

Chiller Selection Matrix

Hei-VAP based on solvent

ENTHALPY OF EVAPORATION (AT 50°C)	EXAMPLES	PROCESSING TYPE	FLASK SIZE	POWER LEVEL
< 500 J/g	<ul style="list-style-type: none"> Cyclohexane Dichloromethane Ether Toluene Octane Heptane Hexane 	<ul style="list-style-type: none"> Very small batches 	<ul style="list-style-type: none"> Up to 1 litre 	 <p>Hei-CHILL 250 Cooling capacity at 250 W NOT FOR HIGH AMBIENT TEMPERATURE (e.g. ASIA, INDIA)</p>
< 500 J/g	<ul style="list-style-type: none"> Cyclohexane Dichloromethane Ether Toluene Octane Heptane Hexane 	<ul style="list-style-type: none"> Batch 	<ul style="list-style-type: none"> 1-2 litres 	 <p>Hei-CHILL 350 Cooling capacity at 350 W</p>
> 500 J/g	<ul style="list-style-type: none"> Acetone Acetonitrile Methanol Ethanol Water & water mixtures (batch) 	<ul style="list-style-type: none"> Batch (water & water mixtures) 	<ul style="list-style-type: none"> Up to 3 litres 	 <p>Hei-CHILL 600 Cooling capacity at 600 W</p>
> 800 J/g	<ul style="list-style-type: none"> Methanol Ethanol Water & water mixtures 	<ul style="list-style-type: none"> High volume batches 24/7 	<ul style="list-style-type: none"> Up to 5 litres 	 <p>Hei-CHILL 1200 Cooling capacity at 1,200 W</p>

GENERAL INFORMATION

- To protect the glass cooler, the maximum pump pressure of the circulating cooler must not exceed **2 bar** (including pressure peaks)!
- For optimal distillation rates the three-quarters rule should be observed
- ▶ At three quarters of the height of the cooling coil the steam should condense, form droplets and drain off as condensate, while the upper quarter of the cooling coil should remain free. If this rule is disregarded, the vapour can be sucked in by the vacuum pump and the pump performance can break down.
- The coldest point of the glass chiller should always be at the top of the glass cooler to prevent the vapour from shooting through.
- ▶ The flow of the circulating cooler should be connected to the upper cooling coil connection.



Multiple Evaporators

Only with Hei-CHILL 1200 or Hei-CHILL 600
Power levels are additive (e.g. Hei-CHILL 1200 will perform for two Hei-CHILL 600 (2*600 W))
 Hei-CHILL 250 and Hei-CHILL 350 are not recommended for multi evaporator use

Hei-VOLUME Distimatic

Simply smart – automatically process unlimited amounts

