CASE STUDY

RHEOLOGICAL CONTROL SYSTEMS™

Beaumont

Revolutionizing Injection Molding

MeltFlipper® reduces mold commissioning costs for King Systems

"By designing the MeltFlipper® into a mold up front, we don't have to worry about costly imbalances during sampling or production. "
-Tony Burden, Operation Manager at King Systems Corp.

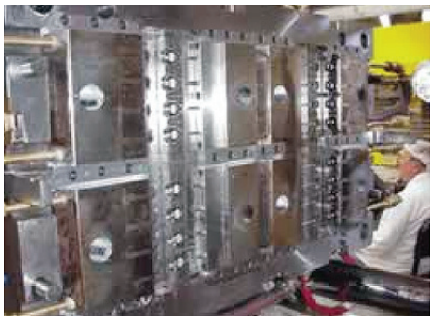
Medical molder, King Systems Corp., built a three-plate, 16-cavity mold to produce a 90 degree medical anesthesia elbow using a low-melt acrylic. To ensure a proper seal and to prevent anesthesia leak with mating parts, it was important to ensure the elbow's crucial diameter dimensions were molded exactly.

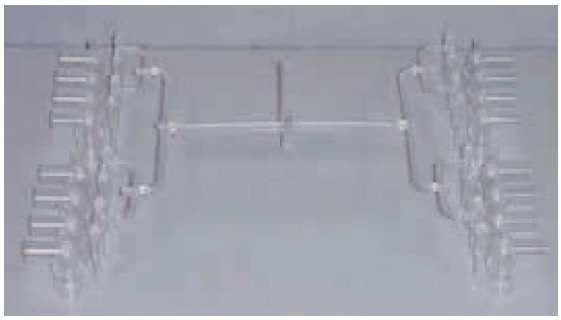
In the original mold design, the steel core pin dimensions were within 0.001" of each other on all 16 cavities. After sampling, King noticed that the molded part's dimensions in the outer 8 cavities were a different size than the inner 8 cavities.

King spent several days trying to artificially compensate for the differences by altering the core pin diameters. "We went around this circle a couple of times, with no acceptable results," said Tony Burden, operations manager of King's plastics technology division.

King had read about MeltFlipper® technology in a trade magazine, and although the company was skeptical, King asked for Beaumont's help.

"After installing MeltFlipper® and returning the core pins to their original-designed size, we have been running this mold for several months without a single quality problem; thus, showing the consistency and flexibility of Beaumont's MeltFlipper® technology," said Burden. "The MeltFlipper® has made the validation of the molding process a breeze."





PROJECT DESCRIPTION:

- Three-plate mold, 16-cavity
- Medical elbow (90 degrees)
- Acrylic material

PROBLEMS :

- Variations between inner and outer cavities
- Product assemby failing
- Artificially balanced

SOLUTION:

- Install MeltFlipper® technology
- Remove artificial imbalance

RESULTS:

- Reduction in mold commissioning cost
- Faster time-to-market
- Scrap reduced to 0%

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Beaumont Technologies, Inc.
1524 E. 10th Street
Erie, PA 16511
PH 814 899-6390 | FX 814 899-7117
info@beaumontinc.com
www.beaumontinc.com