



Mould Temperature Controller

STM-1220D

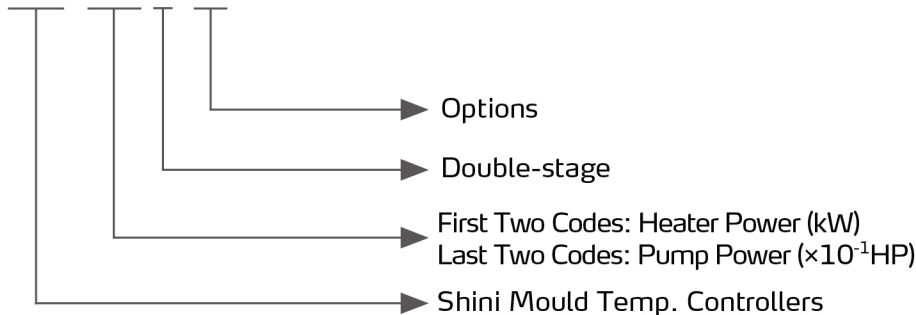


Refer carefully to this manual before operation.

STM-D Series

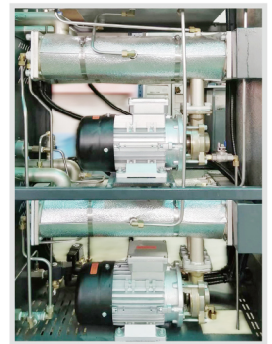
■ Coding Principle

STM- xxxx D - xx



■ Features

- Adopt SSR solid-state relay with heating output, the max. heating temperature can reach 200°C, with the precision of $\pm 0.5^\circ\text{C}$.
- Adopt a vertical structure with a small footprint.
- The controller adopts an easy operation 4.3" touch screen, both heaters with independent temperature control.
- Adopt high-efficient high temp. pump, which can meet the demands of temperature control for precise moulds and mould loop with minor diameter to achieve precise temperature control and high efficient heat exchange.
- In-build multiple safety plus warning devices, such as reverse phase, pump overload, overheat, and high and low-pressure protection.
- Stainless steel pipe heater.
- RS485 communication interface achieves centralized monitoring with the host.



