

# Advantage **ERIEZ**<sup>TM</sup>

Magnetic, Vibratory and Metal Detection Solutions for Industry

## NEWS RELEASE

*For Immediate Release*

### ERIEZ' NEW **POLYMAG**<sup>®</sup> PROCESS REVOLUTIONIZES PLASTICS RECOVERY

Eriez announces a groundbreaking new development in multi-material plastics separation by way of the company's innovative, new **PolyMag**<sup>®</sup> Process. With Eriez' **PolyMag** Process, costly hand sorting and other labor intensive procedures molders may use to recover valuable mixed resins are a thing of the past.

The **PolyMag** Process goes to the core of the problem by creating a material that incorporates separation characteristics into the design. By including one percent of the **PolyMag** Additive, similar to a colorant loading, the resin becomes a candidate for magnetic separation.



Sequential 3D blow molding, two-shot injection, co-extrusion and overmolding processes frequently produce scrap. This scrap is often made up of dissimilar plastics that need to be separated for maximum recovery efficiency and cost savings.

One challenge multi-material processors face is segregating and recovering dissimilar resins. Salvage labor is expensive and inconsistent. Cutting, peeling and sawing multi-material molded parts create employee ergonomic risks. Add to this, escalating resin prices and there is a special urgency to recycle these mixed plastic resins.

Eriez' cutting edge **PolyMag** Process utilizes the time-tested method of magnetic separation to reclaim valuable plastic resins. The **PolyMag** Separator uses extremely powerful Erium<sup>TM</sup> Rare Earth Permanent Magnets to separate mixed resin regrind particles.

In the **PolyMag** Process, the first step is to blend a very small amount of the **PolyMag** Additive into one of the co-molded resins with an additive feeder or color auger. Then to recover the scrap that occurs from start-up, process variations or design changes, simply granulate the multi-material moldings using a standard plastics granulator. The regrind material is now ready to be run through the **PolyMag** Separator. The end result is a high percentage of resin separation, in less time and with greater safety than ever before possible.

By design, the **PolyMag Additive** imparts a low level of magnetic susceptibility without materially affecting the physical properties of the resin or molded part. The additive is a dry, free flowing pellet, with a non-polymer carrier that is compatible with a wide range of resins.

All resins, including thermosets and thermoplastics, are candidates for the **PolyMag Process**. As long as the multi-material part can be ground, **PolyMag** can help separate it.

When chemically bonded materials with a high percentage of surface contact are used, it may be necessary to produce a smaller regrind particle to liberate the two resins. Eriez can offer assistance in this area.

Eriez is recognized as world authority in advanced technology for magnetic, vibratory and metal detection applications. The company's magnetic lift and separation, metal detection, materials feeding, screening, conveying and controlling equipment have application in the plastics, process, metalworking, packaging, recycling, mining, aggregate and textile industries. Eriez manufactures and markets these products through nine international facilities located on five continents. For more information, call toll-free in the U.S. and Canada at (888) 300-(ERIEZ) 3743 or (814) 835-6000. For online visitors, go to [www.eriez.com](http://www.eriez.com) or send Email to [eriez@eriez.com](mailto:eriez@eriez.com)