CHAPTER 4

MATERIAL CERTIFICATES

(1)

slovenske železarne
ACRONI
J E S E N I C E

N° JACQUET :
83250

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

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

Potrdilo o prevzemu 3.1.B/ Abnahmeprufzeugnis 3.1.B/ Inspection certificate 3.1.B

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DIN 50 049 3.1.B
EN 10 204 3.1.B
St. / Nr. / No.
Datum / Datum / Date

31043563-3 18.08.2004

Narocnik / Kunde / Customer

JACQUET LIZY SAS

ZI LES CARREAUX-BP 4
F-77440 LIZY-SUR-OURCQ

FRANCE

Narocilo / Bestellung Nr. / Order No.
59830 disp.21445

Dobavni list / Lieferschein / Despatch note
31043563 z/vom/from 18.08.2004

Izdelek / Erzeugnis / Product
BLECH

Vrsta peci / Erschmelzunsart / Melting furnace
E+VOD

Znak izvedenca TK
Zeichen des sachverstandigen
Inspectors' stamp
KK 4

Znak proizvajalca
Zeichen des Herstellewerks
Mark of the Manufacturer

Specifikacije / Vorschriften / Specifications	Tip / W.nr. / Type	Pov./ Flache / Finish	Koroz. test / Int.krist.korr. / Corrosion tes
ASTM A240/A 240 M/ED.03	304L/304	No.:1	ASTM A262 PRACTICE E:OK
ASME SA 240 SECT.II PART A/ED.01	304L/304	No.:1	
PED/97/23/EC			
DIN 17440/ED.96 EN10088-2/ED.95 EN 10028-7/ED.2000	X5CrNi18/10/ X2CrNi18/9 W.Nr.1.4301/1.4307	C2-IIa, 1D	DIN 50914:OK EN ISO 3651-2
NF-A 36.209/ED.90	Z 7 CN 18-09	C2-IIa	NF-A 05.159.T1 : OK
AD 2000 Regelwerk W2/ED.01und W10/ED.01 TRB 100	X2CrNi18/9 W.Nr.1.4307		

Obseg dobave / Umfang der Lieferung / Extent of material delivery

Poz. Pos. Item	St. sarze Schmelzen Nr. Heat No.	St. plosce Walztafel Plate No.	Teza neto Gewicht Weight kg	Dimenzije Abmessungen Dimensions mm	St. kom. Stuckzahl Quantity	St. vzorca Probe Nr. Sample No.
1	247314	4095	960	10 / 2000 / 6000	1	4094 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% N/mm2	Nap.tecenja Dehn grenze Yield 1% N/mm2	Nat.trdnost Zugfestigkeit Tensile str. N/mm2	Raztezek / Bruchdehnung / Elongation A5 %	A50 %	A80 %	Kontrakc. Einschnurung Red. of area %	Trdota Harte Hardness HB	Zilavost / Kerbschlag / Impact prl /smer bei /lage J			at/posit. °C
Zahteve Anforderung. Requirem.	MIN	210	250	520	45					60			20
	MAX			650					201				
4094 T	p	330	378	609	51.6	65.6			170	321	339	334	20

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

Kemicna analiza / Chemische Zusammensetzung / Chemical Composition

Sarza/Schmelzen Nr./ Heat No.	%C	%Si	%Mn	%P	%S	%Cr	%Ni	%B	%N	%Co	Ferrite
247314	0.024	0.35	1.47	0.039	0.002	18.20	8.29	<0.0005	0.0828	0.15	

Opombe
Im Einvernehmen mit dem TUV Bayern (August 1965)
"Auf eine Gegenzeichnung wurde durch dem TUV BAYERN SACHSEN verzichtet (20.06.1996)."
WARMBEHANDLUNG : LOSUNGSGLUGEN BEI 1050°C,WASSER ABGESCHRECKT !
- OBERFLACHEN UND MASSPRUFUNG : OHNE BEANSTANDUNG NACH EN 10029 DICKE CLASS B
- PRUFUNG AUF WERKSTOFFVERWECHSLUNG : OHNE BEANSTANDUNG
- PRUFUNG AUF BESTANDIGKEIT GEGEN INTERKRISTALLINE KORROSION NACH DIN 50914 : OHNE BANSTANDUNG
HEAT TREATMENT : SOLUTION ANNEALED 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!
Certified acc. Pressure Equipment Directive (97/23/EC)
by TÜV-CERT-Certification body for pressure equipment of the
TÜV-SÜDDEUTSCHLAND Bau und Betrieb GmbH: notified body. reg-no.0036

Zig in podpis
Firmenstempel und Unterschrift
Stamp and signature

(2-A)

N° JACQUET : 83199 A 83203

slovenske železarne
ACRONI
JESENICE

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Potrdilo o prevzemu 3.1.B/ Abnahmeprufzeugnis 3.1.B/ Inspection certificate 3.1.B

DIN 50 049 3.1.B
EN 10 204 3.1.B

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St. / Nr. / No. 31042056-1

Datum / Datum / Date 29.06.2004

Narocnik / Kunde / Customer

JACQUET LIZY SAS

ZI LES CARREAUX-BP 4
F-77440 LIZY-SUR-OURCQ

FRANCE

Narocilo / Bestellung Nr. / Order No. 59380 disp.21139

Dobavni list / Lieferschein / Despatch note 31042056 z/vom/from 28.06.2004

Izdelek / Erzeugnis / Product: BLECH

Vrsta peci / Erschmelzunsart / Melting furnace: E+VOD

Znak izvedenca TK / Zeichen des sachverstandigen / Inspectors' stamp: KK 4

Znak proizvajalca / Zeichen des Herstellewerks / Mark of the Manufacturer

Specifikacije / Vorschriften / Specifications	Tip / W.nr. / Type	Pov./ Flache / Finish	Koroz. test / Int.krist.korr. / Corrosion tes
ASTM A240/A 240 M/ED.03	304L/304	No.:1	ASTM A262 PRACTICE E:OK
ASME SA 240 SECT.II PART A/ED.01	304L/304	No.:1	
PED/97/23/EC			
DIN 17440/ED.96 EN10088-2/ED.95	X5CrNi18/10/	C2-IIa, 1D	DIN 50914:OK
EN 10028-7/ED.2000	X2CrNi18/9		EN ISO 3651-2
	W.Nr.1.4301/1.4307		NF-A 05.159.T1 : OK
NF-A 36.209/ED.90	Z 7 CN 18-09	C2-IIa	
AD 2000 Regelwerk W2/ED.01und W10/ED.01	X2CrNi18/9		
TRB 100	W.Nr.1.4307		

Obseg dobave / Umfang der Lieferung / Extent of material delivery

Poz. Pos. Item	St. sarze Schmelzen Nr. Cast No.	St. plosce Walztafel Plate No.	Teza neto Gewicht Weight kg	Dimenzije Abmessungen Dimensions mm	St. kom. Stuckzahl Quantity	St. vzorca Probe Nr. Sample No.
2	247005	6432	1440	15 / 2000 / 6000	1	6425T
5	247008	7689	2400	25 / 2000 / 6000	1	7689T
5	247008	7690	2400	25 / 2000 / 6000	1	7690T
5	247008	7691	2400	25 / 2000 / 6000	1	7691T
6	247007	7670	2880	30 / 2000 / 6000	1	7670T

Žig in podpis
Firmenstempel und Unterschrift
Stamp and signature

slovenske železarne
ACRONI
JESENICE

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

N° JACQUET 83599 A 83203

2-B

Potrdilo o prevzemu 3.1.B/ Abnahmeprufzeugnis 3.1.B/ Inspection certificate 3.1.B

St./Nr./No. 31042056-1

Mehanske lastnosti / Mechanische Eigenschaften / Mechanical properties

St.vzorca Probe Nr. Sample No.	Smer vzorca Proben lage Position	Nap.tecenja Dehn grenze Yield 0.2% N/mm2	Nap.tecenja Dehn grenze Yield 1% N/mm2	Nat.trdnost Zugfestigkeit Tensile str. N/mm2	Raztezek / Bruchdehnung / Elongation A5 %	A50 %	A80 %	Kontrakc. Einschnurung Red. of area %	Trdota Harte Hardness HB	Zilavost / Kerbschlag / Impact pri /smer bei /lage J	at/posit.	°C
Zahteve Anforderung. Requirem.	MIN	210	250	520	45					60		20
	MAX			650					201			
6425 T	P	307	355	608	55.4	68.9			170	325	342	344	20
7670 T	p	308	345	594	56.7	78.2			167	325	335	322	20
7689 T	p	336	378	612	56.2	80.4			174	344	350	328	20
7690 T	p	338	381	613	53.9	78.1			174	314	343	332	20
7691 T	p	339	382	613	52.1	76.4			174	340	322	322	20

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

Kemicna analiza / Chemische Zusammensetzung / Chemical Composition

Sarza/Schmelzen Nr./ Heat No.	%C	%Si	%Mn	%P	%S	%Cr	%Ni	%B	%N	%Co	Ferrite
247008	0.020	0.34	1.53	0.039	0.001	18.15	8.06	<0.0005	0.0978	0.14	
247005	0.023	0.39	1.66	0.040	0.001	18.33	8.10	<0.0005	0.0919	0.15	
247007	0.015	0.29	1.45	0.040	0.002	18.17	8.15	<0.0005	0.0996	0.13	

Opombe

Im Einvernehmen mit dem TUV Bayern (August 1965)
"Auf eine Gegenzeichnung wurde durch dem TUV BAYERN SACHSEN verzichtet (20.06.1996)."
WARMBEHANDLUNG : LOSUNGSGLUGEN BEI 1050°C,WASSER ABGESCHRECKT !
- OBERFLACHEN UND MASSPRUFUNG : OHNE BEANSTANDUNG NACH EN 10029 DICKE CLASS B
- PRUFUNG AUF WERKSTOFFVERWECHSLUNG : OHNE BEANSTANDUNG
- PRUFUNG AUF BESTANDIGKEIT GEGEN INTERKRISTALLINE KORROSION NACH DIN 50914 : OHNE BANSTANDUNG
HEAT TREATMENT : SOLUTION ANNEALED 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!
Certified acc. Pressure Equipment Directive (97/23/EC)
by TÜV-CERT-Certification body for pressure equipment of the
TÜV-SÜDDEUTSCHLAND Bau und Betrieb GmbH: notified body. reg-no.0036

Žig in podpis
Firmenstempel und Unterschrift
Stamp and signature

04 0904/783 cc JPG

OUTO KUMPU

CERTIFICATE - ZEUGNIS - CERTIFICAT (3)

EN 10204-3.1.B

Avesta Works
CM. Hans Pernäng

Date - Datum	Load - Ladung - Chargem No	Cert.No - Zeugnis No
2004-10-18	FR4A-0943	1150809-EN

Your order - Ihre Bestellung - Votre commande
316577

Avesta order - Auftrag - Ordre: 661/406146
Invoice - Rechnung - Facture: 661/467900

Purchaser - Besteller - Acheteur
OUTOKUMPU S/A
100, RUE PETIT

FR-75165 PARIS CEDEX 19
FRANCE

Requirements - Anforderungen - Exigences
ASTM A 240-04
ASME SA-240 2001 A02

Dest.
CMP ARLES SA

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

Grade - Werkstoff - Nuance
Avesta 18-8L
TYPE 304

Brand mark / Herstellerzeichen / Signe du producteur	OUTO KUMPU	Inspectors stamp / Abname - Stempel / Estamp de l'expert	AJA A	Melting process / Erschmeltzungsart / Procédé de fusion	E + AOD

Extent of delivery - Lieferumfang - Etendue de livre

Item / Pos / Poste	Pcs / Anzahl / Nombre	kg	Dimensions - Abmessungen - Dimensions mm			Heat No / Schmelze Nr / Coulée No	Lot No / Los Nr / Lot Nr
14	6	5939	8.00	2000	7891	843579 —	003

Chemical composition - Chemische Zusammensetzung - Composition chimique

	C	Si	Mn	P	S	Cr	Ni	Nb	Cu	Co	N
Heat	.019	.30	1.69	.026	.001	18.12	8.09	.005	.37	.10	.073

Radioactive contamination check acc. IAEA recommendations: Satisfactory

Test results - Prüfergebnisse - Résults déssais (1N/mm 2 = 1 MPa) F = Front - Anfang - Début B = Back - Ende - Fin T = Transverse - Quer - Travers

	Test Ref / Probe Ref / Eprouv Ref		Temp °C	Rp 0.2 N/mm²	Rp 1.0 N/mm²	R_m N/mm²	2" %	HB HB
Min			+20	205		515	40	
Max								201
	F	T	+20	316	362	620	54	178
	B	T		311	356	615	56	170

Corrosion acc. ASTM A 262-E: Satisfactory
Heat treatment: Material temperature 1100 cel / Quenched (forced air + water)
Steel grade verification (PMI-spectroscopic): OK
Insp. and gauge measurement: Satisfactory

Outokumpu Stainless AB
Avesta Works
BOX 74, S-774 22 AVESTA
SWEDEN
Regoffice:
Stockholm Sweden

Telephone : (0)226 814 18
Telefax : (0)226 813 16
Telex no : 7030 AVESTA S
Reg no : 556001-8748
V.A.T no : SE556001874801

This material is found to comply with order requirements

Authorized Inspector

EN ISO 9001
EN ISO 14001

OUTO KUMPU

4

CERTIFICATE - ZEUGNIS - CERTIFICAT

EN 10204-3.1.B

Avesta Works
CM. Hans Pernäng

Date - Datum	Load - Ladung - Chargem No	Cert.No - Zeugnis No
2004-09-20	FR4A-0865	1139144-EN

Your order - Ihre Bestellung - Votre commande
316577

Avesta order - Auftrag - Ordre: 661/406146
Invoice - Rechnung - Facture: 661/466166

Purchaser - Besteller - Acheteur
OUTOKUMPU S/A
100, RUE PETIT

FR-75165 PARIS CEDEX 19
FRANCE

Requirements - Anforderungen - Exigences
ASTM A 240-04
ASME SA-240 2001 A02

Dest.
CMP ARLES SA

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

Grade - Werkstoff - Nuance
Avesta 18-8L
TYPE 304

Brand mark / Herstellerzeichen / Signe du producteur	OUTO KUMPU	Inspectors stamp / Abname - Stempel / Estamp de l'expert	AJA A	Melting process / Erschmeltzungsart / Procédé de fusion	E + AOD

Extent of delivery - Lieferumfang - Etendue de livre

Item / Pos / Poste	Pcs / Anzahl / Nombre	kg	Dimensions - Abmessungen - Dimensions mm			Heat No / Schmelze Nr / Coulée No	Lot No / Los Nr / Lot Nr
12	5	4346	7.00	2000	7891	842908 —	004

Chemical composition - Chemische Zusammensetzung - Composition chimique

	C	Si	Mn	P	S	Cr	Ni	Nb	Cu	Co	N
Heat	.020	.32	1.67	.025	.001	18.31	8.12	.002	.29	.10	.071

Radioactive contamination check acc. IAEA recommendations: Satisfactory

Test results - Prüfergebnisse - Résults déssais (1N/mm 2 = 1 MPa) F = Front - Anfang - Début B = Back - Ende - Fin T = Transverse - Quer - Travers

	Test Ref / Probe Ref / Eprouv Ref	Temp °C	Rp 0.2 N/mm²	Rp 1.0 N/mm²	R_m N/mm²	2" %	HB HB
Min		+20	205		515	40	
Max							201
	F T	+20	313	359	623	50	170
	B T		318	366	627	51	187

Corrosion acc. ASTM A 262-E: Satisfactory
Heat treatment: Material temperature 1100 cel / Quenched (forced air + water)
Steel grade verification (PMI-spectroscopic): OK
Insp. and gauge measurement: Satisfactory

Outokumpu Stainless AB
Avesta Works
BOX 74, S-774 22 AVESTA
SWEDEN
Regoffice:
Stockholm Sweden

Telephone : (0)226 814 18
Telefax : (0)226 813 16
Telex no : 7030 AVESTA S
Reg no : 556001-8748
V.A.T no : SE556001874801

This material is found to comply with order requirements

Authorized Inspector

EN ISO 9001
EN ISO 14001

OUTO KUMPU

5

CERTIFICATE - ZEUGNIS - CERTIFICAT

EN 10204-3.1.B

Avesta Works
CM. Hans Pernäng

Date - Datum	Load - Ladung - Chargem No	Cert.No - Zeugnis No
2004-09-29	FR4A-0888	1143250-EN

Your order - Ihre Bestellung - Votre commande
316577

Avesta order - Auftrag - Ordre Invoice - Rechnung - Facture
661/406146 661/466815

Purchaser - Besteller - Acheteur
OUTOKUMPU S/A
100, RUE PETIT

FR-75165 PARIS CEDEX 19
FRANCE

Requirements - Anforderungen - Exigences
ASTM A 240-04
ASME SA-240 2001 A02

Dest.
CMP ARLES SA

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

Grade - Werkstoff - Nuance
Avesta 18-8L
TYPE 304

Brand mark / Herstellerzeichen / Signe du producteur	OUTO KUMPU	Inspectors stamp / Abname - Stempel / Estamp de l'expert	AJA A	Melting process / Erschmeltzungsart / Procédé de fusion	E + AOD

Extent of delivery - Lieferumfang - Etendue de livre

Item Pos Poste	Pcs Anzahl Nombre	kg	Dimensions - Abmessungen - Dimensions mm			Heat No Schmelze Nr Coulée No	Lot No Los Nr Lot Nr
11	21	15710	6.00	2000	7890	843578 —	002

Chemical composition - Chemische Zusammensetzung - Composition chimique

	C	Si	Mn	P	S	Cr	Ni	Nb	Cu	Co	N
Heat	.020	.31	1.66	.026	.001	18.27	8.11	.003	.37	.11	.074

