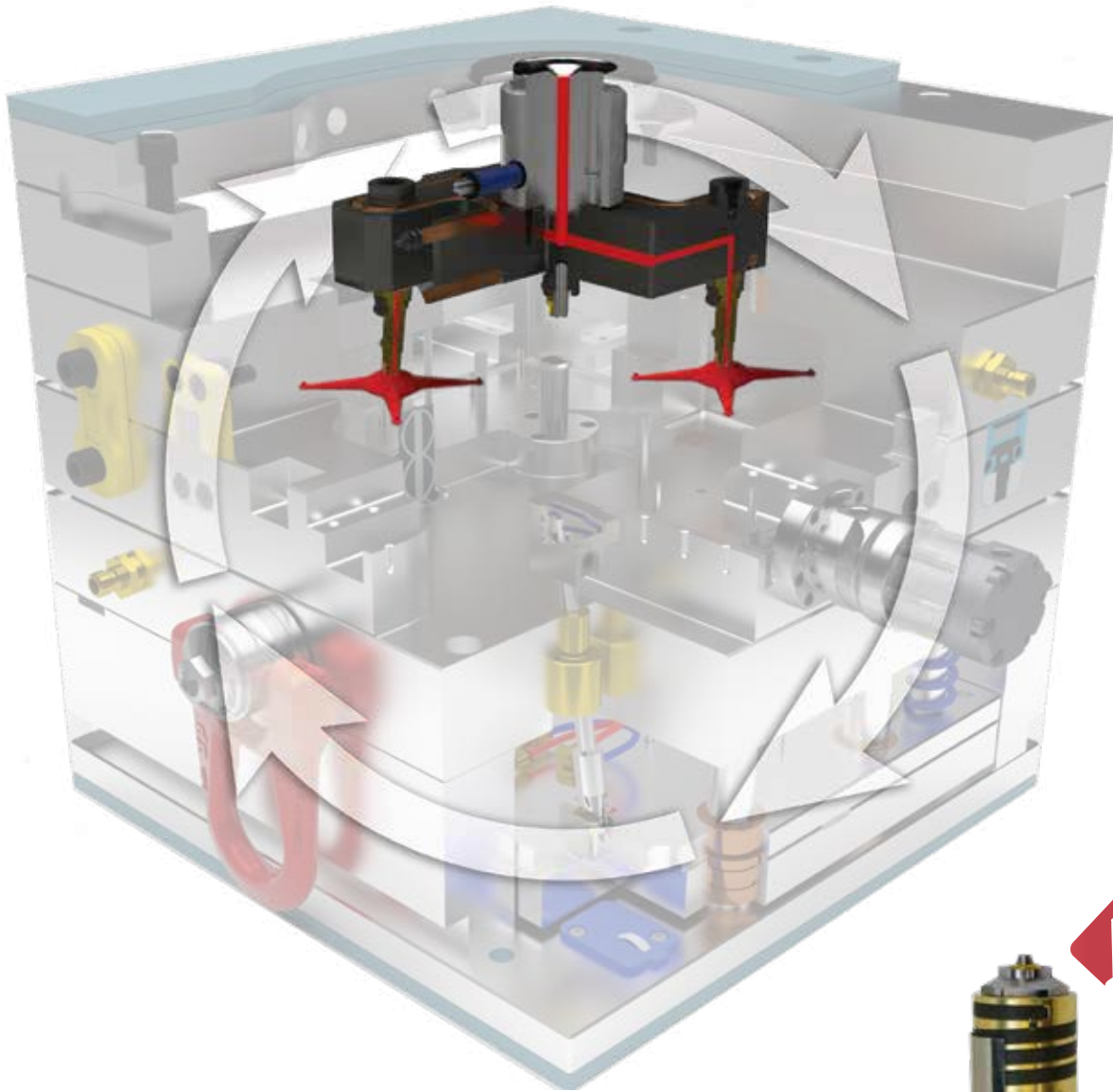




**TOTAL SYSTEM SOLUTIONS**  
FOR INJECTION MOLDING



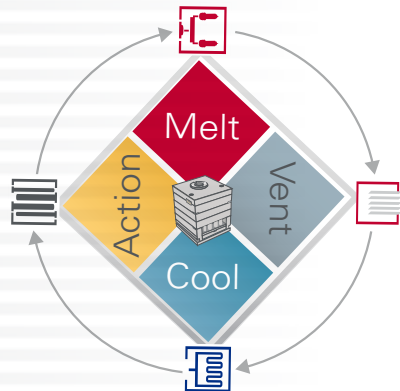
**DME**  
**SmartONE**  
THE SMART WAY TO FILL



# THE BALANCED SOLUTION

Every plastic part is unique and requires a tailored solution.

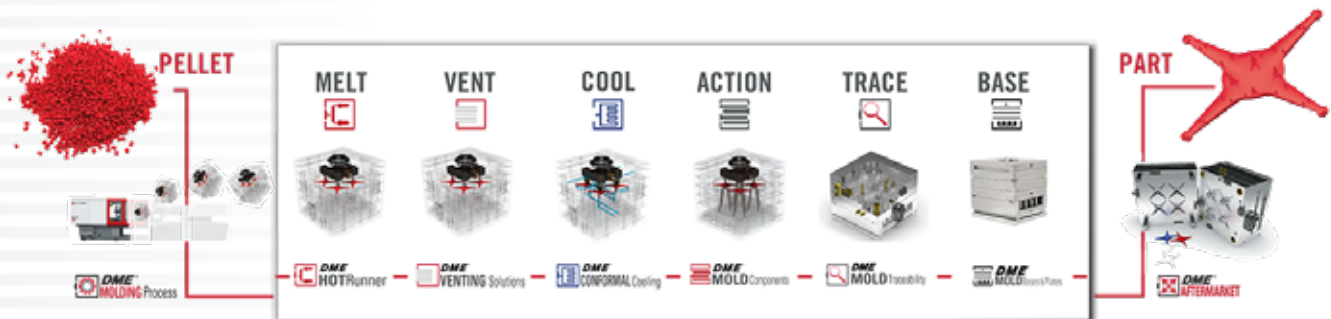
The successful molding of a plastic part relies on the optimal balance of temperature and pressure. The ideal process integrates each element of the system from plastic pellet, design analysis, through the molding process, to the final molded part. It is this holistic approach to mold design and processing that differentiates DME from other hot runner companies.



We draw upon DME's years of technical application experience and wide breadth of advanced technologies to build high performance and reliable systems that enable you to reliably produce the perfect plastic part at the lowest possible cost.



From pellet to part our designed system carefully balances thermal transfer and flow pressure, of even the most complex geometries, to generate high output quality parts.



The DME Molding Design Process

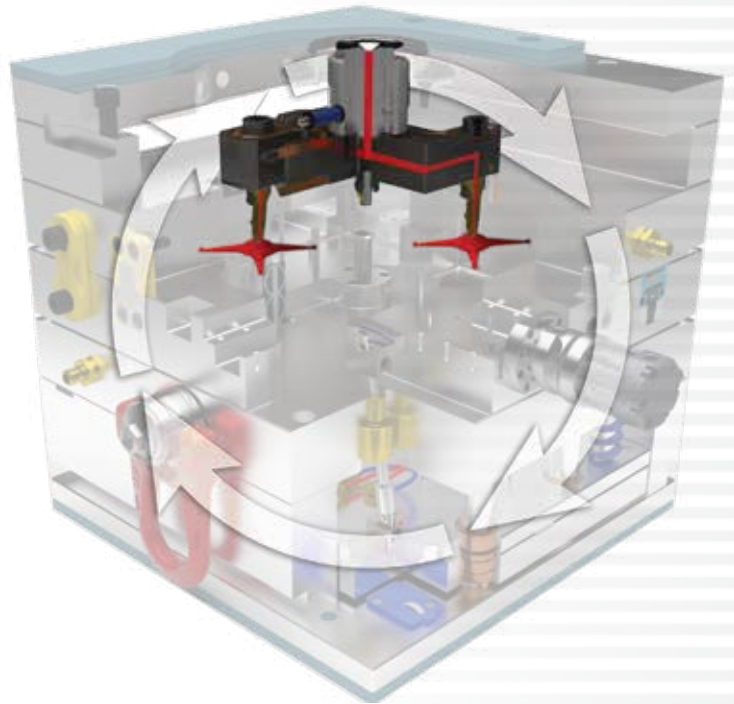
# A Modular Approach to Melt Delivery

## **DME** **SmartONE**

The SmartONE Hot Runner System is built around a modular design concept. It integrates complementary technologies that makes the melt delivery system highly reliable and suitable for a wide range of plastic molding applications.

### The product's strength lies in its simplicity.

Each element of design and part manufacture have been carefully selected. The result is a melt delivery system that precisely controls the pressure and thermal balance of the resin through the molding cycle allowing for the reliable manufacture of high-volume quality parts.



"Our holistic approach to tool design and engineering ensures optimal molding performance"

## COMPLETE MODULAR MELT

Only DME delivers a truly integrated tooling package combining its hot runner systems with precision mold bases, unique venting and cooling solutions and advanced engineered components. It is only by integrating each of these important elements that you obtain the optimal molding process.

