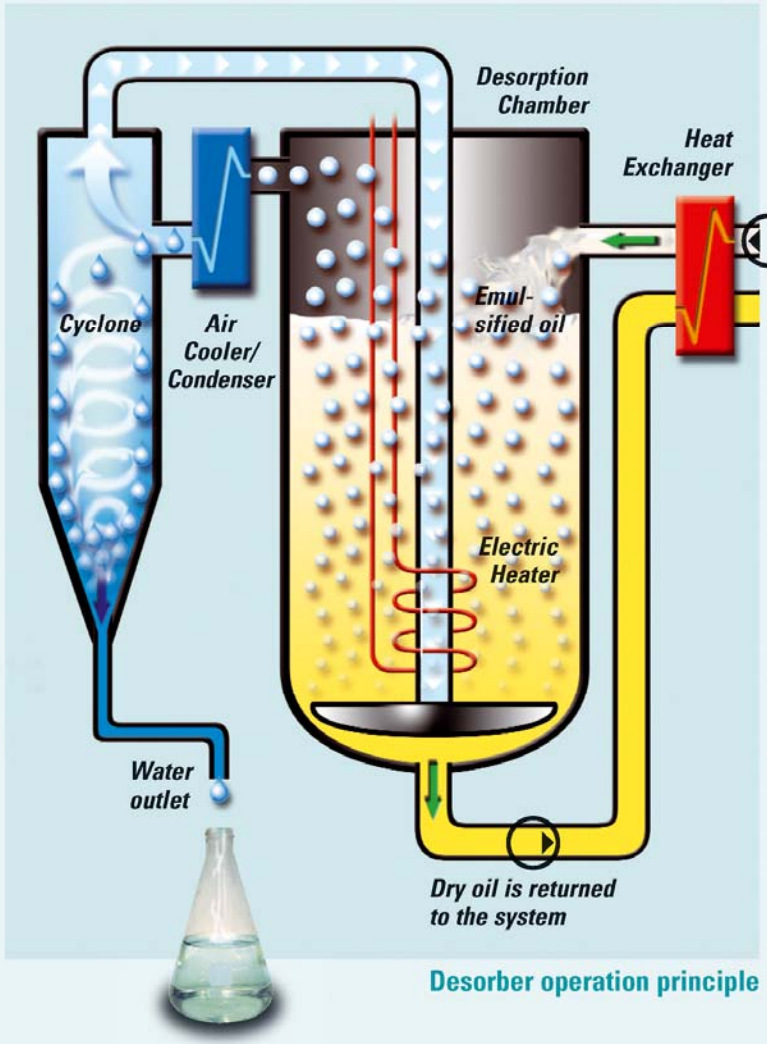
CJC™ Desorbers - Operation Principle

Solutions for Removal of Water from Low and High Viscosity Oils



Desorber operation principle

The Desorber Operation Principle

The supply pump draws oil from the oil system, and the oil is pre-heated through the heat exchanger to save energy and supplied into the top of the desorber chamber and distributed evenly in the chamber.

The oil temperature is maintained by an electric heater. At the same time air passes from the air pump and releases through several hundred nozzles in the bottom of the chamber.

The cold and dry air meets the hot and wet oil in a counter flow. The air is instantly heated by the oil, expands and is saturated by the water in the oil.

The saturated air is condensed by the air cooler and the free water is separated and discharged in the cyclone. The dry and cold air is re-used in the closed circuit.

The discharge pump returns dry oil to the main system through the heat exchanger at an oil temperature close to the original oil temperature.