

PPA GROUP

Developing composite repair capabilities.

Challenge

PPA was firmly established in the market place for the manufacture, supply and repair of non-metallic components for a wide range of aero-structures using 'traditional' materials such as wood or acrylic.

However, with the emergence of composite materials in advanced manufacturing industries, PPA identified in order to strategically position themselves to take advantage of the shift in industry, PPA needed to develop expertise in composite materials and embark on the first-steps in transformation into an advanced manufacturing organisation.

Solution

PPA sought expertise from Dr Arthur Wilkinson, Senior Lecturer in Polymer and Composites Processing in The School of Materials at The University of Manchester. Together with KTP Associate Asier Agirregomezkorta, the partnership undertook a successful 24 month Knowledge Transfer Partnership to develop in-house knowledge and expertise in methodologies to identify composite defects, techniques to repair damage to composite components and the skills and capabilities to manufacture composite components.



Benefits

The development of technical abilities through the KTP project enabled the company to demonstrate a new level of expertise in composite repair and to position itself as a Composite Repair Centre. The project formed part of a process of development that has significantly raised the profile of the company with its existing network of customers in the aerospace sector. It also brought the company to the attention of potential new customers in the marine and automotive sectors.

The company has recently invested £100,000 in a composite facility at its headquarters in North Wales, and as a direct result of the KTP, the company have been asked to manufacture new components for a prestigious car manufacturer and anticipates achieving additional sales of over £600,000 within three years.



The involvement in this KTP has generated new industrially relevant material for a number of undergraduate courses in The School of Materials which students respond well to and the experience gained on composite repair has fed directly into my research.



Arthur Wilkinson



Company Overview

PPA Group's core business activity is the manufacture and repair and overhaul of non-metallic components and assemblies for the aerospace, automotive and marine industries.



We found the project to be a great way to improve processes, enhance skills and provide the company with a new competitive edge in the market place.



Peter Gunson