



DanSteel A/S

DK-3300 Frederiksværk - Telefon 47 77 03 33 - Telefax 47 77 03 02

5700 MULT16 00

BROWN MCFARLANE INTERNATIONAL FZE
PO BOX 17679

JEBEL ALI FREE ZONE
DUBAI

UNITED ARAB EMIRATES

Lieferbedingung / Specification:

MULTI16 REV.2. SEE ANNEX.

SA516-65/70 SA537 CL.1 MAX 22HRC

ASME SECT II PART A 2010

BESCHEINIGUNG/CERTIFICATE

Bleche / Plates

Seite/Page:

1.4

Nr./No.: 31182

Type: EN 10204/3.2

(2)

LR

Ihrer Auftrag/Your order: 8009

Unser Auftrag/Our order: 38938

Datum/Date:

23.06.2011

Lieferstelle/Delivery address:

EUROPORTS QUAY 1215, ANTWERP

VESSEL: ASTERIA

Lieferung/

Delivery:

M/S SELENE PRAHM

Toleranz/

Tolerance:

EN10029 CLASS C

Pos.	Zeichen/Marking	Abmessungen/Dimensions			Stk./Pcs.	Gewicht/Weight	Schmelze/Heat	Slab	Walznr./Millno.	
10	2 BMCFI, JEBEL A	12000	2000	10,0	1	1884	41341	H3	1305G	0 N
11	2 BMCFI, JEBEL A	12000	2000	10,0	1	1884	41341	H3	1305G	0 N
12	2 BMCFI, JEBEL A	12000	2000	10,0	2	3768	41364	D5	2698G	0 N

THIS CERTIFICATE IS A TRUE COPY OF
THE ORIGINAL HELD IN OUR POSSESSION
REF.:

SIGNED:

BROWN MCFARLANE INTERNATIONAL FZE

Gewicht durch nominelle Abmessungen berechnet
Calculated weight based on nominal dimensions

20

24490

	C	Mn	Si	P	S	Cr	Cu	Ni	Mo	Sn	Al	Nb	Ti	V	B	N	Ceq = Carbon-Equivalent (IIW - formula)
10	15	150	32	15	3	2	2	1	0		38	50	3	2		49	40
11	15	150	32	15	3	2	2	1	0		38	50	3	2		49	40
12	18	149	32	12	5	2	3	2	0		40	45	2	1		78	43

CERTIFIED TRUE COPY

KAIHOL TRDG CO LLC

9118/KTC-03

P.O. NO: 10408 ITEM NO: 198

JOB NO: 198 SIGN: AU

Lieferzustand/Condition of Delivery
= Walzstand/as rolled
N = Normalisierend gewalzt/Normalized Rolled
oder/oder Normalgeglüht/Normalized 900°C
25.1 - 25 mm min. 3 Minuten/Minutes
M = TM-gewalzt/TM-coiled
Masskontrolle, Beschichtung: Ohne Beanstandung
Dimension check, inspection: Without remarks
Kennzeichnung/Marking

Stahlsorte/Quality
SA516M-70 MT LTV
Sachverständigen/Quality inspector:
Schmelz nr. / Heat no.
1-89.999
Oxygen converter
90.000-99.999 Electro-Open/El-arc-furnace
Im Pflanne raffiniert/Ladle refined.

Zugversuch quer/Tensile test transverse						Kerbschlagbiegeversuch/Impact test						KV = ISO, KVA = ASTM						Warmzugversuch/ Hot tensile test	
Re	Rmt	A	Re	Rmt	A	1	2	3	Mittel/ Average	Temp		1	2	3	Mittel/ Average	Temp	*	R _{0.2}	Temp
10	416	548	24			156	157	170	161	-20							7L		
10						224	105	108	146	-51							7X		
10						104	200	25	110	-46							7X		
11	416	548	24			156	157	170	161	-20							7L		
11						224	105	108	146	-51							7X		
11						104	200	25	110	-46							7X		
12	402	544	25			153	160	159	158	-20							7L		
12						190	167	159	172	-51							7X		
12						155	188	141	161	-46							7X		

Dehnung/Elongation: A200

Original gauge length: 200 mm

Ship Steel or Steel for Ship Boilers, Pressure Vessels and for Welded Machinery Structures.
We hereby certify, that the Plates have been made by an approved process in accordance
with the Rules of the stated Classification Society and the stated Steel Grade.
Testing of the hereby certified materials has been carried out with satisfactory results in
the presence of the Classification Society's Surveyor.

