



AEROSPACE

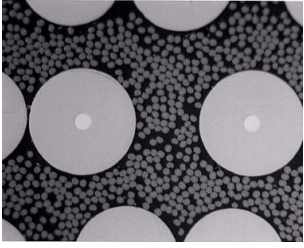


Enhance structural efficiency
of composite structures for
spars, longerons, rotors, and
control surfaces with Hy-Bor®.





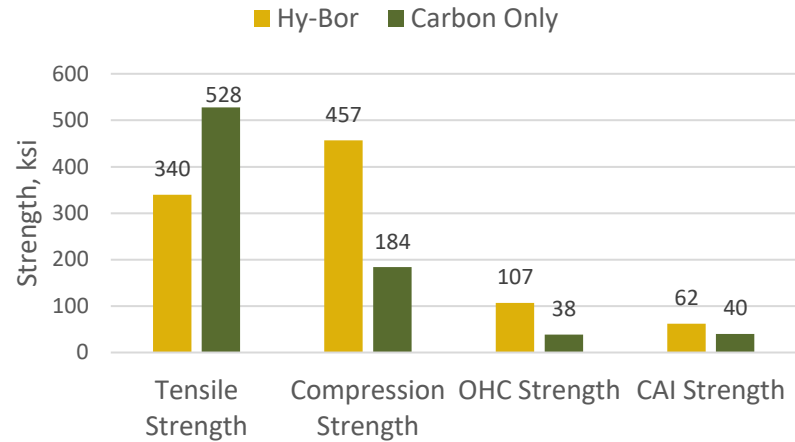
GEN 2 HY-BOR®



Access the highest polymer-based composite compression properties with our Gen 2 Hy-Bor® family of high-performance hybrid prepregs combining Toray's resins and intermediate modulus TORAYCA® carbon fibers with Specialty Materials' boron fibers.

Properties

- 6-inch wide prepreg tape using Specialty Materials Aerospace Grade 0.004-inch (100- μ m) Boron Fiber and domestically produced high strength intermediate modulus 12K and 24K T8000G or T1100G TORAYCA® carbon fiber
- Produced with a wide range of Toray structural and high temperature resins including toughened epoxies (TC250, TC275-1(E), TC380, TC350-1), cyanate esters (RS-3C, TC420), bismaleimides (RS-8HT), and polyimides (RS-51)
- Reduced carbon fiber ply-count and thickness in compression-critical applications
- Boron fiber elastic modulus of 62-Msi increases the stiffness of intermediate modulus carbon fiber composites
- Increased bearing strength compared to standard, intermediate and high modulus carbon fiber composites



Hy-Bor® 208 B4/T1100/TC380 vs T1100/TC380 Carbon Fiber (TC380 is an OOA friendly, highly toughened structural epoxy.)

Hy-Bor® can greatly increase compression strength with a ~2-3x enhancement of all compression related properties (Open Hole Compression and Compression After Impact).

- Nominal cured ply thickness is 0.0062-inch (208-fpi) or 0.0049-inch (104-fpi)
- Available as full-count (208-fpi) or reduced counts of Boron fibers based on the needs of your application

Contact our technical support for assistance and consultation on performance requirements and material evaluations.

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TORAY
Innovation by Chemistry