

Weaving, NCF, Prepregs, Filament Winding, Pultrusion, ...

Advantex® glass

Advantex® glass is a boron-free glass and presents significantly improved corrosion resistance across a wide range of aggressive environments.

Advantex® glass is an E-CR glass in accordance with ASTM D578 and ISO 2078.

This translates into important benefits for end-users over traditional E-glass: longer service life, larger safety coefficients for the same design, and material savings. Traditional E-glass includes boron and often contains added fluorides. By using new manufacturing technology to eliminate these components from the glass composition, Advantex® glass has become a benchmark for integrated pollution prevention and the highest energy efficiency – all in an optimized process.

3B measures its efforts and works continually to minimize its impact on the environment and to set new standards within the global glassfibre industry. This is our commitment.

Advantex® glass is available from 3B European facilities in Battice - Belgium and Birkeland - Norway.

www.3B-fibreglass.com

SE 2020

Direct Roving for Epoxy Resins



Product Description

3B Direct Rovings consist of continuous filaments bonded into a single strand and wound onto a bobbin shape. A proprietary sizing applied on the fibres assures an excellent resin-to-glass bonding.

SE 2020 Direct Rovings made of Advantex® glass are specifically designed for the production of Non Crimped Fabrics.

The sizing of SE 2020 Direct Rovings is specifically designed for excellent adhesion with epoxy resin systems.

SE 2020 Direct Rovings present high level of fatigue performances, superior interfibre and interlaminar shear strengths.

The SE 2020 Roving is approved by Germanischer Lloyd for the use in wind turbine rotor blades.

SE 2020 Direct Rovings made of Advantex® glass can also be used in prepreg, filament winding processes.

Please contact us for further assistance.

FEATURES	BENEFITS
Boron-free ECR glass	High corrosion resistance
Epoxy compatible	High fatigue performances of composites parts Improved inter fibre (transverse tensile) and interlaminar shear strengths Enhanced laminate quality Approved by Germanischer Lloyd for windmill blades manufacturing
Medium strand integrity	High productivity and quality in Non Crimped Fabrics operations

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Direct Roving for Epoxy Resins

PRODUCT PORTFOLIO

Product Name	Filament diameter µm	Linear Density tex (gr/km)	Bobbin type
SE 2020	16	300	R
SE 2020	17	600	C
SE 2020	17	1200	C
SE 2020	17	2400	C
SE 2020	24	4800	C

FIBRE PROPERTIES

Density	CLTE (ASTM D696)	Tensile Strength (ASTM D2343-08)	Tensile Modulus (ASTM D2343-08)
2.62 gr/cm ³	6.10 ⁻⁶ K ⁻¹	2200-2500 MPa	81 GPa

TYPICAL UNI-DIRECTIONAL LAMINATES PROPERTIES (Glass Vf 55%)

	Tensile Strength 0° (ISO 527-5)	Tensile Modulus (ISO 527-5)	Tensile Strength 90° (ISO 527-5)	ILSS (ISO 14130)	Fatigue 1 000 000 cycles
UD 1150 Fabric	980 MPa	44 GPa	61 MPa	59 MPa	255 MPa / R= -1

PACKAGING

Bobbins are individually wrapped with stretched plastic film for protection, improved handling and to allow optimum transfer from bobbin to bobbin. Nominal weights for R and C bobbins are respectively 21 and 25 kg.

Two pallet configurations are available:

- Bulk Pack: standard packaging, consists of individual bobbins.
- Creel Pack: bobbins are connected together for continuous unwinding and no bobbins handling for operators.

For detailed information about bobbins, pallet weight, dimensions and layout please contact us.

STORAGE

Storage in a cool and dry warehouse into the original packaging is formally recommended. More precisely ideal storage conditions are a temperature between 15°C and 35°C and a relative humidity comprised between 35% and 75%. If these conditions are maintained, the glass fibre product should not undergo significant changes when stored for extended periods of time. It is also strongly recommended to condition it in the workshop for at least 24 hours before use to prevent condensation.

For an optimal processing it is recommended to use the product in ambient conditions (20°C-23°C and a relative humidity of 60%-65%).

Binani **3B** the fibreglass company

B R A J B I N A N I G R O U P

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