

WHY USE COMPOSITES?

Weight saving is one of the main reasons for using composite materials rather than conventional materials for components. While composites are lighter they can also be stronger than other materials, for example, reinforced carbon-fibre can be up to five times stronger than 1020 grade steel and only one fifth of the weight, making it perfect for structural purposes.

Another advantage of using a composite over a conventional type of material is the thermal and chemical resistance as well as the electrical insulation properties. Unlike conventional materials, composites can have multiple properties not often found in a single material.

Fibre reinforced composites, such as fibre reinforced plastic (FRP composites), are finding increasing use in the design and manufacture of final products for commercialisation.

