

PRESS RELEASE

Composite Engineering develop innovative heat shield for high speed industrial machinery

Date 17th June 2002 -11.00 hrs

FOR IMMEDIATE RELEASE

On behalf of an International Client, we have completed the design and engineering for a high-speed industrial machine, which utilises advanced composite materials extensively. One of the many interesting challenges presented by this project was a requirement for the machine to be able to withstand intermittent temperatures of up to 400° Centigrade. To achieve this we have developed an innovative and commercially viable system, which will protect the composite structures from these very high temperatures.

The project commenced when the Client asked to carry out a feasibility study, following this, a design concept was created to illustrate the performance benefits composite materials could provide when compared with more traditional materials. The benefits were such that the project then progressed through to structural analysis and detail design.

The Client's manufacturing process requires the rapid conversion of a raw material, to achieve this component parts of the machine measuring approximately 1 metre x 2.5 metres will reciprocate at a speed of 6 cycles per second, sustaining a load of 4G. The machine has been designed to operate continuously for up to twelve months at a time and it is envisaged that following an annual routine inspection the machine will then return to continuous operation.

The machine is currently under construction and it is planned that the first prototype will be installed at one of the Clients manufacturing facilities in Germany. As they operate on an international basis and the machine is designed to increase manufacturing efficiencies, it is hoped that ultimately machines will be installed worldwide, leading to a substantial increase in global profitability.

With this project Composite Engineering have developed an industrial machine, which utilises advanced composite materials extensively, and one that will be able to operate in a harsh manufacturing environment.

Paul said, "To achieve the projects objectives we have had to push forward the accepted boundaries of composites technology, we believe this to be the first industrial machine to be constructed from advanced composite materials which will be able to sustain intermittent temperatures of up to 400° Centigrade."

Composite Engineering is a project management, design and engineering company that specialises in the development of advanced composite structures. The company's Managing Director, Paul McBride has pioneered the application of this technology following his graduation in the late seventies, his career encompasses senior positions in both Formula 1 motor racing and manufacturing companies.

Media enquiries:

E-mail: press@compositesengineering.com