Radioactive contamination check acc. IAEA recommendations: Satisfactory

Test results - Prüfergebnisse - Résults déssais (1N/mm 2 = 1 MPa) F = Front - Anfang - Début B = Back - Ende - Fin T = Transverse - Quer - Travers

	Test Ref Probe Ref Eprouv Ref	Temp °C	Rp 0.2 N/mm²	Rp 1.0 N/mm²	R_m N/mm²	2" %	HB HB
Min		+20	205		515	40	
Max							201
	F T	+20	309	359	621	52	167
	B T		309	358	619	52	163

Corrosion acc. ASTM A 262-E: Satisfactory
Heat treatment: Material temperature 1100 cel / Quenched (forced air + water)
Steel grade verification (PMI-spectroscopic): OK
Insp. and gauge measurement: Satisfactory

Outokumpu Stainless AB
Avesta Works
BOX 74, S-774 22 AVESTA
SWEDEN
Regoffice:
Stockholm Sweden

Telephone : (0)226 814 18
Telefax : (0)226 813 16
Telex no : 7030 AVESTA S
Reg no : 556001-8748
V.A.T no : SE556001874801

This material is found to comply with order requirements

Authorized Inspector

EN ISO 9001
EN ISO 14001

(6)

OUTO KUMPU

Avesta Works
ocm.Hans Pernäng

CERTIFICATE - ZEUGNIS - CERTIFICAT

EN 10204-3.1.B

Date · Datum	Load · Ladung · Chargem No	Cert.No · Zeugnis No
2004-07-30	FR4A-0747	1120675-EN

Your order · Ihre Bestellung · Votre commande
315736 / 04 0536/752

Avesta order · Auftrag · Ordre Invoice · Rechnung · Facture
403883 463338

Purchaser · Besteller · Acheteur
OUTOKUMPU S/A
100, RUE PETIT

FR-75165 PARIS CEDEX 19
FRANCE

Requirements · Anforderungen · Exigences
ASTM A 240-04
ASME SA-240 2001 A02
EN 10028-7:2000

Dest.
CMP ARLES SA

0405361752

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

Grade · Werkstoff · Nuance
Avesta 18-8L
TYPE 304/1.4301

Brand mark / Herstellerzeichen / Signe du producteur	Inspectors stamp / Abnahme - Stempel / Estamp de l'expert	Melting process / Erschmelzungsart / Procédé de fusion
OUTO KUMPU	AJA A	E+AOD

Extent of delivery - Lieferumfang - Étendue de livre

Item / Pos / Poste	Pcs / Anzahl / Nombre	kg	Dimensions - Abmessungen - Dimensions mm			Heat No / Schmelze Nr / Coulée No	Lot No / Los Nr / Lot Nr
3	3	2340	10.00	2000	5000	842555	— 001

Chemical composition · Chemische Zusammensetzung · Composition chimique

	C	Si	Mn	P	S	Cr	Ni	Nb	Cu	Co	N
Heat	.018	.35	1.65	.027	.001	18.21	8.11	.006	.33	.14	.063

Radioactive contamination check acc. IAEA recommendations: Satisfactory

Test results · Prüfergebnisse · Résults dessais (1N/mm 2 = 1 MPa) F = Front · Anfang · Début B = Back · Ende · Fin T = Transverse · Quer · Travers

	Test Ref / Probe Ref / Eprouv Ref	Temp °C	Rp 0.2 N/mm²	Rp 1.0 N/mm²	R_m N/mm²	A5 %	Z %	HB HB
Min		+20	230	260	520	45	40	
Max					720			201
	F T	+20	337	377	621	54	56	201
	B T		339	384	622	54	56	192

Corrosion acc. ASTM A 262-E, EN ISO 3651-2A: Satisfactory
Heat treatment: Material temperature 1100 cel / Quenched (forced air + water)
Steel grade verification (PMI-spectroscopic): OK
Insp. and gauge measurement: Satisfactory
Certified acc. Pressure Equipment Directive (97/23/EC) by TÜV CERT-Certification body for pressure equipment of the TÜV NORD GROUP; notified body, reg-no. 0045.

Outokumpu Stainless AB
Avesta Works
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SWEDEN
Regoffice:
Stockholm Sweden

Telephone : (0)226 814 18
Telefax : (0)226 813 16
Telex no : 7030 AVESTA S
Reg no : 556001-8748
V.A.T no : SE556001874801

This material is found to comply with order requirements

Authorized Inspector

EN ISO 9001
EN ISO 14001

OUTO KUMPU

7

CERTIFICATE - ZEUGNIS - CERTIFICAT

EN 10204-3.1.B

Avesta Works
CM. Hans Pernäng

Date - Datum	Load - Ladung - Chargem No	Cert.No - Zeugnis No
2004-09-20	FR4A-0865	1139148-EN

Your order - Ihre Bestellung - Votre commande
316577

Avesta order - Auftrag - Ordre Invoice - Rechnung - Facture
661/406146 661/466166

Purchaser - Besteller - Acheteur
OUTOKUMPU S/A
100, RUE PETIT

FR-75165 PARIS CEDEX 19
FRANCE

Requirements - Anforderungen - Exigences
ASTM A 240-04
ASME SA-240 2001 A02

Dest.
CMP ARLES SA

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

Grade - Werkstoff - Nuance
Avesta 18-8L
TYPE 304

Brand mark / Herstellerzeichen / Signe du producteur	OUTO KUMPU	Inspectors stamp / Abname - Stempel / Estamp de l'expert	AJA A	Melting process / Erschmeltzungsart / Procédé de fusion	E + AOD

Extent of delivery - Lieferumfang - Etendue de livre

Item / Pos / Poste	Pcs / Anzahl / Nombre	kg	Dimensions - Abmessungen - Dimensions mm			Heat No / Schmelze Nr / Coulée No		Lot No / Los Nr / Lot Nr
7	5	2776	6.00	1500	7890	32730	—	002

Chemical composition - Chemische Zusammensetzung - Composition chimique

	C	Si	Mn	P	S	Cr	Ni	Nb	Cu	Co	N
Heat	.019	.43	1.75	.029	.002	18.30	8.20	.010	.39	.13	.042

Radioactive contamination check acc. IAEA recommendations: Satisfactory

Test results - Prüfergebnisse - Résults déssais (1N/mm 2 = 1 MPa) F = Front - Anfang - Début B = Back - Ende - Fin T = Transverse - Quer - Travers

	Test Ref / Probe Ref / Eprouv Ref		Temp °C	Rp 0.2 N/mm²	Rp 1.0 N/mm²	R_m N/mm²	2" %	HB HB
Min			+20	205		515	40	
Max								201
	F	T	+20	381	421	627	52	192
	B	T		306	349	613	53	170

Corrosion acc. ASTM A 262-E: Satisfactory
Heat treatment: Material temperature 1100 cel / Quenched (forced air + water)
Steel grade verification (PMI-spectroscopic): OK
Insp. and gauge measurement: Satisfactory

Outokumpu Stainless AB
Avesta Works
BOX 74, S-774 22 AVESTA
SWEDEN
Regoffice:
Stockholm Sweden

Telephone : (0)226 814 18
Telefax : (0)226 813 16
Telex no : 7030 AVESTA S
Reg no : 556001-8748
V.A.T no : SE556001874801

This material is found to comply with order requirements

Authorized Inspector

EN ISO 9001
EN ISO 14001

OUTO KUMPU

ok 0906/183 cc JPG

CERTIFICATE - ZEUGNIS - CERTIFICAT (B)

EN 10204-3.1.B

Avesta Works
CM. Hans Pernäng

Date - Datum	Load - Ladung - Chargem No	Cert.No - Zeugnis No
2004-09-29	FR4A-0888	1143248-EN

Your order - Ihre Bestellung - Votre commande
316577

Avesta order - Auftrag - Ordre Invoice - Rechnung - Facture
661/406146 661/466815

Purchaser - Besteller - Acheteur
OUTOKUMPU S/A
100, RUE PETIT

FR-75165 PARIS CEDEX 19
FRANCE

Requirements - Anforderungen - Exigences
ASTM A 240-04
ASME SA-240 2001 A02

Dest.
CMP ARLES SA

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

Grade - Werkstoff - Nuance
Avesta 18-8L
TYPE 304

Brand mark / Herstellerzeichen / Signe du producteur	OUTO KUMPU	Inspectors stamp / Abname - Stempel / Estamp de l'expert	AJA A	Melting process / Erschmeltzungsart / Procédé de fusion	E + AOD

Extent of delivery - Lieferumfang - Etendue de livre

Item / Pos / Poste	Pcs / Anzahl / Nombre	kg	Dimensions - Abmessungen - Dimensions mm			Heat No / Schmelze Nr / Coulée No	Lot No / Los Nr / Lot Nr
10	11	7728	6.00	2000	7400	843576 —	004

Chemical composition - Chemische Zusammensetzung - Composition chimique

	C	Si	Mn	P	S	Cr	Ni	Nb	Cu	Co	N
Heat	.017	.30	1.78	.026	.001	18.15	8.07	.007	.37	.11	.075

Radioactive contamination check acc. IAEA recommendations: Satisfactory

Test results - Prüfergebnisse - Résults déssais (1N/mm 2 = 1 MPa) F = Front - Anfang - Début B = Back - Ende - Fin T = Transverse - Quer - Travers

	Test Ref / Probe Ref / Eprouv Ref	Temp °C	Rp 0.2 N/mm²	Rp 1.0 N/mm²	R_m N/mm²	2" %	HB HB
Min		+20	205		515	40	
Max							201
	F T	+20	317	366	626	50	170
	B T		315	365	627	51	183

Corrosion acc. ASTM A 262-E: Satisfactory
Heat treatment: Material temperature 1100 cel / Quenched (forced air + water)
Steel grade verification (PMI-spectroscopic): OK
Insp. and gauge measurement: Satisfactory

Outokumpu Stainless AB
Avesta Works
BOX 74, S-774 22 AVESTA
SWEDEN
Regoffice:
Stockholm Sweden

Telephone : (0)226 814 18
Telefax : (0)226 813 16
Telex no : 7030 AVESTA S
Reg no : 556001-8748
V.A.T no : SE556001874801

This material is found to comply with order requirements

Rune Jonsson

Authorized Inspector

EN ISO 9001
EN ISO 14001

OUTO KUMPU

Avesta Works
QCM. Hans Pernäng

CERTIFICATE - ZEUGNIS - CERTIFICAT

9

EN 10204-3.1.B

Date - Datum	Load - Ladung - Chargem No	Cert.No - Zeugnis No
2004-09-22	FR4A-0872	1140286-EN

Your order - Ihre Bestellung - Votre commande
316577

Avesta order - Auftrag - Ordre
661/406146

Invoice - Rechnung - Facture
661/466365

Purchaser - Besteller - Acheteur
OUTOKUMPU S/A
100, RUE PETIT

FR-75165 PARIS CEDEX 19
FRANCE

Requirements - Anforderungen - Exigences
ASTM A 240-04
ASME SA-240 2001 A02

Dest.
BSL TUBES ET RACCORDS SA

04 09041783 cc DL

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

Grade - Werkstoff - Nuance
Avesta 18-8L
TYPE 304

Brand mark / Herstellerzeichen / Signe du producteur	OUTO KUMPU	Inspectors stamp / Abname - Stempel / Estamp de l'expert	AJA A	Melting process / Erschmeltzungsart / Procédé de fusion	E+AOD

Extent of delivery - Lieferumfang - Etendue de livre

Item / Pos / Poste	Pcs / Anzahl / Nombre	kg	Dimensions - Abmessungen - Dimensions mm			Heat No / Schmelze Nr / Coulée No	Lot No / Los Nr / Lot Nr
3	12	4694	5.00	2000	5000	843379 —	002

Chemical composition - Chemische Zusammensetzung - Composition chimique

	C	Si	Mn	P	S	Cr	Ni	Nb	Cu	Co	N
Heat	.019	.33	1.73	.024	.001	18.15	8.24	.004	.24	.09	.064

Radioactive contamination check acc. IAEA recommendations: Satisfactory

Test results - Prüfergebnisse - Results dessais (1N/mm 2= 1 MPa) F = Front - Anfang - Début B = Back - Ende - Fin T = Transverse - Quer - Travers

	Test Ref / Probe Ref / Eprouv Ref		Temp °C	Rp 0.2 N/mm²	Rp 1.0 N/mm²	R_m N/mm²	2" %	HB HB
Min			+20	205		515	40	
Max								201
	F	T	+20	294	342	617	52	160
	B	T		302	348	620	53	156

Corrosion acc. ASTM A 262-E: Satisfactory
Heat treatment: Material temperature 1100 cel / Quenched (forced air + water)
Steel grade verification (PMI-spectroscopic): OK
Insp. and gauge measurement: Satisfactory

Outokumpu Stainless AB
Avesta Works
BOX 74, S-774 22 AVESTA
SWEDEN
Regoffice:
Stockholm Sweden

Telephone : (0)226 814 18
Telefax : (0)226 813 16
Telex no : 7030 AVESTA S
Reg no : 556001-8748
V.A.T no : SE556001874801

This material is found to comply with order requirements

Authorized Inspector

EN ISO 9001
EN ISO 14001

A Company ThyssenKrupp Steel
ThyssenKrupp VDM
ThyssenKrupp VDM GmbH Division Plate & Sheet
Kaiserstraße 23, D-58762 Altena
Postbox 1251, D-58742 Altena
Tel. +49 2392 552082
Fax +49 2392 552047
EMail KSawinski@TKS-VDM.THYSSENKRUPP.COM

Certificate Nr. 31239/0
EN 10204 3.1B

printed: 04.01.2005

040904/783 ccDL.

Order No. 404190 | Delivery No. | Trademark 1.4301

by order and on account of **OUTOKUMPU STAINLESS AB**

OUTO KUMPU

Product
plate, hot rolled, solution annealed, descaled, sheared

Specification	Material
ASME SA-240. Code Sect. II. Part A. Ed.2001-A02	Type 304 / Type 304 L
ASTM A 240M-04a	Type 304 / Type 304 L

CMP Arles

Item	Pcs	Wht [kg]	Dimension [mm]			Cast	Lot
1	2		7,000 x	2100,0 x	7800,0	485569	200848805

Purchase Order No. 040904/783

Analysis (weight %)

Cast	Melting Pr.	C	S	N	Cr	Ni	Mn	Si	P
485569	E	0,024	0,001	0,07	18,35	8,08	1,62	0,47	0,028

Sample Condition
solution annealed

Tensile Test
1 ASTM E 8 / transverse specimen

Lot	Sample No.		Temp [°C]	Yield0.2% [MPa]	Yield1.0% [MPa]	Tensile [MPa]	Elongation A [%]	Elongation A [%]	Z [%]
200848805	1-1	1	RT	285		633	50	59	

Hardness Test
1 ASTM E 10
HBW 2.5/187.5

1	174 surface	

Spectrographic analytical mixup test: without objection
Dimensional and visual inspection performed: without objection

We herewith certify, that the material mentioned above is in compliance with the delivery specifications of the order

This certification was created by machine and is valid without signature

Date of release: 04.01.2005

Mark of the Inspector: Q

LRQA Approval Number 912097

31239-0-E

This certifies test report shall not be reproduced except in full, without the written approval of the issuing organization. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law.

