



NIPPON KAIJI KYOKAI

Approval No. NKY-3083
Certificate No. TA201075E

Certificate OF TYPE APPROVAL

Article: Welding Consumables for Steels for Low Temperature Service and High Tensile Steels for Hull

Brand: DW-55L

Applicant: Kobelco Welding of Qingdao Co., Ltd.
Qingdao, Shandong, China

Manufacturer: Kobelco Welding of Qingdao Co., Ltd.
Qingdao, Shandong, China

Grade: KSWL3G(C)H5
KSW54Y40G(C)H5

Welding Process: Semi-Automatic Welding (MAG Welding)

Welding Positions and Max. Diameter of Wire: See Table 1

Current: DCEP

Shielding Gas: CO₂

Remark: For annual inspection, mechanical properties are to comply with the requirements specified in Table 2.

Table 1 Welding Positions and Max. Diameter of Wire for Both Grades


Butt Weld		Fillet Weld	
Flat:	1.4mm	Flat:	1.4mm
Horizontal:	1.4mm	Horizontal Vertical:	1.4mm
Overhead:	1.4mm	Horizontal:	1.4mm
Vertical Upward:	1.4mm	Horizontal Overhead:	1.4mm
Vertical Downward:	1.4mm	Overhead:	1.4mm
		Vertical Upward:	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 27 April 2021.

Issued at Tokyo on 16 September 2020.











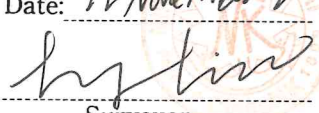
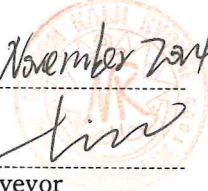

Y. Takao
General Manager
Material and Equipment Department

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.

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Table 2 Mechanical Properties

Deposited Metal Test				
Tensile Test			Impact Test	
Tensile strength (N/mm ²)	Yield point (N/mm ²)	Elongation (%)	Testing temperature (°C)	Minimum mean absorbed energy (J)
510~660	400 min.	22 min.	-40	47
			-60	34

<p>The validity of this certificate has been renewed until <u>20 November 2021</u> 27 April 2021.</p> <p>Date: <u>20 November 2020</u></p> <p> Surveyor</p> 	<p>The validity of this certificate has been renewed until <u>20 November 2022</u>.</p> <p>Date: <u>19 November 2021</u></p> <p> Surveyor</p> 
<p>The validity of this certificate has been renewed until <u>20 November 2023</u>.</p> <p>Date: <u>18 November 2022</u></p> <p> Surveyor</p> 	<p>The validity of this certificate has been renewed until <u>20 November 2024</u>.</p> <p>Date: <u>17 November 2023</u></p> <p> Surveyor</p> 
<p>The validity of this certificate has been renewed until <u>20 November 2025</u>.</p> <p>Date: <u>22 November 2024</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>
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