



# Certificate for Welding Consumable DW-81B2/CO2

Project: **Supplementary List of Certified Welding Consumables**

Client: **Kobe Steel, Ltd.**  
**Ibaraki Plant**

Office: **Yokohama**

Clients Order Number: **-**

Date: **03 December 2025**

Order Status: **Completed**

Inspection Dates

First: **09 July 2025**

Final: **26 September 2025**

This certificate is issued to the above Client to certify that the undersigned Surveyor to this Society did at their request attend their Ibaraki Plant and Fujisawa Plant on and between the dates shown above for the purpose of examining and testing below noted welding consumable.

Trade Name:	<b>DW-81B2/CO2</b>
Welding Process:	Flux-cored Wire/Gas Shield
Welding Position:	DXVuO
Joint Type:	BF
Specification:	DW-81B2/CO2 [M – Manufacturer's specification]

A weld metal assembly was prepared using the welding consumable of lot number AX5448, and specimens machined from the assembly according to the specification were tested using calibrated measuring and testing equipment in the presence of the undersigned with results satisfying the requirements of the specification as follows.

**Mechanical Properties of Deposit Metal**

	<b>Dia. [mm]</b>	<b>Re [N/mm<sup>2</sup>]</b>	<b>Rm [N/mm<sup>2</sup>]</b>	<b>A [%]</b>	<b>CVN Impact [J]</b>	<b>Test Temp.</b>	<b>Stress Relief</b>
<b>Spec.</b>	1.2	≥ 470	550-690	≥ 19	-	-	690°Cx1hr
<b>Obtained</b>	1.2	517	595	23	-	-	690°Cx1hr

**Chemical Analysis of Deposit Metal [WT %]**

	<b>C</b>	<b>Si</b>	<b>Mn</b>	<b>P</b>	<b>S</b>	<b>Ni</b>	<b>Cr</b>	<b>Mo</b>	<b>Cu</b>
<b>Spec.</b>	0.05-0.12	0.80 max	1.25 max	0.030 max	0.030 max	-	1.00-1.50	0.40-0.65	-
<b>Obtained</b>	0.05	0.29	0.87	0.005	0.005	-	1.17	0.42	-

The works of the manufacturer was inspected and found in satisfactory order. The process of manufacture, including supervision, quality control and record keeping were of adequate standard and storage condition and facilities were found to be satisfactory as well.



H. Ban  
Surveyor to Lloyd's Register Group Limited

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