

Travel Sheet

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

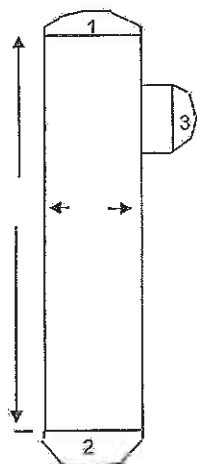
"A"-Hold Point, "I"- Inspection Point, "R"-Revision, "W"- Witness Point

Hold Points established - Sign & Date

[Signature] June 21/12
(Authorized Inspector)

Vessel Range 12513 to 12518

Vessel Serial # 12515		DWG # V01-381-R1	(A) # 607495	
Vessel Title: 16" 3 Phase Separator		CRN # P7217.231		
ITEM	COMMENTS	AUTH Insp., Hold Rev., Witness POINTS	DATE FUNCTION COMPLETE & INSPECTORS INITIALS	
			QC INSPECTOR	AUTHORIZED INSPECTOR
APPROVED DRAWING		X	Feb 8, 2012 <i>[initials]</i>	<i>[initials]</i> AUG 14 2012
CALCULATIONS ON FILE		X	Feb 8, 2012 <i>[initials]</i>	<i>[initials]</i> AUG 14 2012
MATERIAL CHECKED AGAINST DRAWING, MATERIAL LIST			Feb 8, 2012 <i>[initials]</i>	
MTR'S CHECKED		X	Feb 8, 2012 <i>[initials]</i>	<i>[initials]</i> AUG 14 2012
VESSEL LAYOUT			Feb 8, 2012 <i>[initials]</i>	
NOZZLES	ORIENTATION		Feb 8, 2012 <i>[initials]</i>	
& FITTINGS	RATINGS	X	Feb 8, 2012 <i>[initials]</i>	<i>[initials]</i> AUG 14 2012
FIT	NOZZLES & FITTINGS		June 19, 2012 <i>[initials]</i>	
UP	SHELL & HEAD		June 22, 2012 <i>[initials]</i>	
INTERNALS (tray, baffles, etc)			June 20, 2012 <i>[initials]</i>	
INTERNAL INSPECTION		H	June 21, 2012 <i>[initials]</i>	<i>[initials]</i> June 21/12
MATERIAL INSPECTION REPORT		X	June 21, 2012 <i>[initials]</i>	<i>[initials]</i> AUG 14 2012
WELD SIZES		X	June 27, 2012 <i>[initials]</i>	<i>[initials]</i> AUG 14 2012
WELDERS I.D.			June 27, 2012 <i>[initials]</i>	
EXTERNAL AFTER COMPLETION OF ALL WELDING		X	June 27, 2012 <i>[initials]</i>	<i>[initials]</i> AUG 14 2012
INTERNAL ON TYPE 1 JOINTS			June 27, 2012 <i>[initials]</i>	
RADIOGRAPHS		X	June 28, 2012 <i>[initials]</i>	<i>[initials]</i> AUG 14 2012
OTHER N.D.E.				
IMPACT TESTS				
POST WELD HEAT TREATMENT	YES: <i>[initials]</i> NO: <i>[initials]</i>			
EXTERNAL BEFORE PWHT				
PWHT CHART CHECKED				
NAMEPLATE		X	August 14, 2012 <i>[initials]</i>	<i>[initials]</i> AUG 14 2012
HYDROSTATIC TEST		H	August 14, 2012 <i>[initials]</i>	<i>[initials]</i> AUG 14 2012
DATA REPORT		X	August 14, 2012 <i>[initials]</i>	<i>[initials]</i> AUG 14 2012
NONCONFORMANCES				



		SPECIFICATIONS	HEAT NUMBER	VERIFIED THICKNESS
SHELL	C1	SA-106-B	6304295	21.44mm
	1	SA-516-70	344657-76977	20.63mm.
	2	SA-516-70	G4225-275240728	20.63mm.
HEADS	3			
	1			
	2			
	3			
REPADS	4			
	1			
	2			
	3			
		SPECIFICATIONS	SIZE	SCHEDULE
NOZZLES		SA-106-B	2"	Sch. 160
FITTINGS		SA-105	1/2", 3/4", 1", 2"	CL6000 cplg.
TUBES				

CONTRACT No.: 2006BGEL01		包头钢铁(集团)有限责任公司 BAOTOU IRON AND STEEL (GROUP) CO., LTD. Hexi Industrial Zone, Kun Distract, Baotou, Inner Mongolia, China										CERTIFICATE NO.: BSC001/2006	
SHIPPER: Baotou Steel International Economic and Trading Co., Ltd.		TOTAL QUANTITY: 482.722MT											
PURCHASER: Eldon Development Ltd.(LAI WU GROUP) 42/F., Office Tower, Convention Plaza, 1 Harbour Road, Wanchai, Hong Kong		PACKING: Binding together three pieces per bundle											
DESCRIPTION OF GOODS: CARBON SEAMLESS PIPE UNDER CONTRACT NO.2006BGEL01 (1) 16" O.D. X 0.844" W.T. X 7.5FT (2) 16" O.D. X 0.844" W.T. X LESS THAN 7.5FT		SHIPPING MARKS: LW WSC COMMODITY: CARBON SEAMLESS PIPE SPEC.: ASTM A106B/ASME SA 106B SIZE: OD 16" X 0.844" WALL THICKNESS X 7.5FT OD 16" X 0.844" WALL THICKNESS X LESS THAN 7.5FT										HEAT NO.: BUNDLE NO.: BUNDLE WEIGHT: MADE IN CHINA	
		QUALITY AND TEST CERTIFICATE ORIGINAL 16" X 0.844" wall											
		无缝钢管质量证明书											
		QUALITY AND TEST CERTIFICATE											
		ORIGINAL											
		16" X 0.844" wall											
		SHIPPING MARKS:											
		LW WSC											
		COMMODITY: CARBON SEAMLESS PIPE											
		SPEC.: ASTM A106B/ASME SA 106B											
		SIZE: OD 16" X 0.844" WALL THICKNESS X 7.5FT											
		OD 16" X 0.844" WALL THICKNESS X LESS THAN 7.5FT											
		HEAT NO.:											
		BUNDLE NO.:											
		BUNDLE WEIGHT:											
		MADE IN CHINA											
		Mechanical Properties											
		Chemical Compositions(%)											
		YS (Mpa)											
		TS (Mpa)											
		V											
		NI											
		MO											
		CU											
		CR											
		SI											
		P											
		S											
		MN											
		C											
		Tons											
		Meters											
		W.T.(in.)											
		O.D.(in.)											
		Heat No.											
		6204801											
		6104585											
		6601454											
		6704635											
		6304294											
		6704637											
		6304295											
		2371.75											
		482.722											
		Technical Testing											
		Flattening Test											
		Bending Test											
		Rolling process											
		Hot rolling											
		Eddy Current Test											
		OK											
		Surface Quality											
		5.8(Mpa)											
		OK											
		Conclusion:											
		above mentioned material have been made in accordance with A106 B-2004											
		Inspector: [Signature]											
		Date: Sept. 14, 2006											

NOV 22 2006



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 2785

Work Order C91815 Date 2011/11/22 CofC# 28866 Page 1 of 1

Item#	Description	Qty	Heat#	Required Min Thk	Recorded Min Thk	Form. Proc.
H91815-1	HEAD(S) - Semi-Elliptical 2:1 - 0.8750" NOM (0.8125" MIN) X 16" OD (Material Spec: SA 516-70 Normalized) Conforms to NACE MR0175 / ISO 15156-2 2009 Annex A	2	G4225-275240720	0.8125"	0.8220"	1
		10	G4225-275240720	0.8125"	0.8220"	1
		2	333516-30243	0.8125"	0.8260"	1
		1	332122-59647	0.8125"	0.8130"	1
		8	344657-76977	0.8125"	0.8180"	1
		1	350402-14890	0.8125"	0.8290"	1
		2	355137-93546	0.8125"	0.8320"	1
		1	350404-11955	0.8125"	0.8390"	1
		1	290117-15566	0.8125"	0.8230"	1
		8	G4225-275240728	0.8125"	0.8190"	1

Forming Procedure:

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

Brinell Equipment: Newage Calibrated Pin
Brinell Hardness Tester

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

Checked By WJ

Conforms to

ASME Section II

2010 Edition

DEC 09 2011 Date



edmonton exchanger
& manufacturing ltd.

CERTIFICATE OF COMPLIANCE

MTR List

5545-89 Street Edmonton, Alberta Canada T6E 5W9 www.edmontonexchanger.com tel 780.468.6722 • QC fax 780.468.4668 • sales fax 780.468.5155

Customer RJV GASFIELD LTD.

PO 2785

Work Order C91815 Date 2011/11/22 Co/C# 28866 Page 1 of 1

MTR ID	Pages	Heat#	Thickness	Material Grades
13040	8	290117-15566	.875"	SA 516-70 N
15005	4	332122-59647	.875"	SA 516-70 N
15194	6	333516-30243	.875"	SA 516-70 N
15459	6	344657-76977	.875"	SA 516-70 N
15711	17	350404-11955	.875"	SA 516-70 N
15713	8	350402-14890	.875"	SA 516-70 N
16037	9	355137-93546	.875"	SA 516-70 N
16081	9	G4225-275240720	.875"	SA 516-70 N
		G4225-275240728	.875"	SA 516-70 N

Heat#	Material Grades	MTR ID
290117-15566	SA 516-70 N	13040
332122-59647	SA 516-70 N	15005
333516-30243	SA 516-70 N	15194
344657-76977	SA 516-70 N	15459
350402-14890	SA 516-70 N	15713
350404-11955	SA 516-70 N	15711
355137-93546	SA 516-70 N	16037
G4225-275240720	SA 516-70 N	16081
G4225-275240728	SA 516-70 N	16081



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/ Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		242156-20.01.07	315779-002	1/...
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body DH	A06 Purchaser Final receiver	B01 Product HOT ROLLED PLATES		
B02/ Steel design. SA516-70	ARCELOR CANADA, BURLI	A07.1 No. 61056		
B03 Any suppl. requirements	EDMONTON STEEL, EDMON	A07.2 No. B10408-J1010-LG		



13849

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	B02 Heat No.	B07.1 Rolled plate Test No.	A09 Purchaser article number
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290115	15577-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290115	15578-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290115	15580-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290115	15585-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290115	15586-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290115	15588-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290115	15589-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290117	15532-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290117	15555-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290117	15558-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290117	15559-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290117	15561-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290117	15562-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290117	15563-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290117	15565-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290117	15566-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290117	15568-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290117	15569-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290117	15571-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290117	15572-01	ITEM 1
01	1	0,8750 x	120,50000 x	480,00000 x	6510	N	290117	15574-01	ITEM 1
**	21				136710				
02	1	1,1250 x	97,00000 x	480,00000 x	6738	N	290119	15480-01	ITEM 2

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



Manufacturer's mark



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

B. MUELLER
Test House Manager

Inspector's stamp Date 22.01.07

KW 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	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		242156-20.01.07	315779-002	2/...
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body	A08 Purchaser	A07.1 No.	A01 Product	
DH	Final receiver	A07.2 No.	HOT ROLLED PLATES	
B02/ Steel design.	SA516-70	ARCELOR CANADA, BURLI		
B03 Any suppl.	ASME-2A: 04+A05	EDMONTON STEEL, EDMON		
requirements	DIL-HUE-2: R21-2006-04-27			

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 Purchase article number
02	1	1,1250 x	97,00000 x	480,00000	6738	N	290119	15481-01	ITEM 2
02	1	1,1250 x	97,00000 x	480,00000	6738	N	290119	15482-01	ITEM 2
02	1	1,1250 x	97,00000 x	480,00000	6738	N	290119	15483-01	ITEM 2
02	1	1,1250 x	97,00000 x	480,00000	6738	N	290119	15484-01	ITEM 2
***	5				33690				
***	26				170400				

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 MTLV SA516 50 MTLV
HEAT NO. / TRADEMARK / ROLLED PLATE NO.-TEST NO. / INSPECTOR'S STAMP

C10-C29 Tensile test

B14 Item No.	B07.2 Heat No.	B05 Reference (heat) treatment	C01 C02/ C01 Temp. GRF	C10 C11 KSI RP02	C12 RM	C13	A %	A %	C14-C15
01	290115	15577	K1 Q	RT	48,9	72,9	Lo=8IN	Lo=2IN	
01	290115	15578	K1 Q	RT	49,9	72,8	32,4		
01	290115	15580	K1 Q	RT	49,0	72,6	31,9		
							29,9		

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. Mueller
B. MUELLER
Test House Manager



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

Inspector's stamp Date 22.01.07

KW



DILLINGER HÜTTE

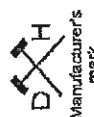
Erläuterungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch	A03 Manufacturer's order/ Certificate No.	Steel
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		242156-20.01.07	315779-002	3/...
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body	A06 Purchaser	A07.1 No.	A07.2 No.	
DH	ARCELOR CANADA, BURLI	61056	EDMONTON STEEL, EDMON	
HOT ROLLED PLATES				
B02/ Steel design. SA516-70				
B03 Any suppl. ASME-2A:04+A05				
requirements DIL-HUE-2:R21-2006-04-27				

C10-C29 Tensile test

B14 Item No.	B07.2 Heat No.	B05 Rol./plate/ Test No.	Reference (heat) treatment	C01 C02/ C03 C01	C03 Temp. GR.F	C10 C11	C12	C13	A % LO=2IN	A % LO=2IN	C14-C15
						RP02	RM				
01	290115	15585		KL Q	RT	48,7	72,5		29,9	29,9	
01	290115	15586		KL Q	RT	49,9	72,9		31,4	31,4	
01	290115	15588		KL Q	RT	49,4	72,9		30,4	30,4	
01	290115	15589		KL Q	RT	50,0	72,8		30,4	30,4	
01	290117	15532		KL Q	RT	50,0	73,7		30,9	30,9	
01	290117	15535		KL Q	RT	49,6	74,1		29,4	29,4	
01	290117	15558		KL Q	RT	49,2	72,8		31,9	31,9	
01	290117	15559		KL Q	RT	50,2	73,1		30,9	30,9	
01	290117	15561		KL Q	RT	49,7	74,0		28,0	28,0	
01	290117	15562		KL Q	RT	49,6	73,1		38,3	38,3	
01	290117	15563		KL Q	RT	49,2	73,8		27,5	27,5	
01	290117	15565		KL Q	RT	50,9	74,0		31,9	31,9	
01	290117	15566		KL Q	RT	48,6	73,2		29,4	29,4	
01	290117	15568		KL Q	RT	48,7	72,5		31,4	31,4	
01	290117	15569		KL Q	RT	50,2	72,6		29,9	29,9	
01	290117	15571		KL Q	RT	49,7	72,8		28,9	28,9	
01	290117	15572		KL Q	RT	50,6	73,4		28,4	28,4	
01	290117	15574		KL Q	RT	49,4	73,2		30,9	30,9	
02	290119	15480		KL Q	RT	49,6	72,9		31,9	31,9	
02	290119	15481		KL Q	RT	49,6	73,4		31,9	31,9	
02	290119	15482		KL Q	RT	50,6	73,5		29,9	29,9	
02	290119	15483		KL Q	RT	49,9	73,8		29,9	29,9	
02	290119	15484		KL QV	RT	50,3	74,8		33,9	33,9	

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. MOELLER
Test House Manager

Inspector's stamp

Date 22.01.07

KW 1

A01



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		242156-20.01.07	315779-002	4/
MATERIAL TEST REPORT (MTR)		B01 Product HOT ROLLED PLATES		
A05 Established inspecting body DH	A06 Purchaser Final receiver			
	ARCELOR CANADA, BURLI	A07.1 No. 61056		
	EDMONTON STEEL, EDMON	A07.2 No. E10408-J1010-LG		
B02/ Steel design. SA516-70				
B03 Any suppl. ASME-2A: 04+A05				
requirements DIL-HUE-2:R21-2006-04-27				

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. GR.F	C33 Testing method	C35 Individual values	C31	C32 Average value
01	290115	15577		K1	O	RT	HBW 10/3000	HB 142	142	141
01	290115	15578		K1	O	RT	HBW 10/3000	HB 143	149	143
01	290115	15580		K1	O	RT	HBW 10/3000	HB 141	141	139
01	290115	15585		K1	O	RT	HBW 10/3000	HB 143	141	140
01	290115	15586		K1	O	RT	HBW 10/3000	HB 142	144	141
01	290115	15588		K1	O	RT	HBW 10/3000	HB 146	143	144
01	290115	15589		K1	O	RT	HBW 10/3000	HB 144	143	143
01	290117	15532		K1	O	RT	HBW 10/3000	HB 142	142	142
01	290117	15555		K1	O	RT	HBW 10/3000	HB 143	143	143
01	290117	15558		K1	O	RT	HBW 10/3000	HB 145	143	142
01	290117	15559		K1	O	RT	HBW 10/3000	HB 142	140	141
01	290117	15561		K1	O	RT	HBW 10/3000	HB 143	143	144
01	290117	15562		K1	O	RT	HBW 10/3000	HB 145	143	142
01	290117	15563		K1	O	RT	HBW 10/3000	HB 142	140	144
01	290117	15565		K1	O	RT	HBW 10/3000	HB 143	143	142
01	290117	15566		K1	O	RT	HBW 10/3000	HB 145	143	144
01	290117	15568		K1	O	RT	HBW 10/3000	HB 144	143	143
01	290117	15569		K1	O	RT	HBW 10/3000	HB 142	142	141
01	290117	15571		K1	O	RT	HBW 10/3000	HB 149	149	147
01	290117	15572		K1	O	RT	HBW 10/3000	HB 149	149	147
01	290117	15574		K1	O	RT	HBW 10/3000	HB 140	141	140
02	290119	15480		K1	O	RT	HBW 10/3000	HB 144	143	144
02	290119	15481		K1	O	RT	HBW 10/3000	HB 147	145	146
02	290119	15482		K1	O	RT	HBW 10/3000	HB 143	141	143
02	290119	15482		K1	O	RT	HBW 10/3000	HB 142	143	143

