

Daicen Presents Green Solutions



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Emizu Shower

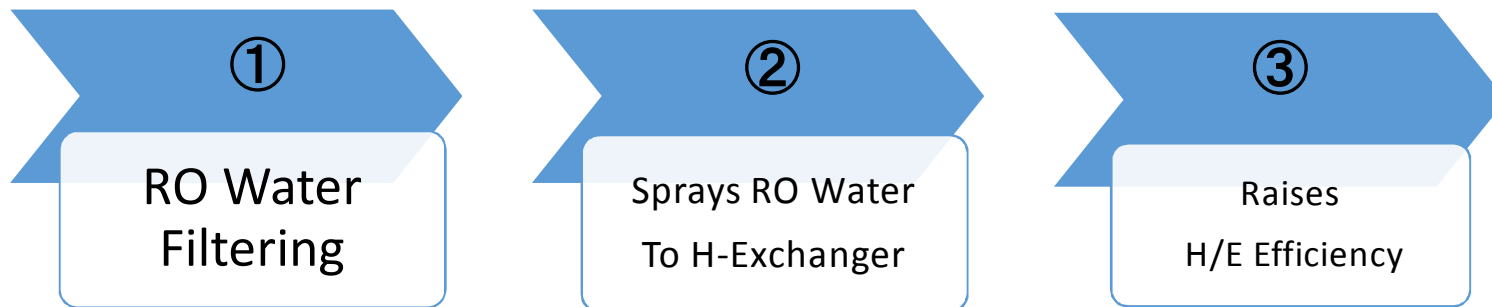


What Emizu Shower Does

- ✓ **20% Cut in the utility cost**
- ✓ **Reduction in CO2 emission**
- ✓ **Programmed efficient operation**
- ✓ **Demineralized (scale-free) spray**



How Emizu Shower Works



- ① Reverse Osmosis filter removes minerals and contaminants (cause of scale).**
- ② RO mist-water enhances vaporization raising heat-exchange ratio.**
- ③ Cuts monthly utility (electricity) cost by up to 20% (Lowers CO2 emission).**

Why Emizu Shower

❑ Higher Heat-Exchange Efficiency

Saves monthly utility (power consumption) cost by up to 20% (Ref. Case Study).

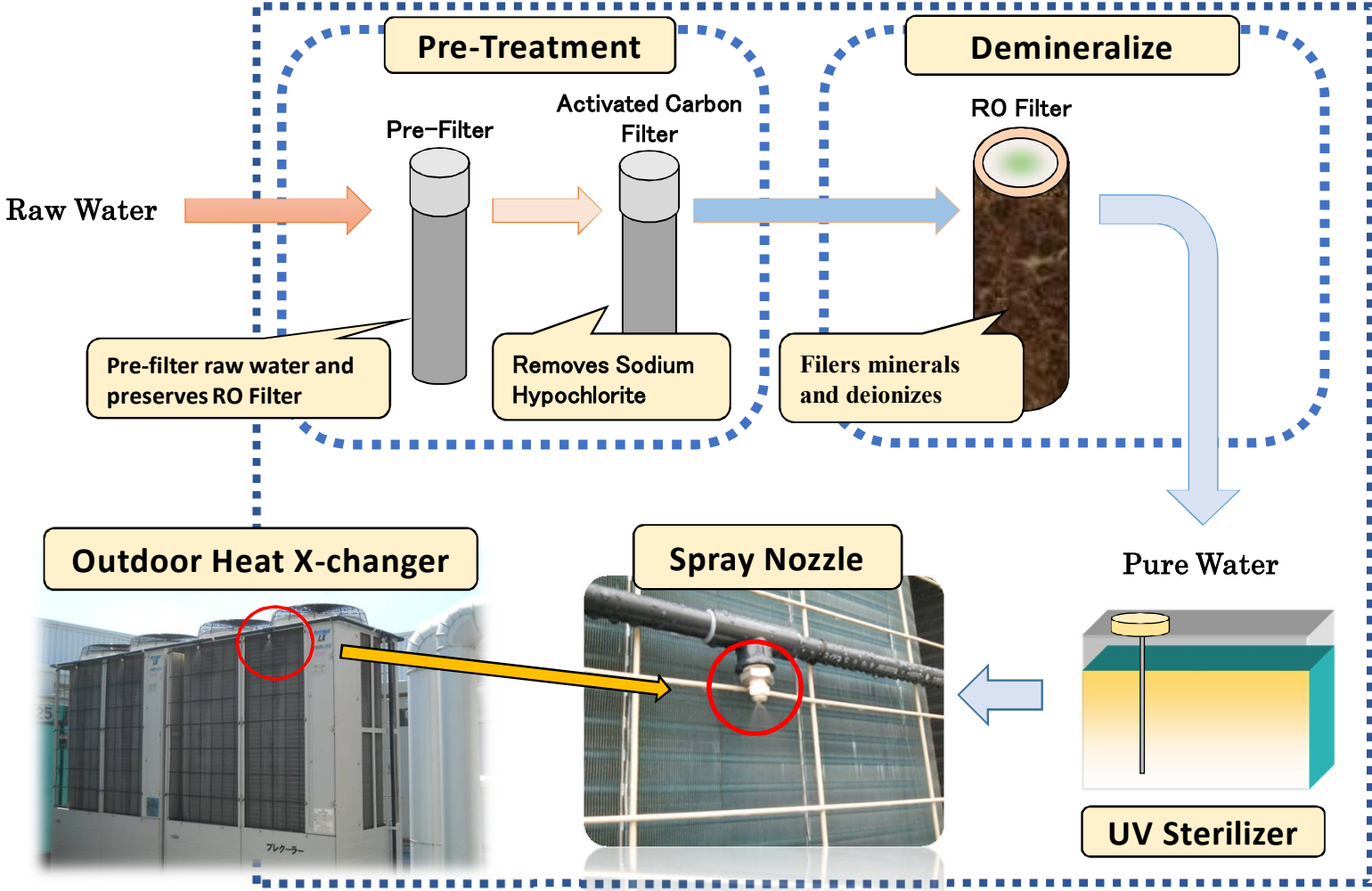
❑ Maintain Scale-Free Heat Exchanger (Fins)

