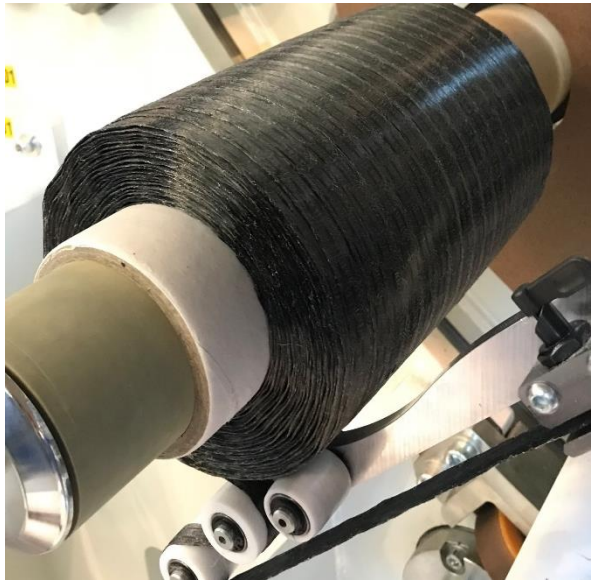
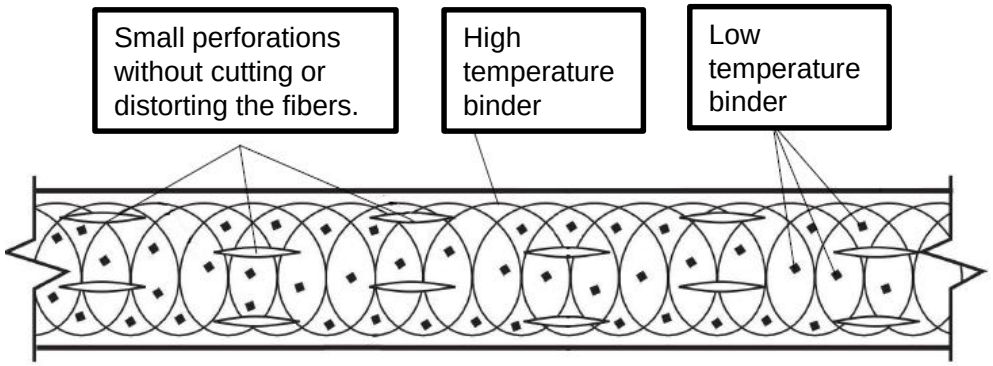
Dry carbon fiber tape





Material description	Advantages
Thermoplastic veil – High temperature binder	Improved permeability in plane and cohesivity.
AFP binder – Low temperature binder	Allows excellent forming in AFP and rapid laydown of tapes. Easy removal of tapes if necessary. Heat activated binder.
HS, IM and HM Carbon fibres	Non-slit tape. Improved mechanical performance. Possibility to select different carbon fiber modulus and tow size.

General product specifications:

- Non-slit tape that improves mechanical properties since the filaments are not cut.
- Low fuzz.
- Better permeability compared to conventional dry tape materials.
- Different areal weight and tape width are available.
- Width control – excellent tolerance.
- Good performance with different high and low temperature binders.
- Room temperature storage and unlimited shelf life.
- Suitable for AFP machines.
- Low bulk factor.
- Low roller compaction force.

Aerospace dry carbon fiber tape

Product Specifications:

- Through thickness (K33) permeability values up to $10E^{-13}$, independent of inter-tow gaps.
- High fiber volume.
- Excellent steering lower than 3 meter radius for ½" tape width.
- Width control – excellent tolerance considering that is not a carbon fiber slit tape.
- No autoclave.
- Liquid composite moulding: infusion, injection.

Table 1. Mechanical Properties dry UD HS CF 50K RTM6 of ½" tape width.

Test	Unit	Lay-up	Plies	Test Spec	Results
0° Tensile Strength	MPa	$[0°]_6$	6	EN 2561	1880
0° Tensile Modulus	GPa				132
0° Compression Strength	MPa	$[0°]_6$	6	EN ISO 14126	1270
0° Compression Modulus	GPa				117
Tg	°C	$[0°]_6$	--	EN ISO 11357-2	210

Industrial dry carbon fiber tape

Product Specifications:

- Better permeability compared to conventional dry tape materials.
- Areal weight up to 550 gsm carbon fiber.
- Excellent steering depending on areal weight and width.
- Tape width adjusted from ½" to 2".
- Width control – excellent tolerance.

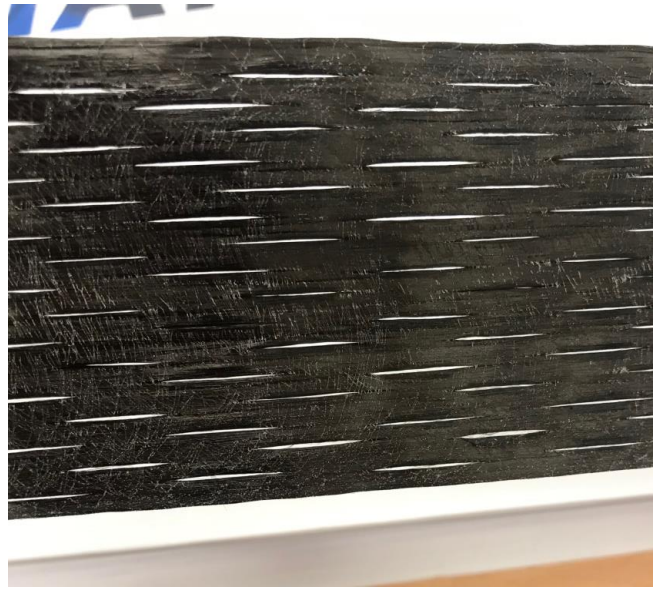


Table 2. Mechanical Properties dry UD HS CF 50K Huntsman XB 6469 of ½" tape width

Test	Unit	Lay-up	Plies	Test Spec	Results
0° Tensile Strength	MPa	$[0°]_7$	7	EN ISO 527-5	1732
0° Tensile Modulus	GPa				114
0° Compression Strength	MPa	$[0°]_7$	7	EN ISO 14126	740
0° Compression Modulus	GPa				101
ILSS	MPa	$[0°]_7$	7	EN ISO 14130	52,1
Tg	°C	$[0°]_7$	--	EN ISO 11357-2	113