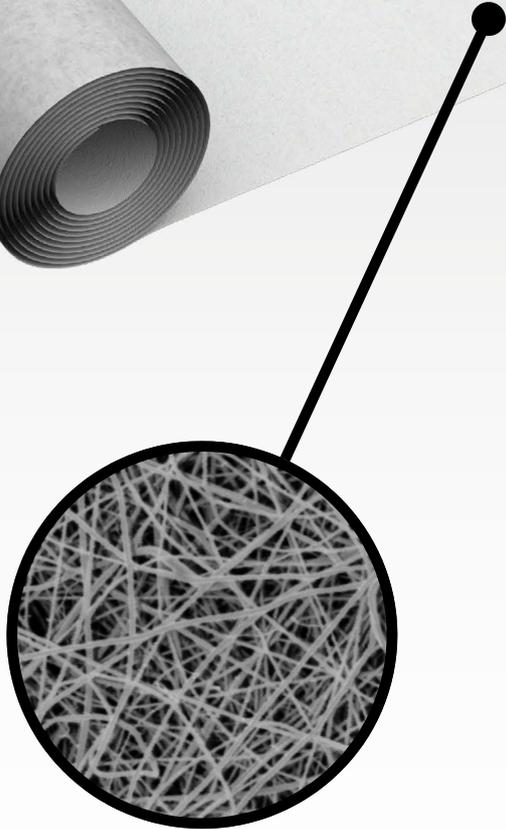


COMPOSITE STRENGTHENING



Enhance your composite's mechanical performance with XantuLayr® nanofibre interleaving veils. XantuLayr® is a unique interlaminar reinforcement veil that consists of tough thermoplastic nanofibres which have the ability to greatly enhance the performance of composite materials.

NanoLayr have developed XantuLayr®, the world's first commercially available interleaving nanofibre veil, for use in fibre reinforced thermoset polymer composite materials. Produced using a proprietary production method (Sonic Electrospinning Technology), XantuLayr® is an ultra-thin non-woven web that consists of kilometre long thermoplastic nanofibres, each one being about 400x thinner than a human hair.

When placed in between the plies of reinforcing fibres in a composite laminate, XantuLayr® nanofibre veils are able to significantly improve the fracture toughness (delamination resistance), compression after impact strength (damage tolerance) and fatigue resistance of the composite without adding much thickness and weight.

XantuLayr® nanofibre veils are able to improve composite materials by providing nano-scale reinforcement of the brittle matrix resin, resulting in a tougher resin (even when used with already toughened resin systems) which is less prone to micro-cracking when stressed or impacted. XantuLayr® is particularly suitable for improving the performance of composite structures that are prone to impact/crash damage, delamination and high flexure or fatigue loadings.

If you require greater performance from your composite components, use XantuLayr® nanofibre veils.

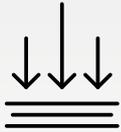


SAI GLOBAL
AS9100
Aerospace

BENEFITS



Virtually zero added weight.



Improved impact strength.



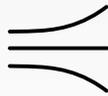
Improved composite fatigue life.



Improved fracture toughness.



Enhanced resin toughness.



Reduced ply delamination.

FEATURES

- Thermoplastic nanofibre interleaving veil on silicone release paper.
- Highly porous — allows resin to penetrate the veil.
- Compatible with epoxy and polyester resin systems.
- Available in areal weights of 1.5gsm, 3gsm and 4.5gsm.
- AS9100 Aerospace Certified.
- 1m² @ 1.5gsm contains 23m² of surface area and 32,000km of nanofibre.
- 1m² @ 3gsm contains 46m² of surface area and 64,000km of nanofibre.
- 1m² @ 4.5gsm contains 69m² of surface area and 96,000km of nanofibre.



Improved impact resistance — crack energy is absorbed and cracks are deflected by the tough nanofibres.

YOUR PRODUCT WITH XANTULAYR

XantuLayr is used to create high performance composite sheets and tubes, as well as custom parts for automotive, aerospace, sports, firearms, military and other industries.

