

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

- 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

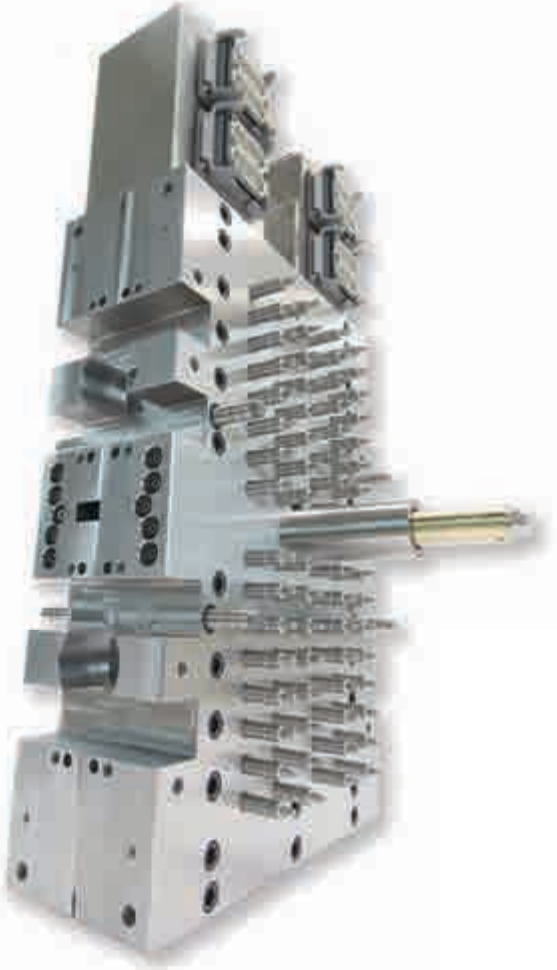


- Improved process window
- Increased flow channels to optimize injection and decrease pressure loss
- Special patented heater:
 - uniform thermal profile
 - significant energy savings
- Tips in special steel:
 - optimal thermal conduction
 - wear resistant
 - wide range of types available
 - suitable 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



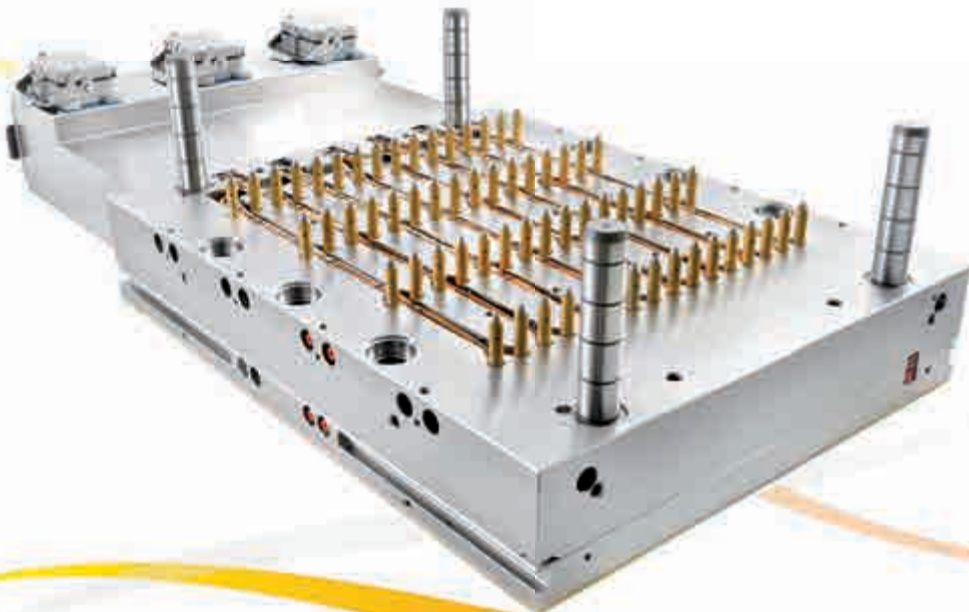
多腔注塑系统

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



1

直接注塑用喷嘴



- 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

1B

用于直接注塑的加长喷嘴



- 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

1GLT

可注塑带金属颗粒的直通式喷嘴



- 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

2P

热浇口注塑喷嘴

- 注塑点可见
- 适合壁厚制件（超过4 mm）
- 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 (over 4 mm)
- Injection point control at restart of the moulding cycle

1DSL A, 1DSL U, 2DSL A, 2DSL U

热浇口注塑喷嘴

- 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

FNH6, FN6, DN6

单喷嘴

- DN6 系列喷嘴加热圈安在喷嘴头部位置
- FNH6系列喷嘴加热圈加长到和喷嘴长度一样贯穿整个喷嘴：
 - 热量更均匀
 - 可以有效减少温控区
- 可选择不同长度及类型
- 可以加阀针



