



ABOUT US

Innovation is at the core of our work to create product ranges suited to the needs of customers. One range of products is dedicated to Closed Mould Processes (RTM, Light-RTM, Press) and another range devoted to the Pultrusion process. Using state-of-the-art technology and maintaining the highest levels of quality, improvements in resin flow and surface finish have resulted in a quality product that outperforms similar existing products in the market



Innovation
in fiberglass
reinforcements

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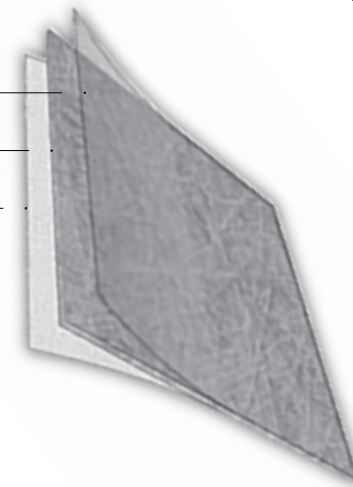
FLEXmat

Fully customizable according to customer demand.

Synthetic integrated veil

Fiberglass

Synthetic integrated veil



PULTRUSION

The range consists of a layer of randomly oriented long glass fibers between two layers of integrated veil. It is light in weight and high in strength.

ULTimat

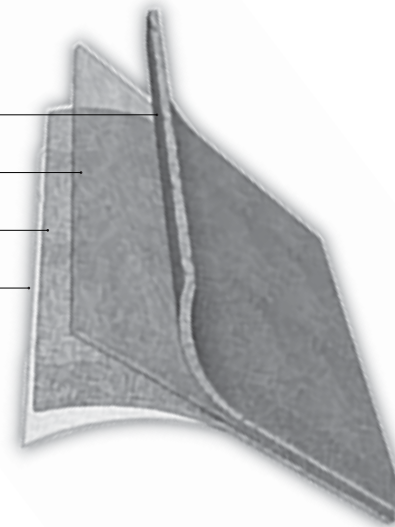
Fully customizable according to customer demand.

Fiberglass

Polyester core

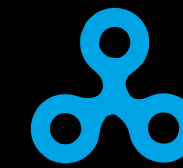
Fiberglass

Synthetic integrated veil



CLOSED MOULD

The range is composed of a synthetic core inserted between two layers of chopped fiberglass incorporating an integrated veil.



Innovation is our core value

SPECIALTIES

Ilium Composites utilize its unique, patented technology to continually innovate new solutions for various composites markets.

preform invisiflo

With a collaborative, customer led approach to innovation, new-to-market products are changing the perception of what a glass fiber reinforcement is able to offer.

FLEXmat

COMPOSED OF

- SF P series - Random long glass fiber mat with 25g/m² integrated surface veil available in any weight greater than 225g/m²

AVAILABLE WITH 3 OPTIONS

- V - Mechanically bonded secondary surface veil
- CV - As above, with colored veil
- W - Including weft UD or biaxial for highly structural parts

ADVANTAGES

- No chemical binder
- Stitch free for improved visual appearance
- Incorporating mechanically bonded veil and reinforcement options saves time, reduces drifting and improves process efficiency
- Weft aligned fiber influence system ensures improved transverse and torsional mechanical properties
- High quality, flexible and cost effective alternative to existing pultrusion reinforcements

PRODUCT OPTIMIZATION

- Customer specified weight and width
- Selected weft UD or biaxial Weft UD weight - 120g/m² Biaxial ±45 custom weight
- Surface veil can be added without stitch or chemical binder to improve print-through and chemical resistance
- Colored surface veil can be used to avoid pigmenting the resin system

ULTimat

Suited to LRTM, vacuum infusion and other closed mould processes. As standard ULTimat is supplied with polyester flow media with the following benefits:

- Superior compatibility with polyester resins
- Increased inter-laminar shear strength by approx. 5%
- Improved cyclic loading
- Better fire retardant performance

ADVANTAGES

- Incorporated surface veil offers reduced print-through
- Stitch free for better visual appearance of parts
- No chemical binders
- Cut mat has tidy edges, clean and free of fraying with no fiber falling out
- Clean splicing to avoid thick overlaps
- Better blister performance can remove the need for added barrier coat
- Excess mat can be removed from the mould without cutting

RANGE

- Standard - Ilium polyester flow media with standard surface veil
- SF (Superior Finish) - Higher weight surface veil on one side for even better surface finish
- HF (High Flow) - Flow media for faster resin flow
- Combi - With added continuous reinforcement (woven roving or multiaxial) for highly structural parts
- PP - Including polypropylene flow media instead of Polyester
- HL - Chemical binder free CSM for styrene free resin systems

PRODUCT OPTIMIZATION

- Fiber length from 50mm to 200mm
- Chopped glass fiber per layer from 150g/m² to 1200g/m²
- Flow media from 100g/m² to 250g/m²
- Integrated surface veil according to required surface finish - 10g/m² to 25g/m²

ULTimat preform

Allows the user to create Preforms quickly and simply without additional costly binders

- Low cost system making preforming available to new applications
- Ilium offers full technology solution including tool making and heating system
- Save up to 70% layup time
- Ideal for high volume, complex parts
- Preform "binder" is an integral, part of the reinforcement with no impact on dry product behaviour
- Binder only activated after forming in the preform tool

ULTimat invisiflo

Highly translucent, highly versatile. This 100% glass fiber mat ensures excellent translucency with a variety of unique benefits

- Highly formable for complex mould geometries
- Specially designed panel roving for best possible translucency and compatibility with clear resin system
- Even surface avoids appearance of star cracks
- Cost effective, making translucent composites accessible to more applications
- Customer specified weight range easily achievable

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