

OVER S.r.L.
MONTAGGI INDUSTRIALI
Via Matteotti, 16
24050 GRASSOBBIO (BG)

Date : 31.08.2012
Doc.N°. 62A3

INSPECTION BOOK N°. 62A3
WORKSHOP JOB N°. : 2F11

CUSTOMER : BALLESTRA S.p.A. Milano

JOB : 2F11

ORDER N°. : 121283

Item : 62A3

Description : LIQUID DOSING VESSEL

OVER S.r.L.
F. Libretti

DESMET BALLESTRA S.p.A.
Inspector
Giovanni Guidi
10/08/2012

OVER S.r.L.
MONTAGGI INDUSTRIALI
Via Matteotti, 16
24050 GRASSOBBIO (BG)

Date : 31.08.2012

Doc.N° 62A3

HYDROSTATIC TEST REPORT

Customer	BALLESTRA S.P.A.	
Customer Order No.	121283	
Job	2F11	
Item	62A3	
Description	LIQUID DOSING VESSEL	
Data sheet	2F11.35.108	
Constructive Dwg.	2F11.30.108	

Pressure (alternatively) on :

TIME HELD (hours)

SHELL SIDE	bar(g)	FILLING H2O	1
TUBE SIDE	bar(g)		
JACKET	bar(g)		
COIL	bar(g)	7,8	1

Pressure gauges serial N° 295

Dial range : 0 - 10

Vessel position : HORIZONTAL

Dichiariamo che la prova idraulica è stata eseguita utilizzando acqua potabile alle pressioni e tempi indicati in tabella ed ha avuto esito positivo.

We certify that the hydrostatic test with water of drinking quality has been performed, at the conditions and times above indicated, with satisfactory result.

OVER S.r.L. Grassobbio (Bg)
F.Libretti

CUSTOMER INSPECTOR

DESMET BALLESTRA S.p.A.
Inspector 7/3/12
Gatti Gattide
Note w only coil

MOD. 8.2.4-05 rev. 0 "Prova idraulica"

OVER S.r.L.
MONTAGGI INDUSTRIALI
Via Matteotti, 16
24050 GRASSOBBIO (BG)

Date : 31.08.2012

Doc. No. : 62A3

WHITE PICKLING REPORT
(For apparatus in Stainless steel with parts in Carbon steel)
QUALITY CONTROL PLAN No. : 62A3

Customer	BALLESTRA S.P.A.
Customer Order No.	121283
Job	2F11
Item	62A3
Description	LIQUID DOSING VESSEL
Data sheet	2F11.35.108
Constructive Dwg.	2F11.30.108

Il decapaggio esterno è stato eseguito in accordo alla specifica Ballestra No SB-ATI-SP002/4 utilizzando pasta decapante DECABLITZ DR5 per un' ora e risciacquando accuratamente con acqua potabile.

The external white pickling treatment has been performed, according to the Ballestra's specification No. SB-ATI-SP002/4 with paste DECABLITZ DR5 for one hour and thoroughly rinsed with water of drinking quality.

Il ciclo di verniciatura su superfici esterne è stato eseguito in accordo alla specifica Ballestra No. SB-ATI-SP002/4 utilizzando antiruggine COSMALVER TIPO BW0136
The external painting cycle has been performed, according to the Ballestra's specification No. SB-ATI-SP002/4 with antirust COSMALVER TYPE 0136

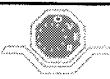
Le parti interne sono state pulite per mezzo di solvente EMULCLEAR M.

The internal parts have been cleaned by means of solvent EMULCLEAR M.


OVER S.r.l. - GRASSOBBIO (BG)

CUSTOMER INSPECTOR


DESME S.p.A.
Inspector
Gatti
Date



OVER S.r.L.
MONTAGGI INDUSTRIALI
Via Matteotti, 16
24050 GRASSOBBIO (BG)
Workshop Job n° 2F11
N°. C0 12C62

CERTIFICATO CONTROLLO DIMENSIONALE
DIMENSIONAL TEST REPORT
CUSTOMER : BALLESTRA S.p. A.
JOB N°. 2F11
Purchase Order N°. 121283
Doc. N°. Sheet 1 of 1 Rev. 0

ITEM : **62A3**
Description : **LIQUID DOSING VESSEL**
DATA SHEET N°.
Constructive Dwg. N°. **2F11.30.108**

SI CERTIFICA CHE L' APPARECCHIO E' STATO SOTTOPOSTO A
CONTROLLO DIMENSIONALE IN ACCORDO AI DISEGNI :

BALLESTRA S.p.A. : DATA SHEET N°. 2F11.35.108
BALLESTRA S.p.A. : COSTRUTTIVO N°. 2F11.30.108

ED ALLE SPECIFICHE RICHIAMATE SUGLI STESSI

TUTTE LE MISURAZIONI EFFETTUATE SONO CONFORMI
ALLE TOLLERANZE INDICATE A DISEGNO
ED ALLE SPECIFICHE IN ESSI RICHIAMATE.
E' STATO ESEGUITO CONTROLLO SPESSORI

WE CERTIFY THAT THE ITEM HAS BEEN CONTROLLED
DIMENSIONALLY ACCORDING TO DRAWINGS :

BALLESTRA S.p.A. : DATA SHEET N°. 2F11.35.108
BALLESTRA S.p.A. : CONSTRUCTIVE N°. 2F11.30.108

AND TO THE SPECIFICATIONS NOTED IN
THE ABOVE MENTIONED DRAWINGS.

ALL THE MEASUREMENTS PERFORMED RESULT WITHIN
DRAWINGS TOLERANCES
AND TO THE SPECIFICATIONS NOTED IN
THE ABOVE MENTIONED DRAWINGS.
THICKNESS CHECK HAS BEEN PERFORMED

DEMANO DI PUNTA
lavorato
Gatti Guido W
7/9/12

RISULTATO / Result : SODDISFALENTE / Satisfactory

1	F. Libretti						
0	OVER Srl	31.08.2012					
Rev.	Issued by	Date	Checked by	Date	Approved by	Date	Description
REV.	Emesso da	Data	Controllato da	Data	Approvato da	Data	Descrizione

OVER S.r.l. Via Matteotti,16 Tel. 035 -525256 Fax 035 - 526467	CERTIFICATO DI CONFORMITA' <i>CERTIFICATE OF COMPLIANCE</i>	
	CUSTOMER : BALLESTRA S.p.A.	JOB N°. 2F11
Workshop Job N° 2F11 N°.: CO 12C62	Purchase Order N°. : 121283	

ITEM :	62A3	LIQUID DOSING VESSEL	2F11.35.108
Description :			
DATA SHEET N°.		QUALITY CONTROL PLAN :	
Constructive Dwg. N°.	2F11.30.108		

**SI CERTIFICA CHE IL MATERIALE RISULTA CONFORME
A QUANTO RICHIESTO DAI DISEGNI,
DALL' ORDINE ED ALLE SPECIFICHE IN ESSI RICHIAMATI.**

**WE HEREBY CERTIFY THAT THE MATERIAL IS IN COMPLETELY
ACCORDANCE WITH THE DRAWINGS,
THE ORDER AND THE SPECIFICATIONS NOTED IN ABOVE
MENTIONED DOCUMENTS.**

OFF. OVER S.R.L. GRASSOBBIO (BG)

*DESMET BALLESTRA S.p.A.
Inspector
Gatti Davide R
7/9/12*

1	F.Libetti						
0	OVER	31.08.2012					
Rev.	Issued by	Date	Checked by	Date	Approved by	Date	Description
REV.	Emesso da	Data	Controllato da	Data	Approvato da	Data	Descrizione

Bulloneria Trevi srl
Via C. Porta, 7
24047 Treviglio (BG)

INSPECTION CERTIFICATE

N° 800172 DATE 17/09/08

OVER srl
VIA MATTEOTTI, 16
24050 GRASSOBIO (BG)

ROLLED BAR ANSI B1.1 A/SA 193 B7 3/4"-10UNCX1000
ZINC PLATING WHITE

Qty 5 Order FAX Date 06/08/08 Heat
Item AR3583 LOT RDC

Heat treatment QUENCHED AND TEMPERED 593°C

The material is conforming to the following specifications:

ASTM A193/A193M-04b B7-ASME II PART "A" ED.2004 SA 193 B7

Mechanical Properties

Required	R Mpa	Rs 0.2 Mpa	A%	Z%	HB	HB 24h	Impact test	Proof Load	Impact test
Actual	970	921	21.0	60.4	294-311	min med	Temp °C	min med	J Temp °C
Chemical Properties	Actual	C	Mn	Si	P	S	Ni	Cr	Mo
		.430	.770	.240	.010	.024	.930	.170	V
									Ti
									Al
									B

VISUAL AND DIMENSIONAL TESTS: SATISFACTORY. WE STATE THAT THE BOLTING MATERIAL WERE MANUFACTURED, SAMPLED, TESTED AND INSPECTED IN ACCORDANCE WITH THE SPECIFICATION AND ANY SUPPLEMENTARY REQUIREMENTS OR OTHER REQUIREMENTS DESIGNATED IN THE PURCHASE ORDER OR CONTACT AND WAS FOUND TO MEET THOSE REQUIREMENTS.

HEAVY HEX NUT h=D ANSI B18.2.2 Tab 9 A/SA 194 2H 3/4"-10UNC ZINC PLATING WHITE

Qty 100 Order FAX Date 06/08/08 Heat
Item 34855 LOT RDC

Heat treatment QUENCHED AND TEMPERED 455°C

The material is conforming to the following specifications:

ASTM A194/A194-04a GR.2H-ASME II PART "A" ED.2004 SA 194 2H

Mechanical Properties

Required	R Mpa	Rs 0.2 Mpa	A%	Z%	HB	HB 24h	Impact test	Proof Load	Impact test
Actual	C	Mn	Si	P	S	Ni	Cr	Mo	V
Chemical Properties	Actual	.430	.730	.160	.009	.022	259	279-294	min med
									Temp °C
									MIN 179/540°C
									POSITIVE
									TI
									AI
									B

VISUAL AND DIMENSIONAL TESTS: SATISFACTORY. WE STATE THAT THE BOLTING MATERIAL WERE MANUFACTURED, SAMPLED, TESTED AND INSPECTED IN ACCORDANCE WITH THE SPECIFICATION AND ANY SUPPLEMENTARY REQUIREMENTS OR OTHER REQUIREMENTS DESIGNATED IN THE PURCHASE ORDER OR CONTACT AND WAS FOUND TO MEET THOSE REQUIREMENTS.

