
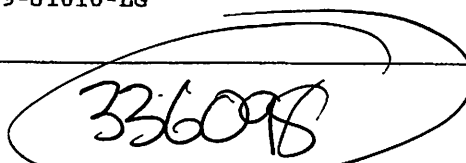


B578905 / R925384 / 505117




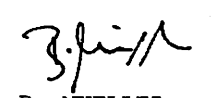

DILLINGER HÜTTE

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 336749-06.06.09	A08/ Manufacturer's order/ A03 Certificate No. 348079-001	Sheet 1/...
A05 Established inspecting body DH	A06 Purchaser EDMONTON STEEL, EDMON Final receiver EDMONTON STEEL, EDMON	A07.1 No. ED10539-J1010-LG A07.2 No.	B01 Product HOT ROLLED PLATES	
B02/ Steel design. B03 Any suppl. requirements	SA516-70 ASME-II-A:07+A08 DIL-HUE-4:R25-2009-01-28	SA20-S5		
				

B01-B99 Description of the product

B14 Item No.	B08 Number of pieces	B09 Thickness	B10 Width	B11 Length	B12 Theoretical mass KG	B04 Product delivery condition	B07.2 Heat No.	B07.1 Rolled plate No./ Test No.	A09 Purchaser article number
INCH									
01	1	3,5000 x	97,00000 x	282,00000	12316	N	336097	05975-01	
01	1	3,5000 x	97,00000 x	282,00000	12316	N	336097	05981-01	
**	2				24632				
02	1	3,5000 x	97,00000 x	320,00000	13975	N	336098	05957-01	
02	1	3,5000 x	97,00000 x	320,00000	13975	N	336098	05957-02	
**	2				27950				
03	1	3,5000 x	97,00000 x	470,00000	20526	N	336097	05968-01	
03	1	3,5000 x	97,00000 x	470,00000	20526	N	336097	05972-01	
**	2				41052				
04	1	3,5000 x	121,00000 x	244,00000	13293	N	336098	05962-02	
04	1	3,5000 x	121,00000 x	244,00000	13293	N	336098	05965-02	
**	2				26586				
05	1	3,5000 x	121,00000 x	282,00000	15363	N	336098	05962-01	
05	1	3,5000 x	121,00000 x	282,00000	15363	N	336098	05965-01	
**	2				30726				
06	1	3,5000 x	121,00000 x	320,00000	17433	N	336097	05969-01	
06	1	3,5000 x	121,00000 x	320,00000	17433	N	336097	05973-01	
**	2				34866				
07	1	3,5000 x	121,00000 x	396,00000	21573	N	336097	05974-01	
07	1	3,5000 x	121,00000 x	396,00000	21573	N	336097	05980-01	
**	2				43146				
08	1	4,0000 x	97,00000 x	420,00000	20963	N	335891	96786-01	
08	1	4,0000 x	97,00000 x	420,00000	20963	N	335891	96787-01	

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		 B. MUELLER Test House Manager		AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	A01
		Inspector's stamp	Date 08.06.09	BM 1		



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

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004 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 336749-06.06.09	A08/ Manufacturer's order/ A03 Certificate No. 348079-001	Sheet 2/...
A05 Established inspecting body DH	A06 Purchaser EDMONTON STEEL, EDMON Final receiver EDMONTON STEEL, EDMON	A07.1 No. ED10539-J1010-LG A07.2 No.	B01 Product HOT ROLLED PLATES	
B02/ Steel design. SA516-70	SA20-S5			
B03 Any suppl. requirements	ASME-II-A:07+A08 DIL-HUE-4:R25-2009-01-28			

B01-B99 Description of the product

B14 Item No.	B08 Number of places	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
**	2		INCH		41926				
09	1	4,0000 x	121,00000 x	248,00000	15441	N	335891	96790-01	
09	1	4,0000 x	121,00000 x	248,00000	15441	N	335891	96791-01	
**	2				30882				
***	18				301766				

B04 Product delivery condition

ITEM NO.: 01-09
 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.: 01-09
 STEEL DESIGNATION SA516 70 MTLTV SA516 60 MTLTV
 HEAT NO. / TRADEMARK / ROLLED PLATE NO.-TEST NO. / INSPECTOR'S STAMP

B07-B99 Further information about the product

ITEM NO.: 01-09
 THICKNESS REDUCTION RATIO >= 3,0 IS FULFILLED (CF. A/SA20 PAR. 5.3)

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 Test House Manager	 Inspector's stamp	AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	A01
 Manufacturer's mark			Date 08.06.09	BM 1	



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

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004 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 336749-06.06.09	A08/ Manufacturer's order/ A03 Certificate No. 348079-001	Sheet 3/...
A05 Established inspecting body DH	A06 Purchaser EDMONTON STEEL, EDMON Final receiver EDMONTON STEEL, EDMON	A07.1 No. ED10539-J1010-IG A07.2 No.	B01 Product HOT ROLLED PLATES	
B02/ Steel design. SA516-70	SA20-S5			
B03 Any suppl. requirements	ASME-II-A:07+A08 DIL-HUE-4:R25-2009-01-28			