Certified acc. CPD (93/68/EC) by TÜV NORD Systems GmbH

Notified body reg.-no 0045

<=22HRC

* Probelage und Zustand
Testpiece location and condition

Probelage Width of testpc	Lage/location
1 10.0	Oberfläche/Surface
2 10.0	Mitte/Center
3 10.0	1/3 von Oberfl./from surface
4 10.0	1/4 von Oberfl./from surface
5 5.0	
6 7.5	
9	Blechedicke/Plate thickness

Zustand/Condition

L=KV-LONG

X=KVA-LONG

Faltversuch/Bend Test

Wir bestätigen, dass die Lieferung den Anforderungen
der obengenannten Lieferbedingungen entspricht.
We hereby certify, that the material has been made and
tested in accordance with the mentioned specification.

24 JUNI 2011
Z. Greisen

Z. Greisen
Chief Metallurgist
DanSteel A/S



DanSteel A/S

DK-3300 Frederiksværk - Telefon 47 77 03 33 - Telefax 47 77 03 02

5700 MULT16 00

BROWN MCFARLANE INTERNATIONAL FZE
PO BOX 17679

JEBEL ALI FREE ZONE
DUBAI

UNITED ARAB EMIRATES

Lieferbedingung / Specification:
MULTI16 REV.2. SEE ANNEX.

SA516-65/70 SA537 CL.1 MAX 22HRC
ASME SECT II PART A 2010

BESCHEINIGUNG/CERTIFICATE

Bleche / Plates

Seite/Page: 1.4 Nr./No.: 31182

Type: EN 10204/3.2

(2)

LR

Ihrer Auftrag/Your order: 8009

Unser Auftrag/Our order: 38938

Datum/Date: 23.06.2011

Lieferstelle/Delivery address:


EUROPORTS QUAY 1215, ANTWERP

VESSEL: ASTERIA

Lieferung/
Delivery: M/S SELENE PRAHM

Toleranz/
Tolerance: EN10029 CLASS C

ASME SECTION PART A 2010										ASME SECTION PART A 2010										ASME SECTION PART A 2010									
Pos.	Zeichen/Marking					Abmessungen/Dimensions					Stk./Pcs.	Gewicht/Weight		Schmelze/Heat		Slab	Walznr./Millno.												
10	2	BMCFI, JEBEL A					12000	2000	10,0	1	1884		41341		H3	1305G 0 N													
11	2	BMCFI, JEBEL A					12000	2000	10,0	1	1884		41341		H3	1305G 0 N													
12	2	BMCFI, JEBEL A					12000	2000	10,0	2	3768		41364		D5	2698G 0 N													

THIS CERTIFICATE IS A TRUE COPY OF
THE ORIGINAL HELD IN OUR POSSESSION
REF.:
SIGNED: 
BROWN MCFARLANE INTERNATIONAL FZE

Gewicht durch nominelle Abmessungen berechnet Calculated weight based on nominal dimensions										20	24490					
C	Mn	Si	P	S	Cr	Cu	Ni	Mo	Sn	Al	Nb	Ti	V	B	N	Ceq = Carbon-Equivalent (IIW - formula)
10	15	150	32	15	3	2	2	1	0	38	50	3	2		49	40
11	15	150	32	15	3	2	2	1	0	38	50	3	2		49	40
12	18	149	32	12	5	2	3	2	0	40	45	2	1		78	43

CERTIFIED TRUE COPY

KALHOJR TRDG. CO. LLC

918/KTC-03

P.O. NO. 10408

JOH. NO. 196197

DATE: 19.06.11

SIGN: A.U.

