Brewing facility applications

Liquid desiccant solutions

For over 75 years, Alfa Laval Kathabar has engineered and manufactured liquid and dry desiccant systems for dehumidification and energy recovery applications. Our technologies improve the reliability, economy and efficiency of any manufacturing or processing operation that is humidity, temperature or microorganism-sensitive. We meet the ever-changing needs of our customers with quality products – providing reliable, precise and economical temperature and humidity control.

Alfa Laval Kathabar liquid desiccant systems provide a perfect solution for a wide range of applications for industrial, commercial, institutional and green/LEED facilities.

Applications:

- Yeast rooms
- Fermenting cellars
- Aging cellars
- Finishing cellars
- Packaging rooms
- Storage areas
- Racking cellars

Advantages:

- Production advantages
  - — Condensation control – prevent mold and bacteria growth
  - — Clean, sanitary production areas
  - — Quickly dry floors after washdown
  - — Precise temperature and humidity control to +/- 1% RH
- Operational advantages
  - — Eliminate complex defrost controls and hardware
  - — Lower refrigerant charge
  - — Reduce maintenance expenses with robust industrial design
- Energy advantages
  - — Reduce utility consumption through simultaneous air cooling and dehumidification
  - — Eliminate moisture reintroduced to space during defrost

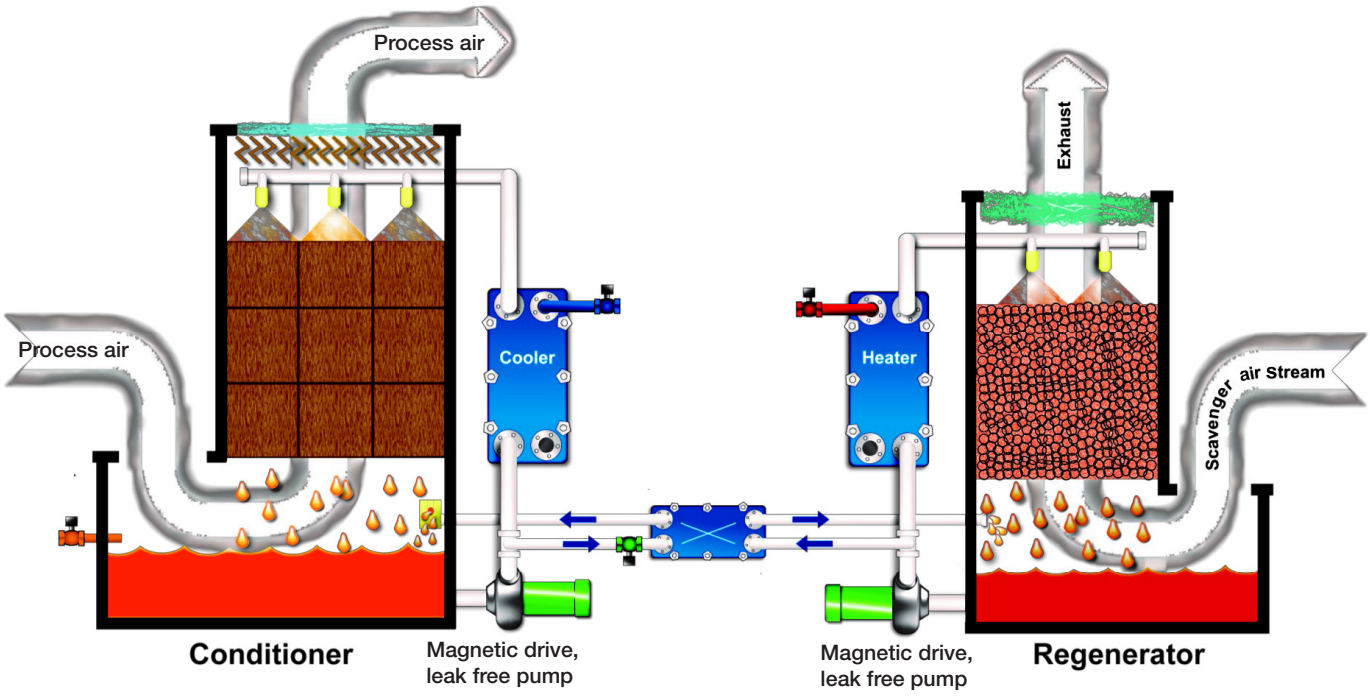
KATHABAR

How it works

The Alfa Laval Kathabar liquid desiccant dehumidification system operates on the principle of chemical absorption of water vapor from air. Our systems utilize a liquid absorbent known as Kathene.® Kathene solution is non-toxic, will not vaporize and is not degraded by common airborne contaminants.

The temperature and concentration of the solution determines the ability of Kathene to remove or add water vapor from the air. The concentration of Kathene can be adjusted so the conditioner delivers air at any desired relative humidity between 18% and 90%. For a given Kathene concentration, lower solution temperatures enable the conditioner to deliver cooler, dryer air.

The illustration below shows the basic elements of the liquid desiccant system. Conditioned air is cooled and dehumidified by contacting Kathene in the conditioner. By continuously circulating the desiccant through a heat exchanger, energy is extracted from the air and transferred to a coolant. The amount of heat extracted by the Alfa Laval Kathabar dehumidifier is modulated to exactly match the load ±1% by controlling coolant flow through the heat exchanger.



Alfa Laval Kathabar
Phone +1 716-875-2000
Email: sales.kathabar@alfalaval.com
Web: www.kathabar.com

Liquid desiccant packaged conditioner