Quality Control Department

bulloneria Trevi srl

Oven



ADDRESS Via Arno, 3
20029 TURBIGO (MI) ITALIA
PHONE 0331 871111 (3 linee r.a.)
FAX 0331 871468
WEB SITE www.turozzi.it
E-MAIL turozzi@turozzi.it

AZIENDA CON
SISTEMA QUALITÀ
CERTIFICATO



COMPANY WITH
QUALITY SYSTEM
CERTIFIED

Raccordi in acciaio per impianti ad alta pressione
Steel fittings for high pressure plants

CLIENTE / Purchaser FERRAM. IND. BONACINA S.r.l.		CERTIFICATO DI COLLAUDO Works certificate EN 10204 3.1	FOGLIO Sheet
ORDINE / Order N. descrizione	ms.DdT 1116	N. 48058 DEL / OF 20/07/2011	2/2

ITEM Item	QUANTITÀ Quantity	DESCRIZIONE / Description	COLATA Heat	MATERIALE Material	CERTIF. ORIG. Mill certif.	ACCIAIERIA / FORNITORE Steel plant / Supplier
3	1	BOCCH. M/F (L61) 3/4 3000 NPT F316L	220658	A182 F316L/316	54097.9L	DEUT. EDELSTAHLW.
4	26	MANICOTTO 1/4 3000 NPT SA182 F316L (*)	031	A182 F316L/316	8818/2396.3	ACC. VALBRUNA
5	2	MANICOTTO 1 3000 NPT F316L	23730	A182 F316L/316	6621/2506.3	ACC. VALBRUNA
6	4	THREDOOLET 10-6x1 3000 NPT SA105 (*)	66656	A105	97308/3397	ACC. VENETE
7	4	THREDOOLET 8-3x1/2 3000 NPT SA105 (*)	899337	A105	131111/3710	ACC. VENETE
8	1	NIPPLA/T. 1/2x50 S.40 PxIS07R WP304L	9746	A312 TP304L/304	0406/1122.6	TTI-TUBACEX
9	10	TEE 1/4 3000 NPT F304L	22815	A182 F304L/304	560372/3422	OLARRA

CONFERMATA
ALL'ORIGINALE

ANALISI CHIMICA - Chemical Analysis

COLATA Heat	C %	Mn %	Si %	P %	S %	Ni %	Cr %	Mo %	Ti %	V %	Cu %	Al %	Nb %	N %	%	%	C.E. %
220658	0,028	1,860	0,490	0,028	0,010	10,130	16,500	2,050						0,044			
031	0,016	1,490	0,600	0,031	0,030	10,150	16,710	2,050						0,065			
23730	0,014	1,530	0,510	0,028	0,030	10,000	16,790	2,060						0,051			
66656	0,180	1,010	0,230	0,007	0,003	0,130	0,140	0,020	0,001	0,273	0,038	0,002					0,410
899337	0,164	1,020	0,260	0,014	0,003	0,140	0,080	0,021	0,001	0,225	0,025	0,003					0,380
9746	0,017	1,490	0,300	0,033	0,002	10,200	18,150							0,074			
22815	0,022	1,530	0,320	0,039	0,027	8,100	18,000							0,089			

CARATTERISTICHE MECCANICHE - Mechanical Test

COLATA Heat	R Tensile Strength N/mm²	S Yield Point N/mm²	A : 2" Elongation %	C Reduction of area %	Bending Test	Flattening Test	Hydraulic Test	HB Hardness test	K Impact test J	Temp. °C	STATO DI FORNIT. (TRATT. TERM.) Supply cond. (heat treatment)	TEMP. °C	NOTE Remarks
220658	576	260	51,0	74,0							SOLUT. TREATED	1050	
031	710	511	42,0	66,0							SOLUT. TREATED	1050	
23730	638	342	50,0	61,0							SOLUT. TREATED	1050	
66656	541	388	27,0	67,0				154	160				
899337	552	410	26,0	67,0				155	155				
9746	588	335	48,6		OK		175BAR				SOLUT. TREATED	1100	
22815	651	349	49,0	72,0							SOLUT. TREATED	1050	

NATURA DEL MATERIALE / Kind of material		NOTE / Remarks	
Acciaio elaborato al forno elettrico Steel made by electric furnace		Materiale conforme a / Material according to: ASME II, part A, edizione 2010.	

COLLAUDI INTERNI / Works inspection		RISULT. Result	COLLAUDI SUPPLEMENTARI / Supplementary tests		RISULT. Result
Dimensionale/Visivo Dimensional/Visual	SILVIA SANTINI	Ok Ok			

RESPONSABILE QUALITÀ / Quality Manager	ENTE COLLAUDATORE / Inspection agency	turozzi fratelli
--	---------------------------------------	------------------

Sede I 25125 Brescia
Via Orzinuovi, 57
Capitale Sociale Euro 1.924.000,00 int. vers.
REA Brescia n. 32614
Registro imprese di Brescia n. 02092360177
C.F. e Partita IVA n. 02092360177

Telefono 030-3544167
Telefax 030-347589

www.intertubi.com
e-mail: info@intertubi.com

Cliente / Customer:

**FERRAMENTA INDUSTRIALE
BONACINA S.R.L.
VIALE EUROPA N. 2/G
24048 CURNASCO DI TREVIOLO (BG)**

D D T / Delivery : **2.565 27/06/2012**

Con riferimento alla fornitura in oggetto ed a fronte della documentazione originale in nostro possesso, dichiariamo che quanto sotto descritto è conforme all'ordine ed alle normative tecniche in seguito richiamate.

Referring to the supply mentioned in the object and as for original document in our possession, we declare that what below described is in conformity with the technical regulation in force, specified at the bottom.

Pos. Item	DESCRIZIONE DELLA FORNITURA EXTENT OF MATERIAL DELIVERED		Quan. Quan.	Colata Heat	Certificato Certificate
Ordine / Order: FAX 27.06.12					
CURVE L.R. S.S. ASME B 16.9 / B 16.25 ASTM/ASME A/SA 403					
L.R. SEAMLESS ELBOWS ASME B 16.9 / B 16.25 ASTM/ASME A/SA 403					
MACE NR 0175					
1.1	CS4041/2 90° 1/2" SCH.40 WP 304/304 L		50	Y110185	509-086 MX
2.1	CS4043/4 90° 3/4" SCH.40 WP 304/304 L		50	10C3628	509-088 MX
3.1	CS4041 90° 1" SCH.40 WP 304/304 L		80	Y110185	509-092 MX
4.1	CS8041/2 90° 1/2" SCH.80 WP 304/304 L		2	ZA1101086	509-123 MX
FLANGE SLIP-ON RF ASME B 16.5/ASTM A 182 150 LBS					
SLIP-ON FLANGES RF ASME B 16.5/ASTM A 182 150 LBS					
5.1	FAS0150611/2 1.1/2" WP 316/316 L		3	TH10043	HR-5-1-45 HR-

Pos. Item	ANALISI CHIMICHE DI COLATA RESULTS OF LADLE ANALYSIS								PROVE MECCANICHE MECHANICAL TEST			
	C%	Si%	Mn%	S%	P%	Cr%	Ni%	Mo%	Ti%	Snev.	Rottu.	Allun.
1.1	0,020	0,420	1,140	0,001	0,038	18,300	8,080			265	550	50,0
2.1	0,023	0,390	1,330	0,001	0,040	18,250	8,100			250	550	55,0
3.1	0,020	0,420	1,140	0,001	0,038	18,300	8,080			290	560	55,0
4.1	0,025	0,420	0,900	0,002	0,038	18,430	8,080			255	545	55,0
5.1	0,015	0,682	1,319	0,013	0,042	16,640	10,140	2,026		320	595	67,0

Esito PMI eseguito in fabbrica: **OK**
Result of PMI executed by the producer:

FERRAMENTA INDUSTRIALE BONACINA SRL
FERRAMENTA INDUSTRIALE BONACINA SRL
Viale Europa, 12 - 24048 TREVIOLO (BG)
Tel. 036 471263 - Fax 036 471263
C. F. IVA: 007271710162

segue / follow

Sede I 25125 Brescia
Via Orzinuovi, 57
Capitale Sociale Euro 1.924.000,00 int. vers.
REA Brescia n. 32614
Registro imprese di Brescia n. 02092360177
C.F. e Partita IVA n. 02092360177

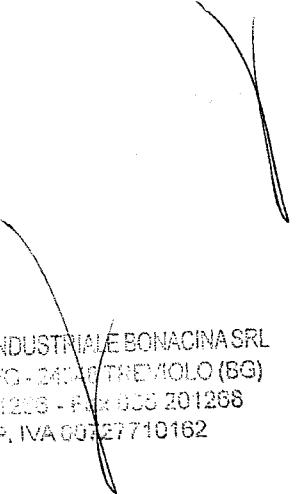
Telefono 030-3544167
Telefax 030-347589

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e-mail: info@intertubi.com

Cliente / Customer:

**FERRAMENTA INDUSTRIALE
BONACINA S.R.L.
VIALE EUROPA N. 2/G
24048 CURNASCO DI TREVIOLO (BG)**

Trattamento termico o solubilizzazione a 1070 °C: OK
Heat treatment or solution annealing at 1070 °C, cooling water:


**FERRAMENTA INDUSTRIALE BONACINA SRL
Viale Europa 2/G - 24048 TREVIOLO (BG)
Tel. 035 201223 - Fax: 035 201268
C. F. e P. IVA 00127710162**

Questo certificato è redatto con l'ausilio informatico ed è valido senza firma.
Modifiche o usi per altri prodotti saranno perseguiti a termine di legge quali falsificazione di documenti e frode
This declaration is drawn-up with informatic aid, therefore is valid without signature.
Any modifications or use of this declaration for different products will be prosecuted by law as falsification and fraud.



