



# WELDING CONSUMABLE CERTIFICATE

Certificate No.: 075277-6431472-001\_\_\_\_\_

Report No.: 6431472\_\_\_\_\_

Port of: KOBE, JAPAN\_\_\_\_\_

Date: 08 OCTOBER 2024\_\_\_\_\_

## THIS IS TO CERTIFY

THAT THE UNDERSIGNED SURVEYOR TO THIS BUREAU DID, AT THE REQUEST OF KOBE STEEL, LTD., ATTEND THEIR PLANT AT IBARAKI & FUJISA WA, JAPAN, ON THE 3RD DAY OF JUNE, 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:

TRADE NAME	SPECIFICATION	GRADE OR CLASS	SHIELDING GAS	POSITION	CURRENT/ POLARITY	SIZE
DW-308	AWS A5 22:2012	E308T0-1**	C1	F, H, V	DCEP	1.2 - 1.6 mm
** Manufacturer's guaranteed min. properties: T.S. 550 MPa, El. 35%						
DW-308L	**		C1	F, V	DCEP	1.2 - 1.6 mm
** Manufacturer's guaranteed min. properties: T.S. 520 MPa, El. 35%, CVN 29 J at minus 196 Cen. Deg., Chem. %: C max 0.04, Mn 1.0-2.5, Si max 1.0, P max 0.04, S max 0.03, Ni 9.0-11.0, Cr 18.0-21.0						
DW-308LP	AWS A5 22:2012	E308LT1-1**	C1	All	DCEP	1.2 mm
** Manufacturer's guaranteed min. properties: T.S. 520 MPa, El. 35%						
DW-309L	**		C1	F, V	DCEP	1.2 - 1.6 mm
** Manufacturer's guaranteed min. properties: T.S. 520 MPa, El. 30%, Chem. %: C max 0.04, Mn 1.0-2.5, Si max 1.0, P max 0.04, S max 0.03, Ni 12.0-14.0, Cr 22.0-25.0						
DW-309MoL	**		C1	F, V	DCEP	1.2 - 1.6 mm
** Manufacturer's guaranteed min. properties: T.S. 520 MPa, El. 20%, Chem. %: C max 0.04, Mn 1.0-2.5, Si max 1.0, P max 0.04, S max 0.03, Ni 12.0-14.0, Cr 22.0-25.0, Mo 2.0-3.0						
DW-316L	**		C1	F, V	DCEP	1.2 - 1.6 mm
** Manufacturer's guaranteed min. properties: T.S. 490 MPa, El. 30%, Chem. %: C max 0.04, Mn 1.0-2.5, Si max 1.0, P max 0.04, S max 0.03, Ni 11.0-14.0, Cr 17.0-20.0, Mo 2.0-3.0						
DW-316LT	AWS A5 22:2012	E316LT1-1**	C1	F, V	DCEP	1.2 mm
** Manufacturer's guaranteed min. properties: T.S. 485 MPa, El. 30%						

TO BE 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 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.

Certificate No. 848327-6431472-001  
 Report No. 6431472  
 Port of Kobe, Japan  
 Date: 08 OCTOBER 2024

TRADE NAME	SPECIFICATION	GRADE OR CLASS	SHIELDING GAS	POSITION	CURRENT/ POLARITY	SIZE
DW-2594	AWS A5 22:2012	E2594T1-1**	C1	F, H, V-up	DCEP	1.2 mm
** Manufacturer's guaranteed min. properties: Y.S. 550 MPa, T.S. 800 MPa, El 15%, CVN min. 40 J at minus 20 Cen. Deg.						
DW-308LP-XR	AWS A5 22:2012	E308LT1-4	75%Ar-25%CO2	All	DCEP	1.2 mm
DW-309LP-XR	AWS A5 22:2012	E309LT1-4	75%Ar-25%CO2	All	DCEP	1.2 mm
DW-316LP-XR	AWS A5 22:2012	E316LT1-4	75%Ar-25%CO2	All	DCEP	1.2 mm
DW-A80L	**	4YQ690SA H5**	M21	All, HF	DCEP	1.2 mm
** Manufacturer's guaranteed min. properties: CVN 47 J at minus 60 Cen. Deg.						

  
 OKADA, SHIGETOSHI, SURVEYOR



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