# Water treatment and distribution

**Applications** 



DESSICA's air dehumidification systems help to protect production equipment from damage caused by condensation, corrosion and mould.

The systems offered by DESSICA provide a dry air at low temperature and also help prevent the growth of mould.

## Your partner in dehumidification

DESSICA's air dehumidification systems serve the technical premises of pumping stations and drinking water treatment plants. Thanks to an extensive experience in the production, wastewater treatment and purification sectors, DESSICA's equipment provides dry air that helps maintain the overall condition of the machinery year-round.

## Dry air in water production and distribution processes

Condensation and mould form in drinking water pumping and treatment stations. It causes premature deterioration of equipment, infrastructure, and protective coatings., The water flowing through the pipes in treatment plants is colder than the ambient air. Condensation happens when warm, moist air, comes into contact with a cold surface.

#### • In summer and mid-season

Pipelines, closed filters, and other treatment systems are often covered with condensation due to the water temperature being lower than the dew point of the surrounding air. As a result, ventilation systems that let in often humid outdoor air, are not efficient.

#### • In winter

The environments in rooms with open filters are often very humid due to water evaporation, causing the walls to be covered in moisture. Ventilation systems are often very energy-intensive, introducing cold air that increases the need for heating.

Our installations are designed with by-pass circuits to ensure that they operate differently depending on the season and to optimize performance to the fullest.

DESSICA equipment can be used to dehumidify these premises regardless of the climatic conditions, while minimizing energy consumption.



### • Protecting electrical cabinets against corrosion in water treatment plants

Humidity can significantly damage the electrical and electronic equipment in wastewater treatment plants. Corrosive pollutants, such as hydrogen sulfide (H2S), are often present in these environments and can cause severe deterioration of electrical cabinets, leading to oxidation of connections and busbars.

By maintaining a relative humidity of less than 30%, DESSICA systems protect equipment and prevent corrosion.

## Advantages of the DESSICA solution

- Protection of production equipment from damage caused by condensation and corrosion
- Limitation of corrosion on equipment and pipelines
- Prevention of mould formation
- Limitation of ventilation system consumption
- Reduction of costs compared to energy-intensive heating systems
- Improvement of hygiene and safety conditions
- Reduction of operating Costs (equipment renewal or sandblasting and painting)

Are you looking for an innovative way to improve your profitability?

We will provide you with our best tailored DESSICA systems to enhance your business performance.

**DESSICA**, your dry air specialist!

Contact us for more information.



