



**ISE** steam exchange humidifier by **steamOvap®** is using energy from a central boiler pressurized steam or high temperature hot water to produce pure and sterile steam that is easy to distribute in air handling unit or ventilation duct.

**ISE** humidifier can be supplied with tap or treated water such as softened or reverse osmosis water. When tap water is used, the scale will come off the heat exchanger by the natural contraction and expansion of the tube. Scale pieces then accumulate at the bottom of the cylinder without the risk of clogging the drain outlet.

Unique and patent pending design of the **ISE** is making it the most efficient, and smallest footprint of the industry, and is it the only one truly easy to service as simple by one person with no need for tools and in few minutes.

- Produces pure & sterile steam
- Full and linear modulation from 1 to 100%
- Capacities from 1.8 to 272kg/h
- Constant and precise steam production +/-1%RH.
- Permanent stainless steel cylinder.
- Supplied with Modbus RTU (RS485)
- Suitable for tap or RO water without additional option.
- Optional BACnet remote control.
- Board computer and 7" touch screen .
- Smallest foot print of the industry
- Self clean vertical heat exchanger with coil shape (patent pending).
- Thermally insulated cylinder

### BEST CHOICE FOR ENGINEERS

- Very efficient and safe design, as condensate cannot flood heat exchanger.
- Thermally insulated cylinder.
- Easy and versatile integration to steam network; left or right hand side connexion and standard wall mount.
- Self cleaning vertical heat exchanger available in stainless steel or copper + Nickel plating.

### PREFERRED BY CONTRACTORS

#### *Easiest to install*

- Smallest & lightest steam exchange humidifier of the industry.

#### *Easiest to set-up and start-up*

- Unique 7in large touch screen.

#### *Easiest to service*

- Done in minutes with no tools & absolutely no spare parts required.

### INNOVATION

- EcoEnerSmart® patented function saving energy and water.
- Unique vertical heat exchanger—patent pending.
- Internal hydraulic circuit without check valve prone to block in open or closed position.
- 7in touch screen user interface

### DESIGN & PRODUCTION

Proudly designed and made in Canada by a dedicated team combining more than 40 years of experience in humidification.



#### **Best warranty of the industry!**

*If your humidifier installation has been verified and validated (with a start-up report) by one of our authorized representatives.*

# ISE [PRESSURIZED STEAM]

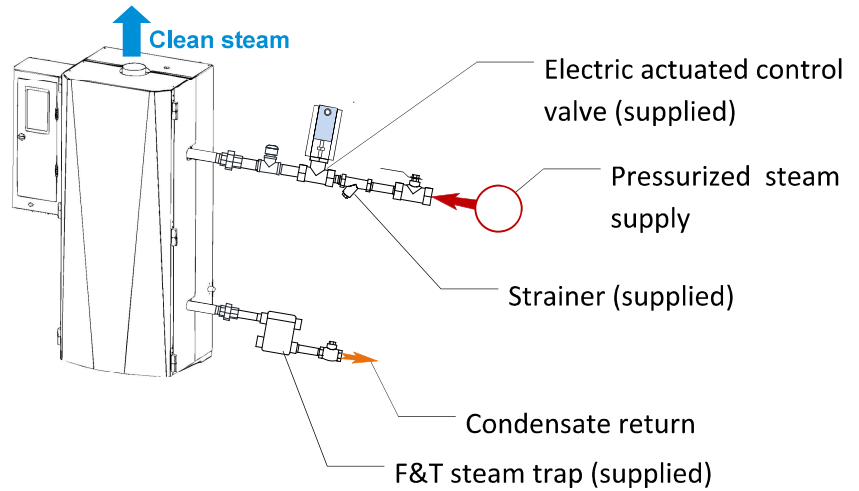
ISE for pressurized steam is supplied with electric control modulating actuated valve (24Vac, signal 0-10Vdc) with fail safe, strainer and F&T condensate trap.

It is also including a wall mounting bracket, water supply braided hose and drain connection sleeve DN32.

Supply voltage is 230Vac/1ph, 50/60Hz.

