

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Wire/Gas combination

with trade name
ED-FK 1000 / M21

Manufacturer

Hermann Fliess & Co. GmbH
Duisburg, Germany

is found to comply with
DNV GL rules for classification – Ships

with this approval

Grade	*
Current	DC +
Approved diameter	0,8 - 1,2mm
Positions	PA, PB, PC, PF (1G, 2G, 3G up, 1F, 2F, 3F up)
Remarks	*) EN ISO 16834-A - G 89 6 M21 Mn4Ni2CrMo Impact test at -40°C average value > 47 Joule

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

This Certificate is valid until **2021-10-18**.

Issued at **Hamburg** on **2016-10-19**

DNV GL local station: **Essen**

for **DNV GL**

Approval Engineer: **Hans-Joachim Vogt**

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Thorsten Lohmann
Head of Section

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