38	77,3	70,9
	87	38	78,8	71,4
	87	37	78,1	69,3
				71,7

ESSAI DE CORROSION SELON ASTM A262 METHODE B 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 ULTRASONNS 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 (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.

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 CERTIF DERNIERE SEULEMENT POUR LES BARRES EN ACIER LAMINEES - ECRUTEES -  
 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 FAR DFARS 252.225-7014 ALT 1.  
 (Z02) POINCON DE L'EXPERT LF

DMS n° 62429

(201) DATE 29.07.2014

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

2/2

94716138157

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

<b>Besteller/Purchaser/Acheteur:</b> Rolled Alloys Inc. - US 125 W Sterns Rd US-48182 Temperance United States	<b>Empfänger/Consignee/Destinaire:</b> Rolled Alloys 9818 E. Hardy Road US-77093 Houston United States
<b>Bestell-Nr./Purchaser order No./No. de commande:</b> 0112301-HOU / 2014.05.12	<b>Empfängerref.-Nr./Receiver reference-No./Référence destinaire:</b> -
<b>Werksauftrags-Nr./Works order-No./No. de la commande de l'usine:</b> 1646604 / 2014.05.12	<b>Lieferschein-Nr./Delivery note-No./Avisd' expedition du client:</b> 51164808 / 2014.08.28
<b>Prüfgegenstand/Object of test/Object d'examen:</b> BÖHLER P511 bar, forged, solution annealed, quenched IBO ECOMAX ISO 286/2 ITK12	<b>Anforderungen/Requirements/Exigence:</b> 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

SDMS n° 62434

1/2

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

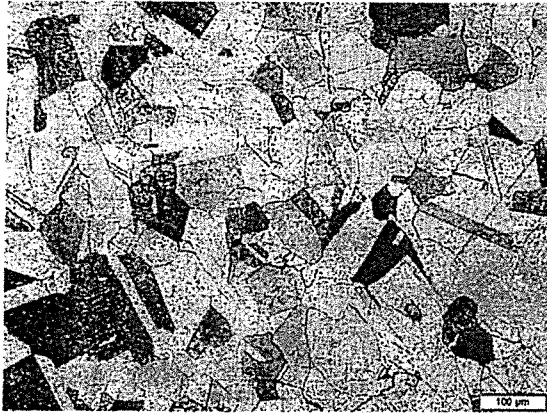
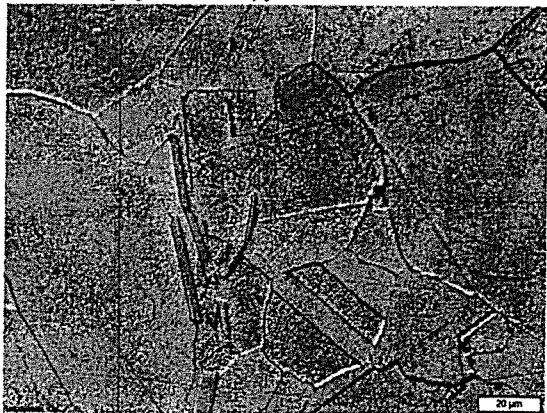
T ...holding time at nominal temperature after furnace has reached the tolerance limit.

TRACER # 043561745

14102145  
SDMS  
C. DREYER  
Inspection

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Chemical Composition (%)										Heat No.
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)										
<u>Ferrite content evaluation</u> The ferrite content was determined similar to ASTM E45-13 using the worst field method.										2/7
			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					

SDMS n° 62434

TRACER # 0113561745

Date 10/25/14

Approved

Rolling Alloys Quality Assurance

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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		

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**Corrosion examination**

Intergranular corrosion acc.to ASTM A262 Practice E: Satisfactory

SDMS n° 62434

**Physical examination**

Permeability test:  $\mu = 1,002-1,003$  (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 deplating 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 < 0,1 Bq/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 obengenannten Erzeugnisse den Bestellevorschriften 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.

