

BS81807/R952787/505117

Heat # 327000



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)		A10 Advice of dispatch No./ Date of dispatch 318054-09.10.08	A08/ Manufacturer's order/ A03 Certificate No. 341102-001	Sheet 1/...
A05 Established inspecting body DH	A06 Purchaser EDMONTON STEEL, EDMON Final receiver EDMONTON STEEL, EDMON	A07.1 No. ED10501-J1010-LG A07.2 No.	B01 Product HOT ROLLED PLATES	
B02/ Steel design. SA516-70	SA20-S5		 14854	
B03 Any suppl. requirements	ASME-2A:07 DIL-HUE-4:R23-2007-11-20			

A01-A99 Further commercial information - Concession requests

B14 Item No.	B07.2 Heat No.	B07.1 Rol.plate / Test No.	B16 Concession request no.	Date
01	326999	47959-02	TO/A993/2008	26.09.08

B01-B99 Description of the product

B14 Item No.	B08 Number of places	B09 Thickness	B10 Width INCH	B11 Length	B12 Theoretical mass KG	B04 Product delivery condition	B07.2 Heat No.	B07.1 Rolled plate No./ Test No.	A09 Purchaser article number
01	1	3,5000 x	97,00000 x	282,00000	12316	N	326999	47957-01	
01	1	3,5000 x	97,00000 x	282,00000	12316	N	326999	47957-02	
01	1	3,5000 x	97,00000 x	282,00000	12316	N	326999	47959-01	
01	1	3,5000 x	97,00000 x	282,00000	12316	N	326999	47959-02	
**	4				49264				
03	1	3,5000 x	97,00000 x	470,00000	20526	N	327000	47950-01	
03	1	3,5000 x	97,00000 x	470,00000	20526	N	327000	47952-01	
**	2				41052				
***	6				90316				

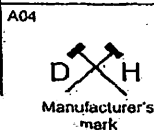
B04 Product delivery condition

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



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



Inspector's stamp

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

Date 10.10.08

KW 1



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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)		A10 Advice of dispatch No./ Date of dispatch: 318054-09.10.08	A08/ Manufacturer's order/ A03 Certificate No. 341102-001	Sheet 2/...
A05 Established inspecting body DH	A06 Purchaser EDMONTON STEEL, EDMON Final receiver EDMONTON STEEL, EDMON	A07.1 No. ED10501-J1010-LG A07.2 No.	B01 Product HOT ROLLED PLATES	
B02/ Steel design. SA516-70	SA20-S5			
B03 Any suppl. requirements	ASME-2A:07 DII.-HUE-4:R23-2007-11-20			

B06 Marking of the product

ITEM NO.: 01,03
STEEL DESIGNATION SA516 70 MTLTV SA516 60 MTLTV
HEAT NO. / TRADEMARK / ROLLED PLATE NO.-TEST NO. / INSPECTOR'S STAMP

C10-C29 Tensile test


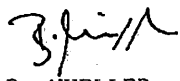

B14 Item No.	B07.2 Heat No.	B07.1 Rol.plate/ Test No.	B05 Reference (heat) treatment	C01	C02/ C01	C03 Temp. GR.F	C10 KSI RP02	C11	C12 RM	C13	C14-C15 A % L0=2IN
01	326999	47957		K1	QV	RT	46,5		74,1		33,3
01	326999	47959		K1	QV	RT	45,5		74,1		36,2
03	327000	47950		K1	QV	RT	45,7		75,0		35,8
03	327000	47952		K1	QV	RT	46,0		74,8		36,0

C30-C39 Hardness test

B14 Item No.	B07.2 Heat No.	B07.1 Rol.plate/ Test No.	B05 Reference (heat) treatment	C01	C02/C01	C03 Temp. GR.F	C33 Testing method	C35	C31 Individual values	C32 Mean value
01	326999	47957		K1	O		RT HBW 10/3000	HB 141	153 146	147
01	326999	47959		K1	O		RT HBW 10/3000	HB 142	143 144	143
03	327000	47950		K1	O		RT HBW 10/3000	HB 141	146 143	143
03	327000	47952		K1	O		RT HBW 10/3000	HB 143	145 143	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	C46 Energy	C45	C42 Individual values AV=FT.LBF	C43 Mean value
01	326999	47957		K1	LV	-51		CHP-V			AV 33	61 16	37
01	326999	47959		K1	LV	-51		CHP-V			AV 58	32 101	64
03	327000	47950		K1	LV	-51		CHP-V			AV 65	84 75	75