This unique approach is supported with DME's legendary after-market services. **The Total Solution to Mold Design for the Perfect Part.**



**DME**  
**SmartONE**

# SmartONE RETHINKING MELT DELIVERY

## Precision Temperature

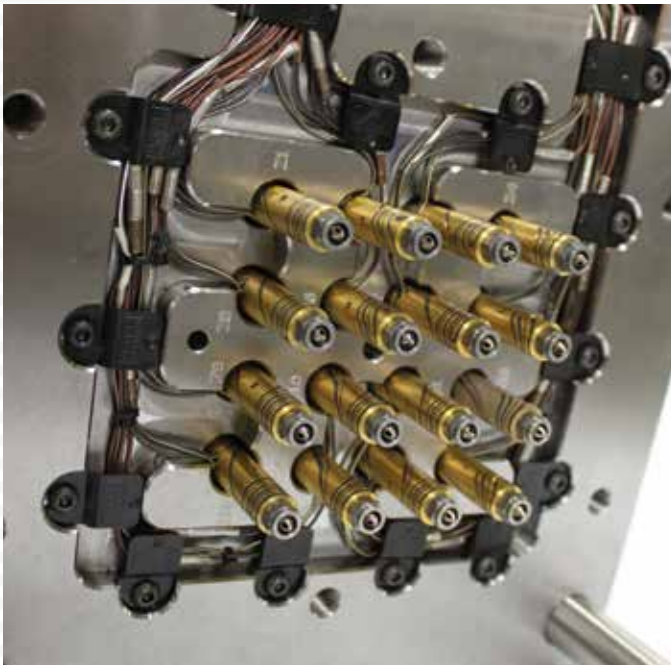
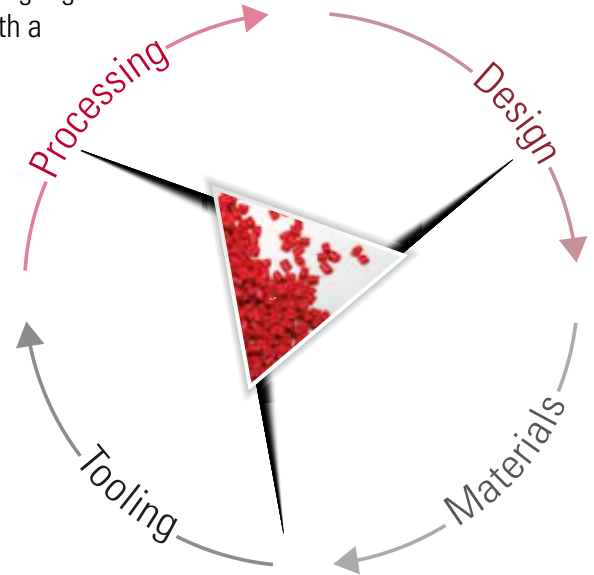
Our heat control technology offers stable heating with minimized loss. Direct heating via replaceable brass sleeve heaters for diffusion into the nozzle body. Thermocouples are ideally positioned for accurate temperature control, all serviceable within the molding machine. The result is an even temperature profile along the entire length of the nozzle guaranteeing high process reliability. The smart system balance allows for the use with a broad range of polymers.

## More Processing Control

Accurate melt distribution from the barrel to the gate and throughout the cavity delivers consistent molding results. Our specially designed melt seal directly at the gate, ensures quick color change performance.

## Extreme Durability

Our systems are built to perform through the life cycle of the tool 24/7. Our Hardened Nozzle body can handle melt pressures up to 20,000 psi.



## **DME** SmartONE

### User Friendly Design and Use

Ease of installation, reliable performance and practical maintenance, guarantees better results and lower operating costs. Our system is designed to allow for the easy replacement of nozzle heater, thermocouple and tip. Using advanced heat treating technology, our threads are wear-resistant for problem-free, tip replacement.