METALFAR

STAMPAGGIO A CALDO DI ACCIAI COMUNI - LEGATI E INOSSIDABILI

SALA PROVE E ANALISI MATERIALI / MATERIAL TEST DEPARTMENT

Certifi

SALA PROVE E ANALISI MATERIALI / MATERIE

DO DI ACCIAI COMUNI - LEGATI E INOSSIDABILI

SEDE AMMINISTRATIVA E STABILIMENTO:
23861 CESSANA BRIANZA (LC) - It.
Via G. Parini, 28
Tel. +39 031.655441
Fax +39 031.655149
quality.mff@farmas.com

WITH QUALITY MANAGEMENT
SYSTEM CERTIFIED BY DNV

FERRAMENTA INDUSTRIALE BONACINA
VIALE EUROPA, 2G - FRAZ. CURNASCO

三

COD. COL. HEAT CODE	COLATA HEAT	POS. ITEM	VS.ORDINE YOUR REF.		Q.TA' Q.TY	DESCRIZIONE DESCRIPTION	DIM. IN ACC. A DIM. ACCORDANCE TO	VISIVO E DIMENS. VISUAL & DIMENS.
			REINTEGRO DEPOSITO	REINTEGRO DEPOSITO				
75401	0001		REINTEGRO DEPOSITO	REINTEGRO DEPOSITO	30,00	BLIND 150 RF 2"	A105	
74610	0002		REINTEGRO DEPOSITO	REINTEGRO DEPOSITO	10,00	BLIND 150 RF 4"	A105	ASME/ANSI B16.5
09/35381	0003		REINTEGRO DEPOSITO	REINTEGRO DEPOSITO	5,00	BLIND 150 RF 10"	A105	ASME/ANSI B16.5
91186	0004		REINTEGRO DEPOSITO	REINTEGRO DEPOSITO	5,00	BLIND 150 RF 12"	A105	ASME/ANSI B16.5
94142	0005		REINTEGRO DEPOSITO	REINTEGRO DEPOSITO	5,00	BLIND 150 RF 16"	A105	ASME/ANSI B16.5
08/75077	0007		REINTEGRO DEPOSITO	REINTEGRO DEPOSITO	50,00	BLIND 150 RF 1"	A105	SATISFACTORY
09/79460	0008		REINTEGRO DEPOSITO	REINTEGRO DEPOSITO	20,00	BLIND 150 RF 1 1/2"	A105	SATISFACTORY
COD. COL. HEAT CODE	COLATA HEAT	POS. ITEM	MATERIALE MATERIAL	C%	S%	Mn%	P%	Cr%
COD. COL. HEAT CODE	COLATA HEAT	POS. ITEM	MATERIALE MATERIAL	C%	S%	Mn%	P%	Cr%
75401	0001		ASTM A105	0,190	0,220	0,070	0,013	0,016
74610	0002		ASTM A105	0,180	0,220	0,050	0,015	0,012
09/35381	0003		ASTM A105	0,190	0,240	1,190	0,013	0,010
91186	0004		ASTM A105	0,190	0,210	1,050	0,010	0,012
94142	0005		ASTM A105	0,210	0,230	0,860	0,010	0,020
08/75077	0007		ASTM A105	0,200	0,200	1,070	0,010	0,013
09/79460	0008		ASTM A105	0,195	0,210	1,010	0,008	0,012
COD. COL. HEAT CODE	COLATA HEAT	POS. ITEM	PROVETTA / TEST SPECIM. SEZ./SECT.	SNERVAMENTO LUNG./LENG.	YIELD POINT N/mm ² >= 0,2%	ROTTURA N/mm ² >=	ALLUNGAMENTO ELONGATION %>=	CONTRAZIONE REDUCT. OF AREA %>=
75401	0001	126,60	50,80	329,0	530,0	31,0	57,0	159,0 - 163,0
74610	0002	126,60	50,80	321,0	517,0	32,0	58,0	156,0 - 159,0
09/35381	0003	126,60	50,80	328,0	528,0	31,0	60,0	163,0 - 165,0
91186	0004	126,60	50,80	326,0	540,0	30,0	59,0	163,0 - 165,0
94142	0005	126,60	50,80	319,0	530,0	32,0	61,0	154,0 - 156,0
08/75077	0007	126,60	50,80	337,0	551,0	31,0	58,0	166,0 - 170,0
09/79460	0008	126,60	50,80	333,0	536,0	31,0	58,0	156,0 - 159,0
COD. COL. HEAT CODE	COLATA HEAT	POS. ITEM	MATERIALE IN ACCORDANCE A MATERIAL IN ACCORDANCE TO	TRATTAMENTO TERMICO HEAT TREATMENT	FORNACE FURNACE	ORIGINE ORIGIN		

NOTE
NOTES

~~COPIA CONFORME
ALL'ORIGINALE~~

FERRAMENTA INDUSTRIALE
BONAGNA S.R.L.
SOCIETÀ PER AZIONI

**FERRAMENTA IN ACCIAIO IN
CORROSIONE E
SISTEMA DI CONTROLLO
DI QUALITÀ**

BONACINA

Viale Europa, 25 - 20090 VIENO (Bg)
Tel. 035-201266 - Fax 035-201266
C.F. 9 PIVA 607277/0162

MARCHIO PRODUZIONE

COPIA CONFERMA
ALL'ORIGINALE



CERTIFICATE OF QUALITY

EN 10204 3.1(MANUFACTURER)

ISO9001+PED97/23/EC+AD2000



Address: Tingtian Industrial Zone Rulan City Zhejiang, China

Purchase Order No.: 1974

Certificate No.: 10236

Client	INDUSTRIALFURNITURE SRL VIA GALILEO GALILEI 2/4 57023 CECINA	P.I. No.	A20101114
Description	SEAMLESS STAINLESS STEEL PIPE	Grade	TP316L
Specification	ASTM/ASME A/SA312	Size	2" SCH10S

Supply Condition	Heat No.	Batch No.	Surface Finish	Dimensional Check	Total Quantity	Total Length	Total Net Weight
annealed, pickled, passivated	11A884	A101221-22	Satisfactory	Satisfactory	30PCS	201.32M	818KGS

Heat Treatment Detail

1050 °C-1050 °C

0.021

1.60

0.027

0.001

0.350

16.64

11.06

2.06

OVER



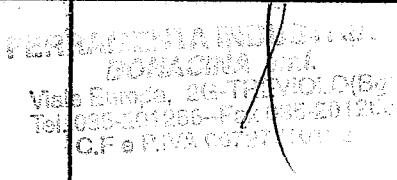
ZHEJIANG TSINGSHAN STEEL PIPE CO., LTD.

XIAOZHI INDUSTRY PARK,WENXI,QINGTIAN COUNTRY,LISHUI,ZHEJIANG 323000 CHINA

青山钢管
TSINGSHAN STEEL PIPE

MILL TEST/INSPECTION CERTIFICATE to EN 10204/3.1

Customer : JANNONE TUBI S.R.L.
Contract No. : TSP07R0411-02
Cert No. : TS070919-22
Specification : ASTM A312
Delivery Condition : A & P
Steel Grade : TP316L
Appearance : Solution Treated
Goods : SEAMLESS STAINLESS STEEL PIPES

Heat No.	Chemical Composition (%)										
	C	Si	Mn	P	S	Cr	Ni	Mo	Ti		
Spec. min.						15.00	10.00	2.00			
Spec. max.	0.035	1.00	2.00	0.045	0.030	16.00	14.00	3.00			
7A1059	0.020	0.37	1.07	0.037	0.003	16.19	10.11	2.06			
Batch No.	Size			Quantity			Test No.				
	26.67-2.87 48.26-2.77 41.26-3.68			55 PCS	336.2 M		84 PCS	516.55 M			
				78 PCS	474.65 M						
Test No.	Mechanical Properties										
	Yield Strength Mpa	Tensile Strength Mpa	Elongation A(%)	Hardness Test HRB	Flaring Test	Flattening Test	Flange Test	Hydrostatic Test Acc to ASTM A450/A450M			
Spec. min.	170	485	35								
Spec. max.				90							
	255/260	565/585	55/57	78/80		GOOD					
	265/275	560/270	55/56	81/82		GOOD					
	270/275	265/280	56/57	80/71		GOOD					
Nondestructive Examination			Inter-granular Corrosion								
Eddy Current Test Acc to ASTM E426	Ultrasonic Test Acc to ASTM E213		Acc to ASTM A262 E PRACTICE								
GOOD			 POLACCHIO INDUSTRIAL POLACCHIO (PV) Viale Europa, 26 - 26010 POLACCHIO (PV) Tel. 036-42-1266-170 Fax 036-42-1266-170 C.F. e P.IVA 00701000122								
GOOD			L/C NO.:094007LI00021 ISSUING DATE:12 JUNE 2007 ISSUING BANK:BANCA MONTE DEI PASCHI DI SIENA S.P.A.(HEAD OFFICE),MILANO								
GOOD											

Additional Remarks:

- 1.Dimension & Surface: OK 2.Country of Origin: China
 3.Hardness acc. to NACE MR 01.75/2003. 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.

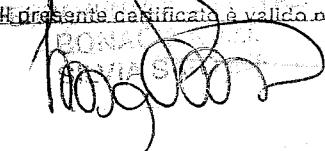
COPIA CONFORME ALL'ORIGINALE

09/18/2007

L'attuale certificato è valido per:

Date

浙江青山钢管有限公司
质量检验专用章
SPECIAL CHARGE OF QUALITY TEST
Quality Technology Director



Original

WELLSLINK ENTERPRISE LIMITED

TEL: 886-7-7243031~4
FAX: 886-7-7133623
886-7-7262595
886-7-7259254

5FL, NO. 78 KWANG HWA 2ND RD.,
CHIEN CHEN DIST., KAOHSIUNG
TAIWAN, R.O.C.

URL: www.catamaron.com
E-Mail:
catama@seed.net.tw

MILL TEST CERTIFICATE CERTIFICATE OF ANALYSIS (INSPECTION CERTIFICATE)

ACCORDING TO EN10204 3.1B

PAGE : 7 OF 9
DATE : AUG.09.2009
P/I NO. : SH50312 (REVISED)
P/O NO. : 408

COMMODITY : STAINLESS STEEL SEAMLESS PIPES
SPEC. / MATERIALS : ASTM A312 -04b TP316/316L

Certificate / INV. No.: CA0800

DIMENSIONS				BUNDLE NO.	PIECES	WEIGHT (kgs)	HEAT NO.
ITEM	O.D. (mm) (inch)	W.T. (mm) (sch)	Length (M) /PCE				
23.	141.30 mm 5"	3.40 mm SCH 10S	6.0 ~ 7.0	05-5-9-7	8	54.54 M (632kgs)	J0504-08
24.	168.30 mm 6"	3.40 mm SCH 10S	6.0 ~ 7.0	05-5-9-8	61	414.95 M (5801kgs)	J0504-08
25.	219.1 mm 8"	3.76 mm SCH 10S	6.0 ~ 7.0	05-5-9-9	60	410.5 M (8417kgs)	J0504-411
26.	33.40 mm 1"	3.38 mm SCH 40S	6.0 ~ 7.0	05-6-109	157	1001.81 M (2493kgs)	J0402-41

CHEMICAL CONTENTS (WT%)								
ELEMENTS	C	Mn	P	S	Si	Ni	Cr	Mo
	≤0.030	≤2.00	≤0.045	≤0.030	≤1.00	10.00~14.00	16.00~18.00	2.00~3.00
Item#23	0.018	0.64	0.030	0.001	0.47	12.25	16.42	2.02
Item#24	0.018	0.64	0.030	0.001	0.47	12.25	16.42	2.02
Item#25	0.019	0.64	0.029	0.001	0.37	12.25	16.46	2.04
Item#26	0.018	0.64	0.033	0.004	0.40	12.19	16.34	2.05

PHYSICAL PROPERTIES							
ELEMENTS	0.2% YIELD STRENGTH (Mpa)	TENSILE STRENGTH (Mpa)	ELONGATION (%)	FLATTENING TEST	HARDNESS (HRB) ≤90	FLARING TEST	EDDY CURRENT TEST (100%)
	≥205	≥ 515	≥35				
Item#23	300	610	55.0	OK	74	OK	OK
Item#24	280	600	53.0	OK	73	OK	OK
Item#25	260	595	56.0	OK	72	OK	OK
Item#26	275	575	63.0	OK	71	OK	OK

REMARKS:

WALL THICKNESS TOLERANCE AS PER ASTM A312-04b

HARDNESS TEST PER NACE MR0175-2003

SOLUTION HEAT TREATMENT: 1050°C × 1.15m/min

NO WELD REPAIR WAS PERFORMED

FREE FROM MERCURY CONTAMINATION

PMI TESTING DONE.

