



VAP250

Small Scale Evaporator

The Small Scale Evaporator, type SiccaDania VAP250, has been designed for both continuous and batch evaporation of liquid products into concentrate. The evaporation process is scalable and the Small Scale Evaporator enables process simulation of larger industrial size evaporators.

VAP250 is targeted for small scale production as well as R&D work and is widely used by companies and universities worldwide. It is available in a standard version and also features a range of optional modules, thus enabling customisation to match individual requirements. The VAP250 is produced in sanitary design and includes a state-of-the-art solution regarding safety, easy cleaning and a sophisticated PLC based control system. All parts in contact with products are made in stainless steel and all elastomers are food grade approved according to GMP standards.

Applications

The VAP250 is widely used for dairy, food, chemical and pharmaceutical applications.

TECHNICAL DATA

Max. water evaporation	500 kg/h
Nominal W.E. capacity	250 kg/h
Steam consumption	Approx. 1 kg steam per kg W.E.
Cooling water consumption at 22°C inlet and 46°C outlet temperature	6000 kg/h
Heating surface	25.4 m ²
Power supply	3 x 400 V, 50 Hz
Space requirements LxWxH	2.0 x 2.0 x 6.0 m
Recommend free height	6.7 m
Weight	Approx. 1500 kg
External surfaces/product contact	AISI 304 / AISI 316

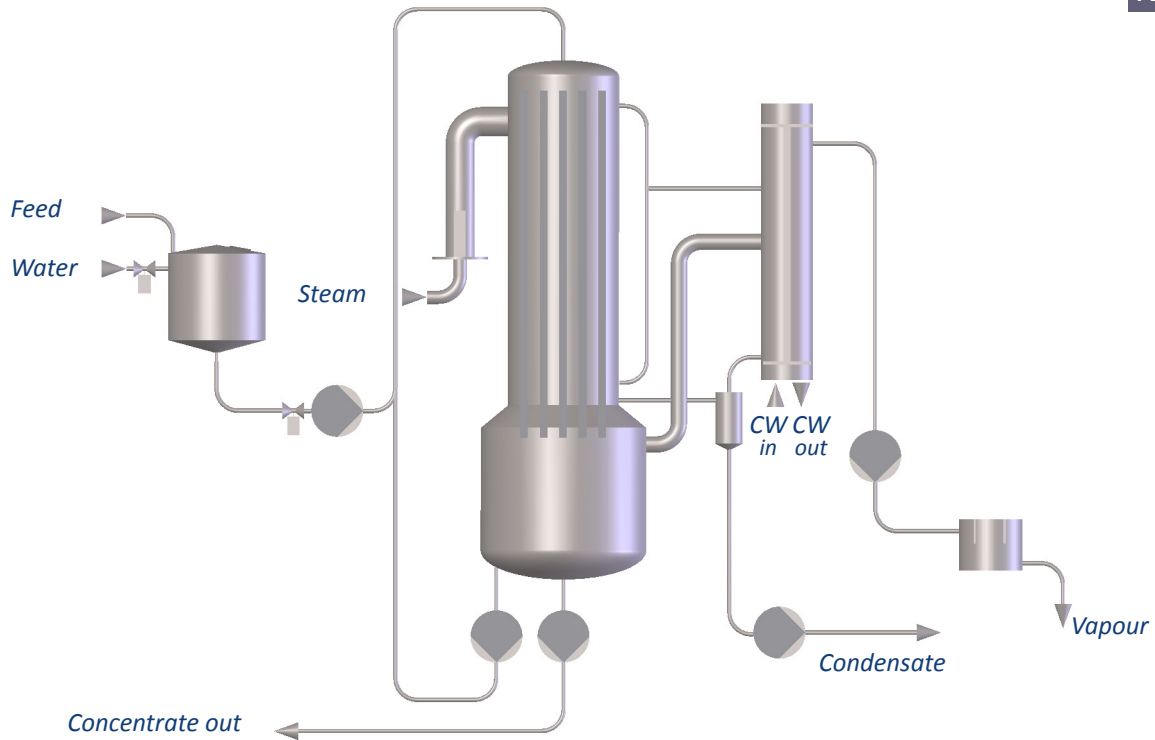


Process Data Range	Nominal	Minimum	Maximum	
Water evaporation capacity	250	79	500	kg/h
Steam consumption	250	79	500	kg/h
Cooling water supply	6000	3000	6750	kg/h
Cooling water temperature, in/out	22/46	22/37	22/63	°C
Boiling point,	62	46	90	°C
Delta T (jacket – boiling)	6.5	2	12	°C

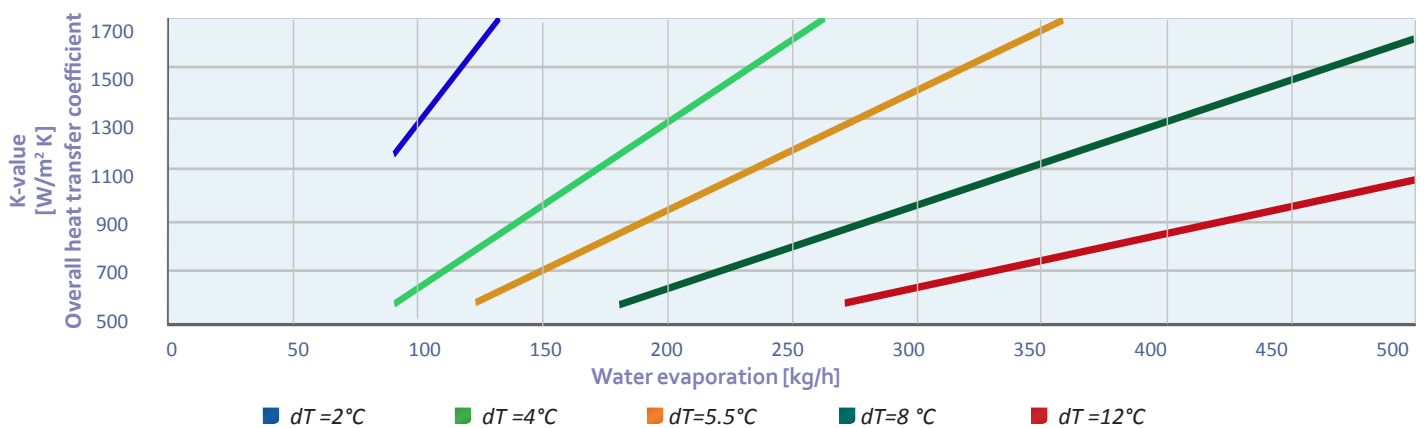


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FLOW CHART



WATER EVAPORATION CAPACITY



EQUIPMENT

BASIC PLANT

- Closed feed tank with level switch
- Feed pump with flowmeter
- Steam ducting with pressure control
- Calandria with integrated vapour separator
- Density meter in recirculation system
- Recirculation pump (centrifugal)
- Tubular condenser
- Vacuum pump (stainless steel body)
- Condensate pump (centrifugal)
- Concentrate pump (centrifugal)
- CIP nozzles
- Combined MCC/HMI cabinet PLC/Touch screen
- Stainless steel support structure
- All components completely wired and tested

OPTIONS

- Tubular preheater with steam control system
- Holding cell
- Stairway or ladder to top of calandria
- Insulated feed tank
- Agitator in feed tank
- Crystallisation unit

