

A customizable solution reduces the perishability of food products

RESULTS

- Fulfilled the highest demands in food processing
- Reduced food product perishability drastically
- Optimized compressed air quality with filter combination
- Used diaphragm-type dryer as an additional air dehumidifier
- Reduced oil content to under 0,003 mg/m³ with optional active carbon filter



APPLICATION

Food packaging

CUSTOMER

Food packager

CHALLENGE

Compressed air quality plays a significant role in packaging food products. Demands and technical requirements are high. Only if the compressed air quality is maintained can maximum food safety be guaranteed. There are defined compressed air quality classes for different contaminants in the various application areas of the food and packaging industry.

Since humidity has begun playing a larger role, dried food products have even stricter requirements than non-dried ones. For an application, this can mean that aseptic filtration (if required) must be verified. Accordingly, maintenance units must be designed depending on the application.

Delivering customizable compressed air filters, Emerson provided a flexible solution to meet the rigorous standards of both wet and dry food packaging, drastically reducing food perishability and wastage.

SOLUTION

Emerson delivered a customizable solution with a sterile filter to reliably retain bacteria, prevent food contamination, and successfully reduce the perishability of food products.

The configuration of a compressed air preparation unit for a food production machine consisted of a compressed air filter regulator and a 5 µm fine particulate filter. Depending on where and to what end the compressed air is being used (e.g., food zone), the Emerson solution adds special downstream filters. This means that the 5 µm filter is connected to a 0.3 µm prefilter followed by a 0.01 µm microfilter.

This combination retains 99.99% of the solids, oils, and water transported by the compressed air. Also, a diaphragm regulator acts as an air dehumidifier and reduces the pressure dew point along with the moisture content of the air. An additional active carbon filter also enables a reduction of oil content to under 0.003 mg/m³.

Emerson Automation Solutions
1953 Mercer Road
Lexington, KY 40511
+ 1 859-254-8031
us.AVENTICS@Emerson.com

The Emerson logo is a trademark and service mark of Emerson Electric Co.
The AVENTICS trademark is registered in the U.S and other countries
© 2020 Emerson Electric Co.

AVENTICS[™]

For more information:
www.Emerson.com/AVENTICS

