

# VAP250

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 represents very well the flexibility achievable in industrial size evaporators.

The VAP250 is targeted for small scale production, R&D work as well as simulation trials for optimisation of large scale production. It comes in a standard version and also features a range of optional modules, thus enabling customisation to individual requirements. The VAP250 is in sanitary design and represents state-of-the-art solution regarding safety, easy cleaning and a robust 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. All components completely wired and tested

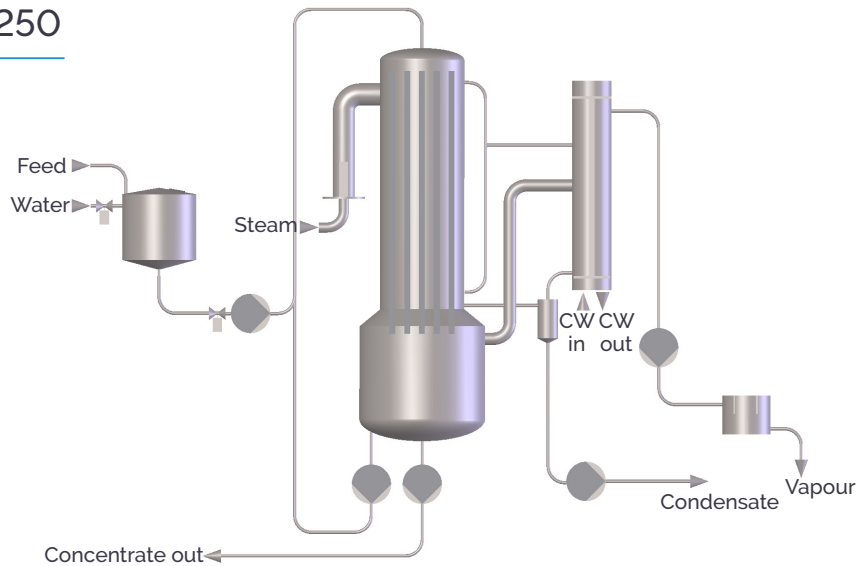


TECHNICAL DATA	
Max. water evaporation	500 kg/h
Nominal W.E. capacity	250 kg/h
Steam consumption	Approx. 1 kg steam per kg W.E.
Cooling water consumption (22°C inlet and 46°C outlet temperature)	6000 kg/h
Heating surface	25.4 m <sup>2</sup>
Power supply	3 x 400 V, 50 Hz

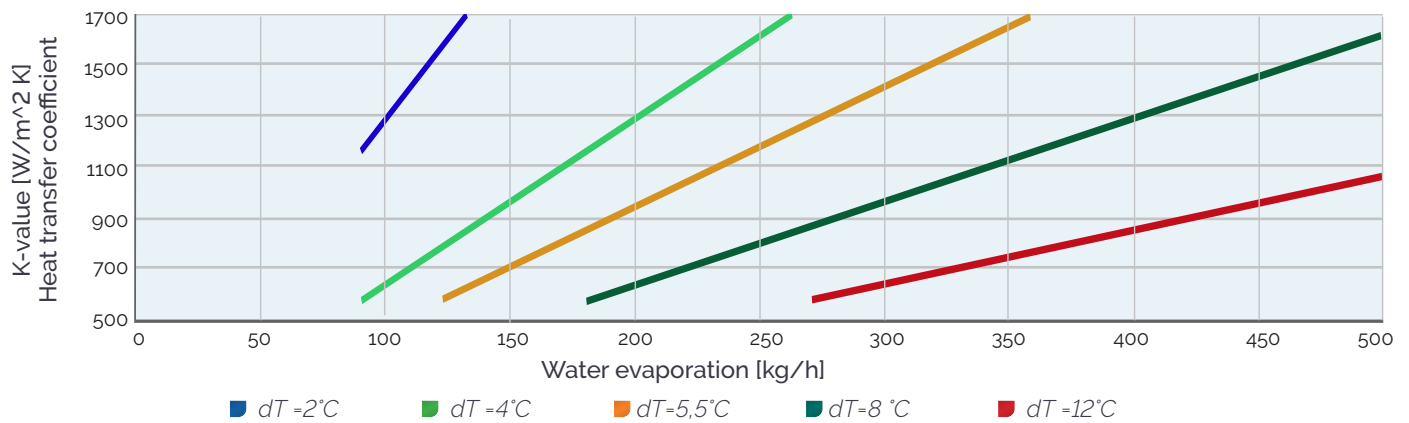
DESIGN DATA	
Space requirements L x W x H	2.0 x 2.0 x 6.0 m
Recommended free height	6.7 m
Product contact parts	AISI 316
External surfaces	AISI 304
Weight, net	1500 kg

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)	6.2	2	12	°C

## Flow chart - VAP250



## Water evaporation capacity



## Equipment

### STANDARD EQUIPMENT

- Closed feed tank with level switch
- Feed pump (centrifugal) with flow meter
- Steam ducting with pressure control
- Calandria with integrated vapour separator
- Density meter in recirculation system
- Re-circulation 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

### OPTIONS

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