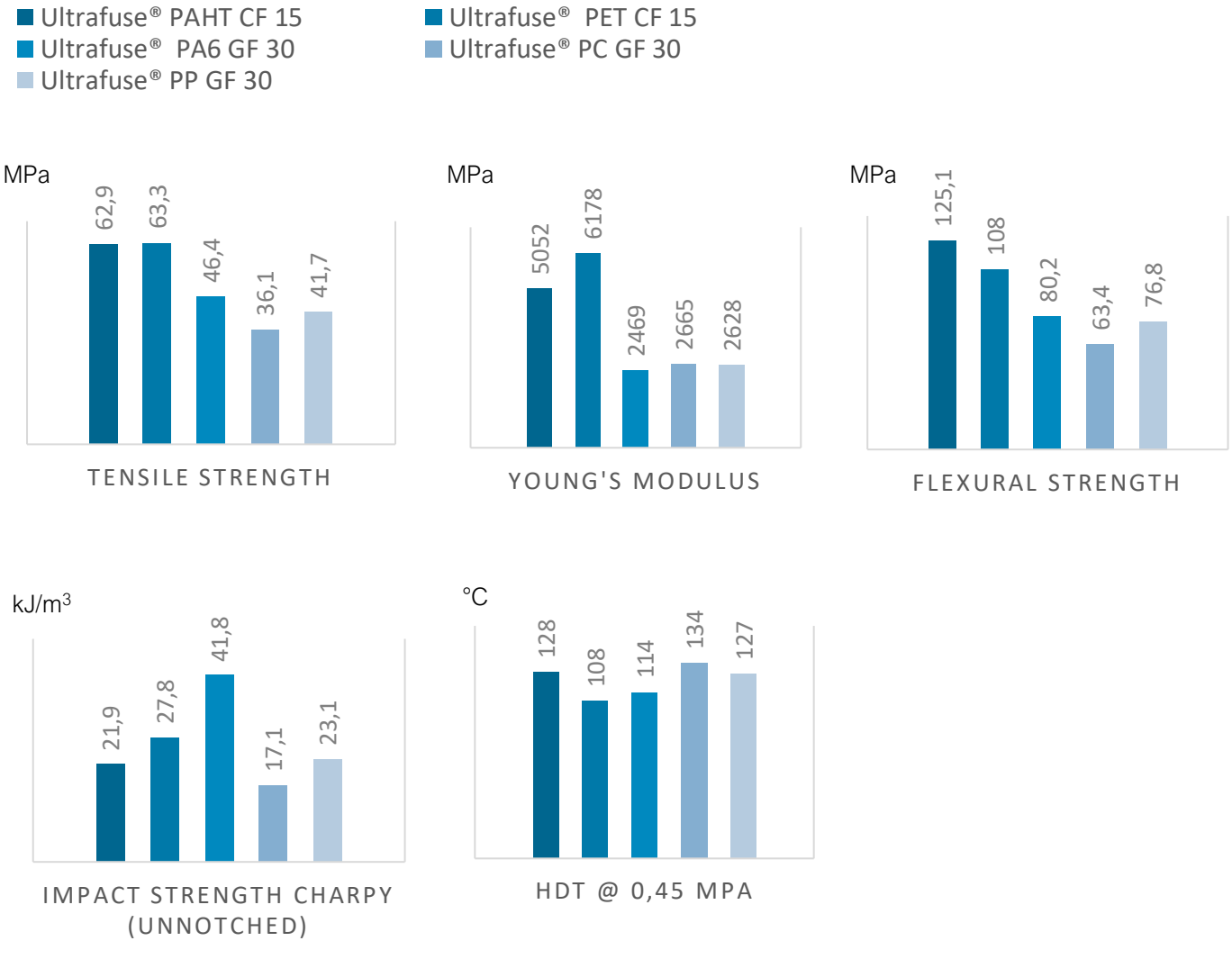
Ultrafuse® Reinforced Filament Comparison

Glass fiber and carbon fiber reinforced Filaments

Carbon fiber reinforced materials	Glass fiber reinforced materials
Organic	Non-organic
High orientation ▪ Large anisotropy ▪ Good elastical properties ▪ High strength	Amorphous
Very light	Light
Electrical conductor	Electrical isolator ▪ High resistivity ▪ High dielectrical strength
High stiffness	Thermal insulator

Material	Benefits	Applications
Ultrafuse® PAHT CF 15	▪ When conditioned, highest flexural strength ▪ Lower moisture uptake than PA	ESD applications
Ultrafuse® PET CF 15	▪ When conditioned, highest tensile strength ▪ Easiest printability	Jigs and fixtures
Ultrafuse® PA6 GF30	▪ When conditioned, highest impact strength ▪ Resistance to oils and greases	Automotive
Ultrafuse® PC GF30	▪ highest heat resistance ▪ UL94 V0 flame retardancy	Light weight applications such as drones, sport instruments
Ultrafuse® PP GF30	▪ Very good chemical resistance ▪ Low moisture uptake	Railway applications

All Ultrafuse® Reinforced materials are printable on desktop printers



Other Resources

- Ultrafuse® PP GF 30 - Elite Biathletes Reach Peak Performance with Athletics 3D and Forward AM
- Ultrafuse® PET CF 15 - Orthoses
- Ultrafuse® PAHT CF 15 - Increasing Part Stiffness of Lightweight FFF End-Use Parts by Simulation