Certificate No:
TAK000026H

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Glass Fibre Products

with type designation(s)
Direct roving E6-CR 386H

Issued to
Jushi Egypt for Fiberglass Industry S.A.E.
Ain Sokhna, **Egypt**

is found to comply with
DNV class programme DNV-CP-0082 – Type approval – Glass fibre rovings

Application :

Filament winding, pultrusion and weaving

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

Issued at **Hamburg** on **2023-01-10**
This Certificate is valid until **2028-01-09**.
DNV local unit: **Egypt**

Approval Engineer: **Joachim Rehbein**

for **DNV**

Thorsten Lohmann
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

E6-CR 386H – Series: Direct roving for filament winding, pultrusion and weaving.

Glass type: E6-CR
Size Type: Silane
Size Code: 386H

Linear density, tex	300	600	1200	2400	4800	9600
Filament diameter, µm	13	17	17	24	24	31

Variants:
E6-CR13-300-386H
E6-CR17-600-386H
E6-CR17-1200-386H
E6-CR24-2400-386H
E6-CR24-4800-386H
E6-CR31-9600-386H

Application/Limitation

Direct roving for filament winding, pultrusion and weaving.

The approval is valid for the above listed linear densities.

Designed for use with unsaturated polyester, vinyl ester and epoxy resins.

Any change in material/design will render this type approval certificate invalid.

Type Approval documentation

Tests carried out

Type Testing carried out in accordance with **Type Approval documentation**.

Marking of product

Product shall be marked with *manufacturer's name*; **Jushi Egypt for Fiberglass Industry S.A.E.** and *type designation*.

The marking is to be carried out in such a way that it is visible, legible and indelible. The marking of product is to enable traceability to the DNV Type Approval Certificate.

Periodical assessment

Periodical assessments are required after two years and after 3.5 years (retention survey) and for renewal after 5 years (renewal survey). Refer to DNV-CP-0338, Sec.4.

A production site with a valid Approval of Manufacturer (AoM) certificate for material in question is exempted from the obligation concerning retention and renewal assessments.

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in https://approvalfinder.dnv.com
END OF CERTIFICATE