Product Highlights

Cost-effective fabrication of thick composite structure with chopped fiber billet stock.

Description
Typical Thickness 13–63.5 mm (0.5–2.5 in)

Standard Billet Block Sizes
- 15.2 x 15.2 cm (6" x 6")
- 20.3 x 25.4 cm (8" x 10")
- 30.5 x 30.5 cm (12" x 12")
- 45.7 x 45.7 cm (18" x 18")
- 35.6 x 71.1 cm (14" x 28")

Typical Applications
- Hard point attachments
- Prototype/small-volume parts
- Initial design proofing of compression molded parts
- Hard to fabricate complex composites parts

Typical Neat Resin Properties
- Part fabrication without the cost of tooling
- Reduces the cost of thick composite laminate manufacturing
- Provides significant labor efficiencies
- Weight reduction of 40% over aluminum

MS-4H, 1” Chop Length, Mechanical Properties

<table>
<thead>
<tr>
<th>Properties</th>
<th>Condition</th>
<th>Method</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength</td>
<td>RT</td>
<td>ASTM D 3039</td>
<td>144 MPa</td>
</tr>
<tr>
<td>Tensile Modulus</td>
<td>RT</td>
<td>ASTM D 3039</td>
<td>29.8 GPa</td>
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<tr>
<td>Flexural Strength</td>
<td>RT</td>
<td>ASTM D 6272</td>
<td>387 MPa</td>
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<tr>
<td>Flexural Modulus</td>
<td>RT</td>
<td>ASTM D 6272</td>
<td>29.7 GPa</td>
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<tr>
<td>Compressive Strength</td>
<td>RT</td>
<td>ASTM D 6484 (No Hole)</td>
<td>271 MPa</td>
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<tr>
<td>Compressive Modulus</td>
<td>RT</td>
<td>ASTM D 6484 (No Hole)</td>
<td>38.3 GPa</td>
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<tr>
<td>Pin Bearing (Single Shear)</td>
<td>RT</td>
<td>ASTM D 5961 Method B</td>
<td>441 MPa</td>
</tr>
</tbody>
</table>

Properties shown are from machined test coupons. Net molded test coupon properties will be considerably higher (see MS-4H TDS).

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