

## Membrane Distillation System MDS 1000

Memsys Membrane Distillation System (MDS) are based on the vacuum-multi-effect-membrane-distillation (V-MEMD) technology. The system are modular and compact. They come in kits or containerised units. Each MDS has its own controls and can operate independently.

The system are easy to install, have low maintenance and minimal energy consumption. MDS 1000 can be used as demonstration system, small desalination plant and pilot plant for industrial waste water treatment.

| Dimension (L×W×H)     | 5.5 * × 1 × 2.5 m             |
|-----------------------|-------------------------------|
| Weight (dry) *        | 2500 ~ 3000 kg                |
| Capacity              | 5~12 ton/day distillate water |
| Membrane material     | Polytetrafluorethylene (PTFE) |
| Heating sources       | Hot water/steam               |
| Cooling sources       | Cold water/cooling tower      |
| Main power connection | 400 V / 50 Hz / 16 A          |
| Control system        | PLC/HMI panel                 |

<sup>\*</sup> The Length and Weight of MDS 1000 may change in relation to the actual module configuration



**MDS 1000** (the photo is for illustration purpose only. Actual product may vary due to product enhancement)

| Ambient temperature    | 5 ~ 40 °C      |
|------------------------|----------------|
| Heat input             | 70 ~ 90 °C     |
| Heating power          | Min. 100 kW    |
| Cooling input          | 20 ~ 30 °C     |
| Cooling power          | Min. 100 kW    |
| Pre-treatment filter   | 5 μm pore size |
| Total suspended solids | < 10 mg/l      |
| Oil & Gas, surfactants | < 10 ppm       |



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Actual MDS 1000 system for waste acid concentration