

Travel Sheet

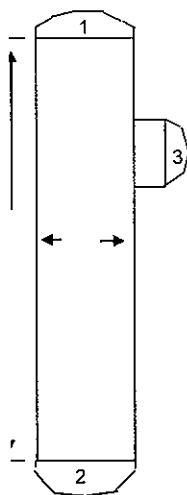
Authorized Inspector to be given travel sheet prior to construction so that he can indicate hold points and Inspection Points.

"A"-Hold Point, "I"- Inspection Point, "R"-Revision, "W"- Witness Point

Hold Points established - Sign & Date

May 19/11 (Authorized Inspector)

vessel Serial #		12135	DWG #	V05-413	(A) #	607661
vessel Title:		24" 3Phase Separator	CRN #	T5394.231		
ITEM	COMMENTS	AUTH Insp., Hold Rev., Witness POINTS	DATE FUNCTION COMPLETE & INSPECTORS INITIALS			
			QC INSPECTOR	AUTHORIZED INSPECTOR		
APPROVED DRAWING		X	May 12, 2011	John June 14/11		
CALCULATIONS ON FILE		X	May 12, 2011	John June 14/11		
MATERIAL CHECKED AGAINST DRAWING, MATERIAL LIST			May 12, 2011			
MTR'S CHECKED		X	May 12, 2011	John June 14/11		
VESSEL LAYOUT			May 13, 2011			
NOZZLES	ORIENTATION		May 13, 2011			
& FITTINGS	RATINGS	X	May 13, 2011	John June 14/11		
FIT	NOZZLES&FITTINGS		May 16, 2011			
UP	SHELL & HEAD		MAY 20 2011			
INTERNALS (tray, baffles, etc)			May 19, 2011			
INTERNAL INSPECTION		H	May 19, 2011	John May 19/11		
WELD SIZES			JUN 07 2011	John June 14/11		
WELDERS I.D.			JUN 07 2011			
EXTERNAL AFTER COMPLETION OF ALL WELDING			JUN 07 2011			
RADIOGRAPHS		X	JUN 09 2011	John June 14/11		
OTHER N.D.E.						
IMPACT TESTS						
POST WELD HEAT TREATMENT	YES: NO: ✓					
EXTERNAL BEFORE PWHT						
PWHT CHART CHECKED						
NAMEPLATE		X	JUN 14 2011	John June 14/11		
-HYDROSTATIC TEST		H	JUN 14 2011	John June 14/11		
DATA REPORT		X	JUN 14 2011	John June 14/11		
NONCONFORMANCES						



		SPECIFICATIONS	HEAT NUMBER	VERIFIED THICKNESS
SHELL	C1	SA-516-70	350404-07813	25.4mm
	C2			
HEADS	1	SA-516-70	G7547-879270469	23.8mm
	2	SA-516-70	G4793-879270310	23.8mm
	3			
REPADS	1	Shell 4" SA-516-70	9580K	9.5mm
	2	Head 4" SA-516-70	344650-33444	6mm
	3	Shell 3" SA-516-70	9580K	9.5mm
	4			
		SPECIFICATIONS	SIZE	SCHEDULE
NOZZLES		SA-106-B	4", 3", 2"	Sch XXH
FITTINGS		SA-105	1/2", 3/4"	CL6000
TUBES				

62A004607

ESSAR Steel Algoma Inc. 105 West Street, Sault Ste. Marie, Ontario Canada P6A 7B4

CUSTOMER PURCHASE ORDER NUMBER M62006006 ENTRY DATE 2010/10/04 SHIP DATE 2010/11/30 TALLY NUMBER 204342 SHIPPERS NO. - CARRIER CN

CHARGE TO CUSTOMER NAME AND ADDRESS

RUSSEL METALS INC.
PO BOX 4128
EDMONTON ALBERTA
T6E 4T2

RUSSEL METALS INC.
C/O CN SCOTSFORD DISTRIBUTION
4060 99TH STREET
SCOTSFORD, ALBERTA T6E 3N5

CUSTOMER SPECIFICATION
HR MULTIPLE CERTIFIED PLATE - CARBON - ASTM A516 GR 70/ASME SA516 GR 70 (06)
(09B) - CVNL 20/13 FT LBS AT -50 F - FINE GRAIN - NORMALIZED FOR 12 MINUTES
MIN. @ 1670 F - PQ2 - NORMALIZED - FLATNESS 1/2 A-20

MILL TEST REPORTS

ESSAR STEEL ALGOMA INC. HEREBY CERTIFIES THAT THE MATERIAL HEREIN DESCRIBED WAS MADE AND TESTED IN ACCORDANCE WITH THE RULES OF THE SPECIFICATION SHOWN. ALL RESULTS ARE RETAINED IN ACCORDANCE WITH THE COMPANY'S STANDARD RECORD KEEPING PRACTICES.

M. MCLEAN

MANAGING METALLURGIST

SUPPLEMENTARY INSTRUCTIONS

TEST CERT 1: GBEYERS@RUSSELMETALS.COM TEST CERT 2: RWEISNER@RUSSELMETALS.COM PLATE TEST COUPON:

TEST REPORTS REQUIRED

RESALE P/N 80678

2000166860 PF
2010/12/03 12:56

THIS MILL TEST REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF ESSAR STEEL ALGOMA INC. IF YOU RECEIVE THIS DOCUMENT AND ARE NOT THE INTENDED RECEIVER, PLEASE CALL (705)945-2624 COLLECT FOR INSTRUCTIONS ON METHOD OF DISPOSAL OF DOCUMENT.

MEETS EN 10204 3.1
ISO QUALITY AND ENVIRONMENTAL CERTIFICATES AVAILABLE AT WWW.ESSARSTEELALGOMA.COM
ALL HEATS FULLY KILLED
HEATS INDICATED WITH (*) FINE GRAINED
HEATS INDICATED WITH (+) MADE IN CANADA WITH DOMESTIC AND NORTH AMERICAN MATERIALS

CUSTOMER ITEM 00001 OUR ITEM 001 DIMENSIONS .375 X 120 X 480 "

PLATE NUMBER	HEAT-MS PIECES	NO.	WEIGHT	PLATE NUMBER	HEAT-MS PIECES	NO.	WEIGHT
70952	9580K-53	1	6125				

TENSILE TESTS:
PLATE
HEAT NUMBER 70952
SRCE 166"
GAUGE .3750
COND METH N
YIELD TENSILE KSI 53.0
T 74.3
% ELONG 25(8")

IMPACT TESTS:
PLATE
HEAT NUMBER 70952
SRCE 166"
GAUGE IN .3750
COND METH N
CVN L 3/4 -50F 123
FULLSIZE ENERGY * FTLB * AVG* 118 103 115

LAB ALG

SPEC LAB
ASTM ALG

WARNING
THE TEST RESULTS AND VALUES REPORTED HEREIN INDICATE ONLY THAT (1) THE PARTICULAR STEEL FOR WHICH THIS CERTIFICATE IS ISSUED MEETS THE MINIMUM SPECIFIED YIELD STRENGTH AND (2) THE CHEMICAL ANALYSIS AND PHYSICAL PROPERTIES OF SUCH STEEL ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THE SPECIFICATION INDICATED. THE RESULTS OR VALUES REPORTED HEREIN CAN NOT BE USED TO QUALIFY THE STEEL FOR ANY SPECIFICATION OTHER THAN THE ONE INDICATED AND CAN NOT BE RELIED UPON FOR ANY PURPOSE (INCLUDING DESIGN OR CALCULATIONS) AS REPRESENTING THE ACTUAL STRENGTH OF SUCH STEEL.

ESSAR Steel Algoma Inc.

105 West Street, Sault Ste. Marie, Ontario Canada P6A 7B4

CUSTOMER PURCHASE ORDER NUMBER	ENTRY DATE	SHIP DATE	TALLY NUMBER	SHIPPER'S NO.	CARRIER	WILL ORDER
M62006006	2010/10/04	2010/11/30	204342	-	CN	68012

CHARGE TO CUSTOMER NAME AND ADDRESS

RUSSEL METALS INC.
PO BOX 4128
EDMONTON ALBERTA
T6E 4T2

SHIP TO CUSTOMER NAME AND ADDRESS

RUSSEL METALS INC.
C/O CN SCOTSFORD DISTRIBUTION
4060 99TH STREET
SCOTSFORD, ALBERTA T6E 3N5

CUSTOMER SPECIFICATION

HR MULTIPLE CERTIFIED PLATE - CARBON - ASTM A516 GR 70/ASME SA516 GR 70 (06)
(09B) - CVNL 20/13 FT LBS AT -50 F - FINE GRAIN - NORMALIZED FOR 12 MINUTES
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M. MCLEAN

MANAGING METALLURGIST

SUPPLEMENTARY INSTRUCTIONS

TEST CERT 1: GBEYERS@RUSSELMETALS.COM TEST CERT 2: RWEISNER@RUSSELMETALS.COM PLATE TEST COUPON:

INSP TR TEST REPORTS REQUIRED

CUST RESALE P/N 80678

2000166860 PF

2010/12/03 12:56

HEAT	(WT %)	C	MN	P	S	SI	CR	NI	CU	MO	AL	CB	V	B	DO
9580K**		19	1.05	.009	.005	.30	.05	.03	.06	.01	.031	.000	.001		.38

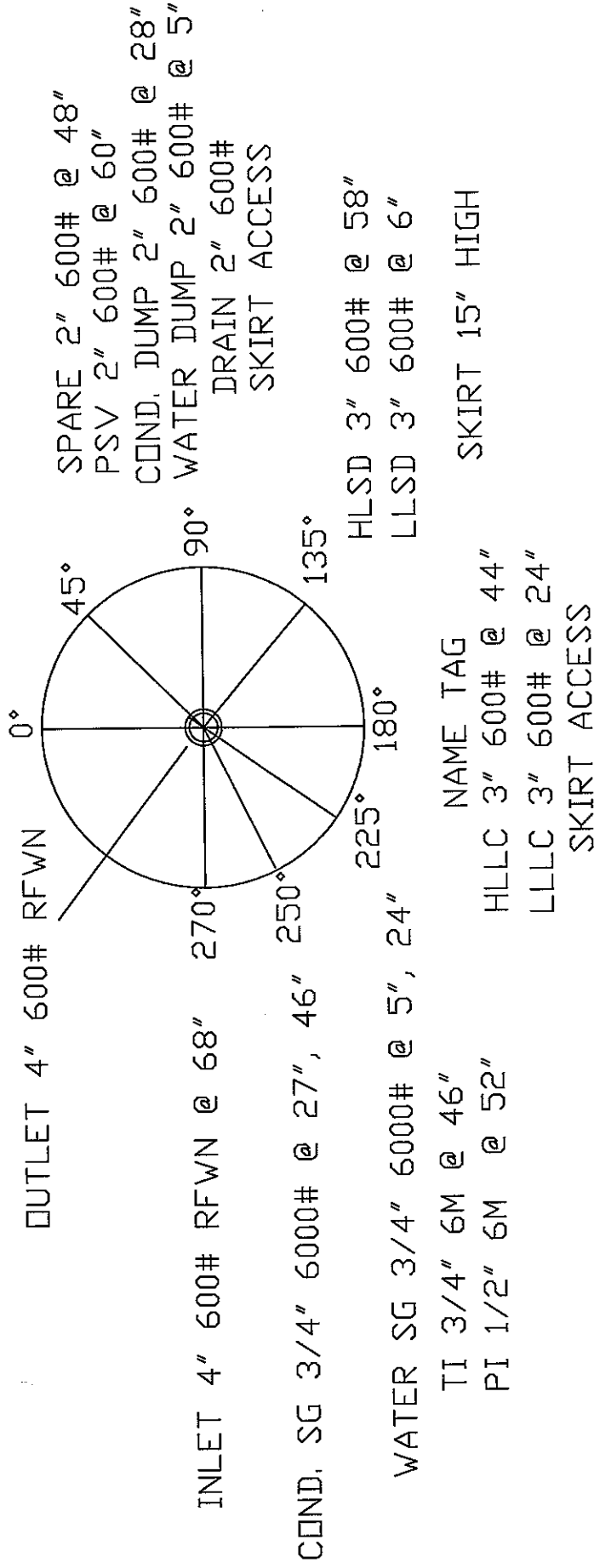
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PENGROWTH VESSEL ORIENTATION

JOB# 10-4806 24" #1440, 3 PHASE

LONG SEAM



4" in shell 42 mm inside proj.	4" nozzles 6" long sch. xxs	24" x 7/8" shell
4" in heads 32 mm inside proj.	3" nozzles 6" long sch. xxs	24" x 1" heads
3" in shell 40 mm inside proj.		



edmonton exchanger
& manufacturing ltd.

CERTIFICATE OF COMPLIANCE

5545-89 Street Edmonton, Alberta Canada T6E 5W9 www.edmontonexchanger.com tel 780.468.6722 • QC fax 780.466.4668 • sales fax 780.466.5155

Customer RJV GASFIELD LTD.

Po 2696

Work Order C88704 Date 2011/03/31 CofC# 23751 Page 1 of 2

Item#	Description	Qty	Heat#	Weld Proc.	Form. Proc.
S88704-1-1	SHELL(S) - 1.0000" NOM X 24" OD X 96" (Material Spec: SA 516-70 Normalized)	1	350404-07813	WP600	4
S88704-1-2	SHELL(S) - 1.0000" NOM X 24" OD X 96" (Material Spec: SA 516-70 Normalized)	1	350405-05064	WP600	4
S88704-1-3	SHELL(S) - 1.0000" NOM X 24" OD X 96" (Material Spec: SA 516-70 Normalized)	1	350405-05064	WP600	4
S88704-1-4	SHELL(S) - 1.0000" NOM X 24" OD X 96" (Material Spec: SA 516-70 Normalized)	1	350405-05064	WP600	4
S88704-1-5	SHELL(S) - 1.0000" NOM X 24" OD X 96" (Material Spec: SA 516-70 Normalized)	1	350405-05064	WP600	4
S88704-1-6	SHELL(S) - 1.0000" NOM X 24" OD X 96" (Material Spec: SA 516-70 Normalized)	1	350405-05064	WP600	4
S88704-1-7	SHELL(S) - 1.0000" NOM X 24" OD X 96" (Material Spec: SA 516-70 Normalized)	1	350405-05064	WP600	4
S88704-1-8	SHELL(S) - 1.0000" NOM X 24" OD X 96" (Material Spec: SA 516-70 Normalized)	1	350404-06357	WP600	4
S88704-1-9	SHELL(S) - 1.0000" NOM X 24" OD X 96" (Material Spec: SA 516-70 Normalized)	1	350404-06357	WP600	4
S88704-1-10	SHELL(S) - 1.0000" NOM X 24" OD X 96" (Material Spec: SA 516-70 Normalized)	1	350404-06357	WP600	4

APR 05 2011



edmonton exchanger
& manufacturing ltd.

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Customer RJV GASFIELD LTD.

po 2696

Work Order C88704 Date 2011/03/31 CotC# 23751 Page 2 of 2

Forming Procedure:

4. Cold Formed

Supplementary Requirements

Normalized Material Identification Marking:

'MT' indicates normalized by the mill per ASME Code Section II, Part A, SA 20, Paragraph 13.1.1.

'GMT' indicates normalized by Edmonton Exchanger per ASME Code Section II, Part A, SA 20, Paragraph 13.1.2.

'GT' indicates normalized by Edmonton Exchanger per ASME Code Section VIII Division 1, UG-85 or ASME Code Section I, PG-77.4.

The item(s) listed above comply with the requirements of ASME Code Section I, PG-80 and ASME Code Section VIII, Division 1, UCS-79(d), UG-79 & UG-80. All welders and procedures are qualified to ASME Code Section IX. For tacking carbon steel items, roundbar used is 1018 Cold Rolled. Material being supplied conforms to the latest ASME Code Section II, Part A, 2010 Edition.

Supplementary Examination - Items



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004

INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991

MATERIAL TEST REPORT (MTR)

A05 Established inspecting body

A06 Purchaser

EDMONTON STEEL, EDMON

A07.1 No.

ED10551-J1010-ER

Final receiver

EDMONTON STEEL, EDMON

A07.2 No.

SA20-S5

B02/ Steel design. SA516-70

B03 Any suppl. ASME-II-A:07+A09

requirements DIL-HUE-2:R30-2010-01-31

A10	Advices of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
	369429-17.09.10	357359-002	1/...
		B01 Product	
		HOT ROLLED PLATES	

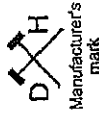


B01-B39 Description of the product

B14 Item No.	B08 Number of pieces	B09 Thickness	B10 Width	B11 Length	B12 Theoretical mass KG	B04 Product delivery condition	B07.2 Heat No.	B07.1 Rolled plate No./ Test No.	A09 Purchaser article number
01	1	0,6250	x 120,50000	x 480,00000	4650	N	348840	11315-01	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350041	63961-01	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350041	63961-02	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	17648-01	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	17648-02	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	17648-03	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	17724-01	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	17724-02	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	17724-03	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	20921-01	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	20921-02	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	20921-03	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	21295-01	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	21295-02	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	21295-03	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	21306-02	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	21306-03	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	21322-01	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	21322-02	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350399	21322-03	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350405	39539-01	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350405	39539-02	
01	1	0,6250	x 120,50000	x 480,00000	4650	N	350405	39694-02	

A04 Z01/Z02/Z03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001



B. BALDAUF
Test House Manager



AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department

Inspector's stamp Date 17.09.10 BM 1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

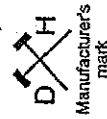
A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		369429-17.09.10	357359-002	2/...
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body DH	A06 Purchaser EDMONTON STEEL, EDMON	A07.1 No. ED10551-J1010-ER	B01 Product HOT ROLLED PLATES	
Final receiver EDMONTON STEEL, EDMON				
B02/ Steel design. SA516-70		SA20-S5		
B03 Any suppl. requirements DIL-HUE-2:R30-2010-01-31				

B01-B99 Description of the product.

B14 Item No.	B08 Number of pieces	B09 Thickness	B10 Width	B11 Length	B12 Theoretical mass KG	B04 Product delivery condition	B07.2 Heat No.	B07.1 Rolled plate No./ Test No.	A03 Purchaser article number
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N	N	350405	39694-03	350405
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N	N	350405	39715-02	350405
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N	N	350405	39774-01	350405
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N	N	350405	39774-02	350405
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N	N	350405	39774-03	350405
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N	N	350405	39799-01	350405
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N	N	350405	39799-02	350405
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N	N	350405	39799-03	350405
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N	N	350405	39359-01	350405
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N	N	350405	39359-02	350405
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N	N	350405	39359-03	350405
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N	N	350405	39965-01	350405
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N	N	350405	39965-02	350405
**	36				167400				
02	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	350401	15513-01	350401
02	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	350401	15513-02	350401
02	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	350401	15513-03	350401
02	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	350401	15526-01	350401
02	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	350401	15526-02	350401
02	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	350401	15526-03	350401
02	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	350401	15608-01	350401
02	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	350401	15610-01	350401
02	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	350401	15610-02	350401

Z01/Z02/Z03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001



B. Baldauf

B. BALDAUF
Test House Manager

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department

Inspector's stamp Date 17.09.10

BM 1

A01



DILLINGER HÜTTE

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INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		369429-17.09.10	357359-002	3/...
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Final receiver EDMONTON STEEL, EDMON				
B02/ Steel design. SA516-70				
B03 Any suppl. requirements				
ASME-II-A:07+A09				
DIL-HUB-2:R30-2010-01-31				
		SA20-S5		

B01-B99 Description of the product

B14 Item No.	B08 Number of pieces	B09 Thickness	B10 Width	B11 Length	B12 Theoretical mass	B04 Product delivery condition	B07.2 Heat No.	B07.1 Rolled plate No./ Test No.	A09 Purchaser article number
			INCH		KG				
02	1	0,7500	120,50000	x	480,00000	5580 N	350401	15610-03	
02	1	0,7500	120,50000	x	480,00000	5580 N	350401	15626-01	
02	1	0,7500	120,50000	x	480,00000	5580 N	350401	15626-02	
02	1	0,7500	120,50000	x	480,00000	5580 N	350401	15645-01	
02	1	0,7500	120,50000	x	480,00000	5580 N	350401	15645-02	
02	1	0,7500	120,50000	x	480,00000	5580 N	350401	15645-03	
02	1	0,7500	120,50000	x	480,00000	5580 N	350402	15169-03	
02	1	0,7500	120,50000	x	480,00000	5580 N	350402	15399-01	
02	1	0,7500	120,50000	x	480,00000	5580 N	350402	15399-02	
02	1	0,7500	120,50000	x	480,00000	5580 N	350402	15399-03	
02	1	0,7500	120,50000	x	480,00000	5580 N	350405	39714-01	
02	1	0,7500	120,50000	x	480,00000	5580 N	350405	39946-01	
02	1	0,7500	120,50000	x	480,00000	5580 N	350405	39946-02	
02	1	0,7500	120,50000	x	480,00000	5580 N	350405	39946-03	
02	1	0,7500	120,50000	x	480,00000	5580 N	350405	39963-01	
02	1	0,7500	120,50000	x	480,00000	5580 N	350405	39963-02	
02	1	0,7500	120,50000	x	480,00000	5580 N	350405	40537-01	
02	1	0,7500	120,50000	x	480,00000	5580 N	350405	40537-02	
**	27				150660				
03	1	0,7500	150,00000	x	480,00000	6946 N	350403	13199-01	
03	1	0,7500	150,00000	x	480,00000	6946 N	350403	13199-02	
03	1	0,7500	150,00000	x	480,00000	6946 N	350403	13199-03	
03	1	0,7500	150,00000	x	480,00000	6946 N	350403	13308-01	

Z01/Z02/Z03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department



B. BALDAUF
Test House Manager

Inspector's stamp Date 17.09.10

BM



Manufacturer's mark



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02	INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10	Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991			369429-17.09.10	357359-002	4/...	
MATERIAL TEST REPORT (MTR)						
A05	Established inspecting body	A08 Purchaser	B01 Product			
DH		Final receiver	HOT ROLLED PLATES			
B02/ Steel design.		SA516-70				
B03 Any suppl. requirements		ASME-II-A:07+A09 DIL-HUE-2:R30-2010-01-31				
		EDMONTON STEEL, EDMON	A07.1 No. ED10551-J1010-ER			
		EDMONTON STEEL, EDMON	A07.2 No. SA20-S5			

B01-B99 Description of the product

B14 Item No.	B08 Number of pieces	B09 Thickness	B10 Width	B11 Length	B12 Theoretical mass KG	B04 Product delivery condition	B07.2 Heat No.	B07.1 Rolled plate No./ Test No.	A09 Purchaser article number
03	1	0,7500 x	150,00000 x	480,00000 x	6946 N	N	350403	13308-02	
03	1	0,7500 x	150,00000 x	480,00000 x	6946 N	N	350403	13308-03	
**	6				41676				
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350403	11964-01	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350403	11964-02	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350403	11964-03	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350403	11979-01	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350403	11979-02	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350403	11979-03	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350403	12013-01	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350403	12013-02	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350403	12013-03	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350403	12280-02	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350403	12280-03	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350403	12638-01	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350403	12638-02	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350403	12638-03	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350404	11955-01	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350404	11955-02	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350404	11955-03	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350405	05031-01	
04	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	350405	05031-02	
**	19				123690				

A04	Z01/Z02/Z03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.		AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department		Date 17.09.10	BM 1
QM-System: Certification as per ISO 9001		B. BALDAUF Test House Manager		Inspector's stamp		
				AHB		



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch	A03/ Manufacturer's order/ A03 Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		369429-17.09.10	357359-002	5 / -
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body	A06 Purchaser	A01 Product		
DH	Final receiver	HOT ROLLED PLATES		
EDMONTON STEEL, EDMONTON				
EDMONTON STEEL, EDMONTON				
SA20-S5				
SA516-70				
ASME-II-A:07+A09				
DIL-HUE-2:R30-2010-01-31				

B01-B99 Description of the product

B14 Item No.	B08 Number of pieces	B09 Thickness	B10 Width	B11 Length	B12 Theoretical mass KG	B04 Product condition	B07.2 Heat No.	B07.1 Rolled plate No./ Test No.	A09 Purchaser article number
05	1	0,8750 x	150,00000 x	480,00000	8104	N	350402	14854-01	
05	1	0,8750 x	150,00000 x	480,00000	8104	N	350402	14854-02	
07	2	1,0000 x	96,50000 x	480,00000	16208	N	350404	06356-02	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	06356-03	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	06357-01	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	06357-02	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	06357-03	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	06943-01	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	06943-02	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	06943-03	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	07812-01	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	07812-02	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	07812-03	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	07813-01	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	07813-02	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	07813-03	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	10672-01	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	10672-02	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	10672-03	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	11097-01	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	11097-02	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350404	11097-03	

A04	Z01/2021/203 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.	AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	Inspector's stamp Date 17.09.10	BM 1
QM-System: Certification as per ISO 9001				
Manufacturer's mark				



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		369429-17.09.10	357359-002	6/...
MATERIAL TEST REPORT (MTR)			B01 Product	
A05 Established inspecting body DH		EDMONTON STEEL, EDMON A07.1 No. ED10551-J1010-ER		
A06 Purchaser Final receiver		EDMONTON STEEL, EDMON A07.2 No.		
B02/ Steel design. SA516-70		SA20-S5		
B03 Any suppl. requirements		ASME-II-A:07+A09		
		DIL-HUE-2:R30-2010-01-31		

B01-B99 Description of the product

B14 Item No.	B08 Number of pieces	B09 Thickness	B10 Width	B11 Length	B12 Theoretical mass KG	B04 Product delivery condition	B07.2 Heat No.	B07.1 Rolled plate No./ Test No.	A09 Purchaser article number
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350405	05063-01	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350405	05063-02	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350405	05063-03	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350405	05064-01	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350405	05064-02	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350405	05064-03	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350405	05065-01	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350405	05065-02	
07	1	1,0000 x	96,50000 x	480,00000	5959	N	350405	05065-03	
**	29				172811				
***	119				672445				

B04 Product delivery condition

ITEM NO.: 01-05,07-08
N: HT: 1670 GR.F +36 -27 GR.F
SOAKING TIME TO ATTAIN THE TARGET TEMPERATURE OVER THE WHOLE SECTION: 1-1,75 MIN/MM (25-45 MIN/INCH)
COOLING IN STILL AIR

B06 Marking of the product

ITEM NO.: 01-05,07-08
STEEL DESIGNATION SA516 70 MTLTV SA516 60 MTLTV
HEAT NO. / TRADEMARK / ROLLED PLATE NO.-TEST NO. / INSPECTOR'S STAMP

A04	Z01/Z02/Z03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.		A01
	QM-System: Certification as per ISO 9001		AG der Dillinger Hüttenwerke
Manufacturer's mark		Inspector's stamp	Postfach 1580, D-66748 Dillingen/Saar
		Date 17.09.10	Inspection department
		Test House Manager	BM 1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004

INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991

MATERIAL TEST REPORT (MTR)

A05 Established inspecting body

DH

A06 Purchaser

EDMONTON STEEL, EDMON

Final receiver

EDMONTON STEEL, EDMON

A07.1 No. ED10551-J1010-ER

A07.2 No. SA20-S5

A08 Manufacturer's order/

A03 Certificate No. 357359-002

B01 Product

HOT ROLLED PLATES

A10 Advice of dispatch No./

Date of dispatch 369429-17.09.10

Sheet 7/...

B07-B99 Further information about the product

ITEM NO.: 01-05,07-08

THICKNESS REDUCTION RATIO $\geq 3,0$ IS FULFILLED (CP. A/SA20 PAR. 5.3)

C10-C29 Tensile test

B14 B07.2:	B07.1:	Reference (heat) treatment	C01	C02/ C03	C10	C11	C12	C13	A	C14-C15
Item Heat No.	Rollplate/ Test No.		C01	C02/ C03	C10	C11	RM	RM	%	
01 348840-11315	01 350041-63961	RT	K1 Q	RT	RT	51,3	77,6	77,6	27	
01 350041-63961	01 350399-17648	RT	K1 Q	RT	RT	47,9	73,1	73,1	29	
01 350399-17648	01 350399-17724	RT	K1 Q	RT	RT	51,3	76,6	76,6	27	
01 350399-17724	01 350399-20921	RT	K1 Q	RT	RT	50,5	76,3	76,3	28	
01 350399-20921	01 350399-21295	RT	K1 Q	RT	RT	49,9	75,7	75,7	25	
01 350399-21295	01 350399-21306	RT	K1 Q	RT	RT	50,8	76,4	76,4	26	
01 350399-21306	01 350399-21322	RT	K1 Q	RT	RT	50,5	75,8	75,8	26	
01 350399-21322	01 350405-39539	RT	K1 Q	RT	RT	50,3	76,3	76,3	28	
01 350405-39539	01 350405-39694	RT	K1 Q	RT	RT	50,9	75,8	75,8	29	
01 350405-39694	01 350405-39715	RT	K1 Q	RT	RT	50,5	75,0	75,0	28	
01 350405-39715	01 350405-39774	RT	K1 Q	RT	RT	50,2	75,4	75,4	31	
01 350405-39774	01 350405-39799	RT	K1 Q	RT	RT	49,7	75,3	75,3	27	
01 350405-39799	01 350405-39959	RT	K1 Q	RT	RT	49,6	75,0	75,0	28	
01 350405-39959	01 350405-39965	RT	K1 Q	RT	RT	50,3	75,8	75,8	28	
01 350405-39965	02 350401-15513	RT	K1 Q	RT	RT	48,7	74,7	74,7	28	
02 350401-15513	02 350401-15526	RT	K1 Q	RT	RT	46,7	73,7	73,7	27	
02 350401-15526	02 350401-15608	RT	K1 Q	RT	RT	48,3	73,5	73,5	28	
02 350401-15608	02 350401-15610	RT	K1 Q	RT	RT	49,0	74,2	74,2	26	
02 350401-15610	02 350401-15626	RT	K1 Q	RT	RT	46,7	73,5	73,5	30	
02 350401-15626		RT	K1 Q	RT	RT	49,2	74,2	74,2	28	

2011/2002/203 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001



B. BALDAUF

Test House Manager

Inspector's stamp

Date 17.09.10

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar

Inspection department

A01

BM 1



DILLINGER HÜTTE

Erklärungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		369429-17.09.10	357359-002	8/...
MATERIAL TEST REPORT (MTR)		B01 Product HOT ROLLED PLATES		
A05 Established inspecting body	A06 Purchaser	EDMONTON STEEL, EDMON		
DH	Final receiver	EDMONTON STEEL, EDMON		
B02/ Steel design.		A07.1 No. ED10551-J1010-ER		
SA516-70		A07.2 No.		
B03 Any suppl.		SA20-SS		
requirements		DIL-HUE-2-R30-2010-01-31		

C10-C29 Tensile test

B14 B07.2 Item No.	B07.1 Rol. plate/ Test No.	B05 Reference (heat) treatment	C01 C01	C02 C02	C03 C03	C10 Temp. GR.F	C11 KSI RP02	C12 RM	C13 A %	C14-C15 L0-8IN
02	350401	15645	K1 Q	Q	RT	RT	48,9	74,0	29	
02	350402	15169	K1 Q	Q	RT	RT	49,2	75,1	28	
02	350402	15399	K1 Q	Q	RT	RT	50,5	75,3	28	
02	350405	39714	K1 Q	Q	RT	RT	49,6	75,3	26	
02	350405	39946	K1 Q	Q	RT	RT	49,0	75,4	28	
02	350405	39963	K1 Q	Q	RT	RT	48,6	74,5	27	
02	350405	40537	K1 Q	Q	RT	RT	46,5	73,7	27	
03	350403	13199	K1 Q	Q	RT	RT	50,0	75,5	27	
03	350403	13308	K1 Q	Q	RT	RT	49,3	75,3	26	
04	350403	11964	K1 Q	Q	RT	RT	49,9	74,1	30	
04	350403	11979	K1 Q	Q	RT	RT	49,2	74,7	29	
04	350403	12013	K1 Q	Q	RT	RT	49,0	74,0	29	
04	350403	12280	K1 Q	Q	RT	RT	49,9	74,1	27	
04	350403	12638	K1 Q	Q	RT	RT	50,0	74,5	28	
04	350404	11955	K1 Q	Q	RT	RT	49,6	74,7	29	
04	350405	05031	K1 Q	Q	RT	RT	48,9	74,8	30	
05	350402	14854	K1 Q	Q	RT	RT	49,7	75,1	27	
07	350404	06356	K1 Q	Q	RT	RT	49,3	75,0	28	
07	350404	06357	K1 Q	Q	RT	RT	50,0	74,1	29	
07	350404	06943	K1 Q	Q	RT	RT	49,7	74,1	30	
07	350404	07812	K1 Q	Q	RT	RT	49,6	74,4	30	
07	350404	07813	K1 Q	Q	RT	RT	50,3	74,0	30	
07	350404	10672	K1 Q	Q	RT	RT	50,2	74,2	30	

A04	Z01Z02/203 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.		AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar. Inspection department		A01
D/H Manufacturer's mark		B. BALDAUF Test House Manager		Inspector's stamp	Date 17.09.10
QM-System: Certification as per ISO 9001		AHB		RM	1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004

INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991

MATERIAL TEST REPORT (MTR)

A10 Advice of dispatch No./ Date of dispatch		A08 Manufacturer's order/ A03 Certificate No.	Sheet
369429-17.09.10		357359-002	9/...
A06 Purchaser Final receiver		B01 Product HOT ROLLED PLATES	
EDMONTON STEEL, EDMON			
EDMONTON STEEL, EDMON			
A07.1 No. ED10551-J1010-ER			
A07.2 No.			
SA20-S5			

C10-C29 Tensile test

B14 B07.2 Item Heat No.	B07.1 Rol. plate/ Test No.	B05 Reference (heat) treatment	C01 C02/ C03		C10 C11		C12 C13		C14-C15	
			C01	C02/ C03 Temp. GRF	KSI RP02	A % LO-BIN	RM			
07 350404	11097		K1 Q	RT	48,3	30	73,8			
07 350405	05063		K1 Q	RT	50,2	29	74,7			
07 350405	05064		K1 Q	RT	50,5	28	74,4			
07 350405	05065		K1 Q	RT	50,0	31	74,1			

C30-C39 Hardness test

B14 B07.2 Item Heat No.	B07.1 Rol. plate/ Test No.	B05 Reference (heat) treatment	C01 C02/ C01		C30 C31		C35 C36		C32 C33	
			C01	C02/ C01 Temp. GRF	Method of test	Individual values			Mean value	
01 348840	11315		K1	RT	HBW 10/3000	149	148		148	
01 350041	63961		K1	RT	HBW 10/3000	143	142		142	
01 350399	17648		K1	RT	HBW 10/3000	146	146		146	
01 350399	17724		K1	RT	HBW 10/3000	148	145		145	
01 350399	20921		K1	RT	HBW 10/3000	146	145		145	
01 350399	21295		K1	RT	HBW 10/3000	144	144		144	
01 350399	21306		K1	RT	HBW 10/3000	144	143		143	
01 350399	21322		K1	RT	HBW 10/3000	142	142		142	
01 350405	39539		K1	RT	HBW 10/3000	142	141		142	
01 350405	39694		K1	RT	HBW 10/3000	142	141		142	
01 350405	39715		K1	RT	HBW 10/3000	144	143		144	
01 350405	39774		K1	RT	HBW 10/3000	145	144		145	
01 350405	39799		K1	RT	HBW 10/3000	145	145		145	
01 350405	39959		K1	RT	HBW 10/3000	144	145		145	
01 350405	39965		K1	RT	HBW 10/3000	139	138		139	
02 350401	15513		K1	RT	HBW 10/3000	142	141		142	

Z01Z02Z03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001

AHB

B. BALDAUF
Test House Manager

Inspector's stamp

Date 17.09.10

BM

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
inspection department



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004

INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991

MATERIAL TEST REPORT (MTR)

A05 Established inspecting body A06 Purchaser EDMONTON STEEL, EDMON A07.1 No. ED10551-J1010-ER

DH Final receiver EDMONTON STEEL, EDMON A07.2 No.

B02 Steel design. SA516-70

B03 Any suppl. ASME-II-A:07+A09

requirements DIL-HUB-2:R30-2010-01-31

SA20-S5

C30-C39 Hardness test

B14 Item No.	B07.2 Heat No.	B07.1 Roll plate/ Test No.	B05 Reference (heat) treatment	C01	C02/C01	C03 Temp. GRF	C30 Method of test	C35 C31 Individual values	C32 Mean value
02	350401	15526		K1	O	RT	HBW 10/3000	HB 142 142 139	141
02	350401	15608		K1	O	RT	HBW 10/3000	HB 141 140 139	140
02	350401	15610		K1	O	RT	HBW 10/3000	HB 142 141 140	141
02	350401	15626		K1	O	RT	HBW 10/3000	HB 138 139 139	139
02	350401	15645		K1	O	RT	HBW 10/3000	HB 139 139 137	138
02	350402	15169		K1	O	RT	HBW 10/3000	HB 141 142 140	141
02	350402	15399		K1	O	RT	HBW 10/3000	HB 146 146 144	145
02	350405	39714		K1	O	RT	HBW 10/3000	HB 144 144 144	144
02	350405	39946		K1	O	RT	HBW 10/3000	HB 145 144 145	145
02	350405	39963		K1	O	RT	HBW 10/3000	HB 142 142 141	142
02	350405	40537		K1	O	RT	HBW 10/3000	HB 141 141 140	141
03	350403	13199		K1	O	RT	HBW 10/3000	HB 143 143 142	143
03	350403	13308		K1	O	RT	HBW 10/3000	HB 142 142 142	142
04	350403	11964		K1	O	RT	HBW 10/3000	HB 142 142 142	142
04	350403	11979		K1	O	RT	HBW 10/3000	HB 143 144 143	143
04	350403	12013		K1	O	RT	HBW 10/3000	HB 142 142 142	142
04	350403	12280		K1	O	RT	HBW 10/3000	HB 141 141 142	141
04	350403	12638		K1	O	RT	HBW 10/3000	HB 141 141 141	141
04	350404	11955		K1	O	RT	HBW 10/3000	HB 141 141 141	141
04	350405	05031		K1	O	RT	HBW 10/3000	HB 144 146 144	145
05	350402	14854		K1	O	RT	HBW 10/3000	HB 148 146 145	146
07	350404	06356		K1	O	RT	HBW 10/3000	HB 142 142 141	142
07	350404	06357		K1	O	RT	HBW 10/3000	HB 139 140 139	139
07	350404	06943		K1	O	RT	HBW 10/3000	HB 142 142 142	142

Z01Z02Z03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001

ADH

B. BALDAUF

Test House Manager

Inspector's stamp

Date 17.09.10

BM

AG der Dillinger Hüttenwerke

Postfach 1580, D-66748 Dillingen/Saar

Inspection department



Manufacturer's mark



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004

INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991

MATERIAL TEST REPORT (MTR)

A05 Established inspecting body A08 Purchaser EDMONTON STEEL, EDMONT A07.1 No. ED10551-J1010-ER

DH Final receiver EDMONTON STEEL, EDMONT A07.2 No.

SA20-S5

B02 Steel design. SA516-70

B03 Any suppl. ASME-II-A:07+A09

requirements DILL-HUE-2:R30-2010-01-31

A10 Advice of dispatch No./
Date of dispatch
369429-17.09.10

A08 Manufacturer's order/
A03 Certificate No.
357359-002

B01 Product

HOT ROLLED PLATES

Sheet

11/...

C30-C39 Hardness test

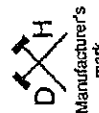
B14 Item No.	B07.2 Heat No.	B07.1 Roll plate/ Test No.	B05 Reference (heat) treatment	C01	C02/C01	C03 Temp. GRF	C30 Method of test	C35 Individual values	C31 Individual values	C32 Mean value
07	350404	07812		K1	O	RT	HBW 10/3000	HB 145	145	145
07	350404	07813		K1	O	RT	HBW 10/3000	HB 144	145	144
07	350404	10672		K1	O	RT	HBW 10/3000	HB 146	144	144
07	350404	11097		K1	O	RT	HBW 10/3000	HB 144	144	144
07	350405	05063		K1	O	RT	HBW 10/3000	HB 146	147	146
07	350405	05064		K1	O	RT	HBW 10/3000	HB 144	144	144
07	350405	05065		K1	O	RT	HBW 10/3000	HB 144	144	144

C40-C49 Impact test

B14 Item No.	B07.2 Heat No.	B07.1 Roll plate/ Test No.	B05 Reference (heat) treatment	C01	C02	C03 Temp. GRF	C41 Width of test piece	C40 Type of test piece	C44 Testing method	C45 Individual values	C43 Mean value
01	348840	11315		K1	LV	-51	51	CHP-V	AV 101	123	121
01	350041	63961		K1	LV	-51	51	CHP-V	AV 208	195	195
01	350399	17648		K1	LV	-51	51	CHP-V	AV 193	125	143
01	350399	17724		K1	LV	-51	51	CHP-V	AV 117	181	149
01	350399	20921		K1	LV	-51	51	CHP-V	AV 124	120	135
01	350399	21295		K1	LV	-51	51	CHP-V	AV 119	119	145
01	350399	21306		K1	LV	-51	51	CHP-V	AV 141	209	161
01	350399	21322		K1	LV	-51	51	CHP-V	AV 122	197	171
01	350405	39539		K1	LV	-51	51	CHP-V	AV 184	196	192
01	350405	39694		K1	LV	-51	51	CHP-V	AV 208	187	179
01	350405	39715		K1	LV	-51	51	CHP-V	AV 104	194	150
01	350405	39774		K1	LV	-51	51	CHP-V	AV 119	198	152
01	350405	39799		K1	LV	-51	51	CHP-V	AV 129	162	163
01	350405	39959		K1	LV	-51	51	CHP-V	AV 198	150	185

201202/203 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001



Manufacturer's mark



B. BALDAUF
Test House Manager

Inspector's stamp

Date 17.09.10

BM

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004

INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991

MATERIAL TEST REPORT (MTR)

A05 Established inspecting body A06 Purchaser EDMONTON STEEL, EDMON A07.1 No. ED10551-J1010-BR

DH Final receiver EDMONTON STEEL, EDMON A07.2 No.

B02/ Steel design. SA516-70

B03 Any suppl. ASME-III-A:07+A09

requirements DIL-HUE-2:R30-2010-01-31

SA20-S5

A10 Advice of dispatch No./
Date of dispatch

369429-17.09.10

A08/ Manufacturer's order/
A09 Certificate No.

357359-002

Sheet

12/...

