

# 多腔注塑系统

## Multicavity injection systems

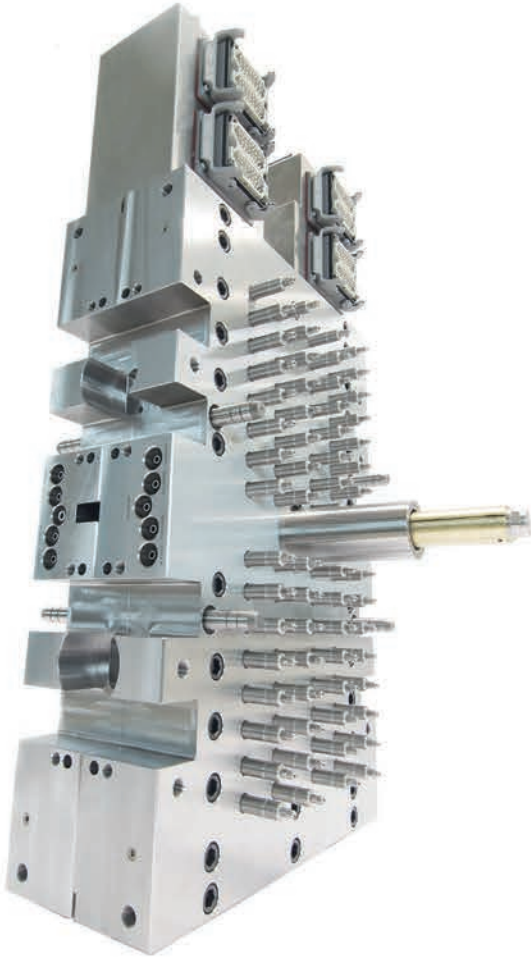


可自由配置的注塑系统 · 大大节省了能源，改善了工艺窗口 · 防漏料 · 适用于大多数聚合物

FREELY CONFIGURABLE INJECTION SYSTEMS · SIGNIFICANT ENERGY SAVING  
IMPROVED PROCESS WINDOW · LEAK PROOF · SUITABLE FOR MOST POLYMERS

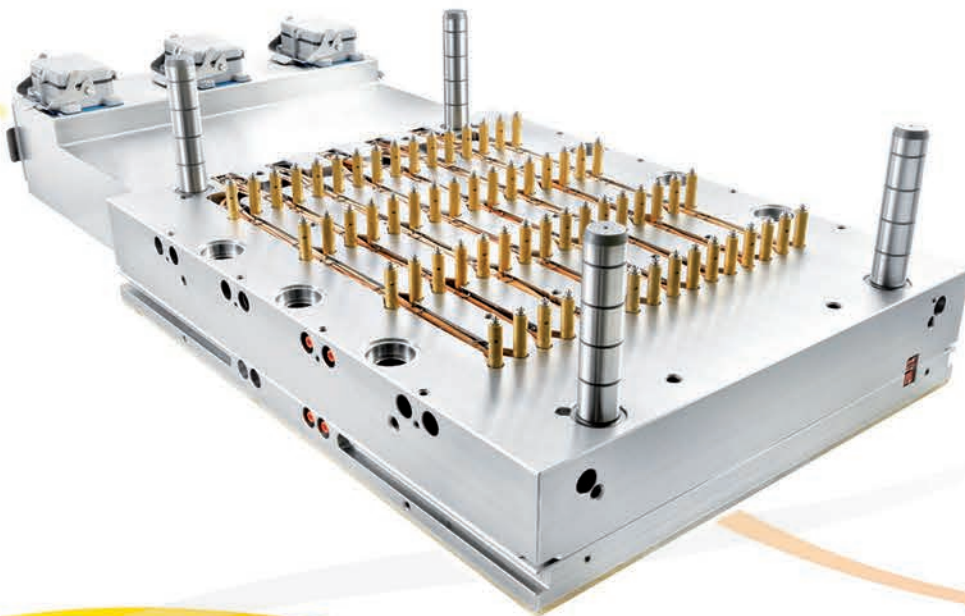
# 多腔注塑系统

## Multicavity injection systems



- 已经安装在流道板底座上的全套热流道可以直接装在模具上
- 最多144腔的多型腔热半模
- 计算注塑产品和喷嘴的尺寸以保证注塑平衡和最佳注塑周期。
- 优化热半模注塑面冷却系统设计
- 预接线和预测试
- 高质量标准, 可靠性和高生产效率

