

# COPY



## NIPPON KAIJI KYOKAI

### Certificate

#### OF

#### TYPE APPROVAL

Approval No. NKY-3500  
Certificate No. TA20252E

Article: Welding Consumables for High Strength Rolled Steels for Offshore Structures  
Brand: SF-80A  
Applicant: NIPPON STEEL WELDING & ENGINEERING CO., LTD.  
Narashino Plant  
Narashino, Chiba, Japan  
Manufacturer: NIPPON STEEL WELDING & ENGINEERING CO., LTD.  
Narashino Plant  
Narashino, Chiba, Japan  
Grade: KSW4Y69G(M2)H5  
Welding Process: Semi-Automatic Welding (MAG Welding)  
Welding Positions and Max. Diameter of Wire: See Table 1  
Current: DCEP  
Shielding Gas: Ar +CO<sub>2</sub>

Table 1 Welding Positions and Max. Diameter of Wire

Butt Weld		Fillet Weld	
Flat:	1.2mm	Flat:	1.2mm
Horizontal:	1.2mm	Horizontal Vertical:	1.2mm
Overhead:	1.2mm	Horizontal:	1.2mm
		Horizontal Overhead:	1.2mm
		Overhead:	1.2mm
Vertical Upward:	1.2mm	Vertical Upward:	1.2mm
Vertical Downward:	Not Applicable	Vertical Downward:	Not Applicable

THIS IS TO CERTIFY that the above mentioned welding consumable has been approved by the NIPPON KAIJI KYOKAI in accordance with the requirements of the Society's Rules.

This Certificate will remain in force until 18 February 2021.

Issued at Tokyo on 6 March 2020.

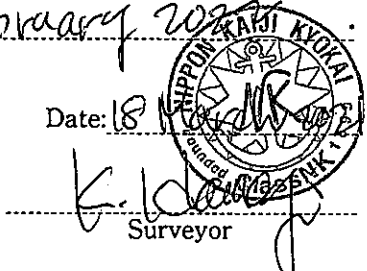
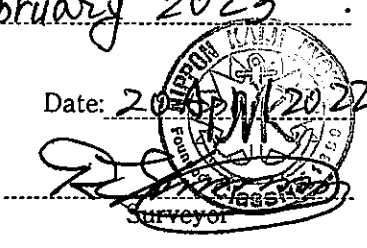
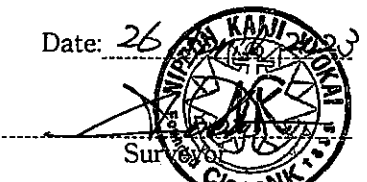
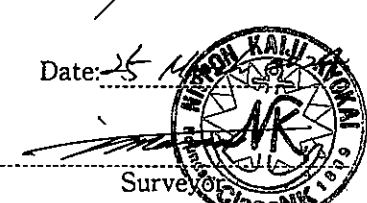
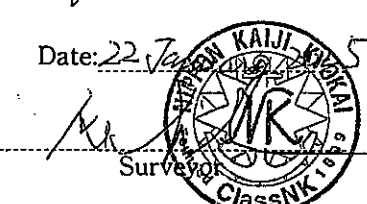
H. Kobayashi

General Manager

Material and Equipment Department



Note : The validity of this certificate may be renewed by endorsement on the attached sheet upon completion of the annual inspections.

<p>The validity of this certificate has been renewed until <u>18 February 2022</u>.</p> <p>Date: <u>18</u></p> <p> Surveyor</p>	<p>The validity of this certificate has been renewed until _____.</p> <p>Date: _____</p> <p>_____ Surveyor</p>
<p>The validity of this certificate has been renewed until <u>18 February 2023</u>.</p> <p>Date: <u>20</u></p> <p> Surveyor</p>	<p>The validity of this certificate has been renewed until _____.</p> <p>Date: _____</p> <p>_____ Surveyor</p>
<p>The validity of this certificate has been renewed until <u>18 February 2024</u>.</p> <p>Date: <u>26</u></p> <p> Surveyor</p>	<p>The validity of this certificate has been renewed until _____.</p> <p>Date: _____</p> <p>_____ Surveyor</p>
<p>The validity of this certificate has been renewed until <u>18 February 2025</u>.</p> <p>Date: <u>25</u></p> <p> Surveyor</p>	<p>The validity of this certificate has been renewed until _____.</p> <p>Date: _____</p> <p>_____ Surveyor</p>
<p>The validity of this certificate has been renewed until <u>18 February 2026</u>.</p> <p>Date: <u>22</u></p> <p> Surveyor</p>	<p>The validity of this certificate has been renewed until _____.</p> <p>Date: _____</p> <p>_____ Surveyor</p>