



Certificate number: WM 77487/08/N.0

File number: 77487-N-2011

## TYPE APPROVAL CERTIFICATE

as per Bureau Veritas Marine & Offshore Classification Rules

This certificate is issued to

## Kobelco Welding of Qingdao Co., Ltd.

Qingdao - CHINA

for the product

## Flux-Cored Wire for Semi-Automatic or Automatic Welding with Shielding Gas

**Designation**: DW-110E/FB-B3/CO2

Grade : SA3YM H10

**Description**: Gas Shield CO2 100%

Diameter : 1.2mm-1.4mm

Welding current : DCEP

Welding position : Flat butt weld (PA bw), Horizontal vertical butt weld (PC bw), Vertical upwards butt weld (PF bw)

Remark : For semi-automatic welding with ceramic backing,type:FB-B3

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements of Bureau Veritas Marine & Offshore Rules on Materials and Welding for the Classification of Marine Units.

This certificate is a renewal of certificate N° WM 77487/08/M.0 expiring on 19/12/2023

This certificate will expire on: 19 Dec 2024

## For Bureau Veritas Marine & Offshore,

Local office: BV SHANGHAI Issued on 06 Dec 2023 Surveyor: M. Zhang

This certificate was created electronically and is valid without signature



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore. Any Person not a party to the contract pursuant to which this

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