

# SIGRAFIL® C T50-4.9/235

## Continuous carbon fiber tow

#### The new 50k carbon fiber: High strength and elongation.

One of our innovations is a continuous carbon fiber tow for pressure vessel applications. The new SIGRAFIL C T50-4.9/235 carbon fiber meets the high strength requirements for common pressure vessel designs and exhibits a high elongation capacity, previously unseen with any 50k fiber. It also enables further applications in market segments that require high strength and elongation.

#### Material data

Typical properties	Units	C T50-4.9/235
Tensile strength	GPa	4.9
Tensile modulus	GPa	235
Elongation at break	%	2.0
Number of filaments		50k
Fineness of yarn dry	tex (g/1000 m)	3420
Single filament diameter	μm	7.0



↑ Pressure Vessel based on 50k carbon fiber



#### Carbon Fibers | SGL TECHNOLOGIES GmbH

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↑ The new SIGRAFIL C T50-4.9/235 carbon fiber

### **Material properties**

- High strength with high elongation
- High productivity due to 50k
- Great spreadability
- Excellent resin impregnation

### Overview of SGL basic fiber types



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