201/202/203 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		Inspector's stamp Date 22.01.07	KW 1
ADB			
B. MUELLER Test House Manager			



DILLINGER HÜTTE

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

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		242156-20.01.07	315779-002	5/...
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body	A06 Purchaser	B01 Product		
DH	Final receiver	HOT ROLLED PLATES		
B02/ Steel design.	SA516-70			
B03 Any suppl. requirements	ASME-2A:04+A05 DIL-HUE-2:R21-2005-04-27			
ARCELOR CANADA, BURLI		A07.1 No. 61056		
EDMONTON STEEL, EDMON		A07.2 No. E10408-J1010-LG		

C30-C39 Hardness test

B14 Item No.	B07.2 Heat No.	B07.1 Ref. plate/ Test No.	B05 Reference (heat) treatment	C01	C02/C01	C03 Temp. GR.F	C33 Testing method	C35 C31 Individual values	C32 Average value
02	290119	15483		K1 O		RT HBW 10/3000		HB 146 145	145
02	290119	15484		K1 O		RT HBW 10/3000		HB 145 140	142

C40-C49 Impact test

B14 Item No.	B07.2 Heat No.	B07.1 Ref. plate/ Test No.	B05 Reference (heat) treatment	C01	C02/ C01	C03 Temp. GR.F	C44 Width of test piece	C40 Type of test piece	C44 Testing method	C46 Energy	C45 C42 Individual values AV=FT.LBF	C43 Average value
01	290115	15577		K1 LV		-51		CHP-V			AV 142 156	90 129
01	290115	15578		K1 LV		-51		CHP-V			AV 204 134	146 161
01	290115	15580		K1 LV		-51		CHP-V			AV 138 123	205 155
01	290115	15585		K1 LV		-51		CHP-V			AV 231 119	119 156
01	290115	15586		K1 LV		-51		CHP-V			AV 196 191	113 167
01	290115	15588		K1 LV		-51		CHP-V			AV 142 195	139 159
01	290115	15589		K1 LV		-51		CHP-V			AV 157 170	163 163
01	290117	15532		K1 LV		-51		CHP-V			AV 161 150	196 169
01	290117	15535		K1 LV		-51		CHP-V			AV 104 115	129 116
01	290117	15558		K1 LV		-51		CHP-V			AV 122 152	212 162
01	290117	15559		K1 LV		-51		CHP-V			AV 121 111	201 144
01	290117	15561		K1 LV		-51		CHP-V			AV 124 129	132 128
01	290117	15562		K1 LV		-51		CHP-V			AV 104 89	114 102
01	290117	15563		K1 LV		-51		CHP-V			AV 137 122	122 127
01	290117	15565		K1 LV		-51		CHP-V			AV 75 189	159 141
01	290117	15566		K1 LV		-51		CHP-V			AV 134 199	84 139
01	290117	15568		K1 LV		-51		CHP-V			AV 128 114	125 122
01	290117	15569		K1 LV		-51		CHP-V			AV 176 189	128 164
01	290117	15571		K1 LV		-51		CHP-V			AV 147 132	93 124

Z01/Z02/203 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

ADB

3. J. Müller

DH
Manufacturer's mark

B. MUELLER
Test House Manager

Inspector's stamp

Date 22.01.07

KW 1

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		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		242156-20.01.07	315779-002	6/...
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body	A06 Purchaser	B01 Product		
DH	Final receiver	HOT ROLLED PLATES		
B02/ Steel design.	SA516-70			
B03 Any suppl.	ASME-2A:04+A05			
requirements	DIL-HUB-2:R21-2006-04-27			
ARCELOR CANADA, BURLI		A07.1 No. 61056		
EDMONTON STEEL, EDMON		A07.2 No. E10408-J1010-LG		

C40-C49 Impact test

B14 Item No.	B07.2 Heat No.	B07.1 Rot.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	C45 Energy	C45 Individual values AV=FT.LBF	C43 Average value
01	290117	15572		KL LV	LV	-51		CHP-V		AV 121	129	121
01	290117	15574		KL LV	LV	-51		CHP-V		AV 128	167	138
02	290119	15480		KL LV	LV	-51		CHP-V		AV 170	115	119
02	290119	15481		KL LV	LV	-51		CHP-V		AV 117	113	119
02	290119	15482		KL LV	LV	-51		CHP-V		AV 153	198	162
02	290119	15483		KL LV	LV	-51		CHP-V		AV 121	138	153
02	290119	15484		KL LV	LV	-51		CHP-V		AV 151	145	151

C70-C99 Chemical composition % - Heat analysis

B07.2 Heat	C70	C	SI	MN	P	S	N	AL	CU	MO	NI	CR	V	NE	SN
290115	Y	0.173	0.359	1.16	0.010	0.0012	0.0057	0.031	0.016	0.005	0.023	0.026	0.000	0.000	0.001
290117	Y	0.175	0.360	1.14	0.008	0.0009	0.0048	0.039	0.047	0.007	0.071	0.033	0.000	0.000	0.001
290119	Y	0.173	0.354	1.17	0.010	0.0008	0.0068	0.029	0.022	0.019	0.036	0.031	0.000	0.000	0.001
B07.2 Heat	C70	TI	S												
290115	Y	0.003	0.0001												
290117	Y	0.003	0.0001												
290119	Y	0.003	0.0001												

C94 Heat analysis Carbon equivalent / Alloying restrictions

B07.2 Heat	FO-02=	FO-55=	FO-78=	FO-91=
290115	0.38	0.38	0.07	6.7
290117	0.38	0.38	0.16	6.5
290119	0.38	0.38	0.11	6.8

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



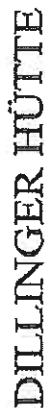
AG der Dillinger Hüttenwerke
Postfach 1580, D-66748 Dillingen/Saar
Inspection department

ADB

B. MUELLER
Test House Manager

Inspector's stamp Date 22.01.07

KW 1



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

402 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)

AP5 Established inspecting body	AP6 Purchaser
---------------------------------	---------------

100

802/ Steel design. SA516-70

ASME-2A:04+A05

DTI-HTE-2-B23-2006-04-27

C95 Ladle treatment

ITEM NO.: 01-02

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

c70-c99 Chemical composition % - Product analysis

B07.2	B07.1		C	SI	MIN	P	S	N	AL	CU	MO	NI	CR	V	NE	SN
Heat	Test No.															
290115	15578	KI	0.170	0.345	1.14	0.009	0.0009	0.0051	0.031	0.015	0.004	0.019	0.024	0.000	0.000	0.000
290117	15569	KI	0.172	0.347	1.13	0.008	0.0010	0.0055	0.037	0.041	0.006	0.061	0.032	0.000	0.000	0.000
290119	15483	KI	0.168	0.354	1.16	0.009	0.0009	0.0070	0.030	0.021	0.019	0.032	0.031	0.000	0.000	0.000

B07.2 Heat	B07.1 Test No.	C01	
		T1	B
290115	15578	K1 0.003	0.0000
290117	15569	K1 0.003	0.0000
290119	15483	K1 0.003	0.0001

C94 Product analysis Carbon equivalent / Alloying restrictions

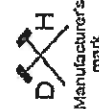
B07.2	B07.1	C01
Heat	Test No.	
290115	15578	K1 FO-02= 0,37 FO-55= 0,06
290117	15569	K1 FO-02= 0,37 FO-55= 0,14
290119	15483	K1 FO-02= 0,37 FO-55= 0,10

C94 Carbon equivalent formula / Allowing restrictions

$$\begin{aligned} \text{FO-02} &= \text{C} + (\text{MN}/6) + (\text{CR} + \text{MO} + \text{V})/5 + (\text{NI} + \text{CU})/15 \\ \text{FO-55} &= \text{CU} + \text{MO} + \text{NI} + \text{CR} \\ \text{FO-78} &= \text{CR} + \text{MO} \\ \text{FO-91} &= \text{MN}/\text{C} \end{aligned}$$

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. MUELLER
Test House Manager

Inspector's stamp Date 22.01.07

KW 1



DILLINGER HÜTTE

Erfäurungen 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.	Shoot
	INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991			242156-20.01.07	315779-002	8
MATERIAL TEST REPORT (MTR)						
A05 Established inspecting body	A06 Purchaser	ARCELOR CANADA, BURLI	A07.1 No.	61056	B01 Product	
DE	Final receiver	EDMONTON STEEL, EDMON	A07.2 No.	E10408-J1010-LG	HOT ROLLED PLATES	
B02/ Steel design.	SA516-70					
B03 Any suppl.	ASME-2A:04+A05					
requirements	DIL-HUE-2:R21-2006-04-27					

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

ITEM NO.: 01-02

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



Z01/202/203 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.

QMI-System: Certification as per ISO 9001

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

AHB

B. MUELLER
Test House Manager

Inspector's stamp Date 22.01.07

KW 1



Manufacturer's mark



DILLINGER HÜTTE

Erläuterungen siehe Rückseite/Explications voir au verso/Ses 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		329272-06.02.09	345609-001	1/...
MATERIAL TEST REPORT (NTR)		B01 Product HOT ROLLED PLATES		

A05 Established inspecting body	A06 Purchaser	EDMONTON STEEL, EDMON	A07.1 No.	ED10520-JL010-LG
DH	Final receiver	EDMONTON STEEL, EDMON	A07.2 No.	

B02 Steel design. SA516-70

B03 Any suppl. ASME-2A:07+A08

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



15005

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.	B97.1 Rolled plate No./ Test No.	A09 Purchaser article number
01	1	0,8750 x	150,00000 x	480,00000	8104	N	332122	59629-01	
01	1	0,8750 x	150,00000 x	480,00000	8104	N	332122	59629-02	
01	1	0,8750 x	150,00000 x	480,00000	8104	N	332122	59647-01	
01	1	0,8750 x	150,00000 x	480,00000	8104	N	332122	59647-02	
**	4				32416				
03	1	1,3750 x	150,00000 x	480,00000	12735	N	332122	59623-01	
03	1	1,3750 x	150,00000 x	480,00000	12735	N	332122	59623-02	
**	2				25470				
***	6				57886				

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)

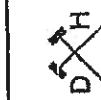
COOLING IN STILL AIR

B06 Marking of the product

ITEM NO.: 01,03

STEEL DESIGNATION SA516 70 MLTY SA516 60 MLTY

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



Manufacturer's mark

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. MUELLER
Test House Manager

Inspector's stamp

Date 06.02.09

KW 1

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.de/certificate)

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch		A03 Manufacturer's order/ Certificate No.		Short									
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		329272-06.02.09		345609-001		2/...									
MATERIAL TEST REPORT (MTR)				B01 Product											
A05 Established inspecting body		A06 Purchaser		EDMONTON STEEL, EDMON		A07.1 No. ED10520-J1010-IG									
DE		Final receiver		EDMONTON STEEL, EDMON		A07.2 No.									
B02/ Steel design.		SA516-70		S220-S5											
B03 Any suppl.		ASME-2A:07+A08													
requirements		DIL-HUE-2:R24-2007-11-20													
C10-C29 Tensile test															
B14 Item No.	B07.2 Heat No.	B05 Reference (heat) treatment	C01 C02/ C03 C01 Temp. GR.F	C10 C11 KSI RP02	C12 C13 RM	C14-C15 A % L0=2IN L0=8IN									
01	332122 59629		KL Q RT 50,3		74,5	28,0									
01	332122 59647		KL Q RT 49,6		75,0	30,4									
03	332122 59623		KL QV RT 50,6		75,8	36,2									
C30-C39 Hardness test															
B14 Item No.	B07.2 Heat No.	B05 Reference (heat) treatment	C01 C02/ C01	C33 Temp. GR.F	C35 C31 Individual values	C32 Mean value									
01	332122 59629		KL O	RT HBW 10/3000	HB 142 141	141									
01	332122 59647		KL O	RT HBW 10/3000	HB 149 148	148									
03	332122 59623		KL O	RT HBW 10/3000	HB 140 141	141									
C40-C49 Impact test															
B14 Item No.	B07.2 Heat No.	B05 Reference (heat) treatment	C01 C02/ C01	C40 C41 Type of test piece	C44 Testing method	C45 C42 Individual values AV=FTLEF	C43 Mean value								
01	332122 59629		KL LV	CHP-V		AV 104 142	123								
01	332122 59647		KL LV	CHP-V		AV 112 122	115								
03	332122 59623		KL LV	CHP-V		AV 97 101	105								
C70-C99 Chemical composition % - Heat analysis															
B07.2 Heat No.	C70	C	Si	Mn	P	S	N	CU	MO	NE	CR	V	NB	SN	TI
332122	Y	0,179	0,383	1,19	0,009	0,0019	0,0070	0,028	0,007	0,040	0,019	0,000	0,000	0,000	0,002
B07.2 Heat No.	C70	B	CA	AL-T											
332122	Y	0,0002	0,0017	0,031											
A04		Z01/Z02/Z03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.													
D/H		QM-System: Certification as per ISO 9001													
Manufacturer's mark		AG der Dillinger Hüttenwerke Postfach 1586, D-66748 Dillingen/Saar Inspection department													
		B. MUELLER Test House Manager													
		Inspector's stamp													
		Date 06.02.09													
		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 329272-06.02.09		A08 Manufacturer's order/ A03 Certificate No. 345609-001 S01 Product HOT ROLLED PLATES		Sheet 3/...
A05 Established inspecting body DIL		A08 Purchaser EDMONTON STEEL, EDMON		A07.1 No. ED10520-J1010-LG A07.2 No.		
S02/ Steel design. SA516-70 S03 Any suppl. ASME-2A:07+A08 requirements DIL-HUE-2:R24-2007-11-20		Final receiver EDMONTON STEEL, EDMON		SA20-SS		
C94 Heat analysis. Carbon equivalent / Alloying restrictions						
S07.2 Heat 332122 FO-02= 0,39 FO-55= 0,09 FO-78= 0,03 FO-91= 6,6						
C95 Ladle treatment						
ITEM NO.: 01,03 HEAT OF THE INDICATED ITEM: VACUUM DEGASSED / SULPHIDE SHAPE CONTROL						
C70-C99 Chemical composition % - Product analysis						
S07.2 Heat 332122 Test No. C01 332122 59623 KI 0,177 0,374 1,17 0,009 0,0016 0,0059 0,026 0,006 0,039 0,017 0,000 0,000 0,002 332122 59629 KI 0,177 0,378 1,18 0,008 0,0018 0,0065 0,026 0,006 0,038 0,017 0,000 0,000 0,002						
S07.2 Heat 332122 Test No. C01 332122 59623 KI 0,0003 0,0017 0,030 332122 59629 KI 0,0002 0,0017 0,031						
C94 Product analysis Carbon equivalent / Alloying restrictions						
S07.2 Heat 332122 Test No. C01 332122 59623 KI FO-02= 0,38 FO-55= 0,09 332122 59629 KI FO-02= 0,38 FO-55= 0,09						
C94 Carboni 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		Z01Z02Z03 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 06.02.09 KW 1



DILLINGER HÜTTE

Erklärungen siehe Rückseite/Explications voir au verso/Set 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/ Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		329272-06.02.09	345609-001	4
MATERIAL TEST REPORT (MTR)		B01 Product		
A05 Established inspecting body	A06 Purchaser	HOT ROLLED PLATES		
DH	Final receiver			
SA20-S5				
B02 Steel design	SA516-70			
B03 Any suppl. requirements	ASME-2A:07+A08 DIL-HUE-2:R24-2007-11-20			

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



Manufacturer's
mark

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. MUELLER
Test House Manager

Inspector's stamp

Date 06.02.09

KN

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
 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
 333525-31.03.09

A08 Manufacturer's order/
 A09 Certificate No.
 345557-002

Sheet
 1/...

A05 Established inspecting body
 A06 Purchaser
 A07.1 No. ED10528-J1010-LG
 A07.2 No.