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	A % L0=2IN	C14-C15
01	336097	05975		K1	QV	RT	48,9		74,8		39	
01	336097	05981		K1	QV	RT	48,7		76,0		39	
02	336098	05957		K1	QV	RT	48,9		75,1		36	
03	336097	05968		K1	QV	RT	50,8		75,5		39	
03	336097	05972		K1	QV	RT	50,2		75,3		37	
04	336098	05962		F1	QV	RT	48,0		74,8		36	
04	336098	05965		F1	QV	RT	49,7		75,0		38	
05	336098	05962		F1	QV	RT	48,0		74,8		36	
05	336098	05965		F1	QV	RT	49,7		75,0		38	
06	336097	05969		K1	QV	RT	50,9		75,4		37	
06	336097	05973		K1	QV	RT	49,3		75,3		37	
07	336097	05974		K1	QV	RT	48,9		75,1		40	
07	336097	05980		K1	QV	RT	49,6		75,3		38	
08	335891	96786		K1	QV	RT	50,2		75,7		37	
08	335891	96787		F1	QV	RT	50,2		76,1		36	
09	335891	96790		K1	QV	RT	48,7		75,5		36	
09	335891	96791		K1	QV	RT	50,3		76,0		36	

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 08.06.09	BM 1



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

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004 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 336749-06.06.09	A08/ Manufacturer's order/ A03 Certificate No. 348079-001	Sheet 4/...
A05 Established inspecting body DH	A06 Purchaser EDMONTON STEEL, EDMON Final receiver EDMONTON STEEL, EDMON	A07.1 No. ED10539-J1010-LG	A07.2 No.	
B02/ Steel design. SA516-70	SA20-S5			
B03 Any suppl. requirements	ASME-II-A:07+A08 DIL-HUE-4:R25-2009-01-28			

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	336097	05975		K1	O	RT	HBW 10/3000	HB 146	149	145	147
01	336097	05981		K1	O	RT	HBW 10/3000	HB 147	149	149	148
02	336098	05957		K1	O	RT	HBW 10/3000	HB 147	150	148	148
03	336097	05968		K1	O	RT	HBW 10/3000	HB 162	153	151	155
03	336097	05972		K1	O	RT	HBW 10/3000	HB 148	146	147	147
04	336098	05962		F1	O	RT	HBW 10/3000	HB 148	151	152	150
04	336098	05965		F1	O	RT	HBW 10/3000	HB 143	143	144	143
05	336098	05962		F1	O	RT	HBW 10/3000	HB 148	151	152	150
05	336098	05965		F1	O	RT	HBW 10/3000	HB 143	143	144	143
06	336097	05969		K1	O	RT	HBW 10/3000	HB 147	148	148	148
06	336097	05973		K1	O	RT	HBW 10/3000	HB 157	153	148	153
07	336097	05974		K1	O	RT	HBW 10/3000	HB 144	144	145	144
07	336097	05980		K1	O	RT	HBW 10/3000	HB 158	152	147	152
08	335891	96786		K1	O	RT	HBW 10/3000	HB 159	156	157	157
08	335891	96787		F1	O	RT	HBW 10/3000	HB 151	149	155	152
09	335891	96790		K1	O	RT	HBW 10/3000	HB 145	147	147	146
09	335891	96791		K1	O	RT	HBW 10/3000	HB 150	153	155	153

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	336097	05975		K1	LV	-51		CHP-V		AV 64	111 118	98
01	336097	05981		K1	LV	-51		CHP-V		AV 100	100 89	96
02	336098	05957		K1	LV	-51		CHP-V		AV 150	85 188	141
03	336097	05968		K1	LV	-51		CHP-V		AV 182	167 195	181

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 08.06.09	BM 1



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

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004 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 336749-06.06.09	A08/ Manufacturer's order/ A03 Certificate No. 348079-001	Sheet 5/...
A05 Established inspecting body DH	A06 Purchaser EDMONTON STEEL, EDMON Final receiver EDMONTON STEEL, EDMON	A07.1 No. ED10539-J1010-LG	B01 Product HOT ROLLED PLATES	
B02/ Steel design. SA516-70	SA20-S5			
B03 Any suppl. requirements	ASME-1I-A:07+A08 DIL-HUE-4:R25-2009-01-28			