B01 Product

HOT ROLLED PLATES

C40-C49 Impact test

B14 Item	B07.2 Heat No.	B07.1 Rol. plate/ Test No.	B05 Reference (heat) treatment	C01	C02/ C01	C03 Temp. GRF	C41 Width of test piece	C40 Type of test piece	C44 Testing method	C46 Energy	C45 Individual values. AV±FT.LBF	C43 Mean value
01	350405	39965		K1	LV	-51	-51	CHP-V		AV 192	147	190
02	350401	15513		K1	LV	-51	-51	CHP-V		AV 128	150	127
02	350401	15526		K1	LV	-51	-51	CHP-V		AV 195	209	128
02	350401	15608		K1	LV	-51	-51	CHP-V		AV 137	131	130
02	350401	15610		K1	LV	-51	-51	CHP-V		AV 117	193	186
02	350401	15626		K1	LV	-51	-51	CHP-V		AV 122	212	190
02	350401	15645		K1	LV	-51	-51	CHP-V		AV 145	207	198
02	350402	15169		K1	LV	-51	-51	CHP-V		AV 159	118	201
02	350402	15399		K1	LV	-51	-51	CHP-V		AV 186	164	136
02	350405	39714		K1	LV	-51	-51	CHP-V		AV 144	201	116
02	350405	39946		K1	LV	-51	-51	CHP-V		AV 205	124	125
02	350405	39963		K1	LV	-51	-51	CHP-V		AV 119	192	124
02	350405	40537		K1	LV	-51	-51	CHP-V		AV 131	131	195
03	350403	13199		K1	LV	-51	-51	CHP-V		AV 120	148	117
03	350403	13308		K1	LV	-51	-51	CHP-V		AV 130	188	153
04	350403	11964		K1	LV	-51	-51	CHP-V		AV 192	106	181
04	350403	11979		K1	LV	-51	-51	CHP-V		AV 90	142	130
04	350403	12013		K1	LV	-51	-51	CHP-V		AV 136	118	146
04	350403	12280		K1	LV	-51	-51	CHP-V		AV 109	187	195
04	350403	12638		K1	LV	-51	-51	CHP-V		AV 114	157	116
04	350404	11955		K1	LV	-51	-51	CHP-V		AV 117	127	125
04	350405	05031		K1	LV	-51	-51	CHP-V		AV 157	128	190
05	350402	14854		K1	LV	-51	-51	CHP-V		AV 118	125	136
07	350404	06356		K1	LV	-51	-51	CHP-V		AV 131	129	145

A04 ZD1702/203 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001

AHB

AG der Dillinger Hüttenwerke

Postfach 1580, D-66748 Dillingen/Saar

Inspection department

B. BALDAUF

Test House Manager

Inspector's stamp

Date 17.09.10

BM

1

D/H

Manufacturer's mark



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso (See reverse for explanations (www.dillinger.de/certificate))

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch		A08/ Manufacturer's order/ A03 Certificate No.		Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		369429-17.09.10		357359-002		13/...
MATERIAL TEST REPORT (MTR)				B01 Product		
A05 Established inspecting body		A06 Purchaser		EDMONTON STEEL, EDMON		A07.1 No. ED10551-J1010-ER
DH		Final receiver		EDMONTON STEEL, EDMON		A07.2 No.
B02/ Steel design.		SA516-70				SA20-S5
B03 Any suppl. requirements		ASME-II-A:07+A09				
		DIL-HUE-2:R30-2010-01-31				

C40-C49 Impact test

B14 Item No.	B07.2 Heat No.	B07.1 Rollplate/ Test No.	B05 Reference (heat) treatment	C01	C02/ C01	C03 Temp. GRF.	C41 Width of test piece	C40 Type of test piece	C44 Testing method	C46 Energy	C45 AV	C42 Individual values AV=FT.LBF	C43 Mean value
07	350404	06357		K1	LV	-51	-51	CHP-V			AV 114	98	122
07	350404	06943		K1	LV	-51	-51	CHP-V			AV 188	108	140
07	350404	07812		K1	LV	-51	-51	CHP-V			AV 190	106	141
07	350404	07813		K1	LV	-51	-51	CHP-V			AV 193	118	147
07	350404	10672		K1	LV	-51	-51	CHP-V			AV 55	153	118
07	350404	11097		K1	LV	-51	-51	CHP-V			AV 150	204	162
07	350405	05063		K1	LV	-51	-51	CHP-V			AV 101	124	116
07	350405	05064		K1	LV	-51	-51	CHP-V			AV 95	146	121
07	350405	05065		K1	LV	-51	-51	CHP-V			AV 88	194	136

C70-C99 Chemical composition % - Heat analysis

B07.2 Heat	C70	C	SI	MN	P	S	N	CU	MO	NI	CR	V	NB	SN	TI
348840	Y	0,184	0,384	1,18	0,010	0,0011	0,0063	0,044	0,010	0,053	0,030	0,001	0,000	0,001	0,003
350041	Y	0,163	0,344	1,19	0,012	0,0009	0,0071	0,037	0,014	0,048	0,045	0,001	0,000	0,001	0,003
350399	Y	0,176	0,376	1,19	0,010	0,0011	0,0075	0,046	0,015	0,055	0,049	0,001	0,000	0,001	0,003
350401	Y	0,170	0,364	1,17	0,008	0,0013	0,0085	0,036	0,011	0,055	0,026	0,001	0,000	0,001	0,002
350402	Y	0,174	0,386	1,18	0,010	0,0012	0,0075	0,037	0,011	0,064	0,027	0,001	0,000	0,001	0,003
350403	Y	0,170	0,373	1,17	0,009	0,0010	0,0063	0,042	0,008	0,063	0,031	0,001	0,000	0,001	0,002
350404	Y	0,174	0,376	1,19	0,009	0,0009	0,0071	0,044	0,008	0,067	0,031	0,000	0,000	0,001	0,002
350405	Y	0,172	0,381	1,19	0,009	0,0010	0,0059	0,040	0,010	0,057	0,035	0,001	0,000	0,001	0,003

A04	201702/203 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.	AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	A01
	QM-System: Certification as per ISO 9001		
Manufacturer's mark	B. BALDAUF Test House Manager	Inspector's stamp	Date 17.09.10
			BM 1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02	INSPECTION CERTIFICATE 3.1	AS PER EN 10204:2004	A10	Advice of dispatch No./ Date of dispatch	369429-17.09.10	A08/ Manufacturer's order/ A03 Certificate No.	357359-002	Sheet	14/...
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991									
MATERIAL TEST REPORT (NTR)									

A05	Established inspecting body	A06 Purchaser	EDMONTON STEEL, EDMON	A07.1 No.	ED10551-J1010-ER	B01 Product	HOT ROLLED PLATES	
DH	Final receiver	EDMONTON STEEL, EDMON	A07.2 No.					

B02/ Steel design.	SA516-70	SA20-S5						
B03 Any suppl. requirements	ASME-II-A:07+A09 DIL-HUE-2:R30-2010-01-31							

C70-C99 Chemical composition % - Heat analysis									
B07.2 Heat	C70	B	CA	AL-T					
348840	Y	0,0003	0,0015	0,035					
350041	Y	0,0004	0,0015	0,033					
350399	Y	0,0002	0,0015	0,035					
350401	Y	0,0000	0,0020	0,044					
350402	Y	0,0002	0,0013	0,033					
350403	Y	0,0001	0,0014	0,034					
350404	Y	0,0003	0,0014	0,033					
350405	Y	0,0003	0,0014	0,035					

C94 Heat analysis Carbon equivalent / Alloying restrictions									
B07.2 Heat					Carbon equivalent				
348840					FO-02=	0,40	FO-51=	0,001	FO-55=
350041					FO-02=	0,38	FO-51=	0,001	FO-55=
350399					FO-02=	0,39	FO-51=	0,001	FO-55=
350401					FO-02=	0,38	FO-51=	0,001	FO-55=
350402					FO-02=	0,39	FO-51=	0,001	FO-55=
350403					FO-02=	0,38	FO-51=	0,001	FO-55=
350404					FO-02=	0,39	FO-51=	0,000	FO-55=
350405					FO-02=	0,39	FO-51=	0,001	FO-55=

C95 Ladle treatment									
ITEM NO.: 01-05,07-08									
HEAT OF THE INDICATED ITEM: VACUUM DEGASSED / SULPHIDE SHAPE CONTROL									

A04		2012/02/203 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.					AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department		
QM-System: Certification as per ISO 9001				AHB		Inspector's stamp		Date 17.09.10	
Manufacturer's mark		B. BALDAUF		Test House Manager		BM		1	



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		369429-17.09.10	357359-002	15/...
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body	A06 Purchaser	A07.1 No. ED10551-J1010-ER		
DH	Final receiver	EDMONTON STEEL, EDMON A07.2 No.		
SA20-S5				
B02/ Steel design.	SA516-70			
B03 Any suppl. requirements	ASME-II-A:07+A09			
DIL-HUE-2:R30-2010-01-31				

C95 Further information about ladle treatment

ITEM NO.: 01-05,07-08

CALCIUM TREATED

C70-C99 Chemical composition % - Product analysis

	C01	C	Si	Mn	P	S	N	CU	MO	NI	CR	V	NB	SN	TI
B07.2 Heat															
348840 11315	K1	0,187	0,376	1,17	0,009	0,0012	0,0059	0,040	0,012	0,052	0,034	0,000	0,001	0,001	0,003
350041 63959	K1	0,157	0,335	1,16	0,010	0,0011	0,0071	0,035	0,014	0,048	0,045	0,002	0,000	0,001	0,003
350041 63961	K1	0,157	0,340	1,16	0,011	0,0010	0,0074	0,036	0,013	0,047	0,045	0,002	0,000	0,001	0,003
350399 21322	K1	0,175	0,367	1,17	0,009	0,0012	0,0072	0,046	0,015	0,055	0,042	0,000	0,000	0,001	0,001
350401 15608	K1	0,165	0,361	1,16	0,008	0,0015	0,0079	0,035	0,010	0,054	0,026	0,001	0,000	0,001	0,003
350402 14890	K1	0,168	0,389	1,17	0,010	0,0011	0,0065	0,036	0,011	0,065	0,027	0,001	0,000	0,001	0,002
350402 15169	K1	0,172	0,376	1,15	0,009	0,0010	0,0068	0,036	0,007	0,063	0,032	0,001	0,000	0,000	0,002
350403 11979	K1	0,171	0,367	1,16	0,009	0,0012	0,0067	0,042	0,010	0,064	0,027	0,001	0,000	0,000	0,003
350403 13199	K1	0,170	0,385	1,17	0,010	0,0017	0,0067	0,037	0,008	0,063	0,031	0,001	0,000	0,001	0,002
350404 11097	K1	0,164	0,375	1,17	0,009	0,0015	0,0064	0,042	0,008	0,062	0,031	0,001	0,000	0,001	0,002
350404 11955	K1	0,172	0,366	1,15	0,008	0,0012	0,0062	0,041	0,010	0,062	0,033	0,000	0,001	0,001	0,002
350405 05031	K1	0,173	0,376	1,17	0,008	0,0014	0,0059	0,041	0,010	0,068	0,031	0,000	0,000	0,000	0,003
350405 05063	K1	0,173	0,374	1,17	0,009	0,0013	0,0064	0,044	0,008	0,055	0,035	0,000	0,000	0,001	0,003
350405 39946	K1	0,175	0,370	1,16	0,008	0,0014	0,0061	0,037	0,010	0,054	0,036	0,000	0,000	0,000	0,003
350405 39965	K1	0,173	0,369	1,17	0,009	0,0012	0,0061	0,037	0,009	0,054	0,036	0,000	0,000	0,000	0,003

Z01/Z02/Z03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001



B. BALDAUF
Test House Manager

Inspector's stamp

Date 17.09.10

BM 1

A01

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department



DILLINGER HÜTTE

Erklärungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		369429-17.09.10	357359-002	16/...
MATERIAL TEST REPORT (MTR)		B01 Product HOT ROLLED PLATES		
A05 Established inspecting body		A07.1 No. ED10551-J1010-ER		
DH		Final receiver EDMONTON STEEL, EDMON		
B02 Steel design. SA516-70		A07.2 No. SA20-S5		
B03 Any suppl. ASME-II-A:07+A09				
requirements DIL-HUB-2:R30-2010-01-31				

C70-C99 Chemical composition % - Product analysis

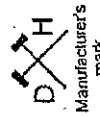
B07.2	B07.1	C01	B	CA	AL-T
Heat	Test No.				
348840	11315	K1	0,0002	0,0015	0,033
350041	63959	K1	0,0002	0,0016	0,033
350041	63961	K1	0,0003	0,0013	0,033
350399	21322	K1	0,0003	0,0017	0,036
350401	15608	K1	0,0002	0,0019	0,045
350402	14890	K1	0,0002	0,0017	0,032
350402	15169	K1	0,0002	0,0015	0,035
350403	11979	K1	0,0000	0,0017	0,036
350403	13199	K1	0,0003	0,0014	0,033
350404	11097	K1	0,0002	0,0016	0,035
350404	11955	K1	0,0002	0,0016	0,037
350405	05031	K1	0,0002	0,0018	0,031
350405	05063	K1	0,0000	0,0016	0,032
350405	39946	K1	0,0003	0,0015	0,035
350405	39965	K1	0,0003	0,0014	0,035

C94 Product analysis Carbon equivalent / Alloying restrictions

B07.2	B07.1	C01	FO-02=	FO-51=	FO-55=
Heat	Test No.				
348840	11315	K1	0,40	0,001	0,14
350041	63959	K1	0,37	0,002	0,14
350041	63961	K1	0,37	0,002	0,14
350399	21322	K1	0,39	0,000	0,16
350401	15608	K1	0,37	0,001	0,13
350402	14890	K1	0,38	0,002	0,14
350402	15169	K1	0,38	0,001	0,13

A04 Z01/Z02/Z03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001



AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department		Inspector's stamp Date 17.09.10	BM 1
B. BALDAUF Test House Manager			

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch	A08 Manufacturer's order/ A03 Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		369429-17.09.10	357359-002	17
MATERIAL TEST REPORT (MTR)		B01 Product		
A05 Established inspecting body	A06 Purchaser	HOT ROLLED PLATES		
DH	Final receiver			
B02 Steel design. SA516-70				
B03 Any suppl. requirements				
ASME-II-A:07+A09				
DIL-HUE-2:R30-2010-01-31				
		A07.1 No. ED10551-J1010-ER		
		A07.2 No. SA20-S5		

C94 Product analysis Carbon equivalent / Alloying restrictions

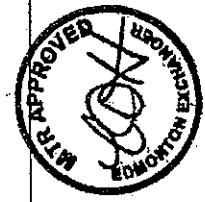
B07.2 Heat	B07.1 Test No.	C01	FO-02=	FO-51=	FO-55=
350403	11979	K1	0,38	0,001	0,14
350403	13199	K1	0,38	0,001	0,14
350404	11097	K1	0,37	0,001	0,14
350404	11955	K1	0,38	0,001	0,14
350405	05031	K1	0,38	0,001	0,15
350405	05063	K1	0,38	0,000	0,15
350405	39946	K1	0,38	0,000	0,14
350405	39965	K1	0,38	0,000	0,14

C94 Carbon equivalent formula / Alloying restrictions

FO-02 = $C + (Mn/6) + (Cr+Mo+V)/5 + (Ni+Cu)/15$
 FO-51 = V + Nb
 FO-55 = Cu+Mo+Ni+Cr
 FO-78 = Cr+Mo
 FO-91 = Mn/C

D01 Marking and identification, surface appearance, shape and dimensional properties

ITEM NO.: 01-05,07-08
 RESULT OF MARKING, SURFACE, SHAPE AND DIMENSIONS: NO REMARKS
 SURFACE AS PER ASME-SA20
 THICKNESS AS PER ASME-SA20
 LENGTH AND WIDTH AS PER ASME-SA20
 FLATNESS AS PER 1/2-ASME-SA20



A04	2012/02/203 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.	AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar inspection department	A01
	QM-System: Certification as per ISO 9001	Inspector's stamp Date 17.09.10	BM 1
B. BALDAUF Test House Manager			



edmonton exchanger
& manufacturing ltd.

CERTIFICATE OF COMPLIANCE

5545-89 Street Edmonton, Alberta Canada T6E 5W9 www.edmontonexchanger.com tel 780.468.6722 • QC fax 780.466.4668 • sales fax 780.466.5155

Customer RJV GASFIELD LTD.

PO 2696

Work Order C88704 Date 2011/03/28 CofC# 23655 Page 1 of 1

Item#	Description	Qty	Heat#	Required Min Thk	Recorded Min Thk	Form. Proc.
H88704-2	HEAD(S) - Semi-Elliptical 2:1 - 1.0000" NOM (0.9375" MIN) X 24" OD (Material Spec: SA 516-70 Normalized)	1	G7491-879270408	0.9375"	0.9550"	1
		1	G7493-879270310	0.9375"	0.9560"	1
		6	G7547-879270469	0.9375"	0.9590"	1
		4	G7547-879270469	0.9375"	0.9470"	1
		6	G7546-879270463	0.9375"	0.9500"	1
		1	G7491-879270409	0.9375"	0.9510"	1
		1	58606-51936	0.9375"	0.9670"	1

Forming Procedure:

1. Hot Formed @ 1650F/899C and Air Cooled

Supplementary Requirements

Normalized Material Identification Marking:

'MT' indicates normalized by the mill per ASME Code Section II, Part A, SA 20, Paragraph 13.1.1.

'GMT' indicates normalized by Edmonton Exchanger per ASME Code Section II, Part A, SA 20, Paragraph 13.1.2.

'GT' indicates normalized by Edmonton Exchanger per ASME Code Section VIII Division 1, UG-85 or ASME Code Section I, PG-77.4.

The Item(s) listed above comply with the requirements of ASME Code Section I, PG-29, PG-81 and ASME Code Section VIII, Division 1, UCS-79(d), UG-79 & UG-81. All welders and procedures are qualified to ASME Code Section IX. Material being supplied conforms to the latest ASME Code Section II, Part A, 2010 Edition.

Supplementary Examination - Items

APR 05 2011



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02 ABNAHMEPRÜFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE		3.1.B DIN EN 10204 - EN 10204 - DIN 50049 3.1.B NF EN 10204 3.1.B BS EN 10204 - ISO 10474 MATERIAL TEST REPORT		A03 Advice of dispatch No./ Date of dispatch	A03 Manufacturer's order/ Certificate No.	Sheet
A05 Established inspecting body DH		A05 Purchaser Final receiver		152917-14.09.04	283849-001	1/...
A06 Steel grade B03 Specifications		ARCELOR CANADA, BURLI EDMONTON STEEL, EDMON		B01 Product HOT ROLLED PLATES		
SA516-70 ASME-2A:01+A02+SA20-S5 DIL-HUE-2:31.10.03		A07.1 No. 40358 A07.2 No. E10296-J1010-LG		10234		



B01-B99 Product description

B09 Item No.	B10 Quantity	B11 Thickness	B12 Width	B13 Length	B14 Mass theoretical KG	B04 Delivery condition	B08 Heat No.	B07 Rolled plate No./ Test No.	B16 Customer reference
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51956-01	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51956-03	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51958-01	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51958-02	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51958-03	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51959-01	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51959-02	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51959-03	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51960-01	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51960-02	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51960-03	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51961-01	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51961-02	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51961-03	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51962-01	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51962-02	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51962-03	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51963-01	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51963-02	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58601	51963-03	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58604	51949-02	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58604	51951-01	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58604	51951-02	ITEM 1

Z01/Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001



AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department

B. MUELLER

Inspector's stamp

Date 14.09.04

KW 1



Trademark

A02 ABNAHMEPRUEFZEUGNIS 3.1.B DIN EN 10204 - EN 10204 - DIN 50049
 CERTIFICAT DE RECEPTION 3.1.B NF EN 10204
 INSPECTION CERTIFICATE 3.1.B BS EN 10204 - ISO 10474 MATERIAL TEST REPORT
 A03 Advice of dispatch No./ Date of dispatch 152917-14.09.04
 A08/ Manufacturer's order/ A03 Certificate No. 283849-001
 B01 Product HOT ROLLED PLATES
 B02/ Steel grade SA516-70
 B03 Specifications ASME-2A:01+A02+SA20-S5
 DIL-HUE-2:31.10.03

B01-B99 Product description									
B09 Item No.	B10 Quantity	B11 Thickness	B12 Width	B13 Length	B14 Mass theoretical KG	B04 Delivery condition	B08 Heat No.	B07 Rolled plate No./ Test No.	B16 Customer reference
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58604	51951-03	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58604	51955-01	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58604	51955-02	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58604	51955-03	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58605	51941-01	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58605	51941-02	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58605	51941-03	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58605	51943-03	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58605	51945-01	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58605	51945-02	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58605	51945-03	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58605	51947-03	ITEM 1
**	35				195300				
02	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	57466	42249-01	ITEM 2
02	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	57466	42249-02	ITEM 2
02	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	57466	42249-03	ITEM 2
02	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	58604	51948-01	ITEM 2
02	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	58604	51948-03	ITEM 2
02	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	58604	51950-01	ITEM 2
02	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	58604	51950-02	ITEM 2
02	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	58604	51950-03	ITEM 2
02	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	58604	51954-01	ITEM 2
02	1	0,8750 x	120,50000 x	480,00000 x	6510 N	N	58604	51954-02	ITEM 2

A04 Z01/Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.
 AG der Dillinger Hüttenwerke
 Postfach 1580, D-66748 Dillingen/Saar
 Inspection department
 AHB
 B. MUELLER
 Der Werkstättverständige
 Inspector's stamp Date 14.09.04 KW 1
 A01



QM-System: Certification as per ISO 9001



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02 ABNAHMEPRÜFZEUGNIS CERTIFICAT DE RECEPTION		3.1.B	DIN EN 10204 - EN 10204 - DIN 50049	A09	Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
INSPECTION CERTIFICATE		3.1.B	BS EN 10204 - ISO 10474	MATERIAL TEST REPORT		283849-001	3/...
A05 Established inspecting body		A06 Purchaser	ARCELOR CANADA, BURLI	A07.1 No.	40358	801 Product	
DH		Final receiver	EDMONTON STEEL, EDMON	A07.2 No.	E10296-J1010-LG	HOT ROLLED PLATES	

B02/ Steel grade	SA516-70						
B03 Specifications	ASME-2A:01+A02+SA20-S5						
	DIL-HUE-2:31.10.03						

B01-B99 Product description

B09 Item No.	B10 Quantity	B11 Thickness	B12 Width	B13 Length	B14 Mass theoretical KG	B04 Delivery condition	B08 Heat No.	B07 Rolled plate No./ Test No.	B16 Customer reference
INCH									
02	1	0,8750 X	120,50000 X	480,00000 X	6510	N	58604	51954-03	ITEM 2
02	1	0,8750 X	120,50000 X	480,00000 X	6510	N	58607	51929-01	ITEM 2
02	1	0,8750 X	120,50000 X	480,00000 X	6510	N	58607	51929-02	ITEM 2
02	1	0,8750 X	120,50000 X	480,00000 X	6510	N	58607	51931-03	ITEM 2
**	14				91140				
03	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58605	51940-01	ITEM 3
03	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58605	51940-02	ITEM 3
03	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58605	51940-03	ITEM 3
03	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58605	51942-01	ITEM 3
03	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58605	51942-02	ITEM 3
03	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58605	51942-03	ITEM 3
03	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58605	51944-01	ITEM 3
03	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58605	51944-02	ITEM 3
03	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58605	51944-03	ITEM 3
03	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58607	51928-01	ITEM 3
03	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58607	51928-02	ITEM 3
**	11				81840				
04	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58606	51932-02	ITEM 4
04	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58606	51932-03	ITEM 4
04	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58606	51933-01	ITEM 4
04	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58606	51933-02	ITEM 4
04	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58606	51933-03	ITEM 4
04	1	1,0000 X	120,50000 X	480,00000 X	7440	N	58606	51934-01	ITEM 4

A04 Z01/Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001

AGB

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department

B. MUELLER

Der Werkstuchverständliche

Inspector's stamp

Date 14.09.04

KW

1



Trademark



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02 ABNAHMEPRÜFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE		3.1.B DIN EN 10204 - EN 10204 - DIN 50049 3.1.B NF EN 10204 3.1.B BS EN 10204 - ISO 10474 MATERIAL TEST REPORT		A09 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
A05 Established inspecting body DH		A06 Purchaser Final receiver		152917-14.09.04	283849-001	4/...
B02/ Steel grade B03 Specifications		ARCELOR CANADA, BURLI EDMONTON STEEL, EDMON		A07.1 No. 40358 A07.2 No. E10296-J1010-IG	B01 Product HOT ROLLED PLATES	
SA516-70 ASNE-2A:01+A02+SA20-S5 DIL-HUE-2:31.10.03						

B01-B99 Product description

B09 Item No.	B10 Quantity	B11 Thickness	B12 Width	B13 Length	B14 Mass theoretical KG	B04 Delivery condition	B08 Heat No.	B07 Rolled plate No./ Test No.	B16 Customer reference
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51934-02	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51934-03	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51935-01	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51935-02	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51935-03	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51936-01	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51936-02	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51936-03	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51937-01	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51937-02	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51937-03	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51938-01	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51938-02	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51938-03	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51939-01	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51939-02	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51939-03	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58607	51927-01	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58607	51927-02	ITEM 4
**	25				186000				
05	1	1,1250 x	121,00000 x	480,00000 x	8405 N	N	58608	51915-01	ITEM 5
05	1	1,1250 x	121,00000 x	480,00000 x	8405 N	N	58608	51915-02	ITEM 5
05	1	1,1250 x	121,00000 x	480,00000 x	8405 N	N	58608	51916-01	ITEM 5

A04		Z01/Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.		AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar		A01
DM System: Certification as per ISO 9001		B. MUELLER Der Werksachverständige		ADB Inspection department		
Trademark		Inspector's stamp		Date 14.09.04		KW 1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02 ABNAHMEPRÜFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE		3.1.B DIN EN 10204 - EN 10204 - DIN 50049 3.1.B NF EN 10204 3.1.B BS EN 10204 - ISO 10474 MATERIAL TEST REPORT	A09 Advice of dispatch No./ Date of dispatch 152917-14.09.04	A08/ Manufacturer's order/ A03 Certificate No. 283849-001	Sheet 5/...
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A05 Established inspecting body DH	A06 Purchaser Final receiver	ARCELOR CANADA, BURLI EDMONTON STEEL, EDMON	A07.1 No. 40358 A07.2 No. E10296-J1010-LG
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B02/ Steel grade B03 Specifications	SA516-70 ASME-2A: 01+A02+SA20-S5 DIL-HUE-2:31.10.03
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B01-B99 Product description

B09 Item No.	B10 Quantity	B11 Thickness	B12 Width	B13 Length	B14 Mass theoretical KG	B04 Delivery condition	B08 Heat No.	B07 Rolled plate No./ Test No.	B16 Customer reference
05	1	1,1250 x	121,00000 x	480,00000 x	8405 N	N	58608	51916-02	ITEM 5
05	1	1,1250 x	121,00000 x	480,00000 x	8405 N	N	58608	51917-01	ITEM 5
05	1	1,1250 x	121,00000 x	480,00000 x	8405 N	N	58608	51917-02	ITEM 5
**	6				50430				
06	1	1,2500 x	121,00000 x	480,00000 x	9339 N	N	58608	51918-01	ITEM 6
06	1	1,2500 x	121,00000 x	480,00000 x	9339 N	N	58608	51918-02	ITEM 6
06	1	1,2500 x	121,00000 x	480,00000 x	9339 N	N	58608	51919-01	ITEM 6
06	1	1,2500 x	121,00000 x	480,00000 x	9339 N	N	58608	51919-02	ITEM 6
06	1	1,2500 x	121,00000 x	480,00000 x	9339 N	N	58608	51920-01	ITEM 6
06	1	1,2500 x	121,00000 x	480,00000 x	9339 N	N	58608	51920-02	ITEM 6
06	1	1,2500 x	121,00000 x	480,00000 x	9339 N	N	58608	51921-01	ITEM 6
06	1	1,2500 x	121,00000 x	480,00000 x	9339 N	N	58608	51921-02	ITEM 6
06	1	1,2500 x	121,00000 x	480,00000 x	9339 N	N	58608	51922-01	ITEM 6
06	1	1,2500 x	121,00000 x	480,00000 x	9339 N	N	58608	51922-02	ITEM 6
**	10				93390				
***	101				698100				

B04 Delivery condition / Heat treatment of plates

ITEM NO.: 01-06
N: HT: 1634 GR.F +27 -27 GR.F
SOAKING TIME TO ATTAIN THE TARGET TEMPERATURE OVER THE WHOLE SECTION: 1-1,75 MIN/MM (25-45 MIN/INCH)
COOLING IN STILL AIR

A04	201Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.	AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	Inspector's stamp Date 14.09.04	KW 1
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QM-System: Certification as per ISO 9001

B. MUELLER
Der Werkssachverständige

201Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.



Inspector's stamp

Date 14.09.04

KW 1

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)		A02 ABNAHMEPRUEFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE		3.1.B DIN EN 10204 - EN 10204 - DIN 50049 3.1.B NF EN 10204 3.1.B BS EN 10204 - ISO 10474 MATERIAL TEST REPORT		A09 Advice of dispatch No./ Date of dispatch 152917-14.09.04		A03 Manufacturer's order/ A03 Certificate No. 283849-001 B01 Product HOT ROLLED PLATES		Sheet 6/...	
A05 Established inspecting body DH		A06 Purchaser Final receiver ARCELOR CANADA, BURLI EDMONTON STEEL, EDMON		A07.1 No. 40358 A07.2 No. E10296-J1010-LG							
B02/ Steel grade SA516-70											
B03 Specifications ASME-2A:01+A02+SA20-S5 DIL-HUE-2:31.10.03											

B06 Marking

ITEM NO.: 01-06
 STEEL GRADE SA516 70 MTLTV SA516 60 MTLTV
 HEAT NO. / TRADEMARK / ROLLED PLATE NO.-TEST NO. / INSPECTOR'S STAMP

C10-C29 Tensile test

B08 Item No.	B07 Ref. plate/ Test No.	B05 Reference condition	C01	C02/ C03 Temp. GR.F	C11 KSI RP02	C12 RM	C13	A % LO=BIN	A % LO=2IN	C14-C15
01	58601	51956	K4 Q	RT	49,4	73,2		29,4		
01	58601	51958	K4 Q	RT	50,2	74,0		29,4		
01	58601	51959	K4 Q	RT	50,3	74,1		28,9		
01	58601	51960	K4 Q	RT	48,9	73,7		30,4		
01	58601	51961	K4 Q	RT	49,2	73,8		30,4		
01	58601	51962	K4 Q	RT	50,5	73,7		30,9		
01	58601	51963	K4 Q	RT	50,3	74,1		30,4		
01	58604	51949	K4 Q	RT	49,9	74,4		31,9		
01	58604	51951	K4 Q	RT	48,9	74,1		30,4		
01	58604	51955	K4 Q	RT	50,8	74,1		30,4		
01	58605	51941	K4 Q	RT	49,0	74,8		28,9		
01	58605	51943	K4 Q	RT	49,0	74,4		28,0		
01	58605	51945	K4 Q	RT	49,2	74,4		30,4		
01	58605	51947	K4 Q	RT	49,6	73,8		29,4		
02	57466	42249	K4 Q	RT	50,9	75,0		31,9		
02	58604	51948	K4 Q	RT	49,4	74,4		29,4		
02	58604	51950	K4 Q	RT	49,6	74,1		31,9		
02	58604	51954	K4 Q	RT	49,7	74,0		30,4		
02	58607	51929	K4 Q	RT	48,3	73,4		29,4		

A04 2012/02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.		AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	
QM-System: Certification as per ISO 9001		AHB B. MUELLER Der Werksschweissverständige	
		Inspector's stamp Date 14.09.04 KW 1	



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02 ARNAHMEPRÜFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE		3.1.B DIN EN 10204 - EN 10204 - DIN 50049 3.1.B NF EN 10204 3.1.B BS EN 10204 - ISO 10474 MATERIAL TEST REPORT		A09 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
A05 Established inspecting body DH		A06 Purchaser ARCELOR CANADA, BURLI		152917-14.09.04	283849-001	7/...
Final receiver EDMONTON STEEL, EDMON		A07.1 No. 40358 A07.2 No. E10296-J1010-LG		S01 Product HOT ROLLED PLATES		

B02/ Steel grade SA516-70						
B03 Specifications ASME-2A:01+A02+SA20-S5 DIL-HUE-2:31.10.03						

C-10-C29 Tensile test

B09 B08 Item Heat No.	B07 Rol. plate/ Test No.	B05 Reference condition	C01 K4 Q	C02/ C01 Temp. GRF	C10 KSI RP02	C11	C12	C13	A % L0=8IN	A % L0=2IN	C14-C15
02 58607	51931		K4 Q	RT	48,4		74,2		29,9		
03 58605	51940		K4 Q	RT	49,0		74,1		29,4		
03 58605	51942		K4 Q	RT	47,9		74,2		30,9		
03 58605	51944		K4 Q	RT	49,2		74,1		30,4		
03 58607	51928		K4 Q	RT	47,4		73,1		30,9		
04 58606	51932		K4 Q	RT	48,0		73,2		30,9		
04 58606	51933		K4 Q	RT	48,1		73,1		31,9		
04 58606	51934		K4 Q	RT	48,4		73,2		32,4		
04 58606	51935		K4 Q	RT	47,9		72,9		30,4		
04 58606	51936		K4 Q	RT	48,7		74,0		29,4		
04 58606	51937		K4 Q	RT	47,0		74,1		30,9		
04 58606	51938		K4 Q	RT	47,0		73,7		31,4		
04 58606	51939		K4 Q	RT	48,1		74,2		30,4		
04 58607	51927		K4 Q	RT	47,9		72,8		30,9		
05 58608	51915		K4 Q	RT	49,0		73,2		32,4		
05 58608	51916		K4 Q	RT	48,9		73,1		31,9		
05 58608	51917		K4 Q	RT	49,7		73,1		30,9		
06 58608	51918		K4 QV	RT	48,4		74,4		34,5		
06 58608	51919		K4 QV	RT	48,1		74,2		35,8		
06 58608	51920		K4 QV	RT	47,6		73,8		36,1		
06 58608	51921		K4 QV	RT	48,4		73,7		33,2		
06 58608	51922		K4 QV	RT	47,3		73,4		36,6		

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department

QM-System: Certification as per ISO 9001

Der Werkssachverständige
B. MUELLER
Inspector's stamp
Date 14.09.04
KW 1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02 ABNAHMEPRÜFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE		3.1.B DIN EN 10204 - EN 10204 - DIN 50049 3.1.B NF EN 10204 3.1.B BS EN 10204 - ISO 10474 MATERIAL TEST REPORT		A09 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
A05 Established inspecting body DH		A06 Purchaser ARCELOR CANADA, BURLI Final receiver EDMONTON STEEL, EDMON		152917-14.09.04	283849-001	8/-
B02/ Steel grade SA516-70		A07.1 No. 40358 A07.2 No. E10296-J1010-LG		B01 Product HOT ROLLED PLATES		
B03 Specifications ASME-2A:01+A02+SA20-S5 DIL-HUE-2:31.10.03						

C40-C49 Impact test

B09 Item No.	B08 Heat No.	B07 Rollated Test No.	B05 Reference condition	C01	C02/ C01	C03 Temp. GRF	C41 Specimen width	C40 Type of specimen	C44 Testing method	C46 Energy	C45 Individual values AV=FT.LBF	C43 Average value
01	58601	51956		K4	LV	-51	-51	CHP-V			AV 190	188
01	58601	51958		K4	LV	-51	-51	CHP-V			AV 142	156
01	58601	51959		K4	LV	-51	-51	CHP-V			AV 194	199
01	58601	51960		K4	LV	-51	-51	CHP-V			AV 93	201
01	58601	51961		K4	LV	-51	-51	CHP-V			AV 176	199
01	58601	51962		K4	LV	-51	-51	CHP-V			AV 152	142
01	58601	51963		K4	LV	-51	-51	CHP-V			AV 187	131
01	58604	51949		K4	LV	-51	-51	CHP-V			AV 125	94
01	58604	51951		K4	LV	-51	-51	CHP-V			AV 200	151
01	58604	51955		K4	LV	-51	-51	CHP-V			AV 122	128
01	58605	51941		K4	LV	-51	-51	CHP-V			AV 74	195
01	58605	51943		K4	LV	-51	-51	CHP-V			AV 118	142
01	58605	51945		K4	LV	-51	-51	CHP-V			AV 125	159
01	58605	51947		K4	LV	-51	-51	CHP-V			AV 131	169
02	57466	42249		K4	LV	-51	-51	CHP-V			AV 98	201
02	58604	51948		K4	LV	-51	-51	CHP-V			AV 118	82
02	58604	51950		K4	LV	-51	-51	CHP-V			AV 131	130
02	58604	51954		K4	LV	-51	-51	CHP-V			AV 121	148
02	58607	51929		K4	LV	-51	-51	CHP-V			AV 130	147
02	58607	51931		K4	LV	-51	-51	CHP-V			AV 128	88
03	58605	51940		K4	LV	-51	-51	CHP-V			AV 98	160
03	58605	51942		K4	LV	-51	-51	CHP-V			AV 89	151
03	58605	51944		K4	LV	-51	-51	CHP-V			AV 148	120
03	58607	51928		K4	LV	-51	-51	CHP-V			AV 127	116

A04	Z01Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.	AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	ADB	Inspector's stamp Date 14.09.04	KW
QIM-System: Certification as per ISO 9001		B. MUELLER Der Werkssachverständige			



DILLINGER HÜTTE

A02 ABNAHMEPRUEFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE		3.1.B DIN EN 10204 - EN 10204 - DIN 50049 3.1.B NF EN 10204 3.1.B BS EN 10204 - ISO 10474 MATERIAL TEST REPORT		A08 Advice of dispatch No./ Date of dispatch 152917-14.09.04	A08/ Manufacturer's order/ A03 Certificate No. 283849-001	Sheet 9/...
A05 Established inspecting body DH		A06 Purchaser ARCELOR CANADA, BURLI		B01 Product HOT ROLLED PLATES		
B02/ Steel grade SA516-70		Final receiver EDMONTON STEEL, EDMON		A07.1 No. 40358 A07.2 No. E10296-J1010-LG		
B03 Specifications ASME-2A: 01+A02+SA20-S5 DIL-HUE-2: 31.10.03						

C40-C49 Impact test												
B08 Heat No.	B07 Replate/ Test No.	B05 Reference condition	C01	C02/ C01	C03 Temp. Gr.F	C41 Specimen width	C40 Type of specimen	C44 Testing method	C46 Energy	C45 Individual values AV=FTLBF	C43 Average value	
04 58606	51932		K4	LV	-51	-51	CHP-V			AV 132	86	113
04 58606	51933		K4	LV	-51	-51	CHP-V			AV 58	136	87
04 58606	51934		K4	LV	-51	-51	CHP-V			AV 125	140	137
04 58606	51935		K4	LV	-51	-51	CHP-V			AV 162	128	137
04 58606	51936		K4	LV	-51	-51	CHP-V			AV 110	97	105
04 58606	51937		K4	LV	-51	-51	CHP-V			AV 104	99	96
04 58606	51938		K4	LV	-51	-51	CHP-V			AV 119	107	106
04 58606	51939		K4	LV	-51	-51	CHP-V			AV 113	103	112
04 58607	51927		K4	LV	-51	-51	CHP-V			AV 167	129	157
05 58608	51915		K4	LV	-51	-51	CHP-V			AV 132	114	116
05 58608	51916		K4	LV	-51	-51	CHP-V			AV 111	164	114
05 58608	51917		K4	LV	-51	-51	CHP-V			AV 152	85	103
06 58608	51918		K4	LV	-51	-51	CHP-V			AV 74	153	113
06 58608	51919		K4	LV	-51	-51	CHP-V			AV 75	109	110
06 58608	51920		K4	LV	-51	-51	CHP-V			AV 141	100	104
06 58608	51921		K4	LV	-51	-51	CHP-V			AV 89	95	90
06 58608	51922		K4	LV	-51	-51	CHP-V			AV 102	23	80

C70-C99 Chemical composition % - Heat analysis															
B08 Heat No.	C70	C	SI	MN	P	S	N	AL	CU	MO	NI	CR	V	NB	SN
57466	Y	0,182	0,366	1,17	0,009	0,0010	0,0057	0,038	0,019	0,029	0,039	0,080	0,000	0,000	0,000
58601	Y	0,172	0,359	1,17	0,009	0,0008	0,0054	0,042	0,011	0,015	0,026	0,044	0,000	0,000	0,000
58604	Y	0,174	0,355	1,19	0,010	0,0005	0,0047	0,033	0,021	0,030	0,032	0,047	0,000	0,000	0,000
58605	Y	0,183	0,352	1,17	0,011	0,0020	0,0051	0,045	0,017	0,023	0,027	0,049	0,001	0,000	0,000

A04	Z01/Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.	AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department		Inspector's stamp Date 14.09.04	KW
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QM-System: Certification as per ISO 9001



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02 ABNAHMEPRUEFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE		3.1.B DIN EN 10204 - EN 10204 - DIN 50049 3.1.B NF EN 10204 3.1.B BS EN 10204 - ISO 10474 MATERIAL TEST REPORT		A09 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
A05 Established inspecting body DH		ARCELOR CANADA, BURLI EDMONTON STEEL, EDMON		152917-14.09.04	283849-001 B01 Product HOT ROLLED PLATES	10/---
B02/ Steel grade SA516-70		Final receiver				
B03 Specifications ASME-2A:01+A02+SA20-S5 DIL-HUB-2:31.10.03		A07.1 No. 40358 A07.2 No. E10296-J1010-LG				

C70-C99 Chemical composition % - Heat analysis

	C70	C	SI	MN	P	S	N	AL	CU	MO	NI	CR	V	NE	SN
B08 Heat															
58606	Y	0,174	0,355	1,17	0,012	0,0016	0,0046	0,039	0,026	0,013	0,025	0,057	0,001	0,000	0,000
58607	Y	0,172	0,369	1,16	0,007	0,0010	0,0056	0,035	0,021	0,031	0,031	0,034	0,000	0,000	0,000
58608	Y	0,172	0,367	1,15	0,008	0,0009	0,0058	0,030	0,012	0,004	0,017	0,027	0,000	0,000	0,000

B08 Heat

57466	Y	0,002	0,0002												
58601	Y	0,001	0,0001												
58604	Y	0,002	0,0002												
58605	Y	0,002	0,0003												
58606	Y	0,002	0,0005												
58607	Y	0,002	0,0004												
58608	Y	0,002	0,0002												

C94 Heat analysis Carbon equivalent / Alloying restrictions

B08 Heat															
57466		FO-02=	0,40	FO-55=	0,17	FO-78=	0,11	FO-91=	6,4						
58601		FO-02=	0,38	FO-55=	0,10	FO-78=	0,06	FO-91=	6,8						
58604		FO-02=	0,39	FO-55=	0,13	FO-78=	0,08	FO-91=	6,8						
58605		FO-02=	0,40	FO-55=	0,12	FO-78=	0,07	FO-91=	6,4						
58606		FO-02=	0,39	FO-55=	0,12	FO-78=	0,07	FO-91=	6,7						
58607		FO-02=	0,38	FO-55=	0,12	FO-78=	0,07	FO-91=	6,7						
58608		FO-02=	0,37	FO-55=	0,05	FO-78=	0,03	FO-91=	6,7						

A04



QM-System: Certification as per ISO 9001

Z01/Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

A01

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department



B. MUELLER

Der Werkssachverständige

Inspector's stamp

Date 14.09.04

KW 1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02 ABNAHMEPRUEFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE		3.1.B DIN EN 10204 - EN 10204 - DIN 50049 3.1.B NF EN 10204 3.1.B BS EN 10204 - ISO 10474 MATERIAL TEST REPORT		A09 Advice of dispatch No./ Date of dispatch	A08 Manufacturer's order/ A03 Certificate No.	Sheet
				152917-14.09.04	283849-001	11/...
A05 Established inspecting body DH		A06 Purchaser ARCELOR CANADA, BURLI Final receiver EDMONTON STEEL, EDMON		A07.1 No. 40358 A07.2 No. E10296-J1010-LG		B01 Product HOT ROLLED PLATES
B02/ Steel grade SA516-70						
B03 Specifications ASME-2A:01+A02+SA20-S5 DIL-HUE-2:31.10.03						

