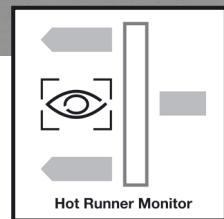




HRM *inside*

HRC *inside*

NMM *inside*



Hot Runner Monitoring

Your tool protection!

wfplastic
Testing · Measuring · Controlling

Wf plastic GmbH was founded in 2003. The family-managed company with a highly motivated team relies on good business relations. Our products are constantly being developed and are always at the state-of-art-technology. We attach particular importance to functionality and intuitive operation here. We have set up a technical center with cutting-edge testing devices and an injection molding machine for our testing series and samples.

Our working environment is characterized by a modern und energetic building. A photovoltaic system covers our entire electricity demand as well as the low heating demand is generated by a heat pump.

Only the best components are used for our products. Here we are aware of the careful use of limited resources and the optimal and efficient utilization of products and solutions.

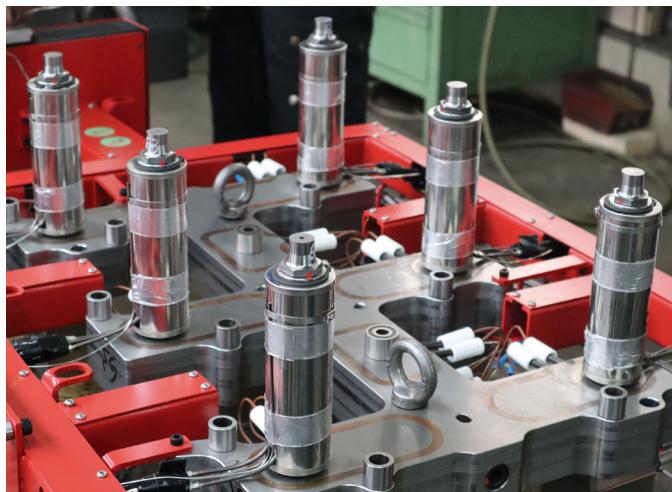
We operate on the national as well as on the international market and also attach value to sustainability in the costumer relation, employee retention as well as in training and knowledge transfer.

Hot Runner Monitoring

Advantages

With hot runner monitoring, you check whether the melt, due to leakages, runs over the manifold, nozzles and electronic connections as well as sensors. The leakages are detected at an early stage.

- Rapid payback period
- Reduce machine downtime
- Less repair costs
- Sustainable investment
- Simple adjustment
- Fast upgrading
- Low maintenance operation



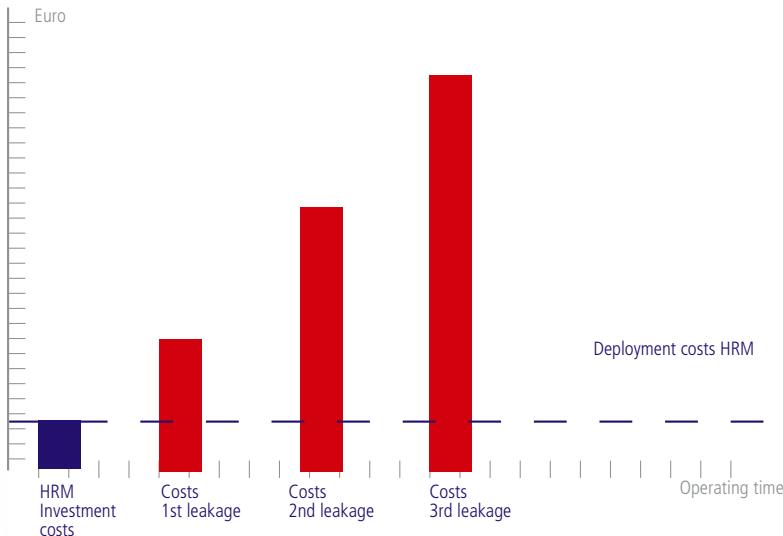
Leakage detection

Through the early detection, causes of failures can be remedied. Possible causes of leakages are:

- Constructional fault
- Incorrect setting in production
- Repair services
- Maintenance services



Cost-benefit



Fixed costs (HRM08) 3.500 EUR

Running costs per year (HRM08) 100 EUR

Costs in case of damage

Labor costs (48 hrs. 60 EUR each) 2.880 EUR

Replacement of hot runner components 5.000 EUR

Loss of production approx. 48 hrs.

