



SUPERCOMP™ Continuous Carbon Fiber Reinforced with Z-axis Milled Fiber

Light, stiff, and sustainable materials that enable your next generation of prosthetics

Supercomp by Boston Materials

Using a patented process, Boston Materials reinforces carbon fiber materials with Z-axis milled fiber to manufacture Supercomp. This breakthrough material enables prosthetic manufacturers to overcome economic, performance, and processing limitations that challenge their use of carbon fiber. Light, stiff, and sustainable materials that enable your next generation of prosthetics.

Supercomp roll goods are commercially available as dry reinforcements for use with your specific resin system or as a prepreg. Both with unidirectional (UD) and woven carbon fabric. Supercomp roll goods can be slit into narrow tape that is 1" wide without fraying or the need for stitching.

NO FRAYING

Supercomp can be cut easily without fabric fraying, allowing for finer features in pre-forms. The Z-axis milled carbon fiber holds the continuous fiber together during cutting and handling.



RECYCLED AEROSPACE FIBER

Supercomp products are made with 50% milled carbon fiber. The milled fiber is sourced from scrap generated by aircraft manufacturers. This alternative source for carbon fiber enables a cost reduction over commercially available carbon fiber products.



DRAPABILITY

Supercomp provides a non-crimp milled fiber layer that can easily morph to tight geometries and eliminate air pockets to give a consistent surface finish. Supercomp parts have been made with a fine as 1/32" (0.8mm) radii features.



What to Expect with Supercomp?



TIME SAVING

Labor costs are always a concern in building composite products. Supercomp fabrics allow for faster build up of layer thickness and reduced labor cost.

LESS FLEX

Create novel micro-sandwich core structure with Z-axis milled carbon fiber to improve flexural stiffness by 25%.



RESIN WICKING

Supercomp has vertical microcapillaries that quickly wick resin through the thickness of the reinforcement, giving consistent wet-out.