

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That
VDM Metals GmbH
Kleffstraße 23, 58762 Altena,
Germany

is an approved manufacturer of
Steelmaking and Rolled Steel Products

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Application area	Stainless steel
	Nickel alloy
Products	Plates
Grades	Special austenitic stainless,
	Nickel-base alloy,
	See page 2
Manufacturing method	Electric arc furnace or induction furnace,
	ingot casting or continuous casting
Max. thickness	See page 2
Heat treatment condition	See page 2
Additional approval conditions	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 **2020-08-05**

for **DNV GL**

This Certificate is valid until **2023-05-07**.

DNV GL local station: **Essen**

Approval Engineer: **Christian Wildhagen**

Thorsten Lohmann
Head of Section

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Job Id: **263.11-009836-1**
Certificate No: **AMMM00002RJ**
Revision No: **1**

Particulars of the approval

Steels acc. other standards ³⁾

Grade	Product	Steel making ¹⁾	Max. thickness [mm]	Delivery condition ²⁾
1.4529 (Alloy 926 acc. VDM Spec.) ³⁾	Plate	EAF, CC or IC	5	SHT
1.4562 (Alloy 31 acc. VDM Spec.) ³⁾	Plate	IF, CC or IC	8	SHT
2.4605 (Alloy 59 acc. VDM Spec.) ³⁾	Plate	IF, CC or IC	10	SHT

Remarks:

- 1) EAF: electric arc furnace
IF: induction furnace
IC: ingot casting
CC: continuous casting
- 2) SHT: solution heat treated (solution annealed)
- 3) Possible application and certification of any material to classed object is subject to case by case approval

Covered manufacturing route:

- Steel making and electro slag remelting in plant Unna
- Pre-rolling of slabs in plant Duisburg
- Hot rolling in plant Siegen
- Final heat treatment in plant Altena