

Key data

Molded part	Guide wheel
Application	Car window mechanism
Part weight	8,6 g
Material	POM: Hostaform C9021
Mold type	Stack mold
No. of cavities	8

Illustrations simplified, schematically drawn and not to scale.
For a specific application, please consult Synventive.

Customer's requirements

This application involved the production of guide rollers of POM for the car window mechanism with the largest possible number of cavities on an existing, relatively small injection molding machine. The cavities were to be gated directly with the hot runner and at several points around the perimeter of the molding in order to ensure good concentricity.



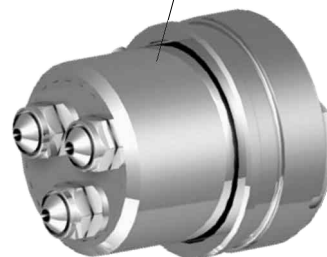
Solution

In the implementation of this application, an externally heated 8-port hot runner system with multi-tip face fit manifold nozzles was employed. The runner was designed in an H shape and had a long gating neck due the stack design of the mold. The nozzles were positioned on both sides of the runner. The cavity was directly gated via open multi-tip nozzles with torpedo at 3 points on the side surface of each molding.



Benefits

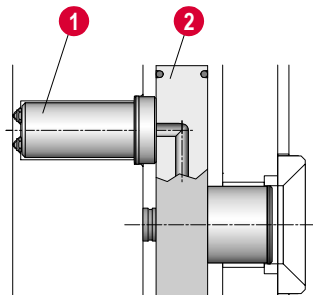
- Production with a relatively large number of cavities on the existing machine
- Good concentricity of the moldings
- Production without sprue waste and without reworking
- Good gating quality with respect to separation and appearance
- Uniform supply and filling of the mold cavities



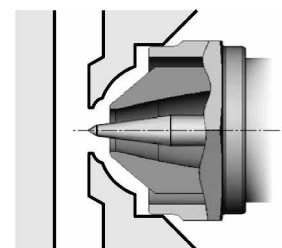
M CB WT M

Schematic product overview

1. Manifold nozzle, face fit
Series M CB...M, Type WT
2. Manifold
Series VC



07 C + V C



W T