Single nozzles

- DN6 single nozzles are supplied including head heater
- FNH6 single nozzles with a single heater covering all the nozzle body:
 - uniform heat distribution along the entire nozzle surface
 - reduced temperature control zones
- Different lengths and constructions available

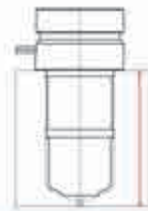
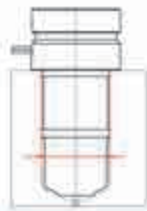
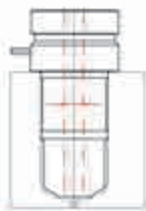
TF-FN-FT SERIES, THERMAL GATE / TF-FN-FT系列, 标准浇口



Model No. (系列)	Pin diam. (引脚直径)	Ø Seal (密封直径)	Length (长度)	Pin pitch (引脚间距)	Max. mold temperature (最大模具温度)
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	--

Die type (模具类型)	Image (示意图)	Model No. (系列)	Gate length (浇口长度)	Pin diameter (引脚直径)	Pin pitch (引脚间距)	Gate diameter (浇口直径)	Max. mold temperature (最大模具温度)
Direct Injection (直浇口)	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	●	●	●	●	
Hot Chocow-Stroke (热冲击浇口)	1DSL A	TF 17	2	--	--	--	●
		TF 23	2	--	--	--	●
		FN 32	3	--	--	--	●
		FN 46	5	--	--	--	●
	1DSL U	TF 17	1.2	--	--	--	●
		TF 23	1.2	--	--	--	●
		FN 32	3	--	--	--	●
		FN 46	5	--	--	--	●
	2P	TF 17	1.2	●	●	●	●
		TF 23	1.2	●	●	●	●
FN-FT 32		3	●	●	●	●	
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	--	--	--	●	

TD - DN SERIES, THERMAL GATE / TD - DN系列, 标准浇口

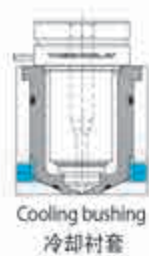


Item No. / 品号	Throat dia. / 浇口直径	W. dia. / 浇口宽	Length range / 长度范围	Height / 高度
TD18	Ø4	Ø18	36-146	20.5
TD22	Ø5	Ø22	36-146	24.5
TD30	Ø7	Ø30	46-146	50
DN44	Ø11	Ø44	76-256	55

Throat dia. / 浇口直径	Type No. / 品号	Gate height range / 浇口高度范围	Wear resistant bushing / 耐磨浇口衬套	Cooling bushing / 冷却衬套	Color change bushing / 换色衬套	Availability / 可用性
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	●	●	●	●
	DN Ø44	1.3 - 3	--	--	--	--
2	TD Ø18	1.8	●	●	--	●
	TD Ø22	2	●	●	--	●
	TD Ø30	2.8	●	●	--	●
	DN Ø44	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



THERMOPLAY S.p.A.

Via Carlo Viola, 74
11026 Pont Saint Martin (AO) Italy
Tel.: +39 0125 800311 r.a.- thermoplay@thermoplay.com

THERMOPLAY FRANCE s.a.r.l.

Tel.: +39 0125 800311
Fax.: +39 0125 805567/806271
info@thermoplay.fr

THERMOPLAY DEUTSCHLAND GmbH

Hoffmeisterstrasse 15 - 58511 Lüdenscheid, Germany
Tel.: +49 2351 661180 - info@thermoplay.de

THERMOPLAY U.K. Ltd.

Tel.: +44 1702 473876
Fax.: +39 0125 805567/806271
thermoplay@thermoplay.co.uk



THERMOPLAY PORTUGAL Unipessoal Lda

Rua Dr. Manuel Ribeiro De Oliveira R/C Esq., 2400-178 Leiria, Portugal
Tel.: +351 244 577247 - geral@thermoplay.pt

THERMOPLAY USA

1105 Progress Industrial Blvd.
Lawrenceville GA 30043 USA - Tel.: +1 770-449-1820
Fax: +1 770-449 1821 - info@maenner-group.com

圣万提注塑工业(苏州)有限公司

苏州工业园区港田工业坊128 邮编: 215021
电话: +86 512 6283 8870 - 传真: +86 512 6283 8890
infohrcn@synventive.com

THERMOPLAY BRASIL Sistemas de Injeção Ltda

Rua Wallace Barnes 301, 13054-701 Campinas, SP, Brasil
Tel.: +55 19 3725 1094 - thermoplaybr@thermoplay.com

THERMOPLAY INDIA Private Limited

1st Floor "Casa Fernandes" - Kamat Kinara Lane
Miramar-Panaji, GOA-403 002, India
Tel. +91 832 2461155 / 2461156 - info@thermoplay.in