C95 Ladle treatment

ITEM NO.: 01-06

HEAT OF THE INDICATED ITEM: VACUUM DEGASSED / SULPHIDE SHAPE CONTROL

C70-C99 Chemical composition % - Product analysis

B08 Heat	B07 Test No.	C01	C	SI	MN	P	S	N	AL	CU	MO	NI	CR	V	NB	SN
57466	42249	K4	0,177	0,361	1,15	0,008	0,0009	0,0055	0,038	0,019	0,030	0,040	0,077	0,000	0,000	0,000
58601	51956	K4	0,164	0,363	1,17	0,009	0,0006	0,0046	0,046	0,012	0,017	0,027	0,040	0,000	0,000	0,000
58604	51951	K4	0,170	0,345	1,17	0,009	0,0003	0,0044	0,034	0,020	0,030	0,032	0,046	0,000	0,000	0,000
58604	51952	K4	0,166	0,357	1,17	0,009	0,0004	0,0048	0,036	0,016	0,024	0,030	0,046	0,000	0,000	0,000
58605	51945	K4	0,171	0,354	1,17	0,010	0,0008	0,0051	0,033	0,021	0,032	0,033	0,045	0,001	0,000	0,000
58605	51946	K4	0,175	0,345	1,17	0,009	0,0015	0,0049	0,037	0,018	0,027	0,030	0,046	0,000	0,000	0,000
58606	51936	K4	0,170	0,350	1,18	0,010	0,0018	0,0052	0,042	0,021	0,015	0,026	0,053	0,000	0,000	0,000
58607	51928	K4	0,165	0,379	1,13	0,009	0,0012	0,0052	0,036	0,024	0,018	0,027	0,045	0,000	0,000	0,001
58607	51929	K4	0,164	0,378	1,16	0,010	0,0014	0,0048	0,040	0,028	0,009	0,025	0,054	0,000	0,000	0,001
58608	51915	K4	0,166	0,363	1,13	0,007	0,0007	0,0061	0,031	0,012	0,005	0,017	0,025	0,000	0,000	0,000
58608	51922	K4	0,164	0,361	1,16	0,006	0,0006	0,0056	0,034	0,021	0,031	0,031	0,029	0,000	0,000	0,000
B08 Heat	B07 Test No.	C01	TI	B												
57466	42249	K4	0,002	0,0000												
58601	51956	K4	0,001	0,0001												
58604	51951	K4	0,002	0,0003												
58604	51952	K4	0,002	0,0002												
58605	51945	K4	0,002	0,0002												
58605	51946	K4	0,002	0,0003												
58605	51936	K4	0,002	0,0004												
58607	51928	K4	0,001	0,0004												

A04	Z01Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.	AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	A01
QM-System: Certification as per ISO 9001			
		Inspector's stamp B. MUELLER Der Werkssachverständige	Date 14.09.04 KW 1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02 ABNAHMEPRÜFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE		3.1.B DIN EN 10204 - EN 10204 - DIN 50049 3.1.B NF EN 10204 3.1.B BS EN 10204 - ISO 10474 MATERIAL TEST REPORT		A09 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
A05 Established inspecting body DH		A06 Purchaser Final receiver		152917-14.09.04	283849-001	12/...
B02/ Steel grade SA516-70		ARCELOR CANADA, BURLI		A07.1 No. 40358	B01 Product	
B03 Specifications ASME-2A: 01+A02+SA20-S5 DIL-HUE-2: 31.10.03		EDMONTON STEEL, EDMON		A07.2 No. E10296-J1010-LG	HOT ROLLED PLATES	

C70-C99 Chemical composition % - Product analysis

B08 Heat	B07 Test No.	C01			B
		Fe	Ti	Si	
58607	51929	K4 0,002	0,0003		
58608	51915	K4 0,002	0,0002		
58608	51922	K4 0,002	0,0003		

C94 Product analysis Carbon equivalent / Alloying restrictions

B08 Heat	B07 Test No.	C01		
		Fe	Si	Al
57466	42249	K4 FO-02=	0,39	FO-55= 0,17
58601	51956	K4 FO-02=	0,37	FO-55= 0,10
58604	51951	K4 FO-02=	0,38	FO-55= 0,13
58604	51952	K4 FO-02=	0,38	FO-55= 0,12
58605	51945	K4 FO-02=	0,39	FO-55= 0,13
58605	51946	K4 FO-02=	0,39	FO-55= 0,12
58606	51936	K4 FO-02=	0,38	FO-55= 0,12
58607	51928	K4 FO-02=	0,37	FO-55= 0,11
58607	51929	K4 FO-02=	0,37	FO-55= 0,12
58608	51915	K4 FO-02=	0,36	FO-55= 0,06
58608	51922	K4 FO-02=	0,37	FO-55= 0,11

C94 Carbon equivalent formula / Alloying restrictions

FO-02 = C + (Mn/6) + (Cr+Mo+V) / 5 + (Ni+Cu) / 15
FO-55 = Cu+Mo+Ni+Cr
FO-78 = Cr+Mo
FO-91 = Mn/C

A04		Z01/Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.	A01
QM-System: Certification as per ISO 9001		AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	
Der Werkssachverständige B. MUELLER		Inspector's stamp ADB	
Date 14.09.04		KW 1	

Erklärungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillingr.biz/certificate)

A02 Steel grade		SA516-70		A09 Advice of dispatch No./ Date of dispatch		A08/ Manufacturer's order/ A03 Certificate No.		Sheet	
B03 Specifica- tions		ASME-2A:01+A02+SA20-S5 DIL-HUE-2:31.10.03		152917-14.09.04		283849-001		13	
A05 Established inspecting body		A06 Purchaser		A07.1 No. 40358		B01 Product			
DH		Final receiver		A07.2 No. B10296-J1010-LG		HOT ROLLED PLATES			
		ARCELOR CANADA, BURLI		EDMONTON STEEL, EDMON					
		3.1.B BS EN 10204 - ISO 10474		MATERIAL TEST REPORT					
		3.1.B NF EN 10204							
		3.1.B DIN EN 10204 - EN 10204 - DIN 50049							
		CERTIFICAT DE RECEPTION							
		ABNAHMEPRUEFZEUGNIS							

001 Checking of marking, surface, shape and dimensions

ITEM NO.: 01-06

Q	RESULT OF MARKING	SURFACE	SHAPE AND DIMENSIONS	NO REMARKS
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SURFACE AS PER ASME-SA20

THICKNESS

LENGTH AND WIDTH
AS PER ASME-SA20

FLATNESS
AS PER 1/2-ASME-SA20

[illegible]

304



Trademark

We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001

W. J. S.

B. MOELLER

Der Werkssachverständige

$\overline{AHB}$

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
inspection department

Inspector's stamp Date 14.09.04

KW 7

INSPECTION CERTIFICATE

DOCUMENT No.	大	国	密	製鋼番号	製品番号	品番	号
--------------	---	---	---	------	------	----	---

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi

Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSU WORKS

7. 45 85 75 100 Through Thickness. R: 45° 方向 45Deg. to the Longitudinal Axis

※1	Location Orientation 位置・方向 T: 顶部 Top, B: 底部 Bottom, L: 任意方向 Longitudinal, C: 任意方向 Transverse, Z: 垂直方向 Through thickness
※2	Rectangular 矩形板片 Round, G: 200mm, H: 211±8 ¹⁾ , I: 5.65 $\sqrt{S_0}$, K: 4 $\sqrt{S_0}$ E: 90mm 圆形板片 Rectangular 矩形板片 Round, G: 200mm, H: 211±8 ¹⁾ , I: 5.65 $\sqrt{S_0}$, K: 4 $\sqrt{S_0}$

[illegible]

※3 R A : 板厚比 Yield Ratio, 板厚: 板厚比 TMR Process/TMC Process. N.R.: Normalizing Rolled

[illegible]

CF: 脆性破壊面 Fracture Surface
L.E.: 繰返し応力による疲労破壊 Lateral Expansion, A.G.S.: 変形誘起の析出物析出 Shear Fracture, C.F.: 脆性破壊面 Fracture Surface

上記文壇に於ては、たゞの規矩を以ては仕様に従つて製造され、その要求事項を満足していることを証明しめよう。

THE UNITED STATES OF AMERICA

WE HEREBY CERTIFY THAT THE MATERIALS SUPPLIED HEREIN DO NOT CONTACT THE PRICES OF THE CONTRACT

MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

[Handwritten signature]

✓. *Warren*

如 對 高 野 山 聖 蹟 巡 禮 記 實 錄

Head of Department

PLATE QUALITY CONTROL DEPT. 11-25-81

—
KIMITSU WORKS

Figure 1. The effect of the number of iterations on the accuracy of the proposed algorithm. The accuracy is measured by the percentage of correct classifications. The number of iterations is 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300, 310, 320, 330, 340, 350, 360, 370, 380, 390, 400, 410, 420, 430, 440, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 660, 670, 680, 690, 700, 710, 720, 730, 740, 750, 760, 770, 780, 790, 800, 810, 820, 830, 840, 850, 860, 870, 880, 890, 900, 910, 920, 930, 940, 950, 960, 970, 980, 990, 1000. The accuracy is 0.95, 0.96, 0.97, 0.98, 0.99, 1.00, 1.01, 1.02, 1.03, 1.04, 1.05, 1.06, 1.07, 1.08, 1.09, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 1.22, 1.23, 1.24, 1.25, 1.26, 1.27, 1.28, 1.29, 1.30, 1.31, 1.32, 1.33, 1.34, 1.35, 1.36, 1.37, 1.38, 1.39, 1.40, 1.41, 1.42, 1.43, 1.44, 1.45, 1.46, 1.47, 1.48, 1.49, 1.50, 1.51, 1.52, 1.53, 1.54, 1.55, 1.56, 1.57, 1.58, 1.59, 1.60, 1.61, 1.62, 1.63, 1.64, 1.65, 1.66, 1.67, 1.68, 1.69, 1.70, 1.71, 1.72, 1.73, 1.74, 1.75, 1.76, 1.77, 1.78, 1.79, 1.80, 1.81, 1.82, 1.83, 1.84, 1.85, 1.86, 1.87, 1.88, 1.89, 1.90, 1.91, 1.92, 1.93, 1.94, 1.95, 1.96, 1.97, 1.98, 1.99, 2.00, 2.01, 2.02, 2.03, 2.04, 2.05, 2.06, 2.07, 2.08, 2.09, 2.10, 2.11, 2.12, 2.13, 2.14, 2.15, 2.16, 2.17, 2.18, 2.19, 2.20, 2.21, 2.22, 2.23, 2.24, 2.25, 2.26, 2.27, 2.28, 2.29, 2.30, 2.31, 2.32, 2.33, 2.34, 2.35, 2.36, 2.37, 2.38, 2.39, 2.40, 2.41, 2.42, 2.43, 2.44, 2.45, 2.46, 2.47, 2.48, 2.49, 2.50, 2.51, 2.52, 2.53, 2.54, 2.55, 2.56, 2.57, 2.58, 2.59, 2.60, 2.61, 2.62, 2.63, 2.64, 2.65, 2.66, 2.67, 2.68, 2.69, 2.70, 2.71, 2.72, 2.73, 2.74, 2.75, 2.76, 2.77, 2.78, 2.79, 2.80, 2.81, 2.82, 2.83, 2.84, 2.85, 2.86, 2.87, 2.88, 2.89, 2.90, 2.91, 2.92, 2.93, 2.94, 2.95, 2.96, 2.97, 2.98, 2.99, 3.00, 3.01, 3.02, 3.03, 3.04, 3.05, 3.06, 3.07, 3.08, 3.09, 3.10, 3.11, 3.12, 3.13, 3.14, 3.15, 3.16, 3.17, 3.18, 3.19, 3.20, 3.21, 3.22, 3.23, 3.24, 3.25, 3.26, 3.27, 3.28, 3.29, 3.30, 3.31, 3.32, 3.33, 3.34, 3.35, 3.36, 3.37, 3.38, 3.39, 3.40, 3.41, 3.42, 3.43, 3.44, 3.45, 3.46, 3.47, 3.48, 3.49, 3.50, 3.51, 3.52, 3.53, 3.54, 3.55, 3.56, 3.57, 3.58, 3.59, 3.60, 3.61, 3.62, 3.63, 3.64, 3.65, 3.66, 3.67, 3.68, 3.69, 3.70, 3.71, 3.72, 3.73, 3.74, 3.75, 3.76, 3.77, 3.78, 3.79, 3.80, 3.81, 3.82, 3.83, 3.84, 3.85, 3.86, 3.87, 3.88, 3.89, 3.90, 3.91, 3.92, 3.93, 3.94, 3.95, 3.96, 3.97, 3.98, 3.99, 4.00, 4.01, 4.02, 4.03, 4.04, 4.05, 4.06, 4.07, 4.08, 4.09, 4.10, 4.11, 4.12, 4.13, 4.14, 4.15, 4.16, 4.17, 4.18, 4.19, 4.20, 4.21, 4.22, 4.23, 4.24, 4.25, 4.26, 4.27, 4.28, 4.29, 4.30, 4.31, 4.32, 4.33, 4.34, 4.35, 4.36, 4.37, 4.38, 4.39, 4.40, 4.41, 4.42, 4.43, 4.44, 4.45, 4.46, 4.47, 4.48, 4.49, 4.50, 4.51, 4.52, 4.53, 4.54, 4.55, 4.56, 4.57, 4.58, 4.59, 4.60, 4.61, 4.62, 4.63, 4.64, 4.65, 4.66, 4.67, 4.68, 4.69, 4.70, 4.71, 4.72, 4.73, 4.74, 4.75, 4.76, 4.77, 4.78, 4.79, 4.80, 4.81, 4.82, 4.83, 4.84, 4.85, 4.86, 4.87, 4.88, 4.89, 4.90, 4.91, 4.92, 4.93, 4.94, 4.95, 4.96, 4.97, 4.98, 4.99, 5.00, 5.01, 5.02, 5.03, 5.04, 5.05, 5.06, 5.07, 5.08, 5.09, 5.10, 5.11, 5.12, 5.13, 5.14, 5.15, 5.16, 5.17, 5.18, 5.19, 5.20, 5.21, 5.22, 5.23, 5.24, 5.25, 5.26, 5.27, 5.28, 5.29, 5.30, 5.31, 5.32, 5.33, 5.34, 5.35, 5.36, 5.37, 5.38, 5.39, 5.40, 5.41, 5.42, 5.43, 5.44, 5.45, 5.46, 5.47, 5.48, 5.49, 5.50, 5.51, 5.52, 5.53, 5.54, 5.55, 5.56, 5.57, 5.58, 5.59, 5.60, 5.61, 5.62, 5.63, 5.64, 5.65, 5.66, 5.67, 5.68, 5.69, 5.70, 5.71, 5.72, 5.73, 5.74, 5.75, 5.76, 5.77, 5.78, 5.79, 5.80, 5.81, 5.82, 5.83, 5.84, 5.85, 5.86, 5.87, 5.88, 5.89, 5.90, 5.91, 5.92, 5.93, 5.94, 5.95, 5.96, 5.97, 5.98, 5.99, 6.00, 6.01, 6.02, 6.03, 6.04, 6.05, 6.06, 6.07, 6.08, 6.09, 6.10, 6.11, 6.12, 6.13, 6.14, 6.15, 6.16, 6.17, 6.18, 6.19, 6.20, 6.21, 6.22, 6.23, 6.24, 6.25, 6.26, 6.27, 6.28, 6.29, 6.30, 6.31, 6.32, 6.33, 6.34, 6.35, 6.36, 6.37, 6.38, 6.39, 6.40, 6.41, 6.42, 6.43, 6.44, 6.45, 6.46, 6.47, 6.48, 6.49, 6.50, 6.51, 6.52, 6.53, 6.54, 6.55, 6.56, 6.57, 6.58, 6.59, 6.60, 6.61, 6.62, 6.63, 6.64, 6.65, 6.66, 6.67, 6.68, 6.69, 6.70, 6.71, 6.72, 6.73, 6.74, 6.75, 6.76, 6.77, 6.78, 6.79, 6.80, 6.81, 6.82, 6.83, 6.84, 6.85, 6.86, 6.87, 6.88,

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B

注 文 者 : HANWA CO., LTD.

注文者照会番号 : 228-38501040

契約番号 : 0-831-H1-5-0-AI01

商 品 名 : HOT ROLLED STEEL PLATES

規 格 : ASME SA-516 GRADE 70-E07-A08

文 書 番 号 : 需要家 : ED MONTON EXCHANGER GROUP OF C-

DOCUMENT NO. : CUSTOMER : COMPANIES

(AS PER EN 10204 CERTIFICATE ON MATERIAL TESTS 3.1)

需要家管理番号 : CUSTOMER CONTROL NO.

INSPECTION CERTIFICATE

鋼材検査証明書

新日本製鐵株式会社
Nippon Steel Corporation

本 社 : 〒100-8071 東京都千代田区丸の内二丁目6番1号
HEAD OFFICE : 2-6-1, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8071 JAPAN
君津製鐵所 : 〒299-1141 千葉県君津市君津1番地
KIMITSU WORKS : 1, KIMITSU, KIMITSU-CITY, CHIBA-PREF. 299-1141 JAPAN

証明書番号 : P-09818 PAGE : 20

CERTIFICATE NO. : 発行年月日

DATE OF ISSUE : 2010-10-25

1001

2**DM*****

*****CEW**

E3001P0700 E07

寸 法	DIMENSION mm, inch, feet	数量 QUANTITY	重量 MASS KG	鋼板番号 CAST No. TEST No.	製品番号 PLATE No.	位置 LOCATION	引張試験 TENSILE TEST				衝撃試験 IMPACT TEST				化学成分 CHEMICAL COMPOSITION %													
							縦向 Y.S.	縦向 T.S.	伸び EL	%	平均値 AVG	2V - 50F FT. LB.	平均値 AVG	2V - 50F FT. LB.	C	Si	Mn	P	S	Cl	Ni	Cr	Mo	Nb	V	Ti	Co	As
1' X 120.5' X 480'	04	1	7442	G7546 55570	TESTED-PL 879270463	IC1	53	75	33		294	299	304		16	37	145	8	2	2	2	2	2	0	12	0	2541	
															P15	37	144	7	2	2	2	2	2	0	12	0	40	
1' X 120.5' X 480'	04	1	7442	G7546 55570	TESTED-PL 879270464	IC1	53	75	33		294	299	304		16	37	145	8	2	2	2	2	2	0	12	0	2541	
															P15	37	144	7	2	2	2	2	2	0	12	0	40	
1' X 120.5' X 480'	04	1	7442	G7546 55571	TESTED-PL 879270459	IC1	53	75	31		261	296	286		16	37	145	8	2	2	2	2	2	0	12	0	2541	
															P15	37	144	7	2	2	2	2	2	0	12	0	40	

注 記 NOTES [表1] Location Orientation 位置・方向, T: 頂部 Top, B: 底部 Bottom, L: 圧延方向 Longitudinal, C: 垂直方向 Transverse, Z: 絶対方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis

[表2] GL: 線点距離 Gage Length, A: 50mm 半形試験片 Rectangular, B: 50mm 半形試験片 Rectangular, C: 70mm 半形試験片 Rectangular, D: 70mm 半形試験片 Rectangular, E: 80mm 半形試験片 Rectangular, F: 80mm 半形試験片 Rectangular, G: 80mm 半形試験片 Rectangular, H: 80mm 半形試験片 Rectangular, I: 80mm 半形試験片 Rectangular, J: 80mm 半形試験片 Rectangular, K: 80mm 半形試験片 Rectangular, L: 80mm 半形試験片 Rectangular, M: 80mm 半形試験片 Rectangular, N: 80mm 半形試験片 Rectangular, O: 80mm 半形試験片 Rectangular, P: 80mm 半形試験片 Rectangular, Q: 80mm 半形試験片 Rectangular, R: 80mm 半形試験片 Rectangular, S: 80mm 半形試験片 Rectangular, T: 80mm 半形試験片 Rectangular, U: 80mm 半形試験片 Rectangular, V: 80mm 半形試験片 Rectangular, W: 80mm 半形試験片 Rectangular, X: 80mm 半形試験片 Rectangular, Y: 80mm 半形試験片 Rectangular, Z: 80mm 半形試験片 Rectangular

上記注文品は御指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi

品質管理課 検査係
Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSU WORKS

S. Adachi
 君津製鐵所厚板管理グループ
 Head of Department
 PLATE QUALITY CONTROL DEPT.
 KIMITSU WORKS

注 文 者 : HANWA CO., LTD.

SHIPPER
注文者照合番号 : 228-38501040

契約番号 : 0-831-H1-5-0-AT01

商 品 名 : HOT ROLLED STEEL PLATES

規 格 : ASME SA-516 GRADE 70-E07-A08

SPECIFICATION
文 書 番 号 : DOCUMENT No.

需要家 : EDMONTON EXCHANGER GROUP OF C-
CUSTOMER : COMPANIES

新日本製鐵株式會社
Nippon Steel Corporation

鋼材検査証明書 INSPECTION CERTIFICATE

(AS PER EN 10204 CERTIFICATE ON MATERIAL

TESTS 3.1)

需要家管理番号 :
CUSTOMER'S CONTROL No.

証明書番号 : P-09818
発行年月日 : 2010-10-25
頁 : 26

DATE OF ISSUE : 2010-10-25
1001

2***DM***
*****CEW***
E3001P0700 E07

寸 法 DIMENSION mm, inch, feet	数量 QUANTITY	質量 MASS KG	製鋼番号 CAST No.	製品番号 PLATE No.	引張試験 TENSILE TEST Y.S. 0.2% T.S. E.L.	衝撃試験 IMPACT TEST 2V - 50F FT. LB. 平均値 AVG EACH	化 学 成 分 CHEMICAL COMPOSITION %											
							C	Si	Mn	P	S	Cr	Ni	Mo	Al	Co	As	Se
1' X 120.5' X 480"	04	7442	G7547 55592	TESTED-PL 879270469TCL	53 76 31	278 266 263	15	38	146	9	2	2	2	2	0.13	0.32	40	
							P15	38	144	9	2	2	2	2	0.14	0	40	
1' X 120.5' X 480"	04	7442	G7547 55592	TESTED-PL 879270470TCL	53 76 31	278 266 263	15	38	146	9	2	2	2	2	0.13	0.32	40	
							P15	38	144	9	2	2	2	2	0.14	0	40	
1' X 120.5' X 480"	04	7442	G7547 55593	TESTED-PL 879270479TCL	53 76 33	292 295 297	15	38	146	9	2	2	2	2	0.13	0.32	40	
							P15	38	144	9	2	2	2	2	0.14	0	40	

注 記 NOTES [表1] Location Orientation 位置・方向: T: 頂部 Top, B: 底部 Bottom, L: 長さ方向 Longitudinal, C: 広さ方向 Transverse, Z: 縦方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis

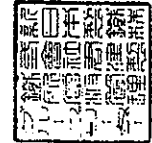
[表2] GL 標点距離 Gage Length, A: 50mm 半形試験片 Rectangular, B: 50mm 半形試験片 Rectangular, C: 70mm 半形試験片 Rectangular, D: 70mm 半形試験片 Rectangular, E: 80mm 半形試験片 Rectangular, F: 80mm 半形試験片 Rectangular, G: 200mm, H: 2", I: 8", J: 5.65/50, K: 4, 50
[表3] RA: 絞り Reduction of Area, YS: 降伏点 Yield Ratio, [表4] A: 合格 Acceptable, [表5] F: 試験片 FULL SIZE, 2: 2.5mm, 3: 3.3mm, 4: 3.3mm, 5: 5.0mm, 6: 6.67mm, 7: 7.5mm, 8: 8.67mm, 9: 製品厚 Plate Thickness, [表6] P: 製品厚 Plate Thickness, [表7] N: 焼戻 Normalized, Q: 焼入れ Quenched, T: 焼戻 Tempered, C.R.: Controlled Rolled, N1C: NIC Process/TMC Process, C1C: CLC Process/TMC Process, A.R.: As Rolled, T.M.R.: TMR Process/TMC Process, N.R.: Normalizing Rolled, S.H.: 連続性面 Shear Fracture, C.F.: 炭素析出物 Carbon Inclusion, A.G.S.: オーステナイト相 Austenite Grain Size, F.C.S.: フェライト相 Ferrite Grain Size, S.R.: Stress Relieved/Post Weld Heat Treatment

上記注文品は御指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi

君津製鐵所厚板管理グループリーダ
Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSU WORKS



B

注 文 者 : HANWA CO., LTD.
 SHIPPER
 注文者照合番号 : 228-38501040
 REFERENCE No.
 契約番号 : 0-831-H1-5-0-A101
 CONTRACT No.
 商品名 : HOT ROLLED STEEL PLATES
 COMMODITY
 規格 : ASME SA-516 GRADE 70-E07-A08
 SPECIFICATION
 文書番号 :
 DOCUMENT No.

新日本製鐵株式會社

Nippon Steel Corporation

鋼材検査証明書

INSPECTION CERTIFICATE

本 社 : 〒100-8071 東京都千代田区丸の内二丁目6番1号
 HEAD OFFICE : 2-6-1, MARUOUCHI, CHIYODA-KU, TOKYO 100-8071, JAPAN
 東京製鐵所 : 〒299-1141 千葉県君津市君津1番地
 KIMITSU WORKS : 1, KIMITSU, KIMITSU-CITY, CHIBA-PREF. 299-1141, JAPAN

証明番号 : P-09818 PAGE : 38
 発行年月日 : 2010-10-25
 DATE OF ISSUE : 1001

(AS PER EN 10204 CERTIFICATE ON MATERIAL
 TESTS 3.1)
 需要家管理番号 :
 CUSTOMER'S CONTROL NO.

2***DM****
 *****CEV***
 E3001P07Q0 E07

DOCUMENT NO.	寸 法 DIMENSION mm, inch, feet	個数 QUANTITY	質 量 MASS KG	製鋼番号 CAST No. 試験番号 TEST No.	製品番号 PLATE No.	引 張 試 験 TENSILE TEST				衝 撃 試 験 IMPACT TEST				HBW	化 学 成 分 CHEMICAL COMPOSITION %																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
						Y.S. 0.2 %	T.S. % TS	伸 び % EL	断面収縮 % S.R.	試験位置 LOCATION ORIENTATION	2V FT-LB	平均値 AVG	個々値 EACH		C x100	Si x100	Mn x100	P x1000	S x1000	Al x100	NI x100	Cr x100	Mo x100	Nb x1000	V x1000	Co x1000																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
	2' X121' X480"	10	14943	G7489 55119	TESTED-PL 879271009101	50	75	36			247 257	247 257	257		P16	38	143	9	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

注 記 NOTES [1] Location Orientation 位置・方向: T: 頂部 Top, B: 底部 Bottom, L: 縦方向 Longitudinal, C: 横方向 Transverse, Z: 板厚方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis

[2] G.L. 板厚公差 Gauge Length, A: 500mm 平板試験片 Rectangular, B: 500mm 丸形試験片 Round, C: 70mm 平板試験片 Rectangular, D: 70mm 丸形試験片 Round, E: 80mm 平板試験片 Rectangular, F: 80mm 丸形試験片 Rectangular, G: 200mm, H: 2" I: 8", J: 5.65"/50, K: 4"/50
 [3] R.A.: 絞り Reduction of Area, Y.R.: 引張り Yield Ratio, [4] A: 合格 Acceptable, [5] F: 試験片 Full Size, 2: 2.5mm, 3: 3.2mm, 4: 3.8mm, 5: 5.0mm, 6: 6.6mm, 7: 7.5mm, 8: 8.7mm, 9: 8.6mm 板厚 Plate Thickness, [6] P: 製品分析 Product Analysis, [7] N: 焼戻 Normalized, Q: 焼入れ Quenched, T: 焼戻し Tempered, C.R.: Controlled Rolled, N.T.C.: Nuc Process/TMC Process, C.L.C.: C.L.C. Process/TMC Process, A.R.: As Rolled, T.M.R.: T.M.R. Process/TMC Process, N.R.: Normalizing Rolled, S.H.: 溶接継手 Shear Fracture, L.E.: 溶接継手 Lateral Expansion, A.G.S.: オーステナイト相変態 Austenite Grain Size, F.G.S.: フェライト相変態 Ferrite Grain Size, S.R.: Stress Relieved/Post Weld Heat Treatment

上記注文品は鋼指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
 MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi
 君津製鐵所板管管理グループリーダー
 Head of Department
 PLATE QUALITY CONTROL DEPT.
 KIMITSU WORKS



注 文 者 :	HANWA CO., LTD.
SHIPPER	
注文者照合番号 :	注文者照合番号
REFERENCE NO. :	228-38501040
契約番号 :	
CONTRACT NO. :	0-831-H1-5-0-A101
商 品 名 :	HOT ROLLED STEEL PLATES
COMMODITY	
規 格 :	ASME SA-516 GRADE 70-E07-A08
注文番号 :	
DOCUMENT NO.	
需 要 家 :	CUSTOMER

鋼材検査証明書
INSPECTION CERTIFICATE

社 本 部 東京千代田区丸の内二丁目6番1号
HEAD OFFICE 2-6-1, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8071, JAPAN
包 装 製 造 所 〒299-1141 千葉県君津市君津 1 番地
KIMTSU WORKS 1, KIMTSU, KINTSU-CITY, CHIBA-PREF. 299-1141 JAPAN

证明 密 证 号 : P-09818 PAGE: 39E

COMMODITY	: HOT ROLLED STEEL PLATES
規格	: ASME SA-516 GRADE 70-E07-A08
SPECIFICATION	
文書番号	: 需要家
DOCUMENT No	: CUSTOMER

(AS PER EN 10204 CERTIFICATE ON MATERIAL TESTS 3.1)
ION EXCHANGER GROUP OF C-
需要家管理
CUSTOMER'S CONTROL

DATE OF ISSUE 2010-10-23
1001 2#DM*****

E UN MATERIAL
需要家管理番
CUSTOMER'S CONTROL No.

2010-10-23
1001 Z#DM####

E UN MATERIAL
需要家管理番
CUSTOMER'S CONTROL No.

[illegible]

Direction of Through Transverse R: 45° to the Longitudinal Axis

[illegible]

上におき、御定額に達した場合は、従つて課税され、その要求事項を満足していることを証明します。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi
 増産製造課前段板管理グループリーダー
 Head of Department
 PLATE QUALITY CONTROL DEPT.
 CHUO KANAN MACHINERY

B

新日本製鐵株式會社
Nippon Steel Corporation

鋼材検査証明書
INSPECTION CERTIFICATE

本 社 千100-3071 東京都千代田区丸の内二丁目6番1号
HEAD OFFICE 千2-6-1 MARUNOUCHI, CHIYODA-KU, TOKYO 100-3071, JAPAN
君津製鐵所 千299-1141 千葉県君津市君津1番地
KIMITSUWORKS 千1-KIMITSU, KIMITSU-CITY, CHIBA-PREF, 299-1141 JAPAN

注文者: HANWA CO., LTD.
注文者販売番号: 228-38501040
契約番号: 0-831-H1-5-0-A101
商品名: HOT ROLLED STEEL PLATES
規格: ASME SA-516 GRADE 70-E07-A08
文書番号: 需要家: EDMONTON EXCHANGER GROUP OF C-
DOCUMENT No. CUSTOMER'S COMPANIES

証明書番号: P-09818 PAGE: 9
発行年月日: 2010-10-25
DATE OF ISSUE: 1001
2***DM***
*****CEW***
E3001P07Q0 E07

寸法 DIMENSION mm, inch, feet	数量 QUANTITY	質量 MASS KG	製鋼番号 CAST No. 試験番号 TEST No.	製品番号 PLATE No.	位置 LOCATION	引張試験 TENSILE TEST				衝撃試験 IMPACT TEST				化学成分 CHEMICAL COMPOSITION %															
						YS 0.2%	TS	EL	%	2V - 50F 平均値 AVG EACH	FL	LB	AVG	C	Si	Mn	P	S	Oh	Ni	Cr	Mo	Nb	V	Al	Co	As	Se	Co
1' X 96.5' X 480'	03	5958	G7493 55197	TESTED-PL 879270310	IC1	53	75	30		276 282 281			AVG 151	15	36	143	5	1	2	2	2	2	0	0	0	0	0	0	0
1' X 96.5' X 480'	03	11916	G7493 55197	FROM TO 879270312	IC1	53	75	30		276 282 281			AVG 151	15	36	143	5	1	2	2	2	0	0	0	0	0	0	0	0
1' X 96.5' X 480'	03	5958	G7493 55197	TESTED-PL 879270307	IC1	52	75	31		293 289 270			AVG 152	15	36	143	5	1	2	2	2	0	0	0	0	0	0	0	0

注 記 NOTES 1. 位置: 頂部 Top, B: 底部 Bottom, L: 左側 Left, R: 右側 Right, C: 中央 Center, Z: 縦断面 Transverse, Z: 縦断面方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis
2. GL: 検査距離 Gage Length, A: 50mm 平形試験片 Rectangular, B: 50mm 丸形試験片 Round, C: 70mm 平形試験片 Rectangular, D: 70mm 丸形試験片 Round, E: 80mm 平形試験片 Rectangular, F: 80mm 丸形試験片 Round, G: 200mm, H: 2', I: 8', J: 5.65/So, K: 4/So
3. RA: 絞り Reduction of Area, YR: 降伏比 Yield Ratio, 4. A: 合格 Acceptable, 5. F: 試験片 FULL SIZE, 2: 2.5mm, 3: 3.3mm, 4: 3.3mm, 5: 5.0mm, 6: 6.7mm, 7: 7.5mm, 8: 6.7mm, 9: 製品板厚 Plate Thickness, 6. P: 製品分片 Product Analysis
7. N: 焼炉 Normalized, Q: 焼入れ Quenched, T: 焼戻し Tempered, C: R: CLC Process/TMC Process, A: R: As Rolled, T: M: R: TMR Process/TMC Process, N: R: Normalizing Rolled
8. 引張試験 Shear Fracture, CF: 縦断面 Shear Fracture, L: B: 縦断面 Lateral Expansion, A: G: ストラスライト強度 Austenite Grain Size, F: G: ストラスライト強度 Ferrite Grain Size, S: R: Stress Relieved Post Weld Heat Treatment

上記注文品は御指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi
君津製鐵所厚板管理グループリーダー
Head of Decatmat
PLATE QUALITY CONTROL DEPT.
KIMITSUWORKS



MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

注文者: HANWA CO., LTD.

注文者照会番号: 228-38501040

契約番号

CONTRACT No.: 0-831-HI-5-0-A101

商品名: HOT ROLLED STEEL PLATES

規格: ASME SA-516 GRADE 70-E07-A08

文書番号

DOCUMENT No.

需要家: EDMONTON EXCHANGER GROUP OF COMPANIES

CUSTOMER

製品番号

CAST No.

試験番号

TEST No.

重量

KG

数量

QUANTITY

単位

mm, inch, feet

寸法

DIMENSION

1'X96.5'X480'

03

5958

55583

75547

8792703131C1

TESTED-PL

53

76

29

317

312

288

AVG

317

312

288

AVG

317

312

288

AVG

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AVG

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AVG

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312

288

新日本製鐵株式会社
Nippon Steel Corporation

鋼材検査証明書

INSPECTION CERTIFICATE

(AS PER EN 10204 CERTIFICATE ON MATERIAL

TESTS 3.1)

需要家管理番号: CUSTOMER'S CONTROL No.

EDMONTON EXCHANGER GROUP OF COMPANIES

必要事項を満足していることを証明します。

鋼材検査証明書

鋼材検査証明書

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鋼材検査証明書

鋼材検査証明書

鋼材検査証明書

鋼材検査証明書

本社: 〒100-8071 東京都千代田区丸の内二丁目6番1号
HEAD OFFICE: 2-6-1, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8071, JAPAN
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KIMITSU WORKS: 1, KIMITSU, KUNITSU-CITY, CHIBA-PREF. 299-1141, JAPAN

証明書番号: P-09818 PAGE: 11

発行年月日: 2010-10-25

DATE OF ISSUE: 2010-10-25

1001

220DM*****

*****CEW*****

E3001P0700 E07

CUSTOMER'S CONTROL No.

鋼材検査証明書

鋼材検査証明書

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鋼材検査証明書

注 意 事 項: 1. 位置: 鋼材検査証明書

2. 位置: 鋼材検査証明書

3. 位置: 鋼材検査証明書

4. 位置: 鋼材検査証明書

5. 位置: 鋼材検査証明書

6. 位置: 鋼材検査証明書

7. 位置: 鋼材検査証明書

8. 位置: 鋼材検査証明書

9. 位置: 鋼材検査証明書

10. 位置: 鋼材検査証明書

11. 位置: 鋼材検査証明書

12. 位置: 鋼材検査証明書

13. 位置: 鋼材検査証明書

14. 位置: 鋼材検査証明書

15. 位置: 鋼材検査証明書

16. 位置: 鋼材検査証明書

17. 位置: 鋼材検査証明書

18. 位置: 鋼材検査証明書

19. 位置: 鋼材検査証明書

20. 位置: 鋼材検査証明書

21. 位置: 鋼材検査証明書

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi

若津製鐵所管理グループリーター
Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSU WORKS



B
SHIPPING
文 者 : HANWA CO., LTD.

新日本製鐵株式會社
Nippon Steel Corporation

鋼材検査証明書
INSPECTION CERTIFICATE

本社 東京千代田区丸の内二丁目6番1号
社 2-6-1, MARUNOUCHI, CHiyODA-KU, TOKYO 100-8071, JAPAN
HEAD OFFICE
千葉県君津市君津1番地
〒299-1141
製造所 1, KINITSU, KUNITSU-CITY, CHIBA-PREF. 299-1141, JAPAN
KIMITSU WORKS

證明書號碼: P-09818 PAGE: 12

COMMODITY	商品名	:	HOT ROLLED STEEL PLATES
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AS PER EN 10204 CERTIFICATE ON MATERIAL

规格: ASME SA-516 GRADE 70-E07-A08

TESTS 3.1)

呼吸文

EXCHANGER GROUP OF C-

DOCUMENT NO.

引張試験	衝撃試験	HBW
TENSILE TEST	IMPACT TEST	
NO.	NO.	

[illegible]

	Y: 纤维方向	X: 垂直纤维方向	Z: 厚度方向	沿厚度方向	沿纤维方向	沿垂直纤维方向
Top						
Bottom						
Transverse						
Longitudinal						
Through Thickness						
45deg. to the Longitudinal Axis						

[illegible]

それによつて、わが國の經濟界に多大の利益を齎してゐることを証明する。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
 ASSESSED IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

T. Adachi
 Head of Department
 PLATE QUALITY CONTROL DEPT.
 KIMITSU WORKS

Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSU WORKS

B

注 文 者 : HANWA CO., LTD.
注文者照合番号 : 228-38501040
契約番号 : 0-831-H1-5-0-A101
商 品 名 : HOT ROLLED STEEL PLATES
規 格 : ASME SA-516 GRADE 70-E07-A08
文 章 番 号 :
DOCUMENT No.:

新日本製鐵株式会社
Nippon Steel Corporation

鋼材検査証明書 INSPECTION CERTIFICATE

社 址 : 〒100-8071 東京都千代田区丸の内二丁目6番1号
HEAD OFFICE : 2-6-1, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8071, JAPAN
若 津 製 鐵 所 : 〒299-1141 千葉県若津市若津1番地
KIMITSU WORKS : 1, KIMITSU, KINTSU-CITY, CHIBA-PREF. 299-1141, JAPAN

証明書番号 : P-09818
発行年月日 : 2010-10-25
頁 : 38

CERTIFICATE No. : P-09818
DATE OF ISSUE : 2010-10-25
*****CEW*****
E3001P07Q0 E07

(AS PER EN 10204 CERTIFICATE ON MATERIAL TESTS 3.1)
EDMONTON EXCHANGER GROUP OF C- CUSTOMERS CONTROL No. 1001
需要家 : COMPANIES

寸 法	DIMENSION	数量	質量	製造番号	製品番号	引張試験				衝撃試験				化学成分													
						CAST No.	TEST No.	PLATE No.	YS	TS	EL	AVG	AVG														
2' X 121" X 480"	mm, inch, feet	10	14943	67489	TESTED-PL	55119	879271009101	50	75	36	247	257	267	C	Si	Mn	P	S	Al	Ni	Cr	Mo	Nb	V	Co	As	Pb
2' X 121" X 480"		10	14943	67489	TESTED-PL	55120	879271010101	52	75	34	274	267	261	C	Si	Mn	P	S	Al	Ni	Cr	Mo	Nb	V	Co	As	Pb
TOTAL		1311007886																									

注 記 NOTES [※1] Location Orientation 位置・方向, T: 頂部 Top, B: 底部 Bottom, L: 縦断方向 Longitudinal, C: 横断方向 Transverse, Z: 板厚方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis
[※2] G.L. 製造距離 Gauge Length, A: 50mm 平形試験片 Rectangular, B: 50mm 平形試験片 Rectangular, D: 70mm 平形試験片 Rectangular, E: 80mm 平形試験片 Rectangular, F: 80mm 平形試験片 Rectangular, G: 200mm, H: 2", I: 8", J: 5.65"/56, K: 4.7/50
[※3] R.A.: 絞り Reduction of Area, Y.R.: 降伏比 Yield Ratio, [※4] A: 合格 Acceptable, [※5] IF: 試験片 Full Size, 2: 2.5mm, 3: 3.2mm, 4: 3.5mm, 5: 5.0mm, 6: 6.67mm, 7: 7.5mm, 8: 8.7mm, 9: 製造距離 Plate Thickness, [※6] P: 製造分析 Product Analysis
[※7] N: 焼戻 Normalized, Q: 焼入れ Quenched, T: 焼戻し Tempered, C.R.: Controlled Rolled, N1 C: CLO Process/TMC Process, C.L.R: CLO Process/TMC Process, A.R: As Rolled, T.M.R: TMR Process/TMC Process, N.R: Normalizing Rolled
S.H.: 製造製造 Shear Pressure, C.F.: 製造製造 Crystallinity Fracture, L.E.: 製造製造 Austenite Grain Size, F.G.S.: フェライト組織 Ferrite Grain Size, S.R.: Stress Relieved Post Weld Heat Treatment

上記本文書は製造規定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。
WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi
Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSU WORKS

若津製鐵所管理グループリーダ
品質管理課長
KIMITSU WORKS



CERTIFICATE OF COMPLIANCE

edmonton exchanger
& manufacturing ltd.

5545-89 Street Edmonton, Alberta Canada T6E 5W9

www.edmontonexchanger.com

tel 780.468.6722 • QC fax 780.466.4668 • sales fax 780.466.5155

Customer RJV GASFIELD LTD.

PO 2675

Work Order C87884 Date 2011/02/10 ColC# 22457 Page 1 of 1

Item#	Description	Qty	Heat#	Required Min Thk	Recorded Min Thk	Form. Proc.
H87884-2	HEAD(S) - Semi-Elliptical 2:1 - 1.0000" NOM (0.9375" MIN) X 24" OD (Material Spec: SA 516-70 Normalized)	9	G7492-879270442	0.9375"	0.9420"	1
		1	G7492-879270442	0.9375"	0.9420"	1
		8	58606-51936	0.9375"	0.9690"	1
		2	58606-51936	0.9375"	0.9690"	1
		6	G7547-879270316	0.9375"	0.9700"	1
		4	G7492-879270429	0.9375"	0.9580"	1
		3	319644-97331	0.9375"	0.9650"	1
		3	G5408-771910808	0.9375"	0.9570"	1
		6	G7493-879270310	0.9375"	0.9560"	1
		1	325469-01795	0.9375"	0.9510"	1
		1	G7189-970680707	0.9375"	0.9690"	1
		6	G7546-879270460	0.9375"	0.9560"	1

Forming Procedure:

1. Hot Formed @ 1650F/899C and Air Cooled

Supplementary Requirements

Normalized Material Identification Marking:

'MT' indicates normalized by the mill per ASME Code Section II, Part A, SA 20, Paragraph 13.1.1.

