DNV·GL

Certificate No:
TAK00000XF

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Glass Fibre Products

with type designation(s)
Direct Roving TGFR 315-2400

Issued to
Taiwan Glass Ind. Corp., Taoyuan Factory
Taipei, Taiwan

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

Application :

Manufacturing of fabrics and/or fibre reinforced plastics.

Issued at **Hamburg** on **2017-08-04**
This Certificate is valid until **2022-08-03**.
DNV GL local station: **Kaohsiung**

Approval Engineer: **Guido Michalek**

for **DNV GL**

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.

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Job Id: **262.1-023419-1**
Certificate No: **TAK00000XF**

Product description

Direct E-glass Roving TGFR 315-2400

Approved variants

Properties	Test Method	TGFR 315 2400	Unit
Density	ISO 1889	2400±240	TEX
Filament Diameter	ISO 1888	17±3	µm
Loss on Ignition	ISO 1887	0.50±0.15	%
Moisture Content	ISO 3344	<0.06	%

Limitation

The roving complies with the applicable requirements of DNV GL and is compatible to the laminating resin. Any significant changes in design and / or quality of the material will render the approval invalid.

Type Approval documentation

- Technical Data Sheet
- Test Report No. 16120842 issued by the DNV GL approved testing laboratory of Nanjing FRP (Approval No. GL-LZ 1308 HH), dated on 2017-03-17.
- Workshop Inspection Report issued by DNV GL Taiwan
- Quality Assurance Documentation

Assessed production sites

1, Ching-Chien 5th Road,
Shu_lin Vil., Kuan-Yin District
Tao-Yuan City 328
Taiwan (R.O.C.)

Periodical assessment

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.
For manufacturer without a valid AoM a periodical assessment after 2.5 years and at renewal after 5 years is required.

Remarks

This certificate supersedes the type approval WP 1230021 HH.

END OF CERTIFICATE