PMC are working on a host of new innovations

PMC are working with the innovation team to develop a number of different innovation products and services for use within the field. Connecting PMC provides an update on two of these innovations, how they are progressing and where you can go for further information.

3D Printing

What?

PMC are working with Premtech and the Institute for Sustainable Energy to help combat the growing risk of obsolete parts across the National Transmission System. The aim of the project is to demonstrate that obsolete parts or unavailable parts can be manufactured, when required, to satisfy operations and asset requirements by using reverse engineering and 3D printing techniques.

National Grid aims to harness this new technology as a method to produce obsolete or unavailable parts on demand and is seeking demonstrator parts or part elements to print as case studies.

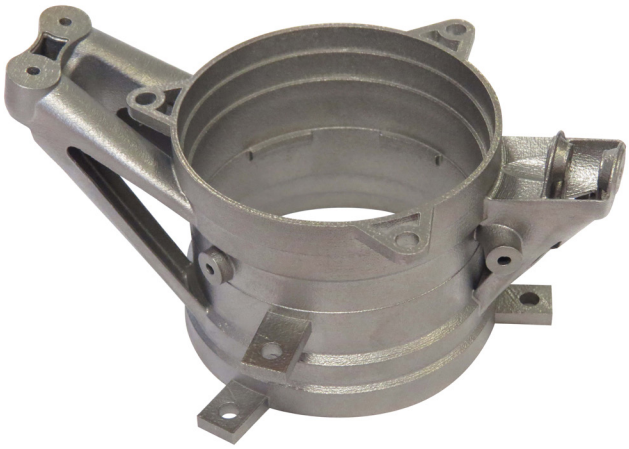
Who?

Alan Horsburgh is facilitating the project.

Alan says “The NIA Advanced Manufacturing (3D Printing of Obsolete Parts) project is currently engaged with a number of departments within National Grid, with a view to helping manufacture parts in metal, resin or plastic.

The Project is at an early stage, but visits have already taken place to Warwick and Didcot Stores with displays planned for the GTO Operations stand down days in November.

A number of spare parts are currently having feasibility studies undertaken to see if they are suitable for 3D Printing with one at the prototype stage”.



New epoxy grout

What?

The new epoxy grout will not have any powder to mix so it is more environmentally friendly and also much quicker to use. Also, the current epoxy resin is hard to pour in winter but as the powder and resin are already mixed this will make the process much easier.

Who?

Gordon Platts is leading on this.

Gordon says: “The new epoxy grout project is on track and the first stage is complete and has passed the relevant tests.

Stage 2 is starting within a matter of weeks. The new grout comes ready mixed in a container and we just add the hardener: either winter grade or summer grade, it also has a higher working temperature: winter is 70 degrees Celsius, summer is 100 degrees Celsius which is much higher than the current one which is about 55 degrees Celsius”.