



High Temp. Oil Heater

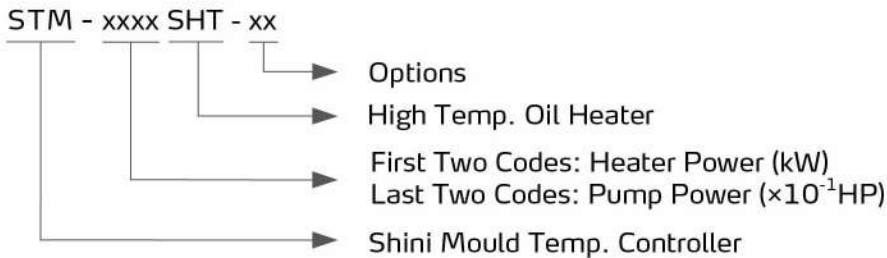
STM-1815SHT



Refer carefully to this manual before operation.

STM-SHT Series

■ Coding Principle



■ Features

- The maximum working temperature can reach up to 350°C/662°F, and the control accuracy can reach $\pm 0.5^{\circ}\text{C}/\pm 0.9^{\circ}\text{F}$.
- The controller adopts 3.2" LCD for easy operation.
- In-build weekly timer with °C/°F unit conversion.
- Adopt P.I.D multi-stage temperature control system and SSR solid-state relay heating output.
- The magnetic-driven pump with stainless steel inside for high-pressure, explosion-proof, and no seal leakage.
- Multiple safety devices, including power reverse phase protection, pump overload protection, overheat protection, and low-level protection, can automatically detect abnormally and indicate via an alarm.
- Stainless steel pipe heater.
- RS485 communication interface that can achieve centralized monitoring online.
- With alarm buzzer.



Control Panel

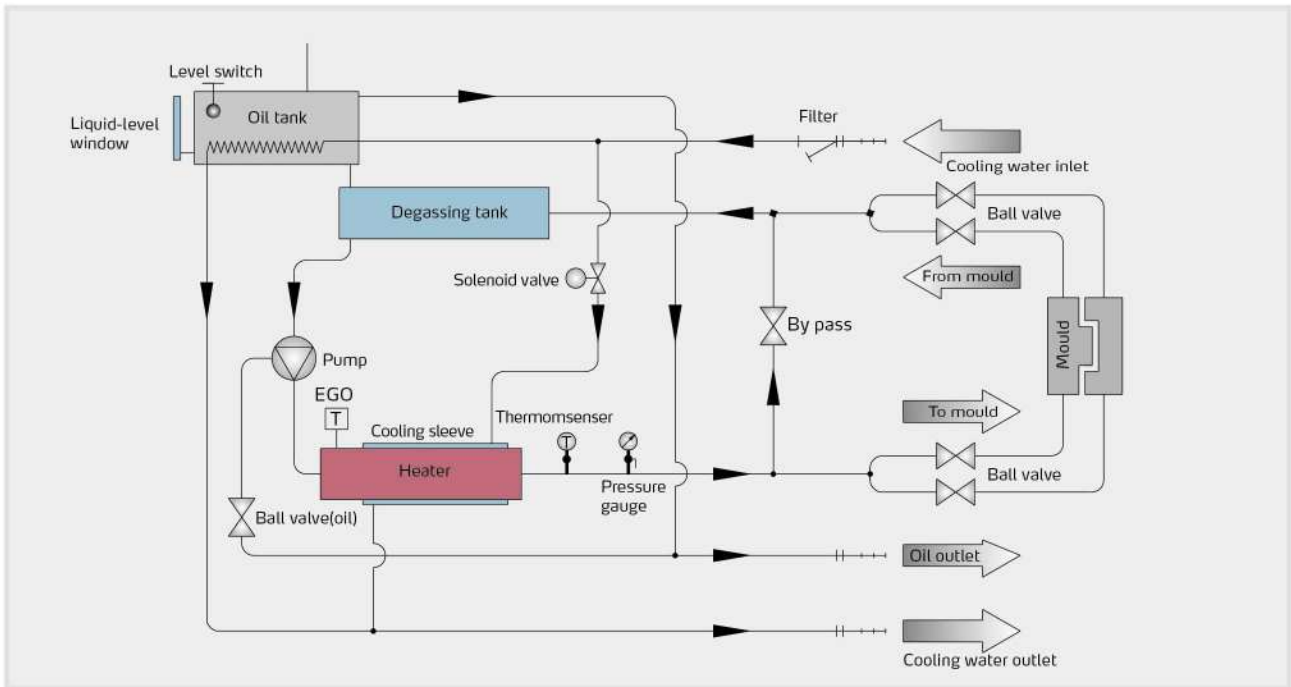
■ Options

- For models optional with mold temperature and mold return oil temperature display, and add "TS" at the end of the model code.
- For models optional with magnetic filter to prolong the service life the magnetic pump, and add "MF" at the end of the model code.

■ Application

STM-SHT series high-temperature water heaters are mainly used for mould heating and mould temperature maintenance. This series of machines use heat transfer oil as the medium to avoid rust within the mould. The oil heater is applicable in high mould temperature application and reduction in mould maintenance; Besides, there are many options and accessories for this series of machines that can meet different production demands. Besides, it applies to fields with other similar needs.

Working Principle



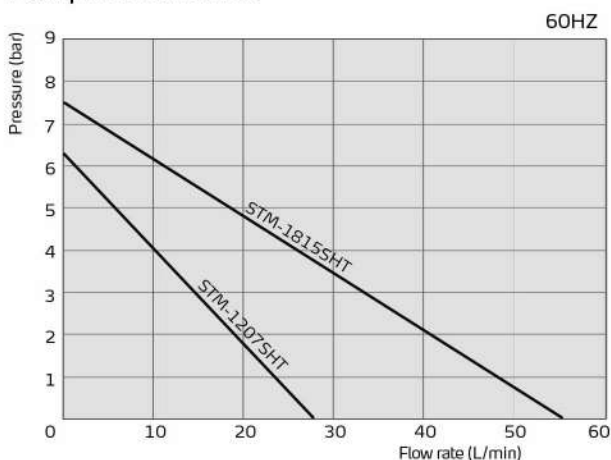
Specifications

Model	Max. Temp.	Heater (kW)	Pump (kW) (50/60Hz)	Max. pump Flow (50/60Hz) (L/min)	Max. pump Pressure (bar)(50/60Hz)	Heating Tank Number	Oil Tank (L)		Cooling Method	Inlet/Outlet (inch)	Dimensions (H×W×D)	Weight (kg)
							Main	Sub.				
STM-1207SHT	350°C	12	0.55/0.63	25.5/28.5	4.8/6.3	1	6	7	Indirect	3/4 / 3/4	710×390×1020	90
STM-1815SHT	350°C	18	1/1.1	50/55.5	5.8/7.6	2	9	12	Indirect	1 / 1	940×430×1050	184

- Notes: 1) In order to maintain stable temp. of heat transfer media, cooling water pressure should be no less than 2kgf/cm², but also no more than 5kgf/cm².
 2) Pump testing standard: Power of 50 / 60Hz, purified water in 20°C. (There is ± 10% tolerance for either max. flowrate or max. pressure).
 3) Power supply: 3Φ, 230/400/460/575VAC, 50/60Hz.

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 / 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 (60)]

Notes: Water specific heat = 1kcal/kg°C
 Heating medium oil specific heat = 0.49kcal/kg°C
 Water density = 1kg/L
 Heating medium oil density = 0.842kg/L

Time for heating = the time needed to heat from room temperature to set temperature

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