Zeichen 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

Zeichen des Prüfers:  
Symbol of Inspector:  
Symbole de l'inspecteur:



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

Christopher.Schmid@boehler-edelstahl.at  
AUSSTELLER/  
ORIGINATOR/AUTEUR

DER ABNAHMEBEAUFTRAGTE/  
INSPECTOR REPRESENTATIVE/  
DU CONTROLEUR

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

TRACER # 04356174



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  
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<b>UT</b> PRÜFBERICHT C REPORT C PROCESS/VERBAL TYPE C		Besteller Purchaser Client		ROLLED ALLOYS	Werkz. Auftrag Working Order Commande interne	1646804 (FA 1384895/1/2)	Pos. Item Rapport	1			
Nr./No	SK-08-262	Bestell-Nr. Order No.	0112301-HDU		Prüfobjekt Test object	Stabstahl / steel bars					
Seite Page	01 von of sur 01	Stückzahl Quantity	3		Kennzeichnung Identification	Schmelze, Werkstoff, Werks Auftrag Heat, Material, Working Order					
Abmessung Dimension	RD 139.7mm	Werkstoff Material	P511		Schmelze-Nr. Heat No.	K10006					
Oberflächenzust. Surface cond.	geschält / peeled	Gewicht Weight	1455 kg		Fertigungsstufe Stage of production	Lieferzustand / delivery condition					
Prüfmeth. Inspection meth.	Gesamte Stablänge / whole length				Wärmebehandlung Heat treatment	Lösungsgedüht / solution annealed					
Prüfvorschr. Inspection Specification	ASTM A388/A388M - 11				Prüfmeth. Inspection Coverage	Gesamter Umfang / whole circumference					
Bewertungsstandard Evaluation standard	3mm KSR / DSR				ZP-Arbeitsvorschr. NDT-procedure	AV2/18/0015/74R01					
ERK (FP / WP) Nr. Traveler (FP / WP) No.	---				Zeichnungs-Nr., Drawing No.	ScanPlan-ASTM-A388-CT_Rev00					
Registrierstufe Recording level	100% of reference amplitude				Schritt / Prüf-Nr. Step / Test no.	---					
Skizze Sketch											
Prüfer-Nr. Equipment No.	EPOCH 600 120381007		Koppelmittel Coupler	Kleister / paste		Justierung Adjustment	AVG / DGS				
Teilblock Bloc d'échantillon	Bauteil / Part		Referenzreflektor Reference reflector	BT-RWE / Part-BWE		Strahl-Abstand Signal-to-noise distance	>6 dB				
Transferkorrektur (weitere Korz.) Correction de transfert (correction additionnelle)	---										
Einfall-Pos. Position of incidence	Prüfkopf Probe	Frequenz Frequency	Einfallswinkel Angle of incidence	Schallweg Sound path	Schallstärk. Sound st.	Anzeigebreite Indication depth	Anzeigelänge Length of indication	KSR-Wert DSR value	dB zu Referenz dB to the reference	Echoform Type of echo	RWE-Abfall dB Loss of BWE dB
A	B2S SN 67741	2	0°	139.7	<2	keine registrierpflichtigen Anzeigen no indications above alarm level					<6
Prüfergebnis Test result:	<input checked="" type="checkbox"/> Entspricht Wohn Conforme		<input type="checkbox"/> Entspricht nicht der Vorschrift Not within specification Pas conforme de la specification			Prüfart Place of inspection	Kapfenberg, Abt. / Dep. EHB		Datum Date	21.08.2014	
Kunde Customer Client						Prüfer / Stufe Operator / Level	Holzer K. II		ISO 9712		
Überwacher / Sachverständiger Authorized Inspector Agent de forgerments de contrôle						Prüfverantwortlicher / Stufe Supervisor / Level	Westermayer F. II		ISO 9712		

SDMS n° 62434



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 Druckgeräte/richtlinie 97/23/EG



# CERTIFICATE ZERTIFIKAT CERTIFICAT

Hiermit zertifizieren wir die Kompetenz  
*We hereby certify the competence* *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

für/for/pour

Prüfverfahren und Stufe  
NDT method and level  
Méthode contrôle et niveau

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

ÖNORMEN: EN ISO 9712, M 3042, M 3041

Gültigkeit der Zertifizierung  
Validity of the certification  
Validité de la certification

23.04.2014 bis 22.04.2019

Österreichische Gesellschaft für Zerstörungsfreie Prüfung  
Austrian Society for Nondestructive Testing  
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

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

der Prüfungsbeauftragte  
the examiner l'examineur  
Dipl.-Ing. (FH) Gerald Idinger (0238)



*Karl Holzer*  
Unterschrift des Inhabers  
Signature of holder / Signature du titulaire

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

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)

