FLOW MANIFOLD TECHNOLOGY



INDUSTRY-LEADING COLOR CHANGE. UP TO 47% FASTER.

Color changeover efficiency is an important cost factor. Each event interrupts the injection molding production process and large amounts of expensive polymer can be lost with each transitional shot. Mold-Masters original iFLOW manifold technology helps to maintain your productivity, minimize scrap and lower your cost per part. Unlock your operations full potential with Mold-Masters technology.

KEY FEATURES

2-PC BRAZED MANIFOLD DESIGN

- Incorporates patented melt-flow geometries, flow path options and runner shapes.
- Runners are carefully CNC milled with curved paths and polished.
- Sharp corners and dead spots are eliminated.
- Promotes resin flow.
- Extensive flexibility for design optimization.

BRAZED HEATER TECHNOLOGY

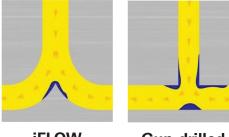
- Aids in the color change process.
- Optimizes heat transfer.
- Enhances thermal mold balance.
- Improves energy efficiency by up to 20%.
- Superior reliability with available 10-year warranty.

COLOR CHANGE OPTIMIZATION SERVICES

- Optimized for each application.
- Dedicated design and simulation services.
- Comprehensive knowledge and experience.
- Extensive application library.
- Global support.







iFLOW

Gun-drilled

iFLOW runner channels eliminate dead spots which helps to clear resins and complete the change color process significantly faster.



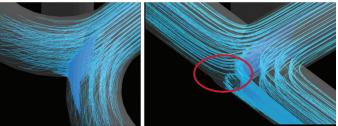


CRITICAL INSIGHTS FOR RAPID COLOR CHANGE PERFORMANCE

- Oversized channels, poor corner designs, bad melt splitting layouts and mismatched melt channels can make efficient color change impossible
- Mold-Masters 2-piece iFLOW brazed manifold channels improve color change by eliminating angular flow paths that can create dead spots.
- The velocity flow simulations to the right compare iFlow and gun-drilled channels.
- Gun-drilled melt channel intersections produce natural stagnation points and high shear areas (dead spots show in dark blue).
- This causes the material opposite the melt channel intersection to stagnate while causing the material on the other side to accelerate.

iFLOW

CONVENTIONAL



Hang up areas (dark blue) are more pronounced with gun drilled channels. making color changes more difficult.

Hang up

spots



Hot Runner Temperature Controllers

COLOR CHANGE PURGE WIZARD

To further enhance color change, Mold-Masters TempMaster hot runner temperature controllers incorporate our advanced Color Change Purge Wizard. This step-by-step guide takes into account resin type, temperature, the injection machine and other factors to clear resins more efficiently.

