



The Benefits of Milled Glass Fibers

One of the challenges with semi-crystalline polymers like PP reinforced with glass fibers is anisotropic mold shrinkage. This is a fancy way of saying the mold shrinkage in the flow direction is less than the cross flow direction.

This can lead to molded part warpage. The usual fix for this issue is a straight mineral filler. The calcium or talc shrinks isotropically. This means the flow and cross flow directions shrink at the same rate.

There is a huge tradeoff in physical and thermal properties. These properties decrease accordingly and may not make the part suitable for the application.

Sometimes blends of glass fibers and minerals are used with limited success to mitigate molded part warpage.

Milled glass fibers may maximize physical and thermal properties while eliminating the tendency towards molded part warpage. Usually, glass fibers are 9 to 13 microns in diameter with a length of 1/8 of an inch. The milled glass fibers are of similar diameters, but much shorter in length - about 1/32 of an inch.

Bottom line – remember to consider milled glass fibers for reducing molded part warpage and maximizing overall physical properties.

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