**DME SmartONE, available in both valve gate and fixed gate create parts with excellent surface quality.**

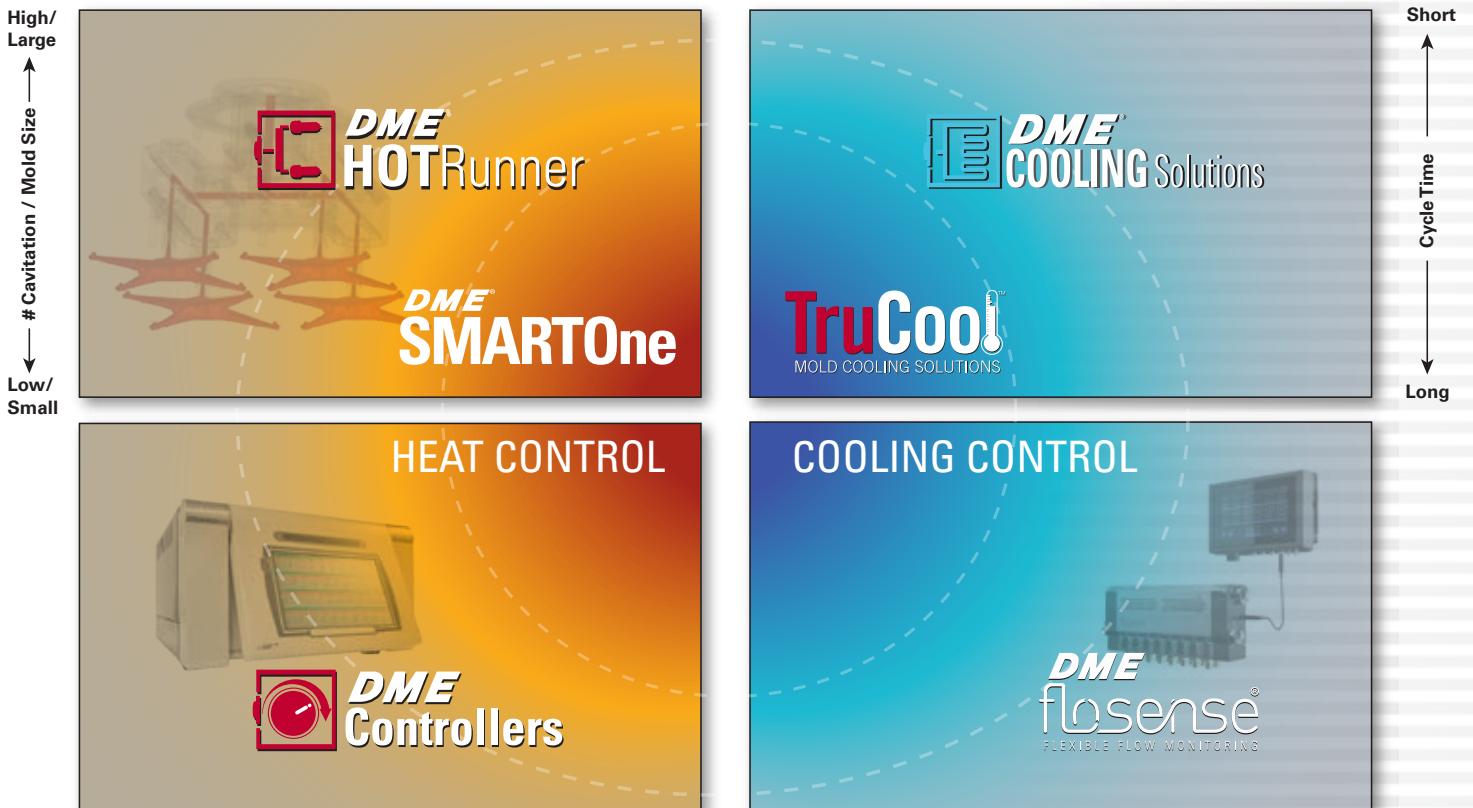


# THERMAL MANAGEMENT

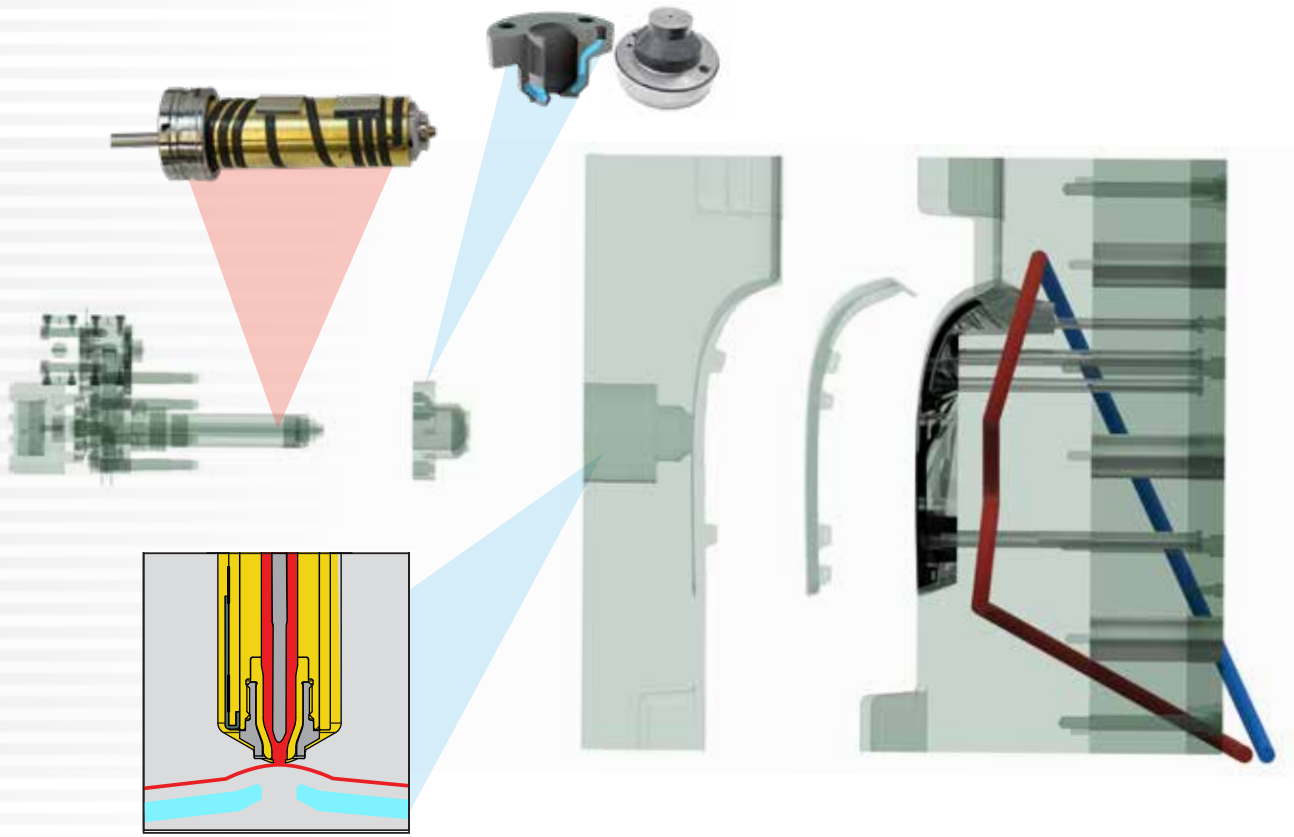
Our approach to melt delivery is a novel one. We leverage our technology to integrate and optimize not only the hot runner system but also cooling of the melt where its most needed. By understanding the type of resins and the necessary flow requirements we help you to manage and control the thermal management of both manifold and nozzle helping to maximize part production output.



## Example: DME CONTROLLED THERMAL MANAGEMENT SYSTEM



# 1+1=~~2~~ 3... ADDING ADDITIONAL VALUE



## 1+1=3 DME Value

On its own a hot runner system is only able to deliver the melt, but the final part demands much more. At DME we integrate a breadth of Industry leading technologies to work alongside the **SmartONE** system to deliver the highest quality in the shortest possible time.

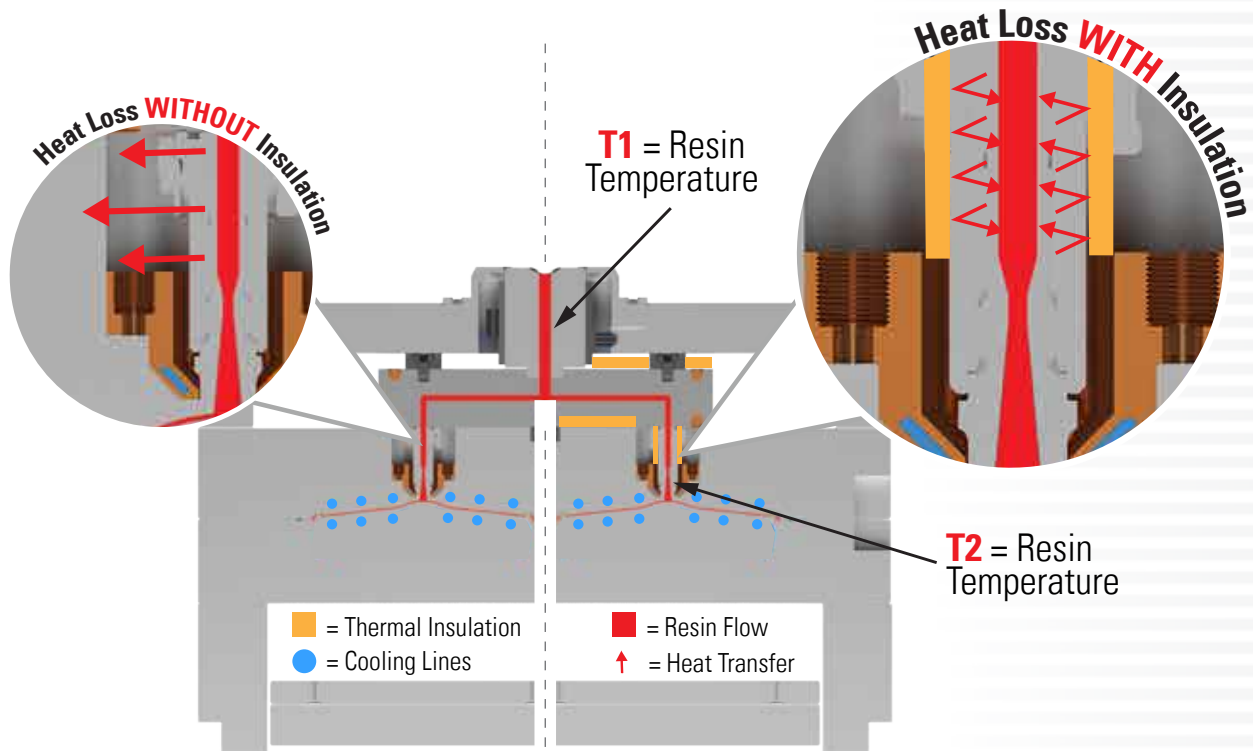


## Optimize Cooling

Working in perfect harmony with the **DME SmartONE** is DME's Conformal Cooled Gate Bushings a thermal management off the shelf solution that can be designed into your next project or retrofitted into an existing tool where excessive heat is causing quality issues or prolonged cycle time.



# SmartONE INTEGRATED SOLUTIONS



## Hot Runner Insulation

DME leadership in thermal management control is highlighted with its work in insulation. The **iControl** High Performance Form Fit Insulation Technology greatly reduces the thermal variation of the melt throughout the hot runner system to ensure  $T_1$  closely matches  $T_2$ .

This proprietary technology, currently used by the military in high end insulation applications, eliminates cold spots in the hot runner allowing the mold to run at the lower end of the resin's processing temperature.

**Result: Less heat in means less heat out for accelerated startups and faster cycle time.** Lower processing temperatures brings further advantage when processing heat sensitive materials. Optical grade resins, bioplastics and resins with high percentages of post-consumer recycled plastics are all prone to degradation with elevated temperatures. SmartONE combined with iControl Insulation allows for faster startup, reduced energy and most importantly lower cycle times.

# CONTROL YOUR DESTINY

Precise temperature control and management are critical elements to successfully producing high quality parts. DME's Smart Series Temperature Controller Systems deliver unparalleled performance for ALL hot runner systems. When combining the DME SmartONE hot runner system with a Smart Series Controller, the results are unmatched. User-friendly performance, Plug-And-Play system approach, Intuitive diagnostic software and System Optimization are just several features that allow all processors to fine tune and control the injection molding process.

The Smart Series Controller can be configured with standard features or can be built to suit valve gate control too! Available in both Hydraulic or Pneumatic, our valve gate control provides the user full management over the valve gate sequence, critical when molding complex or large parts. Same great features built on the same platform to deliver high quality molded parts.

Whether your molding a simple single cavity with PP or 96 cavities with a high-grade glass filled engineered resin we have the controller for you. DME understands not all applications require high end temp control however there are many that do. That's why we offer a wide range of SmartSeries® controllers from single zone push button to fully advanced 216 zones of control to meet your application needs.



**The DME SmartSeries® blue box set the industry standard over 30 years ago and is still a reliable solution for many molding applications.**

**DME Mainframes:** Available in 2, 5, 8, & 12-zones • Heavy-duty Welded Construction • RoHS/WEEE Compliant

**TSM1512 MODULES:** Color touch screen digital display providing readouts for: Actual Temperature, Current Mode, Percentage Power and Current Reading • Leak Alarm

**SSM1512 Modules:** Maintains simplicity of operation with simultaneous display of setpoint and temperature

**TSP Plus SmartSeries® controller brings another level of sophistication and at the same time offer a plug and play ease of use.**

**TSP Plus (Touch Screen Panel)** offers users friendly performance by utilizing an intuitive touch screen display. The controller automatically employs diagnostics to ensure optimal hardware configuration, easy startups, and continuously monitors for ground fault and current measurements. At the heart of each controller is an "all-in-one" control card designed for reliability, configured in a modular 6-zone per card/15 amps per zone, that can be field calibrated and with universal power supply the TSP is a snap to connect. All these features are wrapped in a robust high quality, compact, solid metal enclosure with heavy-duty industrial connectors making this controller and easy choice for your next application.