- Complete hot runner systems already assembled inside the manifold base, ready to be installed in the mould
- Hot half multi cavity systems up to 144 cavities
- Calculation of correct balance between the size of the moulded parts and the nozzles in order to achieve the best cycle time
- Optimum design of mold oriented cooling system in the hot half
- Pre wired and pre tested
- High quality standards, reliability and productivity



# 多腔注塑系统

## Multicavity injection systems

- 改善工艺窗口
- 改进流道优化注塑降低压力损失
- 特殊专利加热器
  - 稳定的热传导
  - 节约能耗
- 采用特殊处理钢材制成的喷嘴头
  - 良好的热传导性
  - 耐磨
  - 应用广泛
  - 适用于常见塑料注塑
- 多种长度可选
- 热电偶接近喷嘴头可以更准确的测量热塑材料的温度
- 模具在注塑机上便可更换加热器和热电偶
- 喷嘴头部和底部双重密封圈



- Improved process window
- Increased flow channels to optimize injection and decrease pressure loss
- Special patented heater:
  - uniform thermal profile
  - significant energy savings
- Tips in special steel:
  - optimal thermal conduction
  - wear resistant
  - wide range of types available
  - suitable for injection of the most used polymers
- Different lengths available
- The thermocouple is positioned close to the tip zone for a more accurate temperature reading
- Heater and the thermocouple can be replaced directly in the injection machine
- Double sealing feature on the nozzle tip and head





## 直接注塑用喷嘴

1

- 浇口最小化
- 适用于拉丝材料注塑
- 加热器电缆长度位置可调



### Direct injection

- Minimized injection point
- Suitable for moulding plastic materials which leave threads.
- Heater cable length position is adjustable

## 用于直接注塑的加长喷嘴

1B

- 产品内部注塑
- 适用于快速注塑周期
- 加热器电缆长度位置可调



### Extended tip nozzles for direct injection

- Internal part injection
- Suitable for fast cycle requirements
- Heater cable length position is adjustable

## 可注塑带金属颗粒的直通式喷嘴

1GLT

- 适用于注塑带金属微粒的塑胶
- 制品外观要求高
- 材料注塑均匀（消除了材料流动导致金属颗粒分布不均现象）



### Direct injection for material with metallic particles

- Suitable for moulding materials with metallic particles
- Applications with aesthetic requirements
- Uniform material distribution and elimination of flow paths

## 热浇口注塑喷嘴

2P

- 注塑点可见
- 适合壁厚制件（超过4mm）
- 每开始一个注塑周期时检测控制注塑点



### Injection on sprue

- Injection point visible on the part depending on the injection hole diameter
- Suitable for injection on sprue or for thick wall parts (> 4 mm)
- Injection point control at restart of the moulding cycle

## 热浇口注塑喷嘴



### 1DSLA, 1DSL, 2DSLA, 2DSL

- 制品上会有一个小圆点
- 换色便捷
- SLA/SLU喷嘴头经过加强可达到大的浇口直径
- 便于加工型腔和喷嘴底座

### Injection on sprue

- The injection point leaves a small boss on the moulded part
- Easy colour changing
- Reinforced tip (SLA/SLU) for bigger sprues and moulded parts
- Easy machining of the mold cavity/nozzle seat

## 带阀针控制的喷嘴



### 3, 3B, 3DSLA, 3DSL

- 制品注塑点平整不易见
- 带气动或液压控制的关闭阀
- 适用于外观要求高及壁厚的制品
- 用于控制注塑效果理想
- 可变换位置的加热圈出线口

### Injection with valve gate

- Injection point is left flat and barely visible.
- Used with either pneumatic or hydraulic shut off valves.
- Suitable to mould aesthetic parts and thick wall parts.
- Possibility of sequential injection.
- Heater cable length position is adjustable.