(Tool: 100,000 EUR; 3 years AFA; 8,000h / year) 220 EUR

Machine downtime approx. 48 hrs.

(Machine: 600.000 EUR; 5 years AFA; 8.000h / year) 800 EUR

Total 8.900 EUR

Function

In order for the Hot Runner Monitor to be used in practice, the possible leakage points must be defined.

The opening of the stainless steel tubes are placed in these areas, through which a very low air flow is directed. The leaking melt seals the ends of the tubes and, due to the pressure change in the system, the leakage is detected at an early stage.

The stainless steel pipes have an outer diameter of 1.6mm and are very flexible. Laying the tubes is unproblematic, they are laid along the cable ducts of the electrical connections.

At the output of the hot runner, the tubes are joined at an air manifold. From there an air tube is routed to the monitor or optionally connected via a switchbox (distributor service) with a multi-coupling. To establish operational readiness, an air supply of 3...14bar is applied to the Hot Runner Monitor. The machine control is addressed via a potential-free contact in order to interrupt the injection molding process in case of detection.

Function

- Leakage detection by pressure measurement
- Monitoring pipes made of flexible stainless steel tubes
- Stainless steel tubes with 1.6mm outer diameter
- 4-fold distributor to combine the stainless steel tubes
- Operation by 7» touch display
- Tool- and machine-independent operation
- Upgrade of injection molds is possible at any time

Technical data

Connections and outputs

- Compressed air connection 3... 14bar
- Operating voltage 100...240 volt alternating voltage (AC),
50/60Hz potential-free-contact

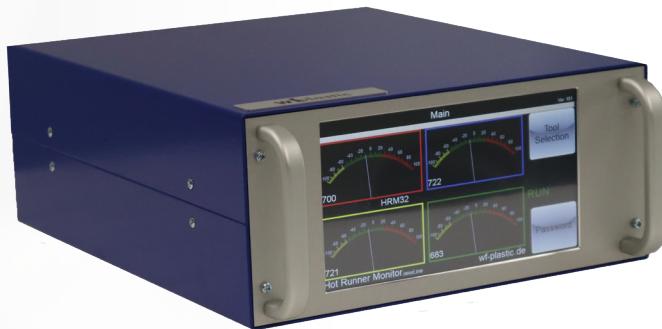
Consumption

- Low air consumption up to 30l/min power consumption < 1500mA

Versions

Hot Runner Monitor (HRM) Types

- HRM 08 (8 monitoring points)
- HRM 16 (16 monitoring points)
- HRM 32 (32 monitoring points)
- HRM Test



Parts and accessories

4-fold distributor

- Including cutting rings and screw fittings
- Order number: 500.000.0008



High-grade-steel tube

- Order number: 500.000.0007



Cutting ring

- Order number: 500.000.0009



Compression coupling 1/16

- Order number: 500.000.0010



Screw plug

- Order number: 500.000.0020



Pressure relief nozzle

- Order number: 500.000.0082



High-grade-steel strip

- Order number: 500.000.0011



Y-distributor hose

- Up to 80 degrees
- Order number: 500.000.0013



Parts and accessories

Switchbox 8-32

- Order number: 500.000.01xx



Tube fitting 1/16

- Order number: 800.000.0069



Air hose

- Temperature range -40 degrees up to +60 degrees
- Order number: 800.000.00xx



Valvetool for distributor

- Order number: 500.000.0017



Fixing base

- Order number: 800.000.1053



Tubing plier for metal tubing

- Order number: 800.000.0053



High-temperature adhesive tape

- Order number: 800.000.0054



Handdrill

- Order number: 800.000.0172

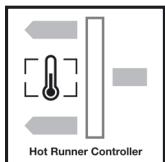


Further Topics



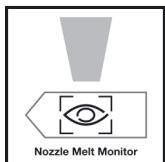
International Standard Tool

Specimen Injection Molding



Hot Runner Controller

Hot Runner Controlling



Nozzle melt Monitor

Nozzle Melt Monitoring

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