# Overview

# Water Circulator (Chiller) & Cold Trap











**Cold Trap** 

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Water Circulator (Chiller)

#### **Water Circulator (Chiller)**

### Purpose

Supplies a source of temperature controlled fluid, typically water, which removes heat from a process

#### **Benefits**

Keeps water in the condenser at a stable low temperature thereby creating ideal conditions for collecting the maximum amount of solvent

## **Cold Trap**

#### **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

Specifications

Туре	Series	Temperature range	Dehumidifying capacity	Capacity (L)	Features	Application	Recommended in combination with
Water Circulator (Chiller)	CB100	-10°C to 80°C	N/A	3.4L	<ul> <li>Closed circulation system</li> <li>Environment friendly coolant used for refrigeration</li> <li>Less energy use and less cooling capacity loss by fixing the heat resistant lead</li> <li>Can connect four (4) Rotary Evaporators when using CF802A</li> </ul>		Viscometer Spectrofluorometer
	CFA302	-10°C to 60°C	N/A	13L		TE100 Thermal Analyzer	
	CF303Y CF313Y	-20°C to 30°C no heating function	N/A	3.9L		Rotary evaporator	
	CF802A		N/A	15.5L			
Cold Trap	CA301	Max lowest temperature -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 equipped with stainless steel condenser / option for glass trap for corrosives     Space saving and highly mobile on wheels, equipped with stoppers in the front caster wheels	Large amount of outgas- sing or contaminants that may be present     Large amount of liquid that must be removed from the vacuum environ- ment (e.g. freeze drying)	Vacuum oven Freeze dryer