RO Filtering removes minerals and contaminants which cause scaling on the H/E fins.

❑ Programmed Operation

Sensor-system controls spraying days/hours to the maximum energy efficiency.

System Flow



Outstanding Features

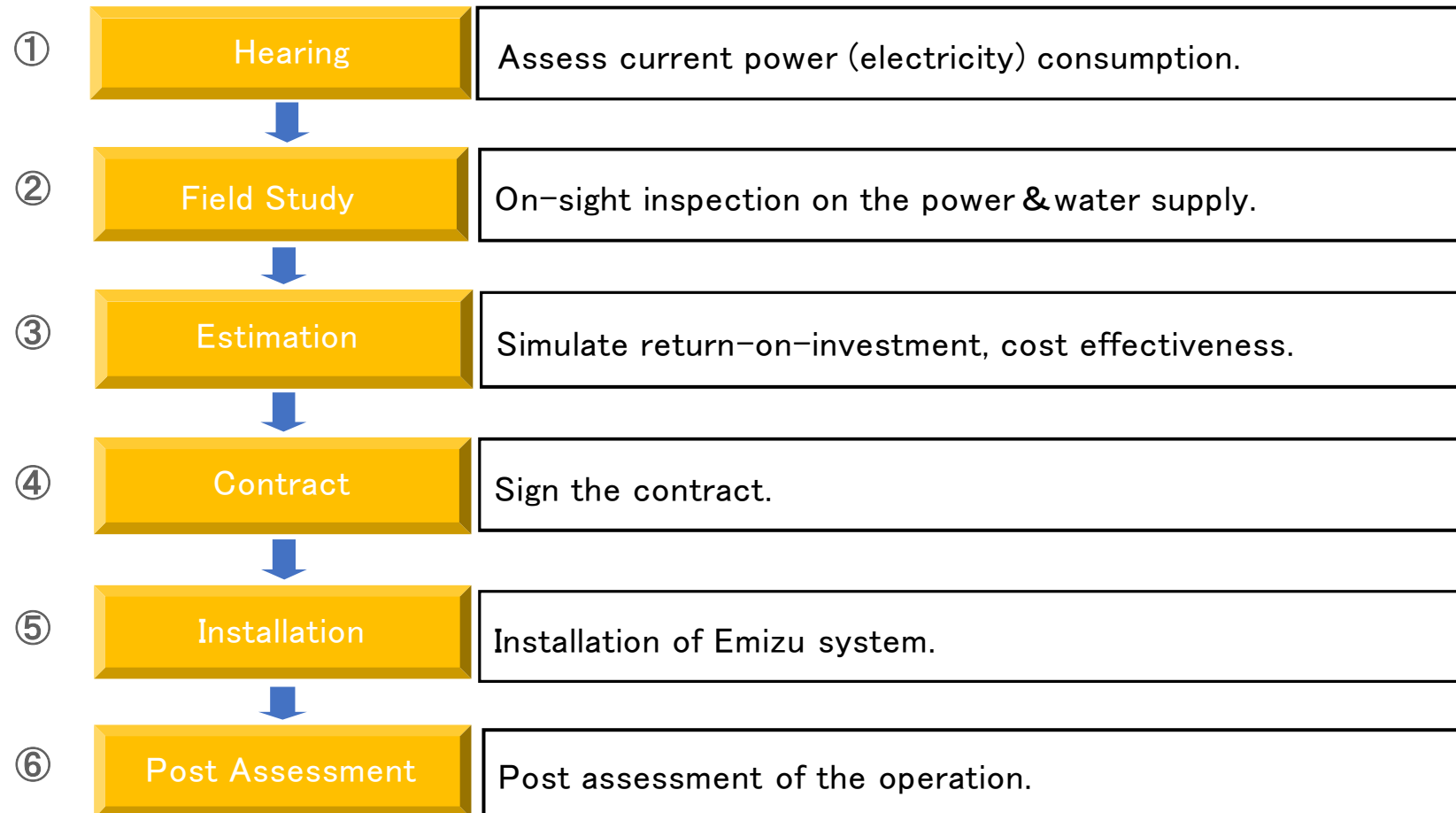
- ❑ RO Filters remove contaminants and minerals which build on aluminum fins of heat-exchanger referred as Scale.
 - * Scale reduce Heat-Exchange efficiency.
 - * Scale erodes the surface of H/E fins.

