PEEK vs. xPEEK147

Composition

PEEK

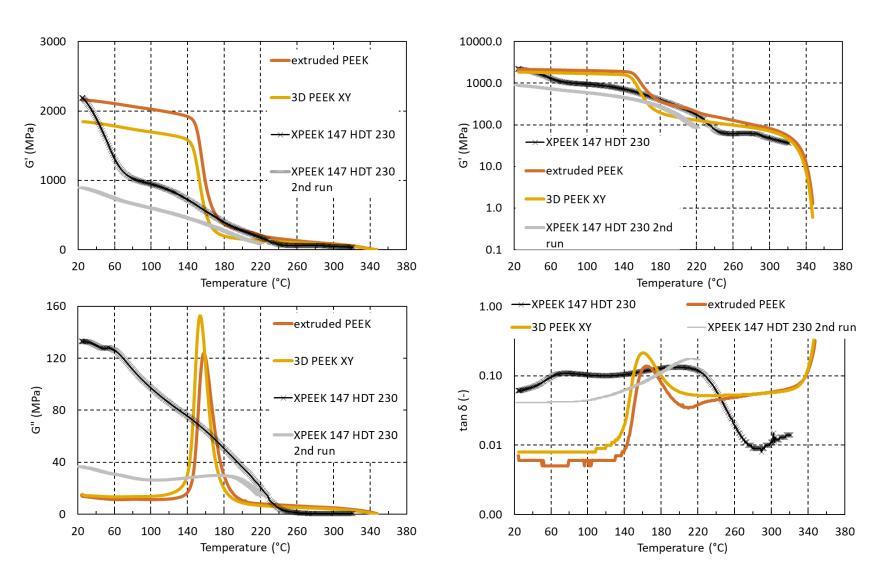
Polyetheretherketone

Nexa3D xPEEK147

30-60% urethane acrylate

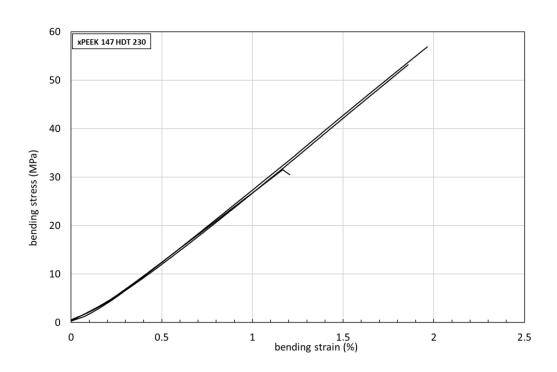
30-60% acrylic ester

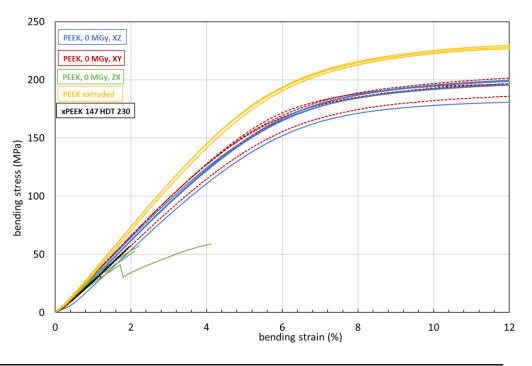
DMA results





Short beam results





Material	Number of tested	Modulus (GPa)	Average maximum	Average stress at $s =$
	samples		stress (MPa)	0.5h (MPa)
FDM PEEK, XY	5	2.5 ± 0.4	-	195 ± 6
FDM PEEK, XZ	5	2.2 ± 0.5	-	195 ± 8
FDM PEEK, ZX	3	2.6 ± 0.1	48 ± 7	-
PEEK extruded	5	2.7 ± 0.3	-	228 ± 1
xPEEK 147	3	2.1 ± 0.1	48 ± 14	-