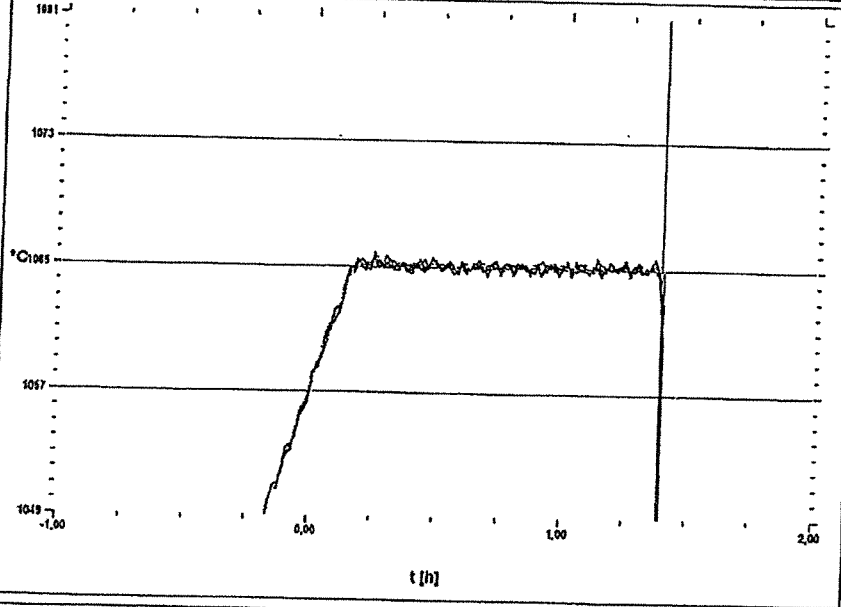
TRACER # 043561745

SDMS n° 62434

Abteilung/Department <b>EHW</b>		<b>Wärmebehandlungsprotokoll</b>		<b>BÖHLER</b>	
		<b>Heat treatment report</b>		<b>EDELSTAHL</b>	
Kunde/customer:	USA ROLLED ALLOYS	Ø818			
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
Ofenstemperatur/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
Wassereendtemp. / 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:

07.08.2014 Unterschrift/signature: Schmitzberger Josef / EHW

TRACER # 0435 61745

SDMS n° 62636



Swagelok Company  
29500 Solon Rd  
Solon, OH 44139 U.S.A.

440.349.5600  
440.519.4997 fax

**Certificate of Compliance/Typical Material Certification (EN 10204-2.2)**

Distributor	Customer	Customer PO#
Lyon Vannes et Raccords S.A.S ZAC du Chene - Activillage 1 Allée des Alisiers BP 80 69673 BRON CEDEX France	SDMS	94992

No.	Part Number	Qty
1	SS-4-TSW-7-2	1

Information contained in the above customer address column (marked as "Customer") and area marked "Reference" (when applicable) of this certification are for reference purposes only. Swagelok Company makes no stipulations, nor takes responsibility, for the accuracy or reliability of such information.

Swagelok products referenced above are manufactured from material purchased and certified as being in accordance with the specification(s) listed below.

Swagelok products are manufactured under conditions which are free from mercury. No mercury bearing components have been used in the products of your order and no mercury bearing instruments or other equipment have been used in their manufacture, assembly, or testing in such a manner as might cause contamination.

No asbestos or asbestos-containing components are used in Swagelok brand products.

Stainless steel material has passed the Intergranular Corrosion Test requirements of EN ISO 3651-2, Method A, and ASTM A-262 Practice E.

All parts were cleaned and packaged in accordance with Swagelok Specifications.

Typical mechanical and/or chemical analysis of the material used in the manufacture of the Swagelok products involved are listed below. These values are average values determined from a sample of certified material test reports. Specific chemistry obtained from analysis of product made from this material may vary from the batch values as provided with this certification.

**MATERIAL STANDARDS**

Components	Material	Standards
Shaped Fittings	F316 Stainless Steel Forgings (1.4401)	ASTM A182, ASME SA182
Straight Fittings	316 Stainless Steel Bar (1.4401)	ASTM A276, ASTM A479, ASME SA479

**MECHANICAL PROPERTIES**

Components/Materials	Yield Strength (ksi/MPa)	Tensile Strength (ksi/MPa)	Elongation (%)	% Red. Area	Hardness
Shaped Fittings	48/331	90/621	61	76	
Straight Fittings	93/641	108/745	36	73	HRC 22

**CHEMICAL ANALYSIS (%)**

Components/Materials	C	Co	Cr	Mn	Mo	N	Ni	P	S	Si
Shaped Fittings	0.043	0.17	17.16	1.57	2.09	0.042	12.23	0.028	0.025	0.60
Straight Fittings	0.040	0.23	17.51	1.71	2.27	0.037	12.19	0.029	0.025	0.60

The Swagelok® products specified above are certified for use in commercial-grade (non-Nuclear Safety Related) applications and were manufactured in accordance with Swagelok Company's Quality Manual (SQS-F latest revision, revision K, dated December 18, 2012).