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1/1

OUTO KUMPU

Avesta Works
QCM. Hans Pernäng

CERTIFICATE - ZEUGNIS - CERTIFICAT

EN 10204-3.1.B

Date - Datum	Load - Ladung - Chargem No	Cert.No - Zeugnis No
2004-10-04	FR4A-0903	1145347-EN

Your order - Ihre Bestellung - Votre commande
316577

Avesta order - Auftrag - Ordre
661/406146

Invoice - Rechnung - Facture
661/467117

Purchaser - Besteller - Acheteur
OUTOKUMPU S/A
100, RUE PETIT

FR-75165 PARIS CEDEX 19
FRANCE

Requirements - Anforderungen - Exigences
ASTM A 240-04
ASME SA-240 2001 A02

Dest.
BSL TUBES ET RACCORDS SA

0409041783 CCDL

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

Grade - Werkstoff - Nuance
Avesta 18-8L
TYPE 304

Brand mark / Herstellerzeichen / Signe du producteur	OUTO KUMPU	Inspectors stamp / Abname - Stempel / Estamp de l'expert	AJA A	Melting process / Erschmeltzungsart / Procédé de fusion	E+AOD

Extent of delivery - Lieferumfang - Etendue de livre

Item / Pos / Poste	Pcs / Anzahl / Nombre	kg	Dimensions - Abmessungen - Dimensions mm			Heat No / Schmelze Nr / Coulée No	Lot No / Los Nr / Lot Nr
8	8	3790	6.00	2000	5000	843181 —	004

Chemical composition - Chemische Zusammensetzung - Composition chimique

	C	Si	Mn	P	S	Cr	Ni	Nb	Cu	Co	N
Heat	.024	.33	1.69	.025	.001	18.05	8.17	.010	.40	.10	.063

Radioactive contamination check acc. IAEA recommendations: Satisfactory

Test results - Prüfergebnisse - Résults dessais (1N/mm 2= 1 MPa) F = Front - Anfang - Début B = Back - Ende - Fin T = Transverse - Quer - Travers

	Test Ref / Probe Ref / Eprouv Ref		Temp °C	Rp 0.2 N/mm²	Rp 1.0 N/mm²	R_m N/mm²	2" %	HB HB
Min			+20	205		515	40	
Max								201
	F	T	+20	303	347	615	54	174
	B	T		299	342	610	54	156

Corrosion acc. ASTM A 262-E: Satisfactory
Heat treatment: Material temperature 1100 cel / Quenched (forced air + water)
Steel grade verification (PMI-spectroscopic): OK
Insp. and gauge measurement: Satisfactory

Outokumpu Stainless AB
Avesta Works
BOX 74, S-774 22 AVESTA
SWEDEN
Regoffice:
Stockholm Sweden

Telephone : (0)226 814 18
Telefax : (0)226 813 16
Telex no : 7030 AVESTA S
Reg no : 556001-8748
V.A.T no : SE556001874801

This material is found to comply with order requirements

Authorized Inspector

EN ISO 9001
EN ISO 14001

(12)

1/1

OUTO KUMPU

Avesta Works
QCM. Hans Pernäng

CERTIFICATE - ZEUGNIS - CERTIFICAT

EN 10204-3.1.B

Date - Datum	Load - Ladung - Chargem No	Cert.No - Zeugnis No
2004-09-22	FR4A-0872	1140282-EN

Your order - Ihre Bestellung - Votre commande
316577

Avesta order - Auftrag - Ordre Invoice - Rechnung - Facture
661/406146 661/466365

Purchaser - Besteller - Acheteur
OUTOKUMPU S/A
100, RUE PETIT

FR-75165 PARIS CEDEX 19
FRANCE

Requirements - Anforderungen - Exigences
ASTM A 240-04
ASME SA-240 2001 A02

040904/783 CUDL

Dest.
BSL TUBES ET RACCORDS SA

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

Grade - Werkstoff - Nuance
Avesta 18-8L
TYPE 304

Brand mark / Herstellerzeichen / Signe du producteur	OUTO KUMPU	Inspectors stamp / Abname - Stempel / Estamp de l'expert	AJA A	Melting process / Erschmeltzungsart / Procédé de fusion	E+AOD

Extent of delivery - Lieferumfang - Etendue de livre

Item Pos Poste	Pcs Anzahl Nombre	kg	Dimensions - Abmessungen - Dimensions mm			Heat No Schmelze Nr Coulée No	Lot No Los Nr Lot Nr
13	3	1881	8.00	2000	5000	843384 —	003

Chemical composition - Chemische Zusammensetzung - Composition chimique

	C	Si	Mn	P	S	Cr	Ni	Nb	Cu	Co	N
Heat	.021	.32	1.62	.026	.001	18.23	8.10	.001	.37	.10	.069

Radioactive contamination check acc. IAEA recommendations: Satisfactory

Test results - Prüfergebnisse - Results dessais (1N/mm 2= 1 MPa) F = Front - Anfang - Début B = Back - Ende - Fin T = Transverse - Quer - Travers

	Test Ref Probe Ref Eprouv Ref		Temp °C	Rp 0.2 N/mm²	Rp 1.0 N/mm²	R_m N/mm²	2" %	HB HB
Min			+20	205		515	40	
Max								201
	F	T	+20	319	360	616	54	174
	B	T		316	358	612	55	170

Corrosion acc. ASTM A 262-E: Satisfactory
Heat treatment: Material temperature 1100 cel / Quenched (forced air + water)
Steel grade verification (PMI-spectroscopic): OK
Insp. and gauge measurement: Satisfactory

Outokumpu Stainless AB
Avesta Works
BOX 74, S-774 22 AVESTA
SWEDEN
Regoffice:
Stockholm Sweden

Telephone : (0)226 814 18
Telefax : (0)226 813 16
Telex no : 7030 AVESTA S
Reg no : 556001-8748
V.A.T no : SE556001874801

This material is found to comply with order requirements

Authorized Inspector

EN ISO 9001
EN ISO 14001

A Company ThyssenKrupp Steel
ThyssenKrupp VDM
ThyssenKrupp VDM GmbH Division Plate & Sheet
Kl[illegible]e 23, D-58762 Altena
Postbox 1251, D-58742 Altena
Tel. +49 2392 552082
Fax +49 2392 552047
EMail KSawinski@TKS-VDM.THYSSENKRUPP.COM

Certificate Nr. 31220/0
EN 10204 3.1B

printed: 07.02.2005

ThyssenKrupp

040904/783 cc DL

Order No.	Delivery No.	Trademark
404190		1.4301

by order and on account of **OUTOKUMPU STAINLESS AB**

OUTO KUMPU

Product
plate, hot rolled, solution annealed, descaled, sheared

Specification	Material
ASME SA-240. Code Sect. II. Part A. Ed.2001-A02	Type 304 / Type 304L
ASTM A 240M-04a	Type 304 / Type 304L

CMP Arles

-

Item	Pcs	Wht [kg]	Dimension [mm]			Cast	Lot
3	3	15,000 x	2100,0 x	4500,0		485569	200848816

Purchase Order No. 040904/783

Analysis (weight %)

Cast	Melting Pr.	C	S	N	Cr	Ni	Mn	Si	P
485569	E	0,024	0,001	0,07	18,35	8,08	1,62	0,47	0,028

Sample Condition		Tensile Test										Hardness Test	
solution annealed		1 ASTM E 8 / transverse specimen										1 ASTM E 10	
Lot	Sample No.		Temp [°C]	Yield0.2% [MPa]	Yield1.0% [MPa]	Tensile [MPa]	Elongation A [%]	A [%]		Z [%]		HBW 2.5/187.5	
200848816	1-1	1	RT	303		630	50	60				1 189 surface	

Spectrographic analytical mixup test: without objection
Dimensional and visual inspection performed: without objection

RECU.E
24 MARS 2005

We herewith certify, that the material mentioned above is in compliance with the delivery specifications of the order

This certification was created by machine and is valid without signature

Date of release: 07.02.2005

Mark of the Inspector: Q

LRQA Approval Number 912097

31220-0-E

This certifies test report shall not be reproduced except in full, without the written approval of the issuing organization. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law.

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CERTIFICAT DE RECEPTION 3.1.B selon EN.10204 — Toles grenaillees et peintes A02 — BLATT NR / PAGE No A03

DUFERCO CLABECQ
Rue de Clabecq 101
1460 ITTRE A01
(BELGIQUE)

PLAQUES-BLECHE-PLATES B01

SIGLE PRODUCTEUR / HERSTELLERZEICHEN / TRADE MARK A04: DC

N. normalisé ou laminage normalisant - normalized or normalising rolled normalgeglüht oder normalisierendes Walzen
BL Brut de laminage - Warmgewaltz unbehandelt - As rolled
TM laminage thermomécanique - thermomechanical rolling - thermomechanisches Walzen
r Revenu - Angelassen - Tempered
NR : laminage normalisant - normalising rolled - normalisierendes Walzen (for ship buildings)
LC Laminage contrôlé - Gleichwertige Temperaturführung - Controlled rolling B03

Organisme abou service de contrôle / Überwachungs-organisation / inspection Z02	Client / Destinataire - Besteller / Empfänger - Purchaser / Consignee A06	N° commande courtier/client - Makler/Kundebestell Nummer - Broker/Purchaser's order number A07	N° commande usine - Werksauftrag Nr - Works order No A08	Nuance et spécifications techniques - Stahlsorte und Prüfbedingungen - Quality and specifications B02	Etat livraison - Lieferzustand - As delivered B04	Traitement de référence - Probestreifen Behandlung - Treatment of test sample B15
	C.M.P. ARLES UE COPERNIC 1 ZI NORD BP 2054 F - 13646 ARLES CEDEX	04 0820/783 du 08.07.04	3512	GRADE C ASTM A283 /03	BL	

Identification du produit - Erzeugnis Bezeichnung - Product identification: N° référence / Referenz Nr / Reference No B07	N° coulée / Schmelz Nr / Heat No B08	Brame / Bramme / Slab	Poste / Posten / Item B09	Nbre de plaques / Stück-Zahl / Number of piece B10	Dimensions - Abmessungen - Dimensions: Epaisseur / Dicke / Thickness B11	Largeur / Breite / Width B12	Longueur / Länge / Length B13	Masse théorique / Theoretisches Gewicht / Theoretical weight B14	Traction - Zugversuch - Tensile test: Place (2) C01	Sens (3) C02	(4) C04	Re REH C11	Rm C12	A% * (3) C13	C14	C15	Résilience - Kerbschlagzähigkeit - Notch toughness: Type - Form - Type C40	Sens (3) C44	Temp °C C45	Peau Coeur (4) C46	Valeurs individuelles / Einzelwerte / Individual values C42	C42	C42	Moyenne / Mittelwerte / Average C43	
					(mm)	(mm)	(mm)	(kg)				(N/m	m2)								(	Joul	es)		
2732	153479	A3	5	5	7.00	2500	7950	5460		T		359	472	25.4			Vnotc	T	-20	P	52	53	51	52	roof
2733		A2	5	6	7.00	2500	7950	6552		T		368	478	22.6			Vnotc	T	-20	P	42	45	47	45	roof
				----				---------																	
				11				12012																	shell
	153507	D3	1	5	6.00	2115	7727	3850		T															
		C2	1	7	6.00	2115	7727	5390		T															
		D1	1	4	6.00	2115	7727	3080		T															
		C3	1	7	6.00	2115	7727	5390		T															
		D1	1	3	6.00	2115	7727	2310		T															
		D3	1	2	6.00	2115	7727	1540		T															
		C1	1	7	6.00	2115	7727	5390		T															shell
		D2	1	7	6.00	2115	7727	5390		T		329	442	27.6			Vnotc	T	-20	P	63	67	66	65	
2946		C5	2	5	6.00	2086	6470	3180		T															
		D4	2	6	6.00	2086	6470	3816		T															
		E2	2	8	6.00	2086	6470	5088		T															
		D5	2	5	6.00	2086	6470	3180		T															
		E4	2	8	6.00	2086	6470	5088		T															
		E1	2	7	6.00	2086	6470	4452		T															
		E3	2	8	6.00	2086	6470	5088		T															
		C4	2	6	6.00	2086	6470	3816		T															

(14)

CONTROLE DE SURFACE SELON EN 10163-2, CLASSE A (SOUS-CLASSE 1)

*(1) Lo = 5,65 VS mm - (2) Lo = 50 mm - (3) LO = 200 mm A05

Analyse coulée - Schmelzanalyse - Heat analysis / (*) = Analyse produit - Stückanalyse - Product analysis

(5) C70	N° de référence / Referenz Nr / Reference No B07	N° coulée / Schmelz Nr / Heat No B08	C94	Mn % C71	P % C72	S % C73	C % C74	Si % C75	Al % C76	Nb% C77	C78	C79	C80	C81	C82	C83	C84	C85	C86	C87	C88
O/Y EF#		153479		0.889	0.021	0.015	0.131	0.184	0.040	0.001											
		153507		0.850	0.018	0.008	0.100	0.174	0.034	0.001											
CC																					

DUFERCO-CLABECQ SA
Rue de Clabecq 101
1460 ITTRE

Contrôle de marquage d'aspect et de dimensions : Satisfaisants
Bezeichnung, besichtigung und ausmessung : Ohne Beanstandung
Marking, inspection and measurement : Without objection.

ITTRE le 11/09/04
G. JONET
Technicien
Laboratoire

D02/Z03

C50 A 283-C
Tol sur epaisseur:-0.25mm max

(2) Probelage - Location C05
1 : Tête - Kopf - Top
2 : Pied - Fuss - Bottom

(3) Richtung - Direction C06
L : Long- Langs - Longitudinal
T : Travers - Quer - Transverse

(4) C : Coeur - Kernprobe - Core sample
P : Peau - Walzfläche - Rolled surface C07

(5) O/Y : Oxygène pur - Oxygen EF : Electric furnace
CC : Coulée continue - Kontinuierliches giessen Contin[uous] casting

Nous certifions que les produits énumérés ci-dessus sont conformes aux prescriptions de la commande
Wir bestätigen hiermit dass die obengenannten erzeugnisse den bestellung vorschriften entsprechen
We certify hereby that the [abo]ve mentioned products are consistent with the order prescriptions Z04

Les résultats des essais particuliers figurent sur les documents complémentaires joints en annexe.
Die ergebnisse der besonderen prüfungen sind in die beigefügten ergänzenden unterlagen angegeben.
The results of the [sp]ecials tests are indicated on the complementary documents in appendix. C60

Z01

CERTIFICAT DE RECEPTION 3.1.B selon .10204 040542/752 Toles gr .lees et peintes A02

N° 11095 N° PAGE 1/ 1 BLAT PAGE A03

CC5PG.

DUFERCO CLABECQ
Rue de Clabecq 101
1460 ITTRE A01
(BELGIQUE)

SIGLE PRODUCTEUR HERSTELLERZEICHEN TRADE MARK A04

DC

N : normalisé ou laminage normalisant - normalized or normalising rolled
normalgeglüht oder normalisierendes Walzen
BL Brut de laminage - Warmgewaltz unbehandelt - As rolled
TM laminage thermomécanique - thermomechanical rolling - thermomechanisches Walzen
T Revenu - Angelassen - Tempered
NR : laminage normalisant - normalising rolled - normalisierendes Walzen (for ship buildings)
LC Laminage contrôlé - Gleichwertige Temperaturführung - Controlled rolling B03

B15

PLAQUES-BLECHE-PLATES B01

Organisme et/ou service de contrôle Überwachungs organisation inspection Z02

CLIENT / DESTINATAIRE _ BESTELLER / EMPFANGER _ PURCHASER / CONSIGNEE A06
C.M.P. ARLES
UE COPERNIC 1 ZI NORD BP 2054
F - 13646 ARLES CEDEX

N° COMMANDE COURTIER/CLIENT _ MAKLER/KUNDEBESTELL NUMMER BROKER/PURCHASER'S ORDER NUMBER A07
04 0542/752 du 04.05.04

N°Commande usine Werkbestel Nr Works order No A08: 3356

NUANCE ET SPECIFICATIONS TECHNIQUES STAHLSORTEN UND PRÜFBEDINGUNGEN QUALITY AND SPECIFICATIONS B02
GRADE C
ASTM A283 /03

ETAT LIVRAISON LIEFERZUSTAND AS DELIVERED B04: BL

TRAITEMENT DE REFERENCE PROBESTREIFENDE HANDLUNG TREATMENT OF TEST SAMPLES B05

IDENTIFICATION DU PRODUCT ERZEUGNIS BEZEICHNUNG - PRODUCT IDENTIFICATION: N° REFERENCE REFERENZ NR REFERENCE No B07	N° COULEE SCHMELZ NR HEAT No B08	BRAME BRAMME SLAB	N° POSTE POST NR ITEM N° B09	Nbre de plaques Stück-Zahl Number of piece B10	DIMENSIONS _ ABMESSUNGEN _ DIMENSIONS: EPAISSEUR DICKE THICKNESS B11 (mm)	LARGEUR BREITE WIDTH B12 (mm)	LONGUEUR LANGE LENGTH B13 (mm)	MASSE THEORIQUE THEORISCHES GEWICHT THEORETICAL WEIGHT B14 (kg)	TRACTION _ ZUGVERSUCH _ TENSILE TEST: place (2) C01	SENS (3) C02	(4) C04	Re REH C11 (N/mm2)	Rm C12	A% * (3) C13	C14	C15	RESILIENCE - KERBSCHLAGZAHIGKEIT - NOTCH TOUGHNESS: TYPE - FORM - TYPE C40	SENS (3) C44	TEMP oC C45	PEAU COEUR (4) C46	VALEURS INDIVIDUELLES EINZELWERTE INDIVIDUAL VALUES C42 (Joules)	C42	C42	MOYENNE MITTELWERTE AVERAGE C43	C08
4833	111136	D4	1	6	6.00	2285	6954	4488		T		346	433	30.3			Vnotc	T	-20	P	45	45	59	50	
4834		D1	1	4	6.00	2285	6954	2992		T		350	438	30.1			Vnotc	T	-20	P	59	71	66	65	
		D3	1	3	6.00	2285	6954	2244		T															
				13				9724																	
4839	111138	D2	3	5	7.00	2500	8770	6025		T		288	418	31.6			Vnotc	T	-20	P	48	51	63	54	
5858	111174	C5	1	8	6.00	2285	6954	5984		T		309	433	29.2			Vnotc	T	-20	P	101	92	128	107	
5755	111180	C4	2	2	10.00	2500	7500	2944		T		305	433	32.4			Vnotc	T	-20	P	133	124	168	142	roof
				28				24677																	

15

CONTROLE DE SURFACE SELON EN 10163-2, CLASSE A (SOUS-CLASSE 1) A05

* (1) Lo = 5,65 VS mm - (2) Lo = 50 mm - (3) Lo = 200 mm

ANALYSE COULEE - SCHMELZANALYSE - HEAT ANALYSIS
(*) = ANALYSE PRODUIT - STÜCKANALYSE - PRODUCT ANALYSIS

(5) C70	N°de REFERENCE REFERENZ NR REFERENCE No B07	No COULEE SCHMELZ NR HEAT No B08	C94	Mn % C71	P % C72	S % C73	C % C74	Si % C75	Al % C76	Nb% C77	C78	C79	C80	C81	C82	C83	C84	C85	C86	C87	C88
O/Y		111136		0.720	0.012	0.015	0.100	0.250	0.033	0.001											
EF		111138		0.770	0.018	0.018	0.100	0.240	0.027	0.001											
		111174		0.840	0.011	0.008	0.100	0.240	0.038	0.001											
		111180		0.880	0.012	0.015	0.120	0.250	0.028	0.001											
CC																					

DUFERCO-CLABECQ SA
Rue de Clabecq 101
1460 ITTRE

Z02/Z03

Contrôle de marquage d'aspect et de dimensions : Satisfaisants
Bezeichnung, besichtigung und ausmessung : Ohne Beanstandung
Marking, inspection and measurement : Without objection.

