

### High Temp. Oil Heaters

The STM-HT series of high temperature oil heaters are used to heat up the mould and maintain this temperature, although they can be used in other similar applications. High temperature oil from the mould is returned to the cooling tank and cooled by indirect cooling. It is then pressurised by the high-pressure pump, sent to the heating tank and finally to the mould with a constant temperature. With our optimised design, oil can reach a maximum of 300°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 magnetic-drive pump features high pressure and stable performance.
- High temperature heat transfer oil is stable up to 300°C, suitable for long and continuous operation.
- Attractive appearance, easy to access and maintain.
- Pipe heaters are made from stainless steel.

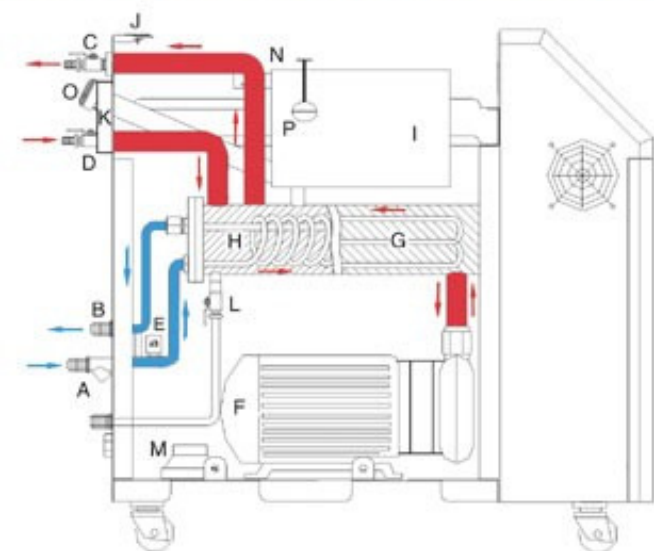


STM-1215-HT



STM-907-HT

## Illustration of working principle (indirect cooling)



High temperature oil from the mould (D) is returned back to the cooling tank, and then sent to the heating tank by the pump (F) to be heated by the pipe heaters, and then onto the mould. In this process, any oil overheating activates the solenoid valve (E) to allow cooling water into the cooling tank (H) to reduce the oil temperature. If the oil reaches the upper limit of the temperature sensor, the machine will activate the overheat alarm. If the floating ball (P) in the oil tank (I) falls below a safe level, the machine will activate the low level alarm by means of a microswitch (N).

A. Cooling water inlet    C. From mould    E. Solenoid valve    G. Pipe heater    I. Oil tank    K. Level mark    M. Temp. sensor (EGO)    O. Oil inlet  
 B. Cooling water outlet    D. To mould    F. Magnetic-drive pump    H. Cooling tank    J. Pressure meter    L. Oil outlet    N. Micro-switch    P. Floating ball

## Applications

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

## Specifications

Model	Max. temp.	Heater (kw)	Pump (kw) (50/60Hz)	Max. pump flow (L/min) (50/60Hz)	Max. pump pressure (bar) (50/60Hz)	Heating tank number	Main / sub. oil tank (L)	Cooling method	Mould coupling (inch)	Dimensions (mm) (H x W x D)	Weight (kg)
STM-907-HT	300°C	9	0.55	30 / 36	5 / 6	1	5 / 6	Indirect	3/8" (2 x 2)	740x320x760	83
STM-1215-HT		12	1 / 1.2	55 / 65	5.8 / 6.8	1	8 / 15		1" (1 x 2)	790x340x810	103
STM-2440-HT		24	2.8 / 3.4	80	10 / 13	2	10 / 15		1" (1 x 2)	790x360x910	130

Note: "HT" stands for High temperature. Power supply: 3  $\Phi$ , 230/400/460/575V, 50/60Hz.

## Model selection

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

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

We reserve the right to change specifications without prior notice.



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