CONDITION: COLD FINISH / SOLUTION TREATED / PICKLED / PLAIN END

THE MATERIALS HAVE BEEN MANUFACTURED,
TESTED AND EXAMINATED IN ACC. WITH ALL THE
REQUIREMENTS OF THE ORDERED STANDARDS
AND WE CONFIRM THAT ALL TEST RESULT ARE
ACCEPTABLE PER ORIGINAL REF. NO.: 2005-3-5-1~11
DATED May 8, 2005.

COPIA CONFORME ALL'ORIGINALE

WELLSLINK ENTERPRISE LIMITED

Manufacturer: CRYSTAL PALACE

Edoardo Facchinetti
S.I.T.I.M. s.a.s.
di Facchinetti Antonio & C.
Via Mattei, 13/A - 24040 MADONE (BG)
Tel. 035.994420 - Fax 035.993867
Cod. Fisc. e P.IVA 01786140168

OTER



DMV STAINLESS France

R.P. 18 - 71561 Montbard Cedex -
Tel : +33 38 52 50 Fax : +33 38 52 57
E-mail : dmvfrance@dmv-stainless.com

INSPECTION CERTIFICATE
ABNAHMEPRUEFZEUGNIS
CERTIFICAT DE RECEPTION
3-1-B - EN 10204: 1991 + A1:1997

No./Nr./Nº:
0290550

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Page : 1 / 2

PURCHASER / Besteller / Client :

ELVINOX

CUSTOMERS ORDER No / Kundenbestellnr / N° Commande client :

208190130

SUBORDER / Item :

TELEFONICO

DMV ORDER No / Werksauftragsnr / N° Commande DMV :

126700140

Product :

Seamless Pipes

Hot finished

Annealed

Pickled Passivated

Erzeugnis :

Nathlose Stahlrohre

Warmgefertigt

Abgeschreckt

Gebeitzt

Type de Produit :

Tubes sans soudure

Fini à chaud

Hypertrémpés

Décapés Passivés

Grade(s) and Specification(s) / Stahlart(e) und Referenzschriften / Norme(s) et spécification(s) :

1.4404 / 1.4401 - TP316L / TP316 - Z2CND17.12 / Z6CND17.11
DIN 17458 PK1 / 85ASTM A312 /00B - ASME SA312 /98 - NACE MR 01.75/2000
NPA 49117L / 85

Marking of the product / Kennzeichnung / Marquage

DMV-F-ASTM A312 / ASME SA 312 - NFA49117 - C2 - S - I- TP316L/TP316 -
Z2CND17.12/Z6CND17.11 - 1.4404/4401 - 168.30 X 7.11 - 6" NPS.SCH 40S -
126700140 -

Supplementary requirements / Zusätzliche Anforderungen / Prescriptions supplémentaires:

Size Tolerances / Toleranzen / Tolérances Dimensionnelles: according to ORDER

Ferramenta Industriale
BONACINA s.r.l.
FERRAMENTA INDUSTRIALE

Part No	Weight	Total Length	OD	W.T	Min Length	Max Length
1	103 Kg	3.61 m	168.30 mm	7.11 mm	3612 mm	6940 mm

Chemical Analysis / Chemische Zusammensetzung / Caractéristiques Chimiques : (%)

Melting Process / Erhitzungsverfahren / Procédé de fondue : Electric / Elektrisch / Électrique + AOD or VOD

Heat No / Schmelzton Nr. / N° Coulée : R03311

	C	Mn	P	Si	Ni	Cr	Mo	Cu	B	Co
Min						11.00	18.5	2.00		
Max	0.030	2.00	0.040	0.030	0.75	12.50	18.0	2.40	1.00	.0015
Head Content/Coule	.0.018	1.67	0.029	.0020	0.37	11.12	18.71	2.10	0.31	.0011

Mechanical and Metallurgical Properties / Mechanische und Metallurgische Kennwerte / Caractéristiques Mécaniques et Métallurgiques

TENSILE TEST 20 °C	Y.S 0.2% (MPA)	Y.S 1% (MPA)	T.S (MPA)	Elongation (2%BSVB)
Zugfestigkeit	Rp 0.2%	Rp 1%	Rm	A %
Traction	Rp 0.2%	Rp 1%		
Long	Requirements : Min 240	Min 230	515 / 690	Min 45
H236	Results : 322	367	591	52.3-52.7

FLARING TEST / AUSWEITUNG / ÉTALEMENT :

H236 OK-a.B-Bon

// TRACTION B :

H236 / H237 Requirements : DIN60138 OK-a.B-Bon

HARDNESS TEST / HÄRTE / DURETÉ :

H236 / H240 Requirements : <=90HRB 75 73 73 73

PLATTENING / RINGFALTE / APATISSEMENT :

H236 OK-a.B-Bon

HARDNESS TEST / HÄRTE / DURETÉ :

H236 Requirements : <=22HRC <= 16

CORROSION / CORROSION / CORROSION :

H236 Requirements : EN ISO3651/2 OK-a.B-Bon

FERRAMENTA INDUSTRIALE**BONACINA s.r.l.**

Viale Europa, 100 - 21040 VARESE (BG)

Tel. 036-120203 - Fax 036-201168

Cell. Ph. 036-3171717/036-31622



DMV STAINLESS France

B.P. 16 - 21501 Montbard Cedex -
Tel : 03 80 89 52 00 Fax : 03 80 89 52 37
Email : dmvfrance@dmv-stainless.com

No / Nr. / N°:

0290550

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Page : 2 / 2

INSPECTION CERTIFICATE ABNAHMEPRUEFZEUGNIS CERTIFICAT DE RECEPTION 3-I-B - EN 10204: 1991 + AJ:1997

CORROSION / KORROSION / CORROSION :

H236

Requirements : ASTMA262/E

OK-o.B-Bon

Other testing and Declaration / Andere Versuche und Bekanntmachung / Autres essais et Déclarations

- Visual and dimensional examination / Besichtigung und masskontrolle / Examen visuel et dimensionnel : OK-o.B-Bon
- Hydrostatic Test / Wasserinnendruck / Essai Hydraulique : 90 BARS / 5s
- Heat Treatment / Wärmebehandlung / Traitement Thermique : Température: 1050/1080°C
- Quenched in water / Lösungsgeglüht und abgeschreckt / Hypertrempe à l'eau.
- PMI examination / Prüfung auf werkstoffverwechslung / Contrôle PMI : OK-o.B-Bon
- No weld repair / Keine reparaturschweissung / Aucune réparation par soudure.
- No contamination by mercury or mercury compounds / Keine Quecksilber - oder Quecksilber bestandteilkontamination
Pas de contamination par le mercure ou l'un de ses composants.

We certify that the delivered products comply with specification of the order.
Die erzeugnisse werden bestellungsgegenäuss geprüft und für In ordnung befunden.
Nous certifions que les produits livrés sont conformes aux stipulations de la commande.

Date d'édition :

22/03/2002

Contrôle Qualité :

Mme LARCHIER

FERRARO S.p.A. INDUSTRIALE

FERRARO S.p.A. INDUSTRIALE

Viale Roma, 1, 21040 VARESE (BG)
Tel. 0362/71113 - Fax 0362/481268
Cod. Fisc. 03410400727710162

This certificate is issued by a computerized system and is valid without signature. On the original certificate, the DMV STAINLESS trade mark in blue color is stamped on the top left of the certificate. In case the owner of the original would release of a copy of it, he must attest its conformity for any unlawful or not allowed use. Any alteration and/or falsification will be subject to the law.

Diese Zeugnis wird mit Hilfe des EDV System erfasst und ist ohne unterschrift gültig. Auf dem Originalzeugnis ist das DMV STAINLESS Warenzeichen in blauer Farbe aufgedruckt. Wenn der Besitzer des Originals eine Kopie herstellen würde, so müsste er dies überzeichnung mit dem Original beschriften und hierzu sein Fall einer gesetzeswidrigen oder unrechtmäßigen Verwendung die Verantwortung zu tragen. Jede Veränderung und/oder Verfälschung wird als gerichtlichen verfolgungen führen.

Ce certificat a été préparé et édité par un système informatique et est valable sans signature. Les données originaux informations sont identifiées par le logo DMV STAINLESS de couleur bleue au haut à gauche du certificat. Dans le cas où le possesseur de l'original se délivre une copie, il devra en attester la conformité et en assumer la responsabilité en cas d'usage illégal. Toute altération ou falsification seront susceptibles d'entraîner des poursuites légales.

Confirmation with reference to Pressure Equipment Directive 97/23/EC: The works operates a quality management system that has undergone a specific assessment for materials for pressure equipment and is certified by a competent body (TUV-CERT.Nº: 05/1992/MAN)

DMV STAINLESS France S.A. ISO9002 - LRQA N° 926478



SUPPLIES

PURCHASE ORDER NO : T0305

CHANGWON SPECIALTY STEEL

65 Shinchon-dong, Changwon, Kyongnam, Korea



ORIGINAL



“首钢”牌产品质量证明书

三

首鋼集團地址：中國北京石景山區
APP THE SHIJIANG GROUP: SHIJING

SCHOOL DISTRICT. 1811.

卷之三

門類編制題解：十四至末

卷之三

114

告 告
造 厂： 首钢集团：河北省首钢迁安钢铁有限责任公司
MANUFACTURER: SHOUGANG GROUP SHOUGANG QIANNAN IRON & STEEL CO., LTD., HEBEI

订货单位：中国首钢国际贸易工程公司 CHINASHOUGANG INTERNATIONAL
Customer

0000322267-60 /GJ201008220499

許可证编号
License No.

卷之三

收货单位 Purchaser	中国外运河北唐山公司 SINOTRANSHEBEIJANGSHAN CO., LTD
产品名称 Product	碳素结构钢 Carbon structural steel
标. 准 Specification	Q/SZGS 321-2007

tion of Supply	AR	证明书编号 Certificate No.	OB1008220012
Date of Delivery	2010-08-22	表 Record No.	SG-01-01-A
Grade	S235JR	页 Page No.	共 1 页, 第 1 页

EC Certificate of Conformity No.: 0038/GPD/MUM
According to EN10204 3.1 (2004)
Tolerance according to EN 10051 (1992+A1:1997)

005941
CO. PROSID.

the heavy-duty materials used have been tested with satisfactory results in accordance with the requirements of the above material specification.