Final receiver
 EDMONTON STEEL, EDMONTON

SA20-S5

B02/ Steel design. SA516-70
 B03 Any suppl. ASME-2A:07+A08
 requirements DIL-HUE-2-R24-2007-11-20

B01-B99 Description of the product									
B04 Item No.	B08 Number of pieces	B09 Thickness	B10 Width	B11 Length	B12 Theoretical mass	B04 Product condition	B07.2 Heat No.	B07.1 Rolled plate No./ Test No.	A09 Purchaser article number
02	1	0,8750 x	96,50000 x	480,00000	5214	N	333517	30278-01	
02	1	0,8750 x	96,50000 x	480,00000	5214	N	333517	30278-02	
02	1	0,8750 x	96,50000 x	480,00000	5214	N	333517	30278-03	
**	3				15642				
03	1	0,8750 x	120,50000 x	480,00000	6510	N	333505	31738-01	
03	1	0,8750 x	120,50000 x	480,00000	6510	N	333505	31738-02	
03	1	0,8750 x	120,50000 x	480,00000	6510	N	333516	30242-01	
03	1	0,8750 x	120,50000 x	480,00000	6510	N	333516	30242-02	
03	1	0,8750 x	120,50000 x	480,00000	6510	N	333516	30243-01	
03	1	0,8750 x	120,50000 x	480,00000	6510	N	333516	30243-02	
**	6				39060				
06	1	1,2500 x	97,00000 x	480,00000	7487	N	333502	34918-01	
06	1	1,2500 x	97,00000 x	480,00000	7487	N	333502	34918-02	
**	2				14974				
***	11				69676				

B04 Product delivery condition

ITEM NO.: 01-04,06-07
 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

A04. Manufacturer's mark

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

DR. C.R. DILG
 Test House Manager

Inspector's stamp
 Date 01.04.09

PP 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
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, EDMONT A07.1 No. ED10528-J1010-LG
DH Final receiver EDMONTON STEEL, EDMONT A07.2 No. SA20-S5

B02/ Steel design. SA516-70
B03 Any suppl. ASME-2A:07+A08
requirements DIL-HUE-2:R24-2007-11-20

B06 Marking of the product

ITEM NO.: 01-04,06-07
STEEL DESIGNATION SA516 70 MLTV SA516 60 MLTV
HEAT NO. / TRADEMARK / ROLLED PLATE NO. - TEST NO. / INSPECTOR'S STAMP

C10-C29 Tensile test

B14 Item No.	B07.2 Heat No.	B07.1 Rol. plate/ Test No.	B05 References (heat) treatment	C01 C02/ C03 C01 Temp. GRF	C10 C11 KSI RP02	C12 RM	C13	A % LO-ZN	A % LO-SN	C14-C15
02	333517	30278	K1 Q	RT	49,6	74,0			28,4	
03	333505	31738	K1 Q	RT	51,2	75,5			28,4	
03	333516	30242	K1 Q	RT	49,6	75,0			28,4	
03	333516	30243	K1 Q	RT	49,6	74,4			31,9	
06	333502	34918	K1 QV	RT	50,2	75,3		35,6		

C30-C39 Hardness test

B14 Item No.	B07.2 Heat No.	B07.1 Rol. plate/ Test No.	B05 References (heat) treatment	C01 C02/ C03 C01 Temp. GRF	C03 Temp. GRF	C33 Testing method	C35 Individual values	C32 Mean value
02	333517	30278	K1	O	RT HBW 10/3000	HB 144	143	146
03	333505	31738	K1	O	RT HBW 10/3000	HB 148	149	148
03	333516	30242	K1	O	RT HBW 10/3000	HB 142	141	142
03	333516	30243	K1	O	RT HBW 10/3000	HB 141	139	140
06	333502	34918	K1	O	RT HBW 10/3000	HB 144	141	143

A04



Manufacturer's mark

Z01/202203 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

DR. CH. DILG
Test House Manager

Inspector's stamp

Date 01.04.09

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)

A03 Established inspecting body A05 Purchaser EDMONTON STEEL, EDMONT A07.1 No. ED10528-J1010-LG
 DH Final receiver EDMONTON STEEL, EDMONT A07.2 No.

B02/ Steel design SA516-70
 B03 Any suppl ASME-2A:07+A08
 requirements DILL-HUE-2:R24-2007-11-20 SA20-S5

A10 Advice of dispatch No./
 Date of dispatch 333525-31.03.09
 A08 Manufacturer's order/
 A03 Certificate No. 345557-002
 Sheet 3/...

B01 Product
 HOT ROLLED PLATES

C40-C49 Impact test

B14 Item No.	B07.1 Heat No.	B07.1 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	C45 Energy	C42 Individual values AV-FTLB	C43 Mean value
02	333517	30278		K1	LV	-51		CHP-V				
03	333505	31738		K1	LV	-51		CHP-V				
03	333516	30242		K1	LV	-51		CHP-V				
03	333516	30243		K1	LV	-51		CHP-V				
06	333502	34918		K1	LV	-51		CHP-V				

C70-C99 Chemical composition % - Heat analysis

B07.2 Heat	C70	C	SI	MN	P	S	N	CU	MO	NI	CR	V	NB	SN	TI
333502	Y	0,178	0,351	1,18	0,008	0,0007	0,0059	0,027	0,017	0,078	0,036	0,000	0,000	0,001	0,001
333505	Y	0,179	0,380	1,19	0,008	0,0006	0,0060	0,038	0,015	0,099	0,033	0,000	0,000	0,001	0,002
333516	Y	0,176	0,373	1,17	0,009	0,0007	0,0066	0,030	0,008	0,046	0,027	0,000	0,000	0,001	0,002
333517	Y	0,171	0,378	1,18	0,011	0,0010	0,0077	0,036	0,009	0,051	0,030	0,001	0,000	0,001	0,001

B07.2 Heat	C70	B	CA	AL-T
333502	Y	0,0002	0,0020	0,049
333505	Y	0,0002	0,0019	0,039
333516	Y	0,0002	0,0025	0,036
333517	Y	0,0001	0,0027	0,043

A04
 D/H
 Manufacturer's mark

2017/02/2003 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

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

DR. CH. DILLG
 Test House Manager

Inspector's stamp Date 01.04.09 PP 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		333525-31.03.09	345557-002	4/...

MATERIAL TEST REPORT (MTR)		B01 Product
A05 Established inspecting body	A06 Purchaser	HOT ROLLED PLATES
DH	Final receiver	
	EDMONTON STEEL, EDMON	
	EDMONTON STEEL, EDMON	
	A07.1 No. ED10528-J1010-LG	
	A07.2 No.	
	SA20-S5	

B02 Steel design.	SA516-70
B03 Any suppl.	ASME-2A:07+A08
requirements	DIL-HUE-2:R24-2007-11-20

C94 Heat analysis Carbon equivalent / Alloying restrictions

B07.2 Heat	FO-02=	0,39	FO-55=	0,16	FO-78=	0,05	FO-91=	6,6
333502	FO-02=	0,40	FO-55=	0,19	FO-78=	0,05	FO-91=	6,6
333505	FO-02=	0,38	FO-55=	0,11	FO-78=	0,04	FO-91=	6,6
333516	FO-02=	0,38	FO-55=	0,13	FO-78=	0,04	FO-91=	6,9
333517	FO-02=	0,38	FO-55=		FO-78=		FO-91=	

C95 Ladle treatment

ITEM NO.:	01-04,06-07
HEAT OF THE INDICATED ITEM:	VACUUM DEGAUSS / SULPHIDE SHAPE CONTROL

C70-C99 Chemical composition % - Product analysis

B07.2 Heat	B07.1 Test No.	C	SI	MN	P	S	N	CU	MO	NI	CR	V	NB	SN	TI
333502	34644	K1	0,177	0,346	1,16	0,008	0,0012	0,0056	0,025	0,017	0,077	0,035	0,001	0,000	0,001
333502	34916	K1	0,177	0,352	1,17	0,007	0,0010	0,0062	0,026	0,018	0,077	0,037	0,001	0,000	0,001
333505	31738	K1	0,173	0,381	1,16	0,008	0,0009	0,0062	0,038	0,015	0,102	0,031	0,001	0,001	0,002
333505	32650	K1	0,176	0,386	1,17	0,008	0,0010	0,0065	0,032	0,016	0,089	0,034	0,001	0,000	0,001
333516	29660	K1	0,172	0,371	1,15	0,009	0,0009	0,0064	0,029	0,009	0,046	0,026	0,000	0,000	0,001
333516	30166	K1	0,175	0,376	1,15	0,009	0,0005	0,0064	0,030	0,007	0,045	0,027	0,000	0,000	0,002
333517	30388	K1	0,159	0,382	1,17	0,010	0,0015	0,0069	0,036	0,008	0,051	0,030	0,001	0,000	0,001

A04 2012/02/203 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.



Manufacturer's mark

QM-System: Certification as per ISO 9001



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

DR. CH. DILG
Test House Manager

Inspector's stamp Date 01.04.09

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+AI:1995 + AS PER ISO 10474:1991
MATERIAL TEST REPORT (MTR)

A03 Manufacturer's order/
A03 Certificate No. 345557-002
B01 Product
HOT ROLLED PLATES

A10 Advice of dispatch No./
Date of dispatch 333525-31.03.09
A07 No. ED10528-J1010-LG
A07.2 No. EDMONTON STEEL, EDMONTON
SA20-S5

B02 Steel design SA516-70
B03 Any suppl. ASME-2A:07-A08
requirements DIL-HUB-2:R24-2007-11-20

C70-C99 Chemical composition % - Product analysis

B07.2 Heat	B07.1 Test No.	C01	B	CA	AL-T
333502	34644	K1	0,0001	0,0019	0,048
333502	34916	K1	0,0000	0,0019	0,046
333505	31738	K1	0,0000	0,0018	0,037
333505	32650	K1	0,0002	0,0021	0,042
333516	29660	K1	0,0002	0,0024	0,035
333516	30166	K1	0,0002	0,0023	0,036
333517	30388	K1	0,0000	0,0023	0,044

C94 Product analysis Carbon equivalent / Alloying restrictions

B07.2 Heat	B07.1 Test No.	C01	FO-02	FO-55
333502	34644	K1	FO-02= 0,39	FO-55= 0,15
333502	34916	K1	FO-02= 0,39	FO-55= 0,16
333505	31738	K1	FO-02= 0,39	FO-55= 0,19
333505	32650	K1	FO-02= 0,39	FO-55= 0,17
333516	29660	K1	FO-02= 0,38	FO-55= 0,11
333516	30166	K1	FO-02= 0,38	FO-55= 0,11
333517	30388	K1	FO-02= 0,37	FO-55= 0,13

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



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

DR. CH. DILG
Test House Manager

Inspector's stamp Date 01.04.09



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		A10 Advice of dispatch No./ Date of dispatch 333525-31.03.09	A08 Manufacturer's order/ A03 Certificate No. 345557-002	Sheet 6
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body DH	A06 Purchaser EDMONTON STEEL, EDMON	A07.1 No. ED10528-J1010-LG		
	Final receiver EDMONTON STEEL, EDMON	A07.2 No.		
B02 Steel design. SA516-70		SA20-S5		
B03 Any suppl. ASME-2A:07+A08 requirements DIL-HUE-2-R24-2007-11-20				

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

ITEM NO.: 01-04,06-07

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



Manufacturer's
mark

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



U. Dill

DR. CH. DILLG
Test House Manager

Inspector's stamp

Date 01.04.09

PP 1

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

A01



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

A10 Advice of dispatch No./
Date of dispatch
356925-08.04.10

A08 Manufacturer's order/
A03 Certificate No.
353891-002

Sheet
2 / ...

MATERIAL TEST REPORT (MTR)

A05 Established inspecting body A06 Purchaser EDMONTON STEEL, EDMON A07.1 No. ED10547-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 DILL-HUE-2:R30-2010-01-31

SA20-S5

B01 Product
HOT ROLLED PLATES

B06 Marking of the product

ITEM NO.: 01-03, 05-06, 08-09

STEEL DESIGNATION SA516 70 MILTY SA516 60 MILTY

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

B07-B99 Further information about the product

ITEM NO.: 01-03, 05-06, 08-09

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

C10-C29 Tensile test

B14 B07.2 Item Heat No.	B07.1 Rol. plate/ Test No.	B05 Reference (heat) treatment	C01 Temp. GR.F	C02 C03 C01	C10 C11 KSI RPO2	C12 RM	C13	A % L0=8IN	A % L0=2IN	C14-C15
02. 344392 72568		K1 Q	RT	50,3	75,0	42				
03 344657 76977		K1 Q	RT	52,3	75,3					
05 344650 04162		K1 Q	RT	49,9	73,8					
06 343716 58575		K1 Q	RT	51,8	76,0					
06 343716 58576		K1 Q	RT	48,1	74,7					
09 343972 39374		K1 QV	RT	50,9	77,9					
09 344390 72572		K1 QV	RT	48,7	74,5					
09 344390 72573		K1 QV	RT	48,1	74,2					

C30-C39 Hardness test

B14 B07.2 Item Heat No.	B07.1 Rol. plate/ Test No.	B05 Reference (heat) treatment	C01 Temp. GR.F	C02/C01	C03 Temp. GR.F	C33 Testing method	C35 C31 Individual values	C32 Mean value
02 344392		K1 Q	RT	HBW 10/3000	HB 148	149	148	148
03 344657		K1 Q	RT	HBW 10/3000	HB 137	143	143	141
05 344650		K1 Q	RT	HBW 10/3000	HB 144	147	148	146

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

AHB

DR. CH. DILLG
Test House Manager

Inspector's stamp Date 08.04.10

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)
A05 Established inspecting body A06 Purchaser EDMONTON STEEL, EDMONT A07.1 No. ED10547-J1010-ER
DH Final receiver EDMONTON STEEL, EDMONT A07.2 No. SA20-S5

A08 Manufacturer's order/
A03 Certificate No. 353891-002
B01 Product
HOT ROLLED PLATES

A10 Advice of dispatch No./
Date of dispatch 356925-08.04.10
Sheet 3/...

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. GR.F	C03 Testing method	C35 C31 Individual values	C32 Mean value
06	343716	58575		K1	O	RT	HBW 10/3000	HB 145	148
06	343716	58576		K1	O	RT	HBW 10/3000	HB 144	149
09	343972	39374		K1	O	RT	HBW 10/3000	HB 146	145
09	344390	72572		K1	O	RT	HBW 10/3000	HB 142	146
09	344390	72573		K1	O	RT	HBW 10/3000	HB 143	143

C40-C49 Impact test									
B14 Item No.	B07.2 Heat No.	B07.1 Roll plate/ Test No.	B05 Reference (heat) treatment	C01	C02/C01	C03 Temp. GR.F	C41 Width of test piece	C44 Testing method	C43 Mean value
02	344392	72568		K1	LV	-51	CHP-V	AV 99	86
03	344657	76977		K1	LV	-51	CHP-V	AV 157	188
05	344650	04162		K1	LV	-51	CHP-V	AV 201	123
06	343716	58575		K1	LV	-51	CHP-V	AV 198	191
06	343716	58576		K1	LV	-51	CHP-V	AV 112	209
09	343972	39374		K1	LV	-51	CHP-V	AV 114	80
09	344390	72572		K1	LV	-51	CHP-V	AV 97	105
09	344390	72573		K1	LV	-51	CHP-V	AV 100	128

C70-C99 Chemical composition % - Heat analysis									
B07.2 Heat	C70	C	Si	MIN	P	S	N	MO.	NI
343716	Y	0,183	0,383	1,20	0,012	0,0005	0,0068	0,019	0,026
343972	Y	0,193	0,389	1,19	0,008	0,0005	0,0061	0,024	0,029
344390	Y	0,174	0,386	1,19	0,008	0,0012	0,0065	0,025	0,037
344392	Y	0,176	0,371	1,18	0,009	0,0010	0,0065	0,023	0,037
344650	Y	0,160	0,343	1,17	0,009	0,0012	0,0067	0,022	0,027

A01 20/12/2023 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
DR. CH. DILG
Test House Manager
Date 08.04.10
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 EDMONTON STEEL, EDMON A07.1 No. ED10547-J1010-ER
DH 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 Advice of dispatch No./ Date of dispatch 355925-08.04.10

A08/ Manufacturer's order/ A03 Certificate No. 353891-002

B01 Product HOT ROLLED PLATES

Shoot 4/...

