

THE ITALIAN COMPANY THERMOPLAY HAS RECENTLY WIDENED SOME RANGES OF PRODUCT. BELOW A NEW VALVE GATE MINI NOZZLE AND A NEW TEMPERATURE CONTROLLER ARE PRESENTED. THEY ARE PROPOSED AT PLAST 2018 TOGETHER WITH OTHER FLAGSHIP PRODUCTS



THM controllers with 3, 6 and 12 control zones

he new valve gate F mini nozzle, with diameter of 11 mm has expanded the small nozzles range of Thermoplay (hall 24, stand D102 at Plast 2018). Designed to meet the increasing requirements of special applications in cosmetic, medical and food packaging markets, the nozzle features a small pitch and is now available for valve gate applications.

The new F valve gate nozzle has a minimum pitch of 17 mm. Thanks to its compact profile, this nozzle is ideal for use in restricted spaces and allows the injection on an "inside" surface of the part. The nozzle and tip design allows low thermal dispersion giving the maximum flexibility to the mould maker to design the cooling system.

The patented Thermoplay heaters uniformly distribute heat along the whole nozzle surface, providing low energy consumption (150 W maximum per nozzle). The tip can be easily replaced for the maintenance with the mould installed into the injection machine.

The valve gate actuation can be pneumatic or hydraulic, individual or plate actuated, making them ideal for high cavitation applications requiring increased precision. The pin, available in a cylindrical or conical option, is designed to minimize the witness mark on the part (gate diameter from 0,8 to 1,2 mm) providing the highest quality finish. This valve gate nozzle range combines flexibility and quality, and is available in lengths from 56 to 146 mm as standard. This nozzle is suitable for injection of all thermoplastics, excluding abrasive materials.

## THREE-ZONE TEMPERATURE CONTROLLERS

Thermoplay recently enriched its range of TH-M6 temperature controllers by offering a new 3-zone model, ideal for hot runners moulding applications with one and two points or single-nozzle injection systems. The new temperature controller is a compact and low-cost product which presents the same characteristics of the 6- and 12-zone models.

A wide graphic display of 240 x 64 pixels allows the simultaneous visualisation of all information relevant to each single controlled zone and visualises the scrolling messages that can help the operator in case of alarm. The temperature controller continuously regulates the absorption of each zone and allows a prompt intervention in case plastic material leaks from an injector.

The temperature controller identifies and signals thermocouple failures (breakage and inverted connection), fuse and heater interruption, solid state relay faults, and interruption of one of the supply phases. On the front panel, 6-LED indicators are present for each zone, which signal any kind of malfunction of the control loop in a univocal way. In case the thermocouple fails, the operator can submit a zone to another with the same thermal behaviour

("slave" function). This is a valid alterna-

tive to the manual operation.

The synchronous increase of temperatures function avoids heating differences in the various zones, due to the different characteristics of each heater during the machine start-up. Therefore, it is not necessary to resort to a delayed start-up of the zones relevant to nozzles anymore. All regulation parameters and those referring to alarms can be collectively modified in all zones. The function is turned on through a button on the panel. www.thermoplay.it

## Online configurator

## Reducing project and manufacture times

The online configurator Webcreator al- of the nozzle chosen. Nozzles, injection lows automatic configuration and manufacturing process of Thermoplay injection systems and generates 2D and 3D CAD models, reducing the design and production times. The design parameters can be inserted by web interface and the software generates the configuration and final assembly CAD drawings in the file format chosen by the user. The files are sent automatically to the user in real time.

The standard injection systems with 1, 2, 4, 6, 8 and 16 injection points with or without shut off groups, and the related accessories, have been transformed in a highly customizable product to follow the project settings. The manifold can be configured in relation to the distance between nozzle axes, the injected material and the transformation temperatures. Flow channels size according to the type and diameter A screen of the Webcreator online configurator

bushing and accessories can be chosen throughout the standard range Thermoplay. The Webcreator allows to extend the standard product range and to reduce the production times, the costs and delivery time of injection systems.





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