王
學
案

神經病講義

冲压试样尺寸：7.5mm x 10mm x 55mm

Dimension for impact test specimens

the requirements of the above material specification.

UNI EN ISO 6892-1:2009 / UNI EN ISO 148-1:2011

Z01						
ITEM		TOLLERANZA DI SPESORE TOLERANCE ON THICKNESS	TOLLERANZE DI LARGHEZZA TOLERANCE ON WIDTH	TOLLERANZE DI LUNGHEZZA TOLERANCE ON LENGTH	CONDIZIONI SUPERFICIALI SURFACE FINISH	PLANARITÀ FLATNESS
5		EN 10029 CL.A	-0+100 MM	-0+100 MM	EN 10163/2 CL A1	EN 10029 CL. N
6		EN 10029 CL.A	-0+100 MM	-0+100 MM	EN 10163/2 CL A1	EN 10029 CL. N
7		EN 10029 CL.A	-0+100 MM	-0+100 MM	EN 10163/2 CL A1	EN 10029 CL. N

CERTIFICHIAMO che le lamiere elencate sono conformi alla prescrizione dell'ordine, che i controlli della marcatura, dell'aspetto superficiale e dimensionale hanno dato esito positivo.
WE CERTIFY that the above mentioned plates are consistent with the order prescriptions: marking, inspection and measurement without objection.

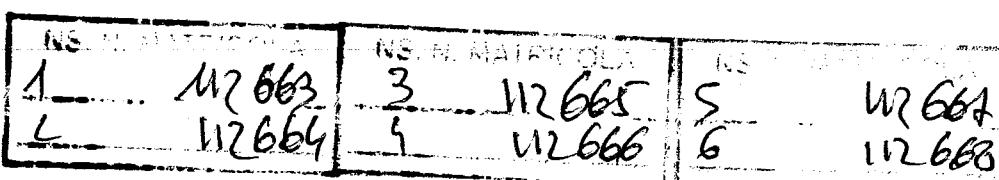


Lamiere conformi ai requisiti della marcatura CE. Certificato di conformità CE n° 0969-CPD-002/06-AC Rev.02 emesso dal Servizio Tecnico Centrale del Consiglio Superiore dei Lavori Pubblici in data 15/09/2011. Plates in compliance with CE marking requirements. Certificate of conformity N° 0969-CPD-002/06-AC Rev.02 from "Servizio Tecnico Centrale del Consiglio Superiore dei Lavori Pubblici" on 15/09/2011.

305

303

	Z03 ENTE COLLAUDO / INSPECTION BODY	Z02
	TIMBRO DELL'ISPEITORE STAMP OF THE INSPECTION REPRESENTATIVE	METINVEST TRAMETAL S.p.a. M. Carrara CQ Respo. 



FRANCHISING L'ADRIETTE SPA
COPIA CONFORME ALL'ORIGINALE

CLIENTE Alex Souza

ORDINE N°

COMMESA AT QUANTITY IS FORWARDED AS DA

Digitized by srujanika@gmail.com

of Ma



Ein Unternehmen der Salzgitter Gruppe

Abnahmeprüfzeugnis 3.1.B
Inspection certificate 3.1.B
Certificato Collaudo Materiali 3.1.B
DIN EN 10204 - ISO 10474

Nr./No./N° 127904
Seite/Page/Pag 1/4
Datum/Date/Data 25.08.2010

Nr./No./N° AMIE000264
Besteller MANNISIPRE SpA
Purchaser I-37135 Verona
Commentario

06.04.2010 Nr./No./N°

Empfänger Manni Siderurgica S.p.A.
Customer I-37060 Mozzecane
Destinatario

Werksauftrags-Nr. 0000001405
Works order No.
N° d'ordine
Abnahme
Inspezione
Collaudo
WS

Erzeugnis Grobblech

Product Heavy plate

Prodotto Lamiere laminate a caldo

Werstoff und Lieferbedingung Grade 60 MT LTW

Steel grade and terms of delivery ASTM A 516 -00/03, A 20-00/03

Condizioni di materia e consegna ASME SA 516, SA 20

ASME sect.II part A ed. 2001 add.2002,2003

DIN EN 10029 B 10/91

Kennzeichnung des Materials / Marking of the product / Puntazione di materiale
Herstellerzeich./Stahlsorte/Schmelzennr./Erzeugn.Nr.
Trademark/Steelgrade/Heat-No/Product-No
Marchio del produttore/Materiale/N°collata/Nºpr.

OS

Materialdaten / Material data / Dati del materiale

Pos. Item Pps.	Anzahl Quantity Numero	Erzeugnis-Nr. Product No. N° prodotto	Schmelzen-Nr. Heat No. N° Calata	Umfert Zustand. Cond. of delivery Stato di fornitura	Dicke x Breite x Länge Thickness x Width x Length Spessore x Largh. x Lunghezza	mm x mm x mm
01	1	102312 1	68696	N	50,00 x 2500,0 x 10000	
01	1	*899713 1	68696	N	50,00 x 2500,0 x 10000	
01	1	*899714 1	68696	N	50,00 x 2500,0 x 10000	
03	1	899631 1	68696	N	60,00 x 2000,0 x 10000	
03	1	899632 1	68696	N	60,00 x 2000,0 x 10000	
03	1	899633 1	68696	N	60,00 x 2000,0 x 10000	
05	1	104285 1	68696	N	70,00 x 2500,0 x 8000	
05	1	*104286 1	68696	N	70,00 x 2500,0 x 8000	
05	1	*104287 1	40105	N	70,00 x 2500,0 x 8000	
06	1	102229 1	68696	N	70,00 x 2000,0 x 8000	
06	1	102230 1	40103	N	70,00 x 2000,0 x 8000	
01	3	Gewicht 29.919 kg		N:	normalisiert / normalized / normalizzata	
03	3	Weight 28.823 lbs				
05	3	Peso 33.627 kg				
06	2	17.900				
Σ	11	110.269				

Maßprüfung und Sichtkontrolle auf äußere Beschaffenheit: ohne Beanstandung
Dimensional check and visual examination of the surface condition:
without objection
Controllo delle dimensioni e controllo a vista della superficie: soddisfacente



Es wird bestätigt, daß die Lieferung den Anforderungen der Lieferbedingung entspricht.
We hereby certify that the delivered material complies with the terms of the order.
Viene confermato, che la consegna corrisponde alle richieste delle condizioni di consegna.
QH-System: Certification ex per ISO 9001 since 25 February 1994



Herstellerzeichen
Trademark
Marchio del produttore

Ilsanburger Großblech GmbH
Vecknitzerstr. Weg 10
D-33871 Ilsenburg



Sachverständigenstempel
Inspector's Stamp
Timbro dell'esperto

Qualitätsverresor
Abnahme
Werksachverständiger
Works Inspector
Perito officina

Cyron



HESBURGER
GROBBLTECH

Ein Unternehmen der Salzgitter Gruppe

Abschlußprüfzeugnis 3.1.B
Inspection certificate 3.1.B
Certificato Collaudo Materiali 3.1.B
DIN EN 10204 - ISO 10474

Nr./No./N° 327904
Seite/Page/Pag. 2/4
Datum/Date/Data 25.08.2010

Nr./No./N° AM1E000264
Besteller MANNISIPRE SpA
Purchaser I-37135 Verona
Commitente

06.04.2010 Nr./No./N°

Empfänger Manni Siderurgica S.p.A.
Customer I-37060 Mozzecane
Destinatario

Erzeugnis Grobblech
Produkt Heavy plate
Prodotto Lamiere laminate a caldo

Werkauftrags-Nr. 0000001405
Works order No.
N° d'ordine
Abnahme
Inspection
Collaudo WS

Werkstoff und Lieferbedingung: Grade 60 MT LTV
Steel grade and terms of delivery ASTM A 516 -00/03, A 20-00/03
Condizioni di materia e consegna ASME SA 516, SA 20
ASME sect.II part A ed. 2001 add.2002,2003
DIN EN 10029 B 10/91

Schmelzenanalyse / Ladle analysis / Analisi di colata

Herstellerangaben / Manufacturer's standard / Indicazioni del fornitore

Schmelzen-Nr. Heat No. N° Colata	C %	Si %	Mn %	P %	S %	N %	Al %	Cu %	Cr %	Ni %
	0,15 - 0,40	0,05 - 1,20	≤ 0,035	≤ 0,035			≤ 0,40	≤ 0,40	≤ 0,30	≤ 0,40
40103	0,14	0,20	1,18	0,010	0,004	0,004	0,035	0,02	0,03	0,12
40105	0,15	0,20	1,18	0,011	0,004	0,004	0,034	0,05	0,04	0,12
68696	0,14	0,18	1,11	0,012	0,002	0,003	0,028	0,03	0,03	0,14
Schmelzen-Nr. Heat No. N° Colata	Mo %	V %	Nb %	Ti %	Cr+Mo %	EV1 1) %	EV2 2) %	EV3 3) %	C+Mn/6 %	
	≤ 0,03	≤ 0,02								
40103	0,00	0,00	0,01	0,00	0,03	0,17	0,01	0,35	0,34	
40105	0,00	0,00	0,01	0,00	0,04	0,21	0,01	0,37	0,35	
68696	0,01	0,00	0,01	0,00	0,04	0,21	0,01	0,34	0,33	

1) EV1: Cr+Cu+Mo+Ni

2) EV2: V+Nb+Ti

3) EV3: Cr+V+Nb+Mo/5+Nb/15+Cr/5+V/5+Cu/15

Erschmelzungsverfahren: Sauerstoffaufblasverfahren

Steelmaking process: Basic oxygen process

Procedimento di elaborazione: Proc. ossigeno

Zugversuch / Tensile test / Prova di trazione

Proben-Nr. Specimen No. N° di provetta	Schmelzen-Nr. Heat No. N° Colata	Ort Location Zona	Richt Direct. Sensu	Zustand Cond. Stato	Form Type Tip	Dehngrenze Yield strength Svadarmto	Zugfestigkeit Tensile strength Carico di rottura Rm N/mm ² ≥ 220	Bruchdehnung Elongation Allungamento Rim 8in %	Bruchdehnung Elongation Allungamento 2in %
102229	68696	K6V	Q	N	C	318	462		34
102230	40103	K6V	Q	N	C	320	482		31
102312	68696	K6G	Q	N	P	300	458	33	
104285	68696	K6V	Q	N	C	319	467		35

1) K: Kopf / Top / Testa

2) 6: 1/8 Breite / 1/8 Width / 1/8 Largh.