C70-C99 Chemical composition % - Heat analysis

	C70	C	Si	Mn	P	S	N	CU	MO	NI	CR	V	NB	SN	TI
B07.2 Heat 344657	Y	0,174	0,338	1,19	0,011	0,0009	0,0059	0,028	0,015	0,035	0,029	0,000	0,000	0,000	0,002
B07.2 Heat 343716	Y														
B07.2 Heat 343972	Y														
B07.2 Heat 344390	Y														
B07.2 Heat 344392	Y														
B07.2 Heat 344650	Y														
B07.2 Heat 344657	Y														

C94 Heat analysis Carbon equivalent / Alloying restrictions

	FO-02=	FO-51=	FO-55=	FO-78=	FO-91=
B07.2 Heat 343716	0,39	0,39	0,001	0,08	6,6
B07.2 Heat 343972	0,40	0,40	0,000	0,10	6,2
B07.2 Heat 344390	0,39	0,39	0,000	0,12	6,8
B07.2 Heat 344392	0,39	0,39	0,000	0,11	6,7
B07.2 Heat 344650	0,37	0,37	0,000	0,09	7,3
B07.2 Heat 344657	0,39	0,39	0,000	0,11	6,8

C95 Ladle treatment

ITEM NO.: 01-03,05-06,08-09
HEAT OF THE INDICATED ITEM: VACUUM DEGASSED / SULPHIDE SHAPE CONTROL

A04

Z011Z02Z03 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

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

A01

DR. CH. DILG
Test House Manager

Inspector's stamp

Date 08.04.10

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)

A03 Established inspecting body

A08 Purchaser

Final receiver

B02 Steel design

B03 Any suppl.

requirements

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

C95 Further information about ladle treatment

ITEM NO.: 01-03.05-06.08-09

CALCIUM TREATED

C70-C99 Chemical composition % - Product analysis

B07.2	B07.1	Heat	Test No.	CO1	C	SI	MN	P	S	N	CU	MO	NI	CR	V	NB	SN	TI
343716	58576	K1	0,177	0,382	1,19	0,011	0,0004	0,0074	0,017	0,004	0,025	0,029	0,039	0,000	0,000	0,000	0,001	0,002
343972	39374	K1	0,183	0,386	1,18	0,008	0,0009	0,0062	0,025	0,007	0,038	0,028	0,034	0,000	0,000	0,000	0,001	0,002
344390	72572	K1	0,171	0,383	1,18	0,007	0,0017	0,0062	0,025	0,005	0,037	0,034	0,030	0,000	0,000	0,000	0,001	0,002
344392	72567	K1	0,178	0,371	1,16	0,009	0,0008	0,0066	0,022	0,018	0,036	0,030	0,030	0,000	0,000	0,000	0,001	0,002
344392	72568	K1	0,175	0,369	1,16	0,008	0,0009	0,0067	0,023	0,014	0,038	0,030	0,030	0,000	0,000	0,001	0,001	0,002
344392	72570	K1	0,176	0,376	1,17	0,008	0,0010	0,0067	0,023	0,015	0,029	0,034	0,030	0,000	0,000	0,001	0,001	0,002
344650	04162	K1	0,167	0,407	1,15	0,008	0,0012	0,0068	0,020	0,009	0,035	0,028	0,030	0,000	0,000	0,001	0,001	0,002
344657	76977	K1	0,172	0,405	1,17	0,009	0,0009	0,0056	0,028	0,019	0,035	0,028	0,030	0,000	0,000	0,001	0,001	0,002

B07.2 B07.1

Heat

Test No.

343716

58576

343972

39374

344390

72572

344392

72567

344392

72568

344392

72570

344650

04162

344657

76977

CA

AL-T

0,0002

0,0010

0,0010

0,048

0,045

0,0001

0,0017

0,036

0,0001

0,0018

0,035

0,0002

0,0036

0,029

0,0000

0,0035

0,028

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

ADB

AG der Dillinger Hüttenwerke

Postfach 1580, D-66748 Dillingen/Saar

Inspection department

DR. CH. DILG

Test House Manager

Inspector's stamp

Date 08.04.10

PP 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		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		356925-08.04.10		353891-002		6
MATERIAL TEST REPORT (MTR)		A06 Purchaser		B01 Product		
A05 Established inspecting body		EDMONTON STEEL, EDMONTON		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				
		EDMONTON STEEL, EDMONTON				
		A07.1 No. ED10547-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=	
343716	58576	KL	0,38	0,001	0,08	
343972	39374	KL	0,39	0,000	0,10	
344390	72572	KL	0,38	0,000	0,10	
344392	72567	KL	0,39	0,000	0,11	
344392	72568	KL	0,38	0,000	0,10	
344392	72570	KL	0,38	0,001	0,11	
344650	04162	KL	0,37	0,000	0,09	
344657	76977	KL	0,38	0,000	0,11	

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.: 01-03,05-06,08-09

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

SURFACE AS PER ASME-SA20

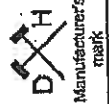
THICKNESS AS PER ASME-SA20

LENGTH AND WIDTH AS PER ASME-SA20

FLATNESS AS PER 1/2-ASME-SA20



A04



201/202/203 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*Dr. CH. DILG*DR. CH. DILG
Test House Manager

Inspector's stamp

Date 08.04.10

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		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	1/...
MATERIAL TEST REPORT (MTR)		B01 Product HOT ROLLED PLATES		
A05 Established inspecting body		EDMONTON STEEL, EDMONTON A07.1 No. ED10551-J1010-ER		
DE		EDMONTON STEEL, EDMONTON A07.2 No.		
B02 Steel design.		SA20-S5		
B03 Any suppl. requirements		ASME-II-A:07+A09 DIL-HUE-2:R30-2010-01-31		



15711

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				
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		348840	11315-01	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350041	63961-01	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350041	63961-02	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	17648-01	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	17648-02	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	17648-03	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	17724-01	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	17724-02	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	17724-03	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	20921-01	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	20921-02	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	20921-03	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	21295-01	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	21295-02	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	21295-03	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	21306-02	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	21306-03	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	21322-01	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	21322-02	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350399	21322-03	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350405	39539-01	
01	1	0,6250 x	120,50000 x	480,00000 x	4650 N		350405	39539-02	
01	1	0,6250 x	120,50000 x	480,00000 x	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

Inspector's stamp

Date 17.09.10

BM

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.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, 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-HUE-2:R30-2010-01-31

SA20-SS

A10 Advice of dispatch No./
Date of dispatch

369429-17.09.10

A08/ Manufacturer's order/
A09 Certificate No.

357359-002

Sheet

2/...

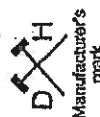
B01 Product

HOT ROLLED PLATES

B01-B99 Description of the product.

B14 Item No.	B08 Number of places	B09 Thickness	B10 Width	B11 Length	B12 Theoretical mass	B04 Product condition	B07.2 Heat No.	B07.1 Rolled plate Test No.	A09 Purchaser article number
			INCH		KG				
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350405	39694-03	
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350405	39715-02	
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350405	39774-01	
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350405	39774-02	
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350405	39774-03	
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350405	39799-01	
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350405	39799-02	
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350405	39799-03	
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350405	39959-01	
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350405	39959-02	
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350405	39959-03	
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350405	39965-01	
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350405	39965-02	
**	36				167400				
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350401	15513-01	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350401	15513-02	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350401	15513-03	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350401	15526-01	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350401	15526-02	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350401	15526-03	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350401	15608-01	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350401	15610-01	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350401	15610-02	

A04 2012/02/203 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.



Manufacturer's mark

QM-System: Certification as per ISO 9001

B. BALDAUF

Test House Manager

ADB

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

Inspector's stamp

Date 17.09.10

BM

A01



DILLINGER HÜTTE

Entwürfen siehe Prospekt/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		3/...	
MATERIAL TEST REPORT (MTR)				B01 Product			
A05 Established inspecting body		A06 Purchaser		A07.1 No.		A07.2 No.	
DX		EDMONTON STEEL, EDMON		EDMONTON STEEL, EDMON		HOT ROLLED PLATES	
B02/ Steel design.		SA516-70		SA20-S5			
B03 Any suppl.		ASME-II-A:07+A09					
requirements		DIL-HUB-2:R30-2010-01-31					

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.	A03 Purchaser article number
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350401	15610-03	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350401	15626-01	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350401	15626-02	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350401	15645-01	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350401	15645-02	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350401	15645-03	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350402	15169-03	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350402	15399-01	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350402	15399-02	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350402	15399-03	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350405	39714-01	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350405	39946-01	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350405	39946-02	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350405	39946-03	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350405	39963-01	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350405	39963-02	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350405	40537-01	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350405	40537-02	
**	27				150660				
03	1	0,7500 x	150,00000 x	480,00000 x	6946	N	350403	13199-01	
03	1	0,7500 x	150,00000 x	480,00000 x	6946	N	350403	13199-02	
03	1	0,7500 x	150,00000 x	480,00000 x	6946	N	350403	13199-03	
03	1	0,7500 x	150,00000 x	480,00000 x	6946	N	350403	13308-01	

A04		Z01/202/203 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		AHB		Inspector's stamp	
				Date 17.09.10		BM	

QM-System: Certification as per ISO 9001



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
 INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+11:1995 + AS PER ISO 10474:1991
 MATERIAL TEST REPORT (MTR)

A10 Advice of dispatch No./
Date of dispatch
359429-17.09.10

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

A05 Established inspecting body
DH

A06 Purchaser
EDMONTON STEEL, EDMON

A07.1 No. ED10551-J1010-ER

A07.2 No.
SA20-S5

A09 Product
HOT ROLLED PLATES

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				
03	1	0,7500 X	150,00000 X	480,00000 X	6946	N	350403	13308-02	
03	1	0,7500 X	150,00000 X	480,00000 X	6946	N	350403	13308-03	
**	6				41676				
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350403	11964-01	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350403	11964-02	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350403	11964-03	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350403	11979-01	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350403	11979-02	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350403	11979-03	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350403	12013-01	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350403	12013-02	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350403	12013-03	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350403	12280-02	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350403	12280-03	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350403	12638-01	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350403	12638-02	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350403	12638-03	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350404	11955-01	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350404	11955-02	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350404	11955-03	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350405	05031-01	
04	1	0,8750 X	120,50000 X	480,00000 X	6510	N	350405	05031-02	
**	19				123690				

A04

Z01202Z03 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

Inspector's stamp
Date 17.09.10

BM

B. BALDAUF
Test House Manager

ADH



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		369429-17.09.10		357359-002		5/...	
MATERIAL TEST REPORT (MTR)							
A05 Established inspecting body		A06 Purchaser		A07.1 No.		A07.2 No.	
DH		EDMONTON STEEL, EDMON		ED10551-J1010-ER			
B02 Steel design		Final receiver		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	B04 Product condition	B07.2 Heat No.	B07.1 Rolled plate No./ Test No.	A09 Purchaser article number
			INCH		KG				
05	1	0,8750 x	150,0000 x	480,0000 x	8104	N	350402	14854-01	
05	1	0,8750 x	150,0000 x	480,0000 x	8104	N	350402	14854-02	
07	2				16208				
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	06356-02	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	06356-03	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	06357-01	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	06357-02	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	06357-03	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	06943-01	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	06943-02	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	06943-03	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	07812-01	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	07812-02	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	07812-03	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	07813-01	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	07813-02	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	07813-03	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	10672-01	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	10672-02	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	10672-03	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	11097-01	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	11097-02	
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	11097-03	

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		A01	
D/H Manufacturer's mark		B. BALDAUF Test House Manager		ADB		BM	
		Inspector's stamp		Date 17.09.10			

QM-System: Certification as per ISO 9001



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	A05/ 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		
A03 Established inspecting body		HOT ROLLED PLATES		
DH				
A08 Purchaser		A07.1 No. ED10551-J1010-ER		
Final receiver		A07.2 No.		
EDMONTON STEEL, EDMON				
EDMONTON STEEL, EDMON				
SA20-S5				
B02/ Steel design. SA516-70				
B03 Any suppl. ASME-II-A:07+A09				
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.	A09 Purchaser article number
07	1	1,0000 x	96,50000 x	480,00000 x	5959 N	N	350405	05063-01	
07	1	1,0000 x	96,50000 x	480,00000 x	5959 N	N	350405	05063-02	
07	1	1,0000 x	96,50000 x	480,00000 x	5959 N	N	350405	05063-03	
07	1	1,0000 x	96,50000 x	480,00000 x	5959 N	N	350405	05064-01	
07	1	1,0000 x	96,50000 x	480,00000 x	5959 N	N	350405	05064-02	
07	1	1,0000 x	96,50000 x	480,00000 x	5959 N	N	350405	05064-03	
07	1	1,0000 x	96,50000 x	480,00000 x	5959 N	N	350405	05065-01	
07	1	1,0000 x	96,50000 x	480,00000 x	5959 N	N	350405	05065-02	
07	1	1,0000 x	96,50000 x	480,00000 x	5959 N	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	201/2002Z03	201/2002Z03	AG der Dillinger Hüttenwerke	A01
	We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order.		Postfach 1580, D-66748 Dillingen/Saar	Inspection department
	QM-System: Certification as per ISO 9001			
Inspector's stamp		Date	BM 1	
B. BALDARF		17.09.10		
Test House Manager				



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/ ACS 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	7/...
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. ASME-II-A:07+A09				
requirements DIL-HUE-2:R30-2010-01-31				
EDMONTON STEEL, EDMONTON		ED10551-J1010-ER		
EDMONTON STEEL, EDMONTON		A07.2 No.		
SA20-SS				

B07-B99 Further information about the product

ITEM NO.: 01-05, 07-08
THICKNESS REDUCTION RATIO $\geq 3,0$ IS FULFILLED (CF. A/SA20 PAR. 5.3)

C10-C29 Tensile test										C14-C15	
B14 B07.2 Item Heat No.	B07.1 Roll plate/ Test No.	Reference (heat) treatment	C01 C01	C02 C02	C03 C03	C04 C04	C05 C05	C06 C06	C07 C07	A %	LO-BIN
01 348840-11315			X1 Q	RT	RT	RT	RT	RT	RT	77,6	27
01 350041 63961			X1 Q	RT	RT	RT	RT	RT	RT	73,1	29
01 350399 17648			X1 Q	RT	RT	RT	RT	RT	RT	76,6	27
01 350399 17724			X1 Q	RT	RT	RT	RT	RT	RT	76,3	28
01 350399 20921			X1 Q	RT	RT	RT	RT	RT	RT	75,7	25
01 350399 21295			X1 Q	RT	RT	RT	RT	RT	RT	76,4	26
01 350399 21306			X1 Q	RT	RT	RT	RT	RT	RT	75,8	26
01 350399 21322			X1 Q	RT	RT	RT	RT	RT	RT	76,3	28
01 350405 39539			X1 Q	RT	RT	RT	RT	RT	RT	75,8	29
01 350405 39694			X1 Q	RT	RT	RT	RT	RT	RT	75,0	28
01 350405 39715			X1 Q	RT	RT	RT	RT	RT	RT	75,4	31
01 350405 39774			X1 Q	RT	RT	RT	RT	RT	RT	75,3	27
01 350405 39799			X1 Q	RT	RT	RT	RT	RT	RT	75,0	28
01 350405 39959			X1 Q	RT	RT	RT	RT	RT	RT	75,8	28
01 350405 39965			X1 Q	RT	RT	RT	RT	RT	RT	74,7	28
02 350401 15513			X1 Q	RT	RT	RT	RT	RT	RT	73,7	27
02 350401 15526			X1 Q	RT	RT	RT	RT	RT	RT	73,5	28
02 350401 15608			X1 Q	RT	RT	RT	RT	RT	RT	74,2	26
02 350401 15610			X1 Q	RT	RT	RT	RT	RT	RT	73,5	30
02 350401 15626			X1 Q	RT	RT	RT	RT	RT	RT	74,2	28

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	A01
QM-System: Certification as per ISO 9001		
B. BALDAUF Test House Manager		



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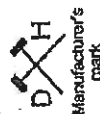
A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		A10 Advice of dispatch No./ Date of dispatch	A08 Manufacturer's order/ A03 Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		369429-17.09.10	357359-002	8/...
MATERIAL TEST REPORT (MTR)		B01 Product HOT ROLLED PLATES		
A05 Established inspecting body DH		A06 Purchaser EDMONTON STEEL, EDMON		
A06 Purchaser Final receiver		A07.1 No. ED10551-J1010-ER A07.2 No.		
B02/ Steel design. SA516-70		SA20-S5		
B03 Any suppl. ASME-II-A:07+A09				
requirements DIL-HUE-2:R30-2010-01-31				

C10-C29 Tensile test

B14 B07.2 Item Heat No. No.	B07.1 Rol./plate/ Test No.	B05 Reference (heat) treatment	C01 C02/ C03 C01 GRF	C10 C11 KSI RPO2	C12 RM	C13 A %	C14-C15 L0-SIN
02 350401	15645	K1 Q	RT	48,9	74,0	29	29
02 350402	15169	K1 Q	RT	49,2	75,1	28	28
02 350402	15399	K1 Q	RT	50,5	75,3	28	28
02 350405	39714	K1 Q	RT	49,6	75,3	25	25
02 350405	39946	K1 Q	RT	49,0	75,4	28	28
02 350405	39963	K1 Q	RT	48,6	74,5	27	27
02 350405	40537	K1 Q	RT	46,5	73,7	27	27
03 350403	13199	K1 Q	RT	50,0	75,5	27	27
03 350403	13308	K1 Q	RT	49,3	75,3	26	26
04 350403	11964	K1 Q	RT	49,9	74,1	30	30
04 350403	11979	K1 Q	RT	49,2	74,7	29	29
04 350403	12013	K1 Q	RT	49,0	74,0	29	29
04 350403	12280	K1 Q	RT	49,9	74,1	27	27
04 350403	12638	K1 Q	RT	50,0	74,5	28	28
04 350404	11955	K1 Q	RT	49,6	74,7	29	29
04 350405	05031	K1 Q	RT	48,9	74,8	30	30
05 350402	14854	K1 Q	RT	49,7	75,1	27	27
07 350404	06356	K1 Q	RT	49,3	75,0	28	28
07 350404	06943	K1 Q	RT	50,0	74,1	29	29
07 350404	07812	K1 Q	RT	49,7	74,1	30	30
07 350404	07813	K1 Q	RT	49,6	74,4	30	30
07 350404	10672	K1 Q	RT	50,3	74,0	30	30

