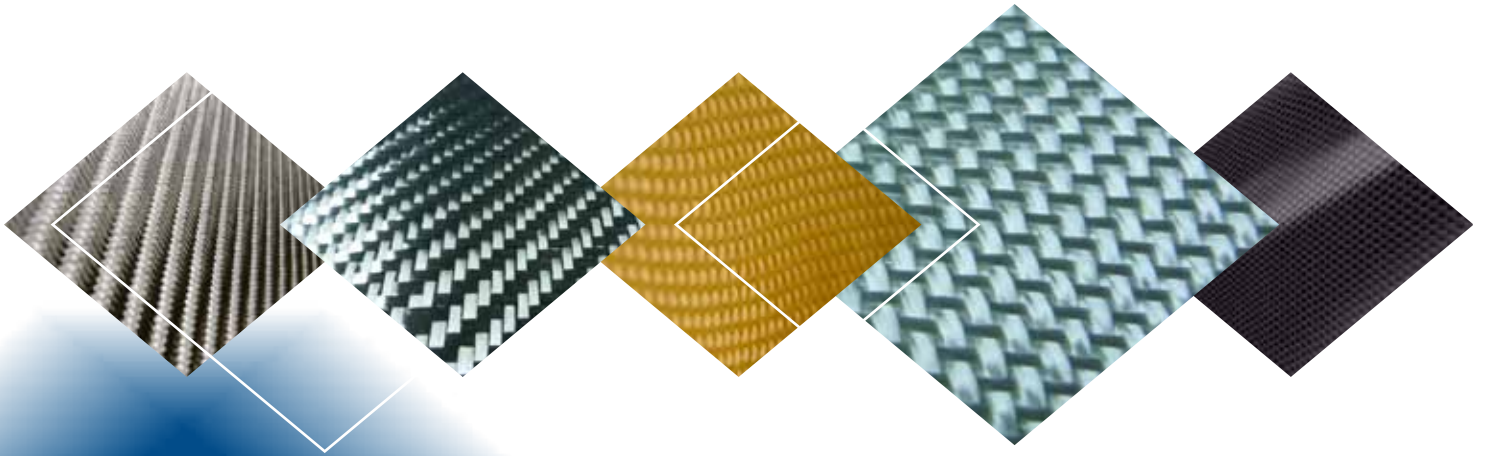




**PRF**  
Composite Materials



High Performance Composite Materials





We know that your industries  
have evolved over time.  
That's why we have too.



PRF Composite Materials is a leading supplier of high performance materials for the advanced composite industry. Since the formation of the company in 1982, PRF has established an enviable reputation for high quality service, supplying the automotive, motorsport, aerospace, defence, wind energy, marine, sports and medical industries.

We offer the widest range of products and services in the industry, including high performance reinforcements, Prepregs (tooling and component), epoxy resin systems, release agents, core materials, tooling block, consumables and kit cutting services.

In 2010, a new warehouse was built freeing up spaces for offices, laboratory work areas and increasing the room for CNC kit cutting machines. Within the new warehouse is a purpose-built forklift-accessible freezer measuring 360m<sup>3</sup>. Controlled at -18°C and monitored 24 hours a day, the freezer holds prepreg stock for rapid delivery.

PRF is committed to supplying materials of the highest quality, whilst simultaneously making the majority of our products available for immediate dispatch from the large stocks held in our rapid response warehouse. This goal is achieved by employing the most advanced manufacturing processes, stock control and QA systems together with our team of highly experienced technicians and engineers.

#### **Reasons to choose PRF**

Our commitment to quality, service and delivering tailor-made composite solutions to suit individual customer requirements.

