



WET ENVIRONMENTS CAN CAUSE PROBLEMS IN BUILDINGS, SHIPS, STEEL STRUCTURES AND PIPELINES. EXCESSIVE MOISTURE AND DAMPNESS LEADS TO MOULD, CORROSION AND SHORT CIRCUITING. **DEHUMIDIFICATION IS ESSENTIAL.** TOO LITTLE MOISTURE RESULTS IN DRY CLIMATES IN OFFICES, MUSEUMS, ART GALLERIES AND ARCHIVES. **HUMIDIFICATION IS THE SOLUTION**

Ship and offshore

On board ships and oil platforms there is a requirement for both dehumidification and humidification. Regardless of how well a ship or oil platform is maintained, certain areas will always be exposed to corrosion.

Supplying these areas with dry air helps keep rust development to a minimum. Even untreated steel stops rusting when the relative humidity is kept below 45 per cent. Unaccountable system failures and breakdowns are mainly caused by dampness because electronics and motor windings are sensitive to moisture. By installing adsorption dehumidifiers, the inner climate can be controlled and repair costs considerably reduced.



The Norwegian Coast Guard

Cold and damp spaces in ships' hulls have presented the Norwegian Coast Guard with maintenance problems. High humidity in equipment rooms containing electric motors, pumps and other installations has resulted in high maintenance costs.

The KV Andenes and KV Nordkapp have now installed adsorption dehumidifiers. These ensure optimum humidity and the Coast Guard anticipates a reduction in maintenance costs. So far, the results have been good. Almost all Norwegian Coast Guard are now equipped with dehumidifiers in wardrobes.



The Kristin platform

F-Tech has delivered adsorption dehumidifiers to StatoilHydro's Kristin platform.

Dehumidifiers safeguard external pipe systems and electronic connections against corrosion and condensation problems. Dry air is pumped into open cavities and service ducts and keeps dampness and maintenance under control. F-Tech has also delivered adsorption dehumidifiers to Gjøa platform (StatoilHydro) and the worlds largest floating rig, H6 (Aker Exploration).



Photo: Trond Sigvaldsen / StatoilHydro

Steam humidification

Humidification of ventilation air, manufacturing facilities, steam baths, etc. We offer a complete range of humidifiers.

Pure steam for all purposes

We deliver quality steam humidifiers from HygroMatik in Germany.

The correct level of humidity in the air is important for a good working environment. Dry air can have a negative effect on health and well-being. It is therefore standard practice to install humidifiers as part of ventilation systems in, for example, hospitals, offices, ship interiors and offshore installations.

Optimal humidity levels are also important for many manufacturing companies, chemical and physical processes, storage facilities and food production facilities.



The adsorption dehumidifier

This is a series of larger standard dehumidifiers produced by Cotes in Denmark, that are used for the dehumidification of large halls, among other places. It is supplied in several versions and is adapted to specific areas of application.

The dehumidifiers are complete units with filters, rotor, fan and heating coil, for the heating and regeneration of air. It is used in areas such as:

- Preservation of laid up ships
- Corrosion protection
- Drying of tanks and holds
- Dry storage rooms
- Drying of fridge and freezer rooms
- Ship and offshore installations
- Explosion proof



COTES

Explosion proof dehumidification

In connection with the painting of offshore installations, there has been a problem in not being able to use effective adsorption dehumidifiers because of the risk of explosion.

The answer has been to keep a fire-fighting team posted in order to deal with critical situations. This is expensive and requires additional helicopter transport and accommodation on board. We have now developed a solution that can be used in Zone 2 areas. The dehumidifier is placed in a container, which is protected by overpressure and monitored by gas and fire detectors. The start-up operation is completely automatic and in accordance with current regulations. Connect up the pipes and hoses and press the button. The automatic control system will exhaust all gases from the container, check that the air is OK, and start the dehumidifying process. If gas is detected, the system will automatically shut down and send a signal to the platform's monitoring system.



Protect thruster rooms

Thrusters that are only used occasionally are more exposed to damage by moisture.

Electronics and motor windings do not like humid conditions. Unaccountable system failures and breakdowns are often caused by moisture. By installing small adsorption dehumidifiers, the inner climate can be controlled and repair costs considerably reduced.

Ships laid up

With protection by dry air, vessels can be laid up for long periods without sustaining damage caused by humidity.

Better surface treatment

When the internal surfaces of tanks and cargo holds are to be treated it is important to keep the steel dry in connection with sandblasting and before paint is applied.

A portable dehumidifier specially designed for sandblasting can make the job easier. If the steel is kept dry prior to painting then the time to the next treatment will be extended!

Rust

Regardless of whether or not you paint regularly, some areas will always rust.

Ships contain lots of redundant spaces that are often difficult to access for purposes of painting etc. Due to condensation these areas are easily exposed to corrosion. If the air is kept dry, the rusting process stops. Even untreated steel stops rusting when the relative humidity is kept below 45 %. The investment cost of installing a dehumidifier is normally recovered quickly due to reduced maintenance costs.

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