



TYPE APPROVAL

Certificate No.:
TA-DNV-CP-0467-10729-0

Issued:
2024-04-26

Valid until:
2028-07-03

Issued for:

Biaxial fabric made from glass fibres

with type designation(s)

X-(S)-E-Series, B-(S)-E-Series

As specified in Annex 1

Issued to:

SAERTEX GmbH & Co. KG

Brochterbecker Damm 52, 48369 Saerbeck, Germany

According to:

DNV-SE-0436:2022-09 Shop approval in renewable energy

and

DNV-CP-0467:2021-09 Type approval – Uni- and multi-axial multi-ply fabrics made of glass fibres

Applying:

DNV-SE-0441:2021-10 Type and component certification of wind turbines

Based on the documents listed in Annex 1.

This Type Approval supersedes the Type Approval TAK00000N9 Rev. 1

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

Hellerup, 2024-04-26
For DNV Renewables Certification

Hamburg, 2024-04-26
For DNV Renewables Certification



Bente Vestergaard
Service Line Leader

By DAKKS according to DIN EN IEC/ISO 17065 accredited Certification Body for products. The accreditation is valid for the fields of certification listed in the certificate.

Bernhard Krüger
Project Manager

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Product description and application

Biaxial fabrics made of e-glass with or without CSM for application in FRP components of wind turbine generators (rotor blades, nacelle covers, spinners) and other applications.

Approved variants

X-(S)-E-XXg/m²-YYmm

B-(S)-E-XXg/m²-YYmm

With:

X: Ply construction $\pm 45^\circ$

B: Ply construction $0^\circ/90^\circ$

S: With CSM

E: E-glass

XX: Total areal weight in g/m²

YY: Width of the fabric in mm

With the following ranges:

Areal weight range fabric	Areal weight range CSM	Width
200 – 2300 g/m ²	20 – 1200 g/m ²	30 – 3810 mm

The assignment of roving to fabric layer areal weights is as follows:

Linear density of roving	Fabric layer areal weight
34 – 68 TEX	≤ 200 g/m ²
136 – 600 TEX	≤ 800 g/m ²
900 – 4800 TEX	≤ 2300 g/m ²

Type Approval documentation

Technical data sheet(s)	30007626, Technical Datasheet for B-E-1243g/m ² -1270mm 30011087, Technical Datasheet for X-E-810g/m ² -2540mm 30004644, Technical Datasheet for X-E-832g/m ² -2540mm 30011931, Technical Datasheet for B-S-E-1137g/m ² -1524mm
Safety data sheet(s)	Safety data sheet according to Regulation (EC) No 1907/2006, Annex II for Glass-Fabric, revision 2, dated 2022-11-09
Test report(s)	LA-23-3498, Test report B-E-1243 g/m ² -1270 mm Tensile and Bending, dated 2024-01-22
Inspection documentation	WIR-10728/29/30/31/32/33/34/35-001-0, workshop inspection report for Saerbeck Germany, DNV, dated 2024-01-10 WIR-10728/29/30/31-002-0, workshop inspection report for Saerbeck Portugal, dated 2024-01-10
Quality control documentation	ISO 9001:2015 certificate no. 80116044/3, DEKRA Certification GmbH, dated 2023-11-16 ISO 9001:2015 certificate no. LT005629 for Saertex Baltics UAB, Bureau Veritas, dated 2021-08-20 Inspection certificates for batch no's. 1285051, 1311394 and 1298542

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Approved production sites

Saertex Germany Gmbh & Co. KG
Brochterbecker Damm 62
48369 Saerbeck
Germany

Saertex Portugal, Unipessoal Lda.
Parque Empressarial de Lanheses
Fracao 5B, Estrada do Engenho 320
4925-432 Lanheses
Portugal

Saertex France SAS
2 lot Parc d'activités d'Arandon
38510 Arandon
France

Saertex South Africa (PTY) LTD.
25 Boland Street Daljosafat
7624 Paarl
South Africa

Saertex USA, LLC.
12200 Mt. Holly-Huntersville Rd.
Suite A
Huntersville, NC 28078
USA

Saertex India Private Limited
Saertex Excellence Centre
S. No. 282, Mann Village Mulshi
Pune 411057
India

Saertex Tecidos Brasil Ltda.
Condominio Industrial Caldeira
Et General Motors, 852
Halls 109 and 20
CEP 13347-500 – SP
Brasil

Saertex Turkey
Organize Sanayi Bölgesi Mahallesi
2. Cadde. No:14
Torbali / İzmir
Turkey

Saertex Mexico SA DE CV
Blvd. Manuel Talamas
Camandri 10085
32695 Cd Juarez, Chih
Mexico

Saertex Baltics UAB
Pramonės g. 20 D
81123 Kuršėnai
Lithuania

Certificate maintenance

In the case of major changes of the approved production processes and methods during the validity time of the Type Approval, the changes shall be reported to DNV. A periodical assessment needs to be carried out 2.5 years after the issue date of the Type Approval. An intermediate inspection of the production workshop(s) might be needed based on the implemented changes. The workshops Saertex Germany and Saertex Portugal had been inspected in connection with the re-certification. All remaining workshops need to be inspected during the validity period of the Type Approval to maintain the certificate's validity. Evidence for the inspections will be provided through separate workshop inspection reports.