Swagelok Company's Quality System is approved to ISO 9001 (BSI Certificate # FM01729).  
PC150305233

02/12/15  
SDMS  
C. DREVETON  
Inspection  
3/5/2015

# 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 resiliance

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  
 CONTROLLED

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 4/2

**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 / Abnahmerprüfzeugnis*

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

**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**  
**ROLÉ**

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

**FP SOUDAGE**

ODAM



SDMS n° 62900 2/2

a member of

**FSH WELDING GROUP****DOCDECLARATION DE CONFORMITE****NF L 00-015C**N° Déclaration  
448753 / 005

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

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

<b>CODE ARTICLE</b>	<b>DESIGNATION</b> <i>Designation / Bezeichnung</i>	<b>QUANTITE</b> <i>Quantity / Stuckzahl</i>	<b>LOT</b> <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

Head Office : 77, rue de la Maire - BP 1023- ZI Les Paluds - 13781 AUBAGNE Cedex - Tél : +33 (0) 442 18 60 60 - Fax : +33 (0) 442 18 60 61  
 S.A.S au capital de 200 000 Euros - SIRET 301 423 463 00035 - Code APE 274 D - 301 423 463 RCS Marseille



TEL +36 0186 2021 - FAX +36 0186 2022  
 CAP. SOC. 100 000 000 EUR INT. 5  
 C.F. 02-87260287  
 VAT-IT00571320078 R.F.A. D. AD-50474

entreprise avec les systèmes de gestion certifiés  
 par ISO selon ISO 9001, ISO 14001 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  
 LES PRODUITS CERTIFIES SONT CONFORMES A LA COMMANDE

COGNE FRANCE S.A.  
 CDA52262  
 AOSTA, VIA PARAVERA 16 - ITALIA  
 SERVICE QUALITE  
 25192240 / 10  
 (A04) SIGLE DU PRODUCTEUR : COGNE

086940

SPECIFICATION INTERNE :  
 (B01) PRODUIT :  
 (B03) FINITION SUPERFICIELLE :  
 (B04) ETAT DE LIVRAISON :  
 (B11) DIMENSIONS DU PRODUIT (MM) :  
 (B02) NUANCE :  
 (B07) IDENTIFICATION N. DE COULEE :  
 (B06) MARQUAGE DU PRODUIT :

STOCKBARREZZ  
 15261 SRE Rectifié Ronds TOLLERANCE : ISOH9  
 2G  
 RS HYPERTREMPE  
 40.000  
 AISI 316/316L EN1.4401/4404 (B12) LONGUEUR DU PRODUIT (MM) : 03000 / 03100  
 572004 NUANCE INTERNE : F316L IMCO  
 1.4401/4404 (B07) IDENTIFICATION N. DE LOT: 720790  
 MARQUAGE PIÈCES : 079

NORMES DE REFERENCE: EN 10088-3 (05), EN 10272(08), ASTM A276 (08), ASTM A479 (08), ASTM A193 (09) B8M CLASSEID, ASME SA 276 (10), ASME SA479 (10), AMS 5653F, AMS 5648K, ISO15156-3/NACE MR0175 (09), NACE MR0103 (07), NORSOK M5501 rev.3  
 NORMES DE REFERENCE CONCERNANT ANALYSE CHIMIQUE ET PROPRIETES MECHANIQUES: 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 + COULEE 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 - 91.403 KG

ELEMENT OBTENU	C	0,018	Si	0,34	Mn	1,80	P	0,027	S	0,028	N	0,075	Cr	16,64	Mo	2,05	Ni	10,37	Cu	0,44
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ESSAI DE DURETE AU ETAT DE FOURNITURE  
 Lot de control - Poids : 020000569929 - 1.252 KG  
 SPECIFICATION OBTENU

ENISO6506 1.252 KG ESSAI DE DURETE HR METHODE D'ESSAI : 10/3000

ESSAI DE RESILIENCE AU ETAT DE FOURNITURE  
 Lot de control - Poids : 020000569929 - 1.252 KG  
 SPECIFICATION OBTENU  
 (C40) EPROUVETTE  
 (C03) TEMPERATURE D'ESSAI °C  
 UNITE DE MESURE  
 OBTENU

(C02) ORIENTATION DE L'EPROUVETTE: L

	J	288	286	285	287	287	290	290
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SDMS n° 63099

SDMS  
 CONTRÔLE





11100 ACSTA VIA PARAVERA  
 TEL. 02.0161.3021 - FAX +39  
 02.0161.3022  
 C.A.P. SOC. 00.000.000 EUR IM. 485  
 C.F. 0216730967  
 VAT. 1100571520076 R.E.A. N. AG-50474

Entreprise avec les avantages de gestion certifiés  
 par ISO selon ISO 9001, ISO 14001 et ISO  
 14001.

