


348240 / 348238

8101456

B637945 / R490084 / 505121

DILLINGER HÜTTE

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 363057-19-06.10	A07 Manufacturer's order/ A03 Certificate No. 355537-001 B01 Product HOT ROLLED FLATBS	Sheet 1/...
MATERIAL TEST REPORT (MTR) A05 Product EDINGTON STEEL, EDWON A07.1 No ED10549-J1010-ER A06 Product EDINGTON STEEL, EDWON A07.2 No. SA20-SS				
B02 Steel design: SAS16-70 B03 Any appl. requirements: ASME-11-A:07+A09 DIL-HUE-4:R32-2010-01-31				
B01-899 Description of the product:				
B04 Product delivery condition	B05 Marking of the product			
ITEM NO.: 01-02 N: HT: 1670 CR.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) ELISE ADDITIONAL TIME AT TEMPERATURE 15 MIN. COOLING IN STILL AIR				
ITEM NO.: 01-02 STEEL DESIGNATION SAS16 70 MELTY SAS16 60 MELTY HEAT NO. / TRADEMARK / ROLLED PLATE NO. - TEST NO. / INSPECTOR'S STAMP				
ITEM NO.: 01-02 THICKNESS REDUCTION RATIO >= 3,0 IS FULFILLED (CP. A/SA20 PAR. 5.3)				
B07-899 Further information about the product				
A04				
A04 Manufacturer's stamp 		A08 Inspector's stamp B. MUELLER Test House Manager		
A05 Manufacturer's stamp AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department		Date: 21.06.10 PP 1		

780-463-1242

JUL 18 2011 2:12PM EMJC





DILLINGER HÜTTE

Erstellungen siehe Richtmaß-Ergänzungen vor au verteiltes Material für Anwendungen (siehe Dillinger Arbeitsblätter)

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  
 A03 MATERIAL TEST REPORT (MTR)  
 A04 Established inspecting body: EDWINGTON STEEL, EDWIGNON A07.1 No. ED10549-J1010-KR  
 A05 Purchaser: EDWINGTON STEEL, EDWIGNON A07.2 No. SA20-S5  
 A06 Final receiver: SA20-S5  
 A07 Steel design: E2516-70  
 A08 Any appl. ASME-II-A: 07+A09  
 A09 requirements: DIL-HDR-4: R32-2010-01-31

A10 Address of dispatch No./ Date of dispatch: 363057-19.06.10  
 A09 Manufacturer's order/ A08 Certificate No.: 35537-001  
 A01 Product: HOT ROLLED PLATES

A04 Sheet: 3/...  
 A01 Date: 21.06.10  
 Inspector's stamp: B. MUELLER  
 Test House Manager

C70-C99 Chemical composition % - Heat analysis

EN 10204	Heat	C	Si	Mn	P	S	N	Cu	MO	NI	CR	V	MB	GA	TI
348238	Y	0,0002	0,0012	0,033	0,007	0,0006	0,0061	0,172	0,012	0,172	0,029	0,001	0,000	0,001	0,002
348240	Y	0,0002	0,0012	0,033	0,007	0,0005	0,0057	0,164	0,014	0,169	0,025	0,001	0,001	0,001	0,002

C94 Heat analysis. Carbon equivalent / Alloying restrictions

EN 10204	Heat	CE	AL-T
348238	Y	0,43	0,001
348240	Y	0,43	0,000

C95 Lodic treatment

ITEM NO.:	FO-02=	FO-51=	FO-55=	FO-78=	FO-91=
348238	0,43	0,001	0,40	0,04	9,9
348240	0,43	0,000	0,38	0,04	9,9

ITEM NO.: 01-02

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

C95 Further information about ladic treatment

ITEM NO.: 01-02  
CALCIUM TREATED

C70-C99 Chemical composition % - Product analysis

EN 10204	Heat	C	Si	Mn	P	S	N	Cu	MO	NI	CR	V	MB	GA	TI
348238	Y	0,145	0,373	1,46	0,008	0,0007	0,0061	0,172	0,012	0,172	0,029	0,001	0,000	0,001	0,002
348238	Y	0,144	0,372	1,48	0,007	0,0006	0,0061	0,168	0,011	0,173	0,031	0,000	0,000	0,000	0,002
348240	Y	0,142	0,365	1,46	0,008	0,0005	0,0057	0,164	0,014	0,169	0,025	0,001	0,001	0,001	0,002
348240	Y	0,143	0,367	1,46	0,008	0,0004	0,0059	0,169	0,010	0,174	0,029	0,000	0,000	0,000	0,002

A04

Z01020200 (No. barely coded), that the above mentioned materials have been obtained in accordance with the terms of order.  
 OHS-System: Certification as per ISO 9001.  
 A01 AG der Dillinger Hüttenwerke  
 Postfach 1580, D-66748 Dillingen/Saar  
 Inspection department

A04 Manufacturer's mark: D/H  
 A01 Inspector's stamp: B. MUELLER  
 Test House Manager  
 Date: 21.06.10  
 PP 1



DILLINGER HÜTTE

A19 Advice of dispatch No./ Date of dispatch 363057-19.06.10		ABB Manufacturer's order/ ABB Certificate No. 355537-001		Sheet 4
A00 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		A01 Product HOT ROLLED PLATES		
A05 Established inspecting body DIB		A02 Purchaser EDWINGTON STEEL, EDWIGNON		
A06 Material test report (MTR) DIL-HUG-4-R32-2010-01-31		A03 Supplier DILL-HUG-4-R32-2010-01-31		
A07 Special design SA516-70		A08 Material EDWINGTON STEEL, EDWIGNON		
A09 Requirements DIL-HUG-4-R32-2010-01-31		A10 Heat treatment SA20-S5		
<b>C70-C89 Chemical composition % - Product analysis</b>				
887.2 Heat 348238 07795 348238 07796 348240 07790 348240 07791	887.1 Test No. KL KL KL KL	B 0,0002 0,0001 0,0000 0,0001	CA 0,0014 0,0012 0,0013 0,0016	AL-T 0,032 0,034 0,031 0,034
<b>C94 Product analysis Carbon equivalent / Alloying restrictions</b>				
887.2 Heat 348238 07795 348238 07796 348240 07790 348240 07791	887.1 Test No. KL KL KL KL	PO-02= PO-02= PO-02= PO-02=	0,42 0,42 0,42 0,42	FO-51= FO-51= FO-51= FO-51=
<b>C94 Carbon equivalent formula / Alloying restrictions</b>				
$PO-02 = C_s (Mn/6) + (Cr+Mo+V) / 5 + (Ni+Cu) / 15$				
$PO-51 = V + Nb$				
$PO-55 = Cu+Mo+Ni+Cr$				
$PO-78 = Cr+Mo$				
$PO-91 = Mn/C$				
<b>D01 Marking and identification, surface appearance, shape and dimensional properties</b>				
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 ASME-SA20				
A04 ZERINORMS (to 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. NUKLEER Test House Manager		
AG der Dillinger Hüttenwerke Postfach 1580, D-66748 Dillingen/Saar Inspection department		Inspector's stamp Date 21.06.10		



*Spitz*

ADB