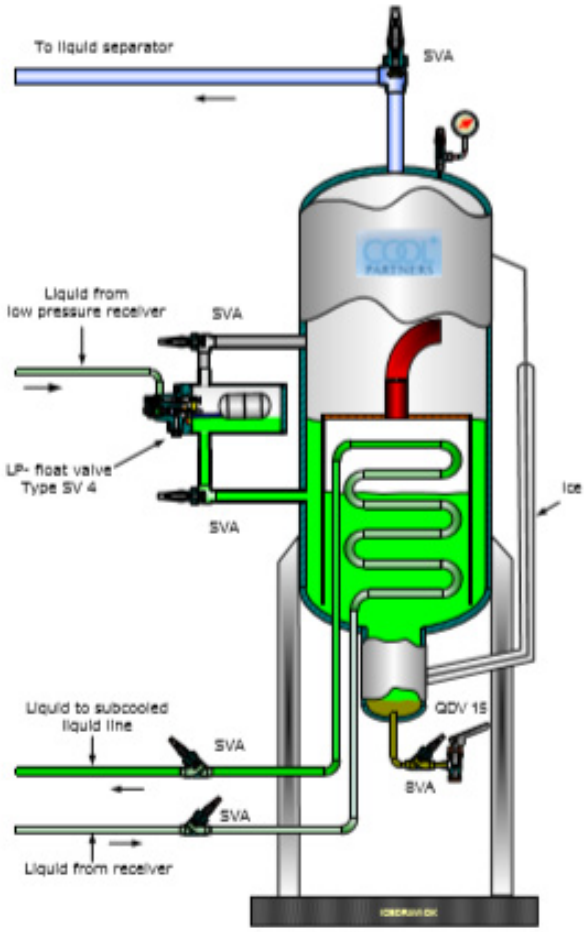
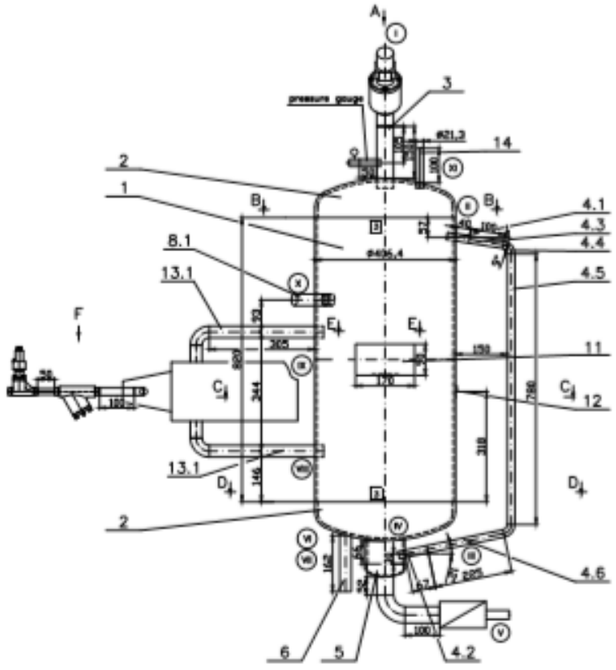
Water Purger CPW15
NH3 System Cleaner

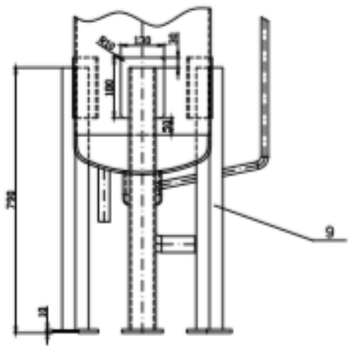
The most effective way to increase your systems capacity and reduce your energy consumption at the same time

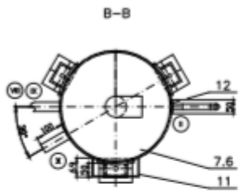


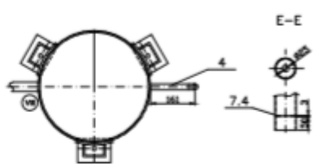
- Self regulating
- No regulation devices
- No maintenance
- No electrical connections
- Easy installation
- Energy neutral

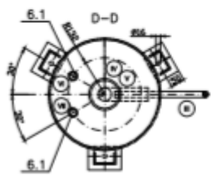
Drawing and Dimension

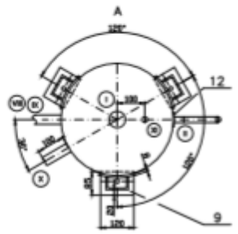












Normal operation:

The stop valve in the suction line is open. The stop valve in the liquid supply line to the float valve is open. Drain valves (quick closing drain valve and stop valve) are closed. Hot liquid supply through the coil is open. (This must always be open, both at normal running conditions and during pump down and drainage)

In normal operation the build in regulation device will automatically take care of the regulation and continually optimization of the unit under all running conditions. The regulation device secures the capacity is always correct for separation of water droplets, droplets of water and ammonia mixtures, and pure ammonia droplets. Water oil and sludge will accumulate in the System Cleaner.

Please note: The liquid level in the vessel will vary during normal operation because of the build in regulation device. During these normal variations the liquid level will rise to a level over the float valve as the build in regulation will force liquid from inside the regulator out in the outer vessel which can be seen as a liquid level over the float valve. This does not mean the float valve is leaking, but is part of the normal operation of the System Cleaner.

Draining the System Cleaner:

Pump down: Close the stop valve in the liquid supply line to the float valve. The unit is kept in operation until the ice starts to melt of on the non insulated area at the bottom the unit. The melting of the ice indicates a low content of ammonia in the liquid left in the System Cleaner.

Draining: Close the suction stop valve and wait until the pressure in the unit rise to a couple of bar over the atmospheric pressure. If the pressure does not seem to increase the stop valve in the liquid line before the float valve can be opened shortly to let a little bit of ammonia into the cleaner to make the pressure rise.

Open the drain valves, and drain the unit through a hose to a secure location. The liquid coming out will be a solution of approx 30 % ammonia in approx 70 % water (by weight) at atmospheric pressure together with oil, sludge and dirt.

When should the System Cleaner be drained?

When installed on a very contaminated or dirty system the System Cleaner should be drained every second day for a period of time, until the worst part of the water and dirt is drained out. Later draining every week will be suitable for a couple of months. When only small amounts of water and dirt is drained out one draining every third months should be suitable.
The need for draining will be different from system to system depending on many factors such as the seize of the system, the running conditions, amount of leaks (air drawn into the system), if service work has been carried out and the purity of the ammonia charged to the system.

Note:
If the ice starts melting of the non insulated area at the bottom of the System Cleaner during normal running condition it is an indication there is something in it which is not pure refrigerant and it should be drained. Most likely it will contain oil sludge and water mixed with some ammonia.

Installation