



STM-W Series

Standard Water Heaters

The STM-W series of standard water heaters are used to heat up the mould and maintain this temperature, although they can be used in other similar applications. High temperature water from the mould is cooled by direct cooling and then sent to the pipe heaters via high-pressure pump for heating to a constant temperature. With our optimised design, water can reach a maximum of 120°C and the OMRON temperature controller can maintain an accuracy of $\pm 1^\circ\text{C}$.

Features:

- PID multi-stage temperature control system can maintain a mould temperature with accuracy of $\pm 1^\circ\text{C}$.
- Multiple safety devices can automatically detect abnormal performance and indicate this via visible alarm.
- Reliable mains isolator to cut power supply in case of emergency.
- German made SPECK pump features high pressure and stable performance.
- Accurate temperature control achieved by direct cooling and quick heat transfer by automatic water supply facility.
- Inner parts made from stainless steel to ensure corrosion-free operation.
- Attractive appearance, easy to access and maintain.



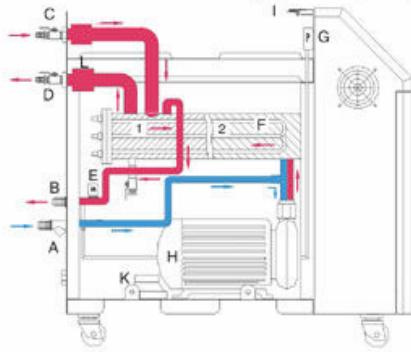
STM-910W



STM-910W-D



Illustration of working principle (direct cooling)



High temperature water from the mould (C) is returned to heating tank 1 to be heated, then sent to heating tank 2 by pump (H) to be heated again, and then onto the mould. If the water overheats, this will activate the solenoid valve (E) that allows cold water to flow into heating tank 2 to reduce the water temperature. If the water reaches the upper limits of the temperature sensor, the machine will start to alarm.

- A. Cooling water inlet C. From mould E. Solenoid valve G. Pressure switch I. Pressure meter K. Temp. sensor(EGO)
 B. Cooling water outlet D. To mould F. Pipe heater H. Pump J. Water outlet L. Water flow distributor

Applications

Mainly used for heating up and maintaining a constant mould temperature, and in other fields that require a constant flow of hot water.

Specifications

Model	Max. temp.	Pipe heater (kw)	Pump power (kw)	Max. pump flow (L/min)	Max. pump pressure (bar)	Heating tank number	Heating tank capacity (L)	Cooling method	Mould coupling (inch)	Dimensions (mm) (H x W x D)	Weight (kg)
STM-607W	120°C	6	0.55	30	4.5	1	2.5	Direct	3/8" (2×2)	630×280×735	50
STM-607W-D		6×2	0.55×2	30×2	4.5	2	2.5×2		3/8" (4×2)	630×560×735	100
STM-910W		9	0.75	45	6.0	1	2.5		3/8" (2×2)	630×280×735	72
STM-910W-D		9×2	0.75×2	45×2	6.0	2	2.5×2		3/8" (4×2)	630×560×735	140
STM-1220W		12	1.5	90	5.5	2	5		3/8" (4×2)	690×280×735	101
STM-2440W		24	2.2	160	6.0	2	6.6		1-1/2" (1×2)	790×340×810	132
STM-3650W		36	4.0	500	3.5	2	10			820×385×905	165

- Note: 1) In order to maintain stable temp. of heat transfer media, cooling water pressure should be no less than 2kg/cm², but also no more than 5kg/cm².
 2) Automatic drain facility can be added for all models as optional feature. (Model denotes "R")
 3) "D" stands for dual-heating zone.
 4) Specification of power supply: 3Φ, 230/400/460/575V, 50/60Hz.

Model selection

Mould clamping force (T)	Moulding capacity (kg/hr)	Pump flow (L/min)	Mould clamping force (T)	Moulding capacity (kg/hr)	Pump flow (L/min)
Below 50	Below 6	30	200 ~ 300	25 ~ 40	40
50 ~ 100	6 ~ 12		300 ~ 650	40 ~ 80	60
100 ~ 200	12 ~ 25		Above 650	Above 80	100

We reserve the right to change specifications without prior notice.

Shini Plastics Technologies, Inc.

Corporate Strategic Center:
 Jinshagang Industrial Zone, Dalang,
 Dongguan, Guangdong, P.R.China.
 Telephone: +86 (0)769 8331 3588
 Facsimile: +86 (0)769 8331 3589
 Email: shini@shini.com
www.shini.com