A04 D01/D02/D03 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		9/...	
MATERIAL TEST REPORT (MTR)				B01 Product			
A05 Established inspecting body		A06 Purchaser		A07.1 No.		A07.2 No.	
DH		EDMONTON STEEL, EDMONTON		EDMONTON STEEL, EDMONTON		HOT ROLLED PLATES	
B02/ Steel design.		SA516-70		SA20-S5			
B03 Any suppl. requirements		ASME-II-A-07+A09		DIL-HUE-2:R30-2010-01-31			

C10-C29 Tensile test

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

C30-C39 Hardness test

Item No.	B07.2 Heat No.	B07.1 Re-plate/ Test No.	B05 Reference (heat) treatment	C01 C02/ C03 C01 Temp. GRF	C30 Temp. GRF	C31 Method of test	C32 Mean value
01	348840	11315		K1 O	RT HBW 10/3000	HB 147	148
01	350041	63961		K1 O	RT HBW 10/3000	HB 141	142
01	350399	17648		K1 O	RT HBW 10/3000	HB 146	146
01	350399	17724		K1 O	RT HBW 10/3000	HB 148	145
01	350399	20921		K1 O	RT HBW 10/3000	HB 146	144
01	350399	21295		K1 O	RT HBW 10/3000	HB 144	143
01	350399	21306		K1 O	RT HBW 10/3000	HB 144	142
01	350399	21322		K1 O	RT HBW 10/3000	HB 142	142
01	350405	39539		K1 O	RT HBW 10/3000	HB 142	141
01	350405	39694		K1 O	RT HBW 10/3000	HB 142	141
01	350405	39715		K1 O	RT HBW 10/3000	HB 142	141
01	350405	39774		K1 O	RT HBW 10/3000	HB 144	143
01	350405	39799		K1 O	RT HBW 10/3000	HB 145	144
01	350405	39959		K1 O	RT HBW 10/3000	HB 144	145
01	350405	39965		K1 O	RT HBW 10/3000	HB 139	139
02	350401	15513		K1 O	RT HBW 10/3000	HB 142	142

A04		Z0170203 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		A01B Inspector's stamp		Date 17.09.10 BM 1	
		QM-System: Certification as per ISO 9001					



DILLINGER HÜTTE

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		10/...	
MATERIAL TEST REPORT (MTR)				B01 Product			
A05 Established inspecting body		EDMONTON STEEL, EDMONTON		A07.1 No. ED10551-J1010-ER			
DH		Final receiver		EDMONTON STEEL, EDMONTON		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							

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. GR.F	C30 Method of test	C35 Individual values	C32 Mean value
02	350401	15526		K1	O	RT	HBW 10/3000	HB 142	139
02	350401	15508		K1	O	RT	HBW 10/3000	HB 141	139
02	350401	15610		K1	O	RT	HBW 10/3000	HB 142	140
02	350401	15626		K1	O	RT	HBW 10/3000	HB 138	139
02	350401	15645		K1	O	RT	HBW 10/3000	HB 139	137
02	350401	15169		K1	O	RT	HBW 10/3000	HB 141	140
02	350402	15399		K1	O	RT	HBW 10/3000	HB 146	144
02	350402	39714		K1	O	RT	HBW 10/3000	HB 144	144
02	350405	39946		K1	O	RT	HBW 10/3000	HB 145	145
02	350405	39963		K1	O	RT	HBW 10/3000	HB 142	141
02	350405	40537		K1	O	RT	HBW 10/3000	HB 141	140
03	350403	13199		K1	O	RT	HBW 10/3000	HB 143	142
03	350403	13308		K1	O	RT	HBW 10/3000	HB 142	142
04	350403	11964		K1	O	RT	HBW 10/3000	HB 142	142
04	350403	11979		K1	O	RT	HBW 10/3000	HB 143	143
04	350403	12013		K1	O	RT	HBW 10/3000	HB 142	142
04	350403	12280		K1	O	RT	HBW 10/3000	HB 141	141
04	350403	12638		K1	O	RT	HBW 10/3000	HB 141	141
04	350404	11955		K1	O	RT	HBW 10/3000	HB 144	145
04	350405	05031		K1	O	RT	HBW 10/3000	HB 148	146
05	350402	14854		K1	O	RT	HBW 10/3000	HB 142	142
07	350404	06356		K1	O	RT	HBW 10/3000	HB 139	139
07	350404	06357		K1	O	RT	HBW 10/3000	HB 142	142
07	350404	06943		K1	O	RT	HBW 10/3000	HB 142	142

A04		A01	
Z01202Z03 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	
Manufacturer's mark		Inspector's stamp	
		Date 17.09.10	
		BM 1	



DILLINGER HÜTTE

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A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004		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		A10 Advice of dispatch No./ Date of dispatch		11/...
MATERIAL TEST REPORT (MTR)		369429-17.09.10		357359-002
A05 Established inspecting body		B01 Product		HOT ROLLED PLATES
A06 Purchaser		EDMONTON STEEL, EDMONTON		A07.1 No. ED10551-J1010-ER
Final receiver		EDMONTON STEEL, EDMONTON		A07.2 No.
B02/ Steel design.		SA516-70		SA20-S5
B03 Any suppl. requirements		ASME-II-A:07+A09 DIL-HUB-2-R30-2010-01-31		

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	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 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 Individual values AV=FTLBF	C46 Energy	C43 Mean value
01	348840	11315		K1	LV	-51		CHP-V		AV 101	123	139
01	350041	63961		K1	LV	-51		CHP-V		AV 208	195	181
01	350399	17648		K1	LV	-51		CHP-V		AV 193	125	111
01	350399	17724		K1	LV	-51		CHP-V		AV 117	181	148
01	350399	20921		K1	LV	-51		CHP-V		AV 124	120	162
01	350399	21295		K1	LV	-51		CHP-V		AV 119	119	198
01	350399	21306		K1	LV	-51		CHP-V		AV 141	209	132
01	350399	21322		K1	LV	-51		CHP-V		AV 122	197	171
01	350405	39539		K1	LV	-51		CHP-V		AV 184	196	195
01	350405	39694		K1	LV	-51		CHP-V		AV 208	187	142
01	350405	39715		K1	LV	-51		CHP-V		AV 104	194	152
01	350405	39774		K1	LV	-51		CHP-V		AV 119	198	139
01	350405	39799		K1	LV	-51		CHP-V		AV 129	162	197
01	350405	39959		K1	LV	-51		CHP-V		AV 198	150	206

A04 201202203 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

BY 1

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



DILLINGER HÜTTE

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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-II-A:07+A09

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

SA20-S5

C40-C49 Impact test

B14 Item No.	B07.2 Heat No.	B07.1 Rel. 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 C42 AV-FT1.BF	C43 Mean value
01	350405	39965		K1	LV	-51	-51	CHP-V			AV 192	147
02	350401	15513		K1	LV	-51	-51	CHP-V			AV 128	150
02	350401	15526		K1	LV	-51	-51	CHP-V			AV 195	209
02	350401	15608		K1	LV	-51	-51	CHP-V			AV 137	131
02	350401	15610		K1	LV	-51	-51	CHP-V			AV 117	193
02	350401	15626		K1	LV	-51	-51	CHP-V			AV 122	212
02	350401	15645		K1	LV	-51	-51	CHP-V			AV 145	207
02	350402	15169		K1	LV	-51	-51	CHP-V			AV 159	118
02	350402	15399		K1	LV	-51	-51	CHP-V			AV 186	164
02	350405	39714		K1	LV	-51	-51	CHP-V			AV 144	201
02	350405	39946		K1	LV	-51	-51	CHP-V			AV 205	124
02	350405	39963		K1	LV	-51	-51	CHP-V			AV 119	192
02	350405	40537		K1	LV	-51	-51	CHP-V			AV 131	131
03	350403	13199		K1	LV	-51	-51	CHP-V			AV 120	148
03	350403	13308		K1	LV	-51	-51	CHP-V			AV 130	188
04	350403	11964		K1	LV	-51	-51	CHP-V			AV 192	106
04	350403	11979		K1	LV	-51	-51	CHP-V			AV 90	142
04	350403	12013		K1	LV	-51	-51	CHP-V			AV 136	118
04	350403	12280		K1	LV	-51	-51	CHP-V			AV 109	187
04	350403	12638		K1	LV	-51	-51	CHP-V			AV 114	157
04	350404	11955		K1	LV	-51	-51	CHP-V			AV 117	127
04	350405	05031		K1	LV	-51	-51	CHP-V			AV 157	128
05	350402	14854		K1	LV	-51	-51	CHP-V			AV 118	125
07	350404	06356		K1	LV	-51	-51	CHP-V			AV 131	129

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

D/H
Manufacturer's mark

AGB

B. BALDAUF
Test House Manager

Inspector's stamp Date 17.09.10

BM 1

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

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

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

Sheet
12/...

801 Product
HOT ROLLED PLATES



DILLINGER HÜTTE

Erfüllungen 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)				801 Product			
A05 Established inspecting body		A06 Purchaser		A07.1 No.		A07.2 No.	
DX		Final receiver		EDMONTON STEEL, EDMON		EDMONTON STEEL, EDMON	
B02/ Steel design.		SA516-70		EDMONTON STEEL, EDMON		EDMONTON STEEL, EDMON	
B03 Any suppl. requirements		ASME-II-A:07+A09 DIL-HUE-2-R30-2010-01-31		SA20-S5		HOT ROLLED PLATES	

C40-C49 impact test

B14 Item No.	B07.2 Heat No.	B07.1 Replated/ 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 C42 AV=FT.LBF	C43 Mean value
07	350404	06357		K1	LV	-51		CHP-V			AV 114	98
07	350404	06943		K1	LV	-51		CHP-V			AV 188	108
07	350404	07812		K1	LV	-51		CHP-V			AV 190	106
07	350404	07813		K1	LV	-51		CHP-V			AV 193	118
07	350404	10672		K1	LV	-51		CHP-V			AV 55	153
07	350404	11097		K1	LV	-51		CHP-V			AV 150	204
07	350405	05063		K1	LV	-51		CHP-V			AV 101	124
07	350405	05064		K1	LV	-51		CHP-V			AV 95	146
07	350405	05065		K1	LV	-51		CHP-V			AV 88	194

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		Z01Z02Z03 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		A07	
D/H Manufacturer's mark		B. BALDAUF Test House Manager		AHB		Date 17.09.10	
						BM	



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	14/...
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body	A06 Purchaser	B01 Product		
DH	Final receiver	HOT ROLLED PLATES		
202 Steel design. SA516-70				
803 Any suppl. ASME-II-A:07+A09				
requirements DIL-HUE-2:R30-2010-01-31				
		A07.1 No. ED10551-J1010-ER		
		A07.2 No. SA20-SS		

C70-C99 Chemical composition % - Heat analysis

	C70	B	CA	AL-T
B07.2 Heat				
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	FO-02=	0,40	FO-51=	0,001	FO-55=	0,14	FO-78=	0,04	FO-91=	6,4
348840	FO-02=	0,38	FO-51=	0,001	FO-55=	0,14	FO-78=	0,06	FO-91=	7,3
350041	FO-02=	0,39	FO-51=	0,001	FO-55=	0,17	FO-78=	0,06	FO-91=	6,8
350399	FO-02=	0,38	FO-51=	0,001	FO-55=	0,13	FO-78=	0,04	FO-91=	6,9
350401	FO-02=	0,39	FO-51=	0,001	FO-55=	0,14	FO-78=	0,04	FO-91=	6,8
350402	FO-02=	0,38	FO-51=	0,001	FO-55=	0,14	FO-78=	0,04	FO-91=	6,9
350403	FO-02=	0,39	FO-51=	0,000	FO-55=	0,15	FO-78=	0,04	FO-91=	6,8
350404	FO-02=	0,39	FO-51=	0,001	FO-55=	0,14	FO-78=	0,05	FO-91=	6,9
350405	FO-02=	0,39	FO-51=	0,001	FO-55=	0,14	FO-78=	0,05	FO-91=	6,9

C95 Ladle treatment

ITEM NO.: 01-05, 07-08	HEAT OF THE INDICATED ITEM: VACUUM DEGASSED / SULPHIDE SHAPE CONTROL
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A04	201/202/203 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
QIM-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		15/...	
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					
B03 Any suppl.		ASME-II-A:07+A09					
requirements		DIL-HUE-2-R30-2010-01-31					
				SA20-S5			

C95 Further information about ladle treatment

ITEM NO.: 01-05,07-08

CALCIUM TREATED

C70-C99 Chemical composition % - Product analysis

B07.2 Heat	B07.1 Test No.	C01	C	SI	MN	P	S	N	CU	MO	NI	CR	V	MB	SN	TI
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	0,003
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	0,001
350402	14890	K1	0,168	0,389	1,17	0,010	0,0011	0,0055	0,036	0,011	0,055	0,027	0,001	0,001	0,001	0,003
350402	15169	K1	0,172	0,376	1,15	0,009	0,0010	0,0068	0,036	0,010	0,061	0,027	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	0,007	0,063	0,032	0,001	0,000	0,000	0,002
350403	13199	K1	0,170	0,385	1,17	0,010	0,0017	0,0067	0,037	0,010	0,064	0,027	0,001	0,000	0,000	0,003
350404	11097	K1	0,164	0,375	1,17	0,009	0,0015	0,0064	0,042	0,008	0,063	0,031	0,001	0,000	0,000	0,003
350404	11955	K1	0,172	0,366	1,15	0,008	0,0012	0,0062	0,041	0,008	0,062	0,031	0,001	0,000	0,001	0,002
350405	05031	K1	0,173	0,376	1,17	0,008	0,0014	0,0059	0,041	0,010	0,062	0,033	0,000	0,001	0,001	0,002
350405	05063	K1	0,173	0,374	1,17	0,009	0,0013	0,0064	0,044	0,008	0,068	0,031	0,000	0,000	0,000	0,002
350405	39946	K1	0,175	0,370	1,16	0,008	0,0014	0,0061	0,037	0,010	0,055	0,035	0,000	0,000	0,001	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



A04

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



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		A10 Advice of dispatch No./ Date of dispatch 369429-17.09.10	A08/ Manufacturer's order/ A03 Certificate No. 357359-002	Sheet 15/...
MATERIAL TEST REPORT (NTR)		B01 Product HOT ROLLED PLATES		
A05 Established inspecting body DH		A06 Purchaser EDMONTON STEEL, EDMON		
A07 Steel design. SA516-70		A07.1 No. ED10551-J1010-ER		
A08 Any suppl. ASME-II-A:07+A09		A07.2 No.		
requirements DIL-HUB-2:R30-2010-01-31		EDMONTON STEEL, EDMON		
Final receiver		SA20-S5		

C70-C99 Chemical composition % - Product analysis

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

Z01702Z03 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
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/ A09 Certificate No.		Sheet	
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+AL: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		A07.1 No.		A07.2 No.	
DH		EDMONTON STEEL, EDMONTON		EDMONTON STEEL, EDMONTON		SA20-SS	
B02 Steel design		SA516-70					
B03 Any suppl requirements		ASME-II-A-07+A09					
		DIL-HUE-2:R30-2010-01-31					

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	201202203	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		QM-System: Certification as per ISO 9001		AHB		Date 17.09.10	
Manufacturer's mark		B. BALDAUF Test House Manager		Inspector's stamp		BM	



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		369817-21.09.10	357359-003	1/...
MATERIAL TEST REPORT (MTR)				
A05 Established inspecting body	A06 Purchaser	B01 Product		
DH	Final receiver	HOT ROLLED PLATES		
B02 Steel design: SA516-70				
B03 Any suppl. requirements		SA20-S5		
ASME-II-A:07+A09				
DIL-HUE-2:R30-2010-01-31				
		15713		

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
			INCH						
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	348840	11315-02	
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350399	21306-01	
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350405	39694-01	
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350405	39715-01	
01	1	0,6250 x	120,50000 x	480,00000 x	4650	N	350405	39715-03	
**	5				23250				
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350405	39714-02	
02	1	0,7500 x	120,50000 x	480,00000 x	5580	N	350405	39714-03	
**	2				11160				
04	1	0,8750 x	120,50000 x	480,00000 x	6510	N	350403	12280-01	
05	1	0,8750 x	150,00000 x	480,00000 x	8104	N	350402	14890-01	
05	1	0,8750 x	150,00000 x	480,00000 x	8104	N	350402	14890-02	
05	1	0,8750 x	150,00000 x	480,00000 x	8104	N	350403	14124-01	
05	1	0,8750 x	150,00000 x	480,00000 x	8104	N	350403	14124-02	
**	4				32416				
06	1	0,8750 x	178,00000 x	356,00000 x	7133	N	350402	15168-01	
06	1	0,8750 x	178,00000 x	356,00000 x	7133	N	350402	15168-02	
**	2				14266				
07	1	1,0000 x	96,50000 x	480,00000 x	5959	N	350404	06356-01	
08	1	1,1250 x	178,00000 x	356,00000 x	9171	N	350041	63959-01	
***	16				102732				

A04	2017/02/203 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	Inspector's stamp	Date	22.09.10	PP
		AHB				
B. BALDAUF Test House Manager						
QM-System: Certification as per ISO 9001						



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		369817-21.09.10	357359-003	2/...
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-HUE-2:R30-2010-01-31			
			B01 Product	
			HOT ROLLED PLATES	

B04 Product delivery condition

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

B07-B99 Further information about the product

ITEM NO.: 01-08
THICKNESS REDUCTION RATIO $\geq 3,0$ IS FULFILLED (CF. A/SA20 PAR. 5.3)