A 283-C
Tol sur epaisseur:-0.25mm max

C50

ITTRE le 27/07/04
G. JONET
Technicien
Laboratoire

(2) Probelage - Location C05
1 : Tête - Kopf - Top
2 : Pied - Fuss - Bottom

(3) Richtung - Direction C06
L : Long- Langs - Longitudinal
T : Travers - Quer - Transverse

(4) C : Coeur - Kernprobe - Core sample
P : Peau - Walzfläche - Rolled surface C07

(5) O/Y : Oxygène pur - Oxygen
CC : Coulée continue - Kontinuierliches giessen
EF : Electric furnace

Nous certifions que les produits énumérés ci-dessus sont conformes aux prescriptions de la commande
Wir bestätigen hiermit dass die obengenannten erzeugnisse den bestellung vorschriften entsprechen
We certify hereby that the above mentioned products are consistent with the order prescriptions Z04

Les résultats des essais particuliers figurent sur les documents complémentaires jointe en annexe.
Die ergebnisse der besonderen prüfungen sind in die beigefügten erganzenden unterlagen angegeben.
The results of the specials tests are indicated on the complementary documents in appendix. C60

Z01

CERTIFICAT DE RECEPTION 3.1.B selon EN.10204

Toles grenaillees et peintes A02

BLATT NR / PAGE No A03

DUFERCO CLABECQ
Rue de Clabecq 101
1460 ITTRE A01
(BELGIQUE)

SIGLE PRODUCTEUR
HERSTELLERZEICHEN
TRADE MARK A04

N : normalisé ou laminage normalisant - normalized or normalising rolled
normalgeglüht oder normalisierendes Walzen
BL Brut de laminage - Warmgewaltz unbehandelt - As rolled
TM laminage thermomécanique - thermomechanical rolling - thermomechanisches Walzen
T Revenu - Angelassen - Tempered
NR : laminage normalisant - normalising rolled - normalisierendes Walzen (for ship buildings)
LC Laminage contrôlé - Gleichwertige Temperaturführung - Controlled rolling B03

B15

PLAQUES-BLECHE-PLATES B01

Organisme et/ou service de contrôle
Überwachungs-organisation
inspection Z02

CLIENT / DESTINATAIRE _ BESTELLER / EMPFÄNGER _ PURCHASER / CONSIGNEE A06

CMP ARLES S.A.
RUE COPERNIC 1 - ZI NORD - BP 205
F-13646 ARLES CEDEX

N° COMMANDE COURTIER/CLIENT - MAKLER/KUNDEBESTELL NUMMER
BROKER/PURCHASER'S ORDER NUMBER A07

04 0820/783 du 08.07.04

N°Commande usine
Werkbestel Nr
Works order No A08

3512

NUANCE ET SPECIFICATIONS TECHNIQUES B02
STAHLSORTED UND PRÜFBEDINGUNGEN
QUALITY AND SPECIFICATIONS

GRADE C
ASTM A283 /03

ETAT LIVRAISON
LIEFERZUSTAND
AS DELIVERED B04

BL

TRAITEMENT DE REFERENCE
PROBESTREIFENDE HANDLUNG
TREATMENT OF TEST SAMPLES B0

04 0820/783 cc JP6

IDENTIFICATION DU PRODUIT / ERZEUGNIS BENENNUNG - PRODUCT IDENTIFICATION: No REFERENCE / REFERENZ NR / REFERENCE No	N COULEE / SCHMELZ NR / HEAT No	BRAME / BRAMME / SLAB	N° POSTE / POST NR / ITEM N°	Nbre de pieces / Stück-Zahl / Number of piece	DIMENSIONS _ ABMESSUNGEN _ DIMENSIONS: EPAISSEUR / DICKE / THICKNESS	LARGEUR / BREITE / WIDTH	LONGUEUR / LÄNGE / LENGTH	MASSE THEORIQUE / THEORISCHES GEWICHT / THEORETICAL WEIGHT	Place (2)	SENS (3)	(4)	TRACTION _ ZUGVERSUCH _ TENSILE TEST: Re / REH	Rm	A% * (3)			TYPE - FORM - / TYPE	SENS (3)	TEMP °C	PEAU / COEUR (4)	RESILIENCE - KERBSCHLAGZAHIGKEIT - NOTCH TOUGHNESS: VALEURS INDIVIDUELLES / EINZELWERTE / INDIVIDUAL VALUES			MOYENNE / MITTELWERTE / AVERAGE	
B07		B08	B09	B10	B11 (mm)	B12 (mm)	B13 (mm)	B14 (kg)	C01	C02	C04	C11 (N/mm2)	C12	C13	C14	C15	C40	C44	C45	C46	C42 (Joules)	C42	C42	C43	C08
	153507	E1	2	1	6.00	2086	6470	636		T															bottom
		B2	3	6	5.00	2000	5100	2400		T															
		E5	3	8	5.00	2000	5100	3200		T															
		B1	3	5	5.00	2000	5100	2000		T		318	438	34.2			Vnotc	T	-20	P	63	67	66	65	bottom
2956		B3	4	9	5.00	2000	5100	3600		T															
		B4	4	6	5.00	2000	5100	2400		T															bottom
				--- 35				-------- 14236																	
4404	153556	E1	6	4	6.00	2500	6920	3260		T		335	446	28.7			Vnotc	T	-20	P	68	67	75	70	
				==== 39				======== 17496																	

DUFERCO-CLABECQ SA
Rue de Clabecq 101
1460 ITTRE

CONTROLE DE SURFACE SELON EN 10163-2, CLASSE A (SOUS-CLASSE 1)

*(1) Lo = 5,65 VS mm - (2) Lo = 50 mm - (3) LO = 200 mm A05

ANALYSE COULEE - SCHMELZANALYSE - HEAT ANALYSIS
(*) = ANALYSE PRODUIT - STÜCKANALYSE - PRODUCT ANALYSIS

(5)	N°de REFERENCE / REFERENZ NR / REFERENCE No	No COULEE / SCHMELZ NR / HEAT No	Mn %	P %	S %	C %	Si %	Al %	Nb%											
C70	B07	B08	C71	C72	C73	C74	C75	C76	C77	C78	C79	C80	C81	C82	C83	C84	C85	C86	C87	C88
O/Y		153507	0.850	0.018	0.008	0.100	0.174	0.034	0.001											
EF#		153556	0.810	0.013	0.007	0.096	0.192	0.040	0.001											
CC																				

C94

D02/Z03

Contrôle de marquage d'aspect et de dimensions : Satisfaisants
Bezeichnung, besichtigung und ausmessung : Ohne Beanstandung
Marking, inspection and measurement : Without objection.

A 283-C
Tol. s/epaisseur: -0.25mm max

C50

ITTRE le 05/10/04
S. Bonura
Editeur certificat

Z01

(2) Probelage - Location C05
1 : Tête - Kopf - Top
2 : Pied - Fuss - Bottom

(3) Richtung - Direction C06
L : Long- Langs - Longitudinal
T : Travers - Quer - Transverse

(4) C : Coeur - Kernprobe - Core sample C07
P : Peau - Walzfläche - Rolled surface

(5) O/Y : Oxygène pur - Oxygen
CC : Coulée continue - Kontinuierliches giessen
EF : Electric furnace
Contir asting

Nous certifions que les produits énumérés ci-dessus sont conformes aux prescriptions de la commande
Wir bestätigen hiermit dass die obengenannten erzeugnisse den bestellung vorschriften entsprechen
We certify hereby that the mentioned products are consistent with the order prescriptions Z04

Les résultats des essais particuliers figurent sur les documents complémentaires joints en annexe.
Die ergebnisse der besonderen prüfungen sind in die beigefügten erganzenden unterlagen angegeben.
The results of the ciais tests are indicated on the complementary documents in appendix. C60

UGINE & ALZ France
Site d'Isbergues
62330 ISBERGUES
FRANCE 1

KALTGEWALZTES BANDER 2

ABNAHMEPRUFZEUGNIS B DIN EN 10204/3.1.B CERTIFICAT DE RECEPTION NF EN 10204/3.1.B
CERTIFICATE TEST-MILL CERTIFICATE BS EN 10204/3.1.B 3

N-Nr-N 7[illegible] 01/1 4

SIGLE DE L'USINE PRODUCTRICE herstellerzeichen trade mark 5

AUSGESTELLT IM EINVERNEHMEN MIT DEM TUV RHEINLAND - ETABLI EN ACCORD AVEC LE TUV RHEINLAND
AUF GEGENZEICHNUNG WIRD LAUT SCHREIBEN DES TUV RHEINLAND VERZICHTET
DISPENSE DE CONTRESIGNATURE SELON LETTRE DU TUV RHEINLAND
ANFORDERUNGEN : DRUCKBEHALTERVERORDNUNG A.D 2000 MERKBLATT W2- CONDITIONS IMPOSEES
WERSTOFFSORTE SCHMEIZENNUMMER PROBE NR STEMPEL DES WERKSSACHVERT
DESIGNATION DU MATERIAU N.DE COULEE N.D'ECHANTILLON POINCON DU CONTROLEUR

IN ACCORDANCE WITH NACE STANDARD MR0175-99- ATTESTATION PED 97/23-N EP-LY-01-MAT-01 GAPAVE DU 07/12/2001 6

UI 2

A : HYPERTREMPE (1) losungsgegl + abgeschreckt solution treated
R : RECUIT geglüht annealed
E : ECROUI kaltverfestigt work hardened
T : TREMPE vergütet hardened tempered 7

organisme et/ou service controle uberwachungs organisation inspection	CLIENT ET / OU DESTINATAIRE besteller und / oder empfanger purchaser and / or consignee	N.DE COMMANDE CLIENT kundebestell nummer purchaser order number	N.DE COMMANDE USINE werksbestell nummer works order number	NUANCE ET SPECIFICATIONS TECHNIQUES stahlsorte und prufbedingungen quality and specifications	ETAT DE LIVRAISON lieferzustand as delivered (1)
SERVICE METALLURGIQUE USINE 8	C.P.C. INOX SPA 9	975 DEL 19.11.03 10	3UA384785 11	1.4301 / 2B DIN 17441 /97 1.4301 / EN 10028-7 /00 AISI304 / ASTM A 240 /01 12	A 13

IDENTIFICATION DU PRODUIT erzeugnis benennung product identification		N. DE POSITE item n.	NOMBRE stuck - zahl pieces nbr	DIMENSIONS abmessungen - dimensions			POIDS NET netto gewicht net weight	EMPLACEMENT (2)	TRACTION - ZUGVERSUCH - TENSILE TEST						DURETE harte hardness HRB	ESSAIS COMPLEMENTAIRES zusatzliche probe additional tests
N.BOBINE band nr coil n.	N.COULEE schmelze n. heat n.			EPAISSEUR dicke thickness	LARGEUR breite width	LONGUEUR lange length			SENS (3)	Rp 0.2 MPA	Rp 1 MPA	Rm MPA	A % 80MM	A % 2 ''		
									MINI	230	260	540	45			
									MAXI			750				
80174	029761	01	1	1,500	1250,00		13060	1	T	311	362	683	54	54	83	
80174	029761							2	T	333	369	694	52	51	83	
15	16	17	18	19	20	21	22	23	24	25	26	27	28	28	29	30

C.P.C. INOX S.p.A.

37

MODE D'ELABORATION erschmelzungsart steel making process	N.BOBINE band nr coil n.	N.COULEE schmelze n. heat n.	TYPE D'ANALYSE (4)	ANALYSE CHIMIQUE - CHEMISCHE ZUSAMMENSETZUNG - CHEMICAL ANALYSIS													
				C	Si	Mn	Ni	Cr	Mo	Ti	N	S	P	CU			
			MINI				8,00	17,00									
			MAXI	0,070	1,00	2,00	10,50	19,50			0,110	0,0300	0,045				
FE + AOD + CC	80174	029761	C	0,048	0,51	1,16	8,08	18,10	0,16		0,059	0,0005	0,025	0,202			
38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55

Materiale consegnato a CMP ARLES
Ns. DDT GES V. 4410 del 17/12/04
sotto forma di lam. 1.50X1250X2300
CL L017557
VS ORD N.RO U 041438

56

SERVICE METTALURGIQUE
LE : 01/03/04
LE RESPONSABLE
DER WERKSSACHVERSTANDIGE
THE INSPECTOR
M. THOMAS
L'AGENT EXTERIEUR

BESTANDIGKEIT GEGEN INTERKRISTALLINE KORROSION NACH DIN EN ISO 3651-2:GUT RESISTANCE A LA CORROSION INTERGRANULAIRE SELON DIN EN ISO 3651-2:BON

PROBELAGE - LOCATION (2)
1 : debut - anfang - front
2 : fin - ende - back
3 : milieu - mitte - middle 57

RICHTUNG - DIRECTION (3)
l : long - lange - longitudinal
t : travers - quer - transverse 58

ANALYSE - ANALYSIS (4)
c : coulee - schmelze - heat
p : produit - stuck - product 60

LES ESSAIS DE PLIAGE SONT SATISFAISANTS
die ergebnisse der faltversuchen entsprechen den vorschriften
bend test results are satisfactory 61

CONTROLE DE MARQUAGE D'ASPECT ET DE DIMENSIONS : SATISFAISANTS
bezeichnung, besichtigung und ausmessung : ohne beanstandung
marking, inspection and measurement : without objection 62

63

NOUS CERTIFIONS QUE LES PRODUITS ENUMERES CI-DESSUS SONT CONFORMES AUX PRESCRIPTIONS DE LA COMMANDE
wir bestatigen hiermit dass die obengenannten erzeugnisse den bestellung vorschriften entsprechen
we certify hereby that the above mentioned products are consistent with the order prescriptions

WERKSTOFFVERWECHSLUNGSPRUFUNG DURCHGEFUHRT:JA CONTROLE ANTI-MELANGE EFFECTUE 64

Inspectie order 13347 - 0

138326

18-A

TÜV CERT DIN EN ISO 9001 Certificate: 07 100 926

TÜV APPROVED MANUFACTURER ACC. TO AD-MERKBLATT W0/TRD 100

Ukraine

Nikopol Stainless Tube Mill

53201 56, Trubnikov Avenue Nikopol Dnepropetrovsk Region Ukraine tel/fax (05662) 2-51-94

Approved acc. to AD 2000-Merkblatt W0 by TÜV Nord e. V. and certified acc. to Pressure Equipment Directive (97/23/EC) by TÜV CERT-Certification body for pressure equipment of the TÜV NORD GRUPPE; notified body, reg.-no. 0045.
Сертифицирован поAD 2000 WO ТЮФ Норд и по директиве для напорных резервуаров высокого давления (97/23Еа) сертификационным центром ТЮФ СЕРТ для оборудования, работающего под давлением сертификационного общества ТЮФ НОРД ГРУППЕ; регистрацненный номер сертификационного центра 0045.

Требования Сертификата Inspection Certificate EN 10204-1995/3.1.B.-ISO 9001 + P.E.D	Сертификат приемочных испытаний № Material Test Certificate No. 2004/ 802	Лист/Page 1	Листов/Pages 2
Заказчик Customer	VAN LEEUWEN STAINLESS B.V		
Страна назначения Country of destination	The NETHERLANDS		
Адрес Address	INDUSTRIEWEG 26 4153 ZG BEESD		
Контракт №/Contract No.	407142 item 026		

ТЕХНИЧЕСКИЕ ТРЕБОВАНИЯ / TECHNICAL REQUIREMENTS

Наименование продукции/Product description
HOT ROLLED TUBES ; SEAMLESS
НТД/Specification PED 97/23/EC; ASTM A 312-99a/A 530-98/; ASME SA 312/SA 530 SEC.II Part.A - 1998 ; 091.12E/091.17 E;Rev 2 december 2001; NFA 49 – 117;September 85; NACE MR-0175-2001 Part. 3.3

Э1

Способ выплавки/Melting process EAF + AOD	Маркировка/Marking NSTM

Состояние поставки / State of delivery
Solution annealed and passivated

штамп контролера / Inspector's stamp

Сортамент / Range of sizes							Гидроиспытания/ Hydr. test MPa (t=10sec.)
номер партии, Lot	марка стали/ Steel grade	плавка/ Heat No.	штук/ Pieces	Метраж/ Total Length, m	вес нетто, кг Net weight, kg	размеры/Dimensions, mm	
897	TP304/304L/ TUZ 2 CN 18 – 10	912068	6	35,9	1064	OD 168,3 x 7,11 WT x 5500-6500	-
901	TP304/304L/ TUZ 2 CN 18 – 10	912021	10	58,0	1708	OD 168,3 x 7,11 WT x 5500-6500	-
		TOTAL:	16	93,9	2772		

дата / date 17.11.2004

эксперт/inspector Yu.Chaplitskiy

18-B

Требования Сертификата Inspection Certificate EN 10204-1995/3.1.B.-ISO 9001 + P.E.D	Сертификат приемочных испытаний № Material Test Certificate No. 2004/802	Лист/Page 2	Листов/Pages 1

ДОЛЯ ХИМИЧЕСКИХ ЭЛЕМЕНТОВ, В % / CHEMICAL COMPOSITION, %

плавка № Heat No.	C	Mn	Si	P	S	Cr	Ni	Mo		
	0,035 max	2,00 max	0,75 max	0,040 max	0,030 max	18,0-20,0	8,00-13,0			
912068	0,029	1,27	0,60	0,033	0,013	18,48	10,20			
912021	0,024	1,09	0,57	0,035	0,021	18,38	10,40			

РЕЗУЛЬТАТЫ ИСПЫТАНИЙ / TEST RESULTS

МЕХАНИЧЕСКИЕ ИСПЫТАНИЯ / MECHANICAL TESTS ACC. TO EN 10002-1,-5

партия/ Lot No.	Плавка/ Heat No.	№ образца испытаний Specimen No.	направление испытаний/ Test direction	температура испытаний/ Test temperature, °C	предел текучести/ Yield strength, MPa	прочность при растяжении Tensile strength, MPa	удлинение Elongation %	удлинение Elongation % (L_o=5,65$\sqrt{S_o}$)	твердость/ Brinell Hardness, HRB
					170	485	35	45	≤ 90
897	912068	1	L	20°	321	585	47		80
		2			269	595	53		81
901	912021	1			280	600	57		79
		2			282	575	50		79

РЕЗУЛЬТАТЫ МИКРОСТРУКТУРЫ/ MICROSTRUCTURE RESULTS — n/a.

