

Catalysing Growth through Research for Transport Equipment Manufacture (TEM)

Description of Business

Resonant Systems Limited offers a full range of services relating to scientific and electronic equipment. Typical projects include the design and manufacture of measurement and control systems, novel applications of display and lighting equipment, agricultural machinery development, radio-frequency and microwave equipment.

Why engage with the TEM programme?

Resonant Systems Ltd requested the development of a functional prototype of a lightweight bait-boat system to assess its hydrodynamic performance. They required an optimal design with low manufacture costs, and wanted help with identifying these manufacturing routes.

What was the impact of the TEM programme?

Firstly, the design provided by Resonant Systems Ltd has been reviewed and improved e.g. by proposing the application of the sealing gasket between the main body elements. The second stage was the design of the software and control systems associated with the device. The last stage of the work performed to date was the assembly and the testing of the whole system.

The result of the up to date research is the prototype of the bait boat. The current prototype is designed to present main functionality of the bait boat while remaining in the dry environment.

Both hardware and software functionality is being integrated and presented in the current prototype.

What happens next?

Further research on the control systems and possible construction of the second version of the prototype that will be capable of operating on the water if possible within initially planned constraints.

For more information about the University of Derby's Transport Equipment Manufacturing Programme, visit their [website](#).