



# WELDING CONSUMABLE CERTIFICATE

Certificate No.: 383141-6356249-001\_\_\_\_\_

Report No.: 6356249\_\_\_\_\_

Port of: Busan, Korea\_\_\_\_\_

Date: 29 July 2024\_\_\_\_\_

## THIS IS TO CERTIFY

THAT THE UNDERSIGNED SURVEYOR TO THIS BUREAU DID, AT THE REQUEST OF KOBELCO WELDING OF KOREA CO., LTD., ATTEND THEIR PLANT AT CHANGWON, KOREA, ON THE 15TH DAY OF APRIL, 2024 AND ON SUBSEQUENT DATES, IN ORDER TO CARRY OUT A PLANT SURVEY OF FACILITIES AND ASSOCIATED QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND TO WITNESS AND REPORT ON THE ANNUAL APPROVAL TESTING OF WELDING CONSUMABLES; AND,

THAT THE FACILITY IS CONSIDERED CAPABLE OF PROVIDING AN ACCEPTABLE UNIFORM PRODUCT, AND THAT EACH WELDING CONSUMABLE LISTED BELOW WAS FOUND IN COMPLIANCE WITH THE SPECIFICATION INDICATED AND IS ELIGIBLE TO BE PLACED ON THIS BUREAU'S APPROVED WELDING CONSUMABLES LIST IN THE FLUX CORED ARC WELDING SECTION:

<u>TRADE NAME</u>	<u>SPECIFICATION</u>	<u>GRADE OR CLASS</u>	<u>SHIELDING GAS</u>	<u>POSITION</u>	<u>CURRENT/ POLARITY</u>	<u>SIZE</u>
DW-100	ABS	2YSA, 2Y400SA H10	CO2	All, V-down	DCEP	1.2-1.6 mm
DW-100KS	ABS	4YSA H5, 4Y400SA H5	CO2	All, V-down	DCEP	1.2-1.4 mm
DW-460L	ABS	5YQ460 H5	CO2	All	DCEP	1.2-1.4 mm
DW-55L	ABS	3YSA H5, 5Y400SA H5**	CO2	All, V-down	DCEP	1.2-1.4 mm
**Manufacturer guaranteed deposited weld metal: CVN 54 J at -20 °C.						
DW-55LSR	ABS	4Y400SA H5	CO2	HF	DCEP	1.2 mm
DW-55LSR	ABS	5YQ420SA H5	CO2	All, V-Down	DCEP	1.2 mm
DW-S1LG	ABS	3YA, 3Y400A**	CO2	V	DCEP	1.6 mm
** Manufacturer guaranteed min. CVN 2.8 kg-m at -60 °C. Suitable for electro-gas welding of 20 mm plates with 5 mm root opening / 40 ° groove angle and 30 mm plates with 5 mm root opening / 30 ° groove angle.						
DW-S43G	ABS	3YA, 2Y400A**	CO2	V	DCEP	1.6 mm
** Suitable for electro-gas welding where Nb content in steel does not exceed 0.03%.						
FRONTIARC-711	ABS	3YSA H10	75% Ar, 25% CO2	All, V-down	DCEP	0.045-1/16"
FRONTIARC-711	ABS	3YSA H10	CO2	All, V-down	DCEP	0.045-1/16"

-Cont'd-

Note: This Certificate evidences compliance with one or more of the Rules, guides, standards or other criteria of American Bureau of Shipping and is issued solely for the use of the Bureau, its committees, its clients or other authorized entities. This Certificate is a representation only that the structure, item of material, equipment, machinery or any other item covered by this Certificate has met one or more of the Rules, guides, standards or other criteria of American Bureau of Shipping as of the date of issue. Parties are advised to review the Rules for the scope and conditions of classification and to review the survey records for a fuller description of any restrictions or limitation on the vessel's service or surveys. The validity, applicability and interpretation of this Certificate is governed by the Rules and standards of American Bureau of Shipping who shall remain the sole judge thereof. Nothing contained in this Certificate or in any notation made in contemplation of this Certificate shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied.

TRADE NAME	SPECIFICATION	GRADE OR CLASS	SHIELDING GAS	POSITION	CURRENT/POLARITY	SIZE
MX-200	ABS	2YSA, 2Y400SA H5	CO2	F, HF	DCEP	1.2-1.6 mm
MX-200E	ABS	4Y400SA H5	CO2	F, H, HF	DCEP	1.2-1.4 mm
MX-200H	ABS	3YSA H5, 3Y400SA H5	CO2	HF	DCEP	1.2-1.6 mm
MX-200H (Tandem)	ABS	3YA H5, 3Y400A H5	CO2	HF	DCEP	1.4-1.6 mm
MX-55LF	ABS	3YSA H5**	CO2	F, HF	DCEP	1.2-1.6 mm
** Manufacturer guaranteed min. CVN 47 J at -60°C.						
MX-55LF (x2)	ABS	3YA H5**	CO2	F, HF	DCEP	1.2-1.6 mm
** Manufacturer guaranteed min. CVN 47 J at -60°C.						
DW-50	ABS	3YSA H5	CO2	All, V-down	DCEP	1.1 - 1.6 mm
DW-50	ABS	3YSA H5	75% Ar, 25% CO2	All, V-down	DCEP	1.1 - 1.6 mm
DW-55SH	ABS	5YQ460SA H5	CO2	All, V-down	DCEP	1.2 - 1.4 mm
MX-55LF-K2	ABS	5Y400SA H5	CO2	HF	DCEP	1.2 - 1.6 mm
MX-55LF-K2 (x2 Tandem)	ABS	5Y400A H5	CO2	HF	DCEP	1.2 - 1.6 mm
DW-62L	ABS	5YQ500SA H5	CO2	All	DCEP	1.2 mm



Kim, Im-Ho, SURVEYOR

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