

ZIRCOTEC COATING ALLOWS COMPOSITES TO BE USED IN HIGH TEMPERATURE ENVIRONMENTS

Coating prevents composite delamination and component failure in high temperature environments

Zircotec's composite coating allows high strength, lightweight materials to be used in high temperature environments for which they have previously been unsuitable. The coating is so effective it allows composites to function in temperatures above their melting point. Based on Zircotec's proprietary ThermoHold™ technology, the coating is robust and is highly resistant to vibration and mechanical damage, adhering extremely well to the underlying composite structure.

ENGINEERED TO PERFORM

Zircotec's latest process offers the opportunity to 'engineer' the coating to suit specific customer requirements, adjusting the coating properties both through thickness and across the surface of a component to cope with 'hot spots' and differing forms of heat transfer such as radiant, conductive or convective heating.

SAVING WEIGHT AND SPACE

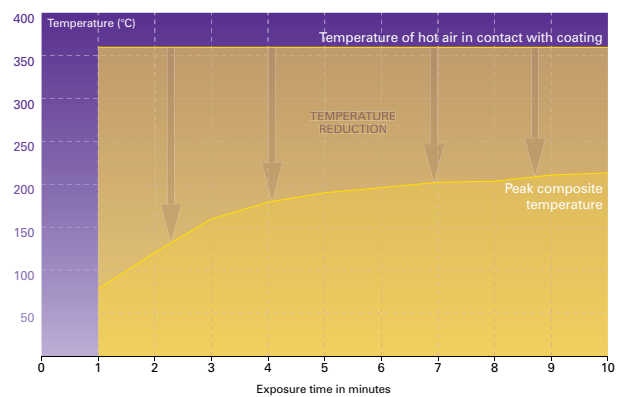
This technology allows engineers to use composites in environments where previously they haven't been feasible. This provides the opportunity to replace metallic components with composites. Where composites are already used, the coating can be used to replace bulky heat shields.



T: +44 (0)1235 434320
E: enquiries@zircotec.com

www.zircotec.com

Typical Application



OPTIMUM RESULTS

To ensure optimum results the Zircotec technical team prefers to work alongside the customer to specify the coating arrangement that is most appropriate for the application. Drawing from a range of coating parameters Zircotec is confident to offer a solution to any thermal issue. Zircotec also has the ability to build in a conductive sub-layer that will help to dissipate heat away from any hot spots, and can also help deal with transient heating situations. This means we apply just the right amount of coating to deliver the necessary protection whilst minimizing the weight impact of the coating (as low as 0.03g/cm² for some applications).

APPLICATIONS

Proven in motorsport, performance road car, defence and aerospace, Zircotec is successfully being used in the following applications.

- Body Panels
- Brake Parts
- Chassis
- Diffusers
- Exhaust
- Suspension
- Heat Shields
- Turbine Blades
- Control Boxes