Multifunctional Thermal Reflux Extractor And Concentrator Machine

Multifunctional Thermal reflux extractor & concentrator machine is a new developed extractor & concentrator machine. This machine have the advantages of the large raw material feeding processing capacity per batch, few solvent consumption, low concentrator temperature, high efficiency and energy-saving etc.characteristic.

- Advantages For The Machine -

-This machine not only can fit to the organic solvent thermal reflux process, but also it can fit water thermal reflux extractor in the vacuum& low temperature condition.

-This machine resolve the problem of the reflux process under high temperature in long time, avoid the destroying Medicinal ingredients which are temperature sensitive.

This machine can fit the processes of extractor& concentrator in atmospheric pressure; extractor in atmospheric pressure & concentrator in vacuum pressure; extractor & concentrator in vacuum pressure; steam distill volatile oil. Especially for the water based and solvent extractor etc.process.

- Machine Structure -

This machine including the following units: extractor tank, single effect concentrator, condenser, oil/water separator, sub-cooler, water (solvent) collection tank, automatic drain system and pipeline etc.

- Working Principle -

The extractor solution outlet from the bottom of the extractor tank to the single effect concentrator to evaporate, and the evaporated solvent condenser then reflux back to the extractor tank as the fresh solvent. The fresh solvent mixture with the solution completely and evaporate again, till to extractor all the medicine from the raw material herbs.

- Technology Data Specification -

Model / Item	RHL— 1.0		RHL— 2.0		RHL— 3.0		RHL— 6.0	
	extractor	concentrator	extractor	concentrator	extractor	concentrator	extractor	concentrator
Jacket steam pressure (MPa)	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.2
Shell (tube) pressure (MPa)	≤0.09	-0.084	≤0.09	-0.084	≤0.09	-0.084	≤0.09	-0.084
Jacket steam temperature (℃)	142	132	142	132	142	132	142	132
Shell (tube) temperature(℃)	≤100	60	≤100	60	≤100	60	≤100	60
Extractor tank volume (L)	1000		2000		3000		6000	
Evaporator capacity (kg/h)	500		800		1000		2000	
Concentrator heating area (m^2)	6.2		9.8		12.2		25	
Condenser area (m^2)	21		30		44		82	
Steam consumption(kg/h)@3bar	600		950		1200		2500	
Cooling water consumption (kg/h)	25		35		50		90	
Dimension L*W*H(mm)	4000×1800×4600		4500×2200×5900		5200×2400×7250		6600×2800×7550	

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