'GMT' indicates normalized by Edmonton Exchanger per ASME Code Section II, Part A, SA 20, Paragraph 13.1.2.

'GT' indicates normalized by Edmonton Exchanger per ASME Code Section VIII Division 1, UG-85 or ASME Code Section I, PG-77.4.

The item(s) listed above comply with the requirements of ASME Code Section I, PG-29, PG-81 and ASME Code Section VIII, Division 1, UCS-79(d), UG-79 & UG-81. All welders and procedures are qualified to ASME Code Section IX. Material being supplied conforms to the latest ASME Code Section II, Part A, 2010 Edition, Addenda July 1, 2010.

Supplementary Examination - Items

FEB 18 2011



DILLINGER HÜTTE

Erklärungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02 ABNAHMEPRUEFZUGNIS CERTIFICAT DE RECEPTION		3.1.B DIN EN 10204 - EN 10204 - DIN 50049		A09 Advice of dispatch No./ Date of dispatch		A08/ Manufacturer's order/ A03 Certificate No.		Sheet	
INSPECTION CERTIFICATE		3.1.B BS EN 10204 - ISO 10474 MATERIAL TEST REPORT		152917-14.09.04		283849-001		1/...	
A05 Established inspecting body DH		A06 Purchaser ARCELOR CANADA, BURLI		A07.1 No. 40358		B01 Product HOT ROLLED PLATES			
Final receiver		EDMONTON STEEL, EDMON		A07.2 No. E10296-J1010-LG					

B02/ Steel grade SA516-70	B03 Specifications ASME-2A: 01+A02+SA20-S5 DIL-HUE-2: 31.10.03
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10234

B01-B99 Product description

B09 Item No.	B10 Quantity	B11 Thickness	B12 Width	B13 Length	B14 Mass theoretical KG	B04 Delivery condition	B08 Heat No.	B07 Rolled plate No./ Test No.	B16 Customer reference
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51956-01	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51956-03	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51958-01	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51958-02	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51958-03	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51959-01	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51959-02	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51959-03	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51960-01	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51960-02	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51960-03	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51961-01	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51961-02	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51961-03	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51962-01	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51962-02	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51962-03	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51963-01	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51963-02	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58601	51963-03	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58604	51949-02	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58604	51951-01	ITEM 1
01	1	0,7500 x	120,50000 x	480,00000 x	5580 N	N	58604	51951-02	ITEM 1

A04		Z01Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.		AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	
QM-System: Certification as per ISO 9001		B. MUELLER		Inspector's stamp	
Trademark		Der Werkssachverständige		Date 14.09.04	
				KW 1	

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)		A02 ABNAHMEPRÜFZEUGNIS 3.1.B DIN EN 10204 - EN 10204 - DIN 50049		A09 Advice of dispatch No./ Date of dispatch		A08/ Manufacturer's order/ A03 Certificate No.		Sheet	
CERTIFICAT DE RECEPTION 3.1.B NF EN 10204		INSPECTION CERTIFICATE 3.1.B BS EN 10204 - ISO 10474 MATERIAL TEST REPORT		152917-14.09.04		283849-001		2/...	
A06 Established inspecting body		A06 Purchaser		A07.1 No. 40358		B01 Product		HOT ROLLED PLATES	
DH		Final receiver		ARCELOR CANADA, BURLI		EDMONTON STEEL, EDMON		A07.2 No. E10296-J1010-LG	
B02/ Steel grade		SA516-70							
B03 Specifications		ASME-2A:01+A02+SA20-S5							
		DIL-HUE-2:31.10.03							

B01-B99 Product description

B09 Item No.	B10 Quantity	B11 Thickness	B12 Width	B13 Length	B14 Mass theoretical KG	B04 Delivery condition	B08 Heat No.	B07 Rolled plate No./ Test No.	B16 Customer reference
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58604	51951-03	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58604	51955-01	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58604	51955-02	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58604	51955-03	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58605	51941-01	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58605	51941-02	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58605	51941-03	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58605	51943-03	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58605	51945-01	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58605	51945-02	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58605	51945-03	ITEM 1
01	1	0,7500 X	120,50000 X	480,00000 X	5580	N	58605	51947-03	ITEM 1
**	35				195300				
02	1	0,8750 X	120,50000 X	480,00000 X	6510	N	57466	42249-01	ITEM 2
02	1	0,8750 X	120,50000 X	480,00000 X	6510	N	57466	42249-02	ITEM 2
02	1	0,8750 X	120,50000 X	480,00000 X	6510	N	57466	42249-03	ITEM 2
02	1	0,8750 X	120,50000 X	480,00000 X	6510	N	58604	51948-01	ITEM 2
02	1	0,8750 X	120,50000 X	480,00000 X	6510	N	58604	51948-03	ITEM 2
02	1	0,8750 X	120,50000 X	480,00000 X	6510	N	58604	51950-01	ITEM 2
02	1	0,8750 X	120,50000 X	480,00000 X	6510	N	58604	51950-02	ITEM 2
02	1	0,8750 X	120,50000 X	480,00000 X	6510	N	58604	51950-03	ITEM 2
02	1	0,8750 X	120,50000 X	480,00000 X	6510	N	58604	51954-01	ITEM 2
02	1	0,8750 X	120,50000 X	480,00000 X	6510	N	58604	51954-02	ITEM 2

A04		 Trademark		Z01Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.		AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department		A01	
QM-System: Certification as per ISO 9001		B. MUELLER Der Werkssachverständige		Inspector's stamp Date 14.09.04		KW		1	



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02 ABNAHMEPRUEFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE	3.1.B DIN EN 10204 - EN 10204 - DIN 50049 3.1.B NF EN 10204 3.1.B BS EN 10204 - ISO 10474 MATERIAL TEST REPORT	A08 Advice of dispatch No./ Date of dispatch 152917-14.09.04	A08/ Manufacturer's order/ A09 Certificate No. 283849-001	Sheet 3/...
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A05 Established inspecting body DH	A06 Purchaser Final receiver ARCELOR CANADA, BURLI EDMONTON STEEL, EDMON	A07.1 No. 40358 A07.2 No. E10296-J1010-LG	B01 Product HOT ROLLED PLATES
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B02/ Steel grade SA516-70			
B03 Specifications ASME-2A:01+A02+SA20-SS DIL-HUE-2:31.10.03			

B01-B99 Product description

B09 Item No.	B10 Quantity	B11 Thickness	B12 Width	B13 Length	B14 Mass theoretical KG	B04 Delivery condition	B08 Heat No.	B07 Rolled plate No./ Test No.	B16 Customer reference
02	1	0,8750 x	120,50000 x	480,00000	6510	N	58604	51954-03	ITEM 2
02	1	0,8750 x	120,50000 x	480,00000	6510	N	58607	51929-01	ITEM 2
02	1	0,8750 x	120,50000 x	480,00000	6510	N	58607	51929-02	ITEM 2
02	1	0,8750 x	120,50000 x	480,00000	6510	N	58607	51931-03	ITEM 2
**	14				91140				
03	1	1,0000 x	120,50000 x	480,00000	7440	N	58605	51940-01	ITEM 3
03	1	1,0000 x	120,50000 x	480,00000	7440	N	58605	51940-02	ITEM 3
03	1	1,0000 x	120,50000 x	480,00000	7440	N	58605	51940-03	ITEM 3
03	1	1,0000 x	120,50000 x	480,00000	7440	N	58605	51942-01	ITEM 3
03	1	1,0000 x	120,50000 x	480,00000	7440	N	58605	51942-02	ITEM 3
03	1	1,0000 x	120,50000 x	480,00000	7440	N	58605	51942-03	ITEM 3
03	1	1,0000 x	120,50000 x	480,00000	7440	N	58605	51944-01	ITEM 3
03	1	1,0000 x	120,50000 x	480,00000	7440	N	58605	51944-02	ITEM 3
03	1	1,0000 x	120,50000 x	480,00000	7440	N	58605	51944-03	ITEM 3
03	1	1,0000 x	120,50000 x	480,00000	7440	N	58607	51928-01	ITEM 3
03	1	1,0000 x	120,50000 x	480,00000	7440	N	58607	51928-02	ITEM 3
**	11				81840				
04	1	1,0000 x	120,50000 x	480,00000	7440	N	58606	51932-02	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000	7440	N	58606	51932-03	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000	7440	N	58606	51933-01	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000	7440	N	58606	51933-02	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000	7440	N	58606	51933-03	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000	7440	N	58606	51934-01	ITEM 4

A04	201/202 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.	AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	Inspector's stamp Date 14.09.04	KW 1
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QM-System: Certification as per ISO 9001

B. MUELLER
Der Werkssachverständige

ADB



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02	ABNAHMEPRUEFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE	3.1.B NF EN 10204	3.1.B DIN EN 10204 - EN 10204 - DIN 50049	A05	Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
A05	Established inspecting body DH	A06 Purchaser Final receiver	ARCELOR CANADA, BURLI EDMONTON STEEL, EDMON	A07.1 No. 40358 A07.2 No. E10296-J1010-IG	152917-14.09.04	283849-001	4/...
B02/	Steel grade SA516-70						
B03	Specifications ASME-2A:01+A02+SA20-S5 DIL-HUE-2:31.10.03						B01 Product HOT ROLLED PLATES

B01-B99 Product description

B09 Item No.	B10 Quantity	B11 Thickness	B12 Width	B13 Length	B14 Mass theoretical KG	B04 Delivery condition	B08 Heat No.	B07 Rolled plate No./ Test No.	B16 Customer reference
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51934-02	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51934-03	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51935-01	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51935-02	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51935-03	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51936-01	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51936-02	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51936-03	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51937-01	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51937-02	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51937-03	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51938-01	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51938-02	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51938-03	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51939-01	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51939-02	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58606	51939-03	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58607	51927-01	ITEM 4
04	1	1,0000 x	120,50000 x	480,00000 x	7440 N	N	58607	51927-02	ITEM 4
**	25				186000				
05	1	1,1250 x	121,00000 x	480,00000 x	8405 N	N	58606	51915-01	ITEM 5
05	1	1,1250 x	121,00000 x	480,00000 x	8405 N	N	58608	51915-02	ITEM 5
05	1	1,1250 x	121,00000 x	480,00000 x	8405 N	N	58608	51916-01	ITEM 5

A04	201202 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.	A01	AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department
QM-System: Certification as per ISO 9001		A01	
		A01	
Der Werkssachverständige		Inspector's stamp	
B. MUELLER		Date 14.09.04	
KW		1	



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02 ABNAHMEPRÜFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE	3.1.B DIN EN 10204 - EN 10204 - DIN 50049 3.1.B NF EN 10204 3.1.B BS EN 10204 - ISO 10474 MATERIAL TEST REPORT	A09 Advice of dispatch No./ Date of dispatch 152917-14.09.04	A08/ Manufacturer's order/ A03 Certificate No. 283849-001	Sheet 5/...
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A05 Established inspecting body DH	A06 Purchaser ARCELOR CANADA, BURLI EDMONTON STEEL, EDMON	A07.1 No. 40358 A07.2 No. E10296-J1010-LG	B01 Product HOT ROLLED PLATES
---------------------------------------	---	--	----------------------------------

B02/ Steel grade SA516-70
B03 Specifications ASME-2A:01+A02+SA20-SS DIL-HUE-2:31.10.03

B01-B99 Product description

B09 Item No.	B10 Quantity	B11 Thickness	B12 Width INCH	B13 Length	B14 Mass theoretical KG	B04 Delivery condition	B06 Heat No.	B07 Rolled plate No./ Test No.	B16 Customer reference
05	1	1.1250 X	121,00000 X	480,00000 X	8405 N	N	58608	51916-02	ITEM 5
05	1	1.1250 X	121,00000 X	480,00000 X	8405 N	N	58608	51917-01	ITEM 5
05	1	1.1250 X	121,00000 X	480,00000 X	8405 N	N	58608	51917-02	ITEM 5
**	6				50430				
06	1	1.2500 X	121,00000 X	480,00000 X	9339 N	N	58608	51918-01	ITEM 6
06	1	1.2500 X	121,00000 X	480,00000 X	9339 N	N	58608	51918-02	ITEM 6
06	1	1.2500 X	121,00000 X	480,00000 X	9339 N	N	58608	51919-01	ITEM 6
06	1	1.2500 X	121,00000 X	480,00000 X	9339 N	N	58608	51919-02	ITEM 6
06	1	1.2500 X	121,00000 X	480,00000 X	9339 N	N	58608	51920-01	ITEM 6
06	1	1.2500 X	121,00000 X	480,00000 X	9339 N	N	58608	51920-02	ITEM 6
06	1	1.2500 X	121,00000 X	480,00000 X	9339 N	N	58608	51921-01	ITEM 6
06	1	1.2500 X	121,00000 X	480,00000 X	9339 N	N	58608	51921-02	ITEM 6
06	1	1.2500 X	121,00000 X	480,00000 X	9339 N	N	58608	51922-01	ITEM 6
06	1	1.2500 X	121,00000 X	480,00000 X	9339 N	N	58608	51922-02	ITEM 6
**	10				93390				
***	101				698100				

B04 Delivery condition / Heat treatment of plates

ITEM NO.: 01-06

N: HT: 1634 GR.F +27 -27 GR.F

SOAKING TIME TO ATTAIN THE TARGET TEMPERATURE OVER THE WHOLE SECTION: 1-1.75 MIN/MM (25-45 MIN/INCH)
COOLING IN STILL AIR

A04



QM-System: Certification as per ISO 9001

Z01/Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.



AG der Dillinger Hüttenwerke

Postfach 1580, D-66748 Dillingen/Saar
inspection department

B. MUELLER

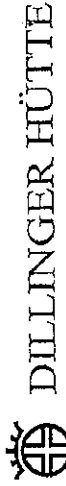
Der Werkssachverständige

Inspector's stamp

Date 14.09.04

KW

A01



A02 ABNAHMEPRÜFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE		A09 Advice of dispatch No./ Date of dispatch		A08/ Manufacturer's order/ A03 Certificate No.		Sheet	
3.1.B DIN EN 10204 - EN 10204 - DIN 50049		152917-14.09.04		283849-001		6/...	
3.1.B NF EN 10204		MATERIAL TEST REPORT		B01 Product		HOT ROLLED PLATES	
3.1.B BS EN 10204 - ISO 10474		A07.1 No. 40358		A07.2 No. E10296-J1010-LG			
A06 Purchaser		ARCELOR CANADA, BURLI					
Final receiver		EDMONTON STEEL, EDMON					
B02/ Steel grade		SA516-70					
B03 Specifications		ASME-2A:01+A02+SA20-S5 DIL-HUB-2:31.10.03					

B06 Marking

ITEM NO.: 01-06

STEEL GRADE SA516 70 MTLTV SA516 60 MTLTV

HEAT NO. / TRADEMARK / ROLLED PLATE NO.-TEST NO. / INSPECTOR'S STAMP

C10-C29 Tensile test									
B08 Item No.	B08 Heat No.	B07 Rol. plate/ Test No.	B05 Reference condition	C01	C02/ C01	C03 Temp. GR.F	C10 C11 KSI RP02	C12 RM	C13
01 58601	51956			K4 Q	RT	RT	49,4	73,2	
01 58601	51958			K4 Q	RT	RT	50,2	74,0	
01 58601	51959			K4 Q	RT	RT	50,3	74,1	
01 58601	51960			K4 Q	RT	RT	48,9	73,7	
01 58601	51961			K4 Q	RT	RT	49,2	73,8	
01 58601	51962			K4 Q	RT	RT	50,5	73,7	
01 58601	51963			K4 Q	RT	RT	50,3	74,1	
01 58604	51949			K4 Q	RT	RT	49,9	74,4	
01 58604	51951			K4 Q	RT	RT	48,9	74,1	
01 58604	51955			K4 Q	RT	RT	50,8	74,1	
01 58605	51941			K4 Q	RT	RT	49,0	74,8	
01 58605	51943			K4 Q	RT	RT	49,0	74,4	
01 58605	51945			K4 Q	RT	RT	49,2	74,4	
01 58605	51947			K4 Q	RT	RT	49,6	73,8	
02 57466	42249			K4 Q	RT	RT	50,9	75,0	
02 58604	51948			K4 Q	RT	RT	49,4	74,4	
02 58604	51950			K4 Q	RT	RT	49,6	74,1	
02 58604	51954			K4 Q	RT	RT	49,7	74,0	
02 58607	51929			K4 Q	RT	RT	48,3	73,4	

A04		Z01/Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.		AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar		A01	
		QM-System: Certification as per ISO 9001		AHB		KW	
Der Werksechverständige		Inspector's stamp		Date		14.09.04	
B. MUELLER							



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02	ABNÄHMERUSEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE	3.1.B NF EN 10204 BS EN 10204	DIN EN 10204 - EN 10204 - DIN 50049	A09	Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
A05	Established inspecting body DH	A06 Purchaser ARCELOR CANADA, BURLI	ISO 10474 A07.1 No. 40358	152917-14.09.04	283849-001	801 Product	7/...
	Final receiver EDMONTON STEEL, EDMON	A07.2 No. E10296-J1010-LG				HOT ROLLED PLATES	

502/ Steel grade SA516-70

503 Specifications
ASME-2A:01+A02+SA20-S5
DIL-HUE-2:31.10.03

C10-C29 Tensile test

B09 Item No.	B08 Heat No.	B07 Roll plate/ Test No.	B05 Reference condition	C01	C02/ C03 C01	C10 Temp. GR.F	C11 KSI RP02	C12 RM	C13	A % L0=8IN	A % L0=2IN	C14-C15
02	58607	51931		K4 Q	RT	RT	48,4	74,2		29,9		
03	58605	51940		K4 Q	RT	RT	49,0	74,1		29,4		
03	58605	51942		K4 Q	RT	RT	47,9	74,2		30,9		
03	58605	51944		K4 Q	RT	RT	49,2	74,1		30,4		
03	58607	51928		K4 Q	RT	RT	47,4	73,1		30,9		
04	58606	51932		K4 Q	RT	RT	48,0	73,2		30,9		
04	58606	51933		K4 Q	RT	RT	48,1	73,1		31,9		
04	58606	51934		K4 Q	RT	RT	48,4	73,2		32,4		
04	58606	51935		K4 Q	RT	RT	47,9	72,9		30,4		
04	58606	51936		K4 Q	RT	RT	48,7	74,0		29,4		
04	58606	51937		K4 Q	RT	RT	47,0	74,1		30,9		
04	58606	51938		K4 Q	RT	RT	47,0	73,7		31,4		
04	58606	51939		K4 Q	RT	RT	48,1	74,2		30,4		
04	58607	51927		K4 Q	RT	RT	47,9	72,8		30,9		
05	58608	51915		K4 Q	RT	RT	49,0	73,2		32,4		
05	58608	51916		K4 Q	RT	RT	48,9	73,1		31,9		
05	58608	51917		K4 Q	RT	RT	49,7	73,1		30,9		
06	58608	51918		K4 QV	RT	RT	48,4	74,4		34,5		
06	58608	51919		K4 QV	RT	RT	48,1	74,2		35,8		
06	58608	51920		K4 QV	RT	RT	47,6	73,8		36,1		
06	58608	51921		K4 QV	RT	RT	48,4	73,7		33,2		
06	58608	51922		K4 QV	RT	RT	47,3	73,4		36,6		

A04



201202 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order

QM-System: Certification as per ISO 9001



AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department

B. MUELLER

Der Werkssachverständige

Inspector's stamp

Date 14.09.04

KW 1

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02 ABNAHMEPRÜFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE		3.1.B DIN EN 10204 - EN 10204 - DIN 50049 3.1.B NF EN 10204 3.1.B BS EN 10204 - ISO 10474 MATERIAL TEST REPORT		A09 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ Certificate No.	Sheet
A03 Established inspecting body DH		A06 Purchaser ARCELOR CANADA, HUKLI		152917-14.09.04	283849-001	8/...
A04 Steel grade SA516-70		A07.1 No. 40358		B01 Product HOT ROLLED PLATES		
B03 Specifications ASME-2A:01+A02+SA20-S5 DIL-HUB-2:31.10.03		A07.2 No. E10296-J1010-LG				

C40-C49 Impact test

B09 Item No.	B08 Heat No.	B07 Rollplate/ Test No.	B05 Reference condition	C01	C02/ C01	C03 Temp. GR.F	C41 Specimen width	C40 Type of specimen	C44 Testing method	C46 Energy	C45 Individual values AVEFT.LBF	C43 Average value
01	58601	51956		K4	LV	-51	-51	CHP-V			AV 190	218
01	58601	51958		K4	LV	-51	-51	CHP-V			AV 142	188
01	58601	51959		K4	LV	-51	-51	CHP-V			AV 194	199
01	58601	51960		K4	LV	-51	-51	CHP-V			AV 93	156
01	58601	51961		K4	LV	-51	-51	CHP-V			AV 176	128
01	58601	51962		K4	LV	-51	-51	CHP-V			AV 152	194
01	58601	51963		K4	LV	-51	-51	CHP-V			AV 187	124
01	58604	51949		K4	LV	-51	-51	CHP-V			AV 125	151
01	58604	51951		K4	LV	-51	-51	CHP-V			AV 200	142
01	58604	51955		K4	LV	-51	-51	CHP-V			AV 122	169
01	58605	51941		K4	LV	-51	-51	CHP-V			AV 74	201
01	58605	51943		K4	LV	-51	-51	CHP-V			AV 118	82
01	58605	51945		K4	LV	-51	-51	CHP-V			AV 125	130
01	58605	51947		K4	LV	-51	-51	CHP-V			AV 131	148
02	57466	42249		K4	LV	-51	-51	CHP-V			AV 98	147
02	58604	51948		K4	LV	-51	-51	CHP-V			AV 131	88
02	58604	51950		K4	LV	-51	-51	CHP-V			AV 98	160
02	58604	51954		K4	LV	-51	-51	CHP-V			AV 131	151
02	58607	51929		K4	LV	-51	-51	CHP-V			AV 118	120
02	58607	51931		K4	LV	-51	-51	CHP-V			AV 121	116
03	58605	51940		K4	LV	-51	-51	CHP-V			AV 128	119
03	58605	51942		K4	LV	-51	-51	CHP-V			AV 98	86
03	58605	51944		K4	LV	-51	-51	CHP-V			AV 89	93
03	58607	51928		K4	LV	-51	-51	CHP-V			AV 148	116
03	58607	51928		K4	LV	-51	-51	CHP-V			AV 127	129

A04	Z01/202 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.	AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar	A01
		 B. MUELLER Der Werkssachverständige	Inspection department Date 14.09.04 Inspector's stamp KW
QM-System: Certification as per ISO 9001			



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02 ANNAHMEPRÜFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE		3.1.B DIN EN 10204 - EN 10204 - DIN 50049 3.1.B NF EN 10204 3.1.B ES EN 10204 - ISO 10474 MATERIAL TEST REPORT	A08 Advice of dispatch No./ Date of dispatch 152917-14.09.04	A08/ Manufacturer's order/ A03 Certificate No. 283849-001	Sheet 9/...
A05 Established inspecting body DH		A06 Purchaser ARCELOR CANADA, BURLI	A07.1 No. 40358	B01 Product HOT ROLLED PLATES	
B02/ Steel grade SA516-70		Final receiver EDMONTON STEEL, EDMON	A07.2 No. E10296-J1010-IG		
B03 Specifications ASME-2A:01+A02+SA20-S5 DIL-HUE-2:31.10.03					

C40-C49 Impact test

B09 Item No.	B08 Heat No.	B07 Rot. plate/ Test No.	B05 Reference condition	C01	C02/ C01	C03 Temp. GRF	C41 Specimen width	C40 Type of specimen	C44 Testing method	C46 Energy	C45 Individual values AV=FT.LBF	C43 Average value
04	58606	51932		K4	LV	-51		CHP-V			AV 132	120
04	58606	51933		K4	LV	-51		CHP-V			AV 58	86
04	58606	51934		K4	LV	-51		CHP-V			AV 125	136
04	58606	51935		K4	LV	-51		CHP-V			AV 162	140
04	58606	51936		K4	LV	-51		CHP-V			AV 110	128
04	58606	51937		K4	LV	-51		CHP-V			AV 104	97
04	58606	51938		K4	LV	-51		CHP-V			AV 119	99
04	58606	51939		K4	LV	-51		CHP-V			AV 113	107
04	58607	51927		K4	LV	-51		CHP-V			AV 167	103
05	58608	51915		K4	LV	-51		CHP-V			AV 132	129
05	58608	51916		K4	LV	-51		CHP-V			AV 111	114
05	58608	51917		K4	LV	-51		CHP-V			AV 152	164
06	58608	51918		K4	LV	-51		CHP-V			AV 74	85
06	58608	51919		K4	LV	-51		CHP-V			AV 75	71
06	58608	51920		K4	LV	-51		CHP-V			AV 141	112
06	58608	51921		K4	LV	-51		CHP-V			AV 89	145
06	58608	51922		K4	LV	-51		CHP-V			AV 102	110
												72
												104
												90
												86
												114
												80

C70-C99 Chemical composition % - Heat analysis

B08 Heat	C70	C	Si	MN	P	S	N	AL	CU	MO	NI	CR	V	NB	SN
57466	Y	0,182	0,366	1,17	0,009	0,0010	0,0057	0,038	0,019	0,029	0,039	0,080	0,000	0,000	0,000
58601	Y	0,172	0,359	1,17	0,009	0,0008	0,0054	0,042	0,011	0,015	0,026	0,044	0,000	0,000	0,000
58604	Y	0,174	0,355	1,19	0,010	0,0005	0,0047	0,033	0,021	0,030	0,032	0,047	0,000	0,000	0,000
58605	Y	0,183	0,352	1,17	0,011	0,0020	0,0051	0,045	0,017	0,023	0,027	0,049	0,001	0,000	0,000

Z01/Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001

AG der Dillinger Hüttenwerke

Postfach 1580, D-66748 Dillingen/Saar

Inspection department



Trademark

B. MUELLER

Der Werkstachverständige

Inspector's stamp

Date 14.09.04

KW 1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02 ABNAHMEPRUEFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE		3.1.B DIN EN 10204 - EN 10204 - DIN 50049	A09 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
A05 Established inspecting body DH		A06 Purchaser Final receiver	152917-14.09.04	283849-001	10/...
B02/ Steel grade B03 Specifications		SA516-70 ASME-2A: 01+A02+SA20-SS DIL-HUE-2: 31.10.03	MATERIAL TEST REPORT	801 Product HOT ROLLED PLATES	
		ARCELOR CANADA, BURLI EDMONTON STEEL, EDMON	152917-14.09.04		
		A07.1 No. 40358 A07.2 No. E10296-J1010-LG			

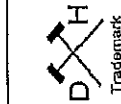
C70-C99 Chemical composition % - Heat analysis

	C70	C	SI	MN	P	S	N	AL	CU	MO	NI	CR	V	NB	SN
B08 Heat															
57466	Y	0,174	0,355	1,17	0,012	0,0016	0,0046	0,039	0,026	0,013	0,025	0,057	0,001	0,000	0,000
58601	Y	0,172	0,369	1,16	0,007	0,0010	0,0056	0,035	0,021	0,031	0,031	0,034	0,000	0,000	0,000
58607	Y	0,172	0,367	1,15	0,008	0,0009	0,0058	0,030	0,012	0,004	0,017	0,027	0,000	0,000	0,000
58608	Y														
B08 Heat															
57466	Y	0,002	0,0002												
58601	Y	0,001	0,0001												
58604	Y	0,002	0,0002												
58605	Y	0,002	0,0003												
58606	Y	0,002	0,0005												
58607	Y	0,002	0,0004												
58608	Y	0,002	0,0002												

C94 Heat analysis Carbon equivalent / Alloying restrictions

B08 Heat															
57466	FO-02=	0,40	FO-55=	0,17	FO-78=	0,11	FO-91=	6,4							
58601	FO-02=	0,38	FO-55=	0,10	FO-78=	0,06	FO-91=	6,8							
58604	FO-02=	0,39	FO-55=	0,13	FO-78=	0,08	FO-91=	6,8							
58605	FO-02=	0,40	FO-55=	0,12	FO-78=	0,07	FO-91=	6,4							
58606	FO-02=	0,39	FO-55=	0,12	FO-78=	0,07	FO-91=	6,7							
58607	FO-02=	0,38	FO-55=	0,12	FO-78=	0,07	FO-91=	6,7							
58608	FO-02=	0,37	FO-55=	0,06	FO-78=	0,03	FO-91=	6,7							

A04



Z01/Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/SaarAG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department

B. MUELLER

Der Werkstachverständige

Inspector's stamp

Date 14.09.04

KW

A01



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.biz/certificate)

A02 ABNAHMEPRUEFZEUGNIS CERTIFICAT DE RECEPTION		3.1.B	DIN EN 10204 - EN 10204 - DIN 50049	A09 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
INSPECTION CERTIFICATE		3.1.B	NF EN 10204			
MATERIAL TEST REPORT		3.1.B	BS EN 10204 - ISO 10474			
A05 Established inspecting body		ARCELOR CANADA, BURLI		152917-14.09.04	283849-001	11/...
DH		EDMONTON STEEL, EDMON		B01 Product HOT ROLLED PLATES		
B02/ Steel grade		SA516-70				
B03 Specifications		ASME-2A: 01+A02+SA20-S5 DIL-HUE-2:31.10.03				

C95 Ladle treatment

ITEM NO.: 01-06

HEAT OF THE INDICATED ITEM: VACUUM DEGASSED / SULPHIDE SHAPE CONTROL

C70-C99 Chemical composition % - Product analysis

B08 Heat	B07 Test No.	C01	C	SI	MN	P	S	N	AL	CU	MO	NI	CR	V	NB	SN
57466	42249	K4	0.177	0.361	1.15	0.008	0.0009	0.0055	0.038	0.019	0.030	0.040	0.077	0.000	0.000	0.000
58601	51956	K4	0.164	0.363	1.17	0.009	0.0006	0.0046	0.046	0.012	0.017	0.027	0.040	0.000	0.000	0.000
58604	51951	K4	0.170	0.345	1.17	0.009	0.0003	0.0044	0.034	0.020	0.030	0.032	0.046	0.000	0.000	0.000
58604	51952	K4	0.166	0.357	1.17	0.009	0.0004	0.0048	0.036	0.016	0.024	0.030	0.046	0.000	0.000	0.000
58605	51945	K4	0.171	0.354	1.17	0.010	0.0008	0.0051	0.033	0.021	0.032	0.033	0.045	0.001	0.000	0.000
58605	51946	K4	0.175	0.345	1.17	0.009	0.0015	0.0049	0.037	0.018	0.027	0.030	0.046	0.000	0.000	0.000
58606	51936	K4	0.170	0.350	1.18	0.010	0.0018	0.0052	0.042	0.021	0.015	0.026	0.053	0.000	0.000	0.000
58607	51928	K4	0.165	0.379	1.13	0.009	0.0012	0.0052	0.036	0.024	0.018	0.027	0.045	0.000	0.000	0.001
58607	51929	K4	0.164	0.378	1.16	0.010	0.0014	0.0048	0.040	0.028	0.009	0.025	0.054	0.000	0.000	0.001
58608	51915	K4	0.166	0.363	1.13	0.007	0.0007	0.0061	0.031	0.012	0.005	0.017	0.025	0.000	0.000	0.000
58608	51922	K4	0.164	0.361	1.16	0.006	0.0006	0.0056	0.034	0.021	0.031	0.031	0.029	0.000	0.000	0.000

B08 Heat	B07 Test No.	C01	Ti	B
57466	42249	K4	0.002	0.0000
58601	51956	K4	0.001	0.0001
58604	51951	K4	0.002	0.0003
58604	51952	K4	0.002	0.0002
58605	51945	K4	0.002	0.0002
58605	51946	K4	0.002	0.0003
58606	51936	K4	0.002	0.0004
58607	51928	K4	0.001	0.0004

A04		Z01/Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.		AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department		A01	
QM-System: Certification as per ISO 9001		Der Werksachverständige		Inspector's stamp		Date 14.09.04	
Trademark		B. MUELLER		14.09.04		KW 1	



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/Sae reverse for explanations (www.dillinger.biz/certificate)

A02	ABNAHMEPRÜFZEUGNIS	3.1.B	DIN EN 10204 - EN 10204 - DIN 50049	A09	Advice of dispatch No./ Date of dispatch	A05/ Manufacturer's order/ ACS Certificate No.	Sheet
	CERTIFICAT DE RECEPTION	3.1.B	NF EN 10204				
	INSPECTION CERTIFICATE	3.1.B	BS EN 10204 - ISO 10474		152917-14.09.04	283849-001	12/----
A05	Established inspecting body	A06	Purchaser			B01 Product	
DH			ARCELOR CANADA, BURLI			HOT ROLLED PLATES	
		Final receiver	EDMONTON STEEL, EDMON				
B02/	Steel grade	SA516-70					
B03	Specifications	ASME-2A: 01+A02+SA20-S5					
		DIL-HUE-2:31.10.03					

C70-C99 Chemical composition % - Product analysis

B08	B07	C01	Ti	B
Heat	Test No.			
58607	51929	K4	0,002	0,0003
58608	51915	K4	0,002	0,0002
58608	51922	K4	0,002	0,0003

C94 Product analysis Carbon equivalent / Alloying restrictions

B08	B07	C01	FO-02	FO-55
Heat	Test No.			
57466	42249	K4	FO-02= 0,39	FO-55= 0,17
58601	51956	K4	FO-02= 0,37	FO-55= 0,10
58604	51951	K4	FO-02= 0,38	FO-55= 0,13
58604	51952	K4	FO-02= 0,38	FO-55= 0,12
58605	51945	K4	FO-02= 0,39	FO-55= 0,13
58605	51946	K4	FO-02= 0,39	FO-55= 0,12
58606	51936	K4	FO-02= 0,38	FO-55= 0,12
58607	51928	K4	FO-02= 0,37	FO-55= 0,11
58607	51929	K4	FO-02= 0,37	FO-55= 0,12
58608	51915	K4	FO-02= 0,36	FO-55= 0,06
58608	51922	K4	FO-02= 0,37	FO-55= 0,11

C94 Carbon equivalent formula / Alloying restrictions

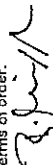
FO-02 = C + (MN/6) + (CR+MO+V) / 5 + (NI+CU) / 15
FO-55 = CU+MO+NI+CR
FO-78 = CR+MO
FO-91 = MN/C

A04

 Trademark

QM-System: Certification as per ISO 9001

Z01/Z02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.



B. MUELLER

Der Werkssachverständige

AHB

Inspector's stamp

Date 14.09.04

KW

A01

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso (See reverse for explanations (www.dillinger.biz/certificate))

A02	ABNAHMEPRUEFZEUGNIS CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE	3.1.B 3.1.B 3.1.B	DIN EN 10204 - EN 10204 NF EN 10204 BS EN 10204 - ISO 10474	- DIN 50049 MATERIAL TEST REPORT	A09 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
A05	Established inspecting body DH	A06 Purchaser Final receiver	ARCELOR CANADA, BURLI EDMONTON STEEL, EDMON	A07.1 No. 40358 A07.2 No. E10296-J1010-LG	152917-14.09.04	283849-001	13
B02	Steel grade	SA516-70					
B03	Specifications	ASME-2A:01+A02+SA20-S5 DIL-HUE-2:31.10.03					

D01 Checking of marking, surface, shape and dimensions

ITEM NO.: 01-06
RESULT OF MARKING, SURFACE, SHAPE AND DIMENSIONS: NO REMARKS
SURFACE AS PER ASME-SA20
THICKNESS AS PER ASME-SA20
LENGTH AND WIDTH AS PER ASME-SA20
FLATNESS AS PER 1/2-ASME-SA20



A04	2012/02 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order. QM-System: Certification as per ISO 9001		AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	Inspector's stamp Date 14.09.04	Inspector's stamp Date 14.09.04	Inspector's stamp Date 14.09.04	Inspector's stamp Date 14.09.04
A01							

新日本製鐵株式會社

Nippon Steel Corporation

鋼材検査証明書

INSPECTION CERTIFICATE

B

注文者: HANWA CO., LTD.

注文者照会番号: 228-38561010

契約番号: 6-831-H1-5-0-A102

商品名: HOT ROLLED STEEL PLATES

規格: ASME SA-516 GRADE 70-E04-A05

文書番号: DOCUMENT No.

顧客: EDMONTON EXCHANGER GROUP OF COMPANIES

本社: 〒100-8071 東京都千代田区大手町二丁目6番3号
HEAD OFFICE: 2-6-3, OTEMACHI, CHIYODA-KU, TOKYO 100-8071, JAPAN
製造場所: 〒299-1141 千葉県君津市君津1番地
KIMITSUWORKS: 1, KIMITSU, KIMITSU-CITY, CHIBA-PREF, 299-1141, JAPAN

証明書番号: P-86490 PAGE: 31
発行年月日: 2006-11-29

DATE OF ISSUE: 2006-11-29

1001

2***DM*****
*****E*****

需要家管理番号: E3001P0100 E07

CUSTOMER'S CONTROL No.

化学成分

IMPACT TEST

2V - 50F

平均値 個々値

AVG EACH

147

151

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注文者: HANWA CO., LTD.

注文者照会番号: 228-38561010

契約番号: 6-831-H1-5-0-A102

商品名: HOT ROLLED STEEL PLATES

規格: ASME SA-516 GRADE 70-E04-A05

文書番号: DOCUMENT No.

顧客: EDMONTON EXCHANGER GROUP OF COMPANIES

化学成分

IMPACT TEST

2V - 50F

平均値 個々値

AVG EACH

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注 文 者 : HANWA CO., LTD.

注文者照合番号 : 228-38561010
REFERENCE No.

契約番号 : 6-831-H1-5-0-A102

COMMODITY	商 品 名	UNIT	QUANTITY	UNIT PRICE	AMOUNT
HOT ROLLED STEEL PLATES					

COMPONENT	UNIT	QUANTITY	UNIT PRICE	TOTAL
規格	:			
SPECIFICATION	:			
			ASME SA-516 GRADE 70-FO4-A05	

文書番号 : DOCUMENT No. 需要家 : CUSTOMER

品名	规格	数量	单位	备注
10# 钢板	10mm	100	kg	
20# 钢板	20mm	200	kg	
30# 钢板	30mm	300	kg	
40# 钢板	40mm	400	kg	
50# 钢板	50mm	500	kg	
60# 钢板	60mm	600	kg	
70# 钢板	70mm	700	kg	
80# 钢板	80mm	800	kg	
90# 钢板	90mm	900	kg	
100# 钢板	100mm	1000	kg	

DIMENSION	CAST No.	PLATE No.	CATIONIC POLYMERIZATION		耐熱性試験
			試料	溶媒	
1	1	1	試料	溶媒	1
2	2	2	試料	溶媒	2
3	3	3	試料	溶媒	3
4	4	4	試料	溶媒	4
5	5	5	試料	溶媒	5
6	6	6	試料	溶媒	6
7	7	7	試料	溶媒	7
8	8	8	試料	溶媒	8
9	9	9	試料	溶媒	9
10	10	10	試料	溶媒	10
11	11	11	試料	溶媒	11
12	12	12	試料	溶媒	12
13	13	13	試料	溶媒	13
14	14	14	試料	溶媒	14
15	15	15	試料	溶媒	15
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17	17	17	試料	溶媒	17
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29	29	29	試料	溶媒	29
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66	66	66	試料	溶媒	66
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68	68	68	試料	溶媒	68
69	69	69	試料	溶媒	69
70	70	70	試料	溶媒	70
71	71	71	試料	溶媒	71
72	72	72	試料	溶媒	72
73	73	73	試料	溶媒	73
74</					

QUALITY	TEST No.	MM	MASS	試料番号	0.2%	EL

	N0	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	N13	N14	N15	N16	N17	N18	N19	N20	N21	N22	N23	N24	N25	N26	N27	N28	N29	N30	N31	N32	N33	N34	N35	N36	N37	N38	N39	N40	N41	N42	N43	N44	N45	N46	N47	N48	N49	N50	N51	N52	N53	N54	N55	N56	N57	N58	N59	N60	N61	N62	N63	N64	N65	N66	N67	N68	N69	N70	N71	N72	N73	N74	N75	N76	N77	N78	N79	N80	N81	N82	N83	N84	N85	N86	N87	N88	N89	N90	N91	N92	N93	N94	N95	N96	N97	N98	N99	N100	N101	N102	N103	N104	N105	N106	N107	N108	N109	N110	N111	N112	N113	N114	N115	N116	N117	N118	N119	N120	N121	N122	N123	N124	N125	N126	N127	N128	N129	N130	N131	N132	N133	N134	N135	N136	N137	N138	N139	N140	N141	N142	N143	N144	N145	N146	N147	N148	N149	N150	N151	N152	N153	N154	N155	N156	N157	N158	N159	N160	N161	N162	N163	N164	N165	N166	N167	N168	N169	N170	N171	N172	N173	N174	N175	N176	N177	N178	N179	N180	N181	N182	N183	N184	N185	N186	N187	N188	N189	N190	N191	N192	N193	N194	N195	N196	N197	N198	N199	N200	N201	N202	N203	N204	N205	N206	N207	N208	N209	N210	N211	N212	N213	N214	N215	N216	N217	N218	N219	N220	N221	N222	N223	N224	N225	N226	N227	N228	N229	N230	N231	N232	N233	N234	N235	N236	N237	N238	N239	N240	N241	N242	N243	N244	N245	N246	N247	N248	N249	N250	N251	N252	N253	N254	N255	N256	N257	N258	N259	N260	N261	N262	N263	N264	N265	N266	N267	N268	N269	N270	N271	N272	N273	N274	N275	N276	N277	N278	N279	N280	N281	N282	N283	N284	N285	N286	N287	N288	N289	N290	N291	N292	N293	N294	N295	N296	N297	N298	N299	N300	N301	N302	N303	N304	N305	N306	N307	N308	N309	N310	N311	N312	N313	N314	N315	N316	N317	N318	N319	N320	N321	N322	N323	N324	N325	N326	N327	N328	N329	N330	N331	N332	N333	N334	N335	N336	N337	N338	N339	N340	N341	N342	N343	N344	N345	N346	N347	N348	N349	N350	N351	N352	N353	N354	N355	N356	N357	N358	N359	N360	N361	N362	N363	N364	N365	N366	N367	N368	N369	N370	N371	N372	N373	N374	N375	N376	N377	N378	N379	N380	N381	N382	N383	N384	N385	N386	N387	N388	N389	N390	N391	N392	N393	N394	N395	N396	N397	N398	N399	N400	N401	N402	N403	N404	N405	N406	N407	N408	N409	N410	N411	N412	N413	N414	N415	N416	N417	N418	N419	N420	N421	N422	N423	N424	N425	N426	N427	N428	N429	N430	N431	N432	N433	N434	N435	N436	N437	N438	N439	N440	N441	N442	N443	N444	N445	N446	N447	N448	N449	N450	N451	N452	N453	N454	N455	N456	N457	N458	N459	N460	N461	N462	N463	N464	N465	N466	N467	N468	N469	N470	N471	N472	N473	N474	N475	N476	N477	N478	N479	N480	N481	N482	N483	N484	N485	N486	N487	N488	N489	N490	N491	N492	N493	N494	N495	N496	N497	N498	N499	N500	N501	N502	N503	N504	N505	N506	N507	N508	N509	N510	N511	N512	N513	N514	N515	N516	N517	N518	N519	N520	N521	N522	N523</
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[illegible][illegible]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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[illegible]

1	96.5	480	5958	U1328	5/0680	091611	32	73	23	PLP	00	102	43	30	8	03	2	11	0
												106	149						
													AVC						

148	012 30 15	7	012 30	0	012 30
148	012 30 15	7	012 30	0	012 30

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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A vertical rectangular sheet of white paper featuring a light gray grid pattern. The grid consists of evenly spaced horizontal and vertical lines, creating a series of small squares across the entire page. There are no margins, text, or other markings on the paper.

