

Data Sheet

DAHLTRAM® I-350CF

High temperature additive manufacturing

DESCRIPTION

Dahltram® I-350CF is a cost effective, high temperature use, additive manufacturing polymer for 176°C service. It is reinforced with carbon fibre for maximum strength and long term performance. Dahltram® I-350CF is ideal for high temperature tooling solutions and high temperature master moulds. Additionally, it is vacuum tight, autoclave capable, and can be machined to the tolerances and surface finish required.

BENEFITS

- Additive manufactured tools can go from conception to the production floor in days not weeks.
- Dahltram® I-350CF is a cost effective solution ideal for 176°C cure systems and much more.
- Provides higher strength, higher temperature performance with lower creep.
- Carbon reinforcement offers greater stiffness versus glass and low warpage for predictable results.
- Better moisture absorption, better strength to weight, higher stiffness, and higher flexural strength than other high temperature additive manufacturing resins.

TECHNICAL DATA

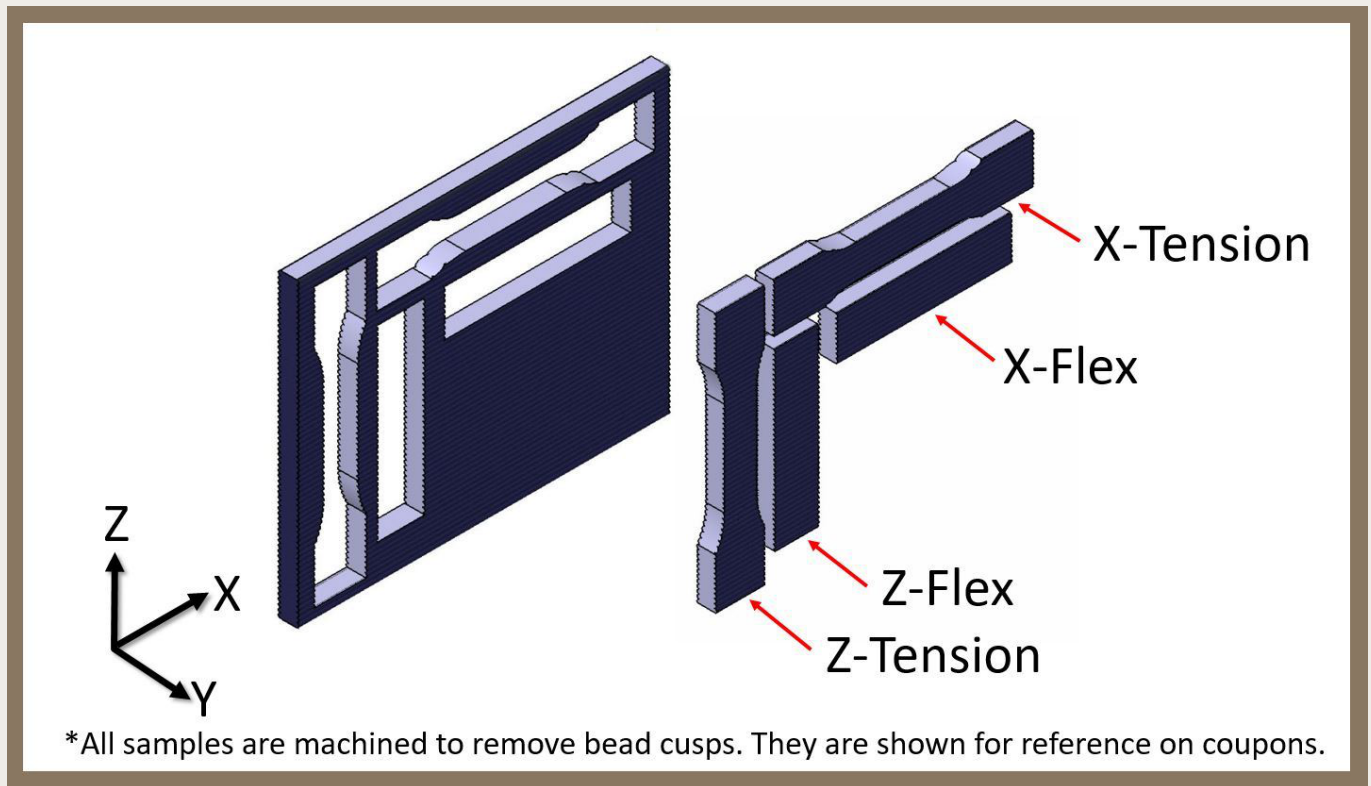
Physicals	Typical Values	Test Method
Base Polymer	Modified PEI	
Reinforcements	Carbon Fibre	
% Fibre Loading	20%	
Tensile Strength		
X Direction	126 MPa	Modified ASTM D638
Z Direction	68 MPa	Modified ASTM D638
Tensile Modulus		
X Direction	11,7 GPa	Modified ASTM D638
Z Direction	3,8 GPa	Modified ASTM D638
Flexural Strength		
X Direction	194 MPa	Modified ASTM D790
Z Direction	107 MPa	Modified ASTM D790
Flexural Modulus		
X Direction	13,1 GPa	Modified ASTM D790
Z Direction	4,1 GPa	Modified ASTM D790
HDT, 1,82 Mpa, 3,22 mm	212°C	ASTM D648 (Annealed)
Water Absorption (24 hr)	0,17%	ASTM D570
Density	1,34 g/cc	ASTM D792

*Where X is the bead print direction and Z is through the bead thickness.

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NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature, and is process specific, Airtech recommends testing prior to use.

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Catalogue position : [Print-Tech®](#)