ТЕХНОЛОГИЧЕСКИЕ ИСПЫТАНИЯ/ TECHNOLOGICAL TESTS — **flattening – 1 – 2 stage – acceptable.**

ИСПЫТАНИЯ НА МЕЖКРИСТАЛЛИТНУЮ КОРРОЗИЮ/ INTERGRANULAR CORROSION TEST — **A 262, Practice E – acceptable, NFA 49-117.**

ИСПЫТАНИЕ НА СООТВЕТСТВИЕ МАРКИ СТАЛИ POSITIVE MATERIAL IDENTIFICATION — **– satisfactory.**

НЕРАЗРУШАЮЩИЙ КОНТРОЛЬ/ NON-DESTRUCTIVE TEST METHOD — **100% ultrasonic tested - acceptable.**

ПРИМЕЧАНИЯ ADDITIONAL REMARKS — **Tubes are heat treated : 1060° C holding time 5 minutes then quenched by water.**

100% ВИЗУАЛЬНЫЙ КОНТРОЛЬ, ПРОВЕРКА РАЗМЕРОВ/ VISUAL INSPECTION, DIMENSIONAL MEASUREMENT — **– SATISFACTORY**

TÜV TÜV

дата / date **17.11.2004**

эксперт/inspector Э1 V.Chaplitskiy

ACERINOX,S.A.
FABRICA DEL CAMPO
DE GIBRALTAR
PALMONES (LOS BARRIOS)
TFNO.(34) -56-629300
FAX (34) -56-629311
P.O. BOX.83
11370 LOS BARRIOS (CADIZ)

TÜV CERT ISO 9002 ISO 14001

INSPECTION CERTIFICATE
CERTIFICADO DE INSPECCION

3.1.B

di 14/7/783 cc. DC.

19

ACCORDING TO EN 10204
SEGUN

CERTIFICATE Nº
CERTIFICADO Nº 524310 2 / 1

CUSTOMER
CLIENTE

CPC INOX SPA
VIA GRAMSCI, 7/9
20032 CORMANO ITALIA

Our order no.
n/pedido AE 60318

Your order no.
s/pedido 17470/03 KN208

REQUERIMENTS
NORMAS APLICABLES
EN 10088-2:1995

GRADE
MATERIAL
ACX 160
1.4301

FINISH
ACABADO
1D

TRADE MARK
SELLO DEL FABRICANTE

ACERINOX

INSPECTOR'S STAMP
SELLO DEL INSPECTOR

STEELMAKING PROCESS
PROCESO DE ACERIA
A.O.D.

COIL/BOX *BOBINA/CAJA*	CONTENT *CONTENIDO*	DIMENSIONS *DIMENSIONES* THICKNESS *ESPESOR*	WIDTH *ANCHO*	LENGTH *LARGO*	MARKS *MARCA*	QUANTITY *Nº PIEZAS*	*PROBETA*
011XD7 A	011XD7 A	10,00	1.540,00		13	1	011XD7
021WE6 A	021WE6 A	10,00	1.542,00		11	1	021WE6

CHEMICAL ANALYSIS
COMPOSICION QUIMICA (%)

HEAT NO. *COLADA*	C	CR	MN	N	NI	P	S	SI
REQUIREMENTS *REQUISITOS*		17,000			8,000			
	0,070	19,500	2,000	0,110	10,500	0,045	0,015	1,000
1WE6	0,020	18,098	1,685	0,037	8,651	0,032	0,004	0,309
1XD7	0,022	18,305	1,628	0,036	8,691	0,030	0,003	0,409

C.R.C. INOX S.p.A.

MECHANICAL PROPERTIES
CARACTERISTICAS MECANICAS

COIL *PROBETA*	SID. TYPE	Rm. N/mm2	Rp 0.2 N/mm2	Rp 1.0 N/mm2	A5 %
REQUIREMENTS *REQUISITOS*		520,00 720,00	210,00	250,00	45,00
011XD7	CT	612,2	330,1	368,3	52,6
021WE6	CT	611,3	330,1	372,7	53,1

Materiale consegnato a ESPACINOX
NS DDT BAS V. 8821 DEL 17/12/04
sotto forma di BARRE 10,00 X 100 X 6000
CL. B020091
VS ORD N. BCF03254

INTERGRANULAR CORROSION TEST
CORROSION INTERGRANULAR TEST

SURFACE AND DIMENSIONAL CONTROL
INSPECCION SUPERFICIAL Y DIMENSIONAL

SATISFACTORY
Satisfactoria

REMARKS *OBSERVACIONES*

WORK INSPECTOR
INSPECTOR J. VAQUERO

PALMONES, 30 SEPTIEMBRE 2003

P.D.C.-94.11.F45

OUTO KUMPU

Avesta Works
OCM. Hans Pernäng

CERTIFICATE - ZEUGNIS - CERTIFICAT

EN 10204-3.1.B

Date - Datum	Load - Ladung - Chargem No	Cert.No - Zeugnis No
2004-07-30	FR4A-0746	1120673-EN

Your order - Ihre Bestellung - Votre commande
315736 / 04 0536/752

Avesta order - Auftrag - Ordre Invoice - Rechnung - Facture
403883 463337

Purchaser - Besteller - Acheteur
OUTOKUMPU S/A
100, RUE PETIT

FR-75165 PARIS CEDEX 19
FRANCE

Requirements - Anforderungen - Exigences
ASTM A 240-04
ASME SA-240 2001 A02
EN 10028-7:2000

Dest.
CMP ARLES SA

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

Grade - Werkstoff - Nuance
Avesta 18-8L
TYPE 304/1.4301

Brand mark / Herstellerzeichen / Signe du producteur	Inspectors stamp / Abnahme - Stempel / Estamp de l'expert	Melting process / Erschmelzungsart / Procédé de fusion
OUTO KUMPU	AJA A	E + AOD

Extent of delivery - Lieferumfang - Etendue de livre

Item / Pos / Poste	Pcs / Anzahl / Nombre	kg	Dimensions - Abmessungen - Dimensions mm			Heat No / Schmelze Nr / Coulée No	Lot No / Los Nr / Lot Nr
3	4	3128	10.00	2000	5000	842555	— 001

Chemical composition - Chemische Zusammensetzung - Composition chimique

	C	Si	Mn	P	S	Cr	Ni	Nb	Cu	Co	N
Heat	.018	.35	1.65	.027	.001	18.21	8.11	.006	.33	.14	.063

Radioactive contamination check acc. IAEA recommendations: Satisfactory

Test results - Prüfergebnisse - Résultats d'essais (1N/mm 2 = 1 MPa) F = Front - Anfang - Début B = Back - Ende - Fin T = Transverse - Quer - Travers

	Test Ref / Probe Ref / Eprouv Ref	Temp °C	Rp 0.2 N/mm²	Rp 1.0 N/mm²	R_m N/mm²	A5 %	2" %	HB HB
Min		+20	230	260	520	45	40	
Max					720			201
	F T	+20	337	377	621	54	56	201
	B T		339	384	622	54	56	192

Corrosion acc. ASTM A 262-E, EN ISO 3651-2A: Satisfactory
Heat treatment: Material temperature 1100 cel / Quenched (forced air + water)
Steel grade verification (PMI-spectroscopic): OK
Insp. and gauge measurement: Satisfactory
Certified acc. Pressure Equipment Directive (97/23/EC) by TÜV CERT-Certification body for pressure equipment of the TÜV NORD GROUP; notified body, reg-no. 0045.

Outokumpu Stainless AB
Avesta Works
BOX 74, S-774 22 AVESTA
SWEDEN
Regoffice:
Stockholm Sweden

Telephone : (0)226 814 18
Telefax : (0)226 813 16
Telex no : 7030 AVESTA S
Reg no : 556001-8748
V.A.T no : SE556001874801

This material is found to comply with order requirements

Authorized Inspector

EN ISO 9001
EN ISO 14001

Inspectie order 17858 - 0

TÜV DIN EN ISO 9001 Certificate: 07 100 938

TÜV APPROVED MANUFACTURER ACC. TO AD-MERKBLATT W0/TRD 100

143308

21.A

Ukraine

Nikopol Stainless Tube Mill

53201 56, Trubnikov Avenue Nikopol Dnepropetrovsk Region Ukraine tel/fax (05662) 2-51-94

Approved acc. to AD 2000-Merkblatt W0 by TÜV Nord e. V. and certified acc. to Pressure Equipment Directive (97/23/EC) by TÜV CERT-Certification body for pressure equipment of the TÜV NORD GRUPPE; notified body, reg.-no. 0045.
Сертифицирован поAD 2000 WO ТЮФ Норд и по директиве для напорных резервуаров высокого давления (97/23Ев) сертификационным центром ТЮФ СЕРТ для оборудования, работающего под давлением сертификационного общества ТЮФ НОРД ГРУППЕ; регистрационный номер сертификационного центра 0045.

Требования Сертификата Inspection Certificate EN 10204-1995/3.1.B.-ISO 9001 + P.E.D	Сертификат приемочных испытаний № Material Test Certificate No. 2005/ 115	Лист/Page 1	Листов/Pages 2
Заказчик Customer	VAN LEEUWEN STAINLESS B.V		
Страна назначения Country of destination	The NETHERLANDS		
Адрес Address	INDUSTRIEWEG 26 4153 ZG BEESD		
Контракт №/Contract No.	411033 item 012		

ТЕХНИЧЕСКИЕ ТРЕБОВАНИЯ / TECHNICAL REQUIREMENTS

Наименование продукции/Product description
HOT ROLLED TUBES ; SEAMLESS
НТД/Specification **PED 97/23/EC; ASTM A 312-99a/A 530-98/; ASME SA 312/SA 530 SEC.II Part.A - 1998 ; 091.12E/091.17 E;Rev 2 december 2001;NACE MR-0175-2001 Part. 3.5**

Способ выплавки/Melting process EAF + AOD	Маркировка/Marking NSTM
Состояние поставки / State of delivery **Solution annealed and passivated**	штамп контролера / Inspector's stamp Э1

Сортамент / Range of sizes

номер партии, Lot	марка стали/ Steel grade	плавка/ Heat No.	штук/ Pieces	Метраж/ Total Length, m	вес нетто, кг Net weight, kg	размеры/Dimensions, mm	Гидроиспытания/ Hydr. test MPa (t=10sec.)
30	TP304/304L	90594	21	134,4	1563	OD 88,9 x 5,49 WT x 5500-6500	-
30	TP304/304L	90594	20	128,0	1493	OD 88,9 x 5,49 WT x 5500-6500	-
		TOTAL:	41	262,4	3056		

дата / date **11.02.2005.**

эксперт/inspector Э1 V.Chaplitskiy

21·B

Требования Сертификата Inspection Certificate EN 10204-1995/3.1.B.-ISO 9001 +P.E.D	Сертификат приемочных испытаний № Material Test Certificate No. 2005/115	Лист/Page 2	Листов/Pages 1

ДОЛЯ ХИМИЧЕСКИХ ЭЛЕМЕНТОВ, В % / CHEMICAL COMPOSITION, %

плавка № Heat No.	C	Mn	Si	P	S	Cr	Ni	Mo		
	0,035 max	2,00 max	0,75 max	0,040 max	0,030 max	18,0-20,0	8,00-13,0			
90594	0,030	1,09	0,40	0,034	0,030	18,33	10,35			

РЕЗУЛЬТАТЫ ИСПЫТАНИЙ / TEST RESULTS

МЕХАНИЧЕСКИЕ ИСПЫТАНИЯ / MECHANICAL TESTS ACC. TO EN 10002-1,-5

партия/ Lot No.	Плавка/ Heat No.	№ образца испытаний Specimen No.	направление испытаний/ Test direction	температура испытаний/ Test temperature, °C	предел текучести/ Yield strength, MPa	прочность при растяжении Tensile strength, MPa	удлинение Elongation %	удлинение Elongation % ($L_0=5,65\sqrt{S_0}$)	твердость/ Brinell Hardness, HRB
					205	515	35	45	≤ 90
30	90594	1	L	20°	269	580	53		81
		2			264	580	50		78
30	90594	1			269	580	53		81
		2			264	580	50		78

РЕЗУЛЬТАТЫ МИКРОСТРУКТУРЫ/ MICROSTRUCTURE RESULTS — n/a.

ТЕХНОЛОГИЧЕСКИЕ ИСПЫТАНИЯ/ TECHNOLOGICAL TESTS — **flattening – 1 – 2 stage – acceptable.**

ИСПЫТАНИЯ НА МЕЖКРИСТАЛЛИТНУЮ КОРРОЗИЮ/ INTERGRANULAR CORROSION TEST — **A 262, Practice E – acceptable**

ИСПЫТАНИЕ НА СООТВЕТСТВИЕ МАРКИ СТАЛИ POSITIVE MATERIAL IDENTIFICATION — **– satisfactory.**

НЕРАЗРУШАЮЩИЙ КОНТРОЛЬ/ NON-DESTRUCTIVE TEST METHOD — **100% ultrasonic tested - acceptable.**

ПРИМЕЧАНИЯ ADDITIONAL REMARKS — **Tubes are heat treated : 1060° C holding time 5 minutes then quenched by water.**

100% ВИЗУАЛЬНЫЙ КОНТРОЛЬ, ПРОВЕРКА РАЗМЕРОВ/ VISUAL INSPECTION, DIMENSIONAL MEASUREMENT — **SATISFACTORY**

TÜV DIN EN ISO 9001 Certificate 07 150 930

TÜV APPROVED MANUFACTURER ACC. TO AD-MERKBLATT W0/TRD 100

дата / date **11.02.2005.**

эксперт/inspector

Э1 V.Chaplitskiy

Inspectie order 17858 - 0

142227

22-A

TÜV CERT DIN EN ISO 9001 Certificate: 07 100 938

TÜV APPROVED MANUFACTURER ACC. TO. AD-MERKBLATT W0/TRD 100

Ukraine

Nikopol Stainless Tube Mill

53201 56, Trubnikov Avenue Nikopol Dnepropetrovsk Region Ukraine tel/fax (05662) 2-51-94

Approved acc. to AD 2000-Merkblatt W0 by TÜV Nord e. V. and certified acc. to Pressure Equipment Directive (97/23/EC) by TÜV CERT-Certification body for pressure equipment of the TÜV NORD GRUPPE; notified body, reg.-no. 0045. Сертифицирован поAD 2000 WO ТЮФ Норд и по директиве для напорных резервуаров высокого давления (97/23Ев) сертификационным центром ТЮФ СЕРТ для оборудования, работающего под давлением сертификационного общества ТЮФ НОРД ГРУППЕ; регистрационный номер сертификационного центра 0045.

Требования Сертификата/ Inspection Certificate EN 10204-1995/3.1.B.-ISO 9001 + P.E.D	Сертификат приемочных испытаний № Material Test Certificate No. 2005/ 43	Лист/Page 1	Листов/Pages 2
Заказчик Customer	VAN LEEUWEN STAINLESS B.V		
Страна назначения Country of destination	The NETHERLANDS		
Адрес Address	INDUSTRIEWEG 26 4153 ZG BEESD		
Контракт №/Contract No.	410061 item 008		

ТЕХНИЧЕСКИЕ ТРЕБОВАНИЯ / TECHNICAL REQUIREMENTS

Наименование продукции/Product description
HOT ROLLED TUBES ; SEAMLESS
НТД/Specification **PED 97/23/EC; ASTM A 312-99a/A 530-98/; ASME SA 312/SA 530 SEC.II Part.A - 1998 ; 091.12E/091.17 E;Rev 2 december 2001;NACE MR-0175-2001 Part. 3.5**

Способ выплавки/Melting process **EAF + AOD**	Маркировка/Marking NSTM
Состояние поставки / State of delivery **Solution annealed and passivated**	штамп контролера / Inspector's stamp Э1

Сортамент / Range of sizes

номер партии, Lot	марка стали/ Steel grade	плавка/ Heat No.	штук/ Pieces	Метраж/ Total Length, m	вес нетто, кг Net weight, kg	размеры/Dimensions, mm	Гидроиспытания/ Hydr. test MPa (t=10sec.)
117	TP304/304L	912248	20	123,3	672	OD 60,33 x 3,91WT x 5500-6500	OK
117	TP304/304L	912248	19	116,44	658	OD 60,33 x 3,91WT x 5500-6500	OK
148	TP304/304L	90474	11	69,0	388	OD 60,33 x 3,91WT x 5500-6500	OK
		TOTAL:	**50**	**308,74**	**1718**		

дата / date **21.01.2005.**

эксперт/inspector Э1 V.Chapitskiy

Inspectie order 17858 - 0

22·B

Требования Сертификата Inspection Certificate **EN 10204-1995/3.1.B.-ISO 9001 + P.E.D**	Сертификат приемочных испытаний № Material Test Certificate No. 2005/43	Лист/Page 2	Листов/Pages 1

ДОЛЯ ХИМИЧЕСКИХ ЭЛЕМЕНТОВ, В % / CHEMICAL COMPOSITION, %

плавка № Heat No.	C	Mn	Si	P	S	Cr	Ni	Mo		
	0,035 max	2,00 max	0,75 max	0,040 max	0,030 max	18,0-20,0	8,00-13,0			
912248 90474	0,025 0,025	1,05 1,11	0,45 0,51	0,038 0,032	0,014 0,019	18,20 18,38	10,80 10,40			