[illegible][illegible]

Location Orientation 位置·方向, T: 顶部 Top, B: 底部 Bottom, L: 压延方向 Longitudinal, C: 垂直方向 Transversus, Z: 压延方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis

Q1. 樣品厚度 Gauge Length, A: 50mm 平形樣片 Rectangular, B: 50mm 平形樣片 Round, C: 70mm 平形樣片 Rectangular, D: 70mm 平形樣片 Round, E: 80mm 平形樣片 Rectangular, F: 80mm 平形樣片 Round, G: 20mm, H: 2', I: 8', J: 5.55 $\sqrt{S_0}$, K: 4 $\sqrt{S_0}$

※2

※3 R.A.: 破片 Reduction of Area, Y.R.: 降比 Yield Ratio, 4 合格 Acceptable, 5 模範計法 FULL SIZE, 2: 2.5mm, 3: 3.3mm, 6: 6.67mm, 7: 7.5mm, 8: 8.67mm, 9: 破品板厚 Plate Thickness, ※6 P: 樣品分析 Product Analysis,

表7

N: 状態	Normalized	Q: 投入し	Quenched	T: 焼戻し	Tempered	C R: Controlled Rolled	N I C: NIC Process/TMC Process	C L C: CLC Process/TMC Process	A R: As Rolled	T M R: TMR Process/TMC Process	N R: Normalizing Rolled
H: 熱処理面から Shear Fracture	C P: 粒径低減率 Crystallinity Fracture	L B: 燃焼出 Lateral Expansion	A G S: ホースゲイト硬度 Austenite Grain Size	S R: ストレスリリーフ Post Weld Heat Treatment	F e m i t e Grain Size	S R: Stress Relieved					

上記注文品は御指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi

一ターリプールクに對する其の關係

GROUP MANAGER
 PLATE QUALITY CONTROL DEPT.
 KIMTSI WORKS

1

B

注 文 者 : HANWA CO., LTD.
SHIPPER

注文者照会番号 : 228-38561010
REFERENCE No.

契約番号 : 6-831-H1-5-0-A102
CONTRACT No.

商 品 名 : HOT ROLLED STEEL PLATES
COMMODITY

規 格 : ASME SA-516 GRADE 70-E04-A05
SPECIFICATION

文 書 番 号 :
DOCUMENT No.

需 要 家 : EDMONTON EXCHANGER GROUP OF C-
CUSTOMER

新日本製鐵株式会社
Nippon Steel Corporation

鋼 材 検 査 証 明 書
INSPECTION CERTIFICATE

本 社 : 〒100-8071 東京都千代田区大手町二丁目6番3号
HEAD OFFICE : 2-6-3, OTEMACHI, CHIYODA-KU, TOKYO 100-8071, JAPAN
君津製鐵所 : 〒299-1141 千葉県君津市君津1番地
KIMITSU WORKS : 1, KIMITSU, KIMITSU-CITY, CHIBA-PREF, 299-1141, JAPAN

証明書番号 : P-86490
CERTIFICATE No.

発行年月日 : 2006-11-29
DATE OF ISSUE

1001
2**DM*****
*****E*****
F3001P01QD E07

(AS PER EN 10204 CERTIFICATE ON MATERIAL
TESTS 3.1)
需 要 家 管 理 番 号 :
CUSTOMERS CONTROL No.

寸 法 DIMENSION MM	質 量 MASS KG	製品番号 CAST No. TEST No.	引 張 試 験 TENSILE TEST Y.S. 0.2% KSI T.S. KSI 伸 び E.L. % 断面収縮 R.A. %	衝撃試験 IMPACT TEST 2V - 50F F.T. LB 平均値 A.V.G. EACH	HBW	化 学 成 分 CHEMICAL COMPOSITION %											
						C	Si	Mn	P	S	CU	Ni	Cr	Mo	Nb	V	Ti
1"X96.5"X480"	1	5958 G7189 01325	52 75 29	109 102 106	146 149 149 AVG	13.38 3.6 1.48	0.33 0.005 0.005	0.15 0.005 0.005	0.009 0.005 0.005	0.005 0.005 0.005	0.005 0.005 0.005	0.005 0.005 0.005	0.005 0.005 0.005	0.005 0.005 0.005	0.005 0.005 0.005	0.005 0.005 0.005	0.005 0.005 0.005
1"X96.5"X480"	1	5958 G7189 01328	52 75 33	110 150 151 AVG	149 153 151 AVG	13.38 3.6 1.51	0.33 0.005 0.005	0.15 0.005 0.005	0.009 0.005 0.005	0.005 0.005 0.005	0.005 0.005 0.005	0.005 0.005 0.005	0.005 0.005 0.005	0.005 0.005 0.005	0.005 0.005 0.005	0.005 0.005 0.005	0.005 0.005 0.005

注 釈 NOTES 1. 位置 Orientation 位置・方向, T: 頂部 Top, B: 底部 Bottom, L: 延延方向 Longitudinal, C: 垂直方向 Transverse, Z: 板厚方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis
2. C.L. 板厚公差 Gauge Length, A: 50mm 平行試験片 Rectangular, B: 50mm 丸形試験片 Round, C: 70mm 平行試験片 Rectangular, D: 70mm 丸形試験片 Round, E: 80mm 平行試験片 Rectangular, F: 80mm 丸形試験片 Round, G: 200mm, H: 2.1: 8", J: 5.65/8", K: 4.4/50
3. R.A.: 絞り Reduction of Area, Y.R.: 降伏比 Yield Ratio, A: 合格 Acceptable, 5. J.P.: 板厚公差 FULL SIZE, 2: 2.5mm, 3: 3.3mm, 4: 3.3mm, 5: 5.0mm, 6: 6.67mm, 7: 7.5mm, 8: 6.7mm, 9: 製品板厚 Plate Thickness, 6. P: 製品分析 Product Analysis, 7. N: 焼硬 Normalized, Q: 焼入れ Quenched, T: 焼戻し Tempered, C.R.: Controlled Rolled, N.I.C.: NIC Process/TMC Process, C.L.C.: C.L.C. Process/TMC Process, A.R.: As Rolled, T.M.R.: TMR Process/TMC Process, N.R.: Normalizing Rolled, S.H.: 延延面 Shear Fracture, C.F.: 板厚底面 Fracture, L.E.: 横断面 Lateral Expansion, A.G.S.: オーステナイト相度 Austenite Grain Size, F.G.S.: フェライト相度 Ferrite Grain Size, S.R.: Stress Relieved/Post Weld Heat Treatment
温度 Temperature 単位 Unit: °C

上記注文品は鋼指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。
WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi
君津製鐵所 厚板管理グループリーダー
GROUP MANAGER
PLATE QUALITY CONTROL DEPT.
KIMITSU WORKS





DILLINGER HÜTTE

Erklärungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/bestellinfo)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		296865-12.04.08	333390-002	1/...
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body DH	A06 Purchaser Final receiver	A07.1 No. E10473-J1010-LG A07.2 No.		
B02 Steel design. B03 Any suppl. requirements		EDMONTON STEEL, EDMON EDMONTON STEEL, EDMON		
SA516-70 ASME-2A:07 DIL-HUE-2-R24-2007-11-20				



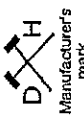
14346

B01-B99 Description of the product

B14 Item No.	B08 Number of pieces	B09 Thickness	B10 Width INCH	B11 Length	B12 Theoretical mass KG	B04 Product delivery condition	B07.2 Heat No.	B07.1 Reford plate No./ Test No.	A09 Purchaser article number
01	1	1,0000 X	96,50000 X	480,00000 X	5959	N	319152	84950-01	1
01	1	1,0000 X	96,50000 X	480,00000 X	5959	N	319152	84950-02	1
01	1	1,0000 X	96,50000 X	480,00000 X	5959	N	319152	84952-01	1
01	1	1,0000 X	96,50000 X	480,00000 X	5959	N	319152	84954-02	1
01	1	1,0000 X	96,50000 X	480,00000 X	5959	N	319152	84957-02	1
01	1	1,0000 X	96,50000 X	480,00000 X	5959	N	319154	84931-01	1
01	1	1,0000 X	96,50000 X	480,00000 X	5959	N	319154	84931-02	1
01	1	1,0000 X	96,50000 X	480,00000 X	5959	N	319154	84932-01	1
01	1	1,0000 X	96,50000 X	480,00000 X	5959	N	319154	84933-02	1
01	1	1,0000 X	96,50000 X	480,00000 X	5959	N	319154	84934-02	1
**	10				59590				
02	1	1,0000 X	120,50000 X	480,00000 X	7440	N	49076	99694-01	2
02	1	1,0000 X	120,50000 X	480,00000 X	7440	N	319154	84928-01	2
02	1	1,0000 X	120,50000 X	480,00000 X	7440	N	319154	84928-02	2
02	1	1,0000 X	120,50000 X	480,00000 X	7440	N	319154	84929-01	2
02	1	1,0000 X	120,50000 X	480,00000 X	7440	N	319644	97328-01	2
02	1	1,0000 X	120,50000 X	480,00000 X	7440	N	319644	97328-02	2
02	1	1,0000 X	120,50000 X	480,00000 X	7440	N	319644	97328-03	2
02	1	1,0000 X	120,50000 X	480,00000 X	7440	N	319644	97329-01	2
02	1	1,0000 X	120,50000 X	480,00000 X	7440	N	319644	97329-02	2
02	1	1,0000 X	120,50000 X	480,00000 X	7440	N	319644	97329-03	2
02	1	1,0000 X	120,50000 X	480,00000 X	7440	N	319644	97330-01	2
02	1	1,0000 X	120,50000 X	480,00000 X	7440	N	319644	97330-03	2

A04 201202Z03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001



B. MUELLER
Test House Manager

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department

Inspector's stamp Date 14.04.08

KW 1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		296855-12.04.08	333390-002	2/...
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body DH	A06 Purchaser Final receiver	A07.1 No.	A07.2 No.	
		EDMONTON STEEL, EDMON	E10473-J1010-IG	
		EDMONTON STEEL, EDMON		HOT ROLLED PLATES

B02 Steel design. SA516-70

B03 Any suppl. ASME-2A:07

requirements DIL-HUE-2:R24-2007-11-20

B01-B99 Description of the product

B14 Item No.	B08 Number of pieces	B09 Thickness	B10 Width	B11 Length	B12 Theoretical mass	B04 Product delivery condition	B07.2 Heat No.	B07.1 Rolled plate No./ Test No.	A09 Purchaser article number
			INCH		KG				
02	1	1,0000 x	120,50000 x	480,00000	7440	N	319644	97331-01	2
02	1	1,0000 x	120,50000 x	480,00000	7440	N	319644	97331-02	2
02	1	1,0000 x	120,50000 x	480,00000	7440	N	319644	97331-03	2
**	15				111600				
03	1	1,3750 x	97,00000 x	480,00000	8235	N	319646	97323-01	3
03	1	1,3750 x	97,00000 x	480,00000	8235	N	319646	97323-02	3
**	2				16470				
***	27				187660				

B04 Product delivery condition

ITEM NO.: 01-03

N: HT: 1670 GR.F +36 -27 GR.F

SOAKING TIME TO ATTAIN THE TARGET TEMPERATURE OVER THE WHOLE SECTION: 1-1,75 MIN/MM (25-45 MIN/INCH)

COOLING IN STILL AIR

B06 Marking of the product

ITEM NO.: 01-03

STEEL DESIGNATION SA516 70 MTLTV SA516 50 MTLTV

HEAT NO. / TRADEMARK / ROLLED PLATE NO.-TEST NO. / INSPECTOR'S STAMP

A04	201202Z03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.		A01
	QM-System: Certification as per ISO 9001	AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	
Manufacturer's mark	B. MUELLER Test House Manager	Inspector's stamp AHB	Date 14.04.08 KW 1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004 INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991 MATERIAL TEST REPORT (MTR)		A10 Advice of dispatch No./ Date of dispatch 296865-12.04.08	A08/ Manufacturer's order/ A03 Certificate No. 333390-002	Sheet 3/...
A05 Established inspecting body DH		A07.1 No. E10473-J1010-LG A07.2 No.		
B02/ Steel design. SA516-70		EDMONTON STEEL, EDMON		
B03 Any suppl. requirements		ASME-2A:07 DIL-HUE-2:R24-2007-11-20		
B06 Purchaser Final receiver		EDMONTON STEEL, EDMON		

C10-C29 Tensile test

B14 Item No.	B07.2 Heat No.	B07.1 Roll plate/ Test No.	B05 Reference (heat) treatment	C01 C02/ C03 C01 Temp. GR.F	C10 C11 KSI RP02	C12 RM	C13	A % LO=8IN	A % LO=2IN	C14-C15
01	319152	84950	K1 Q	RT	48,9	74,2		28,9		
01	319152	84952	K1 Q	RT	49,7	74,4		30,4		
01	319152	84954	K1 Q	RT	50,3	74,4		29,9		
01	319152	84957	K1 Q	RT	50,3	74,8		28,9		
01	319154	84931	K1 Q	RT	50,0	74,2		28,9		
01	319154	84932	K1 Q	RT	50,0	73,5		29,4		
01	319154	84933	K1 Q	RT	48,3	73,5		32,9		
01	319154	84934	K1 Q	RT	48,4	73,4		30,4		
02	49076	99694	K1 Q	RT	47,4	71,9		32,4		
02	319154	84928	K1 Q	RT	50,8	75,0		29,9		
02	319154	84929	K1 Q	RT	50,6	75,5		28,4		
02	319644	97328	K1 Q	RT	50,3	74,1		31,4		
02	319644	97329	K1 Q	RT	49,6	74,1		29,4		
02	319644	97330	K1 Q	RT	50,0	73,7		31,4		
02	319644	97331	K1 Q	RT	49,6	74,4		34,4		
03	319646	97323	K1 QV	RT	50,0	76,6			33,9	

C30-C39 Hardness test

B14 Item No.	B07.2 Heat No.	B07.1 Roll plate/ Test No.	B05 Reference (heat) treatment	C01 C02/ C03 C01 Temp. GR.F	C33 Testing method	C35 C31 Individual values	C32 Mean value
01	319152	84950	K1 O	RT HBW 10/3000	HB 148	147	147
01	319152	84952	K1 O	RT HBW 10/3000	HB 147	145	147
01	319152	84954	K1 O	RT HBW 10/3000	HB 146	148	147
01	319152	84957	K1 O	RT HBW 10/3000	HB 147	148	147

A04 Z01/Z02/Z03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001

AHB

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department

Manufacturer's mark

B. MUELLER
Test House Manager

Inspector's stamp

Date 14.04.08

KW 1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch	A08/ Manufacturer's order/ A03 Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		296865-12.04.08	333390-002	4/...
MATERIAL TEST REPORT (MTR)		B01 Product HOT ROLLED PLATES		
A05 Established inspecting body	A06 Purchaser	A07.1 No.	A07.2 No.	
DH	Final receiver	EDMONTON STEEL, EDMON	EDMONTON STEEL, EDMON	
B02/ Steel design. SA516-70				
B03 Any suppl. ASME-2A:07				
requirements DIL-HUE-2:R24-2007-11-20				

C30-C39 Hardness test

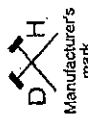
B14 Item No.	B07.2 Heat No.	B07.1 Repl. plate/ Test No.	B05 Reference (heat) treatment	C01	C02/C01	C03 Temp. GR.F	C33 Testing method	C35 Individual values	C32 Mean value
01	319154	84931		K1	O	RT	HBW 10/3000	HB 147	146
01	319154	84932		K1	O	RT	HBW 10/3000	HB 146	145
01	319154	84933		K1	O	RT	HBW 10/3000	HB 149	146
01	319154	84934		K1	O	RT	HBW 10/3000	HB 146	146
02	49076	99694		K1	O	RT	HBW 10/3000	HB 141	141
02	319154	84928		K1	O	RT	HBW 10/3000	HB 146	144
02	319154	84929		K1	O	RT	HBW 10/3000	HB 148	146
02	319644	97328		K1	O	RT	HBW 10/3000	HB 142	142
02	319644	97329		K1	O	RT	HBW 10/3000	HB 143	144
02	319644	97330		K1	O	RT	HBW 10/3000	HB 142	143
02	319644	97331		K1	O	RT	HBW 10/3000	HB 145	144
03	319646	97323		K1	O	RT	HBW 10/3000	HB 148	147

C40-C49 Impact test

B14 Item No.	B07.2 Heat No.	B07.1 Repl. plate/ Test No.	B05 Reference (heat) treatment	C01	C02/ C01	C03 Temp. GR.F	C41 Width of test piece	C40 Type of test piece	C44 Testing method	C46 Energy	C45 Individual values AV=FT.LBF	C43 Mean value
01	319152	84950		K1	LV	-51		CHP-V	CHP-V	AV 83	98	91
01	319152	84952		K1	LV	-51		CHP-V	CHP-V	AV 127	97	102
01	319152	84954		K1	LV	-51		CHP-V	CHP-V	AV 94	87	99
01	319152	84957		K1	LV	-51		CHP-V	CHP-V	AV 108	51	97
01	319154	84931		K1	LV	-51		CHP-V	CHP-V	AV 111	96	100
01	319154	84932		K1	LV	-51		CHP-V	CHP-V	AV 96	113	103
01	319154	84933		K1	LV	-51		CHP-V	CHP-V	AV 137	104	106
01	319154	84934		K1	LV	-51		CHP-V	CHP-V	AV 83	132	104
02	49076	99694		K1	LV	-51		CHP-V	CHP-V	AV 136	139	143

A04 Z01Z02Z03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001



AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar

B. MUELLER
Test House Manager

Inspector's stamp

Date 14.04.08

KW 1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004 INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991 MATERIAL TEST REPORT (MTR)		A10 Advice of dispatch No./ Date of dispatch 296865-12.04.08		A08/ Manufacturer's order/ A03 Certificate No. 333390-002		Sheet 5/...
A05 Established inspecting body DH		A06 Purchaser Final receiver		B01 Product HOT ROLLED PLATES		
B02/ Steel design. B03 Any suppl. requirements		SA516-70 ASME-2A:07 DIL-HUE-2:R24-2007-11-20				

C40-C49 Impact test

B14	B07.2	B07.1	B05	C01	C02/	C03	C41	C40	C44	C46	C45	C42	C43
Item	Heat No.	Ref. plate/ Test No.	Reference (heat) treatment		C01	Temp. GR.F	Width of test piece	Type of test piece	Testing method	Energy	Individual values AV=FT.LBF	Mean value	
02	319154	84928		K1	LV	-51		CHP-V			AV 136	152	109
02	319154	84929		K1	LV	-51		CHP-V			AV 92	122	116
02	319644	97328		K1	LV	-51		CHP-V			AV 122	113	126
02	319644	97329		K1	LV	-51		CHP-V			AV 122	117	137
02	319644	97330		K1	LV	-51		CHP-V			AV 100	104	117
02	319644	97331		K1	LV	-51		CHP-V			AV 142	120	150
03	319646	97323		K1	LV	-51		CHP-V			AV 100	103	113

C70-C99 Chemical composition % - Heat analysis

B07.2	Heat	C70	C	SI	MN	P	S	N	CU	MO	NI	CR	V	NB	SN	TI
49076	Y	Y	0,177	0,380	1,14	0,007	0,007	0,0007	0,015	0,015	0,047	0,030	0,000	0,000	0,001	0,001
319152	Y	Y	0,175	0,376	1,19	0,009	0,009	0,0013	0,031	0,009	0,025	0,027	0,000	0,000	0,002	0,002
319154	Y	Y	0,169	0,350	1,18	0,010	0,010	0,0019	0,018	0,013	0,027	0,036	0,001	0,000	0,001	0,002
319644	Y	Y	0,181	0,342	1,18	0,010	0,010	0,0009	0,034	0,011	0,040	0,064	0,000	0,000	0,001	0,002
319646	Y	Y	0,188	0,348	1,17	0,008	0,008	0,0006	0,054	0,007	0,066	0,023	0,000	0,000	0,001	0,002
B07.2	Heat	C70	B	CA	AL-T											
49076	Y	Y	0,0001	0,0018	0,037											
319152	Y	Y	0,0002	0,0025	0,039											
319154	Y	Y	0,0002	0,0019	0,035											
319644	Y	Y	0,0002	0,0021	0,040											
319646	Y	Y	0,0002	0,0019	0,036											

Z01/2020/2003 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001



B. Müller

B. MUELLER

Test House Manager

A01

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department

Inspector's stamp

Date 14.04.08

KW

1



Manufacturer's mark



DILLINGER HÜTTE

Erklärungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch		A08/ Manufacturer's order/ A03 Certificate No.		Sheet	
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		296865-12.04.08		333390-002		6/...	
MATERIAL TEST REPORT (MTR)				B01 Product			
A05 Established inspecting body		A06 Purchaser		A07.1 No.		A07.2 No.	
DH		Final receiver		EDMONTON STEEL, EDMON		EDMONTON STEEL, EDMON	
B02/ Steel design.		SAS16-70		A07.1 No.		E10473-J1010-LG	
B03 Any suppl.		ASME-2A:07		A07.2 No.			
requirements		DIL-HUE-2:R24-2007-11-20					

C94 Heat analysis Carbon equivalent / Alloying restrictions

Heat	FO-02=	FO-55=	FO-78=	FO-91=	FO-91=
B07.2					
Heat					
49076	0,38	0,38	0,11	0,05	6,4
319152	0,38	0,38	0,09	0,04	6,8
319154	0,38	0,38	0,09	0,05	7,0
319644	0,40	0,40	0,15	0,08	6,5
319646	0,40	0,40	0,15	0,03	6,2

C95 Ladle treatment

ITEM NO.: 01-03

HEAT OF THE INDICATED ITEM: VACUUM DEGASSED / SULPHIDE SHAPE CONTROL

C70-C99 Chemical composition % - Product analysis

Heat	Test No.	C	SI	MN	P	S	N	CU	MO	NI	CR	V	NB	SN	TI
B07.2	B07.1														
Heat															
319152	84954	K1	0,174	0,371	1,17	0,009	0,0013	0,0060	0,029	0,025	0,026	0,001	0,000	0,002	0,002
319154	84933	K1	0,170	0,353	1,17	0,007	0,0013	0,0071	0,017	0,029	0,035	0,001	0,000	0,000	0,002
319644	97331	K1	0,177	0,348	1,17	0,010	0,0010	0,0057	0,033	0,041	0,085	0,001	0,000	0,002	0,002
319646	97323	K1	0,186	0,355	1,16	0,008	0,0010	0,0056	0,053	0,065	0,023	0,000	0,000	0,000	0,002

B07.2	B07.1														
Heat															
319152	84954	K1	0,0000	0,0021	0,037										
319154	84933	K1	0,0000	0,0023	0,034										
319644	97331	K1	0,0001	0,0024	0,038										
319646	97323	K1	0,0000	0,0019	0,036										

2017020203 We hereby certify, that the above mentioned materials have been delivered in accordance

with the terms of order.

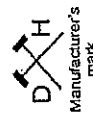
QM-System: Certification as per ISO 9001

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
inspection department

ADB

B. MUELLER
Test House Manager

Inspector's stamp Date 14.04.08 KW 1



Manufacturer's mark



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch 296865-12.04.08	A08/ Manufacturer's order/ A03 Certificate No. 333390-002	Sheet 7
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991				
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body DH	A06 Purchaser Final receiver	A07.1 No. EDMONTON STEEL, EDMON	A07.2 No. EDMONTON STEEL, EDMON	B01 Product HOT ROLLED PLATES
B02 Steel design. SA516-70				
B03 Any suppl. ASME-2A:07				
requirements DIL-HUE-2:R24-2007-11-20				

C94 Product analysis Carbon equivalent / Alloying restrictions

B07.2 B07.1		C01	
Heat	Test No.	K1 FO-02=	FO-55=
319152	84954	0,38	0,09
319154	84933	0,38	0,09
319644	97331	0,40	0,17
319646	97323	0,39	0,15

C94 Carbon equivalent formula / Alloying restrictions

FO-02 = $C + (Mn/6) + (Cr+Mo+V) / 5 + (Ni+Cu) / 15$
FO-55 = $Cu+Mo+Ni+Cr$
FO-78 = $Cr+Mo$
FO-91 = Mn/C

D01 Marking and identification, surface appearance, shape and dimensional properties

ITEM NO.: 01-03

RESULT OF MARKING, SURFACE, SHAPE AND DIMENSIONS: NO REMARKS

SURFACE AS PER ASME-SA20

THICKNESS AS PER ASME-SA20

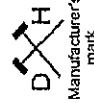
LENGTH AND WIDTH AS PER ASME-SA20

FLATNESS AS PER 1/2-ASME-SA20



A04 2017/202003: We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001



AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department

A01

B. MUELLER
Test House Manager

Inspector's stamp Date 14.04.08

KW

1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch	A08 Manufacturer's order/ A03 Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		312133-20.08.08	341027-001	1/...
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body	A06 Purchaser	A07.1 No. E10494-J1010-LG		
DH	Final receiver	A07.2 No. EDMONTON STEEL, EDMONTON		
B02/ Steel design. SA516-70		B01 Product		
B03 Any suppl. ASME-2A:04		HOT ROLLED PLATES		
requirements DIL-HUE-2:R24-2007-11-20		SA20-S5		



14639

B01-B99 Description of the product

B14 Item No.	B08 Number of pieces	B09 Thickness	B10 Width INCH	B11 Length	B12 Theoretical mass KG	B04 Product delivery condition	B07.2 Heat No.	B07.1 Rolled plate No./ Test No.	A09 Purchaser article number
01	1	1,0000 X	96,50000 X	480,00000 X	5959 N	N	325466	01777-01	
01	1	1,0000 X	96,50000 X	480,00000 X	5959 N	N	325466	01781-01	
**	2				11918				
02	1	1,0000 X	120,50000 X	480,00000 X	7440 N	N	325469	01782-01	
02	1	1,0000 X	120,50000 X	480,00000 X	7440 N	N	325469	01782-02	
02	1	1,0000 X	120,50000 X	480,00000 X	7440 N	N	325469	01795-01	
02	1	1,0000 X	120,50000 X	480,00000 X	7440 N	N	325469	01795-02	
02	1	1,0000 X	120,50000 X	480,00000 X	7440 N	N	325469	01795-03	
02	1	1,0000 X	120,50000 X	480,00000 X	7440 N	N	325469	01796-01	
02	1	1,0000 X	120,50000 X	480,00000 X	7440 N	N	325469	01796-02	
02	1	1,0000 X	120,50000 X	480,00000 X	7440 N	N	325469	01796-03	
**	8				59520				
**	10				71438				

B04 Product delivery condition

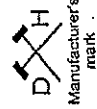
ITEM NO.: 01-02
 N: HT: 1670 GR.F +36 -27 GR.F
 SOAKING TIME TO ATTAIN THE TARGET TEMPERATURE OVER THE WHOLE SECTION: 1-1,75 MIN/MM (25-45 MIN/INCH)
 COOLING IN STILL AIR

B06 Marking of the product

ITEM NO.: 01-02
 STEEL DESIGNATION SA516 70 MLTV SA516 60 MLTV
 HEAT NO. / TRADEMARK / ROLLED PLATE NO.-TEST NO. / INSPECTOR'S STAMP

2017/02/03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001



A01
 AG der Dillinger Hüttenwerke
 Postfach 1580, D-66748 Dillingen/Saar
 Inspection department



B. MUELLER
 Test House Manager

Inspector's stamp

Date 21.08.08

KW

1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch	A08 Manufacturer's order/ Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		312133-20.08.08	341027-001	2/...
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body DH		B01 Product HOT ROLLED PLATES		
A06 Purchaser EDMONTON STEEL, EDMON		A07.1 No. E10494-J1010-LG		
Final receiver EDMONTON STEEL, EDMON		A07.2 No.		
B02/ Steel design. SA516-70		SA20-SS		
B03 Any suppl. requirements		ASME-2A:04 DIL-HUE-2:R24-2007-11-20		

C10-C29 Tensile test

B14 Item No.	B07.2 Heat No.	B07.1 Rol./plate/ Test No.	B05 Reference (heat) treatment	C01 C02/ C03 C01	C03 Temp. GR.F	C10 C11 KSI RP02	C12 RM	C13 A % L0=8IN	C14-C15
01	325466	01777		K1 Q	RT	46,1	73,1	28,9	
01	325466	01781		K1 Q	RT	48,1	73,4	29,9	
02	325469	01782		K1 Q	RT	48,6	73,8	28,0	
02	325469	01795		K1 Q	RT	49,2	73,8	28,9	
02	325469	01796		K1 Q	RT	47,3	73,4	30,4	

C30-C39 Hardness test

B14 Item No.	B07.2 Heat No.	B07.1 Rol./plate/ Test No.	B05 Reference (heat) treatment	C01 C02/ C01	C03 Temp. GR.F	C33 Testing method	C35 C31 Individual values	C32 Mean value
01	325466	01777		K1 O	RT	HBW 10/3000	HB 155	153
01	325466	01781		K1 O	RT	HBW 10/3000	HB 155	148
02	325469	01782		K1 O	RT	HBW 10/3000	HB 147	148
02	325469	01795		K1 O	RT	HBW 10/3000	HB 150	146
02	325469	01796		K1 O	RT	HBW 10/3000	HB 145	149
							HB 145	144

C40-C49 Impact test

B14 Item No.	B07.2 Heat No.	B07.1 Rol./plate/ Test No.	B05 Reference (heat) treatment	C01 C02/ C01	C03 Temp. GR.F	C41 Width of test piece	C40 Type of test piece	C44 Testing method	C45 Energy	C46 Individual values AV=FT.LBF	C43 Mean value
01	325466	01777		K1 LV	-51		CHP-V	CHP-V	AV 94	83	77
01	325466	01781		K1 LV	-51		CHP-V	CHP-V	AV 124	99	111
02	325469	01782		K1 LV	-51		CHP-V	CHP-V	AV 90	91	114
02	325469	01795		K1 LV	-51		CHP-V	CHP-V	AV 67	103	105
02	325469	01796		K1 LV	-51		CHP-V	CHP-V	AV 106	108	109

2010202/203 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001



AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department

B. Mueller
B. MUELLER
Test House Manager

Inspector's stamp Date 21.08.08

KW 1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)		A10 Advice of dispatch No./ Date of dispatch		A08/ Manufacturer's order/ A03 Certificate No.		Sheet
A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		312133-20-08.08		341027-001		3 / ...
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991				B01 Product		
MATERIAL TEST REPORT (MTR)				HOT ROLLED PLATES		
A05 Established inspecting body		A06 Purchaser		A07.1 No.		
DH		Final receiver		EDMONTON STEEL, EDMON		
				A07.2 No.		
				EDMONTON STEEL, EDMON		
				SA20-S5		
B02/ Steel design.		SA516-70				
B03 Any suppl.		ASME-2A: 04				
requirements		DIL-HUE-2: R24-2007-11-20				

C70-C99 Chemical composition % - Heat analysis															
	C70	C	Si	Mn	P	S	N	CU	MO	NI	CR	V	NB	SN	TI
B07.2 Heat	Y	0.177	0.365	1.17	0.009	0.0019	0.0051	0.040	0.010	0.049	0.029	0.004	0.000	0.001	0.001
325466	Y	0.183	0.360	1.20	0.007	0.0017	0.0056	0.043	0.010	0.039	0.034	0.002	0.000	0.002	0.002
B07.2 Heat	Y	0.0001	0.0027	0.037											
325466	Y	0.0001	0.0027	0.036											

C94 Heat analysis Carbon equivalent / Alloying restrictions													
	FO-02=	FO-55=	FO-78=	FO-91=									
B07.2 Heat	0.39	0.13	0.04	6.6									
325466	0.40	0.13	0.04	6.6									
325469													

C95 Ladle treatment													
	FO-02=	FO-55=	FO-78=	FO-91=									
B07.2 Heat	0.39	0.13	0.04	6.6									
325466	0.40	0.13	0.04	6.6									
325469													

C70-C99 Chemical composition % - Product analysis															
	C01	C	Si	Mn	P	S	N	CU	MO	NI	CR	V	NB	SN	TI
B07.2 Heat	K1	0.177	0.371	1.16	0.009	0.0023	0.0057	0.040	0.010	0.048	0.029	0.004	0.000	0.001	0.001
325466	K1	0.178	0.369	1.18	0.007	0.0016	0.0053	0.042	0.010	0.036	0.034	0.002	0.000	0.000	0.001
325469															
B07.2 Heat	K1	0.0001	0.0025	0.036											
325466	K1	0.0000	0.0021	0.036											
325469															

ITEM NO.: 01-02		HEAT OF THE INDICATED ITEM: VACUUM DEGASSED / SULPHIDE SHAPE CONTROL	
			
A04		A01	
Z01Z02Z03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.		AG der Dillinger Hüttenwerke	
QM-System: Certification as per ISO 9001		Postfach 1580, D-66748 Dillingen/Saar	
		Inspection department	
		Inspector's stamp	
		Date 21.08.08	
		KW 1	

B.

注 文 者 : HANWA CO., LTD.
注文者照会番号

REFERENCE No. : 228-38501030
契約番号

CONTRACT No. : 0-831-H1-5-8-A101
商品名

COMMOITY : HOT ROLLED STEEL PLATES
規格

SPECIFICATION : ASME SA-516 GRADE 70-E07-A08
文 章 番 号

DOCUMENT No. :
需要家 顧客

新日本製鐵株式會社
Nippon Steel Corporation

鋼材検査証明書 INSPECTION CERTIFICATE

(AS PER EN 10204 CERTIFICATE ON MATERIAL TESTS 3.1)

需要家管理番号 :
CUSTOMER'S CONTROL No.

本 社 : 〒100-8071 東京都千代田区丸の内二丁目6番号
HEAD OFFICE : 2-6-1, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8071, JAPAN
営業所 : 〒259-1141 千葉県習志野市習志野1番地
KIMITSU WORKS : 1, KIMITSU, KUNITSU-CITY, CHIBA-PREF. 259-1141, JAPAN

証明書番号 : P-08348
発行年月日 : 2010-08-23
頁数 : 55

220DM*****
*****CEW***
E3001P07Q0 E07

寸 法	DIMENSION mm, inch, feet	数量 QUANTITY	重量 MASS KG	製品番号 CAST No. TEST No.	引張試験 TENSILE TEST Y.S. 0.2% KSI	衝撃試験 IMPACT TEST 2V-50F FT-LB AVG EACH	化学成分 CHEMICAL COMPOSITION %												
								C	Si	Mn	P	S	Cr	Ni	Mo	Nb	V	TAI	Co
0.75' X 120.5' X 480'		2	11.58	G5410FROM 38555	54	76	30	16	37	144	5	1	2	2	0	0	0	0	0
				771910715				153											
				771910715															
1' X 120.5' X 480'		1	7.442	G5408TESTED-PL 38515	52	75	34	16	37	144	9	1	2	2	3	0	12	0	41
				771910801				153											
				771910801															
1' X 120.5' X 480'		1	7.442	G5408 38515	52	75	34	16	37	144	9	1	2	2	3	0	12	0	41
				771910801				153											
				771910801															

注 記 NOTES [表1] Location Orientation 位置 - 方向. T: 頂面 Top, B: 底面 Bottom, L: 長さ方向 Longitudinal, C: 幅方向 Transverse, Z: 断面方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis
[表2] CL: 板厚面長方形 Rectangular, A: 50mm 厚板長方形 Rectangular, B: 50mm 厚板長方形 Rectangular, C: 70mm 厚板長方形 Rectangular, D: 70mm 厚板長方形 Rectangular, E: 80mm 厚板長方形 Rectangular, F: 80mm 厚板長方形 Rectangular, G: 80mm 厚板長方形 Rectangular, H: 80mm 厚板長方形 Rectangular, I: 80mm 厚板長方形 Rectangular, J: 80mm 厚板長方形 Rectangular, K: 4/50
[表3] RA: 板厚面長方形 Rectangular, A: 50mm 厚板長方形 Rectangular, B: 50mm 厚板長方形 Rectangular, C: 70mm 厚板長方形 Rectangular, D: 70mm 厚板長方形 Rectangular, E: 80mm 厚板長方形 Rectangular, F: 80mm 厚板長方形 Rectangular, G: 80mm 厚板長方形 Rectangular, H: 80mm 厚板長方形 Rectangular, I: 80mm 厚板長方形 Rectangular, J: 80mm 厚板長方形 Rectangular, K: 4/50
[表4] A: 合格 Acceptable, [表5] F: 板厚面長方形 Rectangular, A: 50mm 厚板長方形 Rectangular, B: 50mm 厚板長方形 Rectangular, C: 70mm 厚板長方形 Rectangular, D: 70mm 厚板長方形 Rectangular, E: 80mm 厚板長方形 Rectangular, F: 80mm 厚板長方形 Rectangular, G: 80mm 厚板長方形 Rectangular, H: 80mm 厚板長方形 Rectangular, I: 80mm 厚板長方形 Rectangular, J: 80mm 厚板長方形 Rectangular, K: 4/50
[表6] C: 板厚面長方形 Rectangular, A: 50mm 厚板長方形 Rectangular, B: 50mm 厚板長方形 Rectangular, C: 70mm 厚板長方形 Rectangular, D: 70mm 厚板長方形 Rectangular, E: 80mm 厚板長方形 Rectangular, F: 80mm 厚板長方形 Rectangular, G: 80mm 厚板長方形 Rectangular, H: 80mm 厚板長方形 Rectangular, I: 80mm 厚板長方形 Rectangular, J: 80mm 厚板長方形 Rectangular, K: 4/50
[表7] N: 板厚面長方形 Rectangular, A: 50mm 厚板長方形 Rectangular, B: 50mm 厚板長方形 Rectangular, C: 70mm 厚板長方形 Rectangular, D: 70mm 厚板長方形 Rectangular, E: 80mm 厚板長方形 Rectangular, F: 80mm 厚板長方形 Rectangular, G: 80mm 厚板長方形 Rectangular, H: 80mm 厚板長方形 Rectangular, I: 80mm 厚板長方形 Rectangular, J: 80mm 厚板長方形 Rectangular, K: 4/50
[表8] SH: 板厚面長方形 Rectangular, A: 50mm 厚板長方形 Rectangular, B: 50mm 厚板長方形 Rectangular, C: 70mm 厚板長方形 Rectangular, D: 70mm 厚板長方形 Rectangular, E: 80mm 厚板長方形 Rectangular, F: 80mm 厚板長方形 Rectangular, G: 80mm 厚板長方形 Rectangular, H: 80mm 厚板長方形 Rectangular, I: 80mm 厚板長方形 Rectangular, J: 80mm 厚板長方形 Rectangular, K: 4/50

上記注文品は部指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.



J. Adachi
Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSU WORKS



本社 : 〒100-8071 東京都千代田区丸の内二丁目6番1号
 HEAD OFFICE : 2-6-1, MARUNOUCHI, CHIYODA-KU, TOKYO, 100-8071, JAPAN
 東京製造所 : 〒299-1141 千葉県君津市君津1番地
 KAMITSU WORKS : 1, KIMITSU, KAMITSU-CITY, CHIBA-PREF. 299-1141 JAPAN

Nippon Steel Corporation

鋼材検査証明書
INSPECTION CERTIFICATE

証明書番号: P-08348 PAGE: 57

発行年月日 : 2010-08-23

(AS PER EN 10204 CERTIFICATE ON MATERIAL TESTS 3.1)

需要家 : EDMONTON EXCHANGER GROUP OF C-
需要家 : CUSTOMER COMPANIES

CUSTOMER'S CONTROL NO.

[illegible]

Location Orientation 位置・方向, T: 顶部 Top, B: 底部 Bottom, L: 左 左方向 Longitudinal, C: 垂直方向 Transverse, Z: 垂直方向 Through Transverse, R: 45° 方向 45 Degree to the Longitudinal Axis

表2 C.L. 斑点巨蜥 Gage Length, A: 50mm 平形切片 Rectangular, B: 50mm 丸形切片 Round, C: 70mm 平形切片 Rectangular, D: 70mm 丸形切片 Round, E: 80mm 平形切片 Rectangular, F: 80mm 丸形切片 Round, G: 200mm H: 2° 1.0° I: 5.55° V: 1.0°

表 3	R.A.: 剝離 Reduction of Area, Y.R.: 降伏比, Yield Ratio,
表 4	A: 合格 Acceptable,
表 5	F: 鋼材寸法 FULL SIZE, 2: 2.5mm, 3: 3.3mm, 4: 4.23mm, 5: 5.0mm, 6: 5.67mm, 7: 7.5mm, 8: 8.67mm, 9: 鋼材厚 Plate Thickness: 表 6
	表 6
	P: 0.05mm, J: 0.03mm, S: 0.02mm, Z: 0.01mm, 鋼材厚 Plate Thickness: 表 6

表 7 N: 標準 Normalized, Q: 焼入れ Quenched, T: 焼戻し Tempered, CR: Controlled Rolled, N1C: NiC Process/TMC Process, CLC: CLC Process/TMC Process, AR: As Rolled, TMR: TMR Process/TMC Process, NR: Normalizing Rolled

H: 熱処理部 Shear Fracture, C.F.: 炭素当量, L.E.: 炭素当量, A.G.S.: オーステナイト相, Austenite Grain Size, F.G.S.: フェライト相, Ferrite Grain Size, S.R.: Stress Relieved Post Weld Heat Treatment

上記注文品は御指定の規格に従って製造され、その要求事項を満足していることを証明します。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

T. Adachi
Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSU WORKS
新栄製板株式会社品質管理部長
東京都板橋区新栄1-1-1

B

注 文 者 : HANWA CO., LTD.
SHIPPER

注文者組合番号 : 228-38501030
REFERENCE No.

契約番号 : 0-831-H1-5-8-A101
CONTRACT No.

商 品 名 : HOT ROLLED STEEL PLATES
COMMODITY

規 格 : ASME SA-516 GRADE 70-E07-A08
SPECIFICATION

文 書 番 号 : 需要家 : EDWINTON EXCHANGER GROUP OF C-
DOCUMENT No. CUSTOMER

新日本製鐵株式会社
Nippon Steel Corporation

鋼 材 検 査 証 明 書 INSPECTION CERTIFICATE

(AS PER EN 10204 CERTIFICATE ON MATERIAL
TESTS 3.1)

需要家管理番号 :
CUSTOMER'S CONTROL No.

本 社 : 〒100-8071 東京都千代田区丸の内二丁目6番1号
HEAD OFFICE : 2-F-1, MARUNOUCHI, CHIYODA-KU, TOKYO, 100-8071, JAPAN
営業所 : 〒299-1141 千葉県君津市宮津1番地
KIMITSU WORKS : 1, KIMITSU, KINETSU-CITY, CHIBA-PREF, 299-1141, JAPAN

証明番号 : P-08348 PAGE : 58
CERTIFICATE No.

