

TYPE APPROVAL CERTIFICATE

Certificate no.:
TAW00004SH
Revision No:
3

This is to certify:

that the Flux Cored Wire/Gas combination

with trade name
HOBART 12J / C1

Manufacturer

Tien Tai Electrode Co., Ltd.
Tainan, Taiwan Region

is found to comply with

DNV rules for classification – Ships

DNV offshore standards

DNV class programme DNV-CP-0069 – Type approval – Welding consumables

with this approval

Grade	IV Y46MS(H5)
Current	DC(+)
Approved diameter	1.2 mm - 1.6 mm
Positions	All, including vertical downwards
Remarks	Also for fillet welding
	Manufacturer's guarantee hydrogen content less than 4ml/100g(H4)
	Impact test at -50°C average value > 47 Joule

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

Issued at **Hamburg** on **2026-01-07**

This Certificate is valid until **2030-10-01**.

DNV local unit: **Kaohsiung**

Approval Engineer: **Christine Löll**

for **DNV**



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

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.