РЕЗУЛЬТАТЫ ИСПЫТАНИЙ / TEST RESULTS

МЕХАНИЧЕСКИЕ ИСПЫТАНИЯ / MECHANICAL TESTS ACC. TO EN 10002-1,-5

партия/ Lot No.	Плавка/ Heat No.	№ образца испыта- ний Specimen No.	направление испытаний/ Test direction	темпе- ратура- испытаний/ Test temperature, ^0C	предел текучести/ Yield strength, MPa	прочность при растяжении Tensile strength, MPa	удли- нение Elon- gation %	удли- нение Elon- gation % ($L_0=5.65\sqrt{S_0}$)	твер- дость/ Brinell Hardness. HRB
					205	515	35	45	≤90
117	912248	1	L	20°	323	590	47		85
		2			342	610	51		88
117	912248	1			323	590	47		85
		2			342	610	51		88
148	90474	1			373	600	40		90
		2			337	540	39		90

РЕЗУЛЬТАТЫ МИКРОСТРУКТУРЫ/
MICROSTRUCTURE RESULTS — **n/a.**

ТЕХНОЛОГИЧЕСКИЕ ИСПЫТАНИЯ/
TECHNOLOGICAL TESTS — **flattening – 1 – 2 stage – acceptable.**

ИСПЫТАНИЯ НА МЕЖКРИСТАЛЛИТНУЮ КОРРОЗИЮ/
INTERGRANULAR CORROSION TEST — **A 262, Practice E – acceptable**

ИСПЫТАНИЕ НА СООТВЕТСТВИЕ МАРКИ СТАЛИ
POSITIVE MATERIAL IDENTIFICATION — **– satisfactory.**

НЕРАЗРУШАЮЩИЙ КОНТРОЛЬ/
NON-DESTRUCTIVE TEST METHOD — **100% ultrasonic tested - acceptable.**

ПРИМЕЧАНИЯ
ADDITIONAL REMARKS — **Tubes are heat treated : 1060^0 C holding time 5 minutes then quenched by water.**

**100% ВИЗУАЛЬНЫЙ КОНТРОЛЬ, ПРОВЕРКА РАЗМЕРОВ/
VISUAL INSPECTION, DIMENSIONAL MEASUREMENT** — **SATISFACTORY**

TÜV TÜV

дата / date **21.01.2005.**

эксперт/inspector Э1 V.Chaplitskiy

[redacted]

E N D I R I A N B E R H A D

Kanzen Tetsu Sdn Bhd
Company No. 190887-W
P.O. Box 7272, Lot 4 Persiaran Perusahaan
Seksyen 23, 40708 Shah Alam, Selangor Darul Ehsan, Malaysia.
Tel: (603) 5542 1400 Fax: (603) 5541 9777
http://www.kanzen-tetsu.com e-mail: info@kanzen-tetsu.com

CERTIFICATE EN 10.204/3.1.B
MILL TEST REPORT
DIN 50049 3.1 B
EN 10204 3.1 B

CERTIFICATE NO : 9125875 (1) DATE : 26/[illegible]/005

CONTRACT NO : 9106111
SHIPPER : KANZEN TETSU SDN BHD

ORDER NO. : 411090
CUSTOMER : VAN LEEUWEN STAINLESS B.V.

PRODUCT : WELDED AUSTENITIC STAINLESS STEEL PIPES ASTM A312/ASME SA312M-03
(ISO SPECIFICATION)

INVOICE OF : 1359 PCS OF STAINLESS STEEL WELDED TUBE
SHIPPING TERMS : CIF PORT OF ROTTERDAM
ACCORDING TO INCOTERMS 2000

L/C NUMBER : NLNL1N1L04M008846

SIZE	QTY PCS	TOTAL LENGTH	WEIGHT KGS	HEAT NO	TENSILE TEST Y.S. N/mm²	TENSILE TEST T.S. N/mm²	TENSILE TEST EL %	HARDNESS TEST (HRB)	HYDROSTATIC TEST MPa	FLATTENING TEST	CORROSION TEST ASTM A262 PRACTICE E	CHEMICAL COMPOSITION (%) C (X 100)	Si (X 100)	Mn (X 100)	P (X 1000)	S (X 1000)	Ni (X 100)	Cr (X 100)	Mo (X 100)	
					205	515	35					-	-	-	-	-	800	1800	-	MIN
												3.5	100	200	45	30	1300	2000	-	MAX
TP304/304L X 1" X SCH10S	112	-	1444	4110-0410	319	638	54	82	17.2	PASSED	PASSED	2.2	48	128	27	2	805	1802	-	
TP304/304L X 1-1/4" X SCH10S	45	-	766	4112-0412	296	619	57	79	13.8	PASSED	PASSED	2.1	53	130	26	3	837	1804	-	
TP304/304L X 2" X SCH10S	135	-	3271	4120-0412	319	664	53	83	9.6	PASSED	PASSED	1.7	46	127	40	2	808	1813	-	
TP304/304L X 2-1/2" X SCH10S	45	-	1459	4125-0412	324	665	55	84	9.0	PASSED	PASSED	1.9	46	126	28	2	804	1831	-	
TP304/304L X 3" X SCH10S	64	-	2546	4130-0411	290	655	51	84	6.9	PASSED	PASSED	2.4	41	146	25	4	823	1825	-	
	26	-	1034	4130-0412	328	630	53	84	6.9	PASSED	PASSED	2.0	47	128	40	2	807	1810	-	
TP304/304L X 3" X SCH40S	10	-	696	4430-0412	267	621	55	83	13.1	PASSED	PASSED	2.2	38	165	23	3	820	1817	-	
TP304/304L X 6" X SCH40S	4	-	697	4460-0412	331	589	49	83	9.0	PASSED	PASSED	2.7	44	133	26	9	806	1815	-	
TP304/304L X 1-1/2" X SCH40S	68	-	1695	4415-0410	324	653	50	85	15.8	PASSED	PASSED	3.0	51	170	22	3	832	1851	-	

HEAT TREATMENT : 1050 DEGREE CELSIUS QUENCHED IN WATER

NOTE : Y.S. = YIELD STRENGTH
T.S. = TENSILE STRENGTH
E.L. = ELONGATION IN 50mm (or 4D), min, %

La societe Kanzen Tetsu garantit que tous les produits, du certificat susdit respectent en leur totalite les specifications de l'article 15 de l'arrete ministeriel du 24 mars 1978 modifie:
C<=0.25%, P<=0.05%, S<=0.05%, R<800 N/mm², E<=0.9 x R
A% (L_0= 5.65V_{so}) min. 16% en long. R(A-2) >=10500
The material comply with ASME SA312 Sect II part A ed.'95 plus addenda.
All Welded Stainless Steel Pipes Are Confirmed P.M.I. Tested

QA DEPARTMENT
CHAN JIN HANG
QA ASST. MANAGER

KT/DOC/QA-22-R3

Inspectie order 17858 - 0

142944

23

SHREE GANESH FORGINGS LIMITED

C-3/C, T.T.C. IND. AREA, THANE BELAPUR ROAD, PAWNE, NAVI MUMBAI, INDIA

TÜV CERT EN ISO 9001 Certificate : 041009695

RWTÜV

QAD/F/04A

Inspectie order 17864 - 1

INSPECTION CERTIFICATE - EN 10204/3.1B

PED Certificate No. 04 202 2 440 02 10004 and AD-2000 Merkblatt WO Certificate No. 04202W1300200018

CLIENT : M/S. VANLEEUWEN STAINLESS B.V.	PRODUCT : MACHINED STAINLESS STEEL FORGED FLANGES	CERTIFICATE NO.: EXP/2004-05/ 1721
ORDER NO. : 408274	MATERIAL SPECIFICATION : DIN EN 10088 - 3	DATE : 27.02.2005
DATE : 27.08.2004	QUALITY : 1.4306	MANUFACTURER'S BRAND : SGF
INVOICE NO .: EXP/04-05/ 115 dt. 31.01.2005	DIMENSIONAL SPECIFICATION : DIN 2635 / C ND 40	INSPECTORS STAMP : SGI

CHEMICAL ANALYSIS

S.NO.	ITEM DESCRIPTION	H.NO./H.CODE	QTY	% C	% Mn	% Si	% S	% P	% Cr	% Ni	% Mo	% Ti	% N2	ARTICLE NO.
23	DIN 2635 / C ND 40 NW 20 / 26.9	S-2500 / 076	10	.014	1.77	.34	.024	.036	18.26	10.04	--	--	.0679	455.34.023
24	DIN 2635 / C ND 40 NW 50 / 60.3	S-2500 / 076	100	.014	1.77	.34	.024	.036	18.26	10.04	--	--	.0679	455.34.053
25	DIN 2635 / C ND 40 NW 80 / 88.9	S-2500 / 076	50	.014	1.77	.34	.024	.036	18.26	10.04	--	--	.0679	455.34.082
26	DIN 2635 / C ND 40 NW 200 / 219.1	S-2408 / 900	10	.025	1.78	.41	.018	.039	18.22	10.31	--	--	.0615	455.34.204

MECHANICAL PROPERTIES

S.NO.	H.NO./H.CODE	TENSILE STRENGTH Rm N/mm2	YIELD STRENGTH Rp N/mm2		% Elongation % A G.L = 50 mm	% Reduction Area % Z	CHARPY IMPACT TEST V – NOTCH (JOULES) (+20°C)				Hardness BHN	MICRO-STRUCTURE	IGC AS PER ISO 3651-2	HEAT TREATMENT.
			0.2%	1.%			I	II	III	AVEG				
23	S-2500 / 076	576	239	281	53	70.20	170	186	194	183.33	156	O.K	O.K	SOIN. ANNL
24	S-2500 / 076	576	239	281	53	70.20	170	186	194	183.33	156	O.K	O.K	SOIN. ANNL
25	S-2500 / 076	576	239	281	53	70.20	170	186	194	183.33	156	O.K	O.K	SOIN. ANNL
26	S-2408 / 900	567	245	288	53.76	68.50	184	186	186	185.33	153	O.K	O.K	SOIN. ANNL

REMARKS : 1) After solution annealing hardness found less than HRC 22 (237 BHN) according to "NACE MR 0175-2000."
2) PMI Test found O.K.

We certify that the material have been manufactured, tested and examined in accordance with all the requirement of the ordered standard and all test result are acceptable.

WORKS INSPECTOR
SGI
T.V. BHOSALE

144553 (24)

Created by DEEPAK

041463/783 cc JPGL

(25)

CERTIFICATE - ZEUGNIS - CERTIFICAT

Page / Seite 1(1)

OUTO KUMPU

EN 10 204-3.1.B

Date – Datum	Load - Ladung - Charge No	Cert.No - Zeugnis Nr
040826		4082476.R00

Your order - Ihre Bestellung - Votre commande
CTS Order

Outokumpu Order - Auftrag - Ordre / Pack - Kolli - Colis No
403200

Purchaser - Besteller - Acheteur
Outokumpu Stainless AB, CL.
Hot Rolled Plate
Central Lager
69381 DEGERFORS
SVERIGE

Requirements - Anforderungen - Exigences
EN 10088-2:95
ASME SA-240. Code Sect. II. Part A.Ed.2001-A02
ASTM A240M-04a
A480/A480M
EN 10 029 - B NK

Dest
By e-Services system

Product - Erzeugnisform - Produit
Stainless steel plate, hot rolled
Solution annealed, pickled/1D/No.1 Finish

Grade - Werkstoff - Nuance *
18-9L
1.4301/Type 304L/Type 304/1.4307

Brand-Mark * Herstellerzeichen Signe du Producteur	W	Inspection stamp * Abnahme-Stempel Estampe de l'expert	DJ 2	Melting process * Erschmelzungsart Procédé de fusion	E+AOD

Marking - Kennzeichnung - Marquage
Plate No, Dimension, Heat No, Lot No, Incl. *

Extent of delivery - Lieferumfang - Etendue de livrasion

Item Pos	Pcs Anzahl Nombre	Kg	Dimension Abmessung mm	Heat No Schmelze Nr Coulée	Lot No Los Nr Lot No
1	1		40 * 2000 * 6000	41597	140373

Plate No / Blech Nr / Tôle No: 8597 2801 Diverging thickness min 37.00 mm accepted by customer

Chemical composition - Chemische Zusammensetzung - Composition chimique %
Heat - Schmelze - Coulée No

	C	Si	Mn	P	S	Cr	Ni	N				
Min	0.000	0.00	0.00	0.000	0.000	18.00	8.00	0.00				
Max	0.030	0.75	2.00	0.045	0.015	19.50	10.00	0.10				
41597	0.022	0.32	1.65	0.026	0.001	18.16	8.21	0.08				

Test results - Prufergebnisse - Résultats des essais (1N/mm² = 1 MPa)

Direc.	Top/Bot	Form	Location
T = Transverse	F = Front	P = Flat	1 = Center
L = Longitudinal	B = Back	C = Round	2 = Close to Surface
			3 = Standard
			4 = At 1/4 of thickness

Mechanical Properties

Tensile testing EN 10 002/Hardness Rockwell B

Plate-No	Direc.	Top/Bot	Location	Form	Temp. C	Rp 0,2 N/mm2	Rp 1,0 N/mm2	Rm N/mm2	A5 %	A50 %	HRB
Min						210	250	520	45	40	0
Max								650			92
2801	T	F	4	C	20	254	300	577	62	64	83

Other Information

Heat treated at 1100°C and Quenched in water.
Dimensional control, visual inspection and grade check :Approved

The results comply with the requirements of the order.

Outokumpu Stainless AB
Hot Rolled Plate

SE-693 81 Degerfors, Sweden

Telefon / Telephone: Nat 0586 470 00, Int +46 (0)586 470 00
Telefax: Nat 0586 470 16, Int +46 (0)586 470 16

Org nr/Reg. No.: 556001-8748
Moms nr/V.A.T. No.: SE556001874801
Säte/Registered office: Stockholm, Sweden

DNV SWEDAC ACKREDITERING 1083 EN 45012
SS-EN ISO 9001

Computer generated original
Quality Inspector

Bengt Hagström

Inspectie order 17858 - 0

137321

26-A

DMV STAINLESS Italia s.r.l

Via Piò, 30 24062 Costa Volpino (BG)
Tel : 035.975.611 - Fax :035.971624
e-mail: dmvitaly@dmv-stainless.com

No 04.04471

Page 1/2

INSPECTION CERTIFICATE

3.1.B - EN 10204 : 1991+A1 : 1995

Purchaser	VAN LEEUWEN STAINLESS .
Address	INDUSTRIEWEG 26 BEESD .
Customers Order	410089 date 08/10/2004 .
DMV Ref. Order / Item	0000213383/000007 .
Part number	091.12.043 .

Product

Seamless Stainless Steel Cold Finished Pipes Solution Annealed Free From Scale Plain Ends Square Cut Deburred

Specification	ASTM A 312-03 ASME SA-312 ED. 2001 ADD. 2002 DIN 17458 PK1 07.85 NF A 49117 09.85
Grade	TP304 TP304L 1.4301 1.4306 Z 2 CN 18-10 Z 6 CN 18-09
Tolerances	ASTM A 312-03 AW - NFA 49117 - D3/T3 EN ISO 1127-4/96
Marking	{LOGO_DMV} ASTM/ASME A/SA-312 -117-TP304/TP304L 1.4301/1.4306 Z2CN1810/Z6CN1809 SEAMLESS HS1 H.{HEAT} NPS 3/8 SCH 40S 17,1 x 2,31 DMV-I IF BUNDLE {BUNDLE}

Heat	No	Weight	Total length	OD	W. Th.	Length
497600	51	256,00 Kg	313,00 m	NPS 3/8	SCH 40S	5182/7315 mm
Tot.	51	256,00 Kg	313,00 m			

Heat 497600 Melting Process Electric + VOD

Chemical analisys (%)

	C	Si	Mn	P	S	Cr	Cu	Ni	Co	B
Min						18.000		10.000		
Max	0.030	1.0000	2.00	0.040	0.0300	19.000	1.000	10.500	0.200	0.0015
Heat	0.013	0.3600	1.75	0.029	0.0020	18.310	0.240	10.280	0.089	0.0014

Mechanical and Metallurgical Properties

Tensile test (at 20 °C)

	Direct. Long/Trans	Y.S. 0,2% MPa	Y.S. 1,0% MPa	U.T.S. MPa	El 5d %	El 50 mm %
Min		205.00	230.00	515.00	45.00	35.00
Max				680.00		
No 176700	L	316.53	347.94	641.56	49.09	51.20

HARDNESS TEST

No 176700/1/2/3/4/5 Required HRB max 90,00 Result 82,00 / 83,00

FLARING TEST

Required NF A 49-856 Result OK

RING FLATTENING TEST

Required DIN 50 136 Result OK

FLATTENING TEST

Required ASTM A 999 Result OK

CORROSION TEST

Required ASTM A 262 PR E Result OK

Inspectie order 17858 - 0

DMV STAINLESS Italia s.r.l

Via Pio, 30.24062 Costa Volpino (BG)
Tel : 035.975.611 - Fax :035.971624
e-mail: dmvitaly@dmv-stainless.com

No
04.04471
Page 2/2

26-B

INSPECTION CERTIFICATE

3.1.B - EN 10204 : 1991+A1 : 1995

CORROSION TEST

Required NF A 05159 T1 **Result** OK

Other tests and declarations

Heat treatment	1070°C	
Antimixing checked by PMI		OK
Visual and dimensional examination		OK
Eddy current testing	ASTM A 999	OK
Material in accordance with	NACE MR 01.75 2000 (HRC<=22)	OK

No weld repair

Tubes are free from mercury contamination

We certify that the delivered products comply with the request of the order

The delivered material has been producted and tested on the internal order/item n° 0004042703/000001

La Societé DMV garantit que tous les produits objet du Certificat susdit, respectent en leur totalité les Specifications de l'Article 15 de l'Arreté Ministeriel du 24 Mars 1978 modifié: C max 0,25% P max 0,05% Rm max 800 N/mm² A (Lo=5,65VSo) min 16% long.Rm (A-2) min 10500 N/mm²