**Discuss your requirements  
with one of our technicians today**

**t +44(0)1202 680022**

**e mail@prfcomposites.com**

**Or register on our website**

**[www.prfcomposites.com](http://www.prfcomposites.com)**

**PRF is ISO 9001:2008 certified**



# Materials & Services

## Prepreg & Structural Adhesives

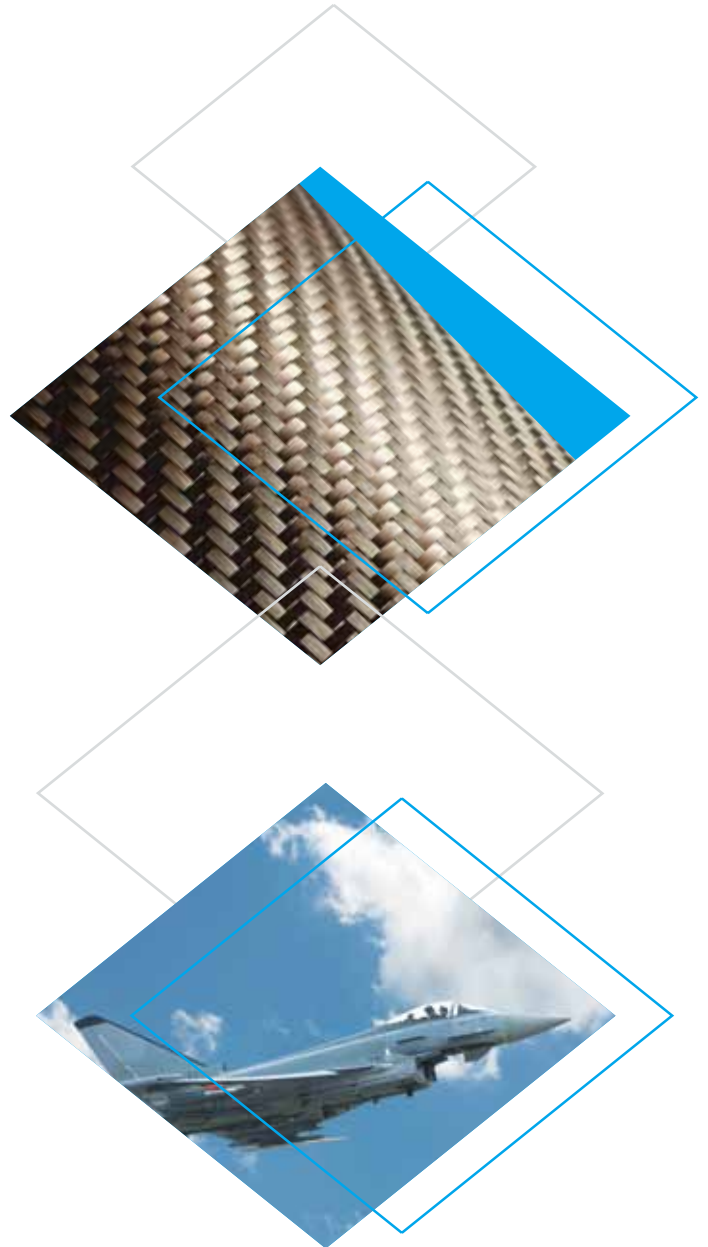
PRF manufacture and supply a comprehensive range of prepreg materials in woven carbon fibre, glass fibre, aramid fibre, hybrids, unidirectional carbon and glass fibres, as well as prepregs with carbon nanotube additives. The resin content of each layup can be manufactured to suit our clients' unique requirements.

The advantages of using Prepreg materials, as opposed to dry fabrics with liquid resins are numerous: the control of fibre and resin ratios, highly controlled tack and drape, the ability to control resin flow during the cure process but still with the options of low or high temperature cure.

The applications of Prepreg are as varied as the material options. From industrial uses such as tooling structures where Prepreg's reliability, ease of handling and long tool life make them a versatile and highly useable option to sports components, aircraft interiors and car interiors where very high standards of finish are required.

Structural adhesives are used as an alternative to conventional methods of joining materials e.g. spot welding, rivets etc.

PRF stocks a range of advanced aerospace structural adhesives, all fully qualified systems that are backed up with our experienced technical support.



## Reinforcements & Technical Veils

At PRF we handle a wide range of composite reinforcement materials that cover the broad spectrum of textile technologies including woven fabrics and tapes, knitted multiaxials, braids and non-woven technical veils. Additional fabric processing and finishing facilities are available, including powder coating with epoxy or polyester (for RTM performing), laminating fabrics to other materials and slitting broad loom fabrics into narrow widths.



The type of weave pattern in woven fabrics will affect the drape, the ease and speed of impregnation and the mechanical properties of the final laminate. For this reason PRF's woven reinforcement fabrics are available in a large range of weave patterns, in balanced constructions with similar strength in the warp and weft, and bias fabrics which increase strength in the dominant fibre direction, the extreme being uni-directional fabrics. PRF's standard woven reinforcements are available in a large range of weights and fibre types. We also supply speciality materials such as stainless steel fibre, titanium and others.

## Epoxy Resin Systems

PRF's extensive range of epoxy resin systems includes low viscosity systems for room temperature laminating, RTM and resin infusion, as well as systems required to operate in high temperatures, specialist gelcoat formulations and adhesives.