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 place	C44 Testing method	C46 Energy	C45	C42 Individual values AV=FT.LBF	C43 Mean value	
03	336097	05972		K1	LV	-51		CHP-V			AV 148	227	122	166
04	336098	05962		F1	LV	-51		CHP-V			AV 109	100	35	81
04	336098	05965		F1	LV	-51		CHP-V			AV 100	104	20	75
05	336098	05962		F1	LV	-51		CHP-V			AV 109	100	35	81
05	336098	05965		F1	LV	-51		CHP-V			AV 100	104	20	75
06	336097	05969		K1	LV	-51		CHP-V			AV 108	117	66	97
06	336097	05973		K1	LV	-51		CHP-V			AV 247	235	230	237
07	336097	05974		K1	LV	-51		CHP-V			AV 121	108	125	118
08	335891	96786		K1	LV	-51		CHP-V			AV 167	177	198	181
08	335891	96787		F1	LV	-51		CHP-V			AV 138	168	125	144
09	335891	96790		K1	LV	-51		CHP-V			AV 106	105	94	102
09	335891	96791		K1	LV	-51		CHP-V			AV 114	109	142	122
				K1	LV	-51		CHP-V			AV 129	86	108	108

C70-C99 Chemical composition % - Heat analysis




B07.2 Heat	C70	C	SI	MN	P	S	N	CU	MO	NI	CR	V	NB	SN	TI
335891	Y	0,147	0,378	1,43	0,011	0,0005	0,0070	0,173	0,026	0,196	0,036	0,000	0,004	0,001	0,002
336097	Y	0,148	0,379	1,48	0,009	0,0008	0,0060	0,165	0,024	0,171	0,032	0,001	0,000	0,000	0,002
336098	Y	0,146	0,380	1,48	0,011	0,0008	0,0061	0,170	0,029	0,171	0,033	0,001	0,000	0,001	0,004

B07.2 Heat	C70	B	CA	AL-T
335891	Y	0,0002	0,0013	0,032
336097	Y	0,0002	0,0015	0,033
336098	Y	0,0003	0,0011	0,038

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 08.06.09	BM 1



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

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004 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 336749-06.06.09	A08/ Manufacturer's order/ A03 Certificate No. 348079-001	Sheet 6/...												
A05 Established inspecting body DH	A06 Purchaser EDMONTON STEEL, EDMON Final receiver EDMONTON STEEL, EDMON	A07.1 No. ED10539-J1010-LG A07.2 No.	B01 Product HOT ROLLED PLATES													
B02/ Steel design. SA516-70 SA20-S5																
B03 Any suppl. ASME-II-A:07+A08 requirements DIL-HUE-4:R25-2009-01-28																
C94 Heat analysis Carbon equivalent / Alloying restrictions																
B07.2 Heat 335891 FO-02= 0,42 FO-55= 0,43 FO-78= 0,06 FO-91= 9,7 336097 FO-02= 0,43 FO-55= 0,39 FO-78= 0,06 FO-91= 10,0 336098 FO-02= 0,43 FO-55= 0,40 FO-78= 0,06 FO-91= 10,1																
C95 Ladle treatment																
ITEM NO.: 01-09 HEAT OF THE INDICATED ITEM: VACUUM DEGASSED / SULPHIDE SHAPE CONTROL																
C95 Further information about ladle treatment																
ITEM NO.: 01-09 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	NB	SN	TI
335891	96787	F1	0,153	0,381	1,46	0,011	0,0008	0,0079	0,171	0,029	0,175	0,038	0,001	0,001	0,001	0,002
336097	05980	K1	0,148	0,365	1,45	0,009	0,0008	0,0064	0,161	0,023	0,170	0,032	0,001	0,000	0,000	0,002
336098	05957	K1	0,148	0,372	1,46	0,009	0,0010	0,0063	0,160	0,026	0,169	0,033	0,001	0,000	0,000	0,003
B07.2 Heat	B07.1 Test No.	C01	B	CA	AL-T											
335891	96787	F1	0,0000	0,0010	0,033											
336097	05980	K1	0,0001	0,0014	0,030											
336098	05957	K1	0,0001	0,0015	0,035											
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				
 Manufacturer's mark	QM-System: Certification as per ISO 9001										 B. MUELLER Test House Manager	 Inspector's stamp	Date 08.06.09	BM 1		



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

A02 INSPECTION CERTIFICATE 3.1 AS PER EN 10204:2004 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 336749-06.06.09	A08/ Manufacturer's order/ A03 Certificate No. 348079-001	Sheet 7
------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------	---------------------------------------------------------------------	----------------

A05 Established inspecting body DH	A06 Purchaser EDMONTON STEEL, EDMON Final receiver EDMONTON STEEL, EDMON	A07.1 No. ED10539-J1010-LG A07.2 No.	B01 Product HOT ROLLED PLATES
B02 Steel design. SA516-70	SA20-S5		
B03 Any suppl. requirements	ASME-II-A:07+A08 DIL-HUE-4:R25-2009-01-28		

C94 Product analysis Carbon equivalent / Alloying restrictions

B07.2 Heat	B07.1 Test No.	C01				
335891	96787	F1	FO-02=	0,43	FO-55=	0,41
336097	05980	K1	FO-02=	0,42	FO-55=	0,39
336098	05957	K1	FO-02=	0,43	FO-55=	0,39

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.: 01-09
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 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	 B. MUELLER Test House Manager	 Inspector's stamp	AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department	A01 Date 08.06.09 BM 1
--------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------	-----------------------	------------------------------------------------------------------------------------------------	------------------------------