

Structural Polymer Composites from Recycled Raw Materials



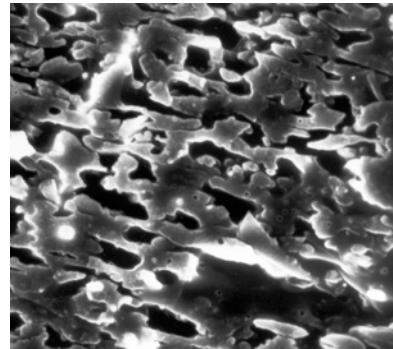
Overview

Polystyrene and High Density Polyethylene, two polymers that are ordinarily incompatible in a melt blend, can be combined under proper processing and composition parameters to produce a strong, stiff composite material with properties exceeding that of either component. Prepared from recycled raw materials, structural I-beams, railroad ties, and other components can be economically and effectively fabricated.

Progress

The oldest of the AMIPP technologies, PS/HDPE materials have undergone research, development, scale-up and commercialization. Currently commercial products are produced under AMIPP/Rutgers University license at Polywood, Inc. or Edison, New Jersey for a range of structural applications. Major project emphasis is towards identifying suitable end-uses for these products and then integrating the material design, structure design, fabrication, and construction phases.

Tables and Figures



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