## 单喷嘴



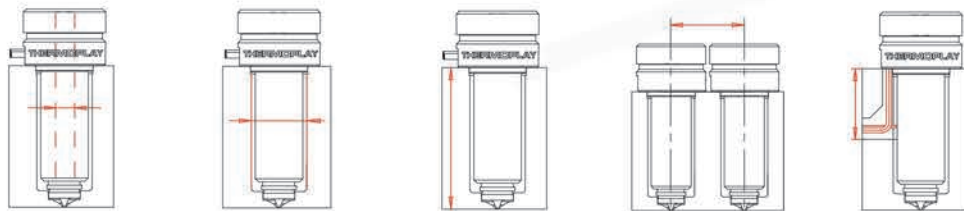
### TF6, TD6

- 系列喷嘴加热圈安在喷嘴头部位置
- 热量更均匀
- 可以有效减少温控区
- 可以加阀针

### Single nozzles

- Single nozzles are supplied including head heater
- Uniform temperature distribution along the entire nozzle surface
- Different lengths and constructions available

# TF-FN-FT SERIES, THERMAL GATE / TF-FN-FT系列, 标准浇口

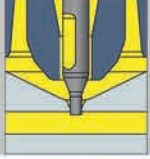

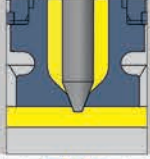
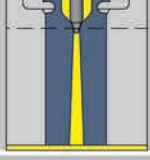


Name Ø / 名称	Flow bore / 流道孔	Ø Seat / 底座	Length range / 长度范围	Min. pitch / 最小间距	Wire exit in the middle / 电缆出口在中间
TF 12	Ø 3	Ø 12	56-146	14	--
TF 17	Ø 5	Ø 17.5	36-206	22	26 min.
TF 23	Ø 7	Ø 23	46-206	26	26 min.
FN-FT 32	Ø 10	Ø 32	56-256	43	--
FN 46	Ø 15	Ø 46	76-356	63	--

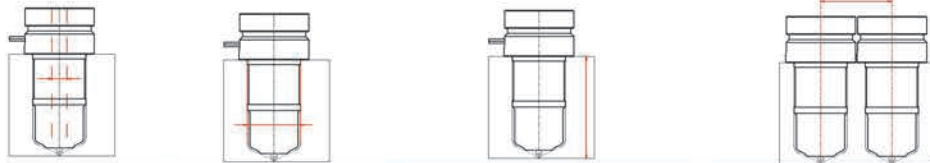
Tip type / 嘴头类型		Name Ø / 名称	Gate Ø range / 浇口直径范围	Wear resistant bushing / 耐磨浇口衬套	Cooling bushing / 冷却衬套	Color change bushing / 换色衬套	Sealing D Bushing / 密封衬套D	Wire exit in the middle / 电缆出口在中间
DIRECT INJECTION / 直接注塑用喷嘴	1	TF 12	0.6 - 1.2	--	--	--	--	--
		TF 17	0.6 - 1.2	●	●	●	--	●
		TF 23	0.6 - 1.2	●	●	●	--	●
		FN-FT 32	0.8 - 2	●	●	●	--	●
		FN 46	1.3 - 3	●	●	●	--	●
	1B15	TF 17	0.6 - 1.2	--	--	--	●	●
		TF 23	0.6 - 1.2	--	--	--	●	●
	1B50	TF 17	0.6 - 1.2	--	--	--	●	●
		TF 23	0.6 - 1.2	--	--	--	●	●
	1GLT	TF 17	0.6 - 1.2	●	●	●	●	●
		TF 23	0.6 - 1.2	●	●	●	●	●
	INJECTION ON SPRUE / 热浇口注塑喷嘴	1DSL A	TF 17	1.2	--	--	--	--
TF 23			1.2	--	--	--	--	●
FN 32			3	--	--	--	--	●
FN 46			3	--	--	--	--	●
1DSL U		TF 17	1.2	--	--	--	--	●
		TF 23	1.2	--	--	--	--	●
		FN 32	3	--	--	--	--	●
		FN 46	3	--	--	--	--	●
2P		TF 17	2	●	●	●	--	●
		TF 23	2	●	●	●	--	●
		FN-FT 32	2.8	●	●	●	--	●
		FN 46	5	●	●	●	--	●
2DSL A	TF 17	1.2	--	--	--	--	●	
	TF 23	1.2	--	--	--	--	●	
	FN 32	2	--	--	--	--	●	
	FN 46	3	--	--	--	--	●	
2DSL U	TF 17	1.2	--	--	--	--	●	
	TF 23	1.2	--	--	--	--	●	
	FN 32	2	--	--	--	--	●	
	FN 46	3	--	--	--	--	●	






