

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That
BGH Edelstahl Siegen GmbH
Siegen, Germany

is an approved manufacturer of
Steel Forgings

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Products	Steel Forgings
Steel type(s)	Carbon, Carbon-Manganese, Alloy, Ferritic Stainless Austenitic Stainless Martensitic Stainless
Max. weight	22Cr duplex, 25Cr duplex 32 000 kg
Remarks	<p>1. Including 'clean steel forged bars' as pre-material for crankshafts up to maximum diameter 650 mm</p> <p>2. Including 'clean steel forged bars' as blanks for case hardened gear transmissions and short shafts with "specially approved forging process" up to maximum diameter 650 mm</p> <p>3. Including forgings in following grades: 1.3964 acc. to SEW 390 / BWB WL 1.3964-2, -3 1.6780 (HY-80) acc. to MIL-S-23009C / BWB WL 1.6780-2, -3 1.6782 (HY-100) acc. to MIL-S-23009C / BWB WL 1.6782-2, -3</p>

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules. Materials to be applied to DNV GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Hamburg** on **2016-12-29**

This Certificate is valid until **2019-12-31**.

DNV GL local station: **Essen**

Approval Engineer: **Stefan Röhr**



for **DNV GL**

Digitally Signed By: Wildhagen, Christian

Location: DNV GL Hamburg, Germany

Signing Date: 2017-01-02, on behalf of

Thorsten Lohmann
Head of Section

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That
BGH Edelstahl Siegen GmbH
Siegen, Germany

is an approved manufacturer of
Steelmaking

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Product	Steelmaking and semi-finished products: Ingot Castings, Forged Blanks and Bars
Grade(s)	Carbon, Carbon-Manganese, Alloy, Ferritic Stainless, Martensitic Stainless, Austenitic Stainless, 22Cr duplex, 25Cr duplex
Steelmaking Deoxidation	Electric Arc Furnace, Ingot Casting Killed
Remarks	1. Including 'clean steel forged bars' as pre-material for crankshafts up to maximum diameter 650 mm 2. Including 'clean steel forged bars' as blanks for case hardened gear transmissions and short shafts with "specially approved forging process" up to maximum diameter 650 mm

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules. Materials to be applied to DNV GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

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