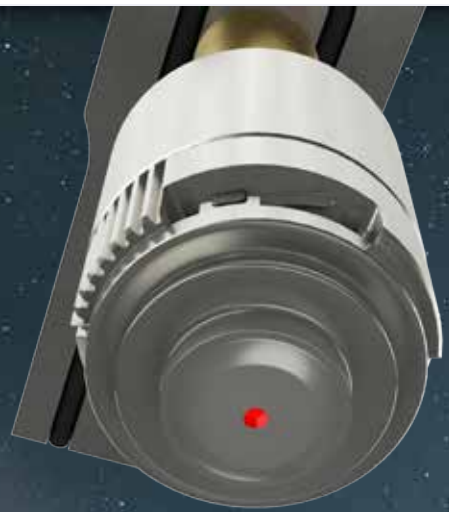


# STARgate HRS

It was always in front of us.  
We just had to see it differently.  
New eyes. Same world.

**Radical change.**



# UNLOCKING A NEW ERA IN VALVE GATE SOLUTIONS

STARgate HRS® is a disruptive **pin-less solution** that manages the flow rate through a revolutionary **diaphragmatic design and movement**.

## Key Benefits

- **Significant cycle time reduction** thanks to the optimal cooling performance of the diaphragmatic concept
- **Pin-less design** ensures smoother plastic flow at a consistent melt speed, enabling faster color changes
- **Optimized circular flow** minimizes pressure loss for more efficient injection
- **Quick color changes** and minimized plastic waste
- **Smaller nozzle size and mold pocket** made possible by the innovative pin-less configuration
- **Simplified maintenance** with easy-to-replace gate inserts
- **Energy-saving design** with external actuator. No cooling required



Fig.1 Adjustable flow rate through diaphragmatic movement and design

## INSIDE TECHNOLOGY

### 1. COMPACT SOLUTION

The radical change in the actuator's position enables a **space-saving design**.

Its pin-less configuration allows for a **smaller nozzle size and mold pocket** compared to standard valve gate systems.

**STANDARD**  
Valve Gate Solution



**STARgate HRS®**



Fig.2 Actuator's position change

### STANDARD Valve Gate Solution



### STARgate HRS®



Fig.3 Valve gate's position change

## 2. PIN-LESS DESIGN

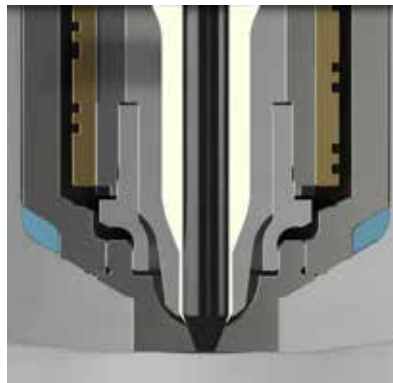
The valve gate's position changes radically, paving the way for a pin-less design.

This ensures smoother plastic flow at a consistent melt speed, enabling **faster color changes**.

## 3. OPTIMAL COOLING PERFORMANCE

The revolutionary **diaphragmatic concept** delivers optimal cooling performance. This results in a significant reduction in cycle time.

### STANDARD Valve Gate Solution



### STARgate HRS®

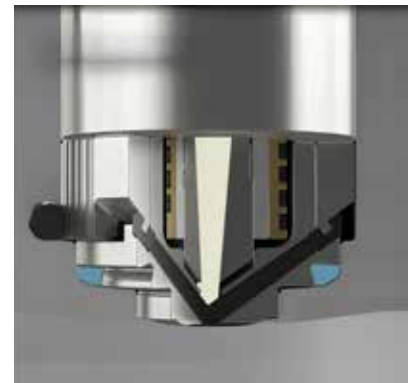


Fig.4 Cooling system's position change

# >> Best Practice

## Turning innovation into results

### HOT RUNNER SYSTEM FEATURES

Molding material:	PP (Post-Consumer Recycled, MFR40)
Cavities N°:	2
System type:	STARgate HRS Technology, 2 drops, M series

### PART DESCRIPTION

Application:	Bucket
Sector:	Thin Wall Packaging
Part dimensions:	6.6 liter
Part weight:	200 g
Part thickness:	1.1 mm

### HIGHLIGHTS

- Significant cycle time reduction
- Pin-less design
- Space saving solution
- Lower pressure loss
- Faster colour change



**Oerlikon HRSflow Italy**

Production Plant  
Headquarter  
Via Piave, 4 - San Polo di Piave  
31020 Treviso  
Phone +39 0422 750 111  
info.hrsflow@oerlikon.com - www.hrsflow.com

**24/7 Service Hotline**

Phone +39 0422 750 555  
service.hrsflow@oerlikon.com

**Oerlikon HRSflow China**

Production Plant  
InGlass Tooling & Hot Runner Manufacturing  
(China) Co. Ltd  
No. 385, Road No. 18, Xiasha, Hangzhou Econ. &  
Tech. Devel. Area Zhejiang 310018  
Phone +86 571 86686900  
china.hrsflow@oerlikon.com

**24/7 customer service for Asian countries**

Phone +86 18858181211  
service.china.hrsflow@oerlikon.com

**Oerlikon HRSflow USA**

Production Plant  
Oerlikon HRSflow USA, LLC  
920 74th Street - 49315 Byron Center, MI  
Phone +1 616 228 6900  
usa.hrsflow@oerlikon.com

**24/7 Service Hotline**

Phone +1-855-HRS-FLOW  
(1-855-477-3569)  
service.usa.hrsflow@oerlikon.com