

# SCIENTIFIC MOLDING

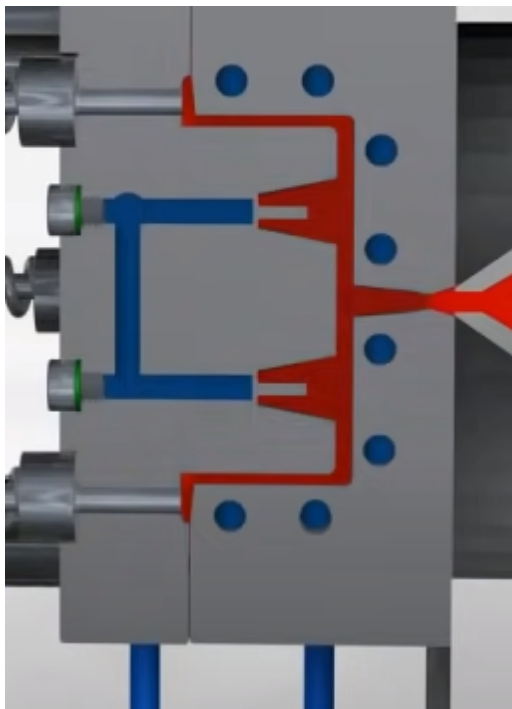
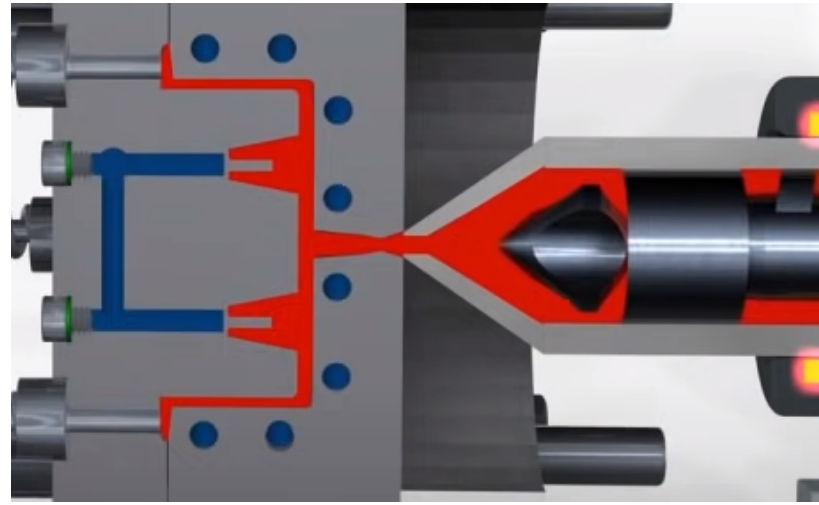
Scientific Injection Molding is a step by step procedure used to build a robust and repeatable process to minimize variations within molded parts.

## STEP 1

### INJECTION/PACK AND HOLD

**Injection** - Melted polymer is injected in to the mold cavity filling it 95-99% full. This step establishes the foundation of consistency between shots.

**Pack and Hold** - As the material is cooling and beginning to shrink, more material is added to the mold to ensure a complete fill.



## STEP 2

### COOLING

A continuation of the cooling and shrinkage of the part in preparation for mold opening and ejection.

## STEP 3

### MOLD OPEN

The part is cooling and releasing from the sides of the mold at the parting lines.



## STEP 4

### EJECTION

The cooled part is pushed away from the mold via ejection pins.

