## WELDING CONSUMABLE CERTIFICATE



Certificate No.: 243387-5808055-X-1
Report No.: #5808055
Port of: Rotterdam, the Netherlands

Date: 08 June 2023\_

## THIS IS TO CERTIFY

THAT THE UNDERSIGNED SURVEYOR TO THIS BUREAU DID, AT THE REQUEST OF KOBELCO WELDING OF EUROPE, ATTEND THE PLANT AT HEERLEN, THE NETHERLANDS, ON THE 29 DAY OF MARCH, 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:

TRADE NAME	SPECIFICATION	GRADE OR CLASS	SHIELDING GAS	POSITION	CURRENT/ POLARITY	SIZE
4.5		5-1				
DW-316LP	AWS A5.22	E316LT1-4	M21	1G,2F,2G,3Gu, 4G	DC+(DCEP)	1.2mm
DW-A55LSR	ABS	5YQ420SA(H5)	M21	All, V-down	DC+(DCEP)	1.2mm
DW-308LP	AWS A5.22	E308LT1-4	M21	1G,2F,2G,3Gu ,4G	DC+(DCEP)	1.2mm
DW-50	ABS	3YSA(H5)	M21	All, V-down	DC+(DCEP)	1.1-1.6mm
DW-309LP	AWS A5.22	E309LT1-4	M21	1G,2F,2G,3Gu ,4G	DC+(DCEP)	1.2mm
DW-50	ABS	3YSA(H5)	CO2	All, V-down	DC+(DCEP)	1.1-1.6mm
MX-A100	ABS	4YSA(H5)	M21	F, H-Fillet, V- down	DC+(DCEP)	1.2-1.6mm
DW-A62L	ABS	5YQ500SA(H5	M21	All	DC+(DCEP)	1.2mm
DW-309LP	AWS A5.22		CO2	All	DC+(DCEP)	1.2-1.6mm
MX-100T	ABS	3SA, 3YSA(H5)	CO2	All	DC+(DCEP)	1.2-1.4mm
DW-A81Ni1	ABS	4Y400SA(H5)	M21	F, H	DC+(DCEP)	1.2-1.6mm
DW-A81Ni1	ABS	5YQ420SA(H5)	M21	A11	DC+(DCEP)	1.2-1.6mm

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.

DW-308L	Manufacturer's guaranteed minimum properties: T.S. 53 kg/mm2, El. 35%, CVN 3 kg-m at -196°C. Chem: max. C 0.04, Mn 1.0-2.5, max. Si 1.0, max. P 0.04, max. S 0.03,	N/A	CO2	F, V	DC+(DCEP)	1.2-1.6mm				
DW-316L	Ni. 9.0-11.0, Cr 18.0-21.0%. Manufacturer's guaranteed Min. T.S. 50 kg/mm2, EL. 30%, and chemical max: C 0.04, Mn 1.0 - 2.5, Si 1.0, P 0.04, S 0.03, Ni 11.0 -14.0, Cr 17.0 - 20.0, Mo	N/A	CO2	F, V	DC+(DCEP)	1.2-1.6mm				
DW-309L	2.0 - 3.0.  Manufacturer's guaranteed minimum properties: T.S. 53 kg/mm2, El. 30%, Chem: C 0.04, Mn 1.0-2.5, max. Si 1.0, max. P 0.04, max. S 0.03, Ni 12.0-14.0, Cr 22.0-25.0%.	N/A	CO2	F.V	DC+(DCEP)	1.2-1.6mm				
DW-308LP	Manufacturer's guaranteed Min. T.S. 520 N/mm2, EL. 35%, and chemical max: C 0.04, Mn 0.5 - 2.5, Si 1.0, P 0.04, S 0.03, Ni 9.0 -11.0, Cr 18.0 - 21.0, Mo 0.75%	N/A	CO2	All	DC+(DCEP)	1.2mm				
MX-200E	ABS	4Y400SA (H5)	CO2	PA, PB, PC	DC+(DCEP)	1.2-1.4mm				
M. Zalewski SURVEYOR										

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.

Materials Manufacturer Approval Audits CLS-PRI-00826