発行年月日 : 2010-08-23
DATE OF ISSUE

1001 2***DM***
*****CE*****
E3001P07Q0 E07

寸 法 DIMENSION mm, 'inch, 'feet	数量 QUAN- TITY	重量 MASS KG	製造番号 CAST No. 試験番号 TEST No.	製品番号 PLATE No.	引張試験 TENSILE TEST				衝撃試験 IMPACT TEST				化学成分 CHEMICAL COMPOSITION %											
					Y.S. 0.2%	T.S.	伸び EL.	%	平均 AVG	2V - 50F	平均 AVG	単位 EACH	C	Si	Mn	P	S	Cr	Ni	Mo	Nb	V	Ti	Al
1"X120.5"X480"	08	7442	65408 38529	771910804TCI	54	75	33		282	262	153		16	37	144	9	1	2	2	3	0	12	0	2541
									266				15	38	146	9	1	2	3	3	0	13	0	40
1"X120.5"X480"	08	7442	65408 38529	771910804TCI	52	75	32		271	268	152		16	37	144	9	1	2	2	3	0	12	0	2541
									263				15	38	146	9	1	2	3	3	0	13	0	40
1"X120.5"X480"	08	7442	65408 38529	771910804TCI	52	75	32		271	268	152		16	37	144	9	1	2	2	3	0	12	0	2541
									263				15	38	146	9	1	2	3	3	0	13	0	40

注 記 NOTES 1. 位置 Orientation 位置・方向, T: 縦横 Top, B: 底面 Bottom, L: 長手方向 Longitudinal, C: 短手方向 Transverse, Z: 縦横方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis

2. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

3. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

4. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

5. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

6. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

7. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

8. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

9. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

10. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

11. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

12. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

13. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

14. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

15. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

16. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

17. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

18. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

19. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

20. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

21. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

22. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

23. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

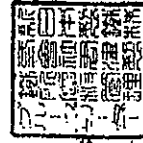
24. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

25. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

26. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

27. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa

28. 形状 Shape, A: 50mm 正方形 Rectangular, B: 50mm 正方形 Rectangular, C: 70mm 正方形 Rectangular, D: 70mm 正方形 Rectangular, E: 80mm 正方形 Rectangular, F: 80mm 正方形 Rectangular, G: 200mm H: 21.8, J: 5.85/Sa, K: 4.7/Sa



J. Adachi

若葉製鐵所管理グループリーダ
Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSU WORKS

上記注文品は都指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。
WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

B-

注 文 者 : HANWA CO., LTD.

SHIPPER

注文者照会番号

REFERENCE No. : 228-38501030

契約番号 : 0-831-H1-5-8-A101

商 品 名 : HOT ROLLED STEEL PLATES

COMMODITY

規 格

SPECIFICATION : ASME SA-516 GRADE 70-E07-A08

文 書 番 号 : DOCUMENT No.

需 要 家 : EDMONTON EXCHANGER GROUP OF C-

CUSTOMER : COMPANIES

製品番号

CAST No.

試験番号

TEST No.

質 量

MASS

KG

08

1' X 120.5' X 480'

08

1' X 120.5' X 480'

08

1' X 120.5' X 480'

08

1' X 120.5' X 480'

08

1' X 120.5' X 480'

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1' X 120.5' X 480'

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1' X 120.5' X 480'

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1' X 120.5' X 480'

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08

1' X 120.5' X 480'

新日本製鋼株式会社

Nippon Steel Corporation

鋼 材 検 査 証 明 書
INSPECTION CERTIFICATE(AS PER EN 10204 CERTIFICATE ON MATERIAL
TESTS 3.1)

需 要 家 : EDMONTON EXCHANGER GROUP OF C-

CUSTOMERS CONTROL No.

E3001P0700 E07

2+DM+*****

*****CEW*****

証 明 書 番 号 : P-08348

頁 : 61

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1001

2+DM+*****

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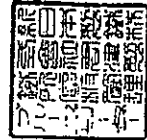
注 記 NOTES [表1] Location Orientation 位置・方向 T: 頂部 Top, B: 底面 Bottom, L: 縦方向 Longitudinal, C: 横方向 Transverse, Z: 短辺方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis

[表2] G.L. 鋼材規格 Gauge Length, A: 50mm 平形鋼材 Flat Rectangular, B: 50mm 平形鋼材 Round, C: 70mm 平形鋼材 Rectangular, D: 70mm 平形鋼材 Round, E: 80mm 平形鋼材 Rectangular, F: 80mm 平形鋼材 Round, G: 200mm H: 2: 1: 0: J: 5.65/√So K: 4.√So

[表3] R.A. 鋼材の Reduction of Area, Y.R.: 炭素比 Yield Ratio, [表4] A.: 全長, Accurable, [表5] F.: 鋼材の Full Size, 2: 2.5mm, 3: 3.3mm, 4: 3.3mm, 5: 5.0mm, 6: 6.67mm, 7: 7.5mm, 8: 6.67mm, 9: 鋼材の厚さ Plate Thickness, [表6] P.: 鋼材の厚さ Product Analysis,

[表7] N.: 鋼材の Normalized, Q.: 焼入れ, Quenched, T.: 焼戻し, Tempered, C.R.: Controlled Rolled, N.I.C.: Normalized Process, C.L.C.: CLC Process/TMC Process, A.R.: As Rolled, T.M.R.: TMR Process/TMC Process, N.R.: Normalizing Rolled

S.H.: 鋼材の Shear Fracture, C.P.: 鋼材の Crystallinity Fracture, L.E.: 鋼材の Lateral Expansion, A.G.S.: オーステナイト化度 Austenite Grain Size, F.G.S.: フェライト化度 Ferrite Grain Size, S.R.: Stress Relieved Post Weld Heat Treatment

J. Adachi
品質管理課 検査係
Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSU WORKS

100

1. The first part of the document is a title page. It contains the title of the report, the author's name, and the date of the report. The title is "The Impact of Climate Change on the Environment". The author is "John Doe". The date is "10/10/2023".

KIMITSU WORKS

T. Adachi
 岩倉製造所 厚板管理グループリーダ
 Head of Department
 PLATE QUALITY CONTROL DEPT.
 KIMITSU WORKS

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KIMITSU WORKS

新日本製鐵株式會社
Nippon Steel Corporation

鋼材検査証明書
INSPECTION CERTIFICATE

证明番号 : P-08348 PAGE: 76E

COMMODITY:	规格:	ASME SA-516 GRADE 70-E07-A08	AS PER EN 10204 CERTIFICATE ON MATERIAL TESTS 3.1	需要家: EDMONTON EXCHANGER GROUP OF C-	需要家管理番号: CUSTOMERS CONTROL No.
规格:	ASME SA-516 GRADE 70-E07-A08	需要家: EDMONTON EXCHANGER GROUP OF C-	需要家管理番号: CUSTOMERS CONTROL No.		

[illegible]

注	新	NOTES	※1	Location Orientation 位置・方向									
				L: 圧延方向 Longitudinal, C: 圧入方向 Transverse, Z: 板厚方向 Through Thickness, R: 45° 方向 45Degree, to the Longitudinal Axis									
※2	Q1	試験箇所 Gauge Length, A: 50mm 平形試験片 Rectangular, B: 50mm 丸形試験片 Round, C: 70mm 平形試験片 Rectangular, D: 70mm 丸形試験片 Round, E: 80mm 平形試験片 Rectangular, F: 80mm 丸形試験片 Round, G: 100mm 平形試験片 Rectangular, H: 100mm 丸形試験片 Round, I: 150mm 平形試験片 Rectangular, J: 150mm 丸形試験片 Round, K: 200mm 平形試験片 Rectangular, L: 200mm 丸形試験片 Round, M: 250mm 平形試験片 Rectangular, N: 250mm 丸形試験片 Round, O: 300mm 平形試験片 Rectangular, P: 300mm 丸形試験片 Round, Q: 350mm 平形試験片 Rectangular, R: 350mm 丸形試験片 Round, S: 400mm 平形試験片 Rectangular, T: 400mm 丸形試験片 Round, U: 450mm 平形試験片 Rectangular, V: 450mm 丸形試験片 Round, W: 500mm 平形試験片 Rectangular, X: 500mm 丸形試験片 Round, Y: 550mm 平形試験片 Rectangular, Z: 550mm 丸形試験片 Round, AA: 600mm 平形試験片 Rectangular, AB: 600mm 丸形試験片 Round, AC: 650mm 平形試験片 Rectangular, AD: 650mm 丸形試験片 Round, AE: 700mm 平形試験片 Rectangular, AF: 700mm 丸形試験片 Round, AG: 750mm 平形試験片 Rectangular, AH: 750mm 丸形試験片 Round, AI: 800mm 平形試験片 Rectangular, AJ: 800mm 丸形試験片 Round, AK: 850mm 平形試験片 Rectangular, AL: 850mm 丸形試験片 Round, AM: 900mm 平形試験片 Rectangular, AN: 900mm 丸形試験片 Round, AO: 950mm 平形試験片 Rectangular, AP: 950mm 丸形試験片 Round, AQ: 1000mm 平形試験片 Rectangular, AR: 1000mm 丸形試験片 Round, AS: 1050mm 平形試験片 Rectangular, AT: 1050mm 丸形試験片 Round, AU: 1100mm 平形試験片 Rectangular, AV: 1100mm 丸形試験片 Round, AW: 1150mm 平形試験片 Rectangular, AX: 1150mm 丸形試験片 Round, AY: 1200mm 平形試験片 Rectangular, AZ: 1200mm 丸形試験片 Round, BA: 1250mm 平形試験片 Rectangular, BB: 1250mm 丸形試験片 Round, BC: 1300mm 平形試験片 Rectangular, BD: 1300mm 丸形試験片 Round, BE: 1350mm 平形試験片 Rectangular, BF: 1350mm 丸形試験片 Round, BG: 1400mm 平形試験片 Rectangular, BH: 1400mm 丸形試験片 Round, BI: 1450mm 平形試験片 Rectangular, BJ: 1450mm 丸形試験片 Round, BK: 1500mm 平形試験片 Rectangular, BL: 1500mm 丸形試験片 Round, BM: 1550mm 平形試験片 Rectangular, BN: 1550mm 丸形試験片 Round, BO: 1600mm 平形試験片 Rectangular, BP: 1600mm 丸形試験片 Round, BQ: 1650mm 平形試験片 Rectangular, BR: 1650mm 丸形試験片 Round, BS: 1700mm 平形試験片 Rectangular, BT: 1700mm 丸形試験片 Round, BU: 1750mm 平形試験片 Rectangular, BV: 1750mm 丸形試験片 Round, BW: 1800mm 平形試験片 Rectangular, BX: 1800mm 丸形試験片 Round, BY: 1850mm 平形試験片 Rectangular, BZ: 1850mm 丸形試験片 Round, CA: 1900mm 平形試験片 Rectangular, CB: 1900mm 丸形試験片 Round, CC: 1950mm 平形試験片 Rectangular, CD: 1950mm 丸形試験片 Round, CE: 2000mm 平形試験片 Rectangular, CF: 2000mm 丸形試験片 Round, CG: 2050mm 平形試験片 Rectangular, CH: 2050mm 丸形試験片 Round, CI: 2100mm 平形試験片 Rectangular, CJ: 2100mm 丸形試験片 Round, CK: 2150mm 平形試験片 Rectangular, CL: 2150mm 丸形試験片 Round, CM: 2200mm 平形試験片 Rectangular, CN: 2200mm 丸形試験片 Round, CO: 2250mm 平形試験片 Rectangular, CP: 2250mm 丸形試験片 Round, CQ: 2300mm 平形試験片 Rectangular, CR: 2300mm 丸形試験片 Round, CS: 2350mm 平形試験片 Rectangular, CT: 2350mm 丸形試験片 Round, CU: 2400mm 平形試験片 Rectangular, CV: 2400mm 丸形試験片 Round, CW: 2450mm 平形試験片 Rectangular, CX: 2450mm 丸形試験片 Round, CY: 2500mm 平形試験片 Rectangular, CZ: 2500mm 丸形試験片 Round, DA: 2550mm 平形試験片 Rectangular, DB: 2550mm 丸形試験片 Round, DC: 2600mm 平形試験片 Rectangular, DD: 2600mm 丸形試験片 Round, DE: 2650mm 平形試験片 Rectangular, DF: 2650mm 丸形試験片 Round, DG: 2700mm 平形試験片 Rectangular, DH: 2700mm 丸形試験片 Round, DI: 2750mm 平形試験片 Rectangular, DJ: 2750mm 丸形試験片 Round, DK: 2800mm 平形試験片 Rectangular, DL: 2800mm 丸形試験片 Round, DM: 2850mm 平形試験片 Rectangular, DN: 2850mm 丸形試験片 Round, DO: 2900mm 平形試験片 Rectangular, DP: 2900mm 丸形試験片 Round, DQ: 2950mm 平形試験片 Rectangular, DR: 2950mm 丸形試験片 Round, DS: 3000mm 平形試験片 Rectangular, DT: 3000mm 丸形試験片 Round, DU: 3050mm 平形試験片 Rectangular, DV: 3050mm 丸形試験片 Round, DW: 3100mm 平形試験片 Rectangular, DX: 3100mm 丸形試験片 Round, DY: 3150mm 平形試験片 Rectangular, DZ: 3150mm 丸形試験片 Round, EA: 3200mm 平形試験片 Rectangular, EB: 3200mm 丸形試験片 Round, EC: 3250mm 平形試験片 Rectangular, ED: 3250mm 丸形試験片 Round, EE: 3300mm 平形試験片 Rectangular, EF: 3300mm 丸形試験片 Round, EG: 3350mm 平形試験片 Rectangular, EH: 3350mm 丸形試験片 Round, EI: 3400mm 平形試験片 Rectangular, EJ: 3400mm 丸形試験片 Round, EK: 3450mm 平形試験片 Rectangular, EL: 3450mm 丸形試験片 Round, EM: 3500mm 平形試験片 Rectangular, EN: 3500mm 丸形試験片 Round, EO: 3550mm 平形試験片 Rectangular, EP: 3550mm 丸形試験片 Round, EQ: 3600mm 平形試験片 Rectangular, ER: 3600mm 丸形試験片 Round, ES: 3650mm 平形試験片 Rectangular, ET: 3650mm 丸形試験片 Round, EU: 3700mm 平形試験片 Rectangular, EV: 3700mm 丸形試験片 Round, EW: 3750mm 平形試験片 Rectangular, EX: 3750mm 丸形試験片 Round, EY: 3800mm 平形試験片 Rectangular, EZ: 3800mm 丸形試験片 Round, FA: 3850mm 平形試験片 Rectangular, FB: 3850mm 丸形試験片 Round, FC: 3900mm 平形試験片 Rectangular, FD: 3900mm 丸形試験片 Round, FE: 3950mm 平形試験片 Rectangular, FF: 3950mm 丸形試験片 Round, FG: 4000mm 平形試験片 Rectangular, FH: 4000mm 丸形試験片 Round, FI: 4050mm 平形試験片 Rectangular, FJ: 4050mm 丸形試験片 Round, FK: 4100mm 平形試験片 Rectangular, FL: 4100mm 丸形試験片 Round, FM: 4150mm 平形試験片 Rectangular, FN: 4150mm 丸形試験片 Round, FO: 4200mm 平形試験片 Rectangular, FP: 4200mm 丸形試験片 Round, FQ: 4250mm 平形試験片 Rectangular, FR: 4250mm 丸形試験片 Round, FS: 4300mm 平形試験片 Rectangular, FT: 4300mm 丸形試験片 Round, FU: 4350mm 平形試験片 Rectangular, FV: 4350mm 丸形試験片 Round, FW: 4400mm 平形試験片 Rectangular, FX: 4400mm 丸形試験片 Round, FY: 4450mm 平形試験片 Rectangular, FZ: 4450mm 丸形試験片 Round, GA: 4500mm 平形試験片 Rectangular, GB: 4500mm 丸形試験片 Round, GC: 4550mm 平形試験片 Rectangular, GD: 4550mm 丸形試験片 Round, GE: 4600mm 平形試験片 Rectangular, GF: 4600mm 丸形試験片 Round, GG: 4650mm 平形試験片 Rectangular, GH: 4650mm 丸形試験片 Round, GI: 4700mm 平形試験片 Rectangular, GJ: 4700mm 丸形試験片 Round, GK: 4750mm 平形試験片 Rectangular, GL: 4750mm 丸形試験片 Round, GM: 4800mm 平形試験片 Rectangular, GN: 4800mm 丸形試験片 Round, GO: 4850mm 平形試験片 Rectangular, GP: 4850mm 丸形試験片 Round, GQ: 4900mm 平形試験片 Rectangular, GR: 4900mm 丸形試験片 Round, GS: 4950mm 平形試験片 Rectangular, GT: 4950mm 丸形試験片 Round, GU: 5000mm 平形試験片 Rectangular, GV: 5000mm 丸形試験片 Round, GW: 5050mm 平形試験片 Rectangular, GX: 5050mm 丸形試験片 Round, GY: 5100mm 平形試験片 Rectangular, GZ: 5100mm 丸形試験片 Round, HA: 5150mm 平形試験片 Rectangular, HB: 5150mm 丸形試験片 Round, HC: 5200mm 平形試験片 Rectangular, HD: 5200mm 丸形試験片 Round, HE: 5250mm 平形試験片 Rectangular, HF: 5250mm 丸形試験片 Round, HG: 5300mm 平形試験片 Rectangular, HH: 5300mm 丸形試験片 Round, HI: 5350mm 平形試験片 Rectangular, HJ: 5350mm 丸形試験片 Round, HK: 5400mm 平形試験片 Rectangular, HL: 5400mm 丸形試験片 Round, HM: 5450mm 平形試験片 Rectangular, HN: 5450mm 丸形試験片 Round, HO: 5500mm 平形試験片 Rectangular, HP: 5500mm 丸形試験片 Round, HQ: 5550mm 平形試験片 Rectangular, HR: 5550mm 丸形試験片 Round, HS: 5600mm 平形試験片 Rectangular, HT: 5600mm 丸形試験片 Round, HU: 5650mm 平形試験片 Rectangular, HV: 5650mm 丸形試験片 Round, HW: 5700mm 平形試験片 Rectangular, HX: 5700mm 丸形試験片 Round, HY: 5750mm 平形試験片 Rectangular, HZ: 5750mm 丸形試験片 Round, IA: 5800mm 平形試験片 Rectangular, IB: 5800mm 丸形試験片 Round, IC: 5850mm 平形試験片 Rectangular, ID: 5850mm 丸形試験片 Round, IE: 5900mm 平形試験片 Rectangular, IF: 5900mm 丸形試験片 Round, IG: 5950mm 平形試験片 Rect											

上記注文品は御指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi
 名取製鐵所庶務管理グループリーダー
 Head of Department
 PLATE QUALITY CONTROL DEPT.
 YAMAGUCHI STEEL CO. LTD.

INSPECTION CERTIFICATE

上記注文品は御指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。

注 釈 NOTES

[※1] Location Orientation 位置・方向、L: 頂部 Top, B: 底部 Bottom, L+R: 圧延方向 Longitudinal, C: 直角方向 Transverse, Z: 壓延方向 Through Thickness, R: 45° 方向 45Deg, to the Longitudinal Axis

[※2] 寸法公差 Gauge Length, A: 50mm 平形試験片 Rectangular, B: 90mm 大形矩形試験片 Round, E: 80mm 平形試験片 Rectangular, D: 70mm 大形矩形試験片 Round, G: 200mm, H: 2°, I: 8°, J: 5.65√So, K: 4/√So

[※3] RA: 絞り Reduction of Area, Y.R.: 降伏比 Yield Ratio, [※5] A: 合格 Acceptable, [※6] F: 標準許容 FULL SIZE, Z: 2.5mm, C: 3.35mm, R: 6.75mm, S: 5.0mm, X: 製品板厚 Plate Thickness, [※7] N: 焼戻 Normalized, Q: 投入後 Quenched, T: 焼戻 Tempered, N.I.C: NIO Process/TMC Process, C.L.C: CLC Process/TMC Process, R.R: As Rolled, T.M.R: TMF Process/TMC Process, N.R: Normalizing Rolled Sheet

S.T.: 焼戻後面 Shear Fracture, C.P.: 焼止後面 Core Fracture, Lateral Expansion AGS: オーステナイト相変 Austenite Grain Size, F.G.S: フェライト相変 Ferrite Grain Size, Stress Relieved Post Weld Heat Treatment

C
E
H
I
J
K

温度 Temperature
℃

Head of Department
PLATE QUALITY CONTROL DEPT.
KIMTSU WORKS

Head of Department
PLATE QUALITY CONTROL DEPT.
KIMTSU WORKS

新日本製鐵株式会社
Nippon Steel Corporation

鋼材検査証明書
INSPECTION CERTIFICATE

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KIMITSU WORKS : 1, KIMITSU KINITSU-CITY, CHIBA-PREF. 299-1141, JAPAN

注文者 : HANWA CO., LTD.
注文照会番号 : 228-38501040
契約番号 : 0-831-HI-5-0-A101
商品名 : HOT ROLLED STEEL PLATES
規格 :
SPECIFICATION : ASME SA-516 GRADE 70-E07-A08
文書番号 :
DOCUMENT No. :

鋼材検査証明書
INSPECTION CERTIFICATE

証明番号 : P-09831
CERTIFICATE No. : P-09831
発行年月日 : 2010-10-26
DATE OF ISSUE : 2010-10-26
必要家管理番号 : 1001
CUSTOMER'S CONTROL No. : E3001P07Q0 E07

寸 法 DIMENSION mm, 'inch, 'feet	頁数 QUAN- TITY	質 量 MASS KG	製鋼番号		製品 番号 PLATE No.	引張 試 験 TENSILE TEST					衝撃 試 験 IMPACT TEST				HBW	化 学 成 分 CHEMICAL COMPOSITION %																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
			CAST No.	試験番号 TEST No.		Y.S. 0.2 %	T.S.	引張強さ T.S.	伸び E.L.	断面収縮 R.A.	位置 LOCATION	方向 ORIENTATION	試験方法 TEST METHOD	試験結果 TEST RESULT		2V - 50F 2V - 50F	平均値 E.L.B.	N	TE3	TE1	SN	CA	B	Ti	Mn	P	S	Q ₁	Ni	Cr	Mo	Nb	V	Ta	Co																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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注釈 NOTES: 1. 位置・方向・T: 縦断面・C: 正方向・Transverse・Z: 縦断面・R: 45° 方向・45° to the Longitudinal Axis
2. CL: 検査位置 Gage Length, A: 50mm 平形試験片 Rectangular, B: 50mm 平形試験片 Rectangular, D: 70mm 平形試験片 Rectangular, E: 80mm 平形試験片 Rectangular, F: 80mm 平形試験片 Rectangular, G: 200mm, H: 2', I: 8', J: 5.65/S₀, K: 4/S₀
3. RA: 絞り Reduction of Area, V & R: 倍伏比 Yield Ratio, 4. A: 合格 Acceptable, 5. F: 標準寸法 FULL SIZE, 2: 2.5mm, 3: 3.3mm, 4: 3.3mm, 5: 5.0mm, 6: 5.67mm, 7: 7.5mm, 8: 6.7mm, 9: 製品厚 Plate Thickness, 10. P: 製品分析 Product Analysis
6. C.R: Controlled Rolled, N.I.C: NIC Process/TMC Process, C.L.C: CLC Process/TMC Process, A.R: As Rolled, T.M.R: TMR Process/TMC Process, N.R: Normalizing Rolled
7. NI: 焼戻し Normalized, Q: 焼入れ Quenched, T: 焼戻し Tempered, S.H: 焼戻し Shear Fracture, C.F: 焼戻し Shear Fracture, A.G.S: オーステナイト粒度 Austenite Grain Size, F.G.S: フェライト粒度 Ferrite Grain Size, S.R: Stress Relieved Post Weld Heat Treatment
温度 Temperature: 100°C, 200°C, 300°C, 400°C, 500°C, 600°C, 700°C, 800°C, 900°C, 1000°C

上記注文品は御指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
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J. Adachi
君津製鐵所厚板管理グループリーダー
Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSU WORKS

新日本製鐵株式會社
Nippon Steel Corporation

鋼材検査証明書

INSPECTION CERTIFICATE

注文者: HANWA CO., LTD.
注文者照会番号: 228-38501040
契約番号: 0-831-H1-5-0-A101
商品名: HOT ROLLED STEEL PLATES
規格: ASME SA-516 GRADE 70-E07-A08
文書番号: 需要家: EDMONTON EXCHANGER GROUP OF C-
DOCUMENT No.: CUSTOMER: COMPANIES

(AS PER EN 10204 CERTIFICATE ON MATERIAL TESTS 3.1)
需要家管理番号: E3001P0700 E07
CUSTOMER'S CONTROL No.

DOCUMENT NO.	寸 法 DIMENSION mm, 'inch, 'feet	数量 QUAN- TITY	質 量 MASS KG	製鋼番号 CAST No. 試験番号 TEST No.	製品番号 PLATE No.	引張 試 験 TENSILE TEST				衝撃試験 IMPACT TEST				化 学 成 分 CHEMICAL COMPOSITION %																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
						引張強さ Y.S.-Y.P. 0.2 %		T.S. %	伸び E.L. %	位置 LOCATION	2V - 50F FT.-LB.		位置 LOCATION	C	Si	Mn	P	S	Cu	Ni	Q	Mo	Nb	V	Al	Co																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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注釈 NOTES: 1. 位置: 縦向き, 横向き, 両向き. 2. 縦向き: 縦向き. 3. 横向き: 横向き. 4. 両向き: 両向き. 5. 試験方法: 引張試験, 衝撃試験. 6. 試験結果: 合格. 7. 試験場所: 日本製鐵株式会社. 8. 試験日: 2010-10-26. 9. 試験員: 田中 一郎. 10. 試験機: 引張試験機, 衝撃試験機. 11. 試験条件: 常温. 12. 試験速度: 引張試験: 2mm/min, 衝撃試験: 10J. 13. 試験結果: 合格. 14. 試験場所: 日本製鐵株式会社. 15. 試験日: 2010-10-26. 16. 試験員: 田中 一郎. 17. 試験機: 引張試験機, 衝撃試験機. 18. 試験条件: 常温. 19. 試験速度: 引張試験: 2mm/min, 衝撃試験: 10J. 20. 試験結果: 合格.

上記注文品は御指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。
WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi
Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSUWORKS



新日本製鐵株式會社
Nippon Steel Corporation

鋼材検査証明書

INSPECTION CERTIFICATE

本社 〒100-8071 東京都千代田区丸の内二丁目6番1号
HEAD OFFICE 2-6-1, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8071, JAPAN
君津製鐵所 〒239-1141 千葉県君津市君津1番地
KIMITSU WORKS 1, KIMITSU, KIMITSU-CITY, CHIBA-PREF. 239-1141, JAPAN

証明書番号: P-08831 頁: 14
CERTIFICATE No. P-08831 PAGE: 14

発行年月日: 2010-10-26
DATE OF ISSUE: 2010-10-26

(AS PER EN 10204 CERTIFICATE ON MATERIAL TESTS 3.1)

需要家管理番号: 需要家管理番号: 1001

CUSTOMER'S CONTROL No. E3001P0700 E07

鋼材検査証明書

鋼材検査証明書

鋼材検査証明書

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鋼材検査証明書

鋼材検査証明書

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J. Adachi
Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSU WORKS

注 釈 NOTES 1. 位置・方向: 縦横方向 Longitudinal, C: 縦横方向 Transverse, 2. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

2. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 3. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

3. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 4. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

4. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 5. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

5. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 6. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

6. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 7. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

7. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 8. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

8. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 9. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

9. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 10. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

10. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 11. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

11. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 12. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

12. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 13. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

13. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 14. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

14. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 15. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

15. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 16. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

16. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 17. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

17. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 18. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

18. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 19. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

19. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 20. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

20. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 21. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

21. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 22. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

22. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 23. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

23. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 24. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

24. 板厚 Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 側面 Side, C: 中央 Center, 25. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

社 本 部 東京都千代田区丸の内二丁目6番1号
 HEAD OFFICE 2-6-1, MARUNOUCHI, CHYODA-KU, TOKYO 100-8071, JAPAN
 製 造 所 千葉県君津市君津1番地
 KIMITSU WORKS 1, KIMITSU, KUNITSU-CITY, CHIBA-PREF. 299-1141 JAPAN

鋼材検査証明書
INSPECTION CERTIFICATE

AS PER EN 10204 CERTIFICATE ON MATERIAL TESTS 3.1)

證明書 證 號 : p-09831 頁 : 15
CERTIFICATE No. PAGE

[illegible]

注 意 事 项 1. 试样底部 1 厘米处方向 Transverse, 2. 试样方向 Through Thickness, R: 45° 方向 45Deg, to the Longitudinal Axis

【2】	端部距離 Gage Length, A: 50mm 平均拉拔片 Rectangular, B: 50mm 內形拉拔片 Round, C: 70mm 內形拉拔片 Rectangular, D: 70mm 內形拉拔片 Round, E: 80mm 平均拉拔片 Rectangular, F: 80mm 內形拉拔片 Round, G: 200mm, H: 2, 1, 8, 1, 5.65- $\sqrt{S}$, K: 4/ $\sqrt{S}$
【3】	端部距離 Gage Length, A: 50mm 平均拉拔片 Rectangular, B: 50mm 內形拉拔片 Round, C: 70mm 內形拉拔片 Rectangular, D: 70mm 內形拉拔片 Round, E: 80mm 平均拉拔片 Rectangular, F: 80mm 內形拉拔片 Round, G: 200mm, H: 2, 1, 8, 1, 5.65- $\sqrt{S}$, K: 4/ $\sqrt{S}$
【4】	合格 Acceptable, 【5】 F: 標準片 Full SIZE, 2: 2.5mm, 3: 3.3mm, 4: 4.33mm, 5: 5.0mm, 6: 6.67mm, 7: 7.5mm, 8: 8.7mm, 9: 9.75mm, 10: 10.7mm, 11: 11.7mm, 12: 12.7mm, 13: 13.7mm, 14: 14.7mm, 15: 15.7mm, 16: 16.7mm, 17: 17.7mm, 18: 18.7mm, 19: 19.7mm, 20: 20.7mm, 21: 21.7mm, 22: 22.7mm, 23: 23.7mm, 24: 24.7mm, 25: 25.7mm, 26: 26.7mm, 27: 27.7mm, 28: 28.7mm, 29: 29.7mm, 30: 30.7mm, 31: 31.7mm, 32: 32.7mm, 33: 33.7mm, 34: 34.7mm, 35: 35.7mm, 36: 36.7mm, 37: 37.7mm, 38: 38.7mm, 39: 39.7mm, 40: 40.7mm, 41: 41.7mm, 42: 42.7mm, 43: 43.7mm, 44: 44.7mm, 45: 45.7mm, 46: 46.7mm, 47: 47.7mm, 48: 48.7mm, 49: 49.7mm, 50: 50.7mm, 51: 51.7mm, 52: 52.7mm, 53: 53.7mm, 54: 54.7mm, 55: 55.7mm, 56: 56.7mm, 57: 57.7mm, 58: 58.7mm, 59: 59.7mm, 60: 60.7mm, 61: 61.7mm, 62: 62.7mm, 63: 63.7mm, 64: 64.7mm, 65: 65.7mm, 66: 66.7mm, 67: 67.7mm, 68: 68.7mm, 69: 69.7mm, 70: 70.7mm, 71: 71.7mm, 72: 72.7mm, 73: 73.7mm, 74: 74.7mm, 75: 75.7mm, 76: 76.7mm, 77: 77.7mm, 78: 78.7mm, 79: 79.7mm, 80: 80.7mm, 81: 81.7mm, 82: 82.7mm, 83: 83.7mm, 84: 84.7mm, 85: 85.7mm, 86: 86.7mm, 87: 87.7mm, 88: 88.7mm, 89: 89.7mm, 90: 90.7mm, 91: 91.7mm, 92: 92.7mm, 93: 93.7mm, 94: 94.7mm, 95: 95.7mm, 96: 96.7mm, 97: 97.7mm, 98: 98.7mm, 99: 99.7mm, 100: 100.7mm, 101: 101.7mm, 102: 102.7mm, 103: 103.7mm, 104: 104.7mm, 105: 105.7mm, 106: 106.7mm, 107: 107.7mm, 108: 108.7mm, 109: 109.7mm, 110: 110.7mm, 111: 111.7mm, 112: 112.7mm, 113: 113.7mm, 114: 114.7mm, 115: 115.7mm, 116: 116.7mm, 117: 117.7mm, 118: 118.7mm, 119: 119.7mm, 120: 120.7mm, 121: 121.7mm, 122: 122.7mm, 123: 123.7mm, 124: 124.7mm, 125: 125.7mm, 126: 126.7mm, 127: 127.7mm, 128: 128.7mm, 129: 129.7mm, 130: 130.7mm, 131: 131.7mm, 132: 132.7mm, 133: 133.7mm, 134: 134.7mm, 135: 135.7mm, 136: 136.7mm, 137: 137.7mm, 138: 138.7mm, 139: 139.7mm, 140: 140.7mm, 141: 141.7mm, 142: 142.7mm, 143: 143.7mm, 144: 144.7mm, 145: 145.7mm, 146: 146.7mm, 147: 147.7mm, 148: 148.7mm, 149: 149.7mm, 150: 150.7mm, 151: 151.7mm, 152: 152.7mm, 153: 153.7mm, 154: 154.7mm, 155: 155.7mm, 156: 156.7mm, 157: 157.7mm, 158: 158.7mm, 159: 159.7mm, 160: 160.7mm, 161: 161.7mm, 162: 162.7mm, 163: 163.7mm, 164: 164.7mm, 165: 165.7mm, 166: 166.7mm, 167: 167.7mm, 168: 168.7mm, 169: 169.7mm, 170: 170.7mm, 171: 171.7mm, 172: 172.7mm, 173: 173.7mm, 174: 174.7mm, 175: 175.7mm, 176: 176.7mm, 177: 177.7mm, 178: 178.7mm, 179: 179.7mm, 180: 180.7mm, 181: 181.7mm, 182: 182.7mm, 183: 183.7mm, 184: 184.7mm, 185: 185.7mm, 186: 186.7mm, 187: 187.7mm, 188: 188.7mm, 189: 189.7mm, 190: 190.7mm, 191: 191.7mm, 192: 192.7mm, 193: 193.7mm, 194: 194.7mm, 195: 195.7mm, 196: 196.7mm, 197: 197.7mm, 198: 198.7mm, 199: 199.7mm, 200: 200.7mm, 201: 201.7mm, 202: 202.7mm, 203: 203.7mm, 204: 204.7mm, 205: 205.7mm, 206: 206.7mm, 207: 207.7mm, 208: 208.7mm, 209: 209.7mm, 210: 210.7mm, 211: 211.7mm, 212: 212.7mm, 213: 213.7mm, 214: 214.7mm, 215: 215.7mm, 216: 216.7mm, 217: 217.7mm, 218: 218.7mm, 219: 219.7mm, 220: 220.7mm, 221: 221.7mm, 222: 222.7mm, 223: 223.7mm, 224: 224.7mm, 225: 225.7mm, 226: 226.7mm, 227: 227.7mm, 228: 228.7mm, 229: 229.7mm, 230: 230.7mm, 231: 231.7mm, 232: 232.7mm, 233: 233.7mm, 234: 234.7mm, 235: 235.7mm, 236: 236.7mm, 237: 237.7mm, 238: 238.7mm, 239: 239.7mm, 240: 240.7mm, 241: 241.7mm, 242: 242.7mm, 243: 243.7mm, 244: 244.7mm, 245: 245.7mm, 246: 246.7mm, 247: 247.7mm, 248: 248.7mm, 249: 249.7mm, 250: 250.7mm, 251: 251.7mm, 252: 252.7mm, 253: 253.7mm, 254: 254.7mm, 255: 255.7mm, 256: 256.7mm, 257: 257.7mm, 258: 258.7mm, 259: 259.7mm, 260: 260.7mm, 261: 261.7mm, 262: 262.7mm, 263: 263.7mm, 264: 264.7mm, 265: 265.7mm, 266: 266.7mm, 267: 267.7mm, 268: 268.7mm, 269: 269.7mm, 270: 270.7mm, 271: 271.7mm, 272: 272.7mm, 273: 273.7mm, 274: 274.7mm, 275: 275.7mm, 276: 276.7mm, 277: 277.7mm, 278: 278.7mm, 279: 279.7mm, 280: 280.7mm, 281: 281.7mm, 282: 282.7mm, 283: 283.7mm, 284: 284.7mm, 285: 285.7mm, 286: 286.7mm, 287: 287.7mm, 288: 288.7mm, 289: 289.7mm, 290: 290.7mm, 291: 291.7mm, 292: 292.7mm, 293: 293.7mm, 294: 294.7mm, 295: 295.7mm, 296: 296.7mm, 297: 297.7mm, 298: 298.7mm, 299: 299.7mm, 300: 300.7mm, 301: 301.7mm, 302: 302.7mm, 303: 303.7mm, 304: 304.7mm, 305:

上記文品は指定の模範校または仕様に従って製造され、その要求事項を満足していることを証明します。

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T. Adachi
東京製板新厚板管理グループ
Head of Department
PLATE QUALITY CONTROL DEPT.
KOMATSU WORKS

新日本製鐵株式會社
Nippon Steel Corporation

鋼材検査証明書
INSPECTION CERTIFICATE

社 千 100-8071 東京都千代田区丸の内二丁目6番1号
HEAD OFFICE 2-6-1 MARUNOUCHI, CHIYODA-KU, TOKYO 100-8071, JAPAN
君津製鐵所 千 299-1141 千葉県君津市君津1番地
KIMITSU WORKS 1, KIMITSU, KIMITSU-CITY, CHIBA-PREF. 299-1141, JAPAN

証明書番号 : P-09818 PAGE : 15

発行年月日 : 2010-10-25

DATE OF ISSUE : 1001

2***DM*****

*****CEW***

E3001P0700 E07

(AS PER EN 10204 CERTIFICATE ON MATERIAL TESTS 3.1)

EDMONTON EXCHANGER GROUP OF C- 需要家管理番号 :

CUSTOMERS CONTROL NO. E3001P0700 E07

製鋼番号 : 7442 55159 879270403

製品番号 : PLATE No.

試験番号 : TEST No.

7442 55159 879270403

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注釈 NOTES 1. 位置 Orientation 位置・方向, T: 頂部 Top, B: 底部 Bottom, L: 左側方向 Longitudinal, C: 右側方向 Transverse, Z: 板厚方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis

2. 板厚板厚 Gage Length, A: 50mm 平行板厚板厚 Rectangular, B: 50mm 平行板厚板厚 Rectangular, D: 70mm 平行板厚板厚 Rectangular, E: 80mm 平行板厚板厚 Rectangular, F: 80mm 平行板厚板厚 Rectangular, G: 200mm 平行板厚板厚 Round, H: 200mm 平行板厚板厚 Round, I: 200mm 平行板厚板厚 Round, J: 200mm 平行板厚板厚 Round, K: 4/50

3. 板厚板厚 Gage Length, A: 50mm 平行板厚板厚 Rectangular, B: 50mm 平行板厚板厚 Rectangular, D: 70mm 平行板厚板厚 Rectangular, E: 80mm 平行板厚板厚 Rectangular, F: 80mm 平行板厚板厚 Rectangular, G: 200mm 平行板厚板厚 Round, H: 200mm 平行板厚板厚 Round, I: 200mm 平行板厚板厚 Round, J: 200mm 平行板厚板厚 Round, K: 4/50

4. 板厚板厚 Gage Length, A: 50mm 平行板厚板厚 Rectangular, B: 50mm 平行板厚板厚 Rectangular, D: 70mm 平行板厚板厚 Rectangular, E: 80mm 平行板厚板厚 Rectangular, F: 80mm 平行板厚板厚 Rectangular, G: 200mm 平行板厚板厚 Round, H: 200mm 平行板厚板厚 Round, I: 200mm 平行板厚板厚 Round, J: 200mm 平行板厚板厚 Round, K: 4/50

5. 板厚板厚 Gage Length, A: 50mm 平行板厚板厚 Rectangular, B: 50mm 平行板厚板厚 Rectangular, D: 70mm 平行板厚板厚 Rectangular, E: 80mm 平行板厚板厚 Rectangular, F: 80mm 平行板厚板厚 Rectangular, G: 200mm 平行板厚板厚 Round, H: 200mm 平行板厚板厚 Round, I: 200mm 平行板厚板厚 Round, J: 200mm 平行板厚板厚 Round, K: 4/50

6. 板厚板厚 Gage Length, A: 50mm 平行板厚板厚 Rectangular, B: 50mm 平行板厚板厚 Rectangular, D: 70mm 平行板厚板厚 Rectangular, E: 80mm 平行板厚板厚 Rectangular, F: 80mm 平行板厚板厚 Rectangular, G: 200mm 平行板厚板厚 Round, H: 200mm 平行板厚板厚 Round, I: 200mm 平行板厚板厚 Round, J: 200mm 平行板厚板厚 Round, K: 4/50

7. 板厚板厚 Gage Length, A: 50mm 平行板厚板厚 Rectangular, B: 50mm 平行板厚板厚 Rectangular, D: 70mm 平行板厚板厚 Rectangular, E: 80mm 平行板厚板厚 Rectangular, F: 80mm 平行板厚板厚 Rectangular, G: 200mm 平行板厚板厚 Round, H: 200mm 平行板厚板厚 Round, I: 200mm 平行板厚板厚 Round, J: 200mm 平行板厚板厚 Round, K: 4/50

8. 板厚板厚 Gage Length, A: 50mm 平行板厚板厚 Rectangular, B: 50mm 平行板厚板厚 Rectangular, D: 70mm 平行板厚板厚 Rectangular, E: 80mm 平行板厚板厚 Rectangular, F: 80mm 平行板厚板厚 Rectangular, G: 200mm 平行板厚板厚 Round, H: 200mm 平行板厚板厚 Round, I: 200mm 平行板厚板厚 Round, J: 200mm 平行板厚板厚 Round, K: 4/50

9. 板厚板厚 Gage Length, A: 50mm 平行板厚板厚 Rectangular, B: 50mm 平行板厚板厚 Rectangular, D: 70mm 平行板厚板厚 Rectangular, E: 80mm 平行板厚板厚 Rectangular, F: 80mm 平行板厚板厚 Rectangular, G: 200mm 平行板厚板厚 Round, H: 200mm 平行板厚板厚 Round, I: 200mm 平行板厚板厚 Round, J: 200mm 平行板厚板厚 Round, K: 4/50

10. 板厚板厚 Gage Length, A: 50mm 平行板厚板厚 Rectangular, B: 50mm 平行板厚板厚 Rectangular, D: 70mm 平行板厚板厚 Rectangular, E: 80mm 平行板厚板厚 Rectangular, F: 80mm 平行板厚板厚 Rectangular, G: 200mm 平行板厚板厚 Round, H: 200mm 平行板厚板厚 Round, I: 200mm 平行板厚板厚 Round, J: 200mm 平行板厚板厚 Round, K: 4/50

11. 板厚板厚 Gage Length, A: 50mm 平行板厚板厚 Rectangular, B: 50mm 平行板厚板厚 Rectangular, D: 70mm 平行板厚板厚 Rectangular, E: 80mm 平行板厚板厚 Rectangular, F: 80mm 平行板厚板厚 Rectangular, G: 200mm 平行板厚板厚 Round, H: 200mm 平行板厚板厚 Round, I: 200mm 平行板厚板厚 Round, J: 200mm 平行板厚板厚 Round, K: 4/50

12. 板厚板厚 Gage Length, A: 50mm 平行板厚板厚 Rectangular, B: 50mm 平行板厚板厚 Rectangular, D: 70mm 平行板厚板厚 Rectangular, E: 80mm 平行板厚板厚 Rectangular, F: 80mm 平行板厚板厚 Rectangular, G: 200mm 平行板厚板厚 Round, H: 200mm 平行板厚板厚 Round, I: 200mm 平行板厚板厚 Round, J: 200mm 平行板厚板厚 Round, K: 4/50

13. 板厚板厚 Gage Length, A: 50mm 平行板厚板厚 Rectangular, B: 50mm 平行板厚板厚 Rectangular, D: 70mm 平行板厚板厚 Rectangular, E: 80mm 平行板厚板厚 Rectangular, F: 80mm 平行板厚板厚 Rectangular, G: 200mm 平行板厚板厚 Round, H: 200mm 平行板厚板厚 Round, I: 200mm 平行板厚板厚 Round, J: 200mm 平行板厚板厚 Round, K: 4/50

14. 板厚板厚 Gage Length, A: 50mm 平行板厚板厚 Rectangular, B: 50mm 平行板厚板厚 Rectangular, D: 70mm 平行板厚板厚 Rectangular, E: 80mm 平行板厚板厚 Rectangular, F: 80mm 平行板厚板厚 Rectangular, G: 200mm 平行板厚板厚 Round, H: 200mm 平行板厚板厚 Round, I: 200mm 平行板厚板厚 Round, J: 200mm 平行板厚板厚 Round, K: 4/50

15. 板厚板厚 Gage Length, A: 50mm 平行板厚板厚 Rectangular, B: 50mm 平行板厚板厚 Rectangular, D: 70mm 平行板厚板厚 Rectangular, E: 80mm 平行板厚板厚 Rectangular, F: 80mm 平行板厚板厚 Rectangular, G: 200mm 平行板厚板厚 Round, H: 200mm 平行板厚板厚 Round, I: 200mm 平行板厚板厚 Round, J: 200mm 平行板厚板厚 Round, K: 4/50

16. 板厚板厚 Gage Length, A: 50mm 平行板厚板厚 Rectangular, B: 50mm 平行板厚板厚 Rectangular, D: 70mm 平行板厚板厚 Rectangular, E: 80mm 平行板厚板厚 Rectangular, F: 80mm 平行板厚板厚 Rectangular, G: 200mm 平行板厚板厚 Round, H: 200mm 平行板厚板厚 Round, I: 200mm 平行板厚板厚 Round, J: 200mm 平行板厚板厚 Round, K: 4/50

17. 板厚板厚 Gage Length, A: 50mm 平行板厚板厚 Rectangular, B: 50mm 平行板厚板厚 Rectangular, D: 70mm 平行板厚板厚 Rectangular, E: 80mm 平行板厚板厚 Rectangular, F: 80mm 平行板厚板厚 Rectangular, G: 200mm 平行板厚板厚 Round, H: 200mm 平行板厚板厚 Round, I: 200mm 平行板厚板厚 Round, J: 200mm 平行板厚板厚 Round, K: 4/50

J. Adachi

君津製鐵所管理グループリーダー

Head of Department

PLATE QUALITY CONTROL DEPT.

