

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That

KUZNIA JAWOR SA
PL-59-400 Jawor, Poland

is an approved manufacturer of
Steel Forgings

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Application area	Forgings for hull structures and equipment Forgings for shafting and machinery Ferritic steel forgings for low temperature service Stainless steel forgings Bolts and nuts
Steel type(s)	Carbon, Carbon-manganese, Alloy, Austenitic stainless
Process	See page 2
Dimensions	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 **2018-03-09**

for **DNV GL**

This Certificate is valid until **2021-03-08**.

DNV GL local station: **Katowice**

Approval Engineer: **Andreas Koch**

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Thorsten Lohmann
Head of Section



Particulars of the approval

Forgings for hull structures and equipment Forgings for shafting and machinery Stainless steel forgings

Steel type ³⁾	Forging method ¹⁾	Max. weight [kg]	Delivery condition ²⁾
C and C-Mn	OD	30	N, NT, QT
Alloy	OD	30	N, NT, QT
Austenitic	OD	30	SHT

Bolts and nuts

Steel type ³⁾	Forging method ¹⁾	DN [mm]	Delivery condition ²⁾
C and C-Mn	CD	300	N
Alloy	CD	300	QT
Austenitic	CD	300	SHT

Ferritic steel forgings for low temperature service

Steel type	Forging method ¹⁾	Max. weight [kg]	Delivery condition ²⁾
C and C-Mn	OD, CD	30	N

Remarks:

- 1) OD: Open die forging
CD: Closed die forging
- 2) QT: Quenched and tempered
N: Normalised
NT: Normalised and tempered
SHT: Solution Heat Treated (Solution Annealing)
- 3) Certification of any material applied to classed object shall fulfill the applicable material requirements in the DNV GL class rules