

2.750" Baker Male Adapter Ring



BGH Edelstahl Freital GmbH

BGH Edelstahl Freital GmbH Am Stahlwerk 1 01705 Freital

Earle M. Jorgensen Company

6201 Lumberdale
77092 Houston, TX
USAKunden-Bestell-Nr. P939654-453
Customer order no.
Cde. no. du client 506848BGH-Auftrags-Nr. 09328201/86148
BGH works no.
BGH référenceZeugnis-Nr. 252681
Certificate no.
No. de certificatBescheinigung über Werkstoffprüfung nach EN 10204
Certificate of material tests according to EN 10204 3.1
Certificat des essais des matériaux selon EN 10204Die Lieferung entspricht den vereinbarten Lieferbedingungen.
Delivery in accordance with the agreed terms of delivery.
La livraison correspond aux conditions de livraison convenues.Zeichen des Lieferwerkes Stempel des Werkstoffsachverständigen
Trade mark Inspector's stamp
Signe du fournisseur Poignon de l'inspecteur

Product Round bars, peeled										
Werkstoff / Quality 9Cr-1Mo (UNS K90841)										
Requirements ES-MA-2-R.E 2006 Rev. 920505 ES-MA 88-2 05/92 EMJ HT03 R.2 07/03 ES-MA-2-R Rev. E sec. 1 - 6, excluding sec. 6.3										
Beschulung und Maßnachprüfung Inspection and dimensional control Inspection et contrôle de dimension without objection				Brennprozess/Nachbehandlung Melting process/secondary refining Mode d'élaboration/traitement ultérieur E - LF/VD				Verwechslungsprüfung (spektralanalytisch) Identification test (spectral-analysis) Examination d'identification (analyse spectrale) without objection		
Pos. Item	Anzahl Quantity	Abmessung Dimension						Gewicht Weight	Schmelz-Nr. Heat-No.	
1	27	2.75" dia.						4852 kg	327475	
Schmelze Heat %	C	Si	Mn	P	S	Cr	Mo	Ni	Cu	
327475	0,123	0,67	0,55	0,015	0,002	8,25	0,93	0,13	0,05	
Condition of heat treat hardened + tempered + stress relieved Traitement thermique 980°C 105'/Oil-oil + 660°C 210'/Luft-air + 610°C 6h/Luft-air (Bd/bd)										
Probe-Nr. Test-No.	Lage	Temp. °F	Rp0,2 ksi		Rm ksi	A4 %	Z %	Kerbschlagarbeit Impact value Ft-lbs	Probenform Shape of test piece Charpy-V	Hardt BHN/HRC Hardness
Soll/Req.	L	RT	>=80		>=95	>=20	>=20	>=15	32	<=235 <=22
	L	RT	<=110							
009FR4 /a	L	RT	82		111	27	69	56 64 55 0		
009FR9 /b	L	RT	84		113	27	69			
The test results of this MTR meet the requirements of the above mentioned specifications.										
We are ISO 9001/2000 registered by LRQA accredited by UKAS.										
reduction ratio: 36:1										
Anlagen End. Annex	US-certificate Hardness certificate				Freitst, den Place and date 29.06.2007			Abnahmebeauftragter Inspector representative Inspecteur de réception BERNDT		

a/27/07

506848

327475

R 300075

(5)

Kunden-Bestell-Nr. P939654-453
Customer order no.
Cde. no. du client 506848BGH-Auftrags-Nr. 093282-01
BGH works no.
BGH référenceZeugnis-Nr. 252681
Certificate no.
No. de certificat

Erzeugnisform : Stab, rund
Product : Round bars, peeled
Werkstoff/Quality : 9Cr-1Mo (UNS K90941) charge: 327475
Abmessung/Dimension : 2.75" dia.
Anzahl/Quantity : 27 Gewicht kg/Weight kg : 4852
Wärmebehandlungszustand : vergütet + spannungsarmgeglüht
Condition of heat treat : hardened + tempered + stress relieved
Traitement thermique : 980°C 105' / Öl-oil + 650°C 210' / Luft-air + 610°C 6h / Luft-air (Bd/bd)
Prüfrichtlinie
Specification
US: nach ASTM/ASME A 388
FBH (KSR) max. 2 mm
Bearbeitungszustand : geschält
Machining condition : peeled
Prüfgerät : Deutsch-STPS-Echograph 1155
Test equipment
Prüfkopf : 15xTS12WB4
Probe
Kopplungsmittel : Wasser
Coupling medium : water
Prüfumfang : vollständig
Extent of examination : completely
Einschallrichtung : senkrecht und in Winkelschallung 40°
Direction of incidence : perpendiculair and oblique incidence 40°
Registr./Zuläss.-grenze : Prüfung und Justierung erfolgten gemäß obiger Spezifikation.
Register/acceptance level : Test and adjustment acc.to a.m.specification.
Befund : Es wurden keine registrierpflichtigen Anzeigen ermittelt.
Result : There have not been found any reportable indications found
Prüfdatum : 05.06.2007
examination date