**TempMaster M2 Superior Control To Maximize Molding Performance** The TempMaster M2 controller offers the precision control needed to make perfect parts. All TempMaster controllers feature the NEW APS (Adaptive Process System) technology providing faster processing and response speed.



## SVGP Pneumatic & SVG Hydraulic Sequential Valve Gate Controllers

The SVGP and SVG controllers provides the user with full control over valve gate flow sequence, critical when molding complex or large parts. All SVG(P) controllers feature the NEW APS (Adaptive Process System) technology providing faster processing and response speed. The sequential valve gate technology is integrated in a precise hot runner control unit with all available features or standalone unit and has been designed to easily connect to any valve gate system. Each controller provides precise filling control with performance graphs displaying time and position, with up to 4 steps per cycle. Each controller is able to accommodate for 2-shot applications as well.





# RETHINKING MELT CONTROL

flosense®



**Maximize Molding Performance** Now more than ever, molders rely on the control and optimization of the key operating parameters. By doing so, it's possible to fully exploit the capabilities of the mold design and deliver optimum production results. Cooling performance of a tool can be overlooked in the design stage and later through limited visibility and control in the production process. By adding the Flosense Water Monitoring System to your molding process, you are able to analyze the coolant and run your tool at the highest performance level possible. Deviations from target are quickly and easily identified and addressed within seconds.



**DME's Flosense digital flow regulator technology** will give you many advantages such as:

- Touch Screen with 4 manifold inputs.
- Magnetic bracket for easy installation.
- Digitally monitoring of Flow, Temperature and Pressure
- Alarm Output
- Higher flow capacity
- Higher temperature range
- Data storage and export
- Faster Mold changeovers with stored tool settings
- OPC-UA / Euromap interface

**DME's Flosense, provides features and interfaces to monitor, analyze and verify cooling data, essential for your productivity and quality.**



**ENERGY TRANSFER INDICATOR:** Heat is transferred from the mold through the water channels, Flosense calculates the heat transfer as energy units BTU or kWh. This feature illustrates the efficiency of the process.



**TURBULENT FLOW INDICATOR:** The unit will indicate laminar, transitional and turbulent flow as well as monitoring the Reynolds number, based on flow diameter and percentage glycol in the system.



**ALARM OUTPUT:** With programmable alarm limits on flow, temperature and pressure any variation in the values being monitored will trigger an on-screen alarm.



**DATA RECORDING & EXPORT:** Flow, Temperature and Pressure data is recorded and stored in the internal memory enough to display data for the previous 30 days, this data can be exported to a laptop using the integrated USB port for further analysis.

**RESULT: Higher Output of Quality Parts improving your overall investment economics.**

# BRINGING ADDITIONAL VALUE

For Rapid Resin & Color Change

**DME**  
**SmartONE**



**Maximum production of high quality parts often depends on the speed of resin and/or color change. Speed of resin and/or color change is critical to the success of any molding operation. TIME IS MONEY** and unnecessary downtime is a missed opportunity. The use of a high performance purging compound is more important than ever with many more heat sensitive resins being processed under increasingly demanding conditions. Avoidance of any heat degradation that can cause oxidation is particularly critical especially in areas of lesser flow often found within the manifold. A new and improved solution is available.



**FreshStart Purging Solutions®** unique chemistry makes has been engineered to perform in today's high-performance melt delivery systems. Competing purging compounds often feature hard particulates, abrasive in their nature, which are not preferred for hot runner systems as they cause surface damage to the manifold channels and even more concerningly, can cause drooling of the melt and even the catastrophic failure of the gating.

FreshStart has been designed and engineered to operate within the smallest of gating in a hot runner system. The FreshStart system is multi-functional combining advanced engineering fluid dynamics with proprietary chemistry. **RESULT....faster color change and less downtime all resulting in higher return on your molding investment.**

*"This purging compound is the best we have ever used. We can go from TPE to PA to TPO in no time."*

**Kevin Jenkins, Correct Mold Inc., ON, Canada**

# YOUR MELT GLOBAL PARTNER

Supporting DME customers in the management of their tooling projects wherever in the world they operate.



A global network of technical service centers coordinates to ensure that no matter where your tool operates DME is nearby to assist. This is made easy through our modular approach to standardized high-quality parts available in Imperial, Metric and JIS.

**Life is made even easier with DME's Industry leading e-commerce platform allowing customers to order parts 24/7.**



Alternatively, your local DME customer service center is always available to take your call or respond to your email.

DME provides offers its broad portfolio of mold technology products through an extensive global network of distribution centers ensuring consumable parts are always available with fast delivery.

**The renowned Quality of DME's products** is assured wherever in the world they are ordered as the same strict process controls are practiced worldwide.

**DME your global tooling solution provider.**



## HOT RUNNER LIFECYCLE VALUE SOLUTION

The **DME SMART ONE** is part of the DME complete lifecycle products and services package. DME understands that you need products and services that support you from the design stage, through development, execution and service through the life of the project.

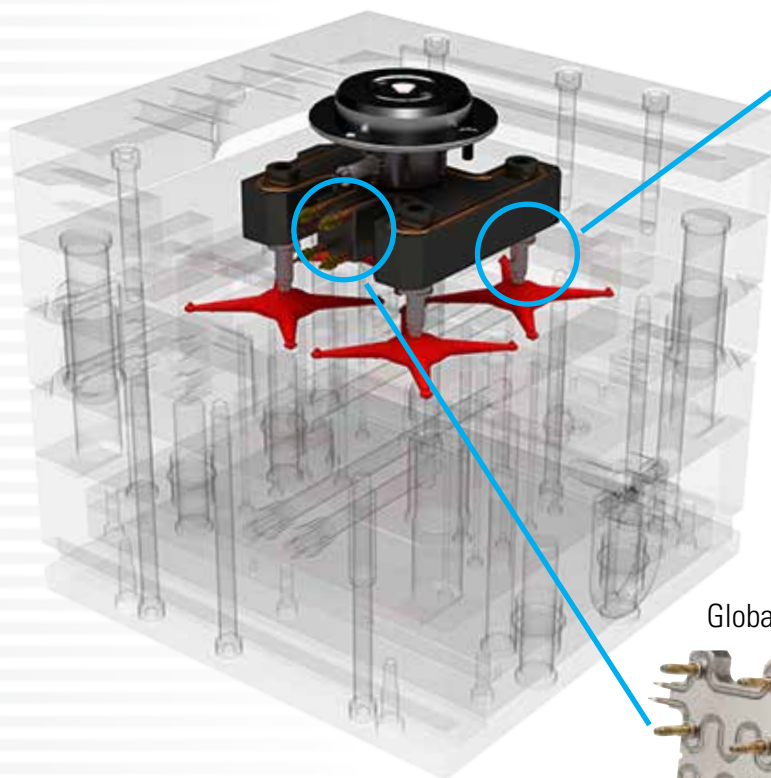


# DME<sup>®</sup> SmartONE

## Key To A Balanced Thermal Dynamics System

A Global offering from DME, providing a common design platform no matter where your molds are built. This DME-Engineered solution is available as a Manifold & Components offering, or as a complete Hot Half, ready to interface with your cavity plate.

*Cost efficient and capable, the DME SmartONE provides all you need in a melt delivery system at an economical price.*



Global Manifold Systems





## Features:

- 6 different nozzle sizes to match your application requirements
- Tip styles include Bodiless, Full Body, Full Body with Extended Sprue, and Sprue Gate
- Available with Pneumatic or Hydraulic cylinders
- Actuation options include individual (sequential) or all open/all close
- Available for 2- to 32-drops, using a naturally balanced manifold flow path design

## Benefits:

- Valve Gate style available for superior gate cosmetics, sequential part filling and the elimination of trimming and secondary operations
- Valve Gate Cylinder design allows removal/setting of Valve Pins without system disassembly
- Easily matched with DME Pneumatic or Hydraulic control systems
- Replacement/spare part availability in North America
- A value offering to provide a competitive edge over other manufacturers
- Designed, Manufactured and Supported by DME North America



## SmartONE Hot Runner Manifold Systems

SmartONE Hot Runner Manifold Systems are designed with balanced runner systems to maximize part productivity. The final design is based on process variables such as resin, shot size, gate vestige and overall system performance requirements.

- All Manifold systems come complete with: Tubular Heaters, Thermocouples, Titanium Pressure Pads, Manifold & Nozzle Locators to suit.
- All Manifold systems are supplied with full system drawings.
- Balanced Design: Thermal and geometric balancing provides uniform production, cavity to cavity.
- Turn-Key Systems: These are ready to install, eliminating the need for machining, wiring and testing the hot half.
- Tubular Heating Element: These provide excellent heat distribution throughout the manifold and standard replacement parts are available off the shelf for quick service
- Streamlined Flow Channels: To ensure optimized melt flow and come complete with fully radiused corners and plugs.
- Hardened Steel Construction: To provide a solid, stress-free foundation.
- Titanium Pressure Pads minimize heat transfer to the plates, ensuring a consistent and efficient heat profile.
- Mold flow analysis is available, on request, for all manifold inquiries.



