

# TYPE APPROVAL CERTIFICATE

**This is to certify:**

**That the Wire/Gas combination**

with trade name  
**VDM® FM 59 / I3(Ar + 30%He)**

Manufacturer  
**VDM Metals GmbH**  
**Werdohl, Germany**

is found to comply with  
**DNV GL rules for classification – Ships**  
**DNV GL class programme DNVGL-CP-0069 – Type approval – Welding consumables**

with this approval

<b>Grade</b>	<b>*</b>
<b>Current</b>	<b>DC(+)</b>
<b>Approved diameter</b>	<b>1.0mm - 1.2mm</b>
<b>Positions</b>	<b>Flat and vertical upwards (PA, PF)</b>
<b>Remarks</b>	<b>*)AWS 5.14 ERNiCrMo-13</b> <b>Minimum 0.2% yield strength of the weld metal 450 N/mm<sup>2</sup></b> <b>For metal arc inert gas welding</b> <b>Also for fillet welding (PB)</b>

**Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**

Issued at **Hamburg** on **2019-06-20**

This Certificate is valid until **2024-06-19**.  
 DNV GL local station: **Essen**

Approval Engineer: **Hans-Joachim Vogt**



for **DNV GL**  
 Digitally Signed By: Hachmoeller, Ludger  
 Location: DNV GL Hamburg, Germany  
 Signing Date: 2019-06-24 , on behalf of

**Thorsten Lohmann**  
**Head of Section**

Any significant change in design or construction may render this Certificate invalid.