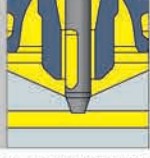
## TF-FN-FT SERIES, VALVE GATE / TF-FN-FT系列, 针阀注塑

Tip type / 嘴头类型	Name Ø 名称	Gate Ø range 浇口直径范围	Wear resistant bushing 耐磨浇口衬套	Cooling bushing 冷却衬套	Color change bushing 换色衬套	Sealing D Bushing 密封衬套D	Wire exit in the middle 电缆出口在中间
VALVE GATE INJECTION / 针阀注塑	 3	TF 12	0.6 - 1.2	--	--	--	--
		TF 17	0.6 - 1.2	●	●	●	●
		TF 23	0.6 - 1.2	●	●	●	●
		FN-FT 32	0.8 - 2	●	●	●	●
		FN 46	1.3 - 3	●	●	●	●
	 3B	TF 12	0.6 - 1.2	--	--	--	--
		TF 17	0.6 - 1.2	●	●	●	●
		TF 23	0.6 - 1.2	●	●	●	●
		FN-FT 32	0.8 - 2	●	●	●	●
		FN 46	1.3 - 3	●	●	●	●
	 3DSL A	TF 12	0.6 - 1.2	--	--	--	--
		TF 17	0.6 - 1.2	●	●	●	●
		TF 23	0.6 - 1.2	●	●	●	●
		FN-FT 32	0.8 - 2	●	●	●	●
		FN 46	1.3 - 3	●	●	●	●
	 3DSL U	TF 12	0.6 - 1.2	--	--	--	--
TF 17		0.6 - 1.2	●	●	●	●	
TF 23		0.6 - 1.2	●	●	●	●	
FN-FT 32		0.8 - 2	●	●	●	●	
FN 46		1.3 - 3	●	●	●	●	

## TD - DN SERIES, THERMAL & VALVE GATE / TD - DN系列, 开放和针阀注塑



Name Ø / 名称	Flow bore / 流通孔	Ø Seat / 座圈	Length range / 长度范围	Min. pitch / 最小间距
TD 18	Ø 4	Ø 18	36-146	20.5
TD 22	Ø 5	Ø 22	36-146	24.5
TD 30	Ø 7	Ø 30	46-146	40
DN 44	Ø 11	Ø 44	76-256	55

Tip type / 嘴头类型	Name Ø 名称	Gate Ø range 浇口直径范围	Wear resistant bushing 耐磨浇口衬套	Cooling bushing 冷却衬套	Color change bushing 换色衬套	Sealing D Bushing 密封衬套D	Wire exit in the middle 电缆出口在中间	
DIRECT INJECTION / 直接注塑用喷嘴	 1	TD Ø18	0.6 - 1.2	●	●	●	●	
		TD Ø22	0.6 - 1.2	●	●	●	●	
		TD Ø30	0.8 - 1.5	●	●	●	●	
		DN Ø44	1.3 - 3	●	●	●	●	
	 1B35	TD Ø18	0.6 - 1.2	--	--	--	●	
		TD Ø22	0.6 - 1.2	--	--	--	●	
		TD Ø30	0.8 - 1.5	--	--	--	●	
		DN Ø44	1.3 - 3	--	--	--	●	
	 1GLT	TD Ø22	0.6 - 1.2	●	●	●	●	
		TD Ø30	0.8 - 1.5	●	●	●	●	
	VALVE GATE INJ. 针阀注塑	 3	TD Ø18	0.8 - 1.2	●	●	●	●
			TD Ø22	0.8 - 1.8	●	●	●	●
TD Ø30			1.6 - 2.5	●	●	●	●	
DN Ø44			3.5 - 4.5	●	●	●	●	

All measures are expressed in mm  
所有尺寸单位为mm

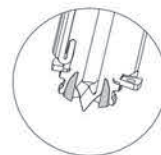
- Standard / 标准
- Available as special / 特殊
- Not available / 不适用



Wear resistant bushing  
耐磨浇口衬套



Cooling bushing  
冷却衬套



Color change bushing  
换色衬套



Sealing D bushing  
密封衬套D

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