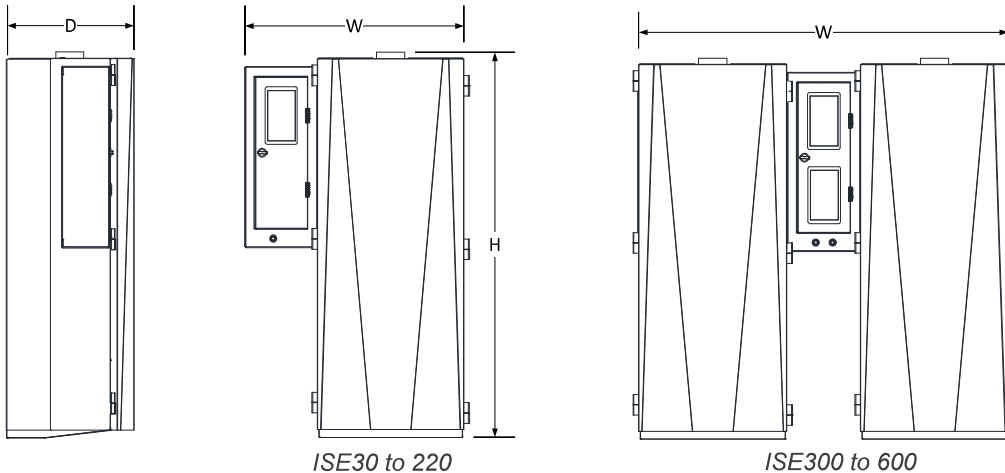
It has never been so easy and simple to install a steam exchange humidifier.

Thanks to its unique & patent pending vertical heat exchanger ISE is the only steam exchange humidifier on the market that can use city (tap) water with a steam cylinder that can be opened and cleaned in minutes without the need of tool.



## TECHNICAL DATA [PRESSURIZED STEAM]

Model		ISE30	ISE70	ISE120	ISE170	ISE220	ISE300	ISE400	ISE600
Capacity (kg/h) <i>stainless steel heat exchanger</i>	[34kPa]	1.8	4.1	7.2	10.4	13.1	18.1	21.8	36.3
	[69Kpa]	6.8	15.9	27.2	38.6	50.0	68.1	90.9	136.3
	[103kPa]	13.6	31.8	54.5	77.2	100.0	136.3	182.0	272.7
Cylinder Qty & Size		1x small	1x medium			1x large		2x larges	



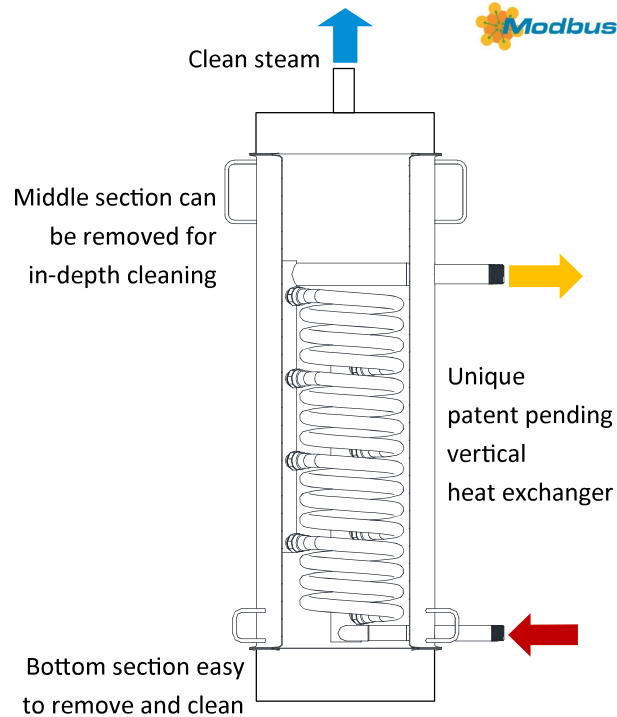
Model		ISE30	ISE70	ISE120	ISE170	ISE220	ISE300	ISE400	ISE600
Dimensions	W	508mm	711mm			1169mm		1619mm	
	H	813mm	1219mm			1219mm		1346mm	
	D	330mm	406mm			406mm		66mm	
Steam outlet	Qty	1x	1x	1x	1x	1x	1x	2x	2x
	Ø	[DN40]	[DN50]	[DN80]	[DN80]	[DN100]	[DN120]	[DN100]	[DN125]
Weight	Net	27kg	39kg			55kg		109kg	
	Oper	50kg	79kg			109kg		190kg	

## LIST OF OPTIONS

- Floor mounting rack
- Roof top weather proof enclosure (IP65)
- BACnet remote control

# ISE-HTHW

## HIGH TEMPERATURE HOT WATER



There are several advantages for HTHW boilers compared to pressurized steam boilers, such as :  
 Lower initial equipment costs ; Lower operating costs ; Higher system efficiency ; Elevation changes do not affect HTHW systems.

**ISE** steam exchange humidifier by **steamOvap®** is the perfect fit for HTHW systems, **ISE** humidifier is designed with latest technology for control and energy conservation, it is safe to operate with all components enclosed in a cabinet. Its unique vertical cylinder made of three sections is thermally insulated, allows for easy service in few minutes with no tool required. It is the only one of its kind that is truly serviceable.

