Use Case: Compressed Air in food industry

The claim of the customer:
Certification according to IFS Food Version 6 (higher lever)

In order to obtain certification according to IFS Food Standard Version 6, a globally active German chocolate manufacturer is raising its hygiene and quality standards.

Challenge:

For our customer from the food industry there was a new requirement of the auditor after an IFS audit: Class 1 for the residual oil content in the compressed air including proof! This means that the manufacturer not only protects the consumer, but also guarantees safe and cost-efficient production. When packing and filling products, the condition of the end product must remain unchanged. Foodstuffs in particular must be handled gently and no contamination through direct or indirect contact must occur.

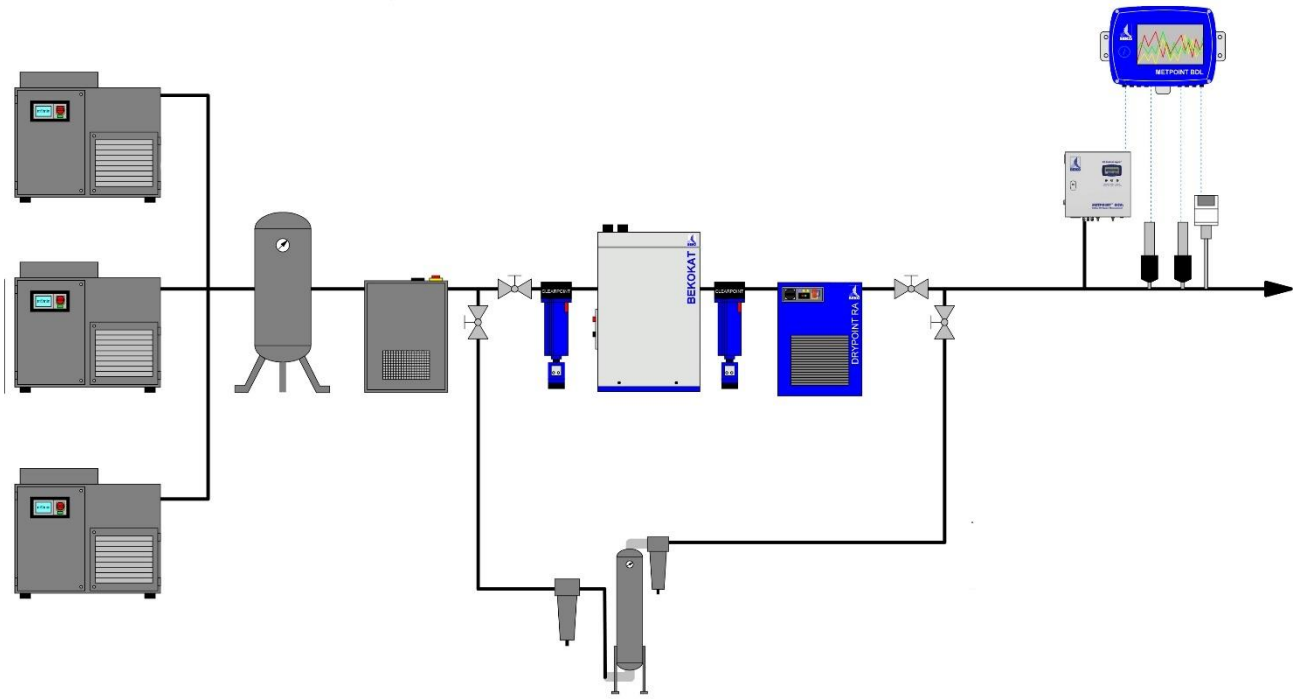
Various approaches to solutions were examined, but the costs for the acquisition of an oil-free compressor seemed too high to the customer. The use of a refrigeration dryer and an activated carbon adsorber had personally not achieved satisfactory results to date. Now only the solution with the catalytic converter with refrigerant dryer came into question.

Solution:

The remaining option was the solution with the catalytic converter BEKOKAT and a downstream refrigeration dryer DRYPOINT RA. The BEKOKAT completely converts the hydrocarbons in the compressed air into carbon dioxide and water by total oxidation. The process constantly produces oil-free compressed air with a maximum residual oil content of hardly measurable 0.003 milligrams per cubic meter. The promised quality result by using BEKOKAT has convinced the customer. The price and the simple integration into the existing compressed air system were also decisive factors.

Furthermore, the customer decided to additionally purchase METPOINT measuring technology for permanent monitoring of the parameters that are decisive for his compressed air quality, such as pressure, pressure dew point, volume flow and residual oil content. This data acquisition guarantees a complete documentation of the compressed air used during the next control by an auditor.

Use Case: Compressed Air in food industry



Conclusion:

Since the BEKOKAT was installed, the customer has consistently maintained Class 1. The plant has been running since March 2019 and the customer is very satisfied. Also, the existing components (old stock) could all be reused. Thus, the old activated carbon adsorber now serves as a bypass solution and the old refrigeration dryer was used in front of the BEKOKAT as an additional safety measure. Additional measuring technology was installed to monitor the compressed air production and treatment.

Products:

Treatment:

1x CLEARPOINT M010FWM
1x BEKOKAT CC-360
1x CLEARPOINT M010RSWT-OF
1x DRYPOINT RA330/AC-OF
METPOINT measurement technology

Edition: USC0002, April 2020