

# EXEL COMPOSITES

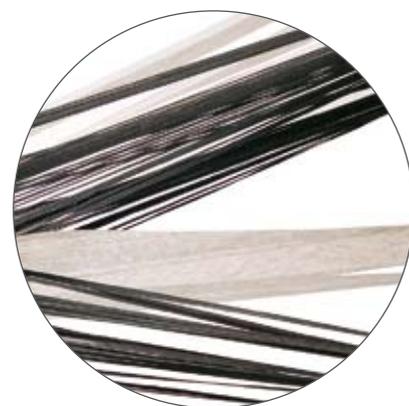
– High-performance solutions for machine industry

## Superior composites for machine industry

Increasing number of machine industry applications are benefiting from the advantages composites offer. Due to their excellent stiffness to weight ratio, carbon fibre composite profiles are the superior material for fast moving machine parts. Their low thermal expansion characteristics are essential for machines, combining tight tolerances and varying operation and/or environment temperatures. Pultruded carbon fibre profiles have excellent fatigue properties, and the composite profiles perform well in corrosive and chemically aggressive environments.

## Application areas

Exel has over 30 years of manufacturing experience in demanding, state-of-the-art pultruded composite profiles. Today, these are extensively used in various segments of machine industry, including paper, packing and printing machines, textile machine components, robotic and manipulator components, processing machines and measuring devices.





## MAIN BENEFITS

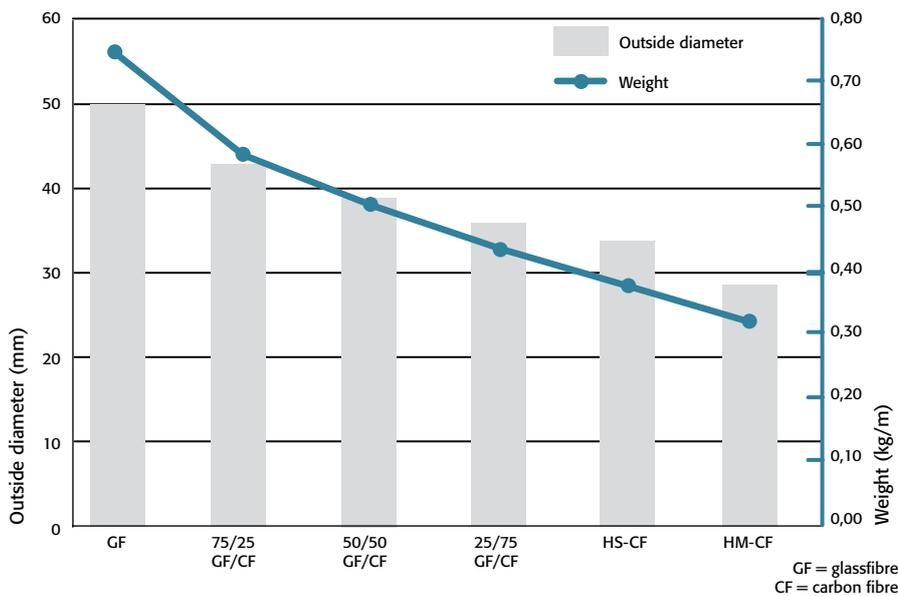
### For fast moving machine parts:

- Excellent strength
- Excellent fatigue properties
- Low weight and inertia
- Good damping properties
- High surface quality
- Excellent shape and tolerance capabilities
- Low co-efficient of thermal expansion
- Excellent wear characteristics when pared to metals

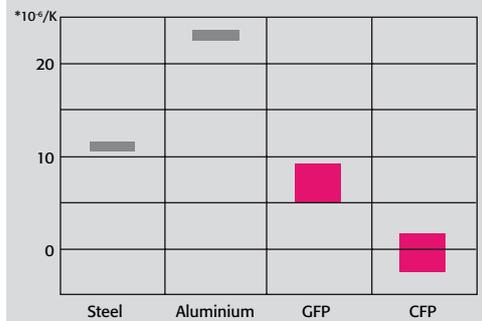
### For machines operating in corrosive environments:

- High resistance to corrosion
- Low weight

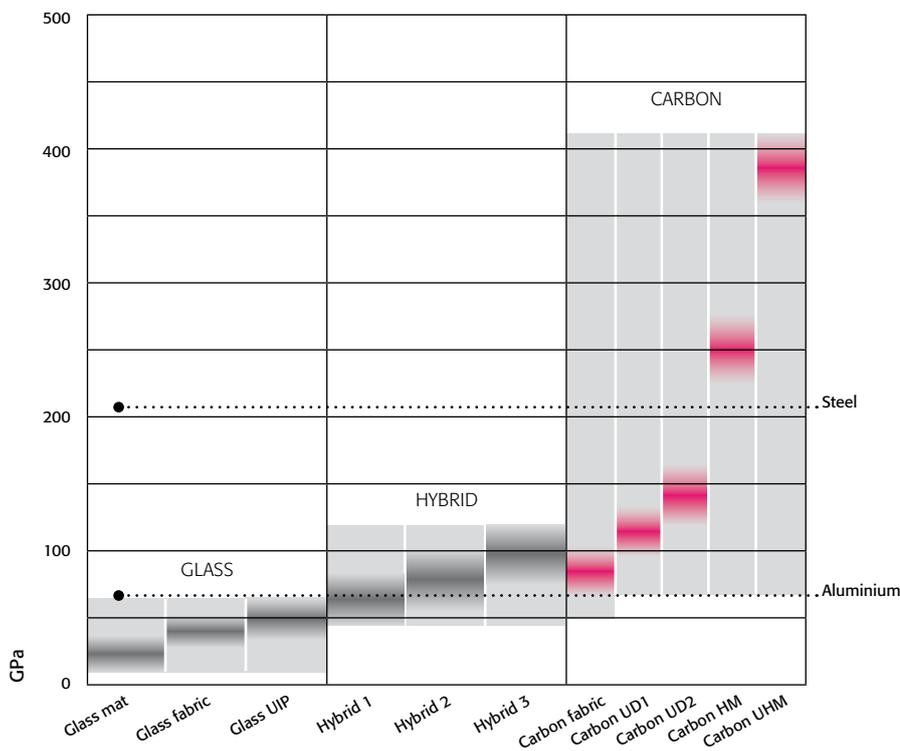
## HYBRID STRUCTURES / BENDING TUBES OD / WALL THICKNESS 2.5MM



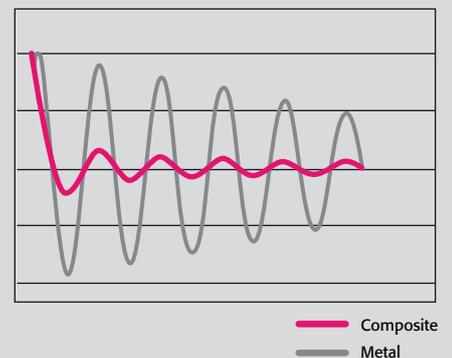
## THERMAL EXPANSION



## STIFFNESS



## DAMPING



Pultruded carbon fibre profiles have excellent strength and stiffness related to their weight.