



## The Brewing Industry

Water is used in beer making at every stage of the production process.

**Temperature changes** are typical in beer making, and can give rise to humidity and condensation problems.

Critical areas involve the pneumatic transport and storage of raw materials: **the maintenance of low humidity levels in production processes** is also vital to improving quality in a clean environment, free from germs, and with a controlled temperature and humidity.





## Humidity control in the brewing industry



### Transport

During mechanical transport, dehumidifying units:

- Prevent the compaction of products
- Improve flows during transport
- Stop products from sticking to pipes
- Provide savings in labour costs for cleaning
- Avoid production stoppages
- Guarantee correct doses in automatic processes

### Storage

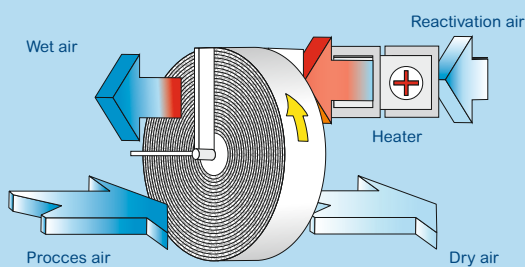
Raw materials are kept in silos, hoppers and chambers. Seeds, sugars, additives, and hops are all **organic materials that can be broken down** and become compacted in the presence of humidity.

The storage of intermediate or finished products in the absence of humidity results in lower contamination levels and reduced growth of bacteria, mould and fungus.

By automatically maintaining dew points below the temperature of the beer tanks in processing areas, condensation is eliminated, as is the potential formation of mould, and spaces are dried quickly after regular cleaning.



#### Desiccant rotor operating principles



### Production

Most beer production operations are carried out in cellars and basements where temperatures are close to freezing.

FISAIR dehumidifiers achieve constant dry air, which keeps the cellars in perfect humidity and temperature conditions, with dew points of up to  $-25^{\circ}\text{C}$ . That is how **condensation in the form of ice is avoided**.