

# DME Gate-Mate® Hot Sprue Bushings

IDEAL FOR DIRECT  
PART GATING,  
SINGLE-CAVITY MOLDS



Gate-Mate® Hot Sprue Bushings

# Gate-Mate® Applications and Benefits

## DME Gate-Mate® Hot Sprue Bushings

The DME Gate-Mate® Hot Sprue Bushing is designed for direct part gating in single-cavity molds, eliminating the conventional cold sprue. The unique design of the bushing provides minimal gate vestige, without the objectionable witness lines so commonly found on direct gated parts.

The bushing transfers molten plastics from the machine nozzle to the mold cavity via a direct channel in the body. The plated copper alloy tip provides an improved temperature profile in the gate area.

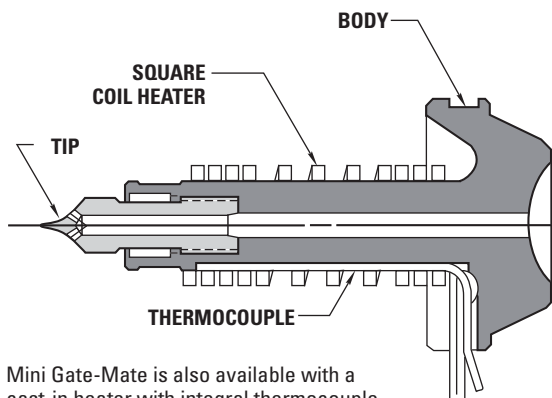
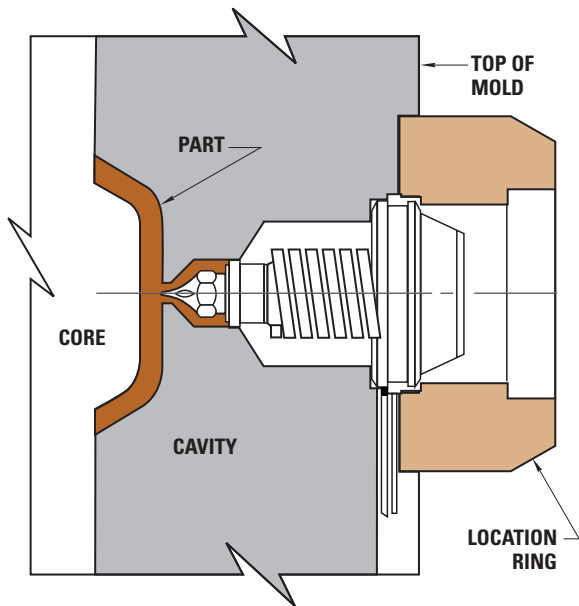
The DME Gate-Mate® Hot Sprue Bushing utilizes an advanced design square coil heater and independent thermocouple, strategically located for precise temperature control. The bushing is available in three sizes to suit a variety of applications.

See the DME Control Systems Catalog for Smart Series® Single Zone Temperature Controllers. (For Multi-Cavity, see DME Gate-Mate Nozzles).



Mini and Jumbo Style Gate-Mate Bushings Shown

## Typical Applications



**NOTE:** Mini Gate-Mate is also available with a cast-in heater with integral thermocouple.

## Benefits

- Eliminates sprues, reduces cycle time, improves part quality, increases production
- Provides optimum gate cosmetics
- Plated copper alloy tip improves temperature profile in gate area
- Self insulating material layer surrounds tip for better tip control and part cooling
- Square coil heater and independent thermocouple provide precise temperature control
- Optional cast in heater available for Mini Gate-Mate bushing

## Advantages

- Direct part gating eliminating a cold sprue to trim and no witness lines on the molded part
- Minimal gate vestige resulting in better part appearance
- Faster start-ups providing positive temperature control of gate area
- Reduced cycle times because the bushing allows cooling channels to be placed closer to the gate area
- Cooler cavities with no direct contact between bushing tip and cavity
- Improved part quality with a shorter injection path and elimination of sprue, meaning no regrind
- Increased production with faster cycles and no sprue trimming
- Easy installation and operation, and available in three standard sizes suitable for most applications
- Positive temperature control with J-Type thermocouple and DME Smart-Series® (and G-Series) controllers