



# NIPPON KAIJI KYOKAI

## Certificate

### OF

### TYPE APPROVAL

Approval No. NKY-3112  
Certificate No. TA18546E

Article : Welding Consumables  
Brand : DW-Z1S  
Applicant : Kobe Steel Ltd., Ibaraki Plant  
: Ibaraki, Osaka, Japan  
Manufacturer : Kobe Steel Ltd., Ibaraki Plant  
: Ibaraki, Osaka, Japan  
Grade : KSW52G(C)H10  
Welding Process : Semi-Automatic Welding (MAG Welding)  
Welding Positions and Max. Diameter of Wire: See Table 1  
Current : DCEP  
Shielding Gas : CO<sub>2</sub>  
Applicable Parent Material: High Tensile Steels for Hull

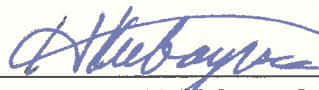
Table 1 Welding Positions and Max. Diameter of Wire

Butt Weld		Fillet Weld	
Flat:	1.2mm	Flat:	1.2mm
Horizontal:	1.2mm	Horizontal Vertical:	1.2mm
Overhead:	1.2mm	Horizontal:	1.2mm
Vertical Upward:	1.2mm	Horizontal Overhead:	1.2mm
Vertical Downward:	1.2mm	Overhead:	1.2mm
		Vertical Upward:	1.2mm
		Vertical Downward:	1.2mm

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.



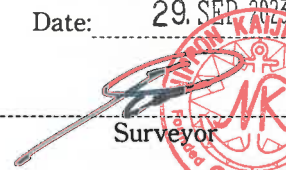


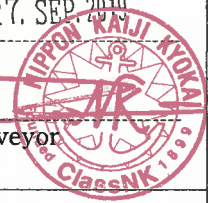

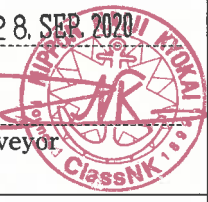


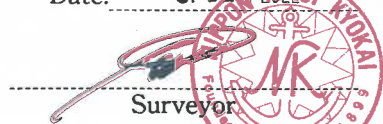

This Certificate will remain in force until 18 December 2018.

Issued at Tokyo on 14 May 2018.

  
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. DEC. 2019</u> .</p> <p>Date: <u>8. FEB. 2019</u></p> <p> Surveyor</p> 	<p>The validity of this certificate has been renewed until <u>18. DEC. 2024</u> .</p> <p>Date: <u>29. SEP. 2023</u></p> <p> Surveyor</p> 
<p>The validity of this certificate has been renewed until <u>18. DEC. 2020</u> .</p> <p>Date: <u>27. SEP. 2019</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. DEC. 2021</u> .</p> <p>Date: <u>28. SEP. 2020</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. DEC. 2022</u> .</p> <p>Date: <u>27. SEP. 2021</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. DEC. 2023</u> .</p> <p>Date: <u>5. DEC. 2022</u></p> <p> Surveyor</p> 	<p>The validity of this certificate has been renewed until _____ .</p> <p>Date: _____</p> <p>_____ Surveyor</p>