- Produces pure & sterile steam
- Full and linear modulation from 1 to 100%
- Capacities from 2 to 130 kg/h
- Constant and precise steam production +/-1%RH.
- Permanent stainless steel cylinder.
- Supplied with Modbus RTU (RS485)
- Suitable for tap or RO water without additional option.
- Optional BACnet remote control.
- Board computer and 7" touch screen .
- Smallest foot print of the industry
- Self clean vertical heat exchanger with coil shape (patent pending).
- Thermally insulated cylinder

### BEST CHOICE FOR ENGINEERS

- Very efficient and safe design, as condensate cannot flood heat exchanger.
- Thermally insulated cylinder.
- Easy and versatile integration to steam network; left or right hand side connexion and standard wall mount.
- Self cleaning vertical heat exchanger made in copper + Nickel plating.

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#### *Easiest to set-up and start-up*

- Unique 7in large touch screen.

#### *Easiest to service*

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### INNOVATION

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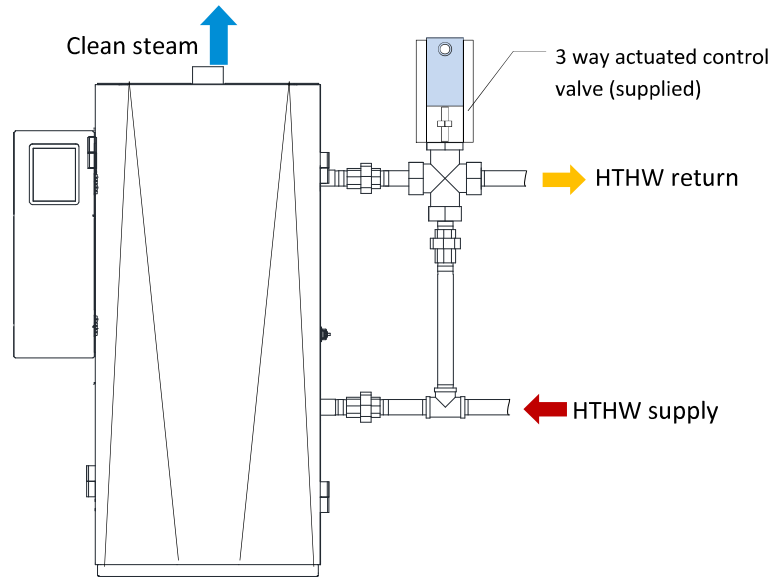
ISE for high temperature hot water is supplied with a 3 way electric control modulating actuated valve (24Vac, signal 0-10Vdc) with fail safe,

It is also including a wall mounting bracket, water supply braided hose and drain connection sleeve DN32.

Supply voltage is 230Vac/1ph, 50/60Hz.

It has never been so easy and simple to install a steam exchange humidifier.

Thanks to its unique & patent pending vertical heat exchanger ISE is the only HTHW humidifier on the market that can use city (tap) water with a clean steam cylinder that can be opened and cleaned in minutes without the need of tool.



## TECHNICAL DATA [HIGH TEMPERATURE HOT WATER]

Model		ISE30-HW			ISE70-HW			ISE120-HW			ISE220-HW		
HTHW Flow (l/min)		30	45	64	30	45	64	30	45	64	30	45	64
Clean steam Capacity [kg/h] / HTHW Temp.	115°C	2	4	8	10	15	20	12	20	35	25	40	55
	125°C	13	20	25	25	30	40	28	47	55	53	68	90
	135°C	20	26	31	35	40	50	45	60	75	70	90	110
	145°C	27	30	35	40	50	60	62	78	100	89	112	130
Pressure drop (kPa)		10	15	20	20	25	30	30	45	60	30	50	70
ΔT across heat exchanger [°C]	115°C	5			5			5			5		
	125°C	8			8			8			8		
	135°C	10			10			10			10		
	145°C	15			15			15			15		
Steam outlet Qty & ø [mm]		1x DN50			1x DN50			1x DN80			1x DN100		
HTHW inlet Qty & ø [in]		1x 3/4BSP			1x 3/4BSP			1x 3/4BSP			1x 3/4BSP		
HTHW outlet Qty & ø [in]		1x 3/4BSP			1x 3/4BSP			1x 3/4BSP			1x 3/4BSP		
Cylinder Qty & Size		1x small			1x medium						1x large		

Heat exchanger is made of spiral coil copper (EN1057) with Nickel-plating protection

HTHW maximum pressure : 400kPa

HTHW inlet & outlet with flange in option.

Refer to page 13 for dimensions & weights.

## LIST OF OPTIONS

- Floor mounting rack
- Roof top weather proof enclosure (IP65)
- BACnet remote control