



# Pre-Preg Carbon

## What is Pre-Preg Carbon?

Pre-Preg refers to any material which has been impregnated with a predetermined amount of resin. Pre-Pregs are being increasingly utilized across a wide range of industries (including motor racing & aerospace) for its superior strength, uniformity, & weight compared to traditional wet laminations.

Pre-Preg Carbon used by MHT contains a weave of carbon-fibre infused with epoxy resin. The layup process allows a range of flexibility & stiffness in the device as well as several options for the surface finish. Pre-preg is available at MHT as a fabrication material for both orthotics & prosthetics.

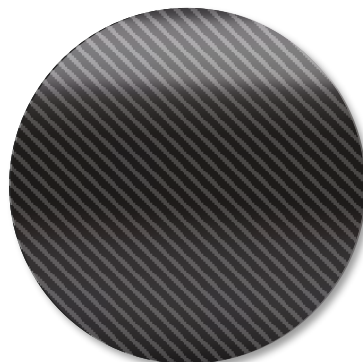
## How do Pre-Preg laminations differ from traditional wet laminations?

- **Set % of resin content** – Increases the properties of the carbon fibre and reduces the properties of resin in the composite
- **Reduced weight** compared to wet laminations
- Better fiber compression – **thinner shells & less bulk** as fibres don't swell with resin
- **Elimination of air bubbles**
- **Fibres stay in intended alignment** – best utilizes the properties of the directional weave, allowing flexibility or stiffness where required
- **Less material wastage**
- Greater ability to **incorporate multiple fabric materials** into the composite
- **Fully integrated** designs possible – add joints/components without need for bolts/screws

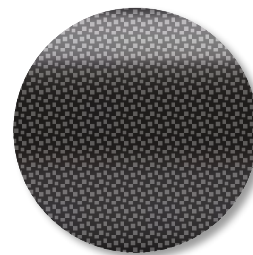
## Pre-Preg Carbon Surface Finish Options



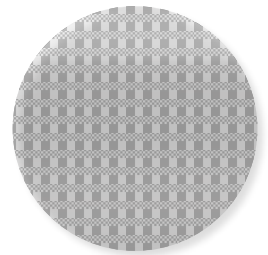
Pre-Preg IN-Pulse AFO  
w/ Directional finish



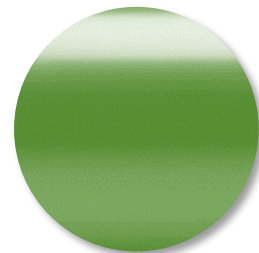
**Directional**  
(default finish)



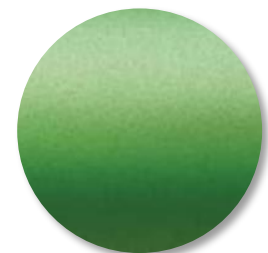
**Forged**



**Aluminized**



**Vinyl Wrapped**



**Spray Painted**

Ask Momentum about Pre-Preg Carbon O&P devices today!