






# HYCOMP™ COMPOSITES MATERIAL COMPARISON

**H310®** PI resin

Reinforced with carbon fibers  
Highest strength at high temperature  
*Aerospace Grade*

**General**  
Specific Gravity: 1.54  
Continuous use temperature:  
+315°C (+600°F)

**Mechanical**  
Tensile Strength  
  
314 MPa (45,540 psi)  
Compressive Strength  
  
628 MPa (91,080 psi)  
Flexural Strength  
  
546 MPa (79,190 psi)  
Thermal expansion - Perpendicular  
  
27x10<sup>-6</sup> m/m/°C  
Thermal expansion - Parallel  
  
4x10<sup>-6</sup> m/m/°C






**Available as**  
Basic Shapes  
✓ Finished Parts

**Manufacturing Process**  
Sheet molding

**H320®** PI resin

Reinforced with glass fibers  
High temperature heat shields & electrical insulation applications

**General**  
Specific Gravity: 1.88  
Continuous use temperature:  
+315°C (+600°F)

**Mechanical**  
Tensile Strength  
  
234 MPa (33,940 psi)  
Compressive Strength  
  
331 MPa (48,010 psi)  
Flexural Strength  
  
434 MPa (62,945 psi)  
Thermal expansion - Perpendicular  
  
43.2x10<sup>-6</sup> m/m/°C  
Thermal expansion - Parallel  
  
14.4x10<sup>-6</sup> m/m/°C






**Available as**  
Basic Shapes  
✓ Finished Parts

**Manufacturing Process**  
Sheet molding

**Wearcomp®** PI resin

Reinforced with carbon fibers  
Outstanding mechanical strength & wear resistance at high temperature

**General**  
Specific Gravity: 1.54  
Continuous use temperature:  
+315°C (+600°F)

**Mechanical**  
Tensile Strength  
  
220 MPa (31,910 psi)  
Compressive Strength  
  
517 MPa (79,985 psi)  
Flexural Strength  
  
345 MPa (50,040 psi)  
Thermal expansion - Perpendicular  
  
27x10<sup>-6</sup> m/m/°C  
Thermal expansion - Parallel  
  
3.6x10<sup>-6</sup> m/m/°C






**Available as**  
Basic Shapes  
✓ Finished Parts

**Manufacturing Process**  
Sheet molding

**Wearcomp® 200** PI resin

Reinforced with carbon fibers & graphite  
Extreme mechanical strength & wear resistance at high temperature

**General**  
Specific Gravity: 1.59  
Continuous use temperature:  
+315°C (+600°F)

**Mechanical**  
Tensile Strength  
  
138 MPa (20,015 psi)  
Compressive Strength  
  
296 MPa (42,930 psi)  
Flexural Strength  
  
209 MPa (30,310 psi)  
Thermal expansion - Perpendicular  
  
27x10<sup>-6</sup> m/m/°C  
Thermal expansion - Parallel  
  
3.6x10<sup>-6</sup> m/m/°C

**Available as**  
Basic Shapes  
✓ Finished Parts

**Manufacturing Process**  
Sheet molding

