

CERTIFICATE OF APPROVAL OF WELDING  
CONSUMABLE FOR SHIP CONSTRUCTION

This certificate is issued to the company named below. The welding consumable or combination described has been tested in accordance with the requirements of Lloyd's Register for use in ship construction. This approval is subject to annual tests being carried out in accordance with the requirements of Lloyd's Register. The continued validity of this approval will be confirmed by appropriately dated Annual Reapproval Certificates issued to the company.

Name of Company: *KOBELCO WELDING OF EUROPE B.V., NETHERLANDS*

Type of Welding Consumable: *Section 5 - Flux-Cored Wire/Gas Shield*

Trade Name: *DW-A51B/80%Ar-20%CO<sub>2</sub>*

Welding Position: *Downhand and horizontal-vertical only.*

Joint Type: *Butt and Fillet Welding.*

Grade: *3Y, suitable for welding steel Grade(s) EH36, EH32, EH27S, E (and any corresponding strength grade(s) of lower toughness), using semi-automatic flux cored arc welding. (Approved also for automatic multirun welding in the downhand position only.)*

Remarks: *Approved low hydrogen consumable, conforming to standard H5.  
Approved for wires of 1.2 - 1.6 mm diameter only.*

Date: *25 September 2009*

Valid until: *25 September 2010*

**Shane Downie**

Surveyor to Lloyd's Register EMEA

On behalf of Lloyd's Register Group