KIMITSU WORKS

上記注文品は御指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN

MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

新日本製鐵株式會社
Nippon Steel Corporation

鋼材検査証明書
INSPECTION CERTIFICATE

注文者: HANWA CO., LTD.
注文者照会番号: 228-38501040
契約番号: 0-831-HI-5-0-AI01
商品名: HOT ROLLED STEEL PLATES
COMMODITY: ASME SA-516 GRADE 70-E07-A08

社: 〒100-8071 東京都千代田区丸の内二丁目6番1号
HEAD OFFICE: 〒2-6-1 MARINOUCHI, CHiyoda-KU, TOKYO 100-8071, JAPAN
名津製鐵所: 〒299-1141 千葉県君津市君津1番地
KIMITSU WORKS: 1, KIMITSU-KIMITSU-CITY, CHIBA-PREF. 299-1141, JAPAN

証明番号: P-09818
発行年月日: 2010-10-25
DATE OF ISSUE: 1001

(AS PER EN 10204 CERTIFICATE ON MATERIAL TESTS 3.1.)

需要家: EDMONTON EXCHANGER GROUP OF COMPANIES
需要家管理番号: CUSTOMER'S CONTROL No. E3001P07Q0 E07

寸法 DIMENSION mm, inch, feet	数量 QUANTITY	質量 MASS KG	製品番号 CAST No. TEST No.	引張試験 TENSILE TEST Y.S. 0.2% KSI 0.2% EL %	衝撃試験 IMPACT TEST 2V - 50F FT.LB. EACH	化学成分 CHEMICAL COMPOSITION %	新製試験 NEW TEST RESULTS									
							C	Si	Mn	P	S	Cr	Ni	Mo	Nb	V
1' X 120.5' X 480'	04	7442	G7491 55166	54 76 32	288 289 304	16 36 143 9 1 2 2 2 2 2 2 2 2 2 2 2 2	16	36	143	9	1	2	2	2	2	2
1' X 120.5' X 480'	04	7442	G7491 55166	54 76 32	288 289 304	16 36 143 9 1 2 2 2 2 2 2 2 2 2 2 2 2	16	36	143	9	1	2	2	2	2	2
1' X 120.5' X 480'	04	7442	G7491 55166	54 76 32	288 289 304	16 36 143 9 1 2 2 2 2 2 2 2 2 2 2 2 2	16	36	143	9	1	2	2	2	2	2

注釈 NOTES: 1. 位置 Orientation 位置: 方向. T: 頂部 Top, B: 底部 Bottom, L: 縦方向 Longitudinal, C: 横方向 Transverse, Z: 縦方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis
2. G.L. 公差範囲 Gauge Length, A: 50mm 公差範囲 Rectangular, B: 50mm 公差範囲 Rectangular, E: 80mm 公差範囲 Rectangular, F: 80mm 公差範囲 Rectangular, G: 200mm 公差範囲 Rectangular, H: 200mm 公差範囲 Rectangular, I: 200mm 公差範囲 Rectangular, J: 200mm 公差範囲 Rectangular, K: 200mm 公差範囲 Rectangular, L: 200mm 公差範囲 Rectangular, M: 200mm 公差範囲 Rectangular, N: 200mm 公差範囲 Rectangular, O: 200mm 公差範囲 Rectangular, P: 200mm 公差範囲 Rectangular, Q: 200mm 公差範囲 Rectangular, R: 200mm 公差範囲 Rectangular, S: 200mm 公差範囲 Rectangular, T: 200mm 公差範囲 Rectangular, U: 200mm 公差範囲 Rectangular, V: 200mm 公差範囲 Rectangular, W: 200mm 公差範囲 Rectangular, X: 200mm 公差範囲 Rectangular, Y: 200mm 公差範囲 Rectangular, Z: 200mm 公差範囲 Rectangular

上記注文品は鋼指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。
WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi
Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSU WORKS

新日本製鐵株式會社
Nippon Steel Corporation

鋼材検査証明書
INSPECTION CERTIFICATE

本社 〒100-8071 東京都千代田区丸の内二丁目6番1号
HEAD OFFICE 〒2-6-1, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8071, JAPAN
営業所 〒299-1141 千葉県君津市君津1番地
KIMITSUWORKS J. KIMITSU, KIMITSU-CITY, CHIBA-PREF. 299-1141 JAPAN

注文者 HANWA CO., LTD.
SHIPPER

注文者照会番号 228-38501040
REFERENCE No.

契約番号 0-831-H1-5-0-A101
CONTRACT No.

商品名 HOT ROLLED STEEL PLATES
COMMODITY

規格 ASME SA-516 GRADE 70-E07-A08
SPECIFICATION

文書番号 70-E07-A08
DOCUMENT No.

(AS PER EN 10204 CERTIFICATE ON MATERIAL
TESTS 3.1)

需要家 EDWINTON EXCHANGER GROUP OF C-
CUSTOMER

需要家管理番号
CUSTOMER'S CONTROL No.

証明書番号 P-09818
CERTIFICATE No.

発行年月日 2010-10-25
DATE OF ISSUE

1001

*****CEW***
E3001P07Q0 E07

寸法 DIMENSION mm, inch, feet	数量 QUANTITY	質量 MASS KG	鋼種番号 CAST No.	製品番号 PLATE No.	位置 LOCATION	引張試験 TENSILE TEST		衝撃試験 IMPACT TEST		化学成分 CHEMICAL COMPOSITION %											
			試験番号 TEST No.	試験結果 TEST RESULT	試験結果 TEST RESULT	YS 0.2%	TS % EL	2V - 50F FT LB	平均値 AVG	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Co	As	Pb
1' X 120.5' X 480"	04	7442	67546 55569	8792704561C1	53	75	33	287 281	287 281	16	37	145	8	2	2	2	2	2	0	0	0
										33	33	144	7	2	2	2	2	0	0	0	0
										15	37	144	7	2	2	2	2	0	0	0	0
1' X 120.5' X 480"	04	7442	67546 55569	8792704531C1	54	75	31	290 275	290 275	16	37	145	8	2	2	2	2	0	0	0	0
										33	37	144	7	2	2	2	2	0	0	0	0
										15	37	144	7	2	2	2	2	0	0	0	0
1' X 120.5' X 480"	04	7442	67546 55569	8792704541C1	54	75	31	290 275	290 275	16	37	145	8	2	2	2	2	0	0	0	0
										33	37	144	7	2	2	2	2	0	0	0	0
										15	37	144	7	2	2	2	2	0	0	0	0

注 釈 NOTES 1. 位置 Orientation 位置 - 方向, T: 縦部 Top, B: 底部 Bottom, L: 縦部方向 Longitudinal, C: 直外方向 Transverse, 2. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

2. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

3. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

4. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

5. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

6. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

7. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

8. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

9. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

10. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

11. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

12. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

13. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

14. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

15. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

16. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

17. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

18. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

19. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

20. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

21. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

22. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

23. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

24. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

25. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

26. 板厚方向 Through Thickness, R: 45° 方向 45Deg to the Longitudinal Axis

上記注文品は御指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi

新日本製鐵株式会社
品質管理部長
Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSUWORKS

注 文 者 : HANWA CO., LTD.
 SHIPPER
 注文者照合番号 : 228-38501040
 REFERENCE No.
 契約番号 : 0-831-H1-5-0-A101
 CONTRACT No.
 商 品 名 : HOT ROLLED STEEL PLATES
 COMMODITY
 規 格 : ASME SA-516 GRADE 70-E07-A08
 SPECIFICATION
 文 書 番 号 :
 DOCUMENT No.

新日本製鐵株式會社

Nippon Steel Corporation

鋼 材 檢 査 証 明 書

INSPECTION CERTIFICATE

(AS PER EN 10204 CERTIFICATE ON MATERIAL
 TESTS 3.1)
 需 要 家 : EDMONTON EXCHANGER GROUP OF C-
 CUSTOMERS CONTROL No. E3001P07Q0 E07

証 明 書 番 号 : P-09818 PAGE : 20
 CERTIFICATE No.

発 行 年 月 日 : 2010-10-25
 DATE OF ISSUE

2**DM*****

*****CEW*****

文番番号 : DOCUMENT No.

需要家 : COMPANIES

EDMUNTON EXCHANGE GROUP LTD

CUSTOMERS CONTROL NO.

E3001P0700 E07

寸 法 DIMENSION mm, 'inch, 'feet	良数 QUAN- TITY	質 量 MASS KG	製鋼番号 CAST No.	製品番号 PLATE No.	引 張 試 験 TENSILE TEST				衝 撃 試 験 IMPACT TEST				化 学 成 分 CHEMICAL COMPOSITION %																
					0.2 % YS		引張強さ TS		伸び EL		%		2V - 50F FT-LB		2V - 50F FT-LB		C ×100 %006	Si ×100 %006	Mn ×100 %006	P ×1000 %006	S ×1000 %006	Cu ×100 %006	Ni ×100 %006	Cr ×100 %006	Mo ×100 %006	Nb ×100 %006	V ×100 %006	Co ×100 %006	
					YS	TS	EL	%	FT-LB	FT-LB	FT-LB	FT-LB																	
1' X 120.5' X 480'	04	7442	G7546 55570	879270463TC1	53	75	33		294 299 304	294 299 304	294 299 304	294 299 304	16	37	145	8	2	2	2	2	2	0	0	0	0	0	0	0	0
1' X 120.5' X 480'	04	7442	G7546 55570	879270464TC1	53	75	33		294 299 304	294 299 304	294 299 304	294 299 304	16	37	145	8	2	2	2	2	2	0	0	0	0	0	0	0	0
1' X 120.5' X 480'	04	7442	G7546 55571	879270459TC1	53	75	33		261 296 286	261 296 286	261 296 286	261 296 286	16	37	145	8	2	2	2	2	2	0	0	0	0	0	0	0	0
1' X 120.5' X 480'	04	7442	G7546 55571	879270459TC1	53	75	33		261 296 286	261 296 286	261 296 286	261 296 286	16	37	145	8	2	2	2	2	2	0	0	0	0	0	0	0	0

注 釈 NOTES [※1] Location Orientation 位置・方向, T: 頭部 Top, B: 底部 Bottom, L: 長手方向 Longitudinal, C: 短手方向 Transverse, Z: 縦断方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis

[※2] GL 端点距離 Gage Length, A: 50mm 平形板状片 Rectangular, B: 50mm 平形板状片 Rectangular, C: 70mm 平形板状片 Rectangular, D: 70mm 平形板状片 Rectangular, E: 80mm 平形板状片 Rectangular, F: 80mm 平形板状片 Rectangular, G: 200mm, H: 2', I: 8', J: 5.55'/Se, K: 4'/So
 [※3] RA: 絞り Reduction of Area, YR: 降伏比 Yield Ratio, [※4] A: 合格 Acceptable, [※5] F: 標準寸法 FULL SIZE, 2: 2.5mm, 3: 3.3mm, 4: 3.3mm, 5: 5.0mm, 6: 6.67mm, 7: 7.5mm, 8: 6.67mm, 9: 製品板厚 Plate Thickness, [※6] P: 製品分析 Product Analysis, [※7] N: 焼却 Normalized, Q: 焼入れ Quenched, T: 焼戻し Tempered, CR: Controlled Rolled, N1C: NIC Process/TMC Process, CLC: CLC Process/TMC Process, AR: As Rolled, TMR: TMR Process/TMC Process, NR: Normalizing Rolled, SH: 延性断面率 Shear Fracture, CF: 延性断面率 Crystallinity Fracture, LE: 側面断面率 Lateral Expansion, AGS: オーステナイト組織 Austenite Grain Size, FGS: フェライト組織 Ferrite Grain Size, SR: Stress Relieved/Post Weld Heat Treatment

上記注文品は御指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
 MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi

君津製鐵所 管理グループリーダ
 Head of Department
 PLATE QUALITY CONTROL DEPT.
 KIMITSU WORKS



新日本製鐵株式會社
Nippon Steel Corporation
鋼材検査証明書
INSPECTION CERTIFICATE

鋼材検査証明書
INSPECTION CERTIFICATE

注文者: HANWA CO., LTD.
注文者照会番号: 228-38501040
契約番号: 0-831-H1-5-0-A101
商品名: HOT ROLLED STEEL PLATES

(AS PER EN 10204 CERTIFICATE ON MATERIAL TESTS 3.1)

規格: ASME SA-516 GRADE 70-E07-A08

文書番号: DOCUMENT No.

需要家: EDMONTON EXCHANGER GROUP OF COMPANIES

製品番号: PLATE No.

製造番号: TEST No.

重量: MASS

数量: QUANTITY

寸法: DIMENSION

1' X 120.5' X 480"

証明書番号: P-09818

発行年月日: 2010-10-25

DATE OF ISSUE: 1001

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注 文 者 : HANWA CO., LTD.
SHIPPER

注文者照会番号 : 228-38501040
REFERENCE No.

契約番号 : 0-831-H1-5-0-AT01
CONTRACT No.

商 品 名 : HOT ROLLED STEEL PLATES
COMMODITY

規格 : ASME SA-516 GRADE 70-E07-A08
SPECIFICATION

文書番号 : 需要家管理番号 :
DOCUMENT No. CUSTOMER'S CONTROL No.

新日本製鐵株式会社
Nippon Steel Corporation

鋼材検査証明書

INSPECTION CERTIFICATE

(AS PER EN 10204 CERTIFICATE ON MATERIAL

TESTS 3.1)

需要家管理番号 :
CUSTOMER'S CONTROL No.

証明書番号 : P-09818
CERTIFICATE No.

発行年月日 : 2010-10-25
DATE OF ISSUE

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*****CEW***
E3001P07Q0 E07

寸 法	DIMENSION	数量	品質	製造番号 CAST No.	製品番号 PLATE No.	引張試験 TENSILE TEST	衝撃試験 IMPACT TEST	硬度試験 HBS	化 学 成 分											
									C	Si	Mn	P	S	Cr	Mo	Ni	Al	Co	Fe	Others
1' X 120.5' X 480'	04	1	7.442	67546 55574	879270461	Y.S. 470-510 T.S. 53 KSI	2V - 50F FT. LB 291	291	16	37	145	8	2	2	2	2	0	12	0	2541
1' X 120.5' X 480'	04	1	7.442	67546 55574	879270462	Y.S. 470-510 T.S. 53 KSI	2V - 50F FT. LB 291	291	16	37	145	8	2	2	2	2	0	12	0	2541
1' X 120.5' X 480'	04	1	7.442	67546 55574	879270465	Y.S. 470-510 T.S. 53 KSI	2V - 50F FT. LB 291	291	16	37	145	8	2	2	2	2	0	12	0	2541

注 記 NOTES ① Location Orientation 位置・方向: T: 頂部 Top, B: 底部 Bottom, L: 圧延方向 Longitudinal, C: 直角方向 Transverse, Z: 板厚方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis

② GL 製品型番 Gage Length, A: 50mm 平形試験片 Rectangular, B: 70mm 平形試験片 Rectangular, D: 70mm 平形試験片 Rectangular, F: 80mm 平形試験片 Rectangular, P: 80mm 平形試験片 Rectangular, R: 80mm 平形試験片 Rectangular, S: 80mm 平形試験片 Rectangular, T: 80mm 平形試験片 Rectangular, U: 80mm 平形試験片 Rectangular, V: 80mm 平形試験片 Rectangular, W: 80mm 平形試験片 Rectangular, X: 80mm 平形試験片 Rectangular, Y: 80mm 平形試験片 Rectangular, Z: 80mm 平形試験片 Rectangular

③ RA 板厚減少率 Reduction of Area, Y.R: 降伏比 Yield Ratio, ④ A: 合格 Acceptable, ⑤ F: 不合格 Unacceptable, ⑥ P: 製品分析 Product Analysis, ⑦ N: 焼入れ焼戻し Tempered, CR: 焼入れ焼戻し Tempered, T: 焼入れ焼戻し Tempered, Q: 焼入れ焼戻し Tempered, R: 焼入れ焼戻し Tempered, S: 焼入れ焼戻し Tempered, U: 焼入れ焼戻し Tempered, V: 焼入れ焼戻し Tempered, W: 焼入れ焼戻し Tempered, X: 焼入れ焼戻し Tempered, Y: 焼入れ焼戻し Tempered, Z: 焼入れ焼戻し Tempered

⑧ SH: 延性断面係数 Shear Fracture, CF: 脆性断面係数 Crystallographic Fracture, L.B: 板厚方向断面係数 Lateral Expansion, AGS: オーステナイト相変態温度 Austenite Grain Size, FGS: フェライト相変態温度 Ferrite Grain Size, SR: Stress Relieved Post Weld Heat Treatment

上記注文品は御指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。
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品質保証部部長 管理グループリーダー
Head of Department
PLATE QUALITY CONTROL DEPT.
KUMISUWORKS



注文者: HANWA CO., LTD.

注文者照会番号: 228-38501040

契約番号: 0-831-H1-5-0-A101

商品名: HOT ROLLED STEEL PLATES

規格: ASME SA-516 GRADE 70-E07-A08

文書番号: 需要家: EDMONTON EXCHANGER GROUP OF C-

DOCUMENT No.: 需要家管理番号: 鋼材検査証明書

新日本製鐵株式会社
Nippon Steel Corporation

鋼材検査証明書

INSPECTION CERTIFICATE

(AS PER EN 10204 CERTIFICATE ON MATERIAL TESTS 3.1)

需要家管理番号: 鋼材検査証明書

CUSTOMER'S CONTROL No.: E3001P07Q0 E07

証明書番号: P-09818

発行年月日: 2010-10-25

DATE OF ISSUE: 1001

228DMM*****

*****CEW***

E3001P07Q0 E07

寸法	DIMENSION	数量	質量	CAST No.	TEST No.	製品番号	PLATE No.	引張試験	TENSILE TEST	衝撃試験	IMPACT TEST	硬度試験	HBW	化学成分											
								YS	TS	EL	AVG	FL		C	Si	Mn	P	S	Ca	Ni	Cr	Mo	Nb	V	Ti
1' X 120.5' X 480'	04	1	7.442	G7547	55588	TESTED-PL	87927047TIC1	54	76	33	294	288	279	15	38	146	9	2	2	2	2	2	2	2	0
1' X 120.5' X 480'	04	1	7.442	G7547	55588	TESTED-PL	87927047TIC1	54	76	33	294	288	279	15	38	146	9	2	2	2	2	2	2	2	0
1' X 120.5' X 480'	04	1	7.442	G7547	55588	TESTED-PL	87927047TIC1	53	76	32	282	288	287	15	38	146	9	2	2	2	2	2	2	2	0

注 新 NOTES 1. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

2. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

3. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

4. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

5. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

6. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

7. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

8. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

9. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

10. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

11. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

12. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

13. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

14. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

15. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

16. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

17. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

18. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

19. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

20. 位置: Top, B: 底部 Bottom, L: 左端 Left, R: 右端 Right, T: 端面 End, C: 中央 Center, S: 表面 Surface, B: 背面 Back, E: 80mm 厚板板厚, F: 80mm 厚板板厚, G: 200mm, H: 2', I: 8', J: 5.65', K: 4', L: 8'

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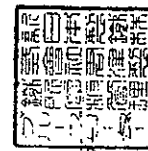
J. Adachi

常務取締役 品質管理グループリーダー

Head of Department

PLATE QUALITY CONTROL DEPT.

KIMITSU WORKS



注文者 : HANWA CO., LTD.

SHIPPER : 注文者照会番号

REFERENCE No. : 228-38501040

契約番号 : 0-831-H1-5-0-AI01

CONTRACT No. : 0-831-H1-5-0-AI01

商品名 : HOT ROLLED STEEL PLATES

規格 : ASME SA-516 GRADE 70-E07-A08

文書番号 : 需要家 EDMONTON EXCHANGER GROUP OF C-

DOCUMENT No. : 需要家 COMPANYIES

新日本製鐵株式會社

Nippon Steel Corporation

鋼材検査証明書

INSPECTION CERTIFICATE

(AS PER EN 10204 CERTIFICATE ON MATERIAL TESTS 3.1)

需要家管理番号 : CUSTOMER'S CONTROL No.

需要家管理番号 : E3001P07Q0 E07

需要家管理番号 : 2***DM*****

需要家管理番号 : *****CEW**

需要家管理番号 : 1001

需要家管理番号 : 2010-10-25

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需要家管理番号 : 2010-10-25

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 本社 : 〒1-1, KIMITSU, KIMITSU-CITY, CHIBA-PREF. 299-1141, JAPAN
 KIMITSUWORKS

証明書番号 : P-09818 PAGE : 27
 CERTIFICATE No. : 発行年月日 : 2010-10-25
 DATE OF ISSUE : 1001

需要家管理番号 : 2***DM*****
 *****CEW**
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注 釈 NOTES [※1] Location Orientation 位置・方向, T: 頂部 Top, B: 底部 Bottom, L: 経度方向 Longitudinal, C: 直交方向 Transverse, Z: 傾斜方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis
 [※2] G.L. 位置位置 Gage Length, A: 50mm 正方形試片 Rectangular, B: 50mm 正方形試片 Rectangular, C: 70mm 正方形試片 Rectangular, D: 70mm 正方形試片 Rectangular, E: 80mm 正方形試片 Rectangular, F: 60mm 正方形試片 Rectangular, G: 200mm, H: 2°, I: 8°, J: 5.65/√So, K: 4/√So
 [※3] RA: 絞り Reduction of Area, YR: 降伏比 Yield Ratio, [※4] A: 合格 Acceptable, [※5] F: 試験片 FULL SIZE, 2: 2.5mm, 3: 3.3mm, 4: 3.3mm, 5: 5.0mm, 6: 6.67mm, 7: 7.5mm, 8: 6.7mm, 9: 製品板厚 Plate Thickness, [※6] P: 製品分析 Product Analysis, [※7] N: 焼入れ Tempered, Q: 焼入れ Quenched, T: 焼入れ Tempered, CR: Controlled Rolled, NI C: NIC Process/TMC Process, CL C: CLC Process/TMC Process, AR: As Rolled, TMR: TMR Process/TMC Process, N.R: Normalizing Rolled, SH: 延性断面率 Shear Fracture, C.F: 延性断面率 Cystallinity Fracture, L.E: 延性断面率 Austenite Grain Size, F.G.S: オーステナイト粒径 Ferrite Grain Size, S.R: Stress Relieved/Post Weld Heat Treatment

上記注文書は御指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
 MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi
 君津製鐵所厚板管理グループリーダー
 Head of Department
 PLATE QUALITY CONTROL DEPT.
 KIMITSUWORKS



新日本製鐵株式會社
Nippon Steel Corporation

鋼材検査証明書
INSPECTION CERTIFICATE

注文者 : HANWA CO., LTD.
注文者照会番号 : 228-38501040
契約番号 : 0-831-H1-5-0-A101
商品名 : HOT ROLLED STEEL PLATES
規格 : ASME SA-516 GRADE 70-E07-A08
文書番号 :
DOCUMENT No. :
需要家 : EDMONTON EXCHANGER GROUP OF C-
CUSTOMER : COMPANIES

証明書番号 : P-09818
発行年月日 : 2010-10-25
DATE OF ISSUE : 1001

E3001P07Q0 E07

寸法 DIMENSION mm, 'inch, 'feet	数量 QUANTITY	質量 MASS KG	製鋼番号 CAST No. 試験番号 TEST No.	製品番号 PLATE No.	引張試験 TENSILE TEST			衝撃試験 IMPACT TEST			化学成分 CHEMICAL COMPOSITION %											
					YS	TS	EL	2V	50F	FT	C	Si	Mn	P	S	Al	Ni	Cr	Mo	Nb	V	Co
0.75' X 120.5' X 480'	2	11158	55168	879270214	54	77	30	TLF180	272	156	16	36	143	9	1	2	2	2	2	0	0	0
				879270215							16	36	143	9	1	2	2	2	2	0	0	0
1' X 96.5' X 480'	1	5958	55194	879270301	53	75	30	TLF294	309	151	15	36	143	5	1	2	2	2	2	0	0	0
				879270302							15	36	143	5	1	2	2	2	2	0	0	0
1' X 96.5' X 480'	2	11916	55194	879270302	53	75	30	TLF294	309	151	15	36	143	5	1	2	2	2	2	0	0	0
				879270303							15	36	143	5	1	2	2	2	2	0	0	0

注釈 NOTES [※1] 位置 Orientation 位置・方向, T: 頂部 Top, B: 底部 Bottom, L: 圧延方向 Longitudinal, C: 横方向 Transverse, Z: 板厚方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis
[※2] G.L. 標点距離 Gauge Length, A: 50mm 平形試験片 Rectangular, B: 50mm 丸形試験片 Round, C: 70mm 平形試験片 Rectangular, D: 70mm 丸形試験片 Round, E: 80mm 平形試験片 Rectangular, F: 80mm 丸形試験片 Round, G: 200mm 平形試験片 Rectangular, H: 200mm 丸形試験片 Round, I: 200mm 平形試験片 Rectangular, J: 200mm 丸形試験片 Round, K: 4.4/So
[※3] R.A.: 絞り Reduction of Area, Y.R.: 降伏比 Yield Ratio, [※4] A: 合格 Acceptable, [※5] P: 製品分析 Product Analysis, [※6] P: 製品分析 Product Analysis, [※7] P: 製品分析 Product Analysis
[※8] N: 焼入れ Normalized, Q: 焼入れ Quenched, T: 焼戻し Tempered, C.R.: Controlled Rolled, N.T.C.: MC Process/TMC Process, C.L.C.: CLC Process/TMC Process, A.R.: As Rolled, T.M.R.: TMR Process/TMC Process, N.R.: Normalizing Rolled
[※9] S.H.: 延性断面率 Shear Fracture, C.F.: 脆性断面率 Crystallinity Fracture, L.E.: 縦断面 Lateral Expansion, A.G.S.: オーステナイト相度 Austenite Grain Size, F.G.S.: フェライト相度 Ferrite Grain Size, S.R.: Stress Relieved/Post Weld Heat Treatment

上記注文品は鋼指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。
WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN
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J. Adachi
君津製鐵所庶務管理グループリーダー
Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSU WORKS



注 文 者 : HANWA CO., LTD.

注文者照合番号 : 228-38501040

契約番号 : 0-831-HJ-5-0-AI01

商 品 名 : HOT ROLLED STEEL PLATES

規 格 : ASME SA-516 GRADE 70-E07-A08

文 書 番 号 : 需 要 家 : EDMONTON EXCHANGER GROUP OF C-

DOCUMENT No. : 需 要 家 : COMPANIES

新日本製鐵株式會社
Nippon Steel Corporation

鋼 材 檢 査 証 明 書

INSPECTION CERTIFICATE

(AS PER EN 10204 CERTIFICATE ON MATERIAL

TESTS 3.1)

需 要 家 管 理 番 号 : CUSTOMER'S CONTROL No.

証 明 書 番 号 : P-09818

発行年月日

DATE OF ISSUE : 2010-10-25

1001

*****CEW*****

E3001P0700 E07

寸 法 DIMENSION mm, inch, feet	厚 度 THICKNESS	重量 WEIGHT	製品番号 PLATE NO.	試験番号 TEST No.	引張試験 TENSILE TEST	衝撃試験 IMPACT TEST	化 学 成 分 CHEMICAL COMPOSITION %									
							C	Si	Mn	P	S	Al	Ni	Cr	Mo	Nb
1' X 96.5' X 480"	03	2	11916	55199	75	31	AVG 15	36	143	5	1	2	2	2	2	0
							28	2	6	0	13	2	0	0	0	0
							AVG 15	36	143	5	1	2	2	2	2	0
							28	2	6	0	13	2	0	0	0	0
1' X 96.5' X 480"	03	1	5958	55200	75	31	AVG 15	36	143	5	1	2	2	2	2	0
							28	2	6	0	13	2	0	0	0	0
							AVG 15	36	143	5	1	2	2	2	2	0
							28	2	6	0	13	2	0	0	0	0
1' X 96.5' X 480"	03	2	11916	55200	75	31	AVG 15	36	143	5	1	2	2	2	2	0
							28	2	6	0	13	2	0	0	0	0
							AVG 15	36	143	5	1	2	2	2	2	0
							28	2	6	0	13	2	0	0	0	0

注 記 NOTES 1. 位置方向 Longitudinal, C: 垂直方向 Transverse, Z: 板厚方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis

2. 試験位置 Location Orientation 位置・方向, T: 頂部 Top, B: 底部 Bottom, L: 長さ方向 Longitudinal, C: 垂直方向 Transverse, Z: 板厚方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis

3. 試験方法 Test Method 試験方法 Full Size, 2: 2.5mm, 3: 3.3mm, 4: 3.3mm, 5: 5.0mm, 6: 6.6mm, 7: 7.5mm, 8: 8.7mm, 9: 製品板厚 Plate Thickness, 10: 試験板厚 Test Plate Thickness

4. 合格 Acceptable, 5. 不合格 Unacceptable

6. 試験方法 Test Method 試験方法 Full Size, 2: 2.5mm, 3: 3.3mm, 4: 3.3mm, 5: 5.0mm, 6: 6.6mm, 7: 7.5mm, 8: 8.7mm, 9: 製品板厚 Plate Thickness, 10: 試験板厚 Test Plate Thickness

7. 試験方法 Test Method 試験方法 Full Size, 2: 2.5mm, 3: 3.3mm, 4: 3.3mm, 5: 5.0mm, 6: 6.6mm, 7: 7.5mm, 8: 8.7mm, 9: 製品板厚 Plate Thickness, 10: 試験板厚 Test Plate Thickness

8. 試験方法 Test Method 試験方法 Full Size, 2: 2.5mm, 3: 3.3mm, 4: 3.3mm, 5: 5.0mm, 6: 6.6mm, 7: 7.5mm, 8: 8.7mm, 9: 製品板厚 Plate Thickness, 10: 試験板厚 Test Plate Thickness

9. 試験方法 Test Method 試験方法 Full Size, 2: 2.5mm, 3: 3.3mm, 4: 3.3mm, 5: 5.0mm, 6: 6.6mm, 7: 7.5mm, 8: 8.7mm, 9: 製品板厚 Plate Thickness, 10: 試験板厚 Test Plate Thickness

10. 試験方法 Test Method 試験方法 Full Size, 2: 2.5mm, 3: 3.3mm, 4: 3.3mm, 5: 5.0mm, 6: 6.6mm, 7: 7.5mm, 8: 8.7mm, 9: 製品板厚 Plate Thickness, 10: 試験板厚 Test Plate Thickness

上記注文品は御指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。

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J. Adachi
Head of Department
PLATE QUALITY CONTROL DEPT.
KIMITSUWORKS



新日本製鐵株式會社
Nippon Steel Corporation

鋼材検査証明書
INSPECTION CERTIFICATE

注文者: HANWA CO., LTD.
注文者照合番号: 228-38501040
契約番号: 0-831-H1-5-0-A101
商品名: HOT ROLLED STEEL PLATES
規格: ASME SA-516 GRADE 70-E07-A08
文書番号: 需要家管理番号: E3001P07Q0 E07

(AS PER EN 10204 CERTIFICATE ON MATERIAL TESTS 3.1.)
需要家管理番号: E3001P07Q0 E07

寸法 DIMENSION mm, inch, feet	数量 QUANTITY	質量 MASS KG	鋼種番号 CAST No.	製品番号 PLATE No.	引張試験 TENSILE TEST				化学成分 CHEMICAL COMPOSITION %									
					Y.S.	T.S.	EL	%	C	Si	Mn	P	S	Al	Ni	Cr	Mo	Nb
1' X 96.5' X 480'	03	5958	55583	879270314TCI	53	76	29		15	38	146	9	2	2	2	2	0	0
									AVG	38	146	9	2	2	2	2	0	0
									317	312	288							
1' X 96.5' X 480'	03	5958	55583	879270314TCI	53	76	29		15	38	146	9	2	2	2	2	0	0
									AVG	38	146	9	2	2	2	2	0	0
									317	312	288							
1' X 96.5' X 480'	03	5958	55583	879270314TCI	53	76	31		15	38	146	9	2	2	2	2	0	0
									AVG	38	146	9	2	2	2	2	0	0
									293	303	295							
1' X 96.5' X 480'	03	5958	55583	879270314TCI	53	76	31		15	38	146	9	2	2	2	2	0	0
									AVG	38	146	9	2	2	2	2	0	0
									293	303	295							

注釈 NOTES: 1. 位置: Top, Bottom, Longitudinal, C: 垂直方向 Transverse, Z: 垂直方向 Through Thickness, R: 45° 方向 45Deg. to the Longitudinal Axis. 2. 試験方法: 50F, 50R, 50S, 50T, 50U, 50V, 50W, 50X, 50Y, 50Z, 50AA, 50AB, 50AC, 50AD, 50AE, 50AF, 50AG, 50AH, 50AI, 50AJ, 50AK, 50AL, 50AM, 50AN, 50AO, 50AP, 50AQ, 50AR, 50AS, 50AT, 50AU, 50AV, 50AW, 50AX, 50AY, 50AZ, 50BA, 50BB, 50BC, 50BD, 50BE, 50BF, 50BG, 50BH, 50BI, 50BJ, 50BK, 50BL, 50BM, 50BN, 50BO, 50BP, 50BQ, 50BR, 50BS, 50BT, 50BU, 50BV, 50BW, 50BX, 50BY, 50BZ, 50CA, 50CB, 50CC, 50CD, 50CE, 50CF, 50CG, 50CH, 50CI, 50CJ, 50CK, 50CL, 50CM, 50CN, 50CO, 50CP, 50CQ, 50CR, 50CS, 50CT, 50CU, 50CV, 50CW, 50CX, 50CY, 50CZ, 50DA, 50DB, 50DC, 50DD, 50DE, 50DF, 50DG, 50DH, 50DI, 50DJ, 50DK, 50DL, 50DM, 50DN, 50DO, 50DP, 50DQ, 50DR, 50DS, 50DT, 50DU, 50DV, 50DW, 50DX, 50DY, 50DZ, 50EA, 50EB, 50EC, 50ED, 50EE, 50EF, 50EG, 50EH, 50EI, 50EJ, 50EK, 50EL, 50EM, 50EN, 50EO, 50EP, 50EQ, 50ER, 50ES, 50ET, 50EU, 50EV, 50EW, 50EX, 50EY, 50EZ, 50FA, 50FB, 50FC, 50FD, 50FE, 50FF, 50FG, 50FH, 50FI, 50FJ, 50FK, 50FL, 50FM, 50FN, 50FO, 50FP, 50FQ, 50FR, 50FS, 50FT, 50FU, 50FV, 50FW, 50FX, 50FY, 50FZ, 50GA, 50GB, 50GC, 50GD, 50GE, 50GF, 50GG, 50GH, 50GI, 50GJ, 50GK, 50GL, 50GM, 50GN, 50GO, 50GP, 50GQ, 50GR, 50GS, 50GT, 50GU, 50GV, 50GW, 50GX, 50GY, 50GZ, 50HA, 50HB, 50HC, 50HD, 50HE, 50HF, 50HG, 50HH, 50HI, 50HJ, 50HK, 50HL, 50HM, 50HN, 50HO, 50HP, 50HQ, 50HR, 50HS, 50HT, 50HU, 50HV, 50HW, 50HX, 50HY, 50HZ, 50IA, 50IB, 50IC, 50ID, 50IE, 50IF, 50IG, 50IH, 50II, 50IJ, 50IK, 50IL, 50IM, 50IN, 50IO, 50IP, 50IQ, 50IR, 50IS, 50IT, 50IU, 50IV, 50IW, 50IX, 50IY, 50IZ, 50JA, 50JB, 50JC, 50JD, 50JE, 50JF, 50JG, 50JH, 50JI, 50JJ, 50JK, 50JL, 50JM, 50JN, 50JO, 50JP, 50JQ, 50JR, 50JS, 50JT, 50JU, 50JV, 50JW, 50JX, 50JY, 50JZ, 50KA, 50KB, 50KC, 50KD, 50KE, 50KF, 50KG, 50KH, 50KI, 50KJ, 50KK, 50KL, 50KM, 50KN, 50KO, 50KP, 50KQ, 50KR, 50KS, 50KT, 50KU, 50KV, 50KW, 50KX, 50KY, 50KZ, 50LA, 50LB, 50LC, 50LD, 50LE, 50LF, 50LG, 50LH, 50LI, 50LJ, 50LK, 50LL, 50LM, 50LN, 50LO, 50LP, 50LQ, 50LR, 50LS, 50LT, 50LU, 50LV, 50LW, 50LX, 50LY, 50LZ, 50MA, 50MB, 50MC, 50MD, 50ME, 50MF, 50MG, 50MH, 50MI, 50MJ, 50MK, 50ML, 50MN, 50MO, 50MP, 50MQ, 50MR, 50MS, 50MT, 50MU, 50MV, 50MW, 50MX, 50MY, 50MZ, 50NA, 50NB, 50NC, 50ND, 50NE, 50NF, 50NG, 50NH, 50NI, 50NJ, 50NK, 50NL, 50NM, 50NO, 50NP, 50NQ, 50NR, 50NS, 50NT, 50NU, 50NV, 50NW, 50NX, 50NY, 50NZ, 50OA, 50OB, 50OC, 50OD, 50OE, 50OF, 50OG, 50OH, 50OI, 50OJ, 50OK, 50OL, 50OM, 50ON, 50OO, 50OP, 50OQ, 50OR, 50OS, 50OT, 50OU, 50OV, 50OW, 50OX, 50OY, 50OZ, 50PA, 50PB, 50PC, 50PD, 50PE, 50PF, 50PG, 50PH, 50PI, 50PJ, 50PK, 50PL, 50PM, 50PN, 50PO, 50PP, 50PQ, 50PR, 50PS, 50PT, 50PU, 50PV, 50PW, 50PX, 50PY, 50PZ, 50QA, 50QB, 50QC, 50QD, 50QE, 50QF, 50QG, 50QH, 50QI, 50QJ, 50QK, 50QL, 50QM, 50QN, 50QO, 50QP, 50QQ, 50QR, 50QS, 50QT, 50QU, 50QV, 50QW, 50QX, 50QY, 50QZ, 50RA, 50RB, 50RC, 50RD, 50RE, 50RF, 50RG, 50RH, 50RI, 50RJ, 50RK, 50RL, 50RM, 50RN, 50RO, 50RP, 50RQ, 50RR, 50RS, 50RT, 50RU, 50RV, 50RW, 50RX, 50RY, 50RZ, 50SA, 50SB, 50SC, 50SD, 50SE, 50SF, 50SG, 50SH, 50SI, 50SJ, 50SK, 50SL, 50SM, 50SN, 50SO, 50SP, 50SQ, 50SR, 50SS, 50ST, 50SU, 50SV, 50SW, 50SX, 50SY, 50SZ, 50TA, 50TB, 50TC, 50TD, 50TE, 50TF, 50TG, 50TH, 50TI, 50TJ, 50TK, 50TL, 50TM, 50TN, 50TO, 50TP, 50TQ, 50TR, 50TS, 50TT, 50TU, 50TV, 50TW, 50TX, 50TY, 50TZ, 50UA, 50UB, 50UC, 50UD, 50UE, 50UF, 50UG, 50UH, 50UI, 50UJ, 50UK, 50UL, 50UM, 50UN, 50UO, 50UP, 50UQ, 50UR, 50US, 50UT, 50UU, 50UV, 50UW, 50UX, 50UY, 50UZ, 50VA, 50VB, 50VC, 50VD, 50VE, 50VF, 50VG, 50VH, 50VI, 50VJ, 50VK, 50VL, 50VM, 50VN, 50VO, 50VP, 50VQ, 50VR, 50VS, 50VT, 50VU, 50VV, 50VW, 50VX, 50VY, 50VZ, 50WA, 50WB, 50WC, 50WD, 50WE, 50WF, 50WG, 50WH, 50WI, 50WJ, 50WK, 50WL, 50WM, 50WN, 50WO, 50WP, 50WQ, 50WR, 50WS, 50WT, 50WU, 50WV, 50WW, 50WX, 50WY, 50WZ, 50XA, 50XB, 50XC, 50XD, 50XE, 50XF, 50XG, 50XH, 50XI, 50XJ, 50XK, 50XL, 50XM, 50XN, 50XO, 50XP, 50XQ, 50XR, 50XS, 50XT, 50XU, 50XV, 50XW, 50XX, 50XY, 50XZ, 50YA, 50YB, 50YC, 50YD, 50YE, 50YF, 50YG, 50YH, 50YI, 50YJ, 50YK, 50YL, 50YM, 50YN, 50YO, 50YP, 50YQ, 50YR, 50YS, 50YT, 50YU, 50YV, 50YW, 50YX, 50YY, 50YZ, 50ZA, 50ZB, 50ZC, 50ZD, 50ZE, 50ZF, 50ZG, 50ZH, 50ZI, 50ZJ, 50ZK, 50ZL, 50ZM, 50ZN, 50ZO, 50ZP, 50ZQ, 50ZR, 50ZS, 50ZT, 50ZU, 50ZV, 50ZW, 50ZX, 50ZY, 50ZZ.

君津製鐵所 検査管理グループ
Head of Department
PLATE QUALITY CONTROL DEPT.
KIMTSU WORKS

J. Adachi

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.



