



COPY

# TYPE APPROVAL CERTIFICATE

Certificate no.:  
**TAW00002K8**  
Revision No:  
**3**

## This is to certify:

that the Flux Cored Wire/Gas combination

with trade name  
**SM-47A / M21\***

Manufacturer  
**NIPPON STEEL WELDING & ENGINEERING CO.,LTD., Narashino Plant**  
**Narashino, Chiba Pref., Japan**

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

with this approval

Grade	V Y46MSH5
Current	DC(+)
Approved diameter	1,0 mm - 1,4 mm
Positions	All, except vertical-down
Remarks	*) M21 (> 5% to 25% CO <sub>2</sub> , rest Argon) according to IACS UR W17. Also for fillet welding.

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

Issued at **Hamburg** on **2025-05-16**

This Certificate is valid until **2029-12-17**.

DNV local unit: **Japan CMC**

Approval Engineer: **Dietmar Liebich**

for **DNV**



Digitally Signed By:  
**Martin Wenning**  
Location: **DNV Hamburg,**  
**Germany**

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

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