

CARBON MINI TAPES

UNIDIRECTIONAL MATERIAL SOLUTION

Our Carbon Mini Tapes are the ideal solution for composite components with tight tolerances, complex shapes, or specific reinforcement zones. The additional powder coating strengthens fiber bonding and specifically enhances material properties – particularly for the production of preforms.

The variable carbon fiber input enables flexible material design with widths starting from 6 mm / 0.24 in. A dry powder coating improves fiber bonding and ensures accurate fiber placement.

✓ **Maximum precision for applications with tight tolerances**

Ensures excellent dimensional accuracy and is therefore ideal for applications that require strict tolerances and consistent quality.

✓ **Minimized material losses**

Optimized material utilization leads to reduced waste, lower production costs and a more sustainable manufacturing process.

✓ **Efficient and automated processing for complex geometries**

Enables production of intricate shapes with automated manufacturing techniques like fiber placement, reducing manual effort and increasing overall efficiency.

✓ **Smart online monitoring**

Continuous real-time data tracking and process control enhance quality assurance, ensuring reliable performance and early detection of deviations.

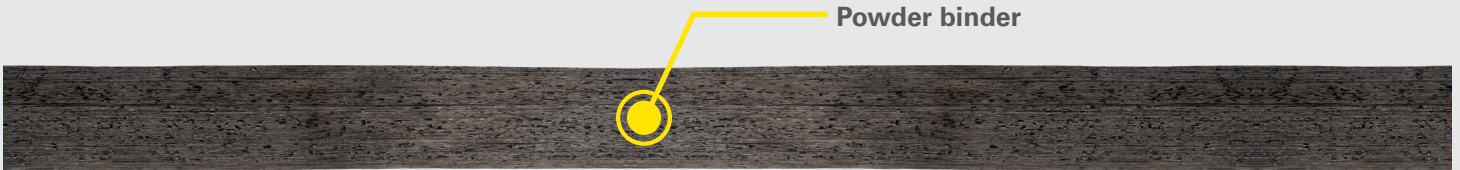


Full production control

- Automatic quality monitoring of all customer requirements
- Direct detection and classification of deviations (e.g. fiber width deviations or tow split)
- Seamless traceability of fiber input for continuous optimization

This online inspection results in:

- 1 More efficiency
- 2 Higher quality
- 3 Fewer rejects



Powder binder

Powder binding is a process in which powdered polymers are applied to the textile structure. The powder is evenly distributed across the tape surface and fixed in place. During the initial preforming stage of component manufacturing, the powder is thermally activated and fixates the Mini Tapes during placement in the defined shape.

The result is a storage-stable, dimensionally stable preform that can later be infiltrated with matrix resin in RTM or compression molding processes.

TECHNICAL DATA	SPECIFICATION	STANDARD MATERIAL
Carbon fiber input	12K - 50K	24K Toray T620
Widths*	0.24 - 0.87 in	0.39 in
Dry powder binder	0.12 - 0.59 oz/yd ²	0.15 oz/yd ²

* Width tolerance are based on customer requirements and very depending on the product type. Detailed specifications are available on request.

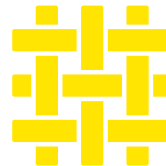
TYPICAL APPLICATIONS



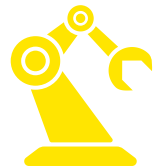
Wheels especially for sports cars and SUVs



Industrial applications like tennis rackets



Intermediates like woven fabrics



Processes like automated fiber placement (AFP)



Product availability and specifications may vary by region. Please contact us for details.

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