# DME SmartONE Hot Runner Technology Selection Guide

**Resin Application Key**

- Good
- Contact DME
- Not recommended

**Polymer Viscosity Key**

L=Low M=Medium H=High

The values expressed in grams are for reference only and are determined by using a nominal wall thickness of 1.8mm (.070") and unfilled poly-propylene Part dimension, wall thickness, length of fill within part, mold conditions and molding parameters must also be considered.

**NOTE:** If flame retardant is present in the desired resin grade, please contact DME for product suitability or application guidance.

NOZZLES	TIP	Recommended Gate Diameter Range				Flow Capacity (Grams)				TPE (Elastomer) [A]	PE (Polyethylene) [C]	PE GF (Polyethylene) [C]	PS (Polystyrene) [A]			
		Min (mm)	Max (mm)	Min (inch)	Max (inch)	Low MFI.16	Medium MFI 7-16	High MFI .02-7	Viscosity							
		L	L	H	M											
SmartONE-04 Thermal Gate	Sprue Tip	1.0	2.0	0.040	0.080	20	15	10								
	Point Gate Tip	1.0	1.9	0.040	0.075	10	10	7								
SmartONE-06 Thermal Gate	Sprue Tip	2.0	3.0	0.080	0.125	500	400	225								
	Point Gate Tip	1.5	2.5	0.060	0.100	175	125	80								
SmartONE-08 Thermal Gate	Sprue Tip	2.5	4.0	0.100	0.160	625	575	325								
	Point Gate Tip	1.5	3.1	0.060	0.125	250	175	125								
SmartONE-10 Thermal Gate	Sprue Tip	2.5	5.0	0.100	0.200	850	700	425								
	Point Gate Tip	1.5	3.1	0.060	0.125	310	200	150								
SmartONE-12 Thermal Gate	Sprue Tip	3.0	6.0	0.125	0.236	1000	775	475								
	Point Gate Tip	2.0	3.1	0.080	0.125	500	375	275								
SmartONE-16 Thermal Gate	Sprue Tip	3.0	8.0	0.125	0.315	1500	1100	750								
	Point Gate Tip	2.5	4.4	0.100	0.175	800	550	400								

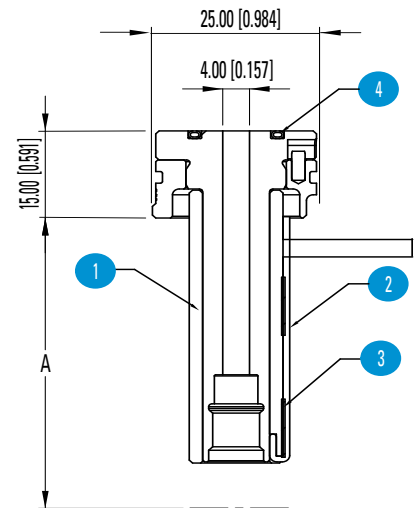
SmartONE-06 Valve Gate	Sprue Tip	1.5	2.0	0.600	0.800	400	300	150				
	Direct Valve Gate Tip	1.5	2.0	0.600	0.800	225	150	90				
SmartONE-08 Valve Gate	Sprue Tip	2.5	2.5	0.100	0.100	500	450	250				
	Direct Valve Gate Tip	2.5	2.5	0.100	0.100	450	300	220				
SmartONE-10 Valve Gate	Sprue Tip	2.5	3.0	0.100	0.125	775	625	375				
	Direct Valve Gate Tip	2.5	3.0	0.100	0.125	610	460	280				
SmartONE-12 Valve Gate	Sprue Tip	4.0	5.0	0.160	0.200	900	725	425				
	Direct Valve Gate Tip	4.0	5.0	0.160	0.200	725	525	315				
SmartONE-16 Valve Gate	Sprue Tip	5.0	7.0	0.200	0.275	1200	950	600				
	Direct Valve Gate Tip	5.0	7.0	0.200	0.275	940	640	475				



# NOZZLE SUB-ASSEMBLIES

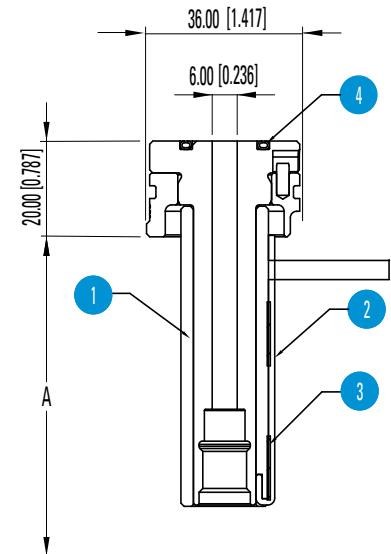
## SmartONE-04 Series Nozzle Sub-Assembly

A	1 NOZZLE HEATER (230V)	WATTS	2 TC	3 TC RETAINER 2 PC.	4 SEAL RING
50	SONH10047	180	SOTC10150-J	SONHC04	EHR7154
60	SONH10057	250			
70	SONH10067	250			
80	SONH10077	250			
90	SONH10087	250	SOTC10200-J		
100	SONH10097	250			
110	SONH10107	260			
120	SONH10117	270			
130	SONH10127	280			
140	SONH10137	290			
150	SONH10147	300			



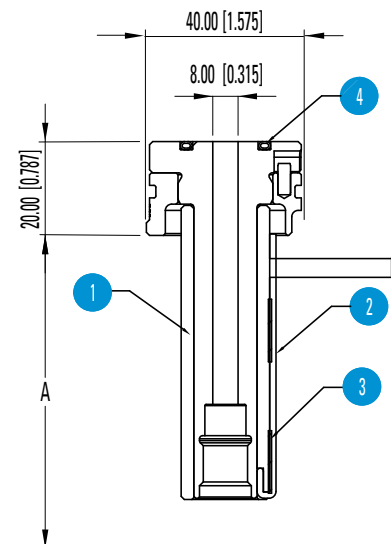
## SmartONE-06 Series Nozzle Sub-Assembly

A	1 NOZZLE HEATER (230V)	WATTS	2 TC	3 TC RETAINER 2 PC	4 SEAL RING
50	SONH18045	300	SOTC10150-J	SONHC06	EHR7154
60	SONH18055	350			
70	SONH18065	400			
80	SONH18075	400			
90	SONH18085	450	SOTC10200-J		
100	SONH18095	450			
120	SONH18115	550			
140	SONH18135	600	SOTC10250-J		
160	SONH18155	700			
180	SONH18175	800			



## SmartONE-08 Series Nozzle Sub-Assembly

A	1 NOZZLE HEATER (230V)	WATTS	2 TC	3 TC RETAINER 2 PC	4 SEAL RING
50	SONH20045	350	SOTC10150-J	SONHC08	EHR7155
60	SONH20055	350			
70	SONH20065	400			
80	SONH20075	400			
90	SONH20085	450	SOTC10200-J		
100	SONH20095	450			
110	SONH20105	450			
120	SONH20115	550	SOTC10250-J		
140	SONH20135	600			
160	SONH20155	650			
180	SONH20175	700			

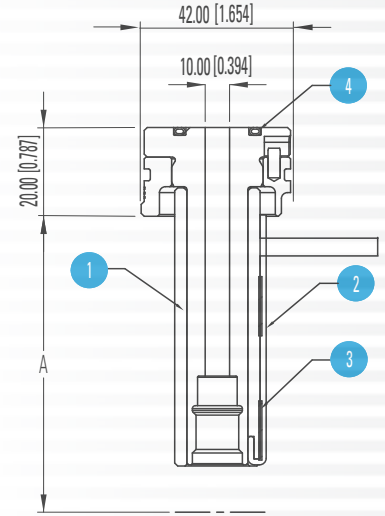




# NOZZLE SUB-ASSEMBLIES

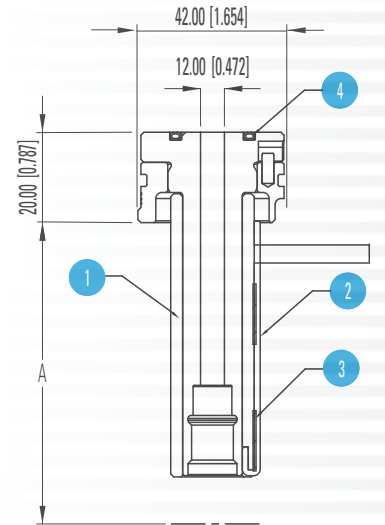
## SmartONE-10 Series Nozzle Sub-Assembly

A	1 NOZZLE HEATER (230V)450	WATTS	2 TC	3 TC RETAINER 2 PC.	4 SEAL RING
50	SONH22045	450	SOTC10150-J	SONHC10	EHR7155
60	SONH22055	450			
70	SONH22065	500			
80	SONH22075	500			
90	SONH22085	550	SOTC10200-J		
100	SONH22095	550			
110	SONH22105	600			
120	SONH22115	600			
140	SONH22135	700	SOTC10250-J		
160	SONH22155	700			
180	SONH22175	700			