Inner structure

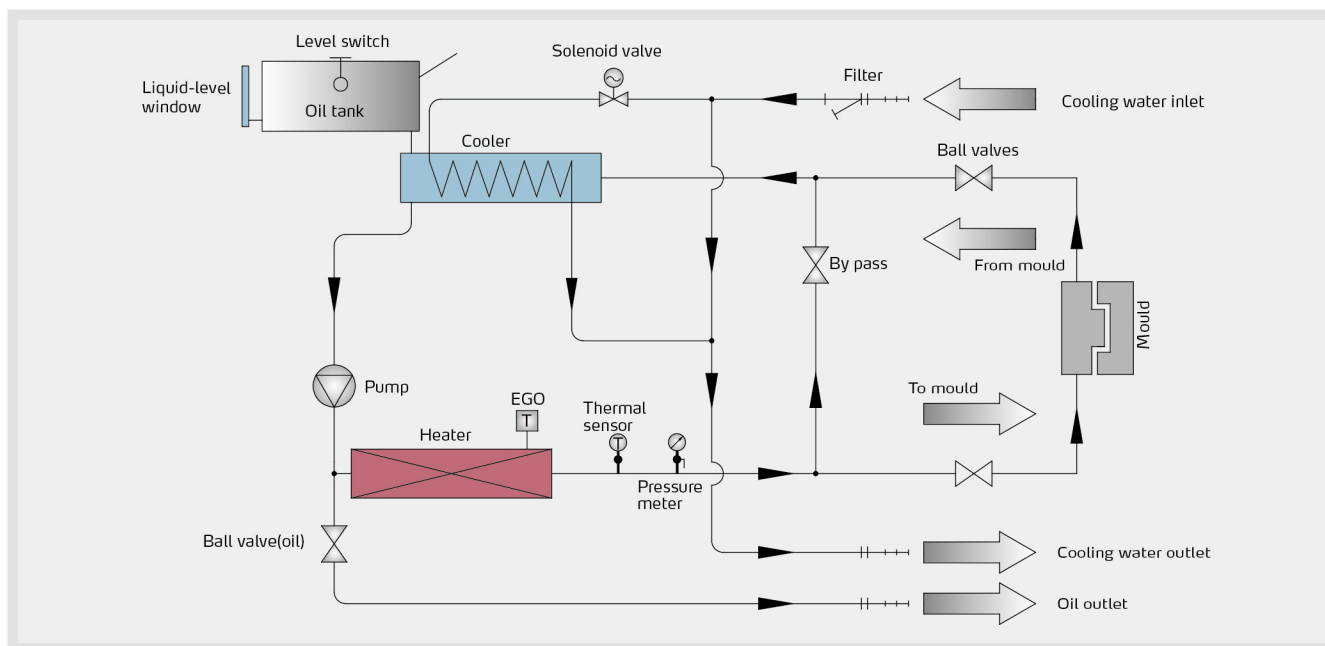
■ Application

STM-D series oil heaters are used to heat the mould and maintain a set temperature. Besides, it can be used in other similar applications. The water-cooled heat exchanger indirectly cools the return oil of the equipment. The pump pressurizes the oil and pumps to mould after being heated by the pipe heater to realize the heating and temperature maintaining needs. It adopts the latest controller to ensure stable temperature control.

■ Options

- Water flow regulator, Teflon pipe and heat-transfer oil .
- Display mould return oil and mould temperature.

Working Principle



System flow

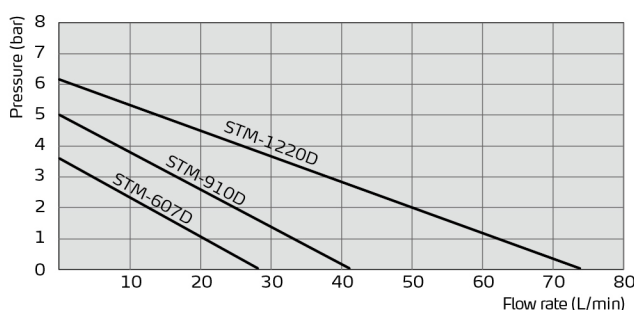
Specifications

Mddel	Max. Temp.	Heater (kW)	Pump Powe 50/60Hz (kW)	Max. pump Flow 50/60Hz (L/min)	Max. pump Pressure 50/60Hz (bar)	Heating Tank Number	Main/Sub. oil tank(L)	Cooling Method	Inlet/Outlet (inch)	Dimensions (H×W×D)(mm)	Weight (kg)
STM-607D	200℃	6×2	0.55×2 0.63×2	27×2 30×2	3.8/5.0	2	6×2/14	Indirect	3/4/3/4	1210×450×1000	150
STM-910D	200℃	9×2	0.75×2 0.92×2	42×2 50×2	5.0/6.4	2	6×2/14	Indirect	3/4/3/4	1210×450×1000	154
STM-1220D	200℃	12×2	1.5×2 1.9×2	74×2 84×2	6.2/7.2	2	6.8×2/26.3	Indirect	1/1	1320×450×1100	175

- Notes: 1) Pump testing standard: Power of 50/60Hz, purified water at 20°C.
(There is ±10% tolerance for either max. flowrate or max.pressure).
2) Power supply: 3Φ, 230/400/460/575VAC, 50/60Hz.
3) When operates the machine continuously, it is recommended that the working temp. should not exceed 180 °C.

We reserve the right to change specifications without prior notice.

Pump Performance



Reference formula of Mould Controllers model selection

Heater Power (kW) = mould weight (kg) × mould specific heat (kcal/kg°C) × temperature difference between mould and environment (°C) × safety coefficient / heating duration(h) / 860

Notes: safety coefficient range 1.3~1.5.

Flow Rate (L/min) = heater power (kW) × 860 / [heating medium specific (kcal/kg°C) × heating medium density (kg/L) × in/outlet temperature difference (°C) × time (60Min)]

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