C10-C29 Tensile test

B14 B07.2 Item No.	B07.1 Heat No.	B05 Rolled plate/ Test No.	Reference (heat) treatment	C01 C01	C02 C02	C03 C03	C10 C10	C11 C11	C12 C12	C13 C13	A A	% %	LO-SIN LO-SIN	C14-C15 C14-C15
01	348840	11315		K1 Q	RT	RT	RT	RT	77,6	77,6	27	27		
01	350399	21306		K1 Q	RT	RT	RT	RT	75,8	75,8	26	26		
01	350405	39694		K1 Q	RT	RT	RT	RT	75,0	75,0	28	28		
01	350405	39715		K1 Q	RT	RT	RT	RT	75,4	75,4	31	31		
02	350405	39714		K1 Q	RT	RT	RT	RT	75,3	75,3	26	26		
04	350403	12280		K1 Q	RT	RT	RT	RT	74,1	74,1	27	27		
05	350402	14890		K1 Q	RT	RT	RT	RT	74,5	74,5	29	29		
05	350403	14124		K1 Q	RT	RT	RT	RT	75,0	75,0	26	26		
06	350402	15168		K1 Q	RT	RT	RT	RT	74,1	74,1	30	30		

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



Manufacturer's mark



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

B. BALDAUF
Test House Manager

Inspector's stamp Date 22.09.10

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 369817-21.09.10		A08 Manufacturer's order/ A03 Certificate No. 357359-003 B01 Product HOT ROLLED PLATES		Sheet 3 / ...	
A05 Established inspecting body DH		A06 Purchaser EDMONTON STEEL, EDMON		A07.1 No. ED10551-J1010-ER			
B02/ Steel design. SAS16-70		Final receiver EDMONTON STEEL, EDMON		A07.2 No.			
B03 Any suppl. requirements		ASME-II-A:07-A09 DIL-HUE-2:R30-2010-01-31		SA20-S5			
C10-C29 Tensile test							
B14 Item No.	B07.1 Heat No.	B05 Reference (heat) treatment	C01 C02 C03 C10 C11 CM Temp. KSI GRF RP02	C12 RM	C13 A % Lo-BIN	C14-C15	
07	350404	06356	K1 Q RT 49,3	75,0	28		
08	350041	63959	K1 Q RT 49,2	72,4	31		
C30-C39 Hardness test							
B14 Item No.	B07.2 Heat No.	B05 Reference (heat) treatment	C01 C02 C03 CM Temp. GRF	C30 Method of test	C35 C31 Individual values	C32 Mean value	
01	348840	11315	K1 O	RT HBW 10/3000	HB 147 149	148	
01	350399	21306	K1 O	RT HBW 10/3000	HB 144 143	143	
01	350405	39694	K1 O	RT HBW 10/3000	HB 142 142	142	
01	350405	39715	K1 O	RT HBW 10/3000	HB 142 141	142	
02	350405	39714	K1 O	RT HBW 10/3000	HB 144 144	144	
04	350403	12280	K1 O	RT HBW 10/3000	HB 142 142	142	
05	350402	14890	K1 O	RT HBW 10/3000	HB 143 144	143	
05	350403	14124	K1 O	RT HBW 10/3000	HB 147 146	146	
06	350402	35168	K1 O	RT HBW 10/3000	HB 143 143	143	
07	350404	06356	K1 O	RT HBW 10/3000	HB 142 142	142	
08	350041	63959	K1 O	RT HBW 10/3000	HB 138 139	139	
C40-C49 Impact test							
B14 Item No.	B07.2 Heat No.	B05 Reference (heat) treatment	C01 C02 C03 CM Temp. GRF	C40 Type of test piece	C45 C42 Energy Individual values AV=FTLEF	C43 Mean value	
01	348840	11315	K1 LV -51	CHP-V	AV 101 123	121	
01	350399	21306	K1 LV -51	CHP-V	AV 141 209	161	
01	350405	39694	K1 LV -51	CHP-V	AV 208 187	179	
A04 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							
		B. BALDAUF Test House Manager		AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department		Date 22.09.10 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		A10 Advice of dispatch No./ Date of dispatch		A08/ Manufacturer's order/ A03 Certificate No.		Shoot	
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		369817-21.09.10		357359-003		4/...	
MATERIAL TEST REPORT (MTR)							
A05 Established inspecting body		A08 Purchaser		B01 Product			
DH		EDMONTON STEEL, EDMONTON		HOT ROLLED PLATES			
Final receiver		EDMONTON STEEL, EDMONTON					
B02/ Steel design.		SA516-70					
B03 Any suppl.		ASME-II-A-07-A09					
requirements		DIL-HUE-2:R30-2010-01-31					

C40-C49 Impact test

B14 Item No.	B07.2 Heat No.	B05 Relplate/ Test No.	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	350405	39715		K1	LV	-51		CHP-V			194	152
02	350405	39714		K1	LV	-51		CHP-V			201	154
04	350403	12280		K1	LV	-51		CHP-V			187	164
05	350402	14890		K1	LV	-51		CHP-V			111	119
05	350403	14124		K1	LV	-51		CHP-V			128	136
06	350402	15168		K1	LV	-51		CHP-V			94	107
07	350404	06356		K1	LV	-51		CHP-V			129	135
08	350041	63959		K1	LV	-51		CHP-V			236	238

C70-C99 Chemical composition % - Heat analysis

B07.2 Heat No.	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
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		Z01Z02Z03 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		Inspector's stamp		Date 22.09.10
		B. BALDAUF Test House Manager		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 369817-21.09.10	A08 Manufacturer's order/ A03 Certificate No. 357359-003	Sheet 5/...
A05 Established inspecting body DH		B01 Product HOT ROLLED PLATES		
B02 Steel design SA516-70				
B03 Any suppl. requirements DIL-HUE-2:R30-2010-01-31		A07.1 No. ED10551-J1010-ER A07.2 No. EDMONTON STEEL, EDMONTON SA20-S5		

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
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	FO-02=	FO-51=	FO-55=	FO-78=	FO-91=
348840	0,40	0,001	0,14	0,04	6,4
350041	0,38	0,001	0,14	0,06	7,3
350399	0,39	0,001	0,17	0,06	6,8
350402	0,39	0,001	0,14	0,04	6,8
350403	0,38	0,001	0,14	0,04	6,9
350404	0,39	0,000	0,15	0,04	6,8
350405	0,39	0,001	0,14	0,05	6,9

C95 Ladle treatment

ITEM NO.: 01-08
HEAT OF THE INDICATED ITEM: VACUUM DEGASSED / SULPHIDE SHAPE CONTROL
C95 Further information about ladle treatment

ITEM NO.: 01-08
CALCULUM TREATED

A04	Z01/2002/203 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		AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	A01
Manufacturer's mark		B. BALDAUF Test House Manager	Inspector's stamp AHB	PP 1
		Date 22.09.10		



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 (NTR)

A10 Address of dispatch
Nb./
Date of dispatch
369817-21.09.10

A08/ Manufacturer's order/
A03 Certificate No.

357359-003

Sheet

5/...

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

DH Final receiver

EDMONTON STEEL, EDMONT A07.2 No.

B02/ Steel design. SA516-70

B03 Any appl. ASME-II-A-07+A09

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

SA20-S5

B01 Product

HOT ROLLED PLATES

C70-C99 Chemical composition % - Product analysis.

Heat	B07.1 Test No.	C01														C02			
		C	SI	MN	P	S	N	CU	MO	NI	CR	V	NB	SN	Ti				
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	0,003				
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				
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				
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				
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	0,001	0,001				
350402	15169	K1	0,172	0,376	1,15	0,009	0,0010	0,0068	0,036	0,010	0,061	0,027	0,001	0,000	0,001				
350403	11979	K1	0,171	0,367	1,16	0,009	0,0012	0,0067	0,042	0,007	0,063	0,032	0,001	0,000	0,000				
350403	13199	K1	0,170	0,385	1,17	0,010	0,0017	0,0067	0,037	0,010	0,064	0,027	0,001	0,000	0,000				
350404	11097	K1	0,164	0,375	1,17	0,009	0,0015	0,0064	0,042	0,008	0,063	0,031	0,001	0,000	0,000				
350404	11955	K1	0,172	0,366	1,15	0,008	0,0012	0,0062	0,041	0,008	0,062	0,031	0,001	0,000	0,001				
350405	05031	K1	0,173	0,376	1,17	0,008	0,0014	0,0059	0,041	0,010	0,062	0,033	0,000	0,001	0,001				
350405	05063	K1	0,173	0,374	1,17	0,009	0,0013	0,0064	0,044	0,008	0,068	0,031	0,000	0,000	0,000				
350405	39946	K1	0,175	0,370	1,16	0,008	0,0014	0,0061	0,037	0,010	0,055	0,035	0,000	0,000	0,001				
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				

C01

B07.1

Heat	B07.1 Test No.	C01				C02			
		B	CA	AL-T	AL-T	B	CA	AL-T	AL-T
348840	11315	K1	0,0002	0,0015	0,033	K1	0,0002	0,0015	0,033
350041	63959	K1	0,0002	0,0016	0,033	K1	0,0002	0,0016	0,033
350041	63961	K1	0,0003	0,0013	0,033	K1	0,0003	0,0013	0,033
350399	21322	K1	0,0003	0,0017	0,036	K1	0,0003	0,0017	0,036
350402	14890	K1	0,0002	0,0017	0,032	K1	0,0002	0,0017	0,032
350402	15169	K1	0,0002	0,0015	0,035	K1	0,0002	0,0015	0,035
350403	11979	K1	0,0000	0,0017	0,036	K1	0,0000	0,0017	0,036
350403	13199	K1	0,0003	0,0014	0,033	K1	0,0003	0,0014	0,033
350404	11097	K1	0,0002	0,0016	0,035	K1	0,0002	0,0016	0,035

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



Manufacturer's mark

B. BALDAUF
Test House Manager



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

Inspector's stamp

Date 22.09.10

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 369817-21.09.10	A03/ Manufacturer's order/ A03 Certificate No. 357359-003	Sheet 7/...
A05 Established inspecting body DH		A06 Purchaser EDMONTON STEEL, EDMON A07.1 No. ED10551-J1010-ER Final receiver EDMONTON STEEL, EDMON A07.2 No. SA20-S5		
B02 Steel design. SAS16-70				
B03 Any suppl. requirements ASME-II-A:07+A09 DIL-HOE-2:R30-2010-01-31				

C70-C99 Chemical composition % - Product analysis

B07.2	B07.1	C01			
Heat	Test No.	B	CA	AL-T	
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				
Heat	Test No.	K1	FO-02=	0,40	FO-51=	0,001	FO-55=	0,14
348840	11315	K1	FO-02=	0,37	FO-51=	0,002	FO-55=	0,14
350041	63959	K1	FO-02=	0,37	FO-51=	0,002	FO-55=	0,14
350041	63961	K1	FO-02=	0,39	FO-51=	0,000	FO-55=	0,16
350399	21322	K1	FO-02=	0,38	FO-51=	0,002	FO-55=	0,14
350402	14890	K1	FO-02=	0,38	FO-51=	0,001	FO-55=	0,13
350402	15169	K1	FO-02=	0,38	FO-51=	0,001	FO-55=	0,14
350403	11979	K1	FO-02=	0,38	FO-51=	0,001	FO-55=	0,14
350403	13199	K1	FO-02=	0,37	FO-51=	0,001	FO-55=	0,14
350404	11097	K1	FO-02=	0,38	FO-51=	0,001	FO-55=	0,14
350404	11955	K1	FO-02=	0,38	FO-51=	0,001	FO-55=	0,15
350405	05031	K1	FO-02=	0,38	FO-51=	0,001	FO-55=	0,15
350405	05063	K1	FO-02=	0,38	FO-51=	0,000	FO-55=	0,14
350405	39946	K1	FO-02=	0,38	FO-51=	0,000	FO-55=	0,14
350405	39965	K1	FO-02=	0,38	FO-51=	0,000	FO-55=	0,14

A04		201202203 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 22.09.10 pp 1
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DILLINGER HÜTTE

Erklärungen siehe Rückseite/Explications voir au verso/See reverse for explanations (www.dillinger.co/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		369817-21.09.10		357359-003		8
MATERIAL TEST REPORT (MTR)				B01 Product		
A05 Established inspecting body		A06 Purchaser		A07.1 No.		
DH		Final receiver		EDMONTON STEEL, EDMON		
				EDMONTON STEEL, EDMON		
B02/ Steel design.		SA516-70		A07.2 No.		
B03 Any suppl.		ASME-II-A:07+A09		SA20-S5		
requirements		DIL-HUE-2:R30-2010-01-31				
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.: 01-08.						
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		2017/02/203 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
D/H Manufacturer's mark		B. Baldauf Test House Manager		ADB Inspector's stamp		pp 1
		QM-System: Certification as per ISO 9001				



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, EDMONTON A07.1 No. ED10557-J1010-ER

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

B02 Steel design. SA516-70

B03 Any suppl. ASME-II-A:10

requirements DIL-RUE-2-R31-2010-11-22

SA20-S5

A10 Advice of dispatch No./
Date of dispatch

380370-18.02.11

A08 Manufacturer's order/
A03 Certificate No.

362037-002

Sheet

1/...

B01 Product

HOT ROLLED PLATES



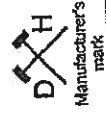
16037

B01-B99 Description of the product

214. Item No.	B08 Number of pieces	B09 Thickness	B10 Width	B11 Length	B12 Theoretical mass	B04 Product delivery condition	B07.2 Heat No.	B07.4 Rolled plate No./ Test No.	A09 Purchaser article number
01	1	0,5000 x	172,0000 x	344,00000	3806	N	351665	60830-01	
01	1	0,5000 x	172,00000	344,00000	3806	N	351665	60830-02	
**	2				7612	N	354638	93854-01	
02	1	0,6250 x	146,00000	438,00000	5141	N	355728	93391-02	
02	1	0,6250 x	146,00000	438,00000	5141	N	355728	93391-03	
02	1	0,6250 x	146,00000	438,00000	5141	N	355728	93391-03	
**	3				15423	N	354638	50834-02	
03	1	0,6250 x	172,00000	344,00000	4757	N	355728	93060-01	
05	1	0,8750 x	150,00000	450,00000	7598	N	355728	93060-02	
05	1	0,8750 x	150,00000	450,00000	7598	N	355728	93060-02	
05	1	0,8750 x	150,00000	450,00000	7598	N	355728	93060-03	
05	1	0,8750 x	150,00000	450,00000	22794	N	354638	93547-01	
**	3				7133	N	354638	93547-02	
06	1	0,8750 x	178,00000	356,00000	7133	N	355137	93540-01	
06	1	0,8750 x	178,00000	356,00000	7133	N	355137	93540-02	
06	1	0,8750 x	178,00000	356,00000	7133	N	355137	93540-02	
06	1	0,8750 x	178,00000	356,00000	7133	N	355137	93546-01	
06	1	0,8750 x	178,00000	356,00000	7133	N	355137	93546-02	
06	1	0,8750 x	178,00000	356,00000	42798	N	355728	93269-01	
**	6				8683	N	355730	92491-01	
07	1	1,0000 x	150,00000	450,00000	8683	N	355730	92491-02	
07	1	1,0000 x	150,00000	450,00000	8683	N	355730	92491-02	
07	1	1,0000 x	150,00000	450,00000	8683	N	355730	92491-02	
07	1	1,0000 x	150,00000	450,00000	8683	N	355730	92491-03	

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



A04

B. Baldauf

B. BALDAUF
Test House Manager



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

Inspector's stamp Date 18.02.11

pp

A01



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		A10 Advice of dispatch No./ Date of dispatch 380370-18.02.11	A08/ Manufacturer's order/ A03 Certificate No. 362037-002	Sheet 2/...
MATERIAL TEST REPORT (MTR)		B01 Product HOT ROLLED PLATES		
A05 Established inspecting body DH	A06 Purchaser EDMONTON STEEL, EDMON	A07.1 No. ED10557-J1010-ER		
Final receiver EDMONTON STEEL, EDMON		A07.2 No.		
SA20-S5				
B02/ Steel design. SAS16-70				
B03 Any suppl. requirements	ASME-II-A:10 DIL-HUB-2:R31-2010-11-22			

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	150,00000 x	450,00000	8683	N	355730	92508-01	
**	5			43415					
08	1	1,0000 x	178,00000 x	356,00000	8152	N	355134	93530-01	
08	1	1,0000 x	178,00000 x	356,00000	8152	N	355137	93528-01	
08	1	1,0000 x	178,00000 x	356,00000	8152	N	355137	93529-01	
**	3			24456					
10	1	1,1250 x	121,00000 x	480,00000	8405	N	355730	92371-01	
10	1	1,1250 x	121,00000 x	480,00000	8405	N	355730	92371-02	
10	1	1,1250 x	121,00000 x	480,00000	8405	N	355730	92483-02	
10	1	1,1250 x	121,00000 x	480,00000	8405	N	355732	92290-01	
**	4			33620					
**	27			194875					

