



WELDING CONSUMABLE CERTIFICATE

Certificate No.: 075277-5798050-001-A_____

Report No.: 5798050-A_____

Port of: KOBE, JAPAN_____

Date: 16 AUGUST 2023_____

THIS IS TO CERTIFY

THAT THE UNDERSIGNED SURVEYOR TO THIS BUREAU DID, AT THE REQUEST OF KOBE STEEL, LTD. IBARAKI PLANT, JAPAN, ATTEND THEIR PLANT AT IBARAKI & FUJISAWA, JAPAN, ON THE 19TH DAY OF APRIL, 2023 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)	C1	All, V-Down	DCEP	1.0-1.6 mm
DW-100R	ABS	2Y400SA (H10)	C1	All, V-Down	DCEP	1.2-1.4
DW-100RK	ABS	2Y400SA (H10)	C1	H-Fillet, V-Up-Fillet	DCEP	1.4
DW-100V	ABS	2YSA, 2Y400SA (H10)	C1	All, V-Down	DCEP	1.2-1.4
DW-200	ABS	3YSA	C1	F	DCEP	1.2-1.6
DW-200D	ABS	2YSA	C1	H	DCEP	1.4
DW-Z100	ABS	2YSA (H10)	C1	All, V-Down	DCEP	1.2-1.6
FRONTIARC-711	ABS	3YSA (H10)	C1	All, V-Down	DCEP	1.1-1.6
FRONTIARC-711	ABS	3YSA (H10)	M21(75%Ar-25%CO2)	All, V-Down	DCEP	1.1-1.6
DW-460L	ABS	5YQ460 (H5)	C1	All	DCEP	1.2-1.4
DW-50	ABS	3YSA (H5)	C1	All, V-Down	DCEP	1.1-1.6
DW-50	ABS	3YSA (H5)	M21(80%Ar-20%CO2)	All, V-Down	DCEP	1.1-1.6

CONTINUED

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, or 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.

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TRADE NAME	SPECIFICATION	GRADE OR CLASS	SHIELDING GAS	POSITION	CURRENT/POLARITY	SIZE(mm)
DW-55L	ABS	3YSA(H5), 5Y400SA(H5)**	C1	All, V-Down	DCEP	1.2-1.4
** Manufacture's Guaranteed min. properties: CVN 54 Joule at minus 20 Cen. Deg.						
DW-A55L	ABS	3YSA**	M21(80%Ar-20%CO2)	All	DCEP	1.0-1.6
** Manufacture's Guaranteed min. properties: CVN 34 Joule at minus 60 Cen. Deg.						
DW-A55LSR	ABS	5YQ420SA (H5)	M21(80%Ar-20%CO2)	All, V-Down	DCEP	1.2
DW-A55EH	ABS	4Y400SA (H5)	M21(80%Ar-20%CO2)	All, V-Down	DCEP	1.1-1.6
DW-A55ESR	ABS	4Y400SA (H5)	M21(80%Ar-20%CO2)	All	DCEP	1.1(0.045")
MX-50H	ABS	2YSA	C1	Horizontal	DCEP	1.2
MX-50H	ABS	2YSA	C1	FF, HF	DCEP	1.2-1.4
MX-200	ABS	2YSA, 2Y400SA (H5)	C1	F, H-Fillet	DCEP	1.2-1.6
MX-200H	ABS	3Y400SA (H5)	C1	F, H-Fillet	DCEP	1.2-1.6
MX-200H/MX-200H	ABS	3Y400A (H5)	C1	F, H-Fillet	DCEP	1.4-1.6
MX-A200	ABS	3YSA (H5)	M21(80%Ar-20%CO2)	F (Fillet only)	DCEP	1.1-1.6
MX-Z200	ABS	2YSA, 2Y400SA (H5)	C1	F, H-Fillet	DCEP	1.2-1.6
MX-200HS(X2)/MG-1HS	ABS	3YA, 3Y400A (H5)	C1	F, H-Fillet	DCEP(X2)/DCEN	1.6(X2)/1.2
MG-50HM/MX-50HM	ABS	3Y400A	C1	F, H-Fillet	DCEP	1.6/1.4




 T. OKAMOTO, SURVEYOR

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