STM-WE Series

"Econo" Water Heaters

The STM-WE series of "Econo" 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 optimized design, water can reach a maximum of 120°C and the OMRON temperature controller can maintain an accuracy of ±1°C.

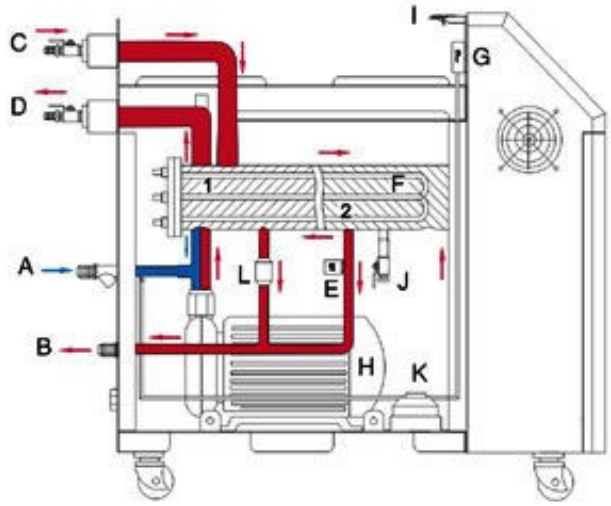
STM-607WE

Features:

- P.I.D. multi-stage temperature control system can maintain a mould temperature with accuracy of ± 1 °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.
- Adopt domestic made pump, featuring 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.

Inner Structure

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. If the solenoid valve (E) is malfunction and system pressure reaches a set valve, the pressure release valve (L) will open.

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. Pressure release valve

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.	Heating Capacity (kw)	Pump power (KW, 50 / 60Hz)	Max. Pump Flow (L/min)	Max. Pump Pressure (bar)	No. of Heating Tank	Heating tank capacity (L)	Cooling Method	Mould Coupling (inch)	Dimensions (mm) (H x W x D)	Weight (kg)
STM-607WE	120℃	6	0.55 / 0.63	50	3.8	1	2.5	Direct	1" (1 × 1)	630x280x735	63
STM-910WE		9	0.75 / 0.88	100	3.8	1	2.5		1" (1 × 1)	630x280x765	65
STM-1220WE		12	1.5 / 1.9	150	3.8	1	3.8		1.5" (1 × 1)	768x320x830	118
STM-1830WE		18	2.2 / 2.53	160	5.0	1	5.0		1.5" (1 × 1)	768x320x830	130

Note: 1) In order to maintain stable temp. of heat transfer media, cooling water pressure should be no less than 2kg/cm^2, but also no more than 5 kg/cm^2.
2) Specification of power supply: 3Φ, 230/400/460/575V, 50/60Hz.

Model selection

Mould clamping force (Tonne)	Moulding capacity (kg/hr)	Pump flow (L/min)
Below 50	Below 6	30
50 ~ 100	6 ~ 12	
100 ~ 200	12 ~ 25	

Mould clamping force (Tonne)	Moulding capacity (kg/hr)	Pump flow (L/min)
200 ~ 300	25 ~ 40	40
300 ~ 650	40 ~ 80	60
Above 650	Above 80	100

We reserve the right to change specifications without prior notice.

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