

Certificate No: **TAK00001F3**

TYPE APPROVAL CERTIFICATE

This is to certify: That the Glass Fibre Products	
i nat the Glass Fibre Products	
with type designation(s) SE 3030 - Series	
Issued to 3B-Fibreglass S.P.R.L. Battice, Belgium	
is found to comply with DNV GL class programme DNVGL-CP-0082 - Type approx	val – Glass fibre rovings
Application:	
Manufacturing of fabrics and/or fibre reinforced plastics	3 .
Issued at Hamburg on 2018-12-11	
TI. 0 ./0	for DNV GL
This Certificate is valid until 2023-12-10 . DNV GL local station: Hamburg Materials & Welding	
Approval Engineer: Guido Michalek	Thorsten Lohmann

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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Thorsten Lohmann Head of Section

Job Id: **262.1-030367-1** Certificate No: **TAK00001F3**

Product description

Direct ECR Glass Roving SE 3030 for Epoxy, Polyester and Vinylester Resins

Approved variants

Properties	Test Method	SE 3030 300	SE 3030 600	SE 3030 1200	SE 3030 2400	SE 3030 4800	Unit
Density	ISO 1889	300±25	600±36	1200±72	2400±144	4800±288	TEX
Filament Diameter	ISO 1888	16±1	17±1	17±1	17±1	24±1	μm
Loss on Ignition	ISO 1887	0.55±0.20	0.55±0.12	0.55±0.12	0.55±0.12	0.55±0.12	%
Moisture Content	ISO 3344	≤0.15	≤0.15	≤0.15	≤0.15	≤0.15	%

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. WMC-2016-047g, issued by WMC Knowledge Centre Netherlands, dated 2016-10-03.
- Test Report No. WMC-2016-047h, issued by WMC Knowledge Centre Netherlands, dated 2016-10-03.
- Test Report No. WMC-2016-047j, issued by WMC Knowledge Centre Netherlands, dated 2016-10-03.
- Workshop Inspection Report issued by DNV GL Hamburg
- Quality Assurance Documentation

Assessed production sites

3B-Fibreglass S.P.R.L.

Rue de Maestricht 67

4651 Battice

Belgien

3B-Fibreglass S.P.R.L.

Colvale, Bardez

Goa, 403513

India

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.

END OF CERTIFICATE

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