

ABS-CF10



What is ABS-CF10?

ABS-CF10 is an ABS-based material with 10% chopped carbon fiber, making it 15% stronger and 50% stiffer than standard ABS. It was specifically formulated for use on the Stratasys F170™, F270™, and F370™ printers for the production of jigs, fixtures, manufacturing aids, and more.

ABS-CF10 has superior stiffness, high accuracy up to 0.2mm, and soluble support. This ready-to-use carbon fiber material is strong, stiff and lightweight, removing barriers to functional, high-performing parts that can be implemented in demanding real-world conditions.

ABS-CF10 is available on the Stratasys F170, F270, and F370 printers, allowing for 2-7x faster prints than competitors' composite material printers. The addition of a high stiffness-to-weight ratio and low moisture-sensitive material enhances the FDM jigs and fixtures offering of the F123™ Series.

Key Attributes:

- First fiber reinforced material on the F123 Series
- Can be used with additional fixturing needs / requirements such as metal parts
- Excellent geometric tolerancing over large parts
- Accuracy of 0.2mm
- Slice Heights: 7, 10, 13
- Soluble support allows for design freedom and complex geometries

Primary Applications:

- End Effectors: requires stiffness
- Ergonomic Aids: requires light weighting
- Alignment Fixtures: requires strength and accuracy

Challenges customers have with current solutions:

- Long lead time
- Bulky, inaccurate, and/or heavy fixtures
- Tools are lost or removed from a job site
- High replacement costs
- Lack required stiffness
- Limited ability to prototype, iterate, or improve parts
- Current AM solutions do not allow for functional testing

ABS-CF10 on the F123 Systems offers:

- Short lead time: replace machined jigs and fixtures
- Better tools: upgrade quickly
- High accuracy: enhanced iterations with the F123 series
- Lightweight tools: produce lightweight aids, jigs, and fixtures
- Durable: replaces traditional material and/or ABS

| Part Number | Description |
|-------------|--|
| 333-90310 | ABS-CF10 Filament Canister, 90 cu. in. |
| 333-63500 | QSR Soluble Support Canister, F123, 60 cu. in. |
| 123-00601-S | Dedicated ABS-CF10 Head (recommended) |
| 123-00302-S | F170 Build Tray |
| 123-00303 | F270 Build Tray, Standard |
| 123-00304 | F370 Build Tray, Standard |

Product requires software update only.
No hardware update needed.

For Internal Use Only

