Water Circulator (Chiller) & Cold Trap Summary



Water Circulator (Chiller)

removes heat from a process

maximum amount of solvent

Supplies a source of temperature

controlled fluid, typically water, which

Keeps water in the condenser at a

stable low temperature thereby creat-

ing ideal conditions for collecting the

Purpose

Benefits

Purpose

Efficiently collects moisture and harmful vapors by trapping them in the container and keeping them from reaching the vacuum pump

Benefits

Protects vacuum pumps

For oil-sealed pumps, collection of vapors is critical to prevent them from getting into the vacuum pump where they would condense and contaminate the pump's oil which will eventually cause loss of efficiency or irreparably damage pump

Protects the environment

For dry pumps, collection of vapors makes the evaporation system a closed system, preventing vapors from passing through the vacuum pump and into the environment

Increases evaporation rate

Vapors are collected as a frozen solid and are therefore not condensed inside the vacuum tubing, which would slow evaporation

Combination Example





Specifications

Туре	Series	Max. lowest temperature	Dehumidifying capacity	Capacity (L)	Features	Application	Recommended in combination with
Water Circulator (Chiller)	CF301	-20°C~Room temperature	N/A	4L	 Closed circulation system Environment friendly coolant used for refrigeration Less energy use and less cooling capacity loss by fixing the heat resistant lead Can connect four (4) Rotary Evaporators when using CF800 	 Used for many cooling applications 	Rotary evaporator
	CF800		N/A	16L			
Cold Trap	CA301	-45°C	Max 0.9 kg (water type liquid)	4L	 A worry-free system which can be operated without adding dry ice or liquid nitrogen Uses environment friendly and CFC-free refrigerant Standard with stainless steel condenser or an optional glass insert for corrosives Portable unit provides easy mobility (stoppers provided in the front caster wheels) CA801 designed with defrosting mechanism (hot gas bypass) Space saving 	 Large amount of outgas- sing or contaminants that may be present Large amount of liquid that must be removed from the vacuum environment (e.g. freeze drying) 	Vacuum oven, Rotary evaporator, Freeze dryer
	CA801	-85°C	Max 1.0 kg (water type liquid)	4L			