



## **Thermoplay unveils its new thermal hot-runner nozzle for direct side injection.**

*Homogeneous temperature profile and easy handling*

Molding Solutions, a strategic business unit within Barnes Group Inc., has expanded its portfolio of nozzles. In addition to the side valve gate nozzle “Edgeline” from Männer, Thermoplay will immediately offer a new, thermal side-gate nozzle.

This new open side-gate TFS hot runner nozzle is available in radial or linear layouts (TFS-Radial and TFS-Linear). The TFS nozzles are particularly suitable for injection molded parts requiring a cosmetic injection point as well as parts for which the optimal injection position is from the side – i.e., at a right angle to the direction that the mold opens. These applications include syringes, caps, tubes, medical sharps, as well as personal care, caps & closures, packaging products, electronic, and technical components.

### **16 mm between injection points**

The TFS-Linear comes equipped with 2+2 or 4+4 parallel nozzle tips, with minimum injection point spacing of 16 mm. The radial design features hot runner nozzles with 1, 2, or 4 nozzle tips. Most commercially available polymers (PP, HDPE, HIPS, PMMA, POM, PC, and many others) can be processed using the Thermoplay TFS design.

### **Technology for safety and ease of installation**

A special feature of the linear side-gate TFS-Linear nozzle is its thermal expansion compensation system in the longitudinal direction.

The cylindrical sealed area between the nozzle tip and cavity ensures maximum reliability during the injection phase.

The attachment system makes both the radial and linear version remarkably easy to install or remove rapidly. The nozzle tips can be easily replaced or maintained in the cold condition directly on the machine without disassembling the mold. First, the nozzle body is installed in the fixed-side (hot half) mold plate, and the nozzle tips are then inserted into the cavity. This procedure also offers the advantage of accommodating undivided mold inserts.



### Uniform temperature distribution

Thermoplay sets high standards in the area of temperature homogeneity. That is why special emphasis was given to the heating design in developing the new side-gate thermal nozzle. Without exception, all patented heating elements are developed and manufactured by Thermoplay using their proven in-house process.

### Direct connection delivers cost savings

Direct side-gating means no sprue is necessary, which eliminates the costs and efforts related to the removal of the sprue from the molded part for disposal or recycling. Direct side-gating without a sprue provides genuine added value to the processor in terms of efficiency and handling.

### Easy handling & safe production

The thermal side-gate TFS-Linear and TFS-Radial nozzles from Thermoplay simplify planning, design, and maintenance of compact molds. These nozzles reflect the Thermoplay philosophy of supplying demanding mold makers with products that are efficient, safe, and easy to use.

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## Barnes Molding Solutions

Barnes Molding Solutions strategic business unit – including brands FoboHa, Gammaflux, Männer, Priamus, Synventive and Thermoplay – covers the entire spectrum of mold making and hot runner technology, including temperature control and process control technology. The expertise and know-how achieved during last years allow to offer innovative solutions for demanding projects concerning the manufacture of plastic parts in the medical/pharmaceutical, personal care, packaging, automotive and technical parts markets, as well as electrical and household applications. Molding Solutions' strategy ensures that each brand of the company focuses on the development of its core competencies while close cooperation between the brands provides the customer with the best solution for the respective application.



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