

# ENHANCED SURFACE APPEARANCE DISTINGUISHES NFD'S VELOCITY SERIES OF LONG FIBER REINFORCED NYLON COMPOSITES

SHANGHAI, CHINA – NFD, a global leader in long fiber thermoplastic (LFT) materials and technologies, recently revealed the enhanced aesthetic capabilities of its high flow nylon long fiber reinforced composites. The products simplify the injection molding of high fiber content LFT components by more easily producing the smooth, fiber-free finish desired on external surfaces.

NFD developed its series of high flow nylon (polyamide) 6 and 66 LFT composites to facilitate easier and quicker molding of high glass or carbon fiber content materials. Standard LFT materials with fiber loadings of 50% or above exhibit high viscosity characteristics which can make them problematic to mold, especially in thin wall sections.

"What was originally a side benefit of improving flow has turned out to be a very desirable attribute of our Velocity long fiber products," said Ming Wang, business development manager at NFD. "As the use of LFT's progresses from industrial goods and internal structural elements to consumer goods and exposed housings, their appearance and surface finish has become a more important selection criteria."

With standard high fiber content materials, higher molding temperatures are required to obtain a resin-rich surface, which results in slower cycle times and increased operating costs. When using NFD's long fiber grades, enhanced, fiber-free surfaces are obtainable at 30-40 ° F (17-22 ° C) lower processing temperatures. A smooth to the touch, resin-rich surface free of fibers makes colors appear more vibrant and is capable of holding finer embossed details – such visual characteristics are important to establishing high product quality perceptions among consumers.

"The superior surface finish of our Velocity LFT products virtually eliminates the need for any type of secondary finishing operations and it's possible to achieve a near class-A surface finish with polished molds," said Wang. "Combining these aesthetic benefits with its capabilities for producing thinner wall sections that facilitate more complex designs while utilizing less material and NFD has long fiber reinforced materials that are ready to take on a new generation of applications."

Surface finish of standard and long fiber reinforced composites3X images show (left) the surface finish of a standard 50% long glass fiber nylon 66 composite with fibers present on the part surface and (right) the surface finish of a 50% long glass fiber nylon 66 composite with its smooth, fiber-free surface finish that is better able to hold fine details. Both samples were injection

molded using the same processing conditions.

For more information on NFD's LFT products and technologies, please call +86 021-51298656,, or visit their website at [www.nfdpla.com](http://www.nfdpla.com).