

PRODUCT: INSTAHEAT - Instantaneous Hot Water Generator

Document No : SE/SOP/INSTAHEAT Rev: 00

Product

InstaHeat is a packaged, instantaneous hot water generator that uses steam as a heat source to heat the process water in a compactly designed heat exchanger.



Installation

- Circulate the steam & water pipelines with clean raw water and flush the lines to ensure removal of all dirt, welding burr, foreign particles etc. which are trapped during fabrication /installation.
- 2. All vents and drains to be routed to safe location.
- 3. Thermostatic trap vent outlet should be routed to safe location with short bend.
- 4. All hot water lines, steam lines, tank and pumping trap to be insulated.
- 5. Temp. controller setting Pvb = 0 and Pvf = 400.
- 6. Auto tune control valve from PID controller.
- 7. Maintain sufficient NPSH for water circulation pump.

Critical Components

INSTAHEAT

Water circulation pump

Plate type heat exchanger

Hot water storage tank

Pumping trap

Control panel

System Requirement

Use R

2

Use RO quality equivalent water.

Three phase (with circulation pump), single phase UPS (without circulation pump) power supply for control panel.

Instrument air should be free from oil / moisture and as per "ISO 8573-1 :2001" norms.

Maintain water

level in hot

Operating Sequence

Hot water outlet temperature will be maintained according to temp. set point.

Put the water circulation pump into operation and remove air from water circuit.



Start
temperature
control system
by providing
required set
point.



Please contact us on 1800 209 0115 or write at SteamEngineering@Thermaxglobal.com



PRODUCT: INSTAHEAT - Instantaneous Hot Water Generator

Document No: SE/SOP/INSTAHEAT Rev: 00

Troubleshooting

Faults	Probable Cause	Corrective Action
Low water temperature	High water flow rate	Ensure the water flow rate as per design condition
	Steam pressure low	Increase steam pressure
	Condensate flow restriction	Float trap choke/ 3 way valve passing
High water temperature	Control valve not closing	Check and clean foreign particle between plug & seat
	Calibration disturbed	Do re-calibration
Steam on/off control valve failed to operate	No/low air pressure	Adjust air pressure as specified on actuatuor
	No input signal to valve from controller	Check relay output from PID controller and set temperature in "AL" value
		Replace controller if observed faulty

Periodic Maintenance as per 0&M Manual

Cleaning Lubrication Checking Control valve calibration NRV's Water circulation pump Level sensor of pump trap Greasing of isolation valves

Safety Interlocks

