Haydale Launches Graphene-enhanced Prepreg That Extends Tool Life Over 100%

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Haydale has launched its graphene-enhanced prepreg after extended field trials more than doubled the manufacture of composite parts.

Using Haydale's HDPlas technology, functionalized graphene is added to high performing tooling epoxy resin and then pre-impregnated onto a suitable carbon fiber reinforcement for use in tool manufacture. The graphene-enhanced epoxy prepreg tooling material is designed to deliver cost-efficient composite tooling with extended tooling life, improved surface quality and enhanced thermal conductivity.

Working with a UK Automotive Tier 1 composite parts manufacturer, Prodrive Composites, the tooling prepreg has been on trial for two years, and they have been delighted with the performance they have seen, according to reports.

"We have been producing duplicate parts with both our standard and the nano-enhanced version and can say with confidence that the Haydale material has delivered more than 500 parts without any deterioration of the mould surface. Using the standard version, we would expect approximately 250 pulls from a tool before it is replaced," says Matt Bradney, Director of Business Development, Prodrive.

Commenting on the graphene-enhanced prepreg, Keith Broadbent Haydale CEO said: "With fiber-reinforced composites gaining in use across aerospace and automotive applications, the fact that our functionalized graphene can extend the tooling life significantly will mean substantial cost savings for the producer and end user."

Switching over to the graphene-enhanced prepreg requires no changes to standard

processing for use in autoclave and out-of-autoclave (OOA) applications.

Read the original article on Graphene Info.