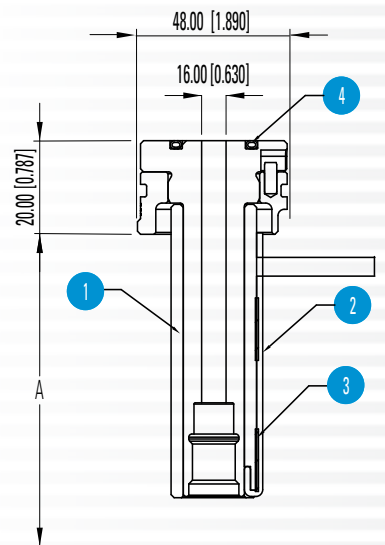
## SmartONE-12 Series Nozzle Sub-Assembly

A	1 NOZZLE HEATER	WATTS	2 TC	3 TC RETAINER 2 PC.	4 SEAL RING
50	SONH24043	500	SOTC10150-J	SONHC12	EHR7001
60	SONH24053	550			
70	SONH24063	700			
80	SONH24073	800			
90	SONH24083	850	SOTC10200-J		
100	SONH24093	850			
110	SONH24103	900			
120	SONH24113	950			
140	SONH24133	950	SOTC10250-J		
160	SONH24153	1000			
180	SONH24173	1100			
200	SONH24193	1100			



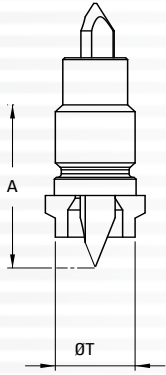
## SmartONE-16 Series Nozzle Sub-Assembly

A	1 NOZZLE HEATER	WATTS	2 TC	3 TC RETAINER 2 PC.	4 SEAL RING
70	SONH28062	550	SOTC10200-J	SONHC16	EHR7156
80	SONH28072	550			
90	SONH28082	700			
100	SONH28092	800			
120	SONH28112	850			
140	SONH28132	850	SOTC10250-J		
160	SONH28152	900			
180	SONH28172	950			
200	SONH28192	950	SOTC10350-J		
220	SONH28212	1000			
240	SONH28232	1050			
260	SONH28252	1050			
280	SONH28272	1100			
300	SONH28292	1100			



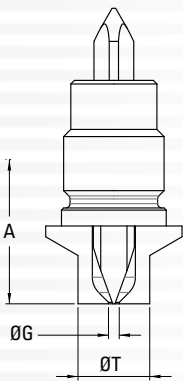
# THERMAL GATE TIPS

## Point Gate (Bodiless)



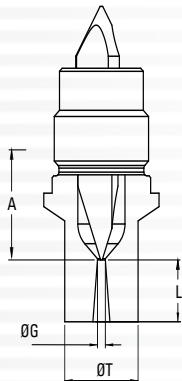
SERIES	GATE TIP	ITEM NUMBER	INCLUDES		T DIA.
			NEEDLE	RETAINER	
SmartONE-04	Standard	SOPGA04	SOPGN0401	SOBRT0401	8
	Wear Resistant	SOPGA04-WR	SOPGN0401-WR		
SmartONE-06	Standard	SOPGA06	SOPGN0601	SOBRT0601	10
	Wear Resistant	SOPGA06-WR	SOPGN0601-WR		
SmartONE-08	Standard	SOPGA08	SOPGN0801	SOBRT0801	12
	Wear Resistant	SOPGA08-WR	SOPGN0801-WR		
SmartONE-10	Standard	SOPGA10	SOPGN1001	SOBRT1001	14
	Wear Resistant	SOPGA10-WR	SOPGN1001-WR		
SmartONE-12	Standard	SOPGA12	SOPGN1201	SOBRT1201	16
	Wear Resistant	SOPGA12-WR	SOPGN1201-WR		
SmartONE-16	Standard	SOPGA16	SOPGN1601	SOBRT1601	20
	Wear Resistant	SOPGA16-WR	SOPGN1601-WR		

## Point Gate (Full Body)



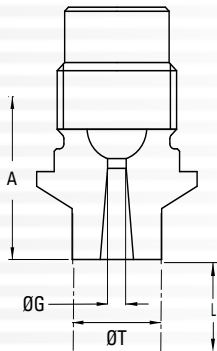
SERIES	GATE TIP	ITEM NUMBER	INCLUDES		G DIA.	T DIA.
			NEEDLE	RETAINER		
SmartONE-04	Standard	SOFBOP04	SOPGN0401	SOFRT0401	1.0	8
	Wear Resistant	SOFBOP04-WR	SOPGN0401-WR			
SmartONE-06	Standard	SOFBOP06	SOPGN0601	SOFRT0601	1.5	10
	Wear Resistant	SOFBOP06-WR	SOPGN0601-WR			
SmartONE-08	Standard	SOFBOP08	SOPGN0801	SOFRT0801	1.5	12
	Wear Resistant	SOFBOP08-WR	SOPGN0801-WR			
SmartONE-10	Standard	SOFBOP10	SOPGN1001	SOFRT1001	1.5	14
	Wear Resistant	SOFBOP10-WR	SOPGN1001-WR			
SmartONE-12	Standard	SOFBOP12	SOPGN1201	SOFRT1201	2.0	16
	Wear Resistant	SOFBOP12-WR	SOPGN1201-WR			
SmartONE-16	Standard	SOFBOP16	SOPGN1601	SOFRT1601	2.5	20
	Wear Resistant	SOFBOP16-WR	SOPGN1601-WR			

## Point Gate (Full Body Extended)



SERIES	GATE TIP	ITEM NUMBER	INCLUDES		G DIA.	T DIA.	L
			NEEDLE	RETAINER			
SmartONE-04	Standard	SOFBOP04EX	SOPGN0401	SOFRT0402	1.0	8	10
	Wear Resistant	SOFBOP04EX-WR	SOPGN0401-WR				
SmartONE-06	Standard	SOFBOP06EX	SOPGN0601	SOFRT0602	1.5	10	10
	Wear Resistant	SOFBOP06EX-WR	SOPGN0601-WR				
SmartONE-08	Standard	SOFBOP08EX	SOPGN0801	SOFRT0802	1.5	12	10
	Wear Resistant	SOFBOP08EX-WR	SOPGN0801-WR				
SmartONE-10	Standard	SOFBOP10EX	SOPGN1001	SOFRT1002	1.5	14	10
	Wear Resistant	SOFBOP10EX-WR	SOPGN1001-WR				
SmartONE-12	Standard	SOFBOP12EX	SOPGN1201	SOFRT1202	2.0	16	10
	Wear Resistant	SOFBOP12EX-WR	SOPGN1201-WR				
SmartONE-16	Standard	SOFBOP16EX	SOPGN1601	SOFRT1602	2.5	20	10
	Wear Resistant	SOFBOP16EX-WR	SOPGN1601-WR				

## Sprue Gate

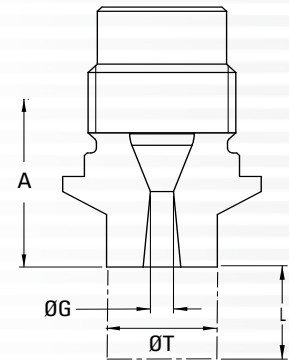


Series	Gate Tip	Item Number	G DIA.	T DIA.	L
SmartONE-04	Sprue Gate	SOSRT0401	1.5	8	NA
	Extended Sprue Gate	SOSRT0402			10
SmartONE-06	Standard	SOSRT0601	2	10	NA
	Extended Sprue Gate	SOSRT0602			10
SmartONE-08	Standard	SOSRT0801	2.5	12	NA
	Extended Sprue Gate	SOSRT0802			10
SmartONE-10	Standard	SOSRT1001	2.5	14	NA
	Extended Sprue Gate	SOSRT1002			10
SmartONE-12	Standard	SOSRT1201	3.0	16	NA
	Extended Sprue Gate	SOSRT1202			10
SmartONE-16	Standard	SOSRT1601	3.0	20	NA
	Extended Sprue Gate	SOSRT1602			10

# VALVE GATE TIPS

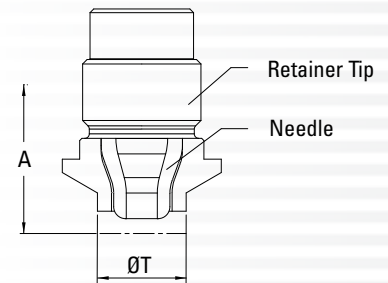
## Valve Gate (Sprue Tip)

SERIES	GATE TIP	ITEM NUMBER	G DIA.	T DIA.	L
SmartONE-06	Standard	SOSRT0603	1.5	10	NA
	Extended Sprue Gate	SOSRT0604			10
SmartONE-08	Standard	SOSRT0803	2.5	12	NA
	Extended Sprue Gate	SOSRT0804			10
SmartONE-10	Standard	SOSRT1003	2.5	14	NA
	Extended Sprue Gate	SOSRT1004			10
SmartONE-12	Standard	SOSRT1203	4.0	16	NA
	Extended Sprue Gate	SOSRT1204			10
SmartONE-16	Standard	SOSRT1603	5.0	20	NA
	Extended Sprue Gate	SOSRT1604			10



