







# HIFILL®

Cost-Effective Material Solutions for Use in Structural Components and Metal Replacement Opportunities

### **Characteristics**

Filled and reinforced thermoplastic compounds designed to deliver improvements in strength, modulus, heat resistance, and creep resistance. Additional performance effects that can be achieved include metal detectability, X-ray opacity, increased density, increased isotropic dimensional control, and reduced CTE.

## **Typical Fillers**

- Glass fiber
- Carbon fiber
- Glass bead
- Various mineral systems

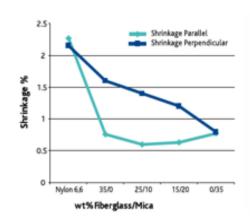
#### Applications

- Automotive: Under hood, powertrain, interior
- Oil & Gas: Down hole exploration and extraction
- Material Handling: Conveyor systems
- Pool & Spa: Pump housings, filter components

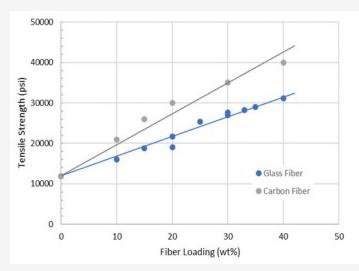
#### **Benefits**

- Weight reduction
- Parts consolidation
- Design freedom
- Potential for molded in color

## Shrinkage Differential of Glass Fiber and Mineral in HIFILL PA6/6



## Tensile Strength from Glass and Carbon Fiber in HIFILL PA6/6



## Tensile Strength Comparison w/ Glass Fiber in HIFILL PA6/6, PC and PP

