Certificate no.:
TAW0000675

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Wire/Flux combination

with trade name
JW®-1 (2x) / JF-B Plus

Manufacturer
Lincoln Electric (Tangshan) Welding Materials Co.,Ltd.
Tangshan, Hebei Province, China

is found to comply with
DNV rules for classification – Ships
DNV rules for classification – Offshore units
DNV class programme DNV-CP-0069 – Type approval – Welding consumables

with this approval

Grade	**IV YM(H5)**
Current	**AC/DC(+)**
Approved diameter	**1.6 mm - 4.8 mm**
Positions	**Flat**
Remarks	**For tandem welding multi-run technique** **The manufacturer guarantees impact CVN properties: min. 47J at -50°C**

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Issued at **Hamburg** on **2026-06-30**

This Certificate is valid until **2031-06-30**.
DNV local unit: **Dalian NB & CMC**

Approval Engineer: **Jens Hörnschemeyer**

for **DNV**

Digitally Signed By:
Ludger Hachmöller
Location: DNV Hamburg, Germany

Any significant change in design or construction may render this Certificate invalid.
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