B04 Product delivery condition

ITEM NO.: 01-10
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.: 01-10
STEEL DESIGNATION SAS16 70 MTLTY SAS16 60 MTLTY
HEAT NO. / TRADEMARK / ROLLED PLATE NO.-TEST NO. / INSPECTOR'S STAMP

A04		AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	Inspector's stamp Date 18.02.11	PP 1
Z01/02/2013 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				



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		380370-18.02.11		362037-002		3/...	
MATERIAL TEST REPORT (MTR)		A07.1 No. ED10557-J1010-ER		B01 Product		HOT ROLLED PLATES	
A05 Established inspecting body		A06 Purchaser		EDMONTON STEEL, EDMON		A07.2 No.	
DH		Final receiver		EDMONTON STEEL, EDMON		SA20-S5	
B02/ Steel design.		SA516-70					
B03 Any suppl.		ASME-II-A:10					
requirements		DIL-RUE-2:R31-2010-11-22					

B07-B99 Further information about the product

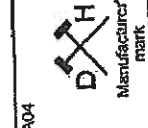
ITEM NO.: 01-10
THICKNESS REDUCTION RATIO >= 3,0 IS FULFILLED (CF. A/SA20 PAR. 5.3)

C10-C29 Tensile test

B14 B07.2 Item No.	B07.1 Rol. plate/ Test No.	B05 Reference (heat) treatment	C01 C02/ C03 C01	C03 Temp. GRF	C10 KSI RP02	C12 RM	C13	A % LO=BIN	C14C15
01	351665	60830	K1 Q	RT	53,2	76,9	25	25	
02	354638	93854	K1 Q	RT	50,6	76,7	26	26	
02	355728	93391	K1 Q	RT	52,6	76,9	25	25	
03	354638	60834	K1 Q	RT	51,5	76,4	25	25	
05	355728	93060	K1 Q	RT	49,7	75,3	27	27	
06	354638	93547	K1 Q	RT	50,9	75,3	26	26	
06	355137	93540	K1 Q	RT	48,9	74,4	30	30	
06	355137	93546	K1 Q	RT	49,9	74,8	29	29	
07	355728	93269	K1 Q	RT	51,0	75,4	29	29	
07	355730	92491	K1 Q	RT	49,9	74,7	29	29	
07	355730	92491	K1 Q	RT	49,3	74,1	29	29	
07	355730	92508	K1 Q	RT	48,1	73,1	33	33	
08	355134	93530	K1 Q	RT	49,2	74,2	28	28	
08	355137	93528	K1 Q	RT	49,9	73,8	28	28	
08	355137	93529	K1 Q	RT	49,7	74,7	29	29	
10	355730	92371	K1 Q	RT	50,0	74,2	33	33	
10	355730	92463	K1 Q	RT	50,0	74,2	29	29	
10	355732	92290	K1 Q	RT	50,0	74,2	29	29	

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



B. Baldauf

B. BALDAUF
Test House Manager

Inspector's stamp

Date 18.02.11

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		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		380370-18.02.11		362037-002		4/...	
MATERIAL TEST REPORT (MTR)				B01 Product			
A06 Purchaser		EDMONTON STEEL, EDMON		A07.1 No. ED10557-J1010-ER			
Final receiver		EDMONTON STEEL, EDMON		A07.2 No.			
DH						HOT ROLLED PLATES	
B02 Steel design.		SA516-70					
B03 Any suppl.		ASME-II-A:10					
requirements		DIL-HUE-2:R31-2010-11-22					

C30-C39 Hardness test

B14 Item No.	B07.2 Heat No.	B07.1 Rollplate Test No.	B05 Reference (heat) treatment	C01	C02/C04	C03 Temp. GRF	C30 Method of test	C35 Individual values	C32 Mean value
01	351665	60830		K1	O	RT	HBW 10/3000	HB 150	151
02	354638	93854		K1	O	RT	HBW 10/3000	HB 150	150
02	355728	93391		K1	O	RT	HBW 10/3000	HB 152	151
03	354638	60834		K1	O	RT	HBW 10/3000	HB 145	148
05	355728	93060		K1	O	RT	HBW 10/3000	HB 148	148
06	354638	93547		K1	O	RT	HBW 10/3000	HB 148	148
06	355137	93540		K1	O	RT	HBW 10/3000	HB 150	151
06	355137	93546		K1	O	RT	HBW 10/3000	HB 151	151
07	355728	93269		K1	O	RT	HBW 10/3000	HB 149	148
07	355730	92491		K1	O	RT	HBW 10/3000	HB 144	144
07	355730	92508		K1	O	RT	HBW 10/3000	HB 149	148
08	355134	93530		K1	O	RT	HBW 10/3000	HB 148	148
08	355137	93528		K1	O	RT	HBW 10/3000	HB 148	148
08	355137	93529		K1	O	RT	HBW 10/3000	HB 147	146
10	355730	92371		K1	O	RT	HBW 10/3000	HB 145	145
10	355730	92483		K1	O	RT	HBW 10/3000	HB 145	146
10	355732	92290		K1	O	RT	HBW 10/3000	HB 145	145

C40-C49 Impact test

B14 Item No.	B07.2 Heat No.	B07.1 Rollplate Test No.	B05 Reference (heat) treatment	C01	C02/C04	C03 Temp. GRF	C41 Width of test piece	C40 Type of test piece	C44 Testing method	C46 Energy	C45 Individual values	C43 Mean value
01	351665	60830		K1	LV	-51		CEP-V	CEP-V	AV 185	74	135
02	354638	93854		K1	LV	-51		CEP-V	CEP-V	AV 97	135	116
02	355728	93391		K1	LV	-51		CEP-V	CEP-V	AV 140	180	167
03	354638	60834		K1	LV	-51		CEP-V	CEP-V	AV 142	136	136

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 18.02.11

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		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		380370-18.02.11		362037-002		5/...
MATERIAL TEST REPORT (MTR)				B01 Product		
DH		A06 Purchaser		EDMONTON STEEL, EDMON		
		Final receiver		EDMONTON STEEL, EDMON		
B02/ Steel design.		SA516-70		A07.1 No.		ED10557-J1010-ER
B03 Any suppl.		ASME-II-A:10		A07.2 No.		
requirements		DIL-HUE-2:R31-2010-11-22				
SA20-S5						

C40-C49 Impact test

B14 Item No.	B07.2 Heat No.	B07.1 Roll 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=FLBF	C43 Mean value
05	355728	93060		K1	LV	-51		CHP-V			105	124
06	354638	93547		K1	LV	-51		CHP-V			127	116
06	355137	93540		K1	LV	-51		CHP-V			118	139
06	355137	93546		K1	LV	-51		CHP-V			214	127
07	355728	93269		K1	LV	-51		CHP-V			155	141
07	355730	92491		K1	LV	-51		CHP-V			120	84
07	355730	92508		K1	LV	-51		CHP-V			146	123
08	355134	93530		K1	LV	-51		CHP-V			106	194
08	355137	93528		K1	LV	-51		CHP-V			201	226
08	355137	93529		K1	LV	-51		CHP-V			111	125
10	355730	92371		K1	LV	-51		CHP-V			115	122
10	355730	92483		K1	LV	-51		CHP-V			119	106
10	355732	92290		K1	LV	-51		CHP-V			109	116

C70-C99 Chemical composition % - Heat analysis

B07.2 Heat	C70	C	Si	Mn	P	S	N	CU	MO	NI	CR	V	NB	SN	TI
351665	Y	0,180	0,375	1,17	0,012	0,0009	0,0067	0,045	0,010	0,041	0,036	0,000	0,000	0,002	0,002
354638	Y	0,171	0,372	1,19	0,009	0,0012	0,0070	0,030	0,012	0,030	0,037	0,000	0,000	0,001	0,002
355134	Y	0,171	0,383	1,16	0,007	0,0005	0,0066	0,021	0,014	0,025	0,020	0,000	0,000	0,001	0,003
355137	Y	0,179	0,387	1,18	0,008	0,0005	0,0066	0,039	0,009	0,050	0,023	0,000	0,000	0,001	0,002
355728	Y	0,175	0,372	1,18	0,009	0,0013	0,0070	0,036	0,021	0,059	0,045	0,000	0,000	0,002	0,003
355730	Y	0,178	0,372	1,17	0,008	0,0010	0,0069	0,034	0,010	0,033	0,042	0,000	0,000	0,002	0,003
355732	Y	0,181	0,357	1,16	0,007	0,0011	0,0076	0,039	0,010	0,040	0,039	0,000	0,000	0,003	0,002

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 1589, D-66748 Dillingen/Saar

Inspection department

B. Baldauf

B. BALDAUF

Test House Manager

Inspector's stamp

Date 18.02.11

PP 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	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	380370-18.02.11	362037-002	6/...
MATERIAL TEST REPORT (MTR)		B01 Product	
A05 Established inspecting body		HOT ROLLED PLATES	

DH	A06 Purchaser	EDMONTON STEEL, EDMON	A07.1 No.	ED10557-J1010-ER
	Final receiver	EDMONTON STEEL, EDMON	A07.2 No.	

B02/ Steel design.	SA516-70	SA20-S5
B03 Any suppl. requirements	ASME-II-A:10	
	DIL-HUE-2-R31-2010-11-22	

C70-C99 Chemical composition % - Heat analysis

B07.2 Heat	C70	B	CA	AL-T
351665	Y	0,0002	0,0016	0,033
354638	Y	0,0001	0,0026	0,034
355134	Y	0,0002	0,0011	0,037
355137	Y	0,0002	0,0010	0,035
355728	Y	0,0002	0,0028	0,034
355730	Y	0,0000	0,0017	0,034
355732	Y	0,0000	0,0019	0,033

C94 Heat analysis Carbon equivalent / Alloying restrictions

B07.2 Heat	FO-02=	FO-51=	FO-55=	FO-78=	FO-91=
351665	0,39	0,000	0,000	0,05	6,5
354638	0,38	0,000	0,000	0,05	7,0
355134	0,37	0,000	0,000	0,03	6,8
355137	0,39	0,000	0,000	0,03	6,6
355728	0,39	0,000	0,000	0,07	6,7
355730	0,39	0,000	0,000	0,05	6,6
355732	0,39	0,000	0,000	0,05	6,4

C95 Ladle treatment

ITEM NO.: 01-10	HEAT OF THE INDICATED ITEM: VACUUM DEGASSED / SULPHIDE SHAPE CONTROL
C95.Further information about ladle treatment	

ITEM NO.: 01-10	CALCIUM TREATED
-----------------	-----------------

A04	2012/02/03 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. BALDAUF Test House Manager	Date 18.02.11 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)

A05 Established inspecting body A06 Purchaser EDMONTON STEEL, EDMON A07.1 No. ED10557-J1010-ER

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

B02 Steel design SA516-70

B03 Any suppl. ASME-II-A:10

requirements DIL-HUE-2:R31-2010-11-22

SA20-S5

A10 Advice of dispatch No./
Date of dispatch

380370-18.02.11

A08/ Manufacturer's order/
A09 Certificate No.

362037-002

B01 Product

HOT ROLLED PLATES

Sheet

7/...

C70-C99 Chemical composition % - Product analysis

B07.2 Heat	B07.1 Test No.	C01	C	SI	MMN	P	S	N	CU	MO	NI	CR	V	NS	SN	TI
351665	60825	K1	0,179	0,378	1,16	0,011	0,0009	0,0068	0,045	0,009	0,041	0,036	0,000	0,000	0,002	0,002
354638	54388	K1	0,169	0,366	1,16	0,009	0,0009	0,0071	0,025	0,010	0,029	0,033	0,000	0,000	0,001	0,001
354638	93547	K1	0,181	0,365	1,15	0,008	0,0008	0,0069	0,037	0,014	0,032	0,033	0,000	0,002	0,000	0,002
354638	93854	K1	0,188	0,369	1,15	0,006	0,0005	0,0070	0,053	0,016	0,034	0,033	0,000	0,004	0,001	0,002
355134	93530	K1	0,170	0,384	1,16	0,007	0,0009	0,0068	0,021	0,014	0,027	0,020	0,000	0,000	0,001	0,003
355137	93529	K1	0,172	0,386	1,17	0,008	0,0010	0,0076	0,040	0,008	0,054	0,023	0,001	0,000	0,000	0,002
355137	93546	K1	0,182	0,386	1,16	0,008	0,0006	0,0079	0,040	0,009	0,053	0,023	0,001	0,000	0,000	0,002
355728	93060	K1	0,174	0,368	1,17	0,008	0,0014	0,0067	0,035	0,021	0,059	0,046	0,000	0,000	0,001	0,003
355728	93269	K1	0,179	0,369	1,18	0,009	0,0015	0,0075	0,035	0,020	0,060	0,046	0,000	0,000	0,001	0,003
355728	93391	K1	0,182	0,367	1,16	0,009	0,0014	0,0081	0,035	0,020	0,059	0,046	0,000	0,000	0,001	0,003
355730	92483	K1	0,173	0,371	1,17	0,009	0,0014	0,0073	0,033	0,009	0,033	0,041	0,000	0,000	0,001	0,003
355730	92486	K1	0,173	0,369	1,16	0,008	0,0008	0,0075	0,034	0,011	0,037	0,042	0,000	0,000	0,001	0,003
355730	92508	K1	0,169	0,370	1,16	0,008	0,0011	0,0066	0,034	0,017	0,052	0,044	0,000	0,000	0,001	0,003
355732	92290	K1	0,170	0,359	1,16	0,007	0,0008	0,0076	0,035	0,009	0,037	0,041	0,000	0,000	0,001	0,002

C01

B07.2 Heat	B07.1 Test No.	B	CA	AL-T
351665	60825	K1 0,0002	0,0017	0,033
354638	54388	K1 0,0003	0,0023	0,034
354638	93547	K1 0,0001	0,0018	0,031
354638	93854	K1 0,0000	0,0015	0,030
355134	93530	K1 0,0003	0,0009	0,036
355137	93529	K1 0,0001	0,0010	0,035
355137	93546	K1 0,0000	0,0010	0,034
355728	93060	K1 0,0002	0,0025	0,035

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

R. Balz

B. BALDAUF
Test House Manager

AHB

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

Inspector's stamp Date 18.02.11 PP 1



Manufacturer's mark

A01



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/ Certificate No.	Sheet
INSPECTION CERTIFICATE 3.1.B AS PER EN 10204:1991+A1:1995 + AS PER ISO 10474:1991		380370-18.02.11	362037-002	8/...

MATERIAL TEST REPORT (MTR)		A07.1 No. ED10557-J1010-ER		
A05 Established inspecting body	A06 Purchaser	EDMONTON STEEL, EDMON	A07.2 No.	
DH	Final receiver	EDMONTON STEEL, EDMON		

B02/ Steel design. SA516-70		SA20-S5		
B03 Any suppl. ASME-II-A:10				
requirements DIL-HUE-2:R31-2010-11-22				

C70-C99 Chemical composition % - Product analysis

B07.2 Heat	B07.1 Test No.	C01				
		KI	B	CA	AL-T	
355728	93269	KI	0,0001	0,0023	0,033	
355728	93391	KI	0,0001	0,0022	0,031	
355728	93534	KI	0,0003	0,0024	0,033	
355730	92483	KI	0,0002	0,0016	0,034	
355730	92486	KI	0,0000	0,0015	0,033	
355730	92508	KI	0,0002	0,0021	0,034	
355732	92290	KI	0,0000	0,0016	0,033	

C94 Product analysis Carbon equivalent / Alloying restrictions

B07.2 Heat	B07.1 Test No.	C01				
		KI	FO-02=	0,39	FO-51=	0,000
351665	60825	KI	FO-55=	0,000	FO-55=	0,13
354638	54388	KI	FO-51=	0,000	FO-55=	0,10
354638	93547	KI	FO-51=	0,002	FO-55=	0,12
354638	93854	KI	FO-51=	0,004	FO-55=	0,14
355134	93530	KI	FO-51=	0,000	FO-55=	0,08
355137	93529	KI	FO-51=	0,001	FO-55=	0,13
355137	93546	KI	FO-51=	0,001	FO-55=	0,13
355728	93060	KI	FO-51=	0,000	FO-55=	0,16
355728	93269	KI	FO-51=	0,000	FO-55=	0,16
355728	93391	KI	FO-51=	0,000	FO-55=	0,16
355728	93534	KI	FO-51=	0,000	FO-55=	0,16
355730	92483	KI	FO-51=	0,000	FO-55=	0,12
355730	92486	KI	FO-51=	0,000	FO-55=	0,12
355730	92508	KI	FO-51=	0,000	FO-55=	0,15
355732	92290	KI	FO-51=	0,000	FO-55=	0,12

2011/2020/203 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		Inspector's stamp		Date	PP
Inspection department		A01		18.02.11	1

B. BALDAUF
Test House Manager



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		380370-18.02.11	362037-002	9
MATERIAL TEST REPORT (MTR)		B01 Product HOT ROLLED PLATES		
A05 Established inspecting body DH	A06 Purchaser EDMONTON STEEL, EDMON	A07.1 No. ED10557-J1010-ER		
	Final receiver EDMONTON STEEL, EDMON	A07.2 No.		
B02/ Steel design. SA516-70		SA20-S5		
B03 Any suppl. requirements DIL-HUB-2:R31-2010-11-22				

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.: 01-10

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	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		A01
QM-System: Certification as per ISO 9001		A01B		Inspector's stamp	PP 1
D/H Manufacturer's mark		B. BALDAUF Test House Manager		Date 18.02.11	

[illegible]

**PURCHASE ORDER #**

2835

DATE Feb 8, 2012

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

CONTACT	ALL
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100	100

[illegible]

JOB NUMBERS

4901 Bruce Road Vegreville, Alberta T9C 1C3

Phone: (780) 632-7774

[illegible]

Authorized Signature

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.