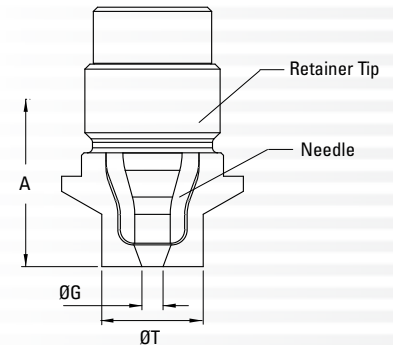
## Valve Gate (Bodiless)

SERIES	GATE TIP	ITEM NUMBER	INCLUDES		T DIA.
			NEEDLE	RETAINER	
SmartONE-06	Standard	SOVGBA06	SOVGN0601	SOBRT0602	10
	Wear Resistant	SOVGBA06-WR	SOVGN0601-WR		
SmartONE-08	Standard	SOVGBA08	SOVGN0801	SOBRT0802	12
	Wear Resistant	SOVGBA08-WR	SOVGN0801-WR		
SmartONE-10	Standard	SOVGBA10	SOVGN1001	SOBRT1002	14
	Wear Resistant	SOVGBA10-WR	SOVGN1001-WR		
SmartONE-12	Standard	SOVGBA12	SOVGN1201	SOBRT1202	16
	Wear Resistant	SOVGBA12-WR	SOVGN1201-WR		
SmartONE-16	Standard	SOVGBA16	SOVGN1601	SOBRT1602	20
	Wear Resistant	SOVGBA16-WR	SOVGN1601-WR		



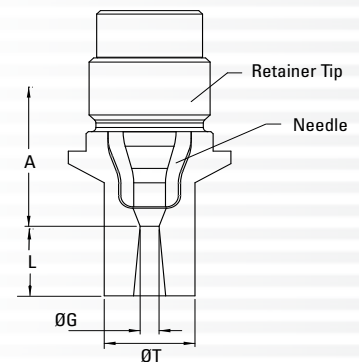
## Valve Gate (Full Body)

SERIES	GATE TIP	ITEM NUMBER	INCLUDES		G DIA.	T DIA.
			NEEDLE	RETAINER		
SmartONE-06	Standard	SOVGFBA06	SOVGN0601	SOFRT0603	1.5	10
	Wear Resistant	SOVGFBA06-WR	SOVGN0601-WR			
SmartONE-08	Standard	SOVGFBA08	SOVGN0801	SOFRT0803	2.5	12
	Wear Resistant	SOVGFBA08-WR	SOVGN0801-WR			
SmartONE-10	Standard	SOVGFBA10	SOVGN1001	SOFRT1003	2.5	14
	Wear Resistant	SOVGFBA10-WR	SOVGN1001-WR			
SmartONE-12	Standard	SOVGFBA12	SOVGN1201	SOFRT1203	4.0	16
	Wear Resistant	SOVGFBA12-WR	SOVGN1201-WR			
SmartONE-16	Standard	SOVGFBA16	SOVGN1601	SOFRT1603	5.0	20
	Wear Resistant	SOVGFBA16-WR	SOVGN1601-WR			



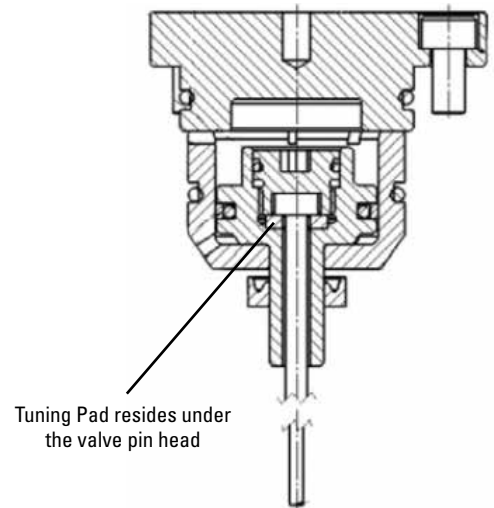
## Valve Gate (Full Body Extended)

SERIES	GATE TIP	ITEM NUMBER	INCLUDES		G DIA.	T DIA.	L
			NEEDLE	RETAINER			
SmartONE-06	Standard	SOVGFBA06EX	SOVGN0601	SOFRT0604	1.5	10	10
	Wear Resistant	SOVGFBA06EX-WR	SOVGN0601-WR				
SmartONE-08	Standard	SOVGFBA08EX	SOVGN0801	SOFRT0804	2.5	12	10
	Wear Resistant	SOVGFBA08EX-WR	SOVGN0801-WR				
SmartONE-10	Standard	SOVGFBA10EX	SOVGN1001	SOFRT1004	2.5	14	10
	Wear Resistant	SOVGFBA10EX-WR	SOVGN1001-WR				
SmartONE-12	Standard	SOVGFBA12EX	SOVGN1201	SOFRT1204	4.0	16	10
	Wear Resistant	SOVGFBA12EX-WR	SOVGN1201-WR				
SmartONE-16	Standard	SOVGFBA16EX	SOVGN1601	SOFRT1604	5.0	20	10
	Wear Resistant	SOVGFBA16EX-WR	SOVGN1601-WR				

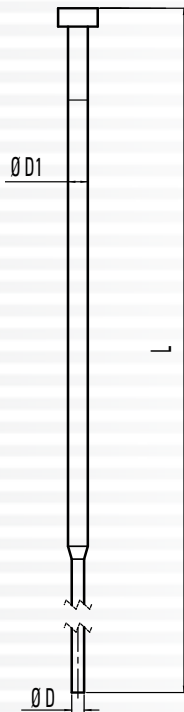


## PNEUMATIC & HYDRAULIC CYLINDERS

SERIES	D-DIA. REF.	SEAL KIT #	VALVE PIN TUNING PAD (Ø)
<b>SmartONE-06</b>			
30 Series-B	70mm	SM30BSK	PTPSC30025A (Ø11.5)
<b>SmarONE-08</b>			
40 Series-B	80mm	SM40BSK	PTPSC40025A (Ø12.0)
<b>SmartONE-10</b>			
50 Series-B	92mm	SM50BSK	PTPSC50025A (Ø14.0)
<b>SmartONE-12</b>			
65 Series-A	110mm	SM65ASK	PTPSC65025A (Ø16.0)
<b>SmartONE-16</b>			
80 Series-A	128mm	SM80ASK	PTPSC80025A (Ø17.0)

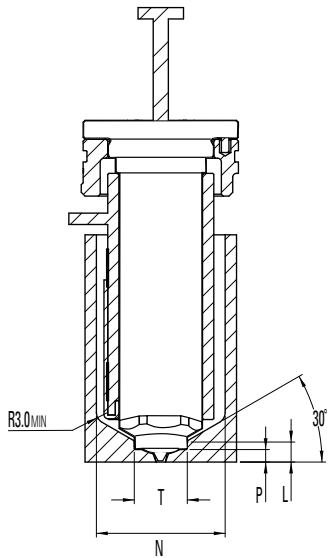


## VALVE PINS



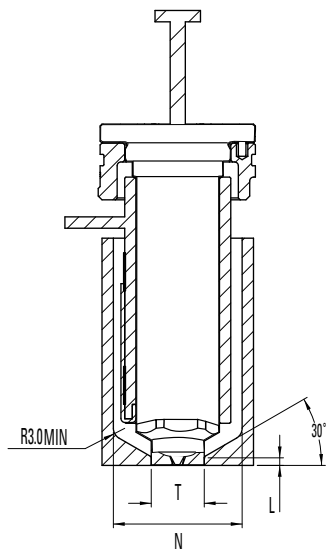
PART NUMBER	Ø D	Ø D1	L (MM)	TUNING PAD
P25VP40210A	2.5	4	210	PTPSC30025A
P25VP40260A			260	
P30VP40230A	3		230	PTPSC40025A
P30VP40280A			280	
P37VP40250A	3.7	250	PTPSC50025A	
P37VP40280A		280		
P37VP40330A		330		
P57VP60270A	5.7	6	270	PTPSC65025A
P57VP60320A			320	
P57VP60370A			370	
P57VP60420A			420	
P57VP60450A			450	
P57VP80270A	7.7	8	270	PTPSC80025A
P57VP80320A			320	
P57VP80370A			370	
P57VP80420A			420	
P57VP80450A			450	





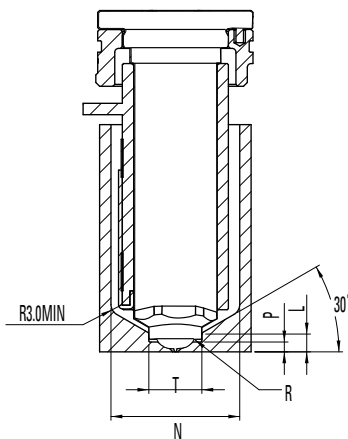
BODILESS - VALVE GATE

VALVE GATE	L	N	P	T
SmartONE-06	5.6	30	3.1	10
SmartONE-08	5.6	32	3.3	12
SmartONE-10	5.6	34	3.3	14
SmartONE-12	7.0	36	4.6	16
SmartONE-16	7.5	42	4.6	20



