

## Graphite Additive Manufacturing www.graphite.uk.com

## PRESS RELEASE

## Graphite SLS - The next evolution of 3D printed parts unique colour, fantastic finish & cost effective

Graphite Additive Manufacturing are very pleased to announce a new, functional, laser-sintered material. Having listened to customers' requests the company has developed this new 'Graphite SLS' material as an intermediate product between a standard PA plastic and Graphite's own, Formula One specification, Carbon SLS.

Graphite, an experienced supplier of 3D printed parts and rapid prototypes, has been supplying its customers with carbon fibre reinforced SLS® (Selective Laser Sintering) parts for some time. Many customers were specifying the material for its colour and surface finish rather than the class-leading strength and stiffness for which it was originally developed.

The new Graphite SLS, whilst not having the ultimate strength of Graphite's Carbon SLS, possesses the same desirable black colour and great surface finish of Carbon SLS and with its use of graphite powder within the nylon mix, it has far superior mechanical properties compared to those of standard white PA12 and without the weight penalty of regular glass-filled nylon materials. Crucially, parts built in the new Graphite SLS are in the same price bracket as these mainstream materials.

Graphite's in-house tensile testing machine ensures that all builds comply with the figures quoted on the company's datasheets. These are real world figures which are achievable with Graphite's machines and materials. This regular testing keeps Graphite's machines dialled-in for peak performance.







The Shadow Robot Company designs and manufactures state-of-the-art anthropomorphic robot hands and related systems. Graphite produced the parts for one of Shadow's robot hands in their new 'Graphite SLS' material and the company constructed the components incorporating their unique manipulation hardware and sensors.

Kevin Lambourne, MD of Graphite Additive Manufacturing says, "A large portion of our profits over the last couple of years has been put back into R&D projects, and this new material is yet another competitive advantage we are able to offer our clients".

Commenting on the new material, Matthew Godden of the Shadow Robot Company said: "We have used Graphite's Carbon SLS in the past where our prototypes have had to both function well and look the part, so we are genuinely excited about their new material. This new Graphite SLS has an excellent finish and a pleasing colour - a big advantage is that it doesn't pick up dirt and stains like the typical white nylon SLS. Parts from Graphite are always very well cleaned, and these components came with the accuracy we now expect and they fitted together perfectly."