



SPORTS & LEISURE

FIRST-EVER CARBON/PEI HOCKEY STICK

Nominated for a JEC Innovation Award: **Schappe Techniques (France)** and partners **Visceral Performance Inc. (Canada)**, **Groupe CTT (Canada)**, **Compsult (Canada)**, **Mat-Comp (Canada)**

An advanced hockey stick (made of continuous carbon-fibre-reinforced thermoplastic materials) that delivers superior toughness/durability and on-ice performance, while being fully recyclable.

Key Benefits:

- Superior toughness / durability of the composite
- Short consolidation cycle
- Fully recyclable (hollow part)



Current hockey sticks are mostly made with thermoset composites, given the performance-enhancing properties offered by this type of material. The disadvantage is that they are relatively brittle, leading to potential breakage at the worst possible moments during game action and considerable costs (for multiple replacements during a season).

Visceral Performance's Lethal stick is the first carbon/PEI hockey stick. It is made from Schappe Techniques' TPFL[®] carbon/PEI that allows for the production of porosity-free composites. The TPFL[®] made of stretch-broken carbon fibres also allows for perfect conformability to the complex geometry of the tool that was developed. These features, combined with net-shape preforming technologies developed by Group CTT, offer superior characteristics. The preforms are then processed using Visceral Performance's proprietary processing technology to create hollow parts.

The end-result is a stick that offers superior toughness, allowing for an advanced optimization of weight-to-stiffness properties, thus producing unprecedented performance when shooting a hockey puck. The thermoplastic composites also offer superior surface finish and are fully recyclable.