

Carbon fibre-reinforced SustaPEEK

What are the advantages of pressed carbon fibre-reinforced SustaPEEK compared to the extruded version?

With our materials SustaPEEK CM CF 30 and SustaPEEK CF 30, two carbon fibre-reinforced PEEKs are part of our extensive range of high-performance plastics. We are often asked by our customers how these two brand materials differ from one another. The difference lies in the manufacturing process, which influences the properties of the materials:

- We manufacture SustaPEEK CM CF 30 using the compression method – “CM” stands for “Compression Moulding”
- We manufacture SustaPEEK CF 30 using an extrusion process

Thanks to the great force used in the pressing process, SustaPEEK CM CF 30 has

- a highly homogenous material structure,
- very low residual stress in the material, and
- very high dimensional stability after processing.

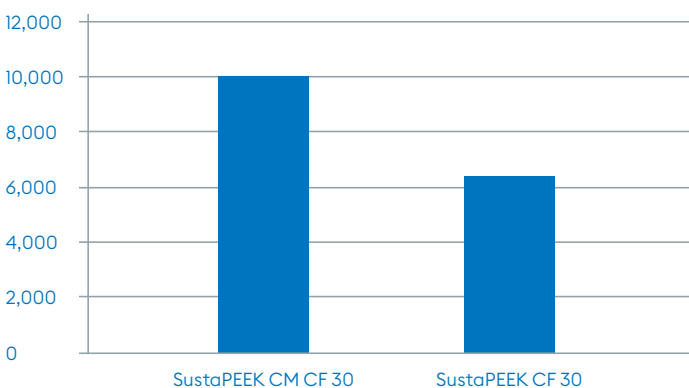
This renders SustaPEEK CM CF 30 particularly suitable for demanding applications in which components may only have low residual stress yet also require great dimensional stability. SustaPEEK CM CF 30’s proven applications include the semiconductor industry, medical technology, and motor sports.



Brackets machined from SustaPEEK CM CF 30 for use in the semiconductor industry: the brackets need to have a high dimensional accuracy and dimensional stability – so they are machined from compressed SustaPEEK CM CF 30.

Modulus of elasticity

MPa



Properties – SustaPEEK CM CF 30:

- Tensile elastic modulus: 10,000 MPa
- Very high dimensional stability
- UL 94 V0 certified (flame resistant and self-extinguishing)

Product range – SustaPEEK CM CF 30:

- Dimensions: 395 x 395 mm
- Thickness: 4 – 90 mm
- Batch size 1
- Very short delivery time (two weeks)