

## Case Study

# Injection molder saves more than \$62,000 annually by using Dyna-Purge® for preventive maintenance.



Joe Riggs, Assistant Plant Manager at Plastic Products, prepares to pour Dyna-Purge M, packaged ready-to-use, into an injection molding machine. The company was experiencing high scrap rates when changing over from black glass-filled PET to ABS. **Switching to Dyna-Purge M for routine preventive maintenance reduced its scrap rate by 82% and saved more than \$62,000 annually.**



Producing louvered grills, machine parts and many other products presented daily purging challenges for Plastic Products. Operators would use up to 140 lbs. of in-house resins and sometimes spend 8-to-10 hours to pull and clean the screw. **With Dyna-Purge M, the company has cut downtime up to 87%.**

### Situation:

Headquartered in Lindstrom, Minnesota, Plastic Products Co., Inc. is a **contract injection molder with nine plants in six states**. The Lebanon, Kentucky facility operates 34 processing machines and uses a wide range of resins to produce a variety of consumer products. Injection molding machines include Nissei, Milacron, Engel, and Mitsubishi systems, with barrel capacities ranging from 1.59 to 80 ounces and temperatures from 350°F to 610°F.

As part of the **daily maintenance routine** at the Lebanon plant, **in-house resins were used to purge colors and materials. This method often presented problems.**

Downtime for changeovers was too lengthy, especially when switching from black glass-filled PET to clear ABS. **Machines were often shut down to remove the screw and clean it manually, an 8-to-10-hour process.** In addition, there was a significant amount of scrap and wasted material reported.

### Solution:

**Use Dyna-Purge M**, a versatile purging compound designed for purging a wide range of resins at 350°F to 600°F (177°C to 315°C).

### Results:

- Plastic Products **lowered its annual purging costs \$62,363, a 55% reduction**, by using Dyna-Purge M. The average cost per purge with in-house resins was \$304.00. With Dyna-Purge, it is now only \$137.70.
- Regularly using 25 lbs. of Dyna-Purge M as part of its preventive maintenance program has enabled Plastic Products to **save more than 42,000 lbs. of molding-grade resins a year**. This represents an 82% reduction in purging waste.
- Downtime for **changeovers now takes only 80 minutes, an improvement of up to 87%** compared to spending from 2 to 10 hours for changeovers before using Dyna-Purge M.

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