

Textiles

– Non-Crimp Biaxial

T E N R O N[®]

Product description

Non-crimp biaxial is made of multiple layers of unidirectional and stitch-bonded TENRON fibres.



Article reference

NCF (NON-CRIMP FABRIC), EX.: **NCF BX BSB3_210.±45.100.0127.IS65T**

- Batch composition's reference _____
- Specific surface weight (gr/m²) _____
- Construction Pattern (fibres orientation) _____
- Length of roll (m) _____
- Width of roll (cm.) _____
- Sizing reference^(*) _____

Properties

Volume density of constituent fibres
(according to ASTM C693)

2.600 gr/cm³

Specific surface weight

From 200 up to 1.200 gr/m²

Constituent filament diameter

9 to 11 µm.

Coefficient of variation

2,5%

Thickness

From 0.4 up to 3,0 mm.

Standard Construction

±45°; 0°–90°

Thermal properties

(according to DIN ISO 7884)

Melting point

1.560 °C

Transition temperature

730 °C

Softening point

940 °C

Sizing

Content, % weight (loss of ignition, LOI):

0,4 – 1,5 % (according to sizing and customer's request)

Moisture content, % weight:

Less than 0,1 %

Resin (matrix) compatibility:

Ceramic matrix materials, epoxy, polyester, vinylester, PA, PP, PEEK, BMI, etc..

Mechanical properties

Sized and dried roving

(according to ISO 3341:2000)

- Tensile strength: 66 80 cN/tex
(depending on the sizing formulation):
1.580 ... 2.000 MPa
- Elongation at break: 2,10%
- Tensile modulus (Young or E-modulus):
90 ... 100 GPa

Impregnated strand (according to ASTM D2343 or ISO 9163:2005:)

- Tensile strength: 3.400 ... 3.600 MPa
- Tensile modulus (Young or E-modulus):
86 ... 97 GPa

Operating thermal range

(continuous)

from -200°C up to 850°C

^(*) see TENRON Sales department for more information

Standard Packaging

The rolls are individually labeled and wrapped with stretched plastic film for protection and improved handling.

Width (cm)

127 cm

Length (m)

From 100 to 500 m

Weight (kg)

Depending on length and surface weight

Inner diameter of cardboard sleeve

150,0 mm. (by default)



Benefits of Tenron in end-applications

Please see our website, under "applications".

Storage and usage conditions

Tenron recommends storage in a cool and dry warehouse into the original packaging. For an optimal processing we recommend to use the product in ambient conditions (20 - 23 °C, 60- 65% relative humidity). TENRON roving need to be kept in the workshop at least 24 hours prior to usage.

Sustainability

-  TENRON respects the environmental directives of the **European Union** and is **REACH compliant** (Regulation, Evaluation, Authorisation and Restriction of Chemicals) .
-  TENRON is fully and easily recyclable. For more information on **sustainability** and our **LCA**, please see our website and / or contact us.

For more detailed information, please contact the Tenron Sales Department at info@tenron.com or by phone at the following number: **+32 (0)81.72.86.86**




DISCLAIMER OF LIABILITY

The above shown data is presented solely as a guide in the selection of a fibre reinforcement. The information mentioned in this leaflet is based on actual TENRON' laboratory data and field test experience. Because of numerous factors in downstream processability affecting results, we consider this information to be reliable, but do not guarantee its applicability to the use's process or assume any liability arising out of its use or performance. The end-user, by accepting the products described herein, assume the responsibility for thoroughly testing any application to determine its compliance before committing to production. It is important for the end-user to determine the properties of its own commercial compounds when using this or any other fibre reinforcement.

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Strong by Nature

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