

Fiche Technique

DAHLTRAM® I-350CF

High temperature additive manufacturing

DESCRIPTION

Dahltram® I-350CF is a cost effective, high temperature use, technical resin for additive manufacturing with a maximum recommended use temperature of 204°C (400°F). It is reinforced with carbon fibre for maximum strength, stiffness, and long-term performance. Dahltram® I-350CF is ideal for applications demanding ultimate performance, rapid prototypes, functional end use parts, high temperature tooling solutions, and high temperature master molds.

BENEFITS

- Dahltram® I-350CF is a cost-effective solution ideal for high strength applications, rapid prototypes, functional mock-ups, 176°C (350°F) cure systems, and much more.
- Carbon reinforcement provides higher strength, and higher temperature performance with lower creep.
- 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 Fiber	
% Fibre Loading	20%	
Tensile Strength		
X Direction	18.3 ksi (126 MPa)	Modified ASTM D638
Z Direction	9.8 ksi (68 MPa)	Modified ASTM D638
Tensile Modulus		
X Direction	1.7 Msi (11.7 GPa)	Modified ASTM D638
Z Direction	0.5 Msi (3.8 GPa)	Modified ASTM D638
Flexural Strength		
X Direction	28.2 ksi (194 MPa)	Modified ASTM D790
Z Direction	15.5 ksi (107 MPa)	Modified ASTM D790
Flexural Modulus		
X Direction	1.9 Msi (13.1 GPa)	Modified ASTM D790
Z Direction	0.6 Msi (4.1 GPa)	Modified ASTM D790
HDT, 1.82 Mpa, 3.22 mm	212°C (414°F)	ASTM D648 (Annealed)
Water Absorption (24 hr)	0.17%	ASTM D570
Density as Printed	1.15 g/cc (0.042 lb/in ³)	ASTM D792

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

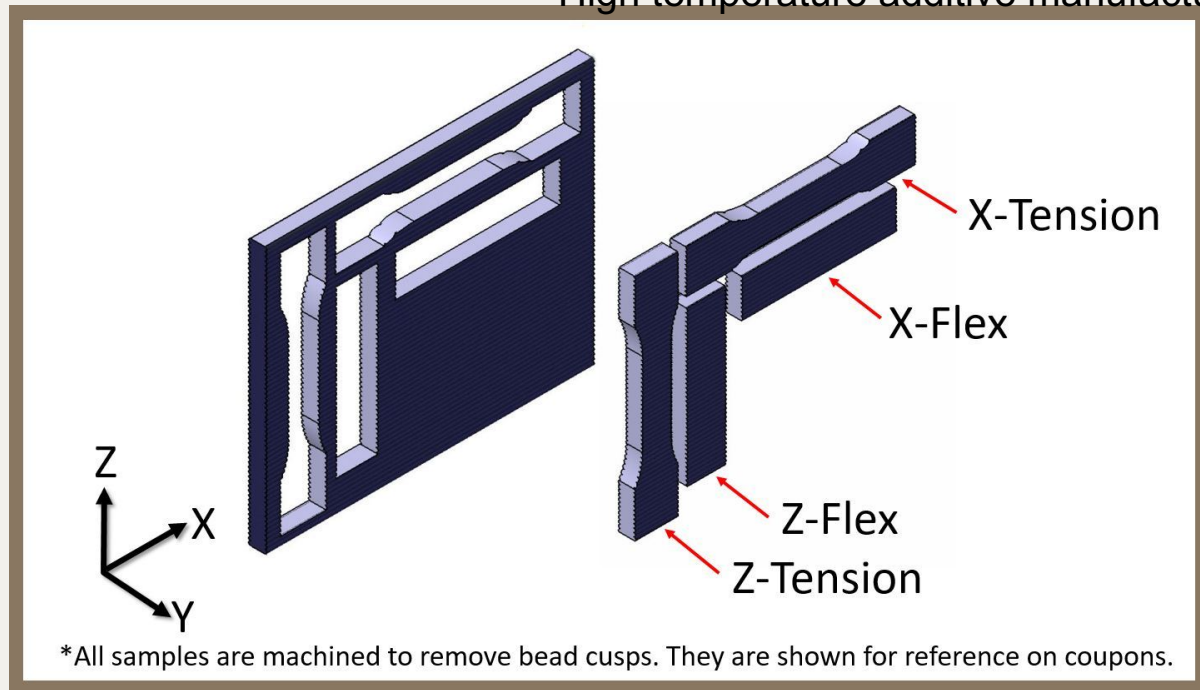
SIZES

Weight	Packaging	Form
25 kg (55 lb)	Bag	Pellet
100 kg (220 lb)	Drum	Pellet
590 kg (1,300 lb)	Box	Pellet

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**SUSTAINABILITY**Can be
recycledRecyclable
packaging**NOTES**

- As-printed mechanics from samples produced by a 12.7mm nozzle, 21 x 5mm beads, and printed under recommended extrusion and drying conditions. Results may vary based off individual hardware and processing conditions.
- Properties are for virgin, first grade use material only. Airtech makes no claims for material that has been reprocessed and re-extruded.
- For comprehensive thermomechanical data and processing parameters contact your Airtech account manager.
- The maximum use temperature is dependent upon the duration at maximum temperature, and is process specific, Airtech recommends testing prior to use.
- Shelf life unlimited when stored in original packaging at 22°C (72°F).