Single Effect Concentrator

Single-effect concentrator is suitable for the evaporator the water or solvent from solution such as traditional herbal medicine, western medicine, glucose, wine-making, starch, oral liquid, chemical industry, food, natural flavor, food additives, monosodium glutamate, dairy products, etc.the outlet ointment density is about 1.2g/cm.

It can be used for vacuum condition for the raw material which is thermal sensitivity.

- Machine Structure -

The equipment including the following units: heating tank, evaporator tank, gas/water separator, condenser, sub-cooler, collection tank and pipeline.

- Working Principle -

The steam enters the outside of the tube of the heating tank, heating up the raw material which inside tube of tank, the raw material spraying it into the evaporator tank, the vapor gas will be vapor from the evaporator tank to the condenser for condensate, then cooling and collect in the storage tank, the ointment products will be back into the evaporator tank. The raw material is concentrated to a certain extent, and after sampling is determined, the ointment is discharged from the bottom outlet of the evaporator tank.



- Technology data Specification -

Model	DX200	DX500	DX1000	DX1500	DX2000	DX3000
Item						
Evaporator capacity (kg/h)	200	500	1000	1500	2000	3000
Evaporator temperature (°C)			>55			
Heating area (m²)	3.2	6.2	12.2	18.5	24.4	36.6
Condenser cooling area (m²)	11	28	56	84	112	168
Sub-cooler cooling area (m²)	1	2	3	3	5	6
Steam consumption (kg/h)@3bar	220	550	1100	1650	2200	3300
Cooling water consumption (T/h)	12	30	60	90	120	180
Vacuum air absorption (m³/h)	50	125	250	375	500	750
Dimension L*W*H (mm)	2300*700	2800*1200	3500*1300	4000*1400	4600*1600	5500*1800
	*2750	*3700	*4600	*5150	*5500	*5800

^{*}Above model just for reference, we can do according to client's URS *