Our resin systems are used mostly in performance driven applications for the production of components that require high static and fatigue strength properties. Our customers include companies producing sports equipment, aircraft components and racing car constructors. Large quantities of our resin systems are also supplied into the wind energy and marine industries.

The precursors used in the formulation of our resin systems are, where possible, carefully selected to reduce odour levels and provide very good physiological properties, thereby minimising skin irritation and skin allergy problems. For optimum processing flexibility most of our systems come with a range of hardeners, which vary in reactivity.



## Qiicote Mould Release

To compliment our range of advanced composite laminating products, PRF has developed Qiicote mould release technologies for thermoset and thermoplastic composites. The Qiicote range of products offer hard-wearing release films giving multiple releases with no contaminating transfer.

### The benefits of using Qiicote:

- ◆ Variable slip with high gloss finish
- ◆ Application by hand or spraying
- ◆ No contaminating transfer from mould surface
- ◆ Low cost per part released
- ◆ Maximum release performance
- ◆ Suitable for thermoset and thermoplastic composites processing



The Qiicote range comprises of cleaners, sealers, semi-permanent mould release and internal mould release.

## Shears

To further support our fabric business, PRF have teamed up with Europe's leading shear manufacturer, Robuso, to supply an extensive range of master-crafted hand and electrical shears specifically designed to provide the complete cutting solution for our large range of high performance reinforcements.



The products are designed to ensure the operator has an efficient, reliable and comfortable cutter for any material or process.

### The range includes:

- ◆ Cutting shears/scissors
- ◆ Mould-making shears/scissors
- ◆ Electric-powered shears
- ◆ Battery-powered shears
- ◆ Rotary blade cutters
- ◆ We also offer re-grinding and overhaul services

Contact us for our extensive brochure of high performance cutting tools.

## Kit Cutting

PRF offers CNC cutting and kitting of composite products. We can cut most commercially available materials in dry or prepreg form using our 2 different CNC machines.

Our 5m conveyor belt CNC machine is capable of cutting a wide variety of dry fabrics, prepregs and other materials using static, rotary and oscillating blades, whilst our bristle bed CNC machine is able to cut ballistic grade Kevlar® layered up to 25mm thick.



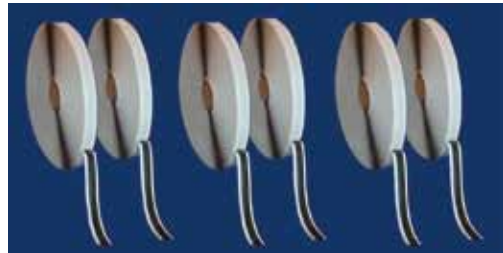
We accept 2 dimensional CAD drawings via email (or digitise templates where drawings are not available) and will nest for optimum material usage.

Our CNC service provides an improvement in quality with consistent machine cut parts and saves your time and labour costs as kits are supplied in bags ready for use.

**Contact us today with your kit-cutting enquiry.**

## Consumables

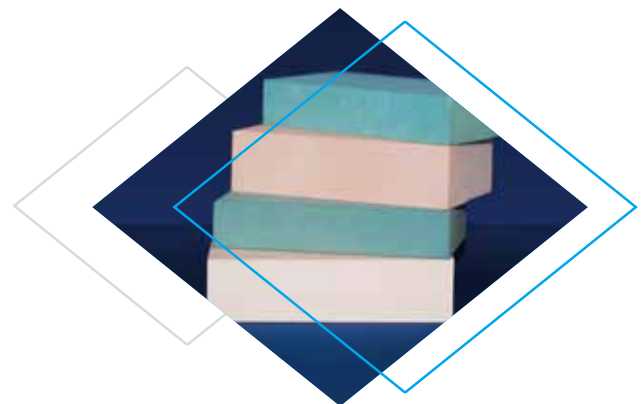
Vacuum bag consumables are used in autoclave, vacuum bag and resin infusion applications. PRF stocks a wide range of consumables for use in these applications. In addition to our vacuum bagging materials, we also offer a range of pumps, regulator valves, coupling discs, etc. Please contact us for advice on your particular requirement.



## Tooling Block

Used throughout the motorsport industry for the manufacture of high precision mould tools, PRF now holds a range of premium epoxy tooling block in our warehouse available for immediate dispatch.

**Contact us for more details.**





Find out what PRF can do for your business

Make an enquiry today at [mail@prfcomposites.com](mailto:mail@prfcomposites.com) or +44(0)1202 680022

or visit our website to join our mailing list: [www.prfcomposites.com](http://www.prfcomposites.com)