

# Commercially Viable Recycling Scheme for Long Fiber Reinforced PP Instrument Panels

*Robert Egbers-American Commodities Inc.  
Peter Wiedeman-WIPAG Recycling GMBH*

## Abstract

To optimize the recycling process for LFPP, we will present the differences in the physical properties of test specimens using different potential recycling schemes. These include:

- Direct molding of chips with a size of 15 mm;
- Molding of a regrind with a particle size of 6 mm;
- Molding from pellets produced on a single screw extruder; and
- Molding from pellets produce on a twin screw extruder.

We will show that the glass fiber gets shorter with more severe treatment. We will also show how this affects the physical properties of virgin blend samples with different percentages of recyclate.

We will also show our unique separation technology and the effect of remaining foam in the recyclate. Alternative methods of separation use granulators only and therefore leave a lot of PU foam in the recyclate decreasing the physical properties substantially.