

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Wire/Flux combination

with trade name
TSW-14H (2x) / TF-660

Manufacturer

Tien Tai Electrode (Kunshan) Co., Ltd.
Kunshan, Jiangsu, China

is found to comply with

DNV rules for classification – Ships

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

with this approval

Grade	IV Y42M(H5)
Current	Lead: DC(+) / Trail: AC
Approved diameter	2.4 mm - 5.0 mm
Positions	Flat
Remarks	Tandem welding
	Manufacturer guaranteed 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 **2025-01-06**

This Certificate is valid until **2030-01-05**.

DNV local unit: **Shanghai**

Approval Engineer: **Ludger Hachmöller**

for **DNV**



Digitally Signed By:
Martin Wenning
Location: DNV Hamburg,
Germany

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

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