3) G: Erzeugnisdicke / Thickness of product / Spessore di prodotto

V: 1/4 Dicke / 1/4 Thickness / 1/4 Spessore

4) Q: quer / transversal / trasversale

5) N: normalisiert / normalized / normalizzato

6) C: zylindrisch / cylindric / cilindrico

P: prismatisch / prismatic / prismatico

Es wird bestätigt, daß die Lieferung den Anforderungen der Lieferbedingung entspricht.

We hereby certify that the delivered material complies with the terms of the order.

Venne confermato, che la consegna corrisponde alle richieste delle condizioni di consegna.

QMS-System: Certification as per ISO 9001 since 28 February 1998



Herstellerzeichen
Trademark
Marchio del produttore

Hesburger Grobblech GmbH
Vecianstadter Weg 10
D-38871 Hesburg



Sachverständigenstempel
Inspector's Stamp
Timbro dell'ispettore

Qualitätswesen
Abnahme
Werksachverständiger
Works Inspector
Perito officina

Cyron

ACRONI

TEHNIČNA KONTROLA
Telefon: +386 4 584 10 43
Telefax: +386 4 584 10 68
<http://www.acroni.si>
E-mail: anton.papler@acroni.si

Potrdilo o prevzemu 3.1 / Abnahmeprüfzeugnis

3.1 / Inspection certificate 3.1

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

EN 10 204 3.1

Datum / Datum / Date

310029862-1

20.07.2011

Naročilo / Bestellung Nr. / Order No.
21/0197 disp. 33270

Dobavni list / Lieferchein / Despatch note
310029862 z/dan/vom/zu 20.07.2011

Izdelek / Erzeugnis / Product

Vrsta peći / Erzhmelzungsart / Melting furnace

BLECH

E+VOD

Znak izvadence TX
Zeichen des sachverständigen
Inspectors' stamp

Specifikacije / Vorschriften / Specifications

ASTM A240/A 240 M/ED.09 A/480

ASME SA 240 SECT.II PART A/ED07 A 09

HACE MR 0175-2003

EN 10088-2/ED.05

EN 10028-7/ED.2000

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

TRB 100

PED/97/23/EC

Tip / W.nr. / Type

316L/316

316L/316

Pov. / Flache / Finish

Koroz. test / Int.krist.kont. / Corrosion test

No.:1

ASTM A262 PRACTICE E:OK

No.:1

X2CrNiMo17/12/2

W.Mr.1.4404/1.4401

C2-IIa, 1D

EN ISO 3651-2: OK

X2CrNiMo17/12/2

W.Mr.1.4404/1.4401

C2-IIa

Obseg dobave / Umfang der Lieferung / Extent of material delivery

Poz. Pos. Item	St. sarže Schmelzen Nr. Heat No.	St. plošce Walzdatei! Plate No.	Teza neto Gewicht Weight kg	Dimenzije Abmessungen Dimensions mm	St. kom. Stückzahl Quantity	St. vzorca Probe Nr. Sample No.
10	276328	46344	5220	25,00 / 2000 / 6000	1	46344 T
11	276337	49181	3878	30,00 / 2000 / 6000	1	49181 T
11	276337	49182	3860	30,00 / 2000 / 6000	1	49182 T

Mehanske lastnosti / Mechanische Eigenschaften / Mechanical properties

St.vzorca Probe Nr. Sample No.	Smr.vzorca Probenlage Position	Nap.tecenja Dehn grenze Yield yield 0,2% MPa	Nap.rocenja Dehn grenze Yield yield 13 MPa	Nat. trdnost Zugfestigkeit Tensile str. MPa	Raztezek / Bruchdehnung / Elongation A5,5 % A50 % A80 %	Kontrak. Einschnürung Red. of area	Trdota Härte Hardness HV	Zlavorst / Kurbschlag / Impact pri/smer bei /lage av/posit.
Zahitev Anforderung Regulam.	MIN	220	260	520	45		217	
	MAX		670					
46344 T P	344	407	572	48,3	66,2		159	359 365 352 20
49181 T P	265	322	568	56,0	80,4		163	365 358 359 20
49182 T P	265	323	568	55,6	79,9		163	378 371 356 20

G - Glava / Kopf / Top

N - Noga / Fuss / Bottom

V - Vzdolzno / Längs / Longitudinal

P - Prečno / Quer / Transversal

Upogib / Bläge / Bend

0,5a

FOTOCOPIA SAMO ZA VSE ALI ORIGINAL
COSTRUITO

29 MAR 2011

GRIFFON & ROMANO S.P.A.

Zig in podpis
Für Unterschrift und Unterschrift
Signature et empreinte

ACRONI d.o.o.

Cesta Borisa Kidriča 43, 4270 Jesenice

Cari skupine SI

Member of Slovenian Steel Group

19/72

Potrdilo o prevzemu 3.1/ Abnahmeprfzeugnis 3.1/ Inspection certificate 3.1

St./Nr./No. 310029862-1

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Kemična analiza / Chemische Zusammensetzung / Chemical Composition

Sarza/Schmelzen Nr./ Heat No.	%C	%Si	%Mn	%P	%S	%Cr	%Ni	%Mo	%N	Ferite
276328	0.013	0.36	1.79	0.040	0.001	16.72	10.18	2.13	0.0404	
276337	0.015	0.42	1.80	0.036	0.001	16.93	10.26	2.13	0.0491	

Opozme / Bemerkungen / Remarks

HEAT TREATMENT : QUENCHED AT 1050° C, WATER QUENCHED

- VISUAL AND DIMENSIONAL CHECK: OKI
- SPECTROMETER SORTING TEST : OKI
- INTERGRANULAR CORROSION TEST ACCORDING TO ASTM A 262 PRACTICE E : OKI

Im Einvernehmen mit dem TÜV Bayern e.V. (August 1965).

Gegenzeichnungsverzicht durch TÜV Bayern Sachsen e.V. mit Schreiben vom 20.6.1996.

WARMBEHANDLUNG : LOSUNGSGLÜGEN BEI 1050°C, WASSER ABGESCHRECKT !

- OBERFLÄCHEN UND MASSPRÜFUNG : OHNE BEAMSTANDUNG NACH EN 10029 DICKE CLASS B UND EN 10163-2 B3
- PRÜFUNG AUF WERKSTOFFVERWECHSLUNG : OHNE BEAMSTANDUNG
- PRÜFUNG AUF BESTÄNDIGKEIT GEGEN INTERKRISTALLINE KORROSION NACH EN ISO 3651-2 : OHNE BEAMSTANDUNG

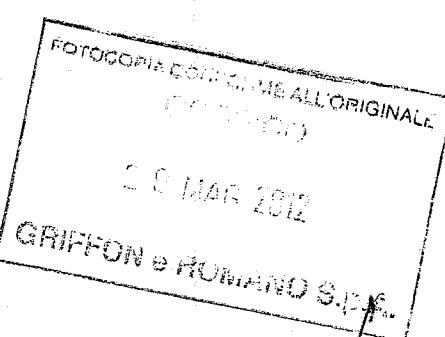
Certified acc. Pressure Equipment Directive (97/23/EC)

by TÜV-CERT-Certification body for pressure equipment of the

TÜV Industrie Service G.m.b.H TÜV Süd Gruppe.

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 pocis
Ink stamp and Unterschrift
and signature
ACRONI
ACRONI, d.o.o.
Cesta Barva Kranj 4 44, 4270 Jesenice
Slovenia
Member of Slovenian Steel Group

19/72


LIANZHONG STAINLESS
STEEL CORP.
MILL CERTIFICATE
EN 10204-3.1

 No.1 Liangguang Road, East Section, Economy & Technology
 Development Zone, Guangzhou, China
 TEL: +86-020-32108888
 FAX: +86-020-32108882

LSI-LAMERE SPECIALI INOX SPA

Customer

FM0014

Customer No.

Order No.

U01001502

Product HOT ROLLED STAINLESS STEEL, COILS

N1106A02

Certificate No.

With consent of TÜV, Certificate no. 01 202 CHIQ-10 0381, dated April. 10 2010

2011-JAN-6

AD2000-W2

Date

1 / 1

Requirements

Page

22°C

 Specification/Siel Grade:EN 10028-7 1.4404(H)
 Surface Finish: 10

Product ID	Heat No.	Dimension		QTY	Weight(Kg)	T.C. test	Specimen No.	Proof stress (N/mm²)		Tensile Stress (N/mm²)	Elong.	Hardness Test	
								0.2%	1.0%				
0CS70711A 0CS70711B	UZ117523 UZ117523	1) 1.0000 mm * 1250 mm * Coi 2) 1.0000 mm * 1250 mm * Coi		1	9,947 10,372	OK	T707414 H707414 T707414 H707414	220 min. 323 323 314	260 min. 381 377 381	530 ~ 680 607 625 607	40 min. 50 49 50	83 83 83 83	165 162 165 162
				Subtotal	20,319								

Chemical Composition

Product ID	C	Si	Mn	P	S	Ni	Cr	Mo	N			
Max./Max.	0.030	1.00	2.00	0.045	0.015	10.00	16.50	2.00				
	0.024	0.64	1.03	0.031	0.003	10.09	16.92	2.06	0.026			
	0.024	0.64	1.03	0.031	0.003	10.09	16.92	2.06	0.026			

Remark

 CLIENTE OVER SOL
 N° ORDINE FOX
 FOTOCOPIA CONFORME ORIGINALE

 LSI-LAMERE SPECIALI INOX S.p.A. - SERVIZIO QUALITÀ
 LSI-LAMERE SPECIALI INOX S.p.A. - SERVIZIO QUALITÀ

Marking:

 Heat No.
 Product ID
 Steel grade
 Manufacturers mark

Works Inspector's Stamp

1. We hereby certify that the material described herein has been manufactured and tested in accordance with the a.m. material specifications.
 2. We hereby certify that on the material described above no radiation contamination has been detected.
 3. LISCO has established a QMS according to ISO 9001, which is certified by DNV CERI (reg.-no. 3863-2007-AQ-RGC-RVA).
 4. The report can only be reproduced in full.



