

Key data

Molded parts	Housing + 3 inner rings
Application	Needle dispenser
Part weight	20 g, 13 g, 10 g, 7g
Material	PP
Mold type	Family mold
No. of cavities	2 + 2 + 2 + 2

Customer's requirements

This application involved the production of a four-piece module of PP, a housing and three inner rings. They formed the heart of a cartridge housing. The components were to be produced in a family mold with which two complete modules could be produced in one shot.

Solution

In the implementation of this application, a rheologically balanced, externally heated 7-port hot runner system with face fit manifold nozzles was employed. Manifold form and nozzle lengths were specially adapted to the part contour and the required injection points. The cavities were gated via cold sub-runners that were fed by open nozzles with torpedo. The outstanding feature of this system lies in the combination of nozzles of three different sizes on one manifold, whereby the largest of the nozzles feeds two cavities.

Benefits

- Two complete modules in one shot with one mold on one machine
- Assembly of the modules directly at the machine without long transport routes or complex logistics
- Good, uniform molding quality from all the cavities
- High productivity

Schematic product overview

1. Manifold nozzles, face fit
Series 03 C01, Type WT
Series 04 C01, Type WT
Series CB...M, Type XT
2. Manifold
Series VC

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

