



# NIPPON KAIJI KYOKAI

Approval No. NKY-2905  
Certificate No. TA20862E

## *Certificate* OF TYPE APPROVAL

Article: Welding Consumables for High Tensile Steels for Hull  
Brand: DW-S43G / KL-4  
[Wire / Backing]  
Applicant: Kobelco Welding of Korea Co., Ltd.  
Changwon, Gyeongnam, Korea  
Manufacturer: Kobelco Welding of Korea Co., Ltd.  
Changwon, Gyeongnam, Korea  
Grade: KEW53  
Welding Process: Electro-Gas Welding  
Welding Positions and Max. Diameter of Wire: See Table 1  
Current: DCEP  
Shielding Gas: CO<sub>2</sub>

Table 1 Welding Positions and Max. Diameter of Wire

Butt Weld		Fillet Weld	
Flat:	Not Applicable	Flat:	Not Applicable
Horizontal:	Not Applicable	Horizontal Vertical:	Not Applicable
Overhead:	Not Applicable	Horizontal:	Not Applicable
Vertical Upward:	1.6mm	Horizontal Overhead:	Not Applicable
Vertical Downward:	Not Applicable	Overhead:	Not Applicable
		Vertical Upward:	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 12 May 2021.

Issued at Tokyo on 28 May 2020.


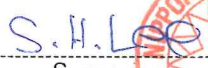


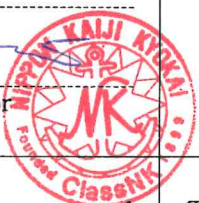
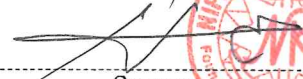
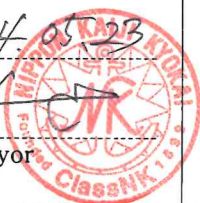


Y. Takao

General Manager

Material and Equipment Department

Note : (1) The validity of this certificate may be renewed by endorsement on the attached sheet upon completion of the annual inspections.  
(2) This certificate was rewritten because of change of the applicant's name and the manufacturer's name.

<p>The validity of this certificate has been renewed until <u>2022 .05. 12</u> .</p> <p>Date: <u>2021 .03. 31</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>2023 .05. 12</u> .</p> <p>Date: <u>2022 .05. 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>2024 .05. 12</u> .</p> <p>Date: <u>2023 .06. 08</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>2025 .05. 12</u> .</p> <p>Date: <u>2024 .05. 23</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 _____ .</p> <p>Date: _____</p> <p>_____ Surveyor</p>	<p>The validity of this certificate has been renewed until _____ .</p> <p>Date: _____</p> <p>_____ Surveyor</p>



# NIPPON KAIJI KYOKAI

Approval No. NKY-2989  
Certificate No. TA20863E

## *Certificate* OF TYPE APPROVAL

Article: Welding Consumables for High Tensile Steels for Hull  
Brand: DW-100KS  
Applicant: Kobelco Welding of Korea Co., Ltd.  
Changwon, Gyeongnam, Korea  
Manufacturer: Kobelco Welding of Korea Co., Ltd.  
Changwon, Gyeongnam, Korea  
Grade: KSW54Y40G(C)H5  
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>

Table 1 Welding Positions and Max. Diameter of Wire


Butt Weld		Fillet Weld	
Flat:	1.4mm	Flat:	1.4mm
		Horizontal Vertical:	1.4mm
Horizontal:	1.4mm	Horizontal:	1.4mm
Overhead:	1.4mm	Horizontal Overhead:	1.4mm
		Overhead:	1.4mm
Vertical Upward:	1.4mm	Vertical Upward:	1.4mm
Vertical Downward:	1.4mm	Vertical Downward:	1.4mm

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 16 January 2022.

Issued at Tokyo on 28 May 2020.



  
Y. Takao  
General Manager  
Material and Equipment Department

Note : (1) The validity of this certificate may be renewed by endorsement on the attached sheet upon completion of the annual inspections.  
(2) This certificate was rewritten because of change of the applicant's name and the manufacturer's name.