

KATHABAR Solutions



HOSPITAL APPLICATIONS

Kathabar systems can provide clean air while efficiently maintaining controlled temperature and humidity levels for ultimate comfort of surgeons and patients.

THE SOLUTION

High humidity can cause numerous problems in hospitals and critical care facilities.

Surgeons alone demand more specific temperature requirements. Heavier gowning combined with more complex surgical procedures call for cooler temperatures in operating rooms. When air is cooled to these lower temperatures, humidity can often rise to over 75% RH. With a Kathabar system installed, humidity can be simply and easily maintained at any temperature desired, 60°F or lower!

A Kathabar system delivers air directly at the required temperature and humidity, regardless of air inlet conditions. The system will cool and dehumidify air in the summer and automatically *humidify* air in the winter, all from simple temperature control.

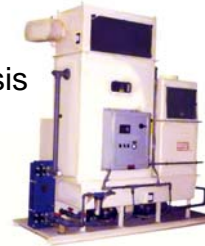
Kathabar also offers more than just humidity control. Airborne bacteria, viruses and molds are removed and killed as air is 'scrubbed' by the liquid desiccant solution.

ECONOMIC VALUE COMPARISON

Whenever a dehumidification project is considered, Kathabar offers an Economic Value Comparison analysis for the customer, an EVC. This evaluation considers the first cost as well as annual operating costs for a Kathabar dehumidification system compared with competitive alternatives.

If a Kathabar system is considered versus refrigeration, Kathabar will calculate the operating cost for both systems and present the EVC based on specific local weather data as well as local energy costs.

The EVC program is also available for comparing a Kathabar system with other liquid desiccant systems, or with any dry desiccant system, including Kathabar's own dry desiccant KBD unit.



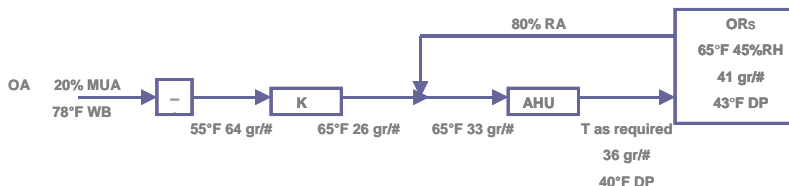
MICROBIOLOGICAL DECONTAMINATION

Kathabar solution is bactericidal and virucidal to most airborne organisms. Bacteria, mold and viruses are automatically neutralized and washed from both the conditioner and regenerator air streams.

The Kathabar system delivers clean and sterile air by two methods:

1. The Kathabar process scrubs the air as it passes through the spray, removing airborne particulates, germs, viruses, etc.
2. All airborne organisms washed from the airstream are neutralized by the liquid desiccant solution.*

**Refer to Battelle study*



THE KATHABAR WAY

The best way to reduce humidity in a hospital operating room while improving indoor air quality is with a Kathabar desiccant dehumidification system.

The new fiberglass Kathabar systems are reliable, energy-efficient, and provide precise air temperature and humidity control.

Incoming air passes through a flow of Kathene[®] solution (lithium chloride brine) that dehumidifies or *humidifies* that air as needed. The temperature of the Kathene, cooled automatically according to load conditions, controls the rate of moisture addition or removal. Dry steam humidifiers are no longer a necessity.

With moisture control as well as scrubbing filter action, a Kathabar system will replace a variety of units that are now only partially effective.



Kathabar brings 75 years of desiccant air conditioning experience to the hospital industry. Kathabar hospital systems solve the root problem, moisture, by eliminating excess moisture in summer and adding moisture in winter to the air supply. This, in turn, solves other problems such as condensation contamination, costly housekeeping, discomfort, winter explosion hazard, and indoor air quality.

Kathabar comes closer to providing full environmental control than any other single system.

BENEFITS OF A KATHABAR SYSTEM

- A Kathabar system will eliminate wet cooling coils that promote reproduction of micro-organisms. And Kathabar itself kills airborne pathogens in the incoming air.
- Relative humidity can be easily controlled to 45% or lower, even at temperatures below 60°F.
- The Kathabar system requires no humidity controller to provide simple and highly precise humidity control.
- Kathabar has the highest energy efficiency of any desiccant unit.
- The new Kathabar fiberglass systems are simple, silent, trouble-free, and operate continuously with very low maintenance.
- A Kathabar system provides automatic air humidification in winter without a dry steam humidifier.
- If your hospital has a distributed power or cogeneration system, Kathabar can use its 200°F hot water waste heat to effect dramatic reductions in refrigeration.

KATHABAR Dehumidification Systems

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