本社 〒100-8071 東京都千代田区丸の内二丁目6番1号
 社 2-6-1, NAKUMOUCHI, CHITODA-KU, TOKYO 100-8071, JAPAN
 HEAD OFFICE
 営業所 〒299-1141 千葉県君津市君津1番地
 KIMITSU WORKS 1, KIMITSU, KUNITSU-CITY, CHIBA-PREF. 299-1141 JAPAN

新日本製鐵株式會社
Nippon Steel Corporation

鋼材検査証明書
INSPECTION CERTIFICATE

證明書 番 号 : P-09818 PAGE 38

發行年月日 : 2010-10-25

AS PER EN 10204 CERTIFICATE ON MATERIAL

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1001      ##          ##
      ## DMCEW    ##
      ##          ##

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TESTS 3.1)

E3001P07Q0 E07

EXCHANGER GROUP OF C-

学 成 分						CHEMICAL COMPOSITION %			Ceq.
Mn	P	S	Si	Ni	C	Mo	Nb	V	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

[illegible]

注 記		NOTES	※1
※2	C/L 縦断面 Gauge Length, A: 50mm 丸形試片 Round, B: 50mm 丸形試片 Rectangular, D: 70mm 平形試片 Rectangular, E: 70mm 平形試片 Rectangular, F: 80mm 平形試片 Rectangular, G: 200mm, H: 2', I: 8', J: 5.65"/S ₀ , K: 4"/S ₀	位置・方向	位置・方向
※3	R.A.: 絞り Reduction of Area, Y.R.: 引張ばね Yield Ratio, T.M.P.: 熱処理 Temperature, S.R.: 応力 Relief Stress, S.T.: 強度 Shear Fracture, C.L.: 縦断面 Coaxiality Fracture, L.E.: 縦断面 Lateral Expansion, A.G.S.: シース・スライダ型 Austenitic Grain Size, F.G.S.: シース・スライダ型 Ferritic Grain Size, S.R.: Stress Relieved post Weld Heat Treatment	位置・方向	位置・方向
※4	R.A.: 絞り Reduction of Area, Y.R.: 引張ばね Yield Ratio, T.M.P.: 熱処理 Temperature, S.R.: 応力 Relief Stress, S.T.: 強度 Shear Fracture, C.L.: 縦断面 Coaxiality Fracture, L.E.: 縦断面 Lateral Expansion, A.G.S.: シース・スライダ型 Austenitic Grain Size, F.G.S.: シース・スライダ型 Ferritic Grain Size, S.R.: Stress Relieved post Weld Heat Treatment	位置・方向	位置・方向
※5	※5	位置・方向	位置・方向

上記注文品は御指定の規格または仕様に従って製造され、その要求事項を満足していることを証明します。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi
 包連製造所 板管理グループ
 Head of Department
 PLATE QUALITY CONTROL DEPT
 KIMITSU WORKS



注 文 者 :	HANWA CO., LTD.
SHIPPER	
在文者國台證号	
REFERENCE No.	228-38501040
契約號碼	
CONTRACT No.	0-831-HI-5-0-AI.Q1
商 品 名	
COMMODITY	HOT ROLLED STEEL PLATES
規 格	
SPECIFICATION	ASME SA-516 GRADE 70-E07-A08
文 書 番 号	
DOCUMENT No.	
需 要 家	
CUSTOMER	

鋼材検査証明書
INSPECTION CERTIFICATE

本社 東京千代田区丸の内二丁目6番1号
社 2-6-1, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8071, JAPAN
HEAD OFFICE
岩津製鐵所 千葉県岩津市君津1番地
1, KAMITSU, KAMITSU-CITY, CHIBA-PREF. 299-1141 JAPAN
KAMITSU WORKS

証明書番号 : P-09818 PAGE: 39E

ON EXCHANGER GROUP OF C-
TESTS 3.1)
AS PER EN 10204 CERTIFICATE ON MATERIAL
CUSTOMER'S CONTROL
需要家管理控制

規格 SPECIFICATION : ASME SA-516 GRADE 70-E07-A08
文書番号 : 需要部 CUSTOMER

Customer's Control No.

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2**DM*****
*****CEW*****
E3001P0700 E07

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[illegible][illegible][illegible]

上記注文品は毎箱の規格に従って製造され、その要求事項を満足していることを証明します。

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

J. Adachi
 高級建築設備所 板管理グループリーダ
 Head of Management
 PLATE QUALITY CONTROL DEPT.
 CONCRETE WORKS



edmonton exchanger
& manufacturing ltd.

CERTIFICATE OF COMPLIANCE

5545-89 Street Edmonton, Alberta Canada T6E 5W9 www.edmontonexchanger.com tel 780.468.6722 • QC fax 780.466.4668 • sales fax 780.466.5155

Customer RJV GASFIELD LTD. PO 2675 Work Order C87884 Date 2011/01/25 ColC# 22012 Page 1 of 1

Item#	Description	Qty	Heat#	Form. Proc.
D87884-3	DISHED REPAD(S) - 0.3750" NOM X 10" OD (Material Spec: SA 516-70 Normalized)	1	4981K-48327	1
		11	344650-33444	-

Forming Procedure:

1. Hot Formed @ 1650F/899C and Air Cooled

Supplementary Requirements

Normalized Material Identification Marking:

'MT' indicates normalized by the mill per ASME Code Section II, Part A, SA 20, Paragraph 13.1.1.

'GMT' indicates normalized by Edmonton Exchanger per ASME Code Section II, Part A, SA 20, Paragraph 13.1.2.

'GT' indicates normalized by Edmonton Exchanger per ASME Code Section VIII Division 1, UG-85 or ASME Code Section I, PG-77.4.

The item(s) listed above comply with the requirements of ASME Code Section I, PG-29, PG-81 and ASME Code Section VIII, Division 1, UCS-79(d), UG-79 & UG-81. All welders and procedures are qualified to ASME Code Section IX. Material being supplied conforms to the latest ASME Code Section II, Part A, 2010 Edition, Addenda July 1, 2010.

Supplementary Examination - Items

JAN 28 2011

ESSAR Steel Algoma Inc.

105 West St., Sault Ste. Marie, Ontario, Canada, P6A 7B4

CUSTOMER PURCHASE ORDER NUMBER	ENTRY DATE	SHIP DATE	FULLY NUMBER	SUPPLIES NUMBER	CARRIER	MILL ORDER
E10723-J1010ER	2010/05/18	2010/07/08	184308	-	BCOL	-865121 52663

CHARGE TO CUSTOMER NAME & ADDRESS

EDMONTON STEEL PLATE
5545 - 89TH STREET
EDMONTON, ALBERTA
T5B 5W9

SHIP TO CUSTOMER NAME & ADDRESS
EDMONTON STEEL PLATE
SWITCH 2057 / EAST EDMONTON
CLOVER BAR, AB

CUSTOMER SPECIFICATION

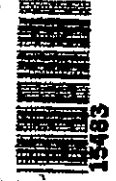
HR PLATE - CARBON - ASME SA516 GR 70 (09B) - CVNL 15/12 FT LBS AT -50 F -
ALG-STE7 R12 2010-01-15, PER SA20 - ESP-03R2 - HEAT ANALYSIS INCLUDING CE &
SB, PRODUCT ANALYSIS INCLUDING SB, SULPHIDE SHAPE CONTROL - FINE GRAIN - PQV -
NORMALIZED - FLATNESS 1/2 A-20 - NORMALIZED 12 MINUTES MIN. @ 1670F

MILL TEST REPORTS

ESSAR STEEL ALGOMA INC. HEREBY
CERTIFIES THAT THE MATERIAL HEREIN
DESCRIBED WAS MADE AND TESTED IN
ACCORDANCE WITH THE RULES OF THE
SPECIFICATION SHOWING ALL RESULTS ARE
RETAINED IN ACCORDANCE WITH THE
COMPANY'S STANDARD RECORD KEEPING
PRACTICES.

John McLean
M. MCLEAN
MANAGING METALLURGIST

THIS MILL TEST REPORT MAY NOT BE
REPRODUCED EXCEPT IN FULL WITHOUT
WRITTEN APPROVAL OF ESSAR STEEL ALGOMA
INC. IF YOU RECEIVE THIS DOCUMENT
AND ARE NOT THE INTENDED RECEIVER,
PLEASE CALL (705) 945-2424 COLLECT FOR
INSTRUCTIONS ON METHOD OF DISPOSAL OF
DOCUMENT.



SUPPLEMENTARY INSTRUCTIONS

TEST CERT 1: WHIEMSTRA@EDMONTONEXCHANGER.COM TEST CERT 2: PLA

TEST COUPON:

INSTR 2010-08-31 SUPPLEMENTAL TO: HEAT 4981K TI=.002%

CURT USE PRESSURE VESSELS

2010/07/09 06:58

MEETS EN 10204 3.1
ISO QUALITY AND ENVIRONMENTAL CERTIFICATES AVAILABLE AT WWW.ESSARSTEELALGOMA.COM
ALL HEATS FULLY KILLED
HEATS INDICATED WITH (*) FINE GRAINED
HEATS INDICATED WITH (+) MADE IN CANADA WITH DOMESTIC AND NORTH AMERICAN MATERIALS

***** PRODUCT SHIPPED *****

CUSTOMER ITEM 00001 OUR ITEM 001 DIMENSIONS .375 X 96.5 X 480 "

PLATE NUMBER	HEAT-MS	NO. PIECES	WEIGHT	PLATE NUMBER	HEAT-MS	NO. PIECES	WEIGHT
48320	4981K-04	2	9852	48323	4981K-04	2	9852
48325	4981K-05	2	9852	48327	4981K-05	2	9852
48330	4981K-06	2	9852	48331	4981K-06	2	9852
48333	4981K-06	2	9852				

***** MECHANICAL PROPERTIES *****

TENSILE TESTS:	PLATE NUMBER	HEAT	SAMPLE	GAUGE	COND	TEST	YIELD	TENSILE	% ELONG
	4981K	48320	166	.3750	N	.2	53.3	76.0	25.8
	4981K	48323	166	.3750	N	.2	55.1	77.0	25.8
	4981K	48325	166	.3750	N	.2	54.4	76.0	26.8
	4981K	48327	166	.3750	N	.2	53.2	74.3	24.8
	4981K	48330	166	.3750	N	.2	53.0	76.1	24.8
	4981K	48331	166	.3750	N	.2	53.0	76.0	29.8
	4981K	48333	166	.3750	N	.2	54.0	76.0	27.8

***** WARNING *****

THE TEST RESULTS AND VALUES REPORTED HEREIN INDICATE ONLY THAT (1) THE PARTICULAR STEEL FOR WHICH THIS CERTIFICATE IS ISSUED MEETS THE MINIMUM SPECIFIED YIELD STRENGTH AND (2) THE CHEMICAL ANALYSIS AND PHYSICAL PROPERTIES OF SUCH STEEL ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THE SPECIFICATION INDICATED. THE RESULTS OR VALUES REPORTED HEREIN CAN NOT BE USED TO QUALIFY THE STEEL FOR ANY SPECIFICATION OTHER THAN THE ONE INDICATED AND CAN NOT BE RELIED UPON FOR ANY PURPOSE (INCLUDING DESIGN OR CALCULATIONS) AS REPRESENTING THE ACTUAL STRENGTH OF SUCH STEEL.

ESSAR Steel Algonia Inc.

105 West St., Sault Ste. Marie, Ontario, Canada, P6A 7B4

CUSTOMER PURCHASE ORDER NUMBER E10723-J1010ER	ENTRY DATE 2010/05/18	SHIP DATE 2010/07/08	SHIP NUMBER 184308	SHIPPER NUMBER BCOL	MILL ORDER 62663
--	--------------------------	-------------------------	-----------------------	------------------------	---------------------

CHARGE TO CUSTOMER NAME & ADDRESS

EDMONTON STEEL PLATE
5545 - 89TH STREET
EDMONTON, ALBERTA
T6E 5W9

SHIP TO CUSTOMER NAME & ADDRESS

EDMONTON STEEL PLATE
SWITCH 2057 / EAST EDMONTON
CLOVER BAR, AB

MILL TEST REPORTS

ESSAR STEEL ALGONIA INC. HEREBY CERTIFIES THAT THE MATERIAL HEREIN DESCRIBED WAS MADE AND TESTED IN ACCORDANCE WITH THE RULES OF THE SPECIFICATION SHOWN. ALL RESULTS ARE RETAINED IN ACCORDANCE WITH THE COMPANY'S STANDARD RECORD KEEPING PRACTICES.

Al Nite
M. MCLEAN
MANAGING METALLURGIST

SUPPLEMENTARY INSTRUCTIONS

TEST CERT 1: WHITEMSTRAC@EDMONTONEXCHANGER.COM TEST CERT 2: PLA
TE TEST COUPON:

INSPT/R 2010-08-31 SUPPLEMENTAL TO: HEAT 4981K TI=.002%

CUST USE PRESSURE VESSELS

2010/07/09 06:58

***** M E C H A N I C A L P R O P E R T I E S *****

IMPACT TESTS:

HEAT	PLATE NUMBER	SRCE	GAUGE IN	COND	METH	DIR	TEST	SIZE	TEMP	FULL SIZE	ENERGY
4981K	48320	166	.3750	N	CVN	L	L	3/4	-50F	81	82
4981K	48323	166	.3750	N	CVN	L	L	3/4	-50F	75	72
4981K	48325	166	.3750	N	CVN	L	L	3/4	-50F	83	80
4981K	48327	166	.3750	N	CVN	L	L	3/4	-50F	86	83
4981K	48330	166	.3750	N	CVN	L	L	3/4	-50F	130	84
4981K	48331	166	.3750	N	CVN	L	L	3/4	-50F	81	80
4981K	48333	166	.3750	N	CVN	L	L	3/4	-50F	103	68

AVG+ 82 73 80 88 92 81 68 86

PRODUCT ANALYSIS TESTS:

HEAT	PLATE NUMBER	COND	TI	SN	AS	NI	CU	MO	AL	CB	V	DO
4981K	48329	.002	.19	1.01	.009	.31	.02	.02	.01	.045	.000	.014
4981K	48329	.002	.19	1.01	.009	.31	.02	.02	.01	.045	.000	.014

***** C H E M I C A L P R O P E R T I E S *****

HEAT	(WT %)	TI	SN	AS	NI	CU	MO	AL	CB	V	DO
4981K**	.21	1.03	.010	.008	.14	.04	.01	.045	.000	.014	.40

SPEC LAB
ASTM ALG
ASTM ALG
ASTM ALG
ASTM ALG
ASTM ALG
ASTM ALG



THE TEST RESULTS AND VALUES REPORTED HEREIN INDICATE ONLY THAT (1) THE PARTICULAR STEEL FOR WHICH THIS CERTIFICATE IS ISSUED MEETS THE MINIMUM SPECIFIED YIELD STRENGTH AND (2) THE CHEMICAL ANALYSIS AND PHYSICAL PROPERTIES OF SUCH STEEL ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THE SPECIFICATION INDICATED. THE RESULTS OR VALUES REPORTED HEREIN CAN NOT BE USED TO QUALIFY THE STEEL FOR ANY SPECIFICATION OTHER THAN THE ONE INDICATED AND CAN NOT BE RELIED UPON FOR ANY PURPOSE (INCLUDING DESIGN OR CALCULATIONS) AS REPRESENTING THE ACTUAL STRENGTH OF SUCH STEEL.

WARNING



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004 INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991 MATERIAL TEST REPORT (MTR)		A10 Advice of dispatch No./ Date of dispatch 364442-07.07.10	A08 Manufacturer's order/ A03 Certificate No. 354133-002	Sheet 1/...
A05 Established inspecting body DH		A07.1 No. ED10548-J1010-ER A07.2 No. EDMONTON STEEL, EDMON		
B02/ Steel design. SA516-70 B03 Any suppl. ASME-II-A:07+A09 requirements DIL-HUE-1:R27-2010-01-31		SA20-S5		
A01-A99 Further commercial information - Concession requests				
B14 Item No.	B07.2 Heat No.	B16 Rolled plate / Test No.	Date	
01	344650	33444-01 1-CJVBX	06.04.10	
B01-B99 Description of the product				
B14 Item No.	B08 Number of pieces	B09 Thickness	B10 Width INCH	B11 Length
01	1	0,3750 x	146,00000 x	480,00000
***	1		3381 N	3381
B04 Product delivery condition				
ITEM NO.: 01 N: HT: 1670 GR.F +36 -27 GR.F SOAKING TIME TO ATTAIN THE TARGET TEMPERATURE OVER THE WHOLE SECTION: 1-1,75 MIN/MM (25-45 MIN/INCH) COOLING IN STILL AIR				
B06 Marking of the product				
ITEM NO.: 01 STEEL DESIGNATION SA516 70 MFLTV SA516 60 MFLTV HEAT NO. / TRADEMARK / ROLLED PLATE NO.-TEST NO. / INSPECTOR'S STAMP				
B07-B99 Further information about the product				
ITEM NO.: 01 THICKNESS REDUCTION RATIO >= 3,0 IS FULFILLED (CF. A/SA20 PAR. 5.3)				
A04		A01		
		AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department		
QM-System: Certification as per ISO 9001		B. BALDAUF Test House Manager		
		Inspector's stamp Date 08.07.10 PP 1		



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004

INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+AL:1995 + AS PER ISO 10474:1991

MATERIAL TEST REPORT (MTR)

A05 Established inspecting body

A06 Purchaser

DH

B02/ Steel design. SA516-70

B03 Any suppl. ASME-II-A:07+A09

requirements DIL-HUE-1:R27-2010-01-31

EDMONTON STEEL, EDMONT A07.1 No. ED10548-J1010-ER

EDMONTON STEEL, EDMONT A07.2 No.

SA20-SS

A10 Advice of dispatch No./
Date of dispatch

364442-07.07.10

A08/ Manufacturer's order/
A09 Certificate No.

354133-002

Sheet

B01 Product
HOT ROLLED PLATES

C10-C29 Tensile test

B14 B07.2 Item Heat No. No.	B05 Reference (heat) treatment	G01 C02/ C03 C10 C11 Temp. GR.F	KSI RP02	C12 C13 RM	A % LO-BIN	C14-C15
01 344650 33444	K1 Q	RT	51,6	74,5	26	

C30-C39 Hardness test

B14 B07.2 Item Heat No. No.	B05 Reference (heat) treatment	C01 C02/C01 Temp. GR.F	C03 Temp. GR.F	C30 Method of test	C35 C31 Individual values	C32 Mean value
01 344650		K1 O		RT HBW 5/750	HB 145 145 145	145

C40-C49 Impact test

B14 B07.2 Item Heat No. No.	B05 Reference (heat) treatment	C01 C02/ C03 Temp. GR.F	C41 Width of test piece	C40 Type of test piece	C44 Testing method	C45 C42 Individual values AV=FT.LBF	C43 Mean value
01 344650		K1 LV	-51 3/4	CHP-V		AV 139 110 132	127

C70-C99 Chemical composition % - Heat analysis

B07.2 Heat 344650	C70 Y	C	Si	Mn	P	S	N	CU	MO	NI	CR	V	NB	SN	TI
		0,160	0,343	1,17	0,009	0,0012	0,0067	0,022	0,005	0,027	0,036	0,000	0,000	0,000	0,002

B07.2 Heat 344650	C70 Y	B	CA	AL-T
		0,0001	0,0020	0,027

C94 Heat analysis Carbon equivalent / Alloying restrictions

B07.2 Heat 344650	FO-02=	0,37	FO-51=	0,000	FO-55=	0,09	FO-78=	0,04	FO-91=	7,3
-------------------------	--------	------	--------	-------	--------	------	--------	------	--------	-----

20/12/2023 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001

AHB

AG der Dillinger Hüttenwerke

Postfach 1580, D-66748 Dillingen/Saar

Inspection department

B. BALDAUF
Test House Manager

Inspector's stamp

Date 08.07.10

PP 1



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004 INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991 MATERIAL TEST REPORT (MTR)		A10 Advice of dispatch No./ Date of dispatch 364442-07.07.10		A06/ Manufacturer's order/ A03 Certificate No. 354133-002		Sheet 3/...									
A05 Established inspecting body DH		A06 Purchaser Final receiver EDMONTON STEEL, EDMON EDMONTON STEEL, EDMON		A07.1 No. ED10548-J1010-ER A07.2 No.		B01 Product HOT ROLLED PLATES									
B02/ Steel design. SA516-70		SA20-S5													
B03 Any suppl. ASME-II-A:07+A09 requirements DIL-HUE-1:R27-2010-01-31															
C95 Ladle treatment															
ITEM NO.: 01 HEAT OF THE INDICATED ITEM: VACUUM DEGASSED / SULPHIDE SHAPE CONTROL															
C95 Further information about ladle treatment															
ITEM NO.: 01 CALCIUM TREATED															
C70-C99 Chemical composition % - Product analysis															
C01															
B07.2 Heat 344650	B07.1 Test No. 33444	C K1	0,163	SI 0,394	MN 1,15	P 0,009	S 0,0014	N 0,0065	CU 0,022	MO 0,006	NI 0,026	V 0,000	NB 0,000	SN 0,001	TI 0,002
B07.2 Heat 344650	B07.1 Test No. 33444	B K1	0,0003	CA 0,0039	AL-T 0,027										
C94 Product analysis Carbon equivalent / Alloying restrictions															
C01															
B07.2 Heat 344650	B07.1 Test No. 33444	K1	FO-02=	0,37	FO-51=	0,000	FO-55=	0,09							
C94 Carbon equivalent formula / Alloying restrictions															
FO-02 = C + (MN/6) + (CR+MO+V) / 5 + (NI+CU) / 15															
FO-51 = V + NB															
FO-55 = CU+MO+NI+CR															
FO-78 = CR+MO															
FO-91 = MN/C															
A04		2012/02/203 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order. QM-System: Certification as per ISO 9001			AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department		A01								
		B. BALDAUF Test House Manager			AHB Inspector's stamp		Date 08.07.10	pp 1							

Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch 364442-07.07.10	A08/ Manufacturer's order/ A03 Certificate No. 354133-002	Sheet 4
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991				
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body DH	A06 Purchaser Final receiver	EDMONTON STEEL, EDMON	A07.1 No. ED10548-J1010-ER	B01 Product HOT ROLLED PLATES
		EDMONTON STEEL, EDMON	A07.2 No.	
B02/ Steel design. SA516-70	SA20-S5			
B03 Any suppl. requirements	DIL-HUE-1:R27-2010-01-31			

D01 Marking and identification, surface appearance, shape and dimensional properties

ITEM NO.: 01
 RESULT OF MARKING, SURFACE, SHAPE AND DIMENSIONS: NO REMARKS
 SURFACE AS PER ASME-SA20
 THICKNESS AS PER ASME-SA20
 LENGTH AND WIDTH AS PER ASME-SA20
 FLATNESS AS PER 1/2-ASME-SA20



Z01/2020203 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QM-System: Certification as per ISO 9001

B. Baldauf

B. BALDAUF
Test House Manager

AHB

Inspector's stamp

Date 08.07.10

PP 1

A01

AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department



Manufacturer's mark



2696

March 7, 2011

Edmonton Exchanger

Peter

3 Phase Separators

24" Stock Vessels

Phone: (780) 632-7774

[illegible]

1. The above items are to be formed to meet the requirements of ASME Section VII, Div. 1 USC 79(d).
2. Tack welds that are welded must use procedures and welders qualified to ASME Section IX
3. On all code required material, Markings must be accurately transferred to formed material or cut pieces.

Authorized
Signature





PURCHASE ORDER #

DATE January 11, 2011

VENDOR
Edmonton Exchanger

CONTACT Peter

DATE REQUIRED 3 Phase Separators

JOB NUMBERS	24" Stock Vessels
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4901 Bruce Road Vegreville, Alberta T9C 1C3

Phone: (780) 632-7774

[illegible]

1. The above items are to be formed to meet the requirements of ASME Section VII, Div. 1 USC 79(d).
2. Tack welds that are welded must use procedures and welders qualified to ASME Section IX
3. On all code required material, Markings must be accurately transferred to formed material or cut pieces.

Authorized
Signature



DATE May 12, 2011

VENDOR **V.E.G. Oilfield Supply**

<u>CONTACT</u>	ALL
----------------	-----

DATE REQUIRED 24" 3 Phase Separators

JOB NUMBERS

4901 Bruce Road Vegreville, Alberta T9C 1C3

Phone: (780) 632-7774

[illegible]

1. The above items are to be formed to meet the requirements of ASME Section VII, Div. 1 USC 79(d).

2. Tack welds that are welded must use procedures and welders qualified to ASME Section IX

3. On all code required material, Markings must be accurately transferred to formed material or cut pieces.

Authorized
Signature



W

RT -2

Certified By

J.P.J. *GASFIELD*
SERVICES

Vegreville, Alberta
Phone (780)632-7774

A#607661

UNIT NAME

Vert. 3 Phase Separator

M.A.W.P. Internal

1440 p.s.i.
9929 Kpa.

HYDRO TEST

2160 p.s.i.
14892 Kpa.

DESIGN TEMP.

129 °F
54 °C

C.R. NUMBER

T5394.231

SERIAL NO.

12135

CORR. ALLOW.

3.17 mm

SHELL MAT'L

SA-516-70

SHELL THICK.

25.4 mm

HEAD THICK.

Top - 23.8 mm

Bottom - 23.8 mm

HEAT TREATMENT

Nil

HEAD MAT'L

Top-SA-516-70

Bottom-SA-516-70

SIZE

610 X 2438 mm

WEIGHT

1273 Kg.

MIN. DESIGN METAL TEMPERATURE

TEMPERATURE

-20 °F

-29 °C

@

@

@

PRESSURE

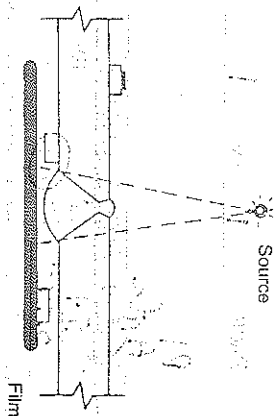
1440 p.s.i.

9929 Kpa.

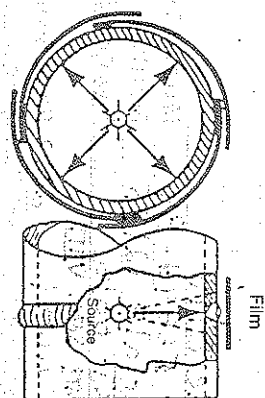
DATE MFG.

May 2011

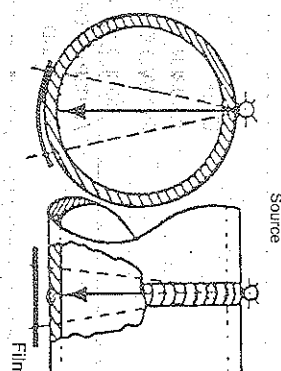
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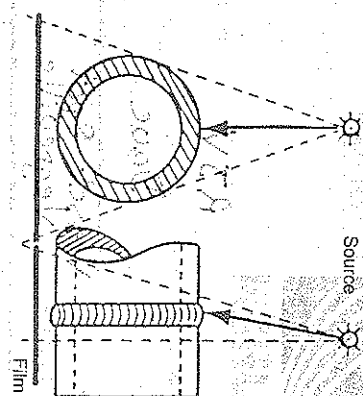
Technique "1"
SWE-SWV



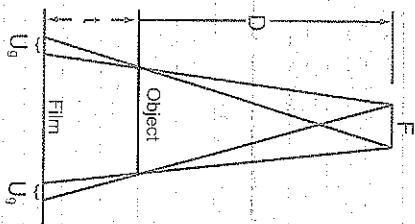
Technique "2"
SWE-SWV



Technique "3"
DWE-SWV



Technique "4"
DWE-DWV



Technique "5"
DWE-DWV

DEFECT LEGEND		OTHER LEGENDS	
CRK	Crack	SWE	Single Wall Exposure
LF	Lack of Fusion	DWE	Double Wall Exposure
IP	Incomplete Penetration	SWV	Single Wall Viewing
P	Porosity	DWV	Double Wall Viewing
S	Slag	EXP	Exposures
UC	Undercut	REIN	Reinforcement
CR	Concave Root	DIA	Diameter
EP	Excessive Penetration	SOD	Source Object Distance
BT	Burn Through	OFD	Object to Film Distance
HB	Hollow Bead		
PH	Pinhole		

DISCLAIMERS

SCOPE OF SERVICE

The agreement of Acuren to perform the Services extends only to those Services provided for in writing. Under no circumstances shall such Services extend beyond the performance of the requested Services provided for in writing and the preparation of reports or similar documents reflecting the data obtained or the opinion formulated on the basis of such Services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinion or observations of the examiner/engineer and are not intended, nor can they be construed, as representations or warranties as to the actual circumstances. Acuren does not assume any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, repair and use decisions as a result of the data or other information provided by Acuren. In no event shall Acuren's liability in respect of the Services related to herein exceed the amount paid for such Services.

STANDARD OF CARE:

In performing the Services provided, Acuren uses the degree of care and skill ordinarily exercised under similar circumstances by others performing such Services in the same or similar locality. If at any time during the performance of the Services or within one (1) year thereafter, Purchaser discovers that the Services do not conform to the warranty, Acuren shall, upon receipt of written notice from Purchaser, promptly provide technicians/engineers to reperform the Services to the extent necessary to conform to the warranty and Acuren shall have no other liability whatsoever. No other warranty, expressed or implied, is made or intended by Acuren.

LIMITATIONS OF LIABILITY

Nothing in this Agreement shall be construed to mean that Acuren assumes any liability on account of injury to persons or property, including death, except those directly caused by negligent acts of Acuren or its employees and that Purchaser's own responsibility for injury to persons or properties while on or about Purchaser's property or equipment is in no way affected by this Agreement. Acuren shall not be held responsible or liable for any loss, damage, detention or delay caused by accidents, strikes, labour shortages, lock-outs, fire, flood, severe weather conditions, acts of civil or military authorities, or by insurrection or riot, or by any other cause that is unavoidable or beyond Acuren's control or in any event for consequential damages including, without limitation, downtime, loss of use or loss of profits.

U_g = Geometric Unsharpness
 D = source to object distance
 t = object to film distance
 F = Focal Spot Size

$$U_g = F t / D$$

Note: if t is omitted from this report, the Pipe Schedule shall apply as t.



ISO 9001:2000

RADIOGRAPHIC TESTING REPORT

R-205021

ACUREN

CLIENT

ATTENTION

ADDRESS

PROJECT

WORK LOCATION

RJV

Dave

Vessel-Long Seam
Vegreville

DATE

ACUREN JOB #

POWO #

PROCEDURE #

ACCEPTANCE

STANDARD

May 16/11

231-56647-04

Serial # 12135

RT-0016

ASME sec VIII

DIV I 4WSI 2010

MATERIAL TYPE

FILM BRAND

RADIATION SOURCE

FOCAL SPOT

PI

Aga

IR 192 ☐ Co 60 ☐ X-RAY

KV

59 Ci

0.14" MM/IN

PAGE

1

OF

1

Legend 1. Accept 2. Moderate 3. Reject *Welder Symbol

	IDENTIFICATION	PIPE DIA.	PIPE SCH	FILM TYPE	REIN.	TECH #	SOD (D)	OFD (I)	# OF EXP	C R K	L F	I P S	U C R P	*	DEFECT LOCATION & REMARKS	ACC	REJ
1	LSI 0-15	24" 1"	1"	DS	1/8"	1	20" 1"	7	7						mike	✓	
2	15-30															✓	
3	30-45															✓	
4	45-60															✓	
5	60-75															✓	
6	75-90															✓	
7	90-END															✓	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	

REFER TO OPPOSITE SIDE FOR SCOPE OF SERVICES AND STANDARD OF CARE

SIGNATURES

CLIENT REPRESENTATIVE

TECHNICIAN (SIGN)

PRINT NAME:

*Please note: Film that is not accepted by the client when the report is issued will be disposed of by Acuren unless otherwise notified and acknowledged in writing.

PRINT

PRINT

SIGNATURE

2nd TECHNICIAN/ASSISTANT

CGSB LEVEL

CGSB REGISTRATION #

Canary - Office Copy

Pink - Technician Copy

Golden Rod - Office Copy

FILM USED

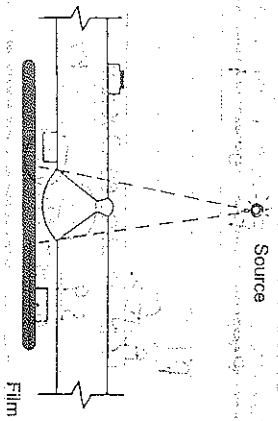
F

FILM SIZE

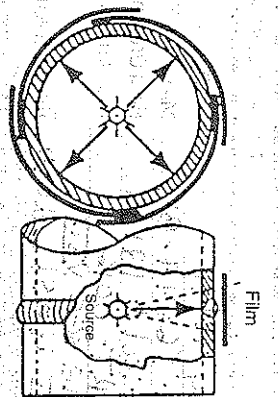
4 1/2 x 17

DTR #

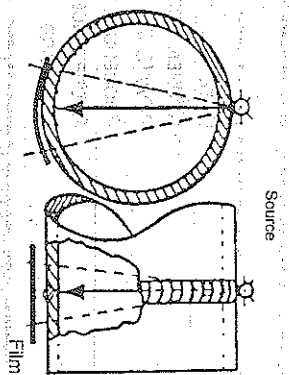
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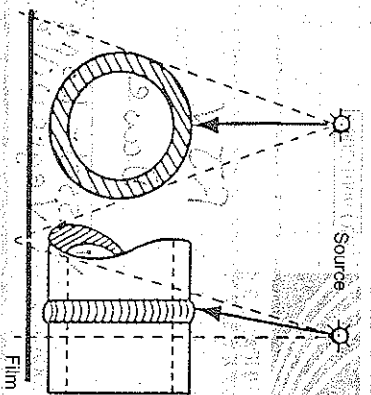
Technique "1"
SWE-SWV



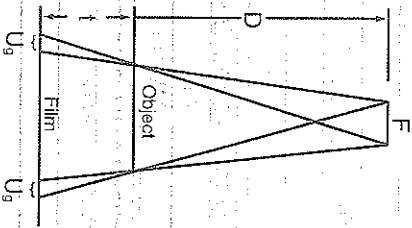
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SWE-SWV



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DWE-SWV



Technique "4"
DWE-DWV



Technique "5"
DWE-DWV

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$$U_g = F \frac{t}{D}$$

U_g = Geometric Unsharpness
 D = source to object distance
 t = object to film distance
 F = Focal Spot Size

ALBERTA MUNICIPAL AFFAIRS

ABSA, the pressure equipment safety authority

9410 - 20th Avenue

Edmonton, AB T6N 0A4

Partial/ Partiel ☐

④607667

**MANUFACTURER'S DATA REPORT
FOR PRESSURE VESSEL
DÉCLARATION DE CONFORMITÉ DU CONSTRUCTEUR
D'APPAREILS SOUS PRESSION**

Upon shipment of a pressure vessel, this form fully and correctly filled in must be mailed to the office of the Chief Inspector in the province of installation in accordance with the regulations under the Act, governing the construction and installation of pressure vessels.

Au moment de l'expédition d'un appareil sous pression, ce formulaire complété correctement, doit être envoyé au bureau de l'inspecteur en chef de la province d'installation tel que prévu dans les règlements de la loi sur les appareils sous pression.

Manufactured by Construit par	Name and address of Manufacturer/ Nom et adresse du constructeur RJV Gasfield Services 4901 Bruce Road, Vegreville, Alberta T9C 1C3
Manufactured for Construit pour	Name and address of Purchaser or Consignee/ Nom et adresse du client ou de son représentant RJV Gasfield Services 4901 Bruce Road, Vegreville, Alberta T9C 1C3
Ultimate owner Utilisateur	Name and address/ Nom et adresse Stock
Location of installation Lieu d'installation	Address/ Adresse Stock

Pressure vessel/ Appareil

Type/ Genre Vertical 3 Phase Separator	Overall Length/Longueur totale 2438 mm sm/sm	Serial No./ N° de série 12135	Year built/Année de fabrication 2011
Provincial Registration No. - C.R.N./N° d'enregistrement provincial - N.E.C. T5394.231		National Board No./ N° National Board N/A	Drawing No./ N° de dessin V05-413

The chemical and physical properties of all parts meet the requirements of material specifications of the A.S.M.E. Code.
Les propriétés chimiques et physiques de toutes les composantes respectent les exigences des spécifications de matériaux de code ASME.

The design, construction and workmanship conform to CSA B51. <i>La conception, la construction et la façon sont conformes à ACNOR B51.</i>	ASME Section VIII 2007 Edition	Division 1	Addenda/Supplément 2009b	Code case No. N° de cas N/A
Manufacturer's partial data reports properly identified and signed by authorized inspectors have been furnished for the following items of the report, and attached to this report: <i>Les rapports partiels du constructeur adéquatement identifiés et signés par les inspecteurs autorisés ont été produits pour les items suivants du rapport, et attachés à ce rapport:</i>				
Names of parts/ Nom de la composante	Item No./ N° d'item	Manufacturer's Name/ Nom du constructeur	Identifying Stamp/ Estampe d'identification	

Shell/ Virole

Description	Material Matériau	Thickness Épaisseur	Corr. Allow. Surépais. de corr.	Diameter Diamètre	Longitudinal Joints Joints longitudinaux			P.W.H.T. Traitement therm		Girth Joints Joints de circonférence		Number of courses Nombre de sections
					Type	R.T. Radiog.	Efficiency Efficacité	Temp.	Time Durée	Type	R.T. Radiog.	
Shell	SA-516-70N	25.4mm	3.17mm	610mm	1	Full	100%	N/A	N/A	1	Spot	1
											70%	

Heads/ Tetes

Description	Material Matériau	Min. Thickn. Épais. minim.	Corr. Allow Surép. Corr.	Crown. Radius Rayon couron.	Knuckle Radius Petit rayon	Ellipse Ratio Rapp. ellipse	Conical Apex Angle Angle conique	Hemisph. Radius Ray. Hémisph	Flat Diameter Diam. plat	Side to pressure Côte sous pression
Top	SA-516-70N	23.8mm	3.17 mm	-----	-----	2.1	-----	-----	-----	Concave
Bottom	SA-516-70N	23.8mm	3.17 mm	-----	-----	2.1	-----	-----	-----	Concave
Removable bolts used (describe other fastenings) <i>Boulons amovibles utilisés (décrire tout autre attache)</i>						Mat'l Spec./ Spéc. du mat.		Grade		Size/ Dimension

Pressure - Temperature/ Pression - température

Pressure Vessel Part Partie de l'appareil	Constructed for max. allowable working pressure Construit pour une pression maximale de marche permise	At max. temp. A une temp. max.	Min. Temp. (when less than -29°C) Temp. min. (inférieure à -29°C)	Test pressure (hydro-pneumatic or combination) Pression d'épreuve (hydro-pneumatique ou combinaison)
Vessel	9928 Kpa	54°C	-29°C	14,892 Kpa

Tube Section/ Faisceau tubulaire

Tube sheet/ Plaque tubulaire	Material/ Matériau	Diameter/ Diamètre	Nominal Thickness Épaisseur nominale	Corr. Allow. Surépais. corrosion	Attachment Mode d'attachement
Tube material/ Matériau des tubes	Diameter/ Diamètre	Nominal Thickness (gauge) Épaisseur nominale (calibre)	Number/ Nbre	Type (Straight or U) Type (Droit ou U)	Heating Surface Surface de chauffe

Jacket/ Chemise

Type of jacket/ Genre de chemise	Jacket closure Fermeture de chemise	Proof Test Pression d'épreuve	Heating Surface Surface de chauffe	Sketch/ Schéma
----------------------------------	--	----------------------------------	---------------------------------------	----------------

Safety Valve Outlets/ Soupapes de sûreté

Number/ Nombre 1	Dimension 60.3mm	Location/ Endroit Shell
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Nozzles and Openings/ Tubulures et ouvertures

Purpose/ But	Number Nombre	Dimension	Type	Material Matériau	Nominal Thickness Épaisseur nominale	Reinforcement material Matériau de renfort	How attached Genre d'attaches	Location/ Endroit
Inlet/Outlet	2	114.3mm	CL600	SA-105/SA-106-B	17.12mm	SA-516-70	UW16.1(c)	Top Head/Shell
L.L.S.D./H.L.S.D./L.L.C	4	88.9mm	CL600	SA-105/SA-106-B	15.24mm	SA-516-70	UW16.1(c)	Shell
Dumps/Drain/PSV/Spare	5	60.3mm	CL600	SA-105/SA-106-B	11.07mm		UW16.1(c)	Shell/bottom Head
Sight Glass / Temperature Indicator	5	26.7mm	Coupling	SA-105	CL6000	N/A	UW16.1(c)	Shell
Pressure Indicator	1	21.3mm	Coupling	SA-105	CL6000	N/A	UW16.1(c)	Shell

Supports/ Supports

Skirt/ Jupe Yes/ Oui No/ Non ☒ ☐	Lugs/ Orelles No./ Nbre No	Legs/ Pieds No./ Nbre No	Other/ Autres (Description) N/A	Attached/ Attaches (Where and How/ Méthode et endroit) Welded to bottom head
---	----------------------------------	--------------------------------	------------------------------------	--

Remarks/ Observations (Cubical capacity/ Volume)

Volume-.76 cubic meters)
Except from impact test requirements as per UG 20(f) 1 to 5
Hydrostatically tested in the Vertical Position
Nozzle to shell weld is full penetration

Certificate of Compliance/ Certificat de conformité

We certify that the statements made in this data report are correct and that the said vessel has been constructed in accordance with the Provincial Registered design below and the requirements of standard CSA B51.

Nous certifions que les données de la déclaration de conformité sont correctes et que l'appareil a été construit en accord avec l'enregistrement provincial ci-dessous et les exigences de la norme ACNOR B51.

Provincial Registered Design
Enregistrement provincial T5394.231

Manufacturer
Constructeur RJV Gasfield Services

Signature [Signature] Date JUN 14 2011

Certificate of Compliance - Field Work/ Certificat de conformité - Installation au chantier

We certify that the field installation of all parts of the vessel conforms with the requirements of Provincial Regulations.

Nous certifions que l'installation au chantier de toutes les composantes de l'appareil est conforme aux règlements provinciaux.

Installer's Name
Nom de l'installateur _____

Signature _____

Date _____

Certificate of Shop Inspection/ Certificat d'inspection en usine

I, the undersigned, a duly authorized Boiler and Pressure Vessel Inspector
Je, soussigné, inspecteur autorisé de chaudières et appareil sous pression
employed by ABSA

of/ de Alberta
have inspected the above vessel and state that to the best of my knowledge and belief, the manufacturer has constructed the vessel in accordance with the Provincial registration CRN T5394.231
and the requirements of standard CSA B51.

ai inspecté l'appareil précité et autant que je sache, crois que le constructeur a construit l'appareil en accord avec l'enregistrement provincial NEC T5394.231
et les exigences de la norme ACNOR B51.

Inspector's Name
Nom de l'inspecteur JASON REINHART NB 12899A AB248A

Signature [Signature] Date JUNE 14/11

Certificate of Field Inspection/ Certificat d'inspection - Installation au chantier

I, the undersigned, a duly authorized Boiler and Pressure Vessel Inspector
Je, soussigné, inspecteur autorisé de chaudières et appareil sous pression
employed by _____

have inspected the items not covered by the Shop Inspection Certificate and the installation of the items and state that to the best of my knowledge and belief the construction and assembly of the items are in accordance with the Provincial Regulations.

ai inspecté les composantes non couvertes par le certificat d'inspection en usine et l'installation de l'appareil et, autant que je sache, la construction et l'assemblage de l'appareil sont en accord avec les règlements provinciaux.

Inspector's Name
Nom de l'inspecteur _____

Signature _____ Date _____