Certificate no.:
TAW0000661

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Wire/Flux combination

with trade name
JW®-1/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	**DC(+)**
Approved diameter	**1.6 mm - 4.8 mm**
Positions	**Flat**
Remarks	**The manufacturer guarantees impact CVN properties：min. 47J at -50℃**

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

Issued at **Hamburg** on **2026-05-06**

This Certificate is valid until **2031-05-05**.
DNV local unit: **Dalian NB & CMC**

Approval Engineer: **Jens Hörnschemeyer**

for **DNV**

This document has been digitally signed and will therefore not have handwritten signature

Ludger Hachmöller

Any significant change in design or construction may render this Certificate invalid.
LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.