

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM000020B
Revision No:
1

This is to certify:

That
GRÄF Verbindungsteile GmbH
Dieselstraße 26, 54634 Bitburg,
Germany

is an approved manufacturer of
Bolt and Nuts

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Application area	Bolts and nuts
Products	Fasteners (bolts, screws, nuts, washers, etc.)
Steel type	Carbon, carbon-manganese, Austenitic stainless, Martensitic stainless, Ferritic stainless, Nickel alloy, Non-magnetizable steels Alloy
Manufacturing method	Hot forming / machining / heat treatment
Dimensions	See page 2
Heat treatment 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 classed object shall fulfill the material requirements in the applicable DNV class rules.

Issued at **Hamburg** on **2021-04-29**

This Certificate is valid until **2024-03-31**.

for **DNV**

DNV local station: **Essen**

Approval Engineer: **Stefan Röhr**

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Thorsten Lohmann
Head of Section

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Particulars of the approval

Fasteners (bolts, screws, nuts, washers, etc.)

Steel type / grade	Max. diameter [mm]	Heat treatment condition
EN 10083-1, -2	140	acc. to standard
EN 10269	140	acc. to standard
EN 10272	140	acc. to standard
EN 10088-1, -3	140	acc. to standard
EN 10025	140	acc. to standard
DIN 17200	140	acc. to standard
DIN 17240	140	acc. to standard
DIN 17280	140	acc. to standard
DIN 17440	140	acc. to standard
DIN 267, Part 13	140	acc. to standard
ISO 3506-1, -2, -3	140	acc. to standard
ISO 898-1, -2	140	acc. to standard
VG 85539	140	acc. to standard
SEW 390	140	acc. to standard
SEW 400	140	acc. to standard

RECOGNITION CERTIFICATE

This is to certify:

That DNV GL recognizes the manufacturer's procedures and processes for production and quality control applied for the manufacturing of the below products. The procedures and processes have been found to meet the quality and safety levels set forth in the DNV GL Rules.

for product(s)

Steel material - Stamping of test specimen and transfer of stamping during production

Manufacturer

GRÄF Verbindungsteile GmbH
Bitburg, GermanyThis Certificate is valid until **2023-07-03**.Issued at **Essen** on **2019-07-04**for **DNV GL**

This document has been digitally signed and
will therefore not have handwritten signatures

Pfahlert, Andre
Principal Surveyor