

## **Heat & Cool Alternating Technology**

The THC is a temperature control unit with two separate circuits (hot and cold) able to be synchronized with molding cycle.

The unit pre-heats the cavity mold with hot water circuit (up to 180°C) until the end of injection phase and sequentially supplies cold water from the other circuit during cooling phase.

In this way all the advantages, in term of parts quality given by a high temperature cavity may be achieved together with unbeatable cooling cycle times.



#### Main features

- Significant reduction in cycle times
- High quality products that require finishings
- AISI 316 stainless steel heater
- Cooling capacity up to 180 kW
- Heating capacity up to 54 kW
- Temperature and pressure digital readings (IN/OUT)
- Programmable PLC with 7" touchscreen
- High pressure safety valve and safety thermostat

 4-way distribution manifolds with temperature probes

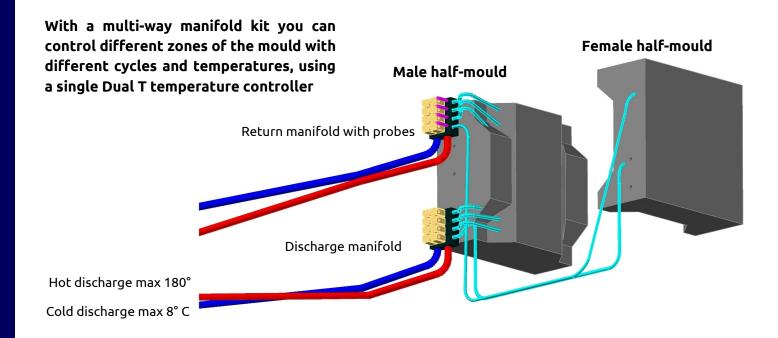


#### **Highlights**

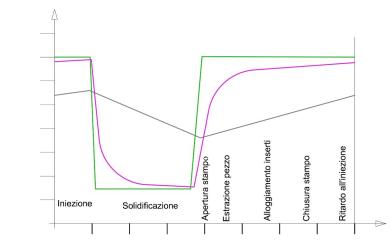
- Cycle time reductions up to 50%
- Reduces the junction lines
- Improves surface properties, self-cleaning and antireflection coating
- Better homogeneity of glass fibers in technical parts
- Reduces shrinkage and improves the dimensional stability
- Reduces injection pressure and clamping force
- Decreases internal stress of thick-wall optical components



### Example of connection on the mold with 4-way manifold



#### Moulding cycle with THC temperature controller



- Temperature of discharge fluid to the mould
- Temperature return fluid from the mould
- Temperature mould surfaces



# **Technical specifications**

Model		THC 200	THC 400	THC 600
Temperature min./max.	°C	8 / 180	8 / 180	8 / 180
Heating capacity	kW	18	36	54
Cooling capacity*	kW	60	100	100
Pump - hot side	kW	1,5	1,5	4
Hot side flow rate	l/min	10 - 80	10 - 80	20 - 200
Hot side pressure	bar	7,2 - 1,0	7,2 - 1,0	8,0 - 1,0
Pump - cold side	kW	0,75	0,75	1,5
Cold side flow rate	l/min	20 - 73	20 - 73	20 - 142
Cold side pressure	bar	6,3 - 2,5	6,3 - 2,5	6,6 - 3,0
Connections	Inch	3/4"	3/4"	1"
Dimensions Width	mm	400	450	450
Depth	mm	920	1100	1100
Height	mm	890	1500	1500
Net weight	kg	208	280	350

Available Power Supply: 400V/50Hz

# **Options**

- 8-way remote distribution manifold
- Manifold with 8 temperature probes on the return
- Increased cooling power
- Flexible hoses suitable for high tempera-
- Special voltages and frequencies

