

Data Sheet

DAHLTRAM® C-250CF

Medium temperature additive manufacturing

DESCRIPTION

Dahltram® C-250CF is a cost effective, low to medium temperature use, additive manufacturing polymer with a maximum recommended use temperature of 135°C. It is reinforced with carbon fibre for maximum strength and long term performance. Dahltram® C-250CF is ideal for room temperature tooling solutions and low to medium temperature master moulds. Additionally, it is vacuum tight and autoclave capable in all forms 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® C-250CF is a cost effective solution ideal for 121°C cure systems and much more.
- Provides higher strength, higher temperature performance and higher throughput.
- Carbon reinforcement offers greater stiffness versus glass and low warpage for predictable results.

TECHNICAL DATA

| Physicals | Typical Values | Test Method |
|------------------------|----------------|----------------------|
| Base Polymer | Modified PC | |
| Reinforcements | Carbon Fibre | |
| % Fibre Loading | 20% | |
| Tensile Strength | | |
| X Direction | 112,4 MPa | Modified ASTM D638 |
| Z Direction | 50,3 MPa | Modified ASTM D638 |
| Tensile Modulus | | |
| X Direction | 11 GPa | Modified ASTM D638 |
| Z Direction | 3,0 GPa | Modified ASTM D638 |
| Flexural Strength | | |
| X Direction | 180 MPa | Modified ASTM D790 |
| Z Direction | 93,8 MPa | Modified ASTM D790 |
| Flexural Modulus | | |
| X Direction | 10,8 GPa | Modified ASTM D790 |
| Z Direction | 3,8 GPa | Modified ASTM D790 |
| HDT, 1,82 MPa, 3,22 mm | 144°C | ASTM D648 (Annealed) |
| Density as Printed | 1,21 g/cc | 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 |

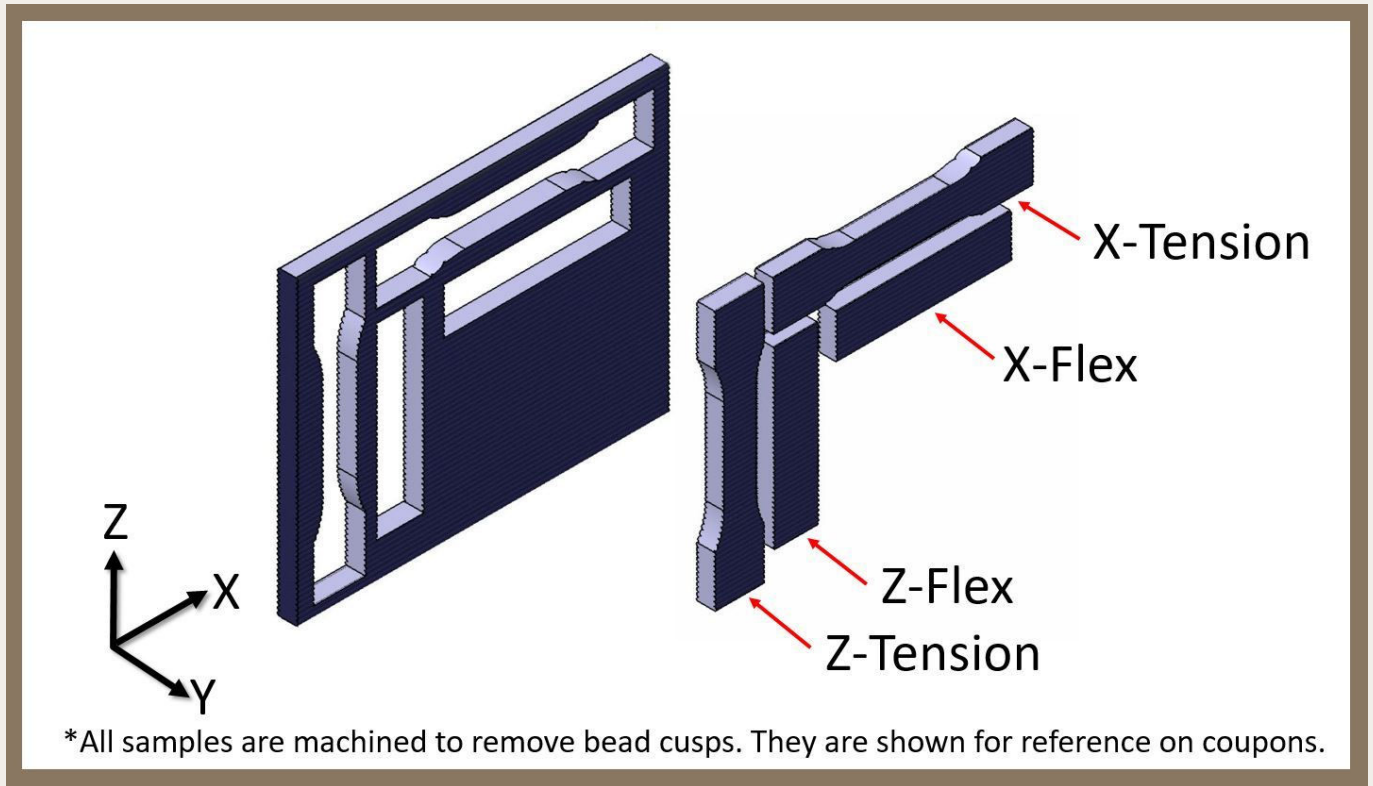
Last updated : 2024-01-09

Catalogue position : [Print-Tech®](#)

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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.
- Shelf life unlimited when stored in original packaging at 22°C.

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Catalogue position : [Print-Tech®](#)