

**COPY**

**DNV-GL**

**TYPE APPROVAL CERTIFICATE**

Certificate No:  
**TAW00000A1**  
Revision No:  
**1**

**This is to certify:**

**That the Flux Cored Wire/Gas combination**

with trade name  
**SM-80A / M21**

Manufacturer

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

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

with this approval

<b>Grade</b>	<b>IV Y69MS(H5)</b>
<b>Current</b>	<b>DC(+)</b>
<b>Approved diameter</b>	<b>1.2 mm</b>
<b>Positions</b>	<b>Flat, Horizontal</b>
<b>Remarks</b>	<b>Also for fillet welding</b>

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

Issued at **Hamburg** on **2019-11-20**

This Certificate is valid until **2024-09-07**.

DNV GL local station: **Yokohama**

Approval Engineer: **Dietmar Liebich**



for **DNV GL**

Digitally Signed By: Hachmoeller, Ludger

Location: DNV GL Hamburg, Germany

Signing Date: 2019-11-21 , on behalf of

**Thorsten Lohmann  
Head of Section**

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



Form code: WELD 1421a

Revision: 2016-12

www.dnvgl.com

Page 1 of 1

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.