

# STM-W Series

## Specifications

### STM-W

Model	Max. Temp.	Pipe Heater (kW)	Pump Power (kW) (50/60Hz)	Max. pump flow (L/min) (50/60Hz)	Max. pump pressure (bar) (50/60Hz)	Heating Chamber Number	Heating Tank Capacity (L)	Cooling Method	Mould Coupling (inch)	Inlet/Outlet (inch)	Dimensions (mm) (H×W×D)	Weight (kg)
STM-607-W		6	0.55/0.63	27/30	3.8/5	1	3.0		3/8 (2×2)	3/4 / 3/4	635×320×740	55
STM-607-W-D		6×2	2×0.55 2×0.63	2×27 2×30	3.8/5	2	2×3.0		3/8 (4×2)	3/4 / 3/4	655×510×740	95
STM-910-W	120°C 140°C**	9	0.75/0.92	42/50	5.0/6.4	1	3.0	Direct	3/8 (2×2)	3/4 / 3/4	635×320×740	60
STM-910-W-D		9×2	2×0.75 2×0.92	2×42 2×50	5.0/6.4	2	2×3.0		3/8 (4×2)	3/4 / 3/4	655×510×740	105
STM-1220-W		12	1.5/1.9	74/84	6.2/7.2	1	3.0		3/8 (4×2)	1 / 1	695×340×815	120
STM-2440-W		24	2.8/3.4	90/90	8.0/10.2	2	7.4		1 (1×2)	1 / 1	870×360×930	140
STM-3650-W		36	4	100/100	8.0/8.0	4	17.7		1 (1×2)	1 / 1	980×415×930	150

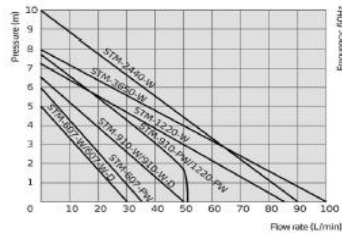
- Notes: 1) "D" stands for dual-heating zones, "\*" stands for options.  
 2) Automatic drain facility can be added for all models as optional feature.  
 (Model denotes "R")  
 3) In order to maintain stable temp. of heat transfer media (120°C), cooling water pressure should be no less than 2kgf/cm<sup>2</sup>, but also no more than 5kgf/cm<sup>2</sup>.  
 4) Pump testing standard: Power of 50/60Hz, purified water at 20°C.  
 (There is ±10% tolerance for either max. flowrate or max. pressure).  
 5) Power supply: 3Φ, 230/400/460/575VAC, 50/60Hz.  
 6) "\*\*" stands for heating the machine to 140°C, cooling water pressure should not be lower than 4kgf/cm<sup>2</sup>.
- We reserve the right to change specifications without prior notice.

### STM-PW

Model	Max. Temp.	Heater (kW)	Pump flow (L/min) (50/60Hz)	Max. pump flow (L/min) (50/60Hz)	Max. pump pressure (bar) (50/60Hz)	Heating Chamber Number	Tank (L) Heating Cooling	Cooling Method	Mould Coupling (inch)	Inlet/Outlet (inch)	Dimensions (mm) (H × W × D)	Weight (kg)
STM-607-PW		6	0.55/0.63	27/30	4.25/5.9	1	3.0 3		3/8 (2×2)	3/4 / 3/4	655×320×740	75
STM-910-PW	160°C	9	1.0/1.0	50/50.8	5.8/7.77	1	3.0 3	Indirect	3/8 (2×2)	3/4 / 3/4	655×320×740	80
STM-1220-PW		12	1.0/1.0	50/50.8	5.8/7.77	1	3.2 3.2		3/8 (2×2)	3/4 / 3/4	655×320×920	80

- Notes: 1) "PW" stands for high temp. "\*" stands for options.  
 2) To ensure stable water temperature, cooling water pressure should not be less than 2kgf/cm<sup>2</sup>, but also no more than 5kgf/cm<sup>2</sup>.  
 3) Pump testing standard: Power of 50/60Hz, purified water at 20°C.  
 (There is ±10% tolerance for either max. flowrate or max. pressure).  
 4) 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

$$\text{Heater Power (kW)} = \text{mould weight (kg)} \times \text{mould specific heat (kcal/kg}^\circ\text{C)} \times \text{temperature difference between mould and environment (}^\circ\text{C)} \times \text{safety coefficient / heating duration / 850}$$

$$\text{Flow Rate (L/min)} = \text{heater power (kW)} \times 850 / [\text{heating medium specific (kcal/kg}^\circ\text{C)} \times \text{heating medium density (kg/L)} \times \text{in/outlet temperature difference (}^\circ\text{C)} \times \text{time (60)}]$$

- 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