FULL BODY - VG/THERMAL

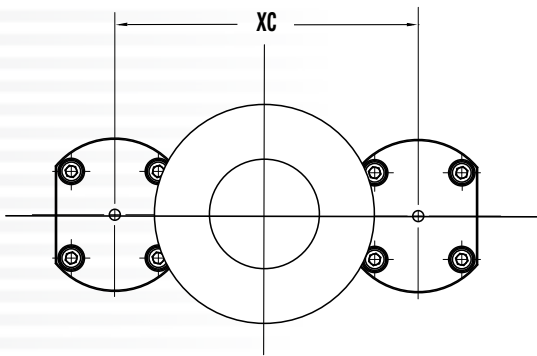
VG/THERMAL	L	N	T
SmartONE-04	3.0	18	8
SmartONE-06	4.0	30	10
SmartONE-08	4.0	32	12
SmartONE-10	4.0	34	14
SmartONE-12	4.0	36	16
SmartONE-16	4.0	42	20



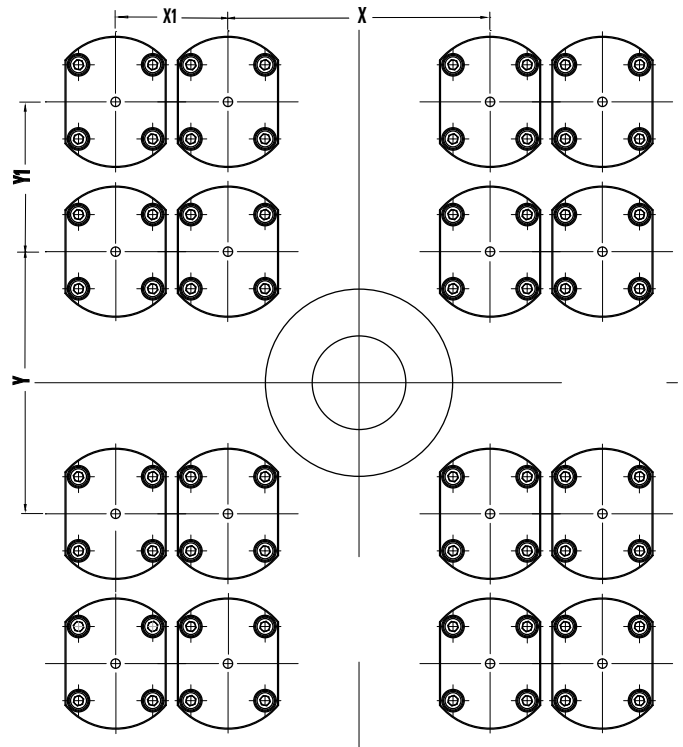
BODILESS - THERMAL

THERMAL	L	N	P	R	T
SmartONE-04	4.7	18	2.6	3.5	8
SmartONE-06	4.9	30	2.6	3.6	10
SmartONE-08	5.0	32	2.6	5.5	12
SmartONE-10	5.0	34	2.6	6.5	14
SmartONE-12	7.0	36	4.6	7.0	16
SmartONE-16	7.4	42	4.6	10.0	20

## MINIMUM DROP PITCH



VALVE GATE SERIES	X1 min	Y1 min	X min	Y min	XC
SmartONE-06	54	72	90	84	90
SmartONE-08	61	82	98	92	98
SmartONE-10	70	94	106	100	106
SmartONE-12	86	112	118	112	118
SmartONE-16	104	130	130	124	130



## COMPLETE CARE

### From Single Nozzles To Fully Assembled Hot Halves ... And Everything In Between.

In the relentless drive to reduce costs, improve part quality and speed time to market, **hot runners** are an increasingly hot item. But every application is unique. How can you ensure you get a **hot runner system** that delivers all the results you're looking for in your project? DME is your **essential resource for everything in Hot Runners... Every Step Of The Way.**



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### Quick, Cost-Effective Hot Runner Service

DME is committed to help you optimize the performance of your hot runner systems. Applying the knowledge we've gained over nearly 30 years of providing **hot runner technology** to customers worldwide, the **DME hot runner service center** continues to deliver fast, cost-effective service. Whether your system is from DME or not, we'll get it into shape and back in your shop quickly!

### Maximize Your Productivity

- Complete hot runner system evaluation & diagnostics
- Extended tool life-cycle
- Cleaning and refurbishment of all hot runner systems
- PM programs scheduled for increasing productivity
- Total restoration of flooded systems
- All resins and materials
- Electrical and mechanical validations
- Custom Hot Runner System Evaluations

# LIFE CYCLE MANAGEMENT

## Unrivalled Hot Runner support

Replacement parts quickly available so you stay up and running. Accidents happen, if you break a component installing your new Valve Gate or while making parts in the press DME will be able to get you replacement parts to get you back up and running.

**The DME Hot Runner Service Center is exclusively dedicated to supporting your hot runner systems.**

## Cost-Effective Refurbishments and Repairs

### Refurbishments

- Cost savings of at least 40% as compared to new systems
- Extended life of your tool
- Maximizing system uptime and performance

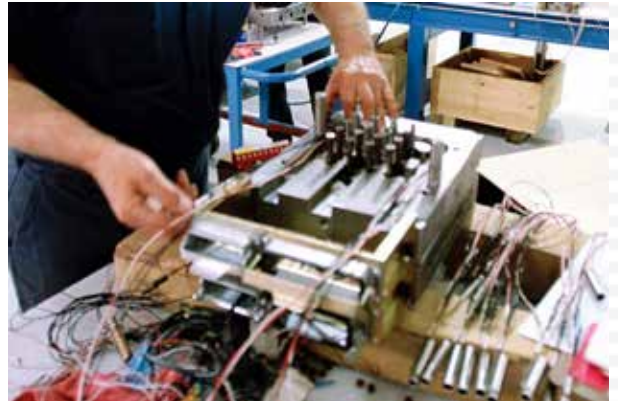
Whether you need a total system rebuild, or a simple cleaning and inspection DME can help. System rebuilds can be performed on **any** hot runner system and typically include:

- Complete bake-out cleaning
- Check and replace heaters and thermocouples
- Inspect and correct wiring
- Replace seals, bushings and other wear items
- Clean or replace nozzle components
- Check and validate all dimensions before re-assembling the system

### Repairs

Time is money. When a critical tool is out of commission, productivity is lost and production schedules can be threatened. We understand this at DME. That's why our team of hot runner technical specialists are always available to get you back in service.

Whether you're experiencing leaks, heating issues, flow problems, or would simply like a system bake-out, we'll repair your system quickly and cost-effectively.



Before



After





## Global Locations

### World Headquarters

#### DME Company LLC

29111 Stephenson Highway  
Madison Heights, MI 48071

**800-626-6653** toll-free tel

**248-398-6000** tel

**888-808-4363** toll-free fax

**www.dme.net** web

dme@dme.net e-mail

### DME Europe C.V.B.A.

Schaliënhoevedreef 20-D  
Mechelen  
BE 2800

**800-626-6653** toll-free tel

**+32 (0) 15 28 87 30** tel

**+32 (0) 15 40 51 17** fax

**www.dme.net** web

DME\_Europe@dme.net e-mail

### DME China

No 502, Building 5C, Skyworth  
Innovation Valley Tangtou 1st RD,  
Shiyan Subdistrict, Baoan District  
Shenzhen, Guangdong, China

**800 830 9802** toll-free tel

+86 (755) 8601 9031/9032 tel

+86 (755) 8601 6583 fax

**www.dmecompany.cn** web

DMECN\_CS@dme.net e-mail

### DME of Canada Ltd.

6210 Northwest Drive  
Mississauga, Ontario  
Canada L4V 1J6

**800-387-6600** toll-free tel

**905-677-6370** tel

**800-461-9965** toll-free fax

dme\_canada@dme.net e-mail

### DME Australia

ABN: 69 136 336 840  
17/37A King Rd.  
Hornsby, OH  
NSW 2077, Australia

**800-626-6653** toll-free tel

**+61 2 9987 2900** tel

**+61 2 9987 290** fax

**www.diemouldequipment.com.au** web

dme@dme.net e-mail

### DME India Pvt. Ltd. – Headquarters

No 502, Building 5C, Skyworth RT Nagar,  
Dinnur Main Road  
Bangalore  
560 032 India

**800-387-6600** toll-free tel

**+91 709 078 3942 / +91 709 078 7733** tel

dme-sales-india@dme.net e-mail

### DME Mexico / South America

Circuito el Marques Notre, No.55  
Parque Industrial El Marqués  
El Marqués, Querétaro, CP 76246

**52.442.713.5666** tel

dme\_mexico@dme.net e-mail

### DME New Zealand

P.O. Box 260041  
26 Judkins Cres  
Howick  
Auckland

New Zealand

**+64.9.5346612** tel

**+64.9.5343612** fax

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