- ❑ Programmable Sensor-System minimizes an hour of spraying. Rain sensor shuts off spraying when it rains.
 - * Sensor-system saves up to 80% water usage over continuous spraying mode.



Scales: Minerals grow on the surface of aluminum fins.

Installation Protocol



Cost Effectiveness

System Installed: EM-1000 (¥8,000,000.-)

Item	No E-Mizu	E-Mizu
Basic Electricity Rate	538 kW	414 kW (-23.1%)
Annual Electricity Rate ①	¥10,330,921.-	¥7,945,421.-
Power (Electricity) Consumed	1,508,206 kWh	1,422,001 kWh
Annual Utility Charge ②	¥20,360,785.-	¥19,197,010.-
Annual Utility Cost ③ = ① + ②	¥30,691,705.-	¥27,142,431.-
Annual Utility Charge Reduced		¥3,549,274.-
Amount of Water Used per Year		1,122 M3
Annual Water Charge (1,122 M3 x @¥300) ④		¥336,725.-
Maintenance Charge ⑤		¥650,000.-
Electricity Cost (4 kWh x @¥13.5) ⑥		¥72,414.-
Total Annual Operation Cost ⑦ = ③ + ④ + ⑤ + ⑥	¥30,691,705	¥28,201,570.-
Total Annual Cost Reduced ⑧		¥2,490,135.-
Turnover Cycle (¥8,000,000 ÷ ⑧)		3.2 Years
Annual CO2 Emission		-33,103 kg

System Lineup

Model	Emizu-200D	Emizu-350	Emizu-600	Emizu-1000	Emizu-2000	Emizu-3000
Capacity	200 L/H	350 L/H	600 L/H	1,000 L/H	2,000 L/H	3,000 L/H
Max. No. of Nozzle*	57	100	172	285	572	858
Dimension (WDH)	1300x550x900	1300x550x900	800x1600x2200	1600x1600x2200	1600x1600x2200	1600x1600x2200
Weight	190 kg	270 kg	990 kg	1,500 kg	1,600 kg	1,800 kg
Power Supply	200V/20A	200V/25A	200V/50A (3p)	200V/75A (3p)	200V/75A (3p)	200V/75A (3p)
Plumbing	15mmφ	15mmφ	25mmφ	25mmφ	32mmφ	32mmφ
H/E Capacity	170kw/h	300kw/h	500kw/h	850kw/h	1600kw/h	2500kw/h
FOB Price**	For price information, please contact AT O-Links Co., Ltd.					

*: Spraying capacity of each nozzle: 3.5L per minute.