HOW TO PRINT NYLFORCE CARBON FIBER and GLASS FIBER

Tips and recommendations:

MAINTENANCE

Even though carbon fibers contained in our *Nylforce* reduce the water that can be absorbed by the filament, *Nylforce Carbon Fiber* is a nylon filament at its roots, so, before printing, be sure that your material is completely dry.

When sold, we provide the spool inside a plastic sachet with a desiccant bag inside, so keeping it in there with the sachet well closed is enough.

In case it got humidity, place it in an oven at 85 - 95°C for 6 to 8 hours, then put it in a dry place preferably in a small closed container with desiccant.

HOT END, NOZZLES and COOLING FANS

As the filament requires temperatures between 250°C and 265°C to extrude, please be sure that your hot end is set up for printing Nylon filaments. An all-metal hot end is the solution and most 3D printers can easily be upgraded with it in order to print at temperatures above 240°C (extrusion temperature).

For the abrasion effect of the carbon fibers, stainless steel, hardened nozzles able to resist abrasive materials or the *OLSSON RUBY nozzle*, are highly recommended.

Larger nozzles (0.6 and larger) can produce amazing strong parts as the trace width is directly proportional to interlayer adhesion. that you can purchase from us, in diameters 1.75 and 2.85 and from 0.4 to 0.8 mm.

Cooling fans are not recommended.

BED ADHESION

The filament doesn't stick well on PEI, BuildTak or similar surfaces, we print it successfully on a heated glass bed (60-70°C) with PVA based stick glue or a non-heated one with a sheet of Garolite LE.

A great feature of our *Nylforce Carbon Fiber* is that the carbon fibers inside, beside reducing water absorption, keep the material dimensionally stable and reduce also the shrink rate (common in pure nylon filaments) while printing.

EXTRUDER TEMPERATURE

Every 3D printer has its own settings, but 250-265°C is the recommended guideline.

Remember, Nylons can be extruded at lower degrees, but parts easily break when not printed hot enough, so be sure you can reach the right temperatures.