CERTIFICAT DE RECEPTION 3.1 (EN 10204:2004  
 (AO3) 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	RM MPA	RP02 MPA	A5 %	Z %	RP1 MPA
OBTENU	615 591 611	283 282 281	5,0 D 53,9 53,3 54,0	75,7 75,6 75,0	339 330 335

086940

ESSAI DE TRACTION  
 Lot de control - Poids : 020000569929 -  
 SPECIFICATION

ASTM A370-E8-0.5" SPEC 1.252 KG

(C02) ORIENTATION DE L'EPROUVETTE: L

UNITE DE MESURE	RMB KSI	RP02B KSI	ZB %	AL2B %
OBTENU	87 89 88	41 41 43	76,6 74,2 76,3	4,0 D 55,5 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  
 RECTIFIEES' ET POUDES METALLIQUES ATOMISEES), CERTIFIE PAR ISO.  
 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 APPAUVRISSENT 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 ULTRASON SELON LA NORME EN 10308 AND API6A  
 (CLASSE B POUR LES TAILLES > 75 MM) ET ASTM A388 FBH 5  
 (UNIQUEMENT POUR LES TAILLES > 100 MM): SATISFAISANTE.  
 AUCUNE REPARATION DE SOUDURE EXECUTEE.  
 CONTROLE ANTIMELANGE AVEC SPECTROMETRE PORTABLE: CONFORME.  
 MARQUAGE: MARQUAGE DU PRODUCTEUR, N. MERKSTOFF, N. COULEE, N. LOT.  
 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).

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

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



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 80\$ 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 MECANQUES - 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	
	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT	BASE	PRODUCT
ZY33075	275		565		51		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**

<b>DIMENSIONAL &amp; ASPECT / DIMENSION ET ASPECT: GOOD</b>		<b>STATE OF DELIVERY / ETAT DE LIVRAISON: PICKLED AND PASSIVATED</b>	
<b>BRAND'S MANUFACTOR</b> <b>SIGLE FABRICANT:</b>			
<b>Manufacturing according to PED 97/23/EC Annex 1 - 4.3</b>  <b>Fabrication conforme PED 97/23/CE Annexe 1 - 4.3</b>		<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 &lt;= 760 MPA. A% (Lo=5.65 √So) &gt; 16. Rm (A-2) &gt;= 10500.</p> <p>Chemical composition and mechanical characteristics are according to the original's Certificate. This certificate, made from data processing treatment, is applicable 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>	
		<b>FACTORY INSPECTOR</b> <b>EXPERT USINE : P.DESBOIS</b>	
		<b>DATE</b> 23/06/2015	
			



18110 VASSELAY-France  
02 48 69 74 20  
02 48 69 74 29

SDMS n° 63106

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° : 212820002  
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
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 0.2% Re Mpa		TENSILE STRENGTH RESISTANCE RUPTUR Rm Mpa		ELONGATION ALLONGEMENT A%		HARDNESS DURETE HRC		HEAT TREATMENT HYPENTREMPE 1040 °C		IC TEST CORROSION INTE. A262 PRACT.E		PMI TEST TEST SPECTRO		WELDING FACTOR FACTEUR SOUDAGE 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**

<b>DIMENSIONAL &amp; ASPECT / DIMENSION ET ASPECT: GOOD</b>	<b>STATE OF DELIVERY / ETAT DE LIVRAISON: PICKLED AND PASSIVATED</b>
<b>BRAND'S MANUFACTOR SIGLE FABRICANT:</b>	<b>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 &lt;= 760 MPA. A% (Lo=5.65 √So) &gt;16.Rm (A-2) &gt;= 10500.</b>
<b>Manufacturing according to PED 97/23/EC Annex 1 - 4.3</b>	<b>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.</b>
<b>Fabrication conforme PED 97/23/CE Annexe 1 - 4.3</b>	<b>DATE 23/06/2015</b> <b>FACTORY INSPECTOR EXPERT USINE : P.DESBOIS</b>



SDMS  
P. DESBOIS