Lieferzustand/Condition of Delivery
= Walz- und/oder Normalisiert
N = Normalisiert gewalzt/Normalized Rolled
oder/oder Normalgeglüht/Normalized 900°C
251 - mm min. 3 Minuten/Minutes
M = TM-gewalzt/TM-rolled
Maschinen- und/oder Handprüfung
Dimension check, inspection: Without remarks
Kernzeichnung/Marking

U.B.

Stahlsorte/Quality
SA516M-70 MT LTV
Sachverständigen/Quality inspector:
Schmelz nr. / Heat no.
1-89.999 Konverter-verfahren/
Oxygen converter
90.000-99.999 Elektro-Ofen/El.-arc-furnace
Im Pfanne raffiniert/Ladle refined.

CE

Zugversuch quer/Tensile test transverse						Kerbschlagbiegeversuch/Impact test						KV = ISO, KVA = ASTM						Warmzugversuch/ Hot tensile test	
Re	Rm	A	Re	Rm	A	1	2	3	Mittel/ Average	Temp	1	2	3	Mittel/ Average	Temp	*	R _{0.2}	Temp	
10	416	548	24			156	157	170	161	-20						7L			
10						224	105	108	146	-51						7X			
10						104	200	25	110	-46						7X			
11	416	548	24			156	157	170	161	-20						7L			
11						224	105	108	146	-51						7X			
11						104	200	25	110	-46						7X			
12	402	544	25			153	160	159	158	-20						7L			
12						190	167	159	172	-51						7X			
12						155	188	141	161	-46						7X			

Lloyd's Register

SURVEYOR TO
LLOYD'S REGISTER EMEA

Copenhagen

N/mm ²	%	N/mm ²	%	Joule	°C	Joule	°C	N/mm ²	°C
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Dehnung/Elongation: **A200** Original gauge length: 200 mm
Ship Steel or Steel for Ship Boilers, Pressure Vessels and for Welded Machinery Structures.
We hereby certify, that the Plates have been made by an approved process in accordance
with the Rules of the stated Classification Society and the stated Steel Grade.
Testing of the hereby certified materials has been carried out with satisfactory results in
the presence of the Classification Society's Surveyor.

Certified acc. CPD (93/68/EC) by TÜV NORD Systems GmbH
Notified body reg.-no 0045

<=22HRC

* Probe Lage und Zustand Testpiece location and condition

Probefläche Width of testpc	Lage/location
1 10.0	Oberfläche/Surface
2 10.0	Mitte/Center
3 10.0	1/3 von Oberfl./from surface
4 10.0	1/4 von Oberfl./from surface
5 5.0	
6 7.5	
7	Blechedicke/Plate thickness

Zustand/Condition
L=KV-LONG
X=KVA-LONG

Faltversuch/Bend Test

Wir bestätigen, dass die Lieferung den Anforderungen
der obengenannten Lieferbedingungen entspricht.
We hereby certify, that the material has been made and
tested in accordance with the mentioned specification.

24 JUNI 2011
[Signature]

Z. Greisen
Chief Metallurgist
DanSteel A/S



DanSteel A/S

DK-3300 Frederiksværk - Telefon 47 77 03 33 - Telefax 47 77 03 02

5700 MULT16 00

BROWN MCFARLANE INTERNATIONAL FZE
PO BOX 17679
JEBEL ALI FREE ZONE
DUBAI
UNITED ARAB EMIRATES

Lieferbedingungen / Specification:

SA516-60MT LTV

BESCHEINIGUNG/CERTIFICATE

Bleche / Plates

Seite/Page: 3.5

Nr./No.: 31183A

Type: EN 10204/3.1

(2)

Ihrer Auftrag/Your order: 8010

Unser Auftrag/Our order: 38939

Datum/Date: 23.06.2011

Lieferstelle/Delivery address:

EUROPORTS QUAY 1215, ANTWERP

VESSEL: ASTERIA

Lieferung/
Delivery:

