Cristex Supplies SAERTEX Fabrics to the Wind Power Industry

An ever-growing industry, the renewable energy sector is increasingly turning to the use of fibre reinforced polymers as a key element in construction and manufacturing. Properties such as minimal maintenance, excellent fatigue strength and the ability to resist random loading and corrosion have seen the rise in the popularity in the use of composite materials in this industry. It is these key properties which have led to the use of composites in both wind turbines and subsea turbines.

Cristex supplies many fabrics suitable for the wind power industry and has done so for many years. As the renewable energy market is growing year on year the demand for longer rotor blades and larger wind turbines has increased. Due to the larger, light weight construction the efficiency capability increases. With many wind farms situated offshore on the high seas it is important the wind turbines are able to withstand poor weather conditions. Cristex's range of fabrics are developed to the highest standard using advanced technology to ensure they can withstand the most hostile of environmental conditions.

The range of fabrics available from Cristex for this application includes glass and carbon to reinforce the webs, spars and shells of the wind turbine rotor blades. In addition Cristex can provide specialist fabrics such as SAERfix and 3D fabrics which are excellent alternative fabrics for this application. Self-adhesive SAERfix fabric means that spray adhesive is no longer needed, while 3D fabrics are a great way to lay thick layers of glass/carbon with ease. For the shells and spars there has been an increase in use of structural core materials, Cristex offer a unique product called SAERfoam which has glass bridges punched through the foam to create strength, alongside multiaxial interlaid complexes. In the area of spars, UD carbon fabrics are seeing increasing use alongside UD glass fabrics, in order to facilitate even longer rotor blade spans.

Cristex is one of the leading suppliers for the renewable energy industry, providing fabrics and resin systems to large scale projects and well known production units. In addition to being able to provide a large selection of fabrics, Cristex can also offer cutting & kitting, prototyping, GL-certified laboratory testing and – in particular – a complete component manufacturing service in Stade.

To discuss your project requirements please contact the office to discuss further.

Awards

In 2014 SAERTEX received the prestigious JEC Innovation award in the wind power sector for the MAPRETEC project. This award recognised SAERTEX's contribution to the automation of rotor blade manufacture in cooperation with the University of Bremen and AREVA Blades.

Cristex Composite Materials

Tel: 01282 770666 Email: <u>sales@cristex.co.uk</u>