

Certificate No: **TAK00000NM** Revision No:

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Glass Fibre Products

with type designation(s)
Y-(S-V-) E-Series, K-(S-V-) E-Series

Issued to

SAERTEX GmbH & Co. KG Saerbeck, Germany

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

Issued at Hamburg on 2018-07-04

for **DNV GL**

This Certificate is valid until **2023-07-03**.

DNV GL local station: Hamburg Materials & Welding

Approval Engineer: Guido Michalek

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.



Form code: TA 251 Revision: 2016-12 www.dnvgl.com Page 1 of 2

Job Id: **262.1-029207-1** Certificate No: **TAK00000NM**

Revision No: 1

Product description

Triaxial fabric made of E-Glass with/without CSM*

Layer structure: $(0^{\circ}/\pm 45^{\circ})$ or $(90^{\circ}/\pm 45^{\circ})$

Mass per unit area Fabric ($0^{\circ}/\pm 45^{\circ}$): 300-3400 g/m²

Fabric (90°/±45°): 300-2500 g/m² CSM: 20-1200 g/m²

Max. width: 3810 mm

*) Chopped Strand Mat for this product is an option.

Limitation

The fabric 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. 1.1/26010/539-2002e issued by Institut für textile Bau- und Umwelttechnik GmbH in Greven, dated 2004-01-13.
- Quality Documentation

Assessed production sites:

Saertex GmbH & Co.KG Saertex France SAS

Brochterbecker Damm 52 2 lot Parc d'activities d'Arandon

48369 Saerbeck 38510 Arandon

Germany France

Saertex South Africa (PTY) Ltd. Saertex USA, LLC.

25 Boland Street Daljosafat 12200 Mt. Holly-Huntsville Rd.

RSA-7624 Paarl Suite A

South Africa Huntsville, NC 28078

USA

Saertex India Private Limited Saertex Portugal, Unipessoal Lda S.No. 282, Mann Village Mulshi Parque Empresarial de Lanheses

Pune 411 057 Fraccao 5B

India Estrada do Engenho 320 4925-432 Lanheses

Portugal

Saertex Reinforcements (Dongying) Co., Ltd.

No. 102, Yihe Road, Dongying Economic Development Zone

Shandong Province, 257091

P.R. China

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

None

End of Certificate

Form code: TA 251 Revision: 2016-12 www.dnvgl.com Page 2 of 2