M/S SELENE PRAHM

Toleranz/
Tolerance:

EN10029 CLASS C

Pos.	Zeichen/Marking	Abmessungen/Dimensions			Stk./Pcs.	Gewicht/Weight	Schmelze/Heat	Slab	Walznr./Millno.	
43	6 BMCFI, JEBEL A	10000	3050	14,0	1	3352	41503	A3	4006G 0	N
44	7 BMCFI, JEBEL A	10000	2500	16,0	1	3140	41459	A2	2240G 0	N
45	7 BMCFI, JEBEL A	10000	2500	16,0	2	6280	41356	E4	3015G 0	N

Gewicht durch nominelle Abmessungen berechnet
Calculated weight based on nominal dimensions

60 157776

	C	Mn	Si	P	S	Cr	Cu	Ni	Mo	Sn	Al	Nb	Ti	V	B	N	Ceq = Carbon-Equivalent (IIW - formula)
43	17	150	40	11	4	2	1	5	0		27	48	15	7		55	43
44	16	145	19	12	5	3	5	2	0		41	44	2	1		40	41
45	15	146	33	15	6	2	2	4	0		40	43	2	2		49	41

Lieferzustand/Condition of Delivery
= Walzzustand/as rolled
N = Normalisierend gewalzt/Normalized Rolled
oder/oder Normalgeglüht/Normalized 900°C
25.1 - 25 mm min. 3 Minuten/Minutes
25.1 - 25 mm min. 5 Minuten/Minutes
M = TM-gewalzt/TM-rolled
Masskontrolle, Besichtigung: Ohne Beanstandung
Dimension check, inspection: Without remarks
Kerzezeichnung/Marking

THIS CERTIFICATE IS A TRUE COPY OF
THE ORIGINAL HELD IN OUR POSSESSION

REF:
SIGNED:
BROWN MCFARLANE INTERNATIONAL FZE

Stahlsorte/Quality
SA516M-70 MT LTV
Sachverständigen/Quality Inspector:
Schmelz nr. / Heat no.
1-89.999 Konverter-verfahren/
Oxygen converter
90.000-99.999 Elektro-Ofen/El-arc-furnace
Im Pflanne raffiniert/Ladle refined

Zugversuch quer/Tensile test transverse						Kerbschlagbiegeversuch/Impact test						KV = ISO, KVA = ASTM						Warmzugversuch/ Hot tensile test	
Re	Rm	A	Re	Rm	A	1	2	3	Mittel/ Average	Temp		1	2	3	Mittel/ Average	Temp	*	R _{0.2}	Temp
43	400	544	27			155	145	104	135	-20							1L		
43						48	19	99	55	-51							1X		
43						113	98	58	90	-46							1X		
44	377	521	28			224	235	234	231	-20							1X		
44						173	160	207	180	-51							1X		
44						241	274	174	230	-46							1X		
45	376	520	26			223	187	225	212	-20							1L		
45						137	221	152	170	-51							1X		
45						197	81	222	167	-46							1X		

Dehnung/Elongation: A200

Original gauge length: 200 mm

Certified acc. GPD (93/68/EC) by TÜV NORD Systems GmbH
Notified body reg.-no 0045

* Probelage und Zustand Testpiece location and condition	
Probelage Width of testpiece	Lage/location
1 10.0	Oberfläche/Surface
2 10.0	Mitte/Center
3 10.0	1/3 von Oberfl./from surface
4 10.0	1/4 von Oberfl./from surface
5 5.0	
6 7.5	
7	
8	
9	Blechedicke/Plate thickness
Zustand/Condition	
L=KV-LONG	
X=KVA-LONG	

Faltversuch/Bend Test

Wir bestätigen, dass die Lieferung den Anforderungen
der obengenannten Lieferbedingungen entspricht.
We hereby certify, that the material has been made and
tested in accordance with the mentioned specification.

18 AUG. 20
Z. Greisen

Z. Greisen
Chief Metallurgist
DanSteel A/S