Certified in accordance to Pressure Equipment Directive 97/23/EC Annex I.,
Paragraph 4.3 by TÜV Anlagetechnik GmbH (Notified Body Identification No. 0035)
Inspection Certificate EN10204-3.1

SHANXI TAIGANG STAINLESS STEEL CO., LTD No. 2 JIANCAOPING, TAIYUAN, SHANXI, P. R. CHINA TEL:+86-351-3013328 FAX:+86-351-3017816 Http://www.tisco.com.cn E_mail:tgbxg@tisco.com.cn				MILL TEST CERTIFICATE								
				Certificate No		GKH100432A						
				Material		1.4401/1.4404/316/316L		Surface	No. 1			
				Standard		EN10028-7/ASTM A240/A240M						
				Heat Treatment		Solution 1050~1100 Quenching in water						
Customer Pacific Linkage (China) Limited			Contract No. GK1008PPF0001			Date 2010/10/20						
Product COIL		Melting furnace EAF+AOD K-OBM-S+VOD		Inspectors stamp 			Marking Shanxi Taigang Stainless Steel CO., LTD					
No.	Heat No.	Coil No.	Batch No.	Quantity	Dimensions (mm)			Edge	Weight (Kg)			
16	A1003451	FA00956490K10	80697850	1 ON 27000	8*1500*C			slit	9610			
17	A1003596	FA00956480K10	80698757	1 ON 26000	8*1500*C			slit	9450			
18	A1003596	FA00956480K20	80698758	1 ON 29000	8*1500*C			slit	9230			
19	A1003725	FA00964060K10	80704974	1 ON 30000	8*2000*C			slit	9310			
20	A1003725	FA00964060K20	80704975	1 ON 31000	8*2000*C			slit	9330			
Total												
Chemical Composition %												
Heat No.	C	Si	Mn	P	S	Cr	Ni	Cu	N	Mo	Ti	Nb
A1003451	0.014	0.51	1.16	0.034	0.001	16.77	10.2	0.13	0.036	2.113		
A1003596	0.015	0.50	1.11	0.035	0.002	16.63	10.1	0.06	0.029	2.556		
A1003596	0.015	0.50	1.11	0.035	0.002	16.63	10.1	0.06	0.029	2.556		
A1003725	0.018	0.44	1.08	0.038	0.002	16.89	10.0	0.04	0.039	2.183		
A1003725	0.018	0.44	1.08	0.038	0.002	16.89	10.0	0.04	0.039	2.183		
Mechanical properties (Test Temperature: At 20°C)												
Test No.	Tensile Rm MPa	Proof Stress Rp0.2 MPa	Proof Stress Rp1.0 MPa	Elongation			Hardness					
				A80 (%)	A (%)	A50 (%)	HB	HRB				
80697850-T	592	294	330		57.0	59.0			82.5 82.0			
80698757-T	579	275	345		56.0	60.0			81.0 82.0			
80698758-T	579	275	345		56.0	60.0			82.0 81.0			
80704974-T	595	307	354		51.0	55.0			80.5 80.5			
80704975-T	595	307	354		51.0	55.0			80.5 80.5			
Notes:												
1. The quality management system is in conformity with ISO9001:2000 standard. 2. The environmental management system is in conformity with ISO14001:2004 standard. 3. No weld repair; Free of mercury; 4. Surface and dimensions control: O.K. 5. Intergranular corrosion test: NO CRACK. 6. We hereby certify that the material described above has been detected and has no radiation contamination.												
Place: Taiyuan				Work Inspector:								

 <p>Correspondentieadres: Aperam Genk Swinnenwijkweg 5, 3600 Genk, Belgium Tel. +32 (0)89 30 21 11</p>		A04 MILL CERTIFICATE BS EN 10204/3.1 CERTIFICAT DE RECEPTION NF EN 10204/3.1 ABNAHMEPRUEFZEUGNIS DIN EN 10204/3.1								N-Nr-N 11K0048776-01 V01 A03							
		A02 Company Certificate: Certified acc. PED 97/23/EC Annex I § 4.3 by Certification Body 0036 of TÜV SÜD Industrie Service GmbH with certificate 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.															
<p>A01 Manufacturer's works order number Nº de la commande usine productrice Werksauftragsnummer 80060096/04-14387/033/02</p>		Surveyor's mark Cachet de l'expert Stempel des Werkssachverstaendigen		GNKI		Purchaser and/or consignee Client et/ou destinataire Besteller und/oder Empfaenger LAMIERE SPECIALI INOX SPA VIA GIULIO NATTA 7-A 43100 PARMA ITALIE				Purchaser's order number Nº de commande client Kundenbestellnummer ORD LSI OF-76							
		A08								Z03		A06		A07			
Product - Produit - Erzeugnis COIL, COLD ROLLED, SHOT BLASTED, UNTRIMMED COIL, LAMINE A FROID, GRENAILLE, RIVES BRUTES COIL, KALTGEWALZT, GESTRAHLT, UNBESAEUMT								Customer article number N'article client Artikelnummer des Kunden									
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 240-2010 TYPE 316L / 316 ASME SA 240-2010 TYPE 316L / 316		Finish Présentation Ausführung 2E 2E NO 1 NO 1		Steelmaking process Mode d'élaboration de l'acier - Stahlherstellungverfahren Prod.proc: Electric arc furnace - VOD/AOD - Continuous casting Proc.fabric.: Four à arc - VOD/AOD - Coulée continue Fertigungsablauf: Elektro-Ofen - VOD/AOD - Stranggussanlage				C70		Product delivery condition Etat de livraison du produit - Lieferzustand							
				Any supplementary requirements Prescriptions supplémentaires - Zusätzliche Anforderungen				B03		Solution treated: Hypertrempe: 1050 C Loesungsgegi+abgeschreckt: Forced air-water/air forced-eau Geblaeße Luft-Wasser							
CORROSION TEST: ASTM A262-E :OK												B04					
1113000												Z06					
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 - Stückzahl									
Coil n. N.Bobine - Band Nr. 14000344		Heat n. N.Coulée - Schmelz Nr. 140003		Thickness Epaisseur - Dicke 3.00 mm	Width Largeur - Breite 2040.00 mm	Length Longueur - Laenge 5.00 m	Net weight Poids net - netto Gewicht 23650 KG	B07	B08	1							
CHEMICAL ANALYSIS - ANALYSE CHIMIQUE - CHEMISCHE ZUSAMMENSETZUNG																	
Required - Exigé %mini Anforderung %maxi		C	Si	Mn	Ni	Cr	Mo	Ti	N	S	P						
0.030		0.75	2.00	10.00 13.00	16.50 18.00	2.00 2.50		0.100	0.015	0.045							
Cast Analysis Analyse coulée Analyse Schmelze		0.022	0.39	1.31	10.02	16.62	2.02		0.034	0.003	0.031						
		C71	C72	C73	C74	C75	C76	C77	C78	C79	C80	C81	C82	C83	C84	C85	
Tests to verify batch and quality have been carried out : OK Tests de vérification de la conformité de la nuance fournie : OK Verwechslungsprüfung wurde durchgeführt : OK				Alfa Ferrite Delta Ferrite				C93				D52					
		C04															
Location (1)		MECHANICAL PROPERTIES - PROPRIETES MECANIQUES - MECHANISCHE WERTE EN ISO 6892-1										C20					
		Room temperature - Température ambiante - Raumtemperatur								Test temperature (°C) : C03							
Direction (2) Required Exigé Anforderung		Yield or proof strength Limite d'élasticité Dehnungsgrenze		Tensile Strength Résistance à la traction Zugfestigkeit		Elongation after fracture Allongement après rupt. Bruchdehnung		Hardness Dureté Härte		Yield or proof strength Limite d'élasticité Dehnungsgrenze		Tensile str. Résist. MPa Zugfestigkeit		Elongation % Allongement Bruchdehnung			
1	T	mini	Rp0.2%	Rp1%	Rm	A5	S0mm	HRR	C30	Rp0.2%	Rp1%	Rm	A5				
		maxi	240	270	530 680	40	40	95									
Obtained Obtenu Ergebnisse		299	336	602	55	55	83										
		C11	C14	C12	C13	C15	C31	C16	C17	C18	C19						
Impact strength test Essai de résilience Kerbschlagzähigkeitstest		Corrosion test Test de corrosion Korrosionstest				E0.2(T)/R(T) %								Sample Thickness 4.96 mm C05			
		C40 (°C)	C44	EN ISO 3651/2:OK				49	C50	C51	C52	C53	C54			C55	
			C42	D51 Internal cleanliness:								A:	B:	C:	D:	C57	
Location of the sample (1)		The delivery is in accordance with the order La fourniture est conforme aux exigences de la commande Die lieferung entspricht den Bestellbedingungen								Organisation inspection Organisme et/ou service contrôlé Überwachungsabteilung				A05			
Direction of the test pieces (2)		Packing list Avis d'expédition LiefercheinNummer								2011046215-14387				Quality Department 31/10/2011			
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								The inspector Le responsable Der Werkssachverständige				S. Hillen			
																Z02	

OPERAM
LAMIERE SPECIALI INOX SPA - SERVIZI DI QUALITÀ
13100 PARMA - ITALIA



OVER 931297

Certified in accordance to Pressure Equipment Directive 97/23/EC Annex I.,
Paragraph 4.3 by TÜV Anlagetechnik GmbH (Notified Body Identification No. 0035)

Inspection Certificate EN10204-3.1

SHANXI TAIGANG STAINLESS STEEL CO. , LTD No. 2 JIANCAOPING, TAIYUAN, SHANXI, P. R. CHINA TEL:+86-351-3013328 FAX:+86-351-3017816 Http://www.tisco.com.cn E_email:tgbxg@tisco.com.cn				MILL TEST CERTIFICATE								
				Certificate No		GKH110603A						
				Material		1.4401/1.4404/316L	Surface					
				Standard		EN10028-7/ASTM A240/A240M						
				Heat Treatment								
				Solution 1050~1100 Quenching in water								
Customer		Contract No. GK1107PPF0002		Date 2011/09/07								
Product COIL		Melting furnace EAF+AOD K-OBM-S+VOD				Inspectors stamp Shanxi Taigang Stainless Steel CO., LTD						
No.	Heat No.	Coil No.	Batch No.	Quantity	Dimensions (mm)		Edge	Weight (Kg)				
1	A1103321	FA10859000N20	81881896	1	5*1500*C		slit	9550				
2	A1103321	FA10859000N10	81881895	1	5*1500*C		slit	9160				
3	A2103137	FA10800840K30	81879737	1	6*2000*C		slit	8900				
4	A2103137	FA10800840K20	81874800	1	6*2000*C		slit	10180				
5	A2103137	FA10800840K10	81874799	1	6*2000*C		slit	10140				
				Total								
Chemical Composition %												
Heat No.	C	Si	Mn	P	S	Cr	Ni	Cu	N	Mo	Ti	Nb
A1103321	0.018	0.58	1.12	0.026	0.002	16.7	10.1	0.02	0.03	2.10		
A1103321	0.018	0.58	1.12	0.026	0.002	16.7	10.1	0.02	0.03	2.10		
A2103137	0.018	0.53	1.08	0.036	0.001	16.7	10.2	0.13	0.03	2.03		
A2103137	0.018	0.53	1.08	0.036	0.001	16.7	10.2	0.13	0.03	2.03		
A2103137	0.018	0.53	1.08	0.036	0.001	16.7	10.2	0.13	0.03	2.03		
Mechanical properties (Test Temperature: At 20°C)												
Test No.	Tensile Rm MPa	Proof Stress Rp0.2 MPa	Proof Stress Rp1.0 MPa	Elongation			Hardness					
				A80 (%)	A (%)	A50 (%)	HB	HRB				
81881896-T	546	285	332		62.0	62.0			83.0 82.5			
81881895-T	546	285	332		62.0	62.0			82.5 83.0			
81879737-T	562	283	324		71.0	65.0			76.5 76.0			
81874800-T	562	283	324		71.0	65.0			76.5 76.0			
81874799-T	562	283	324		71.0	65.0			76.5 76.0			
Notes:												
1. The quality management system is in conformity with ISO9001:2008 standard. 2. The environmental management system is in conformity with ISO14001:2004 standard. 3. No weld repair; Free of mercury; 4. Surface and dimensions control: O.K. 5. Intergranular corrosion test: NO CRACK. 6. We hereby certify that the material described above has been detected and has no radiation contamination. 7. Manufacturer: shanxi taigang stainless steel co.,ltd 8. the materials shipped are radioactivity free. 9. The product also meet ASTM A480/A480M and ASME SA240; 10. The Plate meet En10088-2 , TRD 100 AD 2000 W2/W10, PED 97/23EC 11. Intergranular corrosion test according to EN3651-2 and ASTM A262 Practice E;										FOTOCOPIA CONFERMA ALL'ORIGINALE CONCORDO 17 APR 2012 GRIFFON & ROMANO S.p.A.		
Place: Taiyuan										Work Inspector: 		

Potrdilo o prevzemu 3.1/ Abnahmeprufzeugnis 3.1/ Inspection certificate 3.1

Stran/Selte/Page 1 / 2

EN 10 204 3.1, anlage zu 3.2, TUV

St. / Nr. / No.

