# **ABS-CF10**





Description
ABS-CF10 Filament Canister, 90 cu. in.
QSR Soluble Support Canister, F123, 60 cu. in.
ABS-CF10 Head (Green Cover)
ABS-CF10 Hardened Head - Recommended (Light Gray Cover)
F170 Build Tray, Standard
F270/F190CR Build Tray, Standard
F370/F370CR Build Tray, Standard

Product requires software update only. No hardware update needed.

## 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 the production of jigs, fixtures, manufacturing aids, and more on the Stratasys F123 $^{\text{TM}}$  and F123CR Series.

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<sup>™</sup>, F190<sup>™</sup>CR, F270<sup>™</sup>, F370<sup>™</sup>, and F370<sup>®</sup>CR printers, allowing for 2-7x faster prints than competitors' composite material printers. This material's high stiffness-to-weight ratio and low moisture-sensitivity enhances the FDM jigs and fixtures offering of the F123 and F123CR 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 and F123CR Systems offers:

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

For Internal Use Only

