Certificate No:
TAP00002RJ

TYPE APPROVAL CERTIFICATE

This is to certify:

That the stainless steel seamless multi-core tubes

with type designation(s)
Multi-Core Tubes

Issued to
Jiangsu Kexin Marine Equipment Co., Ltd.
West of Shipei road, Jichuan Street, Taixing City, Jiangsu Province, China

is found to comply with
DNV rules for classification – Ships Pt.4 Ch.6 Piping systems
DNV rules for classification – High speed and light craft
DNV rules for classification – Offshore units

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Issued at **Hamburg** on **2023-06-07**
This Certificate is valid until **2028-06-06**.
DNV local unit: **Jiangyin NB & CMC**

Approval Engineer: **Christian Kaemmer**

for **DNV**

Sven Klinger
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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.

Product description

Multicore metal tube bundles - connecting pipelines / consisting of 1 up to 6 pipes / with plastic wrap for pneumatic and hydraulic applications.

Material:

Tubes:	Austenitic steel – TIG-welded tubes and seamless tubes, made from ASTM316L or ASTM304.
Core material:	PVC, fire retardant, – PVC rod reinforcement. Flame retardant outer sheath.
Temperature: range:	-40°C up to +70°C
Sizes:	Tube outside diameter: 6 up to 16 mm, Tube thickness max. 3.0 mm
Number of cores:	1 up to max. 6 cores.

Application/Limitation

Pneumatic - and hydraulic pipe systems for marine applications.
Pipe penetrations through watertight bulkheads or decks as well as through fire divisions shall be Type Approved.

Type Approval documentation

Tests carried out

Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment to verify that the conditions for the Type Approval are complied with. Refer to the Class Programme DNV-CP-0338, Sec.4.

To check the validity of this certificate, please look it up in https://approvalfinder.dnv.com