

## NIPPON KAIJI KYOKAI

Approval No. NKY-2662 ertificate No. TA20861E Certificate TYPE APPROVAL

Article:

Welding Consumables for High Tensile Steels for Hull and

Steels for Low Temperature Service

Brand:

MX-55LF ( $\times$ 2)

Applicant:

Kobelco Welding of Korea Co., Ltd.

Changwon, Gyeongnam, Korea

Manufacturer:

Kobelco Welding of Korea Co., Ltd.

Changwon, Gyeongnam, Korea

Grade:

KAW54G(C) and KAWL3G(C)

Welding Process:

Automatic Welding (MAG Welding)

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

Current:

DCEP

Shielding Gas:

 $CO_2$ 

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:	Not Applicable	Flat:	1.6mm
		Horizontal Vertical:	1.6mm
Horizontal:	Not Applicable	Horizontal:	Not Applicable
Overhead:	Not Applicable	Horizontal Overhead:	Not Applicable
		Overhead:	Not Applicable
Vertical Upward:	Not Applicable	Vertical Upward:	Not Applicable
Vertical	Not Applicable	Vertical Downward:	Not Applicable
Downward:		vertical Downward.	

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 15 June 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.

Table 2 Mechanical Properties

Deposited Metal Test						
Tensile Test			Impact Test			
Tensile strength (N/mm²)	Yield point (N/mm²)	Elongatio n (%)	Testing temperature (°C)	Minimum mean absorbed energy (J)		
490~660	375 min.	22 min.	-60	34		

The validity of this certificate has been renewed	The validity of this certificate has been renewed
until 2022 .06, 15 .	until
Date: 2021 03 31 Surveyor	Date:Surveyor
The validity of this certificate has been renewed	The validity of this certificate has been renewed
until 2023.06.15.	until
Date: 2022.05.26	Date:
Surveyor	Surveyor
The validity of this certificate has been renewed	The validity of this certificate has been renewed
until 2024.06.15.	until
Date: 2023,06,08	Date:
Surveyor	Surveyor
1888	
The validity of this certificate has been renewed	The validity of this certificate has been renewed
The validity of this certificate has been renewed until 2025. 06.15	The validity of this certificate has been renewed until
until 2025. 06.15	until
until 2025. 06.15.  Date: 2024.05.33	until  Date:
until 2025. 06. 15  Date: 2024. 53	Date: Surveyor
until 2025. 06.15  Date: 2024  Surveyor  The validity of this certificate has been renewed	Date:Surveyor  The validity of this certificate has been renewed