Datum / Datum / Date

31089102-2

12.05.2008

Naročilo / Bestellung Nr. / Order No.

Dobavni list / Lieferschein / Despatch note

18/0034 disp.27545

31089102 z/vom/from 12.05.2008

Izdelek / Erzeugnis / Product

Vrstva peci / Erschmelzunart / Melting furnace

BLECH

E+VOD

Znak Izvedenca TK

Začlen das sachverständigen
Inspectors' stamp

KK

4

Znak proizvajalca

Zeichen des Herstellwerks
Mark of the Manufacturer



Specifikacija / Vorschriften / Specifications

ASTM A240/A 240 M/ED.04 A/480

ASME SA 240 SECT.II PART A/ED.04 Add 07

Tip / W.Nr. / Type

316L/316

316L/316

Pov. / Flache / Finish

No.:1

No.:1

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

ASTM A262 PRACTICE E:OK

DIN 17440/ED.96 EN10088-2/ED.95

EN 10028-7/ED.2000

NF-A 36.209/ED.90

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

TRB 100

PED/97/23/EC

X2CrNiMo17/12/2

C2-IIa, 1D

W.Mr.1..4404/1.4401

ZSCND17-11-02

X2CrNiMo17/12/2

C2-IIa

W.Mr.1..4404/1.4401

EN ISO 3651-2: OK

NF-A 05.159.T1 : OK

Obseg dobave / Umfang der Lieferung / Extent of material delivery

Poz. Pos. Item	St. sarže Schmelze Nr. Heat No.	St. plošča Wälztafel Plate No.	Tezza tehd Gewicht Weight	Dimenzije Abmessungen Dimensions mm	St. kom. Stückzahl Quantity	St. vzorca Probe Nr. Sample No.
17	263340	75981	3072	32 / 2000 / 6000	1	75981 T
41	263400	76653	5600	70 / 2000 / 5000	1	76653 T
42	263207	74692	4480	55 / 2000 / 8000	1	74692 T

Mehanske lastnosti / Mechanische Eigenschaften / Mechanical properties

St.vzorca Probe Nr. Sample No.	Smer vzorca Proben lage Position	Nap.tcenja Dehn grenze Yield 0.2% N/mm ²	Nap.tcenja Dehn grenze Yield 1% N/mm ²	Nat.udržnost Zugfestigkeit Tensile str. N/mm ²	Raztezek / Bruchdehnung / Elongation AS%	Kontrakc. Einschnürung Red. of area %	Trdota Harte Hardness H _B	Zjavost / Karbschlag / Impact pri / smer bei / flage at/posit.
Zahitev: Anforderung: Requirement:	MIN MAX	220	260	520	45		60	20
				670		217		
74692 T	P	305	357	580	55.5	79.7	163	355
75981 T	P	254	300	549	52.8	83.7	152	342
76653 T	P	275	329	555	53.0	76.8	156	322
G - Glava / Kopf / Top	N - Noga / Fuss / Bottom	V - Vzdolzno / Langs / Longitudinal	P - Precno / Quer / Transverse	Upogib / Blege / Bend :	0.5a			

POUDUCHIA KONFORME ALL'ORIGINALE

CORSICO

1 APR 2010

GRIFFON & ROMANO S.p.A.

ACRONI d.o.o. podpis 19/72
 ACRONI, Pravodležni podpis
 Cesta Borisa Kidriča 44, 4220 Jesenice
 Član skupine STO
 Member of Slovenian Steel Group

Potrdilo o prevzemu 3.1/ Abnahmeprfzeugnis 3.1/ Inspection certificate 3.1

St./Nr./No. **31089102-2**

Stran/Site/Page **2 / 2**

Kemična analiza / Chemische Zusammensetzung / Chemical Composition

Sarza/Schmelze Nr./ Heat No.	%C	%Si	%Mn	%P	%S	%Cr	%Ni	%Mo	%N	Ferrite
263207	0.011	0.29	1.56	0.037	0.002	16.69	10.03	2.03	0.0564	
263340	0.018	0.34	1.56	0.035	0.002	16.55	10.07	2.01	0.0426	
263400	0.019	0.25	1.44	0.039	0.002	17.46	10.77	2.03	0.0569	

Opozme

HEAT TREATMENT : QUENCHED AT 1050° C, WATER QUENCHED

- VISUAL AND DIMENSIONAL CHECK: OK!
- SPECTROMETER SORTING TEST : OK!
- INTERGRANULAR CORROSION TEST ACCORDING TO
ASTM A - 262 PRACTICE E : OK!

Im Einvernehmen mit dem TÜV Bayern e.V. (Avgust 1965).

Gegenzeichnungsverzicht durch TÜV Bayern Sachsen e.V. mit Schreiben vom 20.6.1996.

WARMBEHANDLUNG : LOSUNGSGLUGEN BEI 1050°C, WASSER ABGESCHRECKT !

- OBERFLÄCHEN UND MASSPRÜFUNG : OHNE BEANSTANDUNG NACH EN 10029 DICKE CLASS B
- PRÜFUNG AUF WERKSTOFFVERWECHSLUNG : OHNE BEANSTANDUNG
- PRÜFUNG AUF BESTÄNDIGKEIT GEGEN INTERKRISTALLINE KORROSION
NACH EN ISO 3631-2 : OHNE BEANSTANDUNG

Certified acc. Pressure Equipment Directive (97/23/EC)
by TÜV-CERT-Certification body for pressure equipment of the
TÜV Industrie Service G.m.b.H TÜV Süd Gruppe.

ACRONI

ACRONI, d.o.o.
Cesta Berisa Kleščice 44, SI-1770 Jesenice
C�n skupine SU
Member of Slovenian Steel Group

Zig je podpis

Firmahstempel und Unterschrift

Stamp and signature

C�n skupine SU



Certified in accordance to Pressure Equipment Directive 97/23/EC Annex I.,
Paragraph 4.3 by TÜV Anlagetechnik GmbH (Notified Body Identification No. 0035)
Inspection Certificate EN10204-3.1

SHANXI TAIGANG STAINLESS STEEL CO., LTD No. 2 JIANCAOPING, TAIYUAN, SHANXI, P. R. CHINA TEL: +86-351-3013328 FAX: +86-351-3017816 Http://www.tisco.com.cn E-mail: tgbxg@tisco.com.cn		MILL TEST CERTIFICATE										
		Certificate No		GM110022B								
		Material		1.4401/1.4404/316L/316L	Surface	No. 1						
		Standard		EN10028-7/ASTM A240/A240M								
		Heat Treatment		Solution 1050~1100 Quenching in water								
Customer		Contract No.		Date								
		GM1008PST0001		2011/01/21								
Product		Melting furnace	Inspectors stamp	Marking								
HRSS PLATE		EAF+AOD K-OBM-S+VOD		Shanxi Taigang Stainless Steel Co., LTD								
No.	Heat No.	Package No.	Batch No.	Quantity	Dimensions(mm)	Weight(Kg)						
1	A1003595	00920330	L0632448A	1	50*2000*6000	4870						
2	A1003595	00920282	L0632449A	1	50*2000*6000	4925						
3	C2005182	01020149	L0633900A	1	40*2000*6000	3865						
4	C1006754	809-1666	50094159	2	16*2000*6000	3005						
Total				5		16665						
Chemical Composition %												
Heat No.	C	Si	Mn	P	S	Cr	Ni	Cu	N	Mo	Ti	Nb
A1003595	0.019	0.49	1.14	0.032	0.003	16.65	10.1	0.05	0.026	2.050		
A1003595	0.019	0.49	1.14	0.032	0.003	16.65	10.1	0.05	0.026	2.050		
C2005182	0.019	0.57	1.14	0.034	0.001	16.96	10.2	0.12	0.016	2.020		
C1006754	0.016	0.53	1.14	0.031	0.001	16.95	10.1	0.11	0.022	2.100		
Mechanical properties (Test Temperature: At 20°C)												
Test No.	Tensile Rm MPa	Proof Stress Rp0.2 MPa	Proof Stress Rp1.0 MPa	Elongation		Hardness		Impact Test KV(J)				
				A(%)	A50(%)	HB	HRB					
L0632448A-T	560	270	303	58.0	58.0			236.0 240.0 266.0				
L0632449A-T	554	267	312	58.5	58.5			248.0 266.0 270.0				
L0633900A-T	551	259	290	63.0	63.0			277.0 226.0 288.0				
50094159-T	557	272	310	59.6	65.0	143.0		289.0 256.0 271.0				

Notes:

- The quality management system is in conformity with ISO9001:2000 standard.
- The environmental management system is in conformity with ISO14001:2004 standard.
- No weld repair; Free of mercury;
- Surface and dimensions control: O.K.
- Intergranular corrosion test: NO CRACK.
- We hereby certify that the material described above has been detected and has no radiation contamination.
- According to ASTM A180/A180M and cn 10088-2 ASME SA240, EN10028-7, TRD 100 AD 2000 W2 / W16/N & HUMANO S.p.A.
- PED97/23/EC INTERGRANULAR CORROSION TEST ACCORDING TO EN 3651-2 AND ASTM A262 PRACTICE E
- NACE MR 0175 and ISO 15156:OK

FOTOCOPIA CONFORME ALL'ORIGINALE
05 SET 2011

Place: Taiyuan Work Inspector:

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