



## High Temp. Water Heater

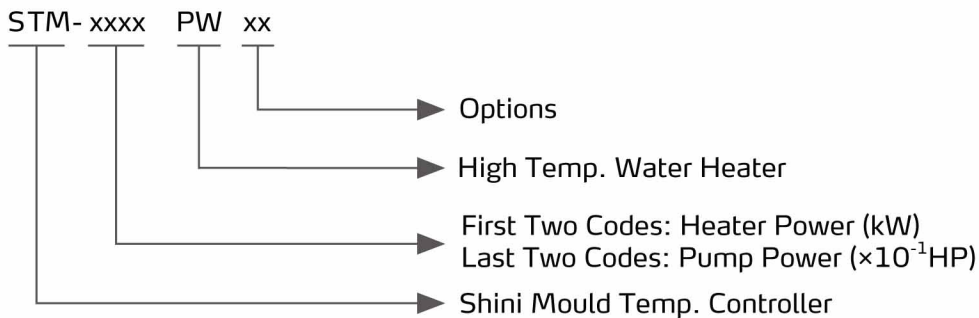
STM-607PW



Refer carefully to this manual before operation.

# STM-PW Series

## ■ Coding Principle



## ■ Features

- For standard STM-PW, the maximum heating temperature is 180°C/356°F.
- 4.3" Touch screen controller with easy to use HMI and clean display.
- Adopt SSR solid-state relay controller.
- Adopt plate heat exchanger for direct cooling and accurate temperature control, and the low water viscosity makes quick heat exchange.
- P.I.D controller with 3.2" LCD with a user-friendly interface. The multi-stage controller can maintain stable mould temperature with a precision of +/- 0.5°C/0.9°F.
- In build weekly timer with °C/°F. unit conversion.
- In build multiple safety with display and alarm buzzer, such as reverse phase, pump overload, overheat, and low water pressure.
- Built-in magnetic pump without seal.
- RS485 communication interface achieves centralized monitoring with the host.
- Equipped with water level probe and high-pressure plunger pump that could accurately detect the water level, and refill during high-pressure as to avoid empty water system.

## ■ Options

- For models optional with magnetic filter to prolong the service life the magnetic pump, and add "MF" at the end of the model code.
- For models optional with mold temperature and mold return water temperature display, and add "TS" at the end of the model code.
- For models optional with air-blowing function, add "A" at the end of the model code.
- For models optional with the circuit breaker, add "CB" at the end of the model code.



Control Panel

## ■ Application

STM-PW series high temp. water heaters are mainly used for mold heating and mold temperature maintaining. Besides, it is also applicable to fields with other similar demands.

Compared with the STM-W water heater, this series is able to meet wider production demands under higher heating temperature (180°C) condition. Besides, there are many options and accessories for this series of machine that can meet different production demands.



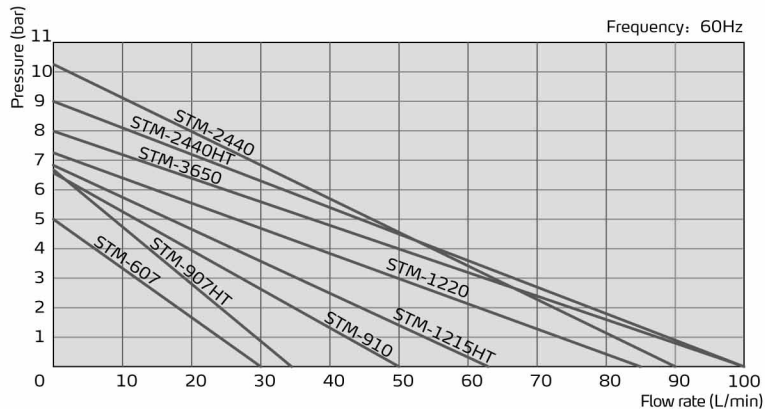


## Specifications

Model	STM-607	STM-910	STM-1220	STM-2440	STM-3650	STM-907HT	STM-1215HT	STM-2440HT	
Max. Temp.	200°C / 392 F					300°C / 572 F			
Pipe Heater (kW)	6	9	12	24	36	9	12	24	
Pump Power (kW) (50/60Hz)	0.55/0.63	0.75/0.92	1.5/1.9	2.8/3.4	4/4	0.5/0.63	1.0/1.1	2.8/3.43	
Max. pump Flow (50/60Hz)	L/min	27/30	42/50	74/84	90/90	100/100	28/34	58/63	100/100
	gal/min	7.1/7.9	11/13.2	19.5/22	23.7/23.7	26.4/26.4	7.4/9	15.3/16.6	26.4/26.4
Max. pump Pressure (bar)(50/60Hz)	3.8/5	5.0/6.4	6.2/7.2	8.0/10.2	8.0/8.0	4.8/6.5	5.8/6.8	8/9	
Heating Tank Number	1	1	1	2	3	1	1	2	
Main/Sub. Oil Tank	L	6/3.2	6/3.2	6.8/11.8	11/16	14/16	6/6	6.8/16	16/25
	gal	1.58/0.85	1.58/0.85	1.8/3.1	2.9/4.2	3.7/4.2	1.58/1.58	1.8/4.2	4.2/6.6
Cooling Method	Indirect								
Inlet/Outlet (inch)	3/4 / 3/4	3/4 / 3/4	1 / 1	1 / 1	1 1/4 / 1 1/4	3/4 / 3/4	1 / 1	1 / 1	
Dimensions (H×W×D)	mm	700×350 ×900	700×350 ×900	755×320 ×900	900×407 ×1009	928×407 ×1000	740×280 ×695	800×400 ×1000	1050×515 ×910
	inch	28×13.8 ×35.4	28×13.8 ×35.4	29.7×12.6 ×35.4	35×16 ×39.7	36.5×16 ×39.4	29×10 ×27	31.5×13 ×39.4	39.4×20 ×35.8
Weight	kg	70	71	90	145	155	75	90	190
	lb	154	157	198	319	341	165	198	418

- Notes: 1) "D" stands for dual-heating zones. "HT" stands for high temperature model.  
 2) Pump testing standard: Power of 50/60Hz, purified water at 20°C/68°F. (There is ±10% tolerance for either max. flowrate or max. pressure).  
 3) When machine works continuously, the suggested temperature should not higher than 180°C/356°F. (Excluding STM-HT)  
 4) Power supply: 3Φ, 230 / 400 / 460 / 575VAC, 50 / 60Hz.

## Pump Performance



- Notes: Heating medium oil specific heat =0.49kcal/kg°C  
 Heating medium oil density =0.842kg/L  
 Time for heating=the time needed to heat from room temperature to set temperature

### 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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