Date 21-Oct-2004

Mill inspector F. ANNIBALI

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: 70/2002/MUC)

This certificate is issued by a computerized system and is valid without signature. In case the owner of the original certificate would release a copy of it, he must attest its conformity to the original one, taking upon himself the responsibility for any anlawful or not allowed use. Any alteration and/or falsification will be subject to the law

dh 0904 1783 cc JPG

OUTO KUMPU

Avesta Works
CM. Hans Pernäng

CERTIFICATE - ZEUGNIS - CERTIFICAT (27) 1/1

EN 10204-3.1.B

Date - Datum	Load - Ladung - Chargem No	Cert.No - Zeugnis No
2004-09-29	FR4A-0889	1143252-EN

Your order - Ihre Bestellung - Votre commande
316577

Avesta order - Auftrag - Ordre: 661/406146
Invoice - Rechnung - Facture: 661/466816

Purchaser - Besteller - Acheteur
OUTOKUMPU S/A
100, RUE PETIT

FR-75165 PARIS CEDEX 19
FRANCE

Requirements - Anforderungen - Exigences
ASTM A 240-04
ASME SA-240 2001 A02

Dest.
CMP ARLES SA

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

Grade - Werkstoff - Nuance
Avesta 18-8L
TYPE 304

?nd mark / ?stellerzeichen / Signe du producteur	Inspectors stamp / Abname - Stempel / Estamp de l'expert	Melting process / Erschmeltzungsart / Procédé de fusion
OUTO KUMPU	AJA A	E+AOD

Extent of delivery - Lieferumfang - Etendue de livre

Item / Pos / Poste	Pcs / Anzahl / Nombre	kg	Dimensions - Abmessungen - Dimensions mm			Heat No / Schmelze Nr / Coulée No	Lot No / Los Nr / Lot Nr
9	11	6350	6.00	2000	6130	843576 –	004

Chemical composition - Chemische Zusammensetzung - Composition chimique

	C	Si	Mn	P	S	Cr	Ni	Nb	Cu	Co	N
Heat	.017	.30	1.78	.026	.001	18.15	8.07	.007	.37	.11	.075

Radioactive contamination check acc. IAEA recommendations: Satisfactory

Test results - Prüfergebnisse - Résults déssais (1N/mm 2 = 1 MPa) F = Front - Anfang - Début B = Back - Ende - Fin T = Transverse - Quer - Travers

	Test Ref / Probe Ref / Eprouv Ref	Temp °C	Rp 0.2 N/mm²	Rp 1.0 N/mm²	R_m N/mm²	2" %	HB HB
Min		+20	205		515	40	
Max							201
	F T	+20	317	366	626	50	170
	B T		315	365	627	51	183

Corrosion acc. ASTM A 262-E: Satisfactory
Heat treatment: Material temperature 1100 cel / Quenched (forced air + water)
Steel grade verification (PMI-spectroscopic): OK
Insp. and gauge measurement: Satisfactory

Outokumpu Stainless AB
Avesta Works
BOX 74, S-774 22 AVESTA
SWEDEN
Regoffice:
Stockholm Sweden

Telephone : (0)226 814 18
Telefax : (0)226 813 16
Telex no : 7030 AVESTA S
Reg no : 556001-8748
V.A.T no : SE556001874801

This material is found to comply with order requirements

[signature]

Authorized Inspector

EN ISO 9001
EN ISO 14001

28

ThyssenKrupp Materials France S.A.S
B.P. 52 - 6, Avenue Gutenberg
78311 MAUREPAS CEDEX FRANCE

MILL CERTIFICATE

Certificat matière

TRANSCRIPT. **3.1.B** (EN 10204)

HEAT Nb. *N° Coulée*: 65526

CERTIFICATE Nb. *N° de certificat*: 12707/15

Client:	N° Cde: Order Nb.	N° BL: DN Nb.
DUPERRIER INDUSTRIE	11484 DU 04.10.04	BL :209477 Poste:03

GRADE *Nuance*	SPECIFICATIONS *Normes*	DIMENSION
1.4301 / 1.4307 X5CRNI18-10 / X2CRNI18-9 304 / 304L	EN 10272/00 EN 10088-3/95 ASME SA 479/98 ASTM A 479/01 ASTM A 276/00A	R 25 mm
		DELIVERY STATE *Etat de livraison*
		ETIRE - POLI h10 HYPERTREMPE (1040°C/EAU)

CHEMICAL COMPOSITION *Composition chimique*

C%	Si%	Mn%	P%	S%	Cr%	Ni%	Mo%	Cu%	Ti%	N	Co	
0.022	0.40	1.48	0.032	0.020	18.15	8.10	0.29	0.28		0.062	0.11	

MECHANICAL PROPERTIES *Caractéristiques mécaniques*

Eprouvette Specimen	*Position* Location	Temp. °C	$Rp_{0.2\%}$ (Y.S.) N/mm^2	$Rp_{1\%}$ N/mm^2	Rm (T.S.) N/mm^2	A% Elong.	Z% Red. Area	KV J	*Dureté* Hardness
			342	403	707	45	71		205HB

ADDITIONAL TESTS *Essais complémentaires*

Corrosion Test	*Essais de corrosion :*	ASTM A 262 Pr. E/98 + EN 3651-2 : OK
PMI (Spectroscopic)	*Contrôle anti-mélange:*	OK
Visual inspection	*Contrôle visual*	OK
Dimension inspection	*Contrôle dimensionnel*	OK

Nous attestons que le présent certificat reproduit intégralement les valeurs du document de contrôle émis par l'usine productrice.
We herewith certify that the information presented in this document is an exact reproduction of the steel mill certificate.

Certified by / *Certifié par* :
DATE : 04/05/04

G. KRAEMER
Technical Director /*Directeur technique*

Gkraemer

Sté DUPERRIER
02320 PINON

V/Cde 156/50144	
NB PIÈCES	RÉFÉRENCE
10	Pièce LGGO

29

4 manuelle ... pk 2 - di 304/783 ... JPG -

OUTO KUMPU

Avesta Works
OCM. Hans Pernäng

CERTIFICATE - ZEUGNIS - CERTIFICAT 1/1

EN 10204-3.1.B

Date - Datum	Load - Ladung - Chargem No	Cert.No - Zeugnis No
2004-11-09	FR4A-1002	1161559-EN

Your order - Ihre Bestellung - Votre commande
201951/NG

Avesta order - Auftrag - Ordre Invoice - Rechnung - Facture
661/408533 661/469379

Purchaser - Besteller - Acheteur
OUTOKUMPU S/A
100, RUE PETIT

FR-75165 PARIS CEDEX 19
FRANCE

Requirements - Anforderungen - Exigences
ASTM A 240-04
ASME SA-240 2001 A02
EN 10088-2 (04.95)
EN 10028-7:2000
AD 2000 W2, W10 & DIN 17440 (09.96)

Dest.
OUTOKUMPU S/A

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

Grade - Werkstoff - Nuance
Avesta 18-8L
TYPE 304/TYPE 304L/1.4307/1.4301

Brand mark / Herstellerzeichen / Signe du producteur	OUTO KUMPU	Inspectors stamp / Abname - Stempel / Estamp de l'expert	AJA A	Melting process / Erschmeltzungsart / Procédé de fusion	E+AOD

Extent of delivery - Lieferumfang - Etendue de livre

Item / Pos / Poste	Pcs / Anzahl / Nombre	kg	Dimensions - Abmessungen - Dimensions mm		Heat No / Schmelze Nr / Coulée No		Lot No / Los Nr / Lot Nr
3	1	7400	6.00	2000	843837	–	003

Chemical composition - Chemische Zusammensetzung - Composition chimique

	C	Si	Mn	P	S	Cr	Ni	Nb	Cu	Co	N
Heat	.018	.32	1.66	.025	.001	18.28	8.10	.004	.37	.10	.073

Radioactive contamination check acc. IAEA recommendations: Satisfactory

Test results - Prüfergebnisse - Résults déssais (1N/mm 2= 1 MPa) F = Front - Anfang - Début B = Back - Ende - Fin T = Transverse - Quer - Travers

	Test Ref / Probe Ref / Eprouv Ref		Temp °C	Rp 0.2 N/mm²	Rp 1.0 N/mm²	R_m N/mm²	A5 %	2" %	HB HB
Min			+20	230	260	520	45	40	
Max						670			201
	F	T	+20	297	338	604	56	56	167
	B	T		290	324	597	56	56	163

Corrosion acc. ASTM A 262-E, EN ISO 3651-2A: Satisfactory
Heat treatment: Material temperature 1100 cel / Quenched (forced air + water)
Steel grade verification (PMI-spectroscopic): OK
Insp. and gauge measurement: Satisfactory
Approved acc. AD 2000 Merkblatt W0 by TÜV Nord e.V. with renounce of countersignment
Certified acc. Pressure Equipment Directive (97/23/EC) by TÜV CERT-Certification body for pressure equipment of the TÜV NORD GROUP; notified body, reg-no. 0045.

076486

Outokumpu Stainless AB
Avesta Works
BOX 74, S-774 22 AVESTA
SWEDEN
Regoffice:
Stockholm Sweden

Telephone : (0)226 814 18
Telefax : (0)226 813 16
Telex no : 7030 AVESTA S
Reg no : 556001-8748
V.A.T no : SE556001874801

This material is found to comply with order requirements

Authorized Inspector

EN ISO 9001
EN ISO 14001

30A

CERTIFICATE - ZEUGNIS - CERTIFICAT

Page / Seite 1(2)

OUTO KUMPU

EN 10 204-3.1.B

Date – Datum	Load - Ladung - Charge No	Cert.No - Zeugnis.Nr
041012	6380	4101076.R00

Your order - Ihre Bestellung - Votre commande: 101331

Outokumpu Order - Auftrag - Ordre: 404523 — Pack/Kolli - Colis No: 0

Purchaser - Besteller - Acheteur:
Outokumpu Stainless AB, CL.
Hot Rolled Plate
Central Lager
69381 DEGERFORS
SVERIGE

Requirements - Anforderungen - Exigences:
AD 2000-Mbl. W2/AD 2000-Mbl. W10/EN 10028-7
EN 10088-2:95
ASME SA-240. Code Sect. II. Part A.Ed.2001-A02
ASTM A240M-04a
A480/A480M
EN 10 029 - B NK
Width tolerance:-0/+100mm

Dest: By e-Services system

Product - Erzeugnisform - Produit:
Stainless steel plate, hot rolled CTS
Solution annealed, pickled/1D/No.1 Finish

Grade - Werkstoff - Nuance:
18-9L
1.4301/1.4307/Type 304/Type 304L

W | DJ 2 | E+AOD

Plate No, Dimension, Heat No, Lot No, Incl. *

Item / Pos	Pcs / Anzahl / Nombre	Kg	Dimension / Abmessung mm	Heat No / Schmelze Nr / Coulée	Lot No / Lot Nr / Lot No
1	2		25 * 3000 * 6000	41347	143549

Plate No / Blech Nr / Tôle No: 8529 4204,-4205

	C	Si	Mn	P	S	Cr	Ni	N
Min	0.000	0.00	0.00	0.000	0.000	18.00	8.00	0.00
Max	0.030	0.75	2.00	0.045	0.015	19.50	10.00	0.10
41347	0.025	0.33	1.64	0.024	0.001	18.13	8.14	0.07

Test results - Prüfergebnisse - Résultats des essais ((N/mm² = 1 MPa)

Direc.: T = Transverse, L = Longitudinal; Top/Bot: F = Front, B = Back; Form: F = Flat, C = Round; Location: 1 = Center, 2 = Close to Surface, 3 = Standard, 4 = At 1/4 of thickness

Mechanical Properties

Tensile testing EN 10 002/Hardness Rockwell B

Plate-No	Direc.	Top/Bot	Location	Form	Temp. C	Rp 0,2 N/mm2	Rp 1,0 N/mm2	Rm N/mm2	A5 %	A50 %	HRB
Min						210	250	520	45	40	0
Max								650			92
4204	T	F	3	C	20	245	303	603	57	59	83
4205	T	F	3	C	20	250	301	599	60	62	83

Charpy impact test (V-notch) EN 10045-1

Plate-No	Direc.	Top/Bot	Location	Form	Temp. C	Value 1 Joule	Value 2 Joule	Value 3 Joule	Average Joule
Min									60
Max									
4204	T	F	3	P	20	327	325	316	323
4205	T	F	3	P	20	350	356	355	354

The results comply with the requirements of the order.

Outokumpu Stainless AB
Hot Rolled Plate
SE-693 81 Degerfors, Sweden
Telefon / Telephone Nat 0586 470 00 Int +46 (0)586 470 00
Telefax Nat 0586 470 16 Int +46 (0)586 470 16
Org nr/Reg. No.: 556001-8748 Moms nr/V.A.T. No.: SE556001874801
Säte/Registered office: Stockholm, Sweden

SWEDAC ACKREDITERING — DNV — SS-EN ISO 9001

Computer generated original
Quality Inspector
Bengt Hagström

(30B)

CERTIFICATE - ZEUGNIS - CERTIFICAT		Page Seite 2(2)
EN 10 204-3.1.B		
Date – Datum	Load - Ladung - Charge No	Cert.No - Zeugnis Nr
041012	6360	4101076.R00

OUTO KUMPU

Corrosion

EN ISO 3651-2 Method A : Approved

Other Information

Heat treated at 1100°C and Quenched in water.
Dimensional control, visual inspection and grade check :Approved
Accepted acc to AD-Merkblatt W0 / TRD 100 without countersignature
document file TÜV Nord e.V. 0121WL12640.
Approved acc. to AD2000-Merkblatt W0 by TÜV Nord e.V.
Certified acc. Pressure Equipment Directive (97/23/EC)
by TÜV-CERT-Certification body for pressure equipment of the
TÜV-NORD GROUP:notified body,reg-no. 0045

Outokumpu Stainless AB
Hot Rolled Plate

SE-693 81 Degerfors, Sweden

Telefon / Telephone Nat 0586 470 00 Int +46 (0)586 470 00
Telefax Nat 0586 470 16 Int +46 (0)586 470 16

Org nr/Reg. No.: 556001-8748
Moms nr/V.A.T. No.: SE556001874801
Säte/Registered office: Stockholm, Sweden

SS-EN ISO 9001

Computer generated original
Quality Inspector

Bengt Hagström

CERTIFICATE - ZEUGNIS - CERTIFICAT Page Seite 1(2)

EN 10 204-3.1.B

Date – Datum	Load - Ladung - Charge No	Cert.No - Zeugnis Nr
050113	9432	5010853.R00

OUTO KUMPU

Your order - Ihre Bestellung - Votre commande: 101414

Outokumpu Order - Auftrag - Ordre: 405692 Pack - Kolli - Colis No: 0

Purchaser - Besteller - Acheteur:
Outokumpu Stainless AB, CL.
Hot Rolled Plate
Central Lager
69381 DEGERFORS
SVERIGE

Requirements - Anforderungen - Exigences:
AD 2000-Mbl. W2/AD 2000-Mbl. W10/EN 10028-7
EN 10088-2:95
ASME SA-240. Code Sect. II. Part A.Ed.2004
ASTM A240M-04a
A480/A480M
EN 10 029 - B NK
Width tolerance:-0/+100mm

Dest: By e-Services system

Product - Erzeugnisform - Produit:
Stainless steel plate, hot rolled CTS
Solution annealed, pickled/1D/No.1 Finish

Grade - Werkstoff - Nuance:
18-9L
1.4301/1.4307/Type 304/Type 304L

Brand Mark - Herstellerzeichen - Signe du Producteur: W

Inspectors stamp - Abnahme - Stempel - Estampe de l'expert: DJ 2

Melting process - Erschmelzungsart - Procédé de fusion: E+AOD

Marking - Kennzeichnung - Marquage:
Plate No, Dimension, Heat No, Lot No, incl. *

Extent of delivery - Lieferumfang - Etendue de livraison

Item Pos	Pcs Anzahl Nombre	Kg	Dimension mm	Abmessung	Heat No Schmelze Nr Coulée	Lot No Los Nr Lot No
1	11		15 * 2000 * 6000		844901	148234

Plate No / Blech Nr / Tôle No: 9180 0112,-0113,-0114,-0115,-0116,-0117,-0118,-0119,-0120,-0121,-0122

Chemical Composition - Chemische Zusammensetzung - Composition chimique % Heat - Schmelze - Coulée No

	C	Si	Mn	P	S	Cr	Ni	N				
Min	0.000	0.00	0.00	0.000	0.000	18.00	8.00	0.00				
Max	0.030	0.75	2.00	0.045	0.015	19.50	10.00	0.10				
844901	0.020	0.33	1.62	0.029	0.001	18.31	8.18	0.08				

Test results - Prüfergebnisse - Résultats des essais (1N/mm² = 1 MPa)

Direc. T = Transverse, L = Longitudinal; Top/Bot B = Back; Form P = Plate, C = Round; Location 1 = Center, 2 = Close to Surface, 3 = Standard, 4 = At 1/4 of thickness

Mechanical Properties

Tensile testing EN 10 002/Hardness Rockwell B

Plate-No	Direc.	Top/Bot	Location	Form	Temp. C	Rp 0,2 N/mm2	Rp 1,0 N/mm2	Rm N/mm2	A5 %	A50 %	HRB
Min						210	250	520	45	40	0
Max								650			92
0112	T	F	3	P	20	258	299	601	61	65	80

Corrosion

EN ISO 3651-2 Method A : Approved

The results comply with the requirements of the order.

