

Taking it to the Next Level

NexCore™

NexCore™ is a next-generation composite fabric that's lighter, durable and specifically designed for infusion.

NexCore material enables reduction in weight, improvement in mechanical properties, and reduction of cost in multiple industries and countless applications.

NexCore material is made from non-crimp reinforcements and low density foam engineered for resin infusion, providing molders with an alternative for resin-infused sandwich structures that is:

- **Lighter**

Excellent shear modulus and tensile modulus allows for weight reduction of 20% - 35% compared to similar Balsa and PVC (60kg) cores. This translates directly into cost savings through lower resin and skin materials consumption.

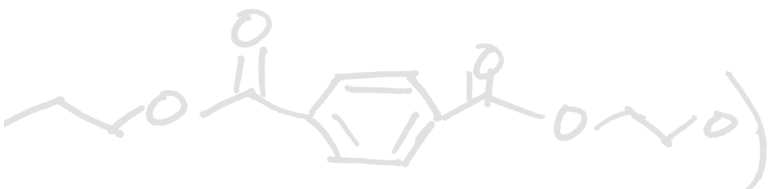
- **Durable**

NexCore's unique geometric design allows for high toughness, high impact resistance, and good fatigue resistance. It's segmented structure reduces potential for crack propagation. NexCore is also constructed completely from composite materials and is therefore unaffected by water or other environmental factors.

- **Designed for Infusion**

Reliable skin core bonding and durable composite trusses provide for constant front flow, excellent fiber wet-out, with less consumables and setup required. NexCore's truss structure provides natural resin channels to allow flow both along the panel, and from top to bottom, eliminating the need for infusion grooves and perforation. Improved flow characteristics can reduce/eliminate need for flow media thus reducing setup time and consumables.

The development of NexCore material by Milliken has a number of infrastructure and industrial market applications, from windmill blades to bridges. Milliken composites experts can engineer solutions for advanced composite applications, with a fully-capable infusion and testing lab that allows us to develop and evaluate solutions.



Milliken™