

Experimental Evaporator for Ambient Conditions

Principle

Investigation of the evaporation behavior of structured surfaces with variable heater power. The measured heater surface excess temperature and the resulting heat transfer coefficient is related to flat surfaces and so the improvement is determined.

Manufacturer	Self Developed and Manufactured
Working Medium	Water
Temperature Range	10 ... 100 °C
Pressure Range	Ambient Pressure
Thermal Output	900 W ($\approx 1200 \text{ kW/m}^2$)
Heating Surface	30 mm Diameter, Flat Surface
Analysed Structures	Metallic Fibers and Metal Foams Made of Al, Cu, Ni