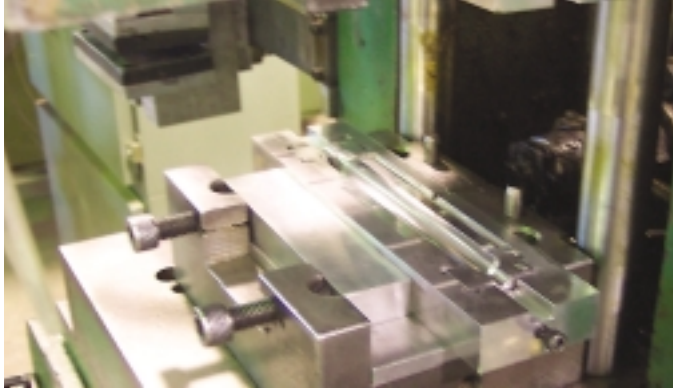


Case Study

Injection moulder uses Dyna-Purge K to lower purging costs by 52% and downtime by 60%.



Operating three Newbury injection machines used for overmoulding, Mitcham Canada runs black colour for long periods, making purging very time-consuming. By switching to Dyna-Purge, the company decreased purging time from 1-1/4 hours to 30 minutes, a 60% reduction in downtime.



Cable splice produced by Mitcham before (left) and after (right) the overmoulding process. By using Dyna-Purge instead of virgin polyethylene to purge, the company has lowered its cost to purge by 52%.



Samples of consecutive shots after introducing Dyna-Purge K into the machine. Dyna-Purge has solved the problem of black specks appearing after purging while providing Mitcham with faster, cleaner transitions between colours.

Situation:

Mitcham Canada, Ltd., of Calgary, Alberta, operates three Newbury 30-ton injection moulding machines, processing polyurethane rubber at barrel temperatures ranging from 193°C to 204°C (380°F to 400°F). With the growing popularity of consumer products combining hard and soft polymers, Mitcham specializes in overmoulding to fill that need.

Purging to change colours - often once a day - Mitcham would run virgin polyethylene through their machines. Continuous extrusion purging was not possible due to attached shut-off nozzles. In addition, the design of the equipment led to a significant amount of material hang-up, while long periods of running black colour made purging very time-consuming.

Consequently, Mitcham would spend, on average, 1-1/4 hours to purge at a labor and material cost of C\$85.22 per purge.

Solution:

Use Dyna-Purge K, a grade specifically designed to purge 'soft-touch' polymers from the barrel and screw at 143°C to 260°C (290°F to 500°F).

Results:

- Downtime for purging was reduced by 60% - from 1-1/4 hours to only 30 minutes on average.
- The overall cost per purge is now only C\$40.88 - a 52% improvement!
- Since Dyna-Purge cleans thoroughly and effectively on the first pass, Mitcham is experiencing faster, cleaner transitions between coloured products.
- Dyna-Purge solved the problem of black specks occurring after purging.

Shuman Plastics, Inc.
35 Neoga St., Buffalo, NY 14043 USA
Phone: 416-283-2427 • Fax: 716-685-3236
E-Mail: info@dynamurge.com • www.DynaPurge.com

Dyna-Purge® and Productivity Begins with Purging® are registered trademarks of Shuman Plastics, Inc.

CS OM105

Dyna-Purge®
Productivity Begins With Purging®