DNV·GL

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00001YJ

This is to certify:

That

Chr. Höver & Sohn GmbH & Co. KG
Lindlar, Germany

is an approved manufacturer of
Steel Forgings

in accordance with
DNV GL rules for classification – Ships
DNV GL rules for classification – Naval vessels

and the following particulars:

Application area	**Forgings for hull structures and equipment** **Forgings for boilers, pressure vessels and piping systems** **Ferritic steel forgings for low temperature service** **Stainless steel forgings**
Steel type(s)	**Carbon and carbon-manganese,** **Alloy,** **Austenitic stainless,** **Austenitic-ferritic (Duplex) stainless,** **Austenitic chromium-nickel stainless steel for use in non-magnetic applications.**
Forging method	**See page 2**
Max. weight	**See page 2**
Delivery Condition	**See page 2**

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 **2018-02-09**

This Certificate is valid until **2021-02-08**.
DNV GL local station: **Essen**

Approval Engineer: **Andreas Koch**

for **DNV GL**
Digitally Signed By: Wildhagen, Christian
Location: DNV GL Hamburg, Germany
Signing Date: 05.04.2018, on behalf of

Thorsten Lohmann
Head of Section

Particulars of the approval

Forgings for hull structures and equipment
Forgings for boilers, pressure vessels and piping systems
Ferritic steel forgings for low temperature service
Stainless steel forgings

Steel type[3)]	Forging method[1)]	Max. weight [kg]	Delivery condition[2)]
C and C-Mn	OD, RB	2 500	N, NT, QT
Alloy			QT
Austenitic Stainless			S+Q
Austenitic-ferritic (Duplex) stainless (UNS S32750 - X 2 CrNiMoN 25-7-4)			
Austenitic Stainless - Non-Magnetic Applications (X2CrNiMnMoNNb21-16-5-3)			

Remarks:

1) OD: Open die forging
   RB: Rolled Bars
2) QT: Quenched and tempered
   N: Normalised
   NT: Normalised and tempered
   S+Q: Solution annealed and quenched
3) Certification of any material applied to classed object shall fulfill the applicable material requirements in the DNV GL class rules