Outokumpu Stainless AB
Hot Rolled Plate
SE-693 81 Degerfors, Sweden
Org nr/Reg. No.: 556001-8748
Säte/Registered office: Stockholm, Sweden
Telefon / Telephone: Nat 0586 470 00, Int +46 (0)586 470 00
Telefax: Nat 0586 470 16, Int +46 (0)586 470 16
Moms nr/V.A.T. No.: SE556001874801

DNV SWEDAC SS-EN ISO 9001

Computer generated (original)
Quality Inspector
Bengt Hagström

(31B)

CERTIFICATE - ZEUGNIS - CERTIFICAT	Page Seite 2(2)
EN 10 204-3.1.B	

Date – Datum	Load.- Ladung - Charge No	Cert.No - Zeugnis Nr
050113	9432	5010853.R00

OUTO KUMPU

Other Information

Heat treated at 1100°C and Quenched in water.
Dimensional control, visual inspection and grade check :Approved
Accepted acc to AD-Merkblatt W0 / TRD 100 without countersignature
document file TÜV Nord e.V. 0121WL12640.
Approved acc. to AD2000-Merkblatt W0 by TÜV Nord e.V.
Certified acc. Pressure Equipment Directive (97/23/EC)
by TÜV-CERT-Certification body for pressure equipment of the
TÜV-NORD GROUP:notified body,reg-no. 0045

Outokumpu Stainless AB
Hot Rolled Plate

SE-693 81 Degerfors, Sweden

Org nr/Reg. No.: 556001-8748
Säte/Registered office: Stockholm, Sweden

Telefon / Telephone
Nat 0586 470 00
Int +46 (0)586 470 00

Telefax
Nat 0586 470 16
Int +46 (0)586 470 16

Moms nr/V.A.T. No.: SE556001874801

SS-EN ISO 9001

Computer generated original
Quality Inspector

Bengt Hagström

ThyssenKrupp Materials France	
CLIENT	
N° Cde CLIENT	
N° BL	
VISA	
PHOTOCOPIE CERTIFIÉE CONFORME A L'ORIGINAL	

32.A

SCHOELLER BLECKMANN EDELSTAHLROHR
SEAMLESS-STAINLESS
NAHTLOS ZUM ERFOLG

Zertifizierter Hersteller nach DGR 97/23/EG
Certified Manufacturer to PED 97/23/EC
von / by LRQA GmbH
Kennummer / Identification No.: 0525

LLOYD'S REGISTER QUALITY ASSURANCE
Certificate No.: 891147
UKAS QUALITY MANAGEMENT
TÜV AD-Merkblatt W0/TRD 100

ABNAHMEPRÜFZEUGNIS B - INSPECTION CERTIFICATE B
CERTIFICAT DE RECEPTION PAR L'USINE 3.1.B C.C.P.U.
nach/according to OENORM/DIN EN 10 204-3.1.B

Schoeller-Bleckmann
Edelstahlrohr AG
Rohrstrasse 1
A-2630 Ternitz, Austria
Tel: +43 02630/316 469
Fax: +43 02630/316 683

Zert./cert: C108140
Seite/Page: 1 /3
Datum/Date: 040824
e-mail: helga.harather@sber.co.at

Besteller/Purchaser/Commettant
THYSSENKRUPP MATERIALS FRANCE
ZI DES DANJONS

F-18000 BOURGES
FRANCE

THYSSENKRUPP MATERIALS FRANCE
ZI DES DANJONS

F-18000 BOURGES

Bestell-Nr./Purchaser's Order No/No. de commande: 45/1/68543

Auftrags-Nr./Works Order No/No. de commande d'usine: 0429839/ 4

Lieferschein/Delivery note/Avis d'expedition: 0429839/ 4 **Date:** 04-07-22

Erzeugnis/Product/Produit
TUBES INOX SANS SOUDURE - SEAML. STAINL. STEEL TUBES/PIPES,
SBS NUANCE / GRADE A600, 1.4301/1.4306, TP304/TP304L,
TUZ2CN18-10, TUZ6CN18-09,
EXECUTION C2 = FINIS A CHAUD, HYPERTREMPE, DECAPE, PASSIVE,
FINISH C2 = HOT FINISHED,HEAT-TREATED,PICKLED,
LIVRAISON SELON / TECHN. COND. ACC. ASTM A312/A312M-01A,
THYSSEN FICHE MATIERE TSS/ANSI/ST/810 REV.00,
TOLERANCES SELON / ACC.
EN ISO 1127/03.97 D2/T2, ASTM A530/A530M-99,
ASME SECT.II PART.A SA530/SA530M-2001 ED. 2002 ADD,
NFA 49-117/SEPT.1985, LONGUEUR COMPRISE / RANDOM LENGTH
6100/ 7300 MM EXTRÉMITÉ D'EQUERRE / PLAIN ENDS,

Lieferung/Descr./Liste descr.:

Pos	Abmessung / Dimensions / Dimensione	Menge / Quantity / Poids	Gewicht / Netweight / Poids net	Stk / Pcs / Pcs	Schmelze / Heat / Coulee	Prüf-Nr / Test-No / No.Epr.
30	168,28 X 7,11 MM / 6"NB X SCH 40S / ISO 168,3 X 7,1 MM	28,94 M	791,00 KG	4	759590	152761

Ergebnis der Prüfungen/Test Result/Resultat des essais:
Die gestellten Anforderungen sind erfüllt.
The material has been furnished in accordance to the requirements.
Le material a été trouvé conforme aux exigences.

Zeichen des Lieferwerks:
Brand of Manufacturer: **SBS**
Marques de l'usine:

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

TA

SCHOELLER-BLECKMANN EDELSTAHLROHR AG
Harather
FR. H. HARATHER
(DER WERKSSACHVERSTÄNDIGE)
(WORKS INSPECTOR/L'EXPERT DE USINE)

32.B

SCHOELLER
BLECKMANN
EDELSTAHLROHR
SEAMLESS·STAINLESS
NAHTLOS ZUM ERFOLG

Zertifizierter Hersteller nach DGR 97/23/EG
Certified Manufacturer to PED 97/23/EC
von / by LRQA GmbH
Kennnummer / Identification No.: 0525

Certificate No.: 897147 UKAS QUALITY MANAGEMENT TÜV AD-Merkblatt W0/TRD 100

ABNAHMEPRÜFZEUGNIS B - INSPECTION CERTIFICATE B
CERTIFICAT DE RECEPTION PAR L'USINE 3.1.B C.C.P.U.
nach/according to OENORM/DIN EN 10 204-3.1.B

Schoeller-Bleckmann
Edelstahlrohr AG
Rohrstrasse 1
A-2630 Ternitz, Austria
Tel: +43 02630/316 469
Fax: +43 02630/316 683

Zert./cert: C108140
Seite/Page: 2 /3
Datum/Date: 040824
e-mail: helga.harather@sber.co.at

Chemische Zusammensetzung/Chemical Composition/Composition chimique (%)

Schmelze Heat coulee	C	SI	MN	P	S	CR	MO	NI	CO
759590	0,024	0,400	1,770	0,022	0,003	18,100	0,210	10,350	0,050

Mechanische Eigenschaften/Mechanical Properties/Charact. mecaniques

Prüf-Nr Test-No No.Epr.	Proben-Nr. Sample-no. sample-no.		TEMP °C	RP0.2 MPA	RM MPA	A2" %
		min		205	515	
		max				35
152761	1		20	294	596	50

Ergebnisse weiterer Prüfungen/Further test results/Résultat d'autre essais
ESSAI D'APLATISSEMENT: SATISFAISANT
FLATTENING TEST: SATISFACTORY
ESSAI DE CORR. INTERGR. SELON ASTM A262 PRACT.E:SATISFAISANT
INTERGR. CORR. TEST ACC. TO ASTM A262 PRACT.E: SATISFACTORY
VERIFICATION DE LA NUANCE SUR CHAQUE TUBE
PAR "X-RAY-FLUORESCENCE-ANALYZER": SATISFAISANT
POSITIVE MATERIAL IDENTIFICATION TEST ON EACH TUBE/PIPE
BY "X-RAY-FLUORESCENCE-ANALYZER": SATISFACTORY

LÖSUNGSGEGLÜHT BEI / SOLUTION ANNEALED AT
1060°C, 10 MINUTES, WASSER/WQ

WASSERDRUCKVERSUCH MIT 1300 PSI: IN ORDNUNG
HYDROSTATIC TEST AT 1300 PSI: SATISFACTORY

BESICHTIGUNG UND NACHMESSUNG: IN ORDNUNG
INSPECTION AND CHECKING OF DIMENSIONS: SATISFACTORY

KENNZEICHNUNG/MARKING/MARQUAGE: WERKSTOFF/MATERIAL

Ergebnis der Prüfungen/Test Result/Resultat des essais:
Die gestellten Anforderungen sind erfüllt.
The material has been furnished in accordance to the requirements.
Le material a été trouvé conforme aux exigences.

Zeichen des Lieferwerks:
Brand of Manufacturer: **SBS**
Marques de l'usine:

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

SCHOELLER-BLECKMANN
EDELSTAHLROHR AG
Harather
FR. H. HARATHER
(DER WERKSSACHVERSTÄNDIGE)
(WORKS INSPECTOR/L'EXPERT DE USINE)

32.C

SCHOELLER
BLECKMANN
EDELSTAHLROHR
SEAMLESS-STAINLESS
NAHTLOS ZUM ERFOLG

Zertifizierter Hersteller nach DGR 97/23/EG
Certified Manufacturer to PED 97/23/EC
von / by LRQA GmbH
Kennnummer / Identification No.: 0525

Certificate No.: 671347

UKAS QUALITY MANAGEMENT

TÜV
AD-Merkblatt WO/TRD 100

ABNAHMEPRÜFZEUGNIS B - INSPECTION CERTIFICATE B
CERTIFICAT DE RECEPTION PAR L'USINE 3.1.B C.C.P.U.
nach/according to OENORM/DIN EN 10 204-3.1.B

Schoeller-Bleckmann
Edelstahlrohr AG
Rohrstrasse 1
A-2630 Ternitz, Austria
Tel: +43 02630/316 469
Fax: +43 02630/316 683

Zert./cert: C108140
Seite/Page: 3 /3
Datum/Date: 040824
e-mail: helga.harather@sber.co.at

-ABMESSUNG/DIMENSION-SCHMELZE/HEAT NO.-LOT NO.-SMLS

ERSCHMELZUNGSART/STEELMAKING PROCESS: EF+AOD

Ergebnis der Prüfungen/Test Result/Resultat des essais:
Die gestellten Anforderungen sind erfüllt.
The material has been furnished in accordance to the requirements.
Le material a été trouvé conforme aux exigences.

Zeichen des Lieferwerks:
Brand of Manufacturer: SBS
Marques de l'usine:

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

SCHOELLER-BLECKMANN
EDELSTAHLROHR AG
Harather
FR. H. HARATHER
(DER WERKSSACHVERSTÄNDIGE)
(WORKS INSPECTOR/L'EXPERT DE USINE)

(33)

ThyssenKrupp Nirosta

ABNAHMEPRUEFZEUGNIS B
INSPECTION CERTIFICATE B
CERTIFICAT DE RECEPTION B
BESCHEINIGUNG 3.1.B
NACH EN 10204

Zeugnis-Nr. / Certificate No. / N° du certificat: 021475321 0

Bk0754

Datum / Date / Date: 27.05.2002

47794 Krefeld Postfach

KRUPP HOESCH STEEL LTD
SPEEDWELL INDUSTRIAL ESTATE
GB- STAVELEY.CHESTERF/DERB S43 3JW
Großbritannien

Besteller / Purchaser / Commettant: KRUPP HOESCH STEEL LTD

Bestell-Nr. / Order-No. / Commande N°: 796201/EMP/58/8

Unser Auftrag Nr. / Our Order No.: 222641

Lieferschein Nr. / Delivery Note No.: 86029164

QA

Erzeugnisform / Product / Produit: Band/Coil/Rouleau

Werkstoff / Quality / Nuance: TYPE 304 / 304 L
NIROSTA 4301 / 4307

Lieferbedingungen/Terms of delivery/Conditions de livraison:
ASTM A 240/A 240M ASME SA 240
EN 10088-2
EN 10028-7 AD W2 AD W10
AD 2000 W2 AD 2000 W10
Richtlinie 97/23/EG

Position	Stückzahl / Quantity	Gewicht / Mass kg	Maße / Dimensions mm	Erschmelzung / Melting	Schmelze-Nr. / Cast-No.	Los-/Band-Nr.	Ausführung / Finish
1	1	21700	6,00 x 1500,00	AOD	469738	31555	2A1D

Schmelze-Nr. / Cast-No.	C %	Si %	Mn %	P %	S %	Cr %	Ni %	N %
469738	0,017	0,37	1,28	0,026	0,001	18,12	8,09	0,045

EUROPEAN METAL PRODUCTS
QUALITY CONTROL DEPARTMENT

Probe Nr.	Los-/Band-Nr.	Rp0,2 N/mm²	Rp1% N/mm²	Rm N/mm²	A5 %	HRB
555 A	31555 00	306	359	646	53,8	85,0
555 E	31555 00	297	355	640	53,0	85,0

THE STATED PHYSICAL PROPERTIES APPLY TO THE MATERIAL PRIOR TO PROCESSING BY EUROPEAN METAL PRODUCTS.

Probenlage zur Walzrichtung: QUER

Verwechslungsprüfung (Spektralanalyse)/Test of identity (spectrum analysis)/Contrôle d'identification (analyse spectrale) I.O.
Maße - Oberfläche/Dimensions - Surface/Dimensions - Surface I.O.
Prüfung auf interkrist. Korros./Test of intercryst. corros./Test de corros. intercrist. ASTM A 262 PRACTICE E O.B.

ThyssenKrupp Nirosta GmbH

DIESES ZEUGNIS WURDE VOM RECHNER ERSTELLT
WERK KREFELD, ABNAHME

BUTZEN

WERKSSACHVERSTAENDIGER
TEL:02151-832447
FAX:02151-834105

* SLIT EDGE*
WAERMEBEHANDLUNG : 1050 GRAD C / LUFT
TRAITEMENT TERMIQUE : 1050 GRAD C / AIR
HEAT - TREATMENT : 1050 DEGREE / AIR

EUROPEAN METAL PRODUCTS CERTIFICATE OF INSPECTION COI 1250C374 DATED 21/6/02 APPLIES TO MATERIAL SUPPLIED ON DELIVERY NOTE 1250 FOR STAINLESS STEEL PLATE DE-COILED FROM HOT ROLLED ANNEALED AND PICKLED COIL.

FAXED

MP
19.6.

AXINOX SA
ZI DE MILLENCOURT
RUE ALBERT ...
02200 SOISSONS

(34)

ACERINOX,S.A.
FABRICA DEL CAMPO DE GIBRALTAR
PALMONES (LOS BARRIOS)
TFNO. (34)-56-629300
FAX (34)-56-629211
P.O. BOX 83
11370 LOS BARRIOS (CADIZ)

TÜV CERT — ISO 14001

INSPECTION CERTIFICATE
CERTIFICAT DE RÉCEPTION 3.1.B

ACCORDING TO / *SUIVANT* EN 10204

CERTIFICATE Nº / *CERTIFICAT Nº* 403534 1 / 1

CUSTOMER / *CLIENT*
TUBES ET RACCORDS DISTRIBUTION
13, RUE CHARLEMAGNE
02200 SOISSONS FRANCE

Our order no. / *n/commande* XN 31469

Your order no. / *v/commande* 80592 Avril 04

REQUERIMENTS / *EXIGENCES*
ASTM-A-240/01;A-480/01;ASME-SA-240/02.

GRADE / *NUANCE* ACX 150 TP-304

FINISH / *FINI* NRO.1

TRADE MARK / *SIGLE DU PRODUCTEUR* ACERINOX

INSPECTOR'S STAMP / *CACHET DE L'AGENT DE CONTROLE*

STEELMAKING PROCESS / *PROCEDE D'ELABORATION* A.O.D.

COIL/BOX *BOBINE/CAISSE*	CONTENT *CONTENU*	DIMENSIONS *DIMENSIONS* THICKNESS *EPAISSEUR*	WIDTH *LARGEUR*	LENGTH *LONGUEUR*	MARKS *MARQUE*	QUANTITY *QUANTITE*	ECHANTILLON
J94789	033EW9 B	5,00	1.500,00	3.000,00	21	8	033EW9
J94790	033EW9 B	5,00	1.500,00	3.000,00	22	8	033EW9
J94802	043EW9 A	5,00	1.500,00	3.000,00	21	8	043EW9

CHEMICAL ANALYSIS — *COMPOSITION CHIMIQUE (%)*

HEAT NO. *COULEE*	C	CR	MN	N	NI	P	S	SI
REQUIREMENTS *EXIGENCES*	0,080	18,000 20,000	2,000	0,100	8,000 10,500	0,045	0,030	0,750
3EW9	0,030	18,085	1,670	0,065	8,379	0,031	0,002	0,332

MECHANICAL PROPERTIES — *CARACTERISTIQUES MECANIQUES*

COIL *ECHANTILLON*		Rm. N/mm2	Rp 0,2 N/mm2	A50 %	HRB
REQUIREMENTS *EXIGENCES*		515,00	205,00	40,00	92,00
033EW9	QT	636,7	306,4	52,7	88,0
043EW9	QT	644,3	322,2	50,5	89,0

INTERGRANULAR CORROSION TEST / *CORROSION INTERGRANULAIRE TEST*
ASTM-A-262 PRACTICA E

SURFACE AND DIMENSIONAL CONTROL / *INSPECTION DIMENSIONELLE ET VISUELLE*
SATISFACTORY / *Satisfaisant*

REMARKS / *REMARQUES*
Temperatura de hipertemple entre 1050 y 1100 ° C.

WORK INSPECTOR / *AGENT DE CONTROLE* J. VAQUERO

PALMONES, 14 ABRIL 2004

La reproduction sur ce papier filigrané atteste dans le système Qualité TRD 13, rue Charlemagne - 02200 SOISSONS - Tél. 03 23 73 50 00 valoir copie "certifié conforme à l'original"

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