

TLV[®]

STEAM CONDENSING HEAT EXCHANGER

SR-3 / SR-8

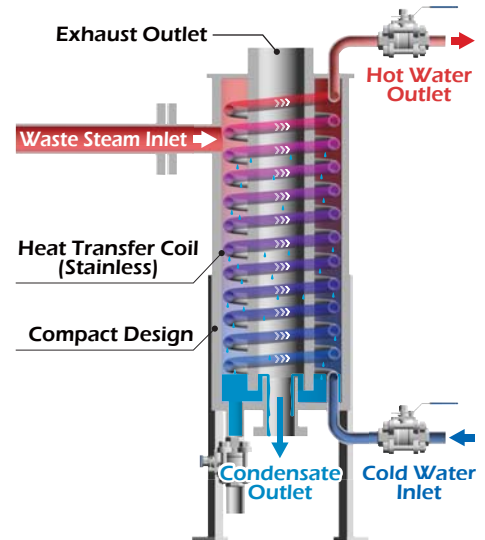
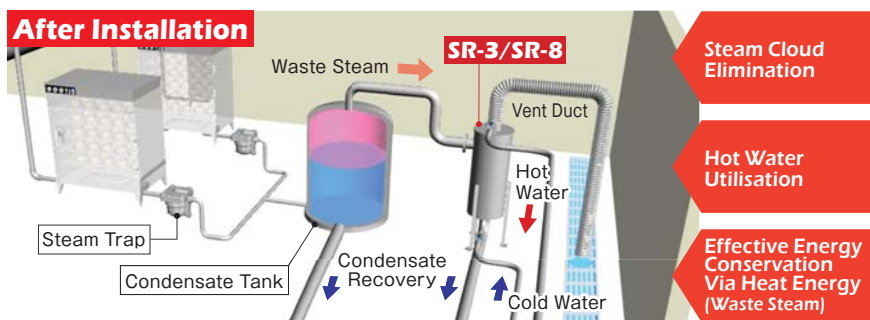
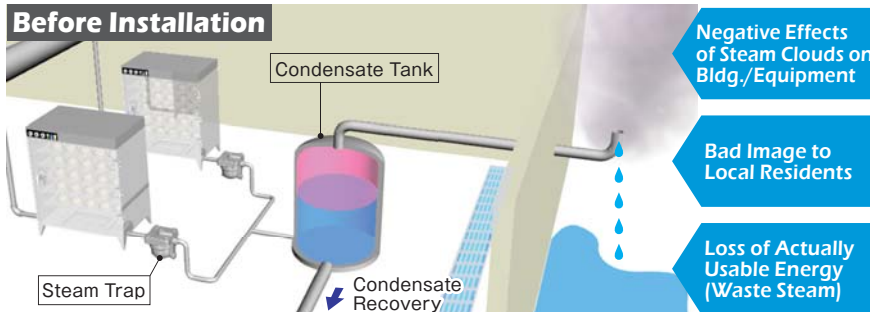
**Eliminate “Steam Clouds” and
Recover Heat Energy as Hot Water**



Clouds of Eliminate Steam From Facilities

Deliver energy savings by turning the heat from steam clouds (waste steam) into hot water!

Cold water can be turned into hot water using the heat energy recovered from previously discarded steam clouds (waste steam), through a heat exchange ability comparable to that of a closed type heat exchanger. Also, since the heat exchanger utilizes indirect heating via a stainless steel coil, it won't contaminate the water being heated, leaving it usable for cleaning etc. in various processes, and thereby leading to increased energy conservation. No power is required to draw steam into the unit, making it very economical.



Large Degree of Freedom for Installation

The product can be easily introduced as it is an open to atmosphere system free from the restrictions and regulations governing pressure vessels.

Recovery is Even Possible for Steam at Atmospheric Pressure

The unique structure that does not apply pressure makes recovery of atmospheric pressure steam possible

Low Back-Pressure Risk Makes it Usable for a Variety of Processes

Almost no back pressure (maximum of 50 mmAq) to steam-using equipment, so it can be used for a variety of processes

Applications

- Heat recovery from steam on processes that can not tolerate back pressure (Recover waste steam from Steamers, set machines, sterilizers, rubber vulcanizers, etc.)
- Handle flash steam from feed water tanks
- Improve steam cloud shrouded workplace

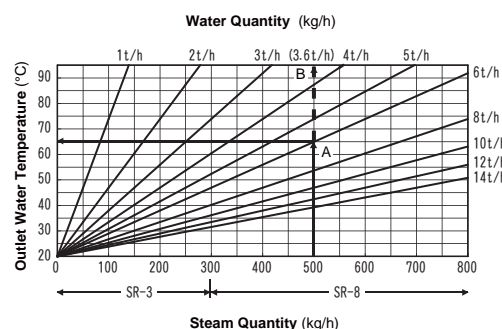
Specifications

Model		SR-3	SR-8
Steam Inlet	Connection	ASME 150RF	
	Size (mm)	80	150
Material	Condensate Tank	Stainless Steel SUS304	
	Heat Exchanger	Stainless Steel SUS304	
Max. Steam Flow Rate		300 kg/h	800 kg/h
Applicable Fluids		Steam	
Max. Heat Recovery Capacity		670 MJ/h	1,800 MJ/h
Heat Transfer Surface Area		2.0 m ²	5.4 m ²
Max. Operating Pressure		Body (shell side) : 0 MPaG Coil (tube side) : 1.0 MPaG	
Operating Water Temp.		up to 100 °C	

Contact TLV for specifications other than shown here.

CAUTION To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

Waste Heat Recovery (Cold Water Inlet Temp. is 20°C)



- The graph to the left shows the relationship between the amount of steam passing through the heat exchanger and the outlet water temperature. Consult TLV if the feed water temperature is not around 20 °C.
- When the outlet water temperature exceeds 95 °C, steam cannot be condensed and will be discharged from the exhaust outlet

Example: At the intersection "A" on the graph, 500 kg/h of waste steam is collected and 6 t/h of water is used for heat recovery.

- Moving left from this point reveals that hot water at 65 °C can be recovered with the SR-8.
- Moving up to point "B" reveals that 3.6 t/h of cold feed water will be required. If less is used, some waste steam will remain uncondensed.

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TLV CO., LTD.
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is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001

