

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Glass Fibre Products

with type designation(s)

AQ - Series

Issued to

Advanced Textiles & Materials Pvt. Ltd.
Gujarat, India

is found to comply with

DNV GL class programme DNVGL-CP-0467 – Type approval – Uni- and multi-axial multi-ply fabrics made of glass fibres

Application :

Manufacturing of FRP laminates

This Certificate is valid until **2017-12-17**.

Issued at **Hamburg** on **2016-12-20**

DNV GL local station: **Mumbai CMC**

Approval Engineer: **Joachim Rehbein**

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.



Job Id:
Certificate No: **TAK00000K9**

The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Product description

AQ – Series : Quadraxial Fabric ($0^{\circ}/90^{\circ}/\pm 45^{\circ}$)

Approved variants

Quadraxial fabrics with or without Chopped Strand Mat / Veil and the following fabric weights:

- AQ ($0^{\circ}/\pm 45^{\circ}/90^{\circ}$): 350 - 2500 g/m²
- Chopped Strand Mat: 70 - 600 g/m²
- Veil: 20 - 90 g/m²

This approval covers also the identical fabrics with designation SQ – series produced by SKAPS Industries India Pvt. Ltd.

Application/Limitation

Applicable for the construction of FRP - laminates, on condition that the fabric or chopped strand mat is compatible to the resin and adhesive.

Any significant changes in design and/or quality of the material will render the approval invalid.

This certificate supersedes certificate WP1330045HH, dated 2013-12-18.

Type Approval documentation

Tests carried out

Production tests: GSM, linear density, moisture content, loss of ignition

Assesed production sites:

Advanced Textiles & Materials Pvt. Ltd.
Survey no. 117, Opp. Narmada Water Canal
Village-Khakharia, Near Halol
Taluka-Savli. Dist. - Valodara 391510
India

SKAPS Industries India Pvt. Ltd
SEZ DIV. UNIT-II Plot No. 10, Road No. 12F,
Sector 12S, MITAP, Mundra SEZ,
Mundra 370421
India

If not listed here a valid Approval of Manufacturer has to be available for all production sites which want to supply material covered by this certificate.

Marking of product

Product shall be marked with manufacturer's name 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 GL Type Approval Certificate.

Periodical assessment



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The scope of the Periodical Assessment is to verify that the conditions stipulated for the Type Approval is complied with and that no alterations are made to the product design or choice of materials.

Periodical Assessment shall be performed after 2.5 years (Certificate Retention) and at renewal after 5 years (Certificate Renewal).

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