PURCHASE ORDER #

2785

DATE	Nov 3, 2011
VENDOR	Edmonton Exchanger
DATE REQUIRED	ASAP
JOB NUMBERS	Stock Heads
VESSEL SER#	Stock Heads

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 UA 79 and all reference paragraphs.
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.





PRESSURE TEST RECORD

Date:

Aug 14, 2012

Vessel Serial Number:

12515

Vessel Design Pressure:

1480 Psi.

Hydro Test Pressure:

2220 Psi.

Temperature:

71.8

Test Gauge No.:

41 + 42

Hydro By:

Wes

Q.C. Signature:

Wes

Print Clearly

Original to be returned to Q.C. on completion of hydro.



GAS FIELD SERVICES

MATERIAL INSPECTION REPORT

12515

Wes Markowsky

INSPECTED

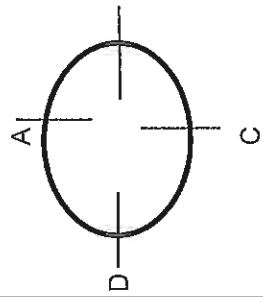
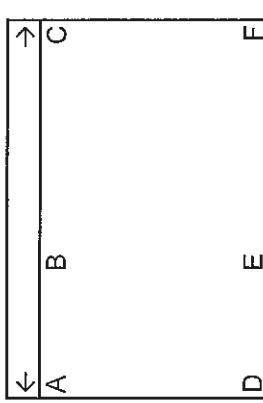
DATE

FROM PURCHASE ORDER NUMBER

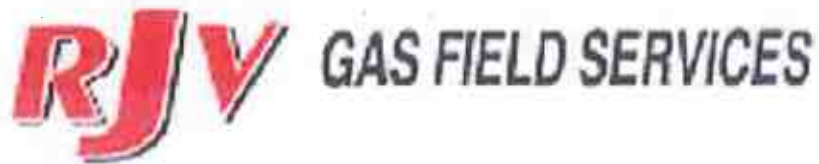
4901 Bruce Road Vegreville, Alberta T9C 1C3

Phone: (780) 632-7774

MATERIAL	NOM. THICK mm.	HEAT NUMBERS	HEAD MIN. THICK. mm.	MATERIAL MARKINGS VERIFICATION mm.	INSP. SURF & Edge	CONFORM Y or N	QUALITY CONTROLL MANAGER
SA-106-B	21.44	6304295		21.13/ 22.45/ 21.08	V	Y	
SA-516-70	22.23	344657-76977	20.64	21.60/ 21.42/ 24.11	V	Y	
SA-516-70	22.23	G4225-275240728	20.64	21.43/ 21.33/ 24.60	V	Y	

Heads 24" & Smaller 0° - 90°	 PIPE	 PLATE & REPADS

REMARKS:



Vessel Name Plate Travel Sheet

Vessel Serial Number:	12515		
Vessel Name:	Vertical 3 Phase Separator		
Vessel DWG #:	V01-381-R1		
Vessel C.R.N. #	P7217.231		
Vessel Design Pressure:	1480 Psi.		
Hydro Pressure:	2220 Psi.		
Plate Originator:	Wes	Date:	Feb 8,2012
Engraved By:	OK.	Date:	Feb 10-12
Picked Up By:		Date:	

Print Clearly

Original to be returned to Q.C.

W
RT - 2

Certified By

RJV GAS FIELD
SERVICES

Vegreville, Alberta
Phone (780)632-7774

A#617495

UNIT NAME

Vertical 3 Phase Separator

M.A.W.P. Internal

10204 Kpa.
1480 Psi.

AT

@
@

DESIGN TEMP.

38 °C
100 °F

M.A.W.P. External

Kpa.
p.s.i.

MINIMUM DESIGN METAL TEMPERATURE

-29 °C
-20 °F

@
@

10205 Kpa.
1480 p.s.i.

YEAR BUILT

2012

C.R. NUMBER

P7217.231

SERIAL NO.

12515

CORR. ALLOW.

1.6 mm

SHELL THICK.

21.44 mm

SHELL MAT'L

SA-106-B

HEAT TREATMENT

Nil

HEAD THICK.

Top - 20.63 mm
Bottom - 20.63 mm

HEAD MAT'L

Top- SA-516-70
Bottom- SA-516-70

HYDRO TEST

15307 Kpa.
2220 p.s.i.

WEIGHT

685 Kg.

SIZE

406 X 2285

A#1042


ACUREN

CLIENT

ATTENTION

ADDRESS

PROJECT

WORK LOCATION

RJV

Dave

Vessel-Spot
Vegreville

DATE

ACUREN JOB #

PO/WO #

PROCEDURE #

ACCEPTANCE

STANDARD

June 28/12

231-63913-84

Serial # 12515

AGI 01-01

ASME sec VIII

Div I UW 5L

2010 FOCAL SPOT

MATERIAL TYPE

FILM BRAND

RADIATION SOURCE

PAGE

OF

R-242360

P1

Agfa

IR 192 ☐ Co 60 ☐ X-RAY

KV

60 (C) MM (IN)

Legend 1. Accept 2. Moderate 3. Reject *Welder Symbol

	IDENTIFICATION	PIPE DIA.	PIPE SCH	FILM TYPE	REIN.	TECH #	SOD (D)	OFD (t)	# OF EXP	C R K	L F	I P	S	U C	E P	*	DEFECT LOCATION & REMARKS	ACC	REJ
1	SPI 0-6	16"	80	DS	125"	2	8"	84"	1								n,x		
2																			
3																			
4																			
5																			
6																			
7																			
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20																			

SIGNATURES

CLIENT REPRESENTATIVE

Nikk Watts
PRINT

TECHNICIAN (SIGN)

Brad Osmond
1st TECHNICIAN

PRINT NAME:

M. Lederer
2nd TECHNICIAN/ASSISTANT

*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.

CGSB LEVEL II SNT LEVEL II

CGSB REGISTRATION # 3161

CGSB LEVEL SNT LEVEL

CGSB REGISTRATION #

FILM USED

1

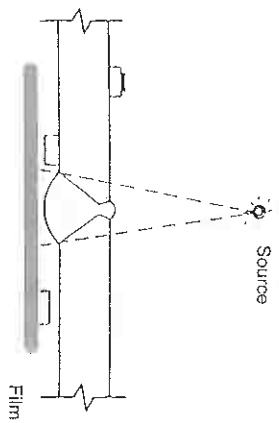
FILM SIZE

4 1/2 x 8 1/2

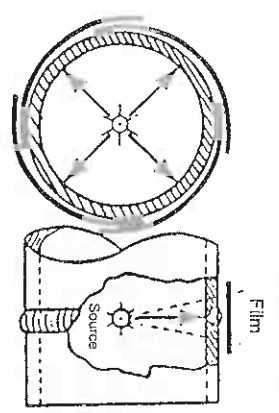
DTR #

2377382

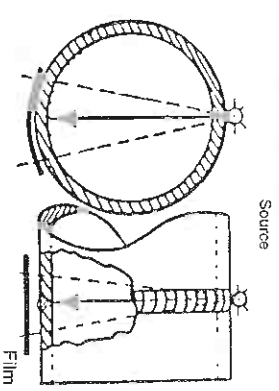
REFER TO OPPOSITE SIDE FOR SCOPE OF SERVICES AND STANDARD OF CARE



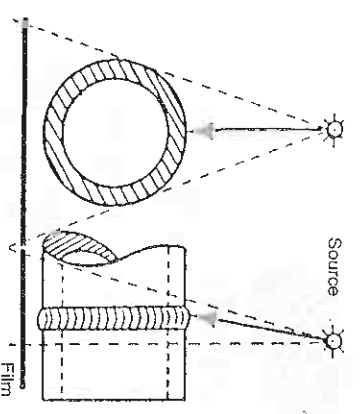
Technique "1"
SWE-SWV



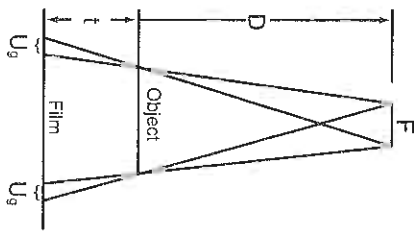
Technique "2"
SWE-SWV



Technique "3"
DWE-SWV



Technique "4"
DWE-DWV



Technique "5"
DWE-DWV

- U_g = Geometric Unsharpness
- D = source to object distance
- t = object to film distance
- F = Focal Spot Size
- $U_g = F \cdot t / D$

Note: if t is omitted from this report, the Pipe Schedule shall apply as t.

DEFECT LEGEND		OTHER LEGENDS	
CRK	Crack	SW/E	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 SERVICES

The agreement of Acuren to perform services extends only to those services specifically provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested inspection of specific equipment provided for in writing and the preparation of reports or similar documents. Any descriptions, statements, comments or expressions made reflect the opinion or observations of the Acuren examiner based solely upon data available at the time, 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 all engineering, repair and use decisions.

STANDARD OF CARE

In performing the services provided, Acuren shall use the degree of care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. ***No other warranty, express or implied, is made or intended by Acuren, and all other warranties are expressly disclaimed.*** In the event of any breach of this warranty, Acuren's sole and exclusive obligation will be to correct or re-perform the deficient service or, at Acuren's option, to refund the amount paid for the deficient service.

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 and only to the extent those directly caused by the willful or negligent misconduct of Acuren in the context of performing the requested services. In no event shall Acuren's aggregate liability for any reason, in connection with any claim asserted, exceed the amount paid for the services in question. Acuren shall not be held responsible or liable for any loss, damage or delay caused by accidents, strikes, fires, floods, or other circumstances or causes beyond Acuren's control, including actions taken or not taken by the owner/operator or other third parties. In no event shall Acuren be liable for indirect, incidental, special, punitive, or consequential damages including, without limitation, damages relating to reputation, lost profits, goodwill, downtime, loss of use, business interruption or other economic loss.

ALBERTA MUNICIPAL AFFAIRS

ABSA, the pressure equipment safety authority

9410 - 20th Avenue

Edmonton, AB T6N 0A4

Partial/ Partiel ☐

617495

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 <i>Construit par</i>	Name and address of Manufacturer/ <i>Nom et adresse du constructeur</i> RJV Gasfield Services 4901 Bruce Road, Vegreville, Alberta T9C 1C3
Manufactured for <i>Construit pour</i>	Name and address of Purchaser or Consignee/ <i>Nom et adresse du client ou de son représentant</i> RJV Gasfield Services 4901 Bruce Road, Vegreville, Alberta T9C 1C3
Ultimate owner <i>Utilisateur</i>	Name and address/ <i>Nom et adresse</i> Stock
Location of installation <i>Lieu d'installation</i>	Address/ <i>Adresse</i> Stock

Pressure vessel/ *Appareil*

Type/ <i>Genre</i> Vertical 3 Phase Separator	Overall Length/ <i>Longueur totale</i> 2285mm sm/sm	Serial No./ <i>N° de série</i> 12515	Year built/ <i>Année de fabrication</i> 2012
Provincial Registration No. - C.R.N./ <i>N° d'enregistrement provincial - N.E.C.</i> P7217.231	National Board No./ <i>N° National Board</i> N/A	Drawing No./ <i>N° de dessin</i> V01-381-R1	

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	Division 1	Addenda/ <i>Supplément</i> 2011a	Code case No. <i>N° de cas</i> 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/ <i>Nom de la composante</i>	Item No./ <i>N° d'item</i>	Manufacturer's Name/ <i>Nom du constructeur</i>	Identifying Stamp/ <i>Estampe d'identification</i>	

Shell/ *Virole*

Description	Material <i>Matériau</i>	Thickness <i>Épaisseur</i>	Corr. Allow. <i>Surépais. de corr.</i>	Diameter <i>Diamètre</i>	Longitudinal Joints <i>Joints longitudinaux</i>			P.W.H.T. <i>Traitement therm</i>		Girth Joints <i>Joints de circonférence</i>		Number of courses <i>Nombre de sections</i>
					Type	R.T. <i>Radiog.</i>	Efficiency <i>Efficacité</i>	Temp.	Time <i>Durée</i>	Type	R.T. <i>Radiog.</i>	
Shell	SA-106-B	21.44 mm	1.6mm	406mm	Sml's	N/A	100%	N/A	N/A	1	Spot	1
											70%	

Heads/ *Tetes*

Description	Material <i>Matériau</i>	Min. Thickn. <i>Épais min.</i>	Corr. Allow. <i>Surép. Corr.</i>	Crown. Radius <i>Rayon couron.</i>	Knuckle Radius <i>Petit rayon</i>	Ellipse Ratio <i>Rapp. ellipse</i>	Conical Apex Angle <i>Angle conique</i>	Hemisph. Radius <i>Ray. Hémisph</i>	Flat Diameter <i>Diam. plat</i>	Side to pressure <i>Côte sous pression</i>
Top	SA-516-70	20.63mm	1.6mm	-----	-----	2.1	-----	-----	-----	Concave
Bottom	SA-516-70	20.63mm	1.6mm	-----	-----	2.1	-----	-----	-----	Concave
Removable bolts used (describe other fastenings) <i>Boulons amovibles utilisés (décrire tout autre attache)</i>						Mat'l Spec./ <i>Spéc. du mat.</i>		Grade		Size/ <i>Dimension</i>

Pressure - Temperature/ *Pression - température*

Pressure Vessel Part <i>Partie de l'appareil</i>	Constructed for max. allowable working pressure <i>Construit pour une pression maximale de marche permise</i>	At max. temp. <i>A une temp. max.</i>	Min. Temp. (when less than -29°C) <i>Temp. min. (inférieure à -29°C)</i>	Test pressure (hydro-pneumatic or combination) <i>Pression d'épreuve (hydro-pneumatique ou combinaison)</i>
Vessel	10,205 Kpa.	38°C	-29°C	15,307 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 33.4mm	Location/ Endroit Shell
---------------------	---------------------	----------------------------

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	60.3mm	CL600RFWN	SA-105/SA-106-B	8.74mm	N/A	UW16.1{c}	Top Head/Shell
L.L.C./H.L.S.D./L.L.S.D.	5	60.3mm	Coupling	SA-105	CL6000	N/A	UW16.1{c}	Shell/Bottom Head
P.S.V.	1	33.4mm	CL600RFWN	SA-105/SA-106-B	8.74mm	N/A	UW16.1{c}	Shell
Sight Glass/Temp. Ind.	5	26.7mm	Coupling	SA-105	CL6000	N/A	UW16.1{c}	Shell
Pressure Indicator	1	21.4mm	Coupling	SA-105	CL6000	N/A	UW16.1{c}	Shell
Liquid out	2	60.3mm	Coupling	SA-105	CL6000	N/A	UW16.1{c}	Shell

Supports/ Supports

Skirt/ Jupe Yes/ Oui No/ Non ☒ ☐	Lugs/ Oreilles 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=.262 Cubic Meters

Exempt from impact test requirements as per UG20(f) 1 to 5

Hydrostatically tested in the vertical position

Nozzle to shell weld 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 P7217.231

Manufacturer
Constructeur RJV Gasfield Services

Signature [Signature] Date AUG 14 2012

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 (employé par) ABSA
or (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 Canadian Registration No. P7217.231 and the requirements of CSA Standard B51. By signing this certificate, neither the inspector nor his or her employer makes any warranty, expressed or implied, concerning the vessel described in this manufacturer's data report. Furthermore, neither the inspector nor his or her employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

ai inspecté l'appareil précité et, autant que je sache, le constructeur a construit l'appareil en accord avec le numéro d'enregistrement canadien P7217.231 et les exigences de la norme CSA B51. En signant ce certificat, ni l'inspecteur ni son employeur ne donnent de garantie explicite ou implicite relativement à l'appareil décrit dans la présente déclaration. De plus, ni l'inspecteur ni son employeur ne doivent être tenus responsables de quelque manière que ce soit des dommages, matériels ou corporels, ou des pertes de quelque nature que ce soit pouvant résulter de cette inspection.

Inspector's Name
Nom de l'inspecteur Jason Reinhart AB 248 NB 12899 A

Signature [Signature] Date AUG 14 2012

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 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 (employé par) ABSA

have inspected the items not covered by the Certificate of Shop inspection 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. By signing this certificate, neither the inspector nor his or her employer makes any warranty, expressed or implied, concerning the vessel described in this manufacturer's data report. Furthermore, neither the inspector nor his or her employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

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. En signant ce certificat, ni l'inspecteur ni son employeur ne donnent de garantie explicite ou implicite relativement à l'appareil décrit dans la présente déclaration. De plus, ni l'inspecteur ni son employeur ne doivent être tenus responsables de quelque manière que ce soit des dommages, matériels ou corporels, ou des pertes de quelque nature que ce soit pouvant résulter de cette inspection.

Inspector's Name
Nom de l'inspecteur _____
Signature _____ Date _____