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.	 B. MUELLER Test House Manager	 Inspector's stamp	AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	A01
	QM-System: Certification as per ISO 9001			Date 10.10.08	KW 1



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A05 Established inspecting body DH	A06 Purchaser EDMONTON STEEL, EDMON Final receiver EDMONTON STEEL, EDMON	A07.1 No. ED10501-J1010-LG A07.2 No.	B01 Product HOT ROLLED PLATES	
B02/ Steel design. SA516-70	SA20-S5			
B03 Any suppl. requirements	ASME-2A:07 DIL-HUE-4:R23-2007-11-20			

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	C46 Energy	C45 AV	C42 Individual values AV=FT.LBF	C43 Mean value
03	327000	47952		K1	LV	-51		CHP-V				87 96 36	73

C70-C99 Chemical composition % - Heat analysis

B07.2 Heat	C70	C	SI	MN	P	S	N	CU	MO	NI	CR	V	NB	SN	TI
326999	Y	0,183	0,369	1,18	0,009	0,0011	0,0068	0,026	0,021	0,040	0,211	0,000	0,000	0,001	0,002
327000	Y	0,178	0,378	1,18	0,009	0,0009	0,0066	0,022	0,027	0,042	0,214	0,001	0,000	0,001	0,002

B07.2 Heat	C70	B	CA	AL-T
326999	Y	0,0002	0,0018	0,034
327000	Y	0,0002	0,0020	0,035

C94 Heat analysis Carbon equivalent / Alloying restrictions

B07.2 Heat	FO-02=	0,43	FO-55=	0,30	FO-78=	0,23	FO-91=	6,4
326999								
327000								

C95 Ladle treatment

B07.2 Heat	FO-02=	0,43	FO-55=	0,31	FO-78=	0,24	FO-91=	6,6
326999								
327000								

ITEM NO.: 01,03
HEAT OF THE INDICATED ITEM: VACUUM DEGASSED / SULPHIDE SHAPE CONTROL

A04	Z01/Z02/Z03 We hereby certify, that the above mentioned materials have been delivered in accordance with the terms of order. QM-System: Certification as per ISO 9001			AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	A01
		B. MUELLER Test House Manager	Inspector's stamp	Date 10.10.08	KW 1



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)

A10 Advice of dispatch No./
Date of dispatch
318054-09.10.08

A08/ Manufacturer's order/
A03 Certificate No. 341102-001
Sheet 4

A05 Established Inspecting body DH
A06 Purchaser EDMONTON STEEL, EDMON
Final receiver EDMONTON STEEL, EDMON
A07.1 No. ED10501-J1010-LG
A07.2 No.

B02/ Steel design. SA516-70
B03 Any suppl. ASME-2A:07 requirements DIL-HUE-4:R23-2007-11-20
SA20-S5

B01 Product
HOT ROLLED PLATES

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	NB	SN	TI
326999	47959	K1	0,177	0,358	1,16	0,009	0,0013	0,0057	0,035	0,020	0,043	0,210	0,001	0,000	0,002	0,002
327000	47950	K1	0,176	0,366	1,17	0,009	0,0006	0,0067	0,020	0,022	0,038	0,203	0,001	0,000	0,000	0,002

B07.2 Heat	B07.1 Test No.	C01	B	CA	AL-T
326999	47959	K1	0,0001	0,0017	0,032
327000	47950	K1	0,0002	0,0019	0,035

C94 Product analysis Carbon equivalent / Alloying restrictions

B07.2 Heat	B07.1 Test No.	C01	FO-02=	FO-55=
326999	47959	K1	0,42	0,31
327000	47950	K1	0,42	0,28

C94 Carbon equivalent formula / Alloying restrictions:

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

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

ITEM NO.: 01,03
RESULT OF MARKING, SURFACE, SHAPE AND DIMENSIONS: NO REMARKS
SURFACE AS PER ASME-SA20
THICKNESS AS PER ASME-SA20
LENGTH AND WIDTH AS PER ASME-SA20
FLATNESS AS PER ASME-SA20

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 10.10.08

A01