Freital, den
Place and date
Lieu et date
29.06.07Prüfer
Testing operator
Opérateur
Fischer J.
Stufe 2 EN 473Abnahmebeauftragter
Inspector representative
Inspecteur de réceptionJUNGKUNZ
Level III SNT-TC 1AOberwacher
Supervisor
Surveillleur

Das Zeugnis wurde maschinell erstellt und ist auch ohne Unterschrift gültig.

This certificate was generated by data system it must not be signed for validity as well.
Ce certificat a été établi sur système informatique et est valable sans signature aussi.



Hardness Report Bar Surface for Grade 1.7386 (9 Cr 1 Mo)

Hardness test with EQUOTIP :

Values in HRC/BHN

Order Number: 093282/1
Test Number: 9FR
certificate: 252681

bar no.	bar end A	middle	bar end B
1	21,5/233	21/231	21/231
2	21,5/233	21,5/233	21,5/233
3	21,5/233	21,5/233	21,5/233
4	21/231	21/231	21/231
5	21,5/233	21,5/233	21/231
6	21,5/233	21,5/233	21,5/233
7	21,5/233	21,5/233	21,5/233
8	21,5/233	21,5/233	21,5/233
9	21/231	21/231	21/231
10	21/231	21/231	21/231
11	21/231	21/231	21,5/233
12	21/231	21/231	21,5/233
13	21/231	21,5/233	21,5/233
14	21/231	21,5/233	21,5/233
15	21,5/233	21,5/233	21,5/233
16	21,5/233	21,5/233	21,5/233
17	21,5/233	21,5/233	21,5/233
18	21,5/233	21,5/233	21,5/233
19	21,5/233	21,5/233	21,5/233
20	21,5/233	21,5/233	21,5/233
21	21,5/233	21,5/233	21,5/233
22	21/231	21,5/233	21,5/233
23	21/231	21,5/233	21,5/233
24	21/231	21,5/233	21,5/233
25	21/231	21,5/233	21,5/233
26	21/231	21,5/233	21,5/233
27	21/231	21/231	21,5/233



CERTIFICATE OF TEST

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Certification Date
2-OCT-2007

CUSTOMER ORDER NUMBER

200314

6201 LUMBERDALE
HOUSTON TX 77092

Invoice Number
T577611

CUSTOMER PART NUMBER

Ship# T577696

SOLD TO:	B AND T OILFIELD PRODUCTS	SHIP TO:	B AND T OILFIELD PRODUCTS
	421 E MAIN STREET		421 E MAIN STREET
	BROUSSARD LA 70518		BROUSSARD LA 70518

Description: 9CR-1MO HR HT RT BAR - ES-MA-2-7 - EMJ HT03
2-3/4 RD X 20' R/L
HEAT: 327475
ITEM: 506848
Line Total: 5364 LB

Specifications:
HES ES-MA-2-7

CHEMICAL ANALYSIS

C	SI	MN	P	S	CR	MO	NI
0.123	0.67	0.55	0.015	0.002	8.25	0.93	0.13
CU							
0.05							

RCPT: R300073
MILL : BGH SPECIALTY STEEL INC
COUNTRY OF ORIGIN : GERMANY

MECHANICAL PROPERTIES

	YLD STR	ULT TEN	%ELONG	%RED	HARDNESS
DESCRIPTION	KSI	KSI	IN 02 IN	IN AREA	BHN
	82.0	111.0	27.0	69.0	231

COMMENTS
REDUCTION RATIO 36:1
TENSILE SPECIMENT SIZE .500"
TEST PIECE IS A PROLONGATION OF BAR
HEAT TREATMENT
HARDNED 980 DEG C OIL
TEMPERED 560 DEG C 210/LUFT- AIR
STRESS RELIEVED 610 DEG C 6H/LUF-AIR

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination.

We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes.

Material did not come in contact with mercury while in our possession.

MICHAEL BOSCH

MANAGER, QUALITY ASSURANCE