

Compounder reduces purging scrap by 30% switching to New & Improved Dyna-Purge® X.

SITUATION

Dynamic Modifiers, based in Atlanta, GA, is a research and development company manufacturing a full line of specialty additive concentrates and other materials used in the property modification of thermoplastics. The company has a 32,000 square foot state of the art manufacturing facility with a twin screw co-rotating extruder and two single screw extruders. In addition, their lab runs a pilot fiber extrusion line along with a lab extruder and injection molding machine.

Due to Dynamic Modifiers' stringent quality control standards and frequent color changes, they purge their lab extruders three times per day on average. Colors, such as a red iron oxide pigment, are very difficult to purge and often lead to excessive downtime and contamination. In the past, the company would run a chemical purging compound but would continue to experience cross contamination after the extruder had been purged.

SOLUTION

The Production Manager initiated purging trials and requested a sample of New and Improved Dyna-Purge® X.

After running the trials, Dynamic Modifiers noted that they were able to transition to the next color successfully using only 1.5 lbs. of New Dyna-Purge® X. Between the purging compound and the transitional resin, this amounted to a 30% savings in purging scrap. Moreover, they were able to begin extruding the next color in less than 12 minutes, a 21% time savings. New Dyna-Purge® X is effective to use in a broad range of extrusion applications such as profile, sheet, cast film and compounding with processing temperatures ranging from 320°F to 575°F (160°C to 302°C). This advanced formulation expands into negative flow areas, loosening and removing degraded material.

RESULTS

- Saved 30% in reduced purging scrap, using only 1.5 lbs of Dyna-Purge® X per purge.
- Successfully transitioned to next color in less than 12 minutes, a 21% improvement over the chemical purging compound.
- Reduced their cost-to-purge to only \$22.79.



Successfully transitioned to next color using only 1.5 lbs of New & Improved Dyna-Purge® X.



Stringent quality standards and frequent color changes means Dynamic Modifiers has to purge three times per day on average. New & Improved Dyna-Purge X reduced changeover time to only 12 minutes.



Shuman Plastics, Inc.

35 Neoga Street ■ Depew, NY 14043 USA
Phone: 716-685-2121 ■ Fax: 716-685-3236
E-Mail: info@dynamapurge.com

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www.dynamapurge.com

CASE STUDY