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hrsflow

Hot Runner Solutions for Technical Applications

HIGH STRUCTURAL PERFORMANCE, OUTSTANDING PROCESS REPEATABILITY.

Advanced resins for lightweight parts.

Technical industry includes a variety of components with different wall thickness, challenging designs, lightweight structures, and the use of advanced resins.

MARKET NEEDS

- Processing of advanced techno-polymers
- High quality surface
- Low part weight
- Excellent dimensional stability
- High structural performance of the component

Dedicated solutions for high performance industries.

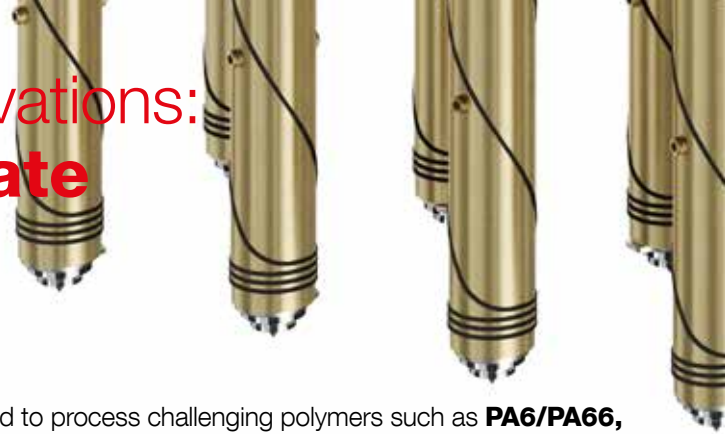
We develop dedicated hot runner technologies for high technical industries working in the electronics, electrical, hydraulics, construction and industrial lighting fields.

Our solutions are designed to process **challenging techno-polymers**, with mechanically or chemically abrasive fillers, tight process window and high molding temperatures.

KEY BENEFITS

- Wide process window and easy restart capabilities
- Great wear and corrosion resistance
- Maximum process repeatability
- Superior surface quality and optimal gate finish
- Structural performance of the molded part

Technical innovations: **new valve gate end rings.**



The innovative end rings are designed to process challenging polymers such as **PA6/PA66, PBT, POM, PPA, and PPS**, which are widely used in technical components like gears and structural parts for automotive, electronics, domestic appliances and other industries.

MAIN BENEFITS

- Enhanced wear resistance of the hot runner components
- Lower material degradation thanks to an optimized process window
- Greater flexibility in the injection point seat owing to the end ring's small diameter

TAKING A CLOSER LOOK AT THE TWO TECHNOLOGIES:

External End Ring for the Tp/Vp nozzle series allows for efficient handling of engineering materials by enabling easy restarting at low temperature, balanced filling of the cavities. It is ideal for applications demanding high structural property of the part with aesthetic quality at the injection point.

Through-the-Cavity End Ring (TTC) for the Tp nozzle series features special geometry that ensures a uniform temperature near the gate, providing an excellent processing window, good restarts at lower temperatures. Its 4mm reduced bushing diameter allows for greater flexibility in the injection point seat and requires simplified manufacturing and maintenance operation. This design results in faster setup times and improves overall productivity.

NEW !

Experience the results of our technology firsthand.

Case study: Cable Holder

High structural performance, outstanding process repeatability.

HOT RUNNER SYSTEM FEATURES	
Molded Material	PA66 + 30%GF
Cavities N°	16
Injection Type	Torpedo
System Type	16 drops system Sa series

PART DESCRIPTION	
Sector	Automotive underhood
Molded Part	Cable Holder
Part Weight	1.2 g
Part Thickness	2 mm

HIGHLIGHTS

- Geometrically balanced filling
- Dedicated system processes PA66+30% GF
- Wide process window and easy restart capabilities
- Optimal wear and corrosion resistance to flame retardant additives
- Excellent dimensional stability and high structural performance of the part

Case study: Gear

Optimal system balance for challenging low shot weights.

HOT RUNNER SYSTEM FEATURES	
Molded Material	PBT+20% Glass Bead
Cavities N°	8
Injection Type	Torpedo
System Type	8 drops system Sp series

PART DESCRIPTION	
Sector	Technical & Electronics
Molded Part	Gear
Part Weight	1 g
Part Thickness	1.5 mm

HIGHLIGHTS

- Achieving optimal system balance for handling challenging low shot weights
- Specific solution designed to process PBT with reinforced material
- High process repeatability

Case study: Adjustable feet

Solutions for complex part design.

HOT RUNNER SYSTEM FEATURES	
Molded Material	PA6+30% GF
Cavities N°	16
Injection Type	Torpedo
System Type	16 drops system Tp series

PART DESCRIPTION	
Sector	Technical & Electronics
Molded Part	Adjustable feet
Part Weight	5 g
Part Thickness	2 mm

HIGHLIGHTS

- Tailored hot runner solution for reinforced material
- Great wear and corrosion resistance of the hot runner components
- Complex part design
- High cavitation

Customer Support

Our team provides you with **complete support**, from the rheological analysis and design phase to try-out and maintenance. For special applications, we can define the optimal system configuration and predict part quality through advanced hot runner systems available in our **Test Lab**.
Plastic samples according to the weight, thickness and geometry of your application can be delivered for a preliminary analysis.

TEST – LAB EQUIPMENT AT YOUR DISPOSAL

- Prototype tools available to try your most challenging polymers
- Full range of nozzles and flow types based on your specific application
- Injection Molding Machines from 50 to 300 tons

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