



## Use Case: Compressed air in mechanical engineering

### residual oil - an absolute no-go

The user works with gas chromatographs, which are used as an analytical method for separating mixtures into individual chemical compounds. The system is worth several million euros. Reason enough to raise the compressed air level to a maximum of efficiency and process reliability.

#### Challenge:

The compressed air station was equipped with oil-free scroll compressors and simple filtration. The operation of the compressors was associated with high maintenance costs. The contamination of the compressed air with residual oil was in a critical area in this sensitive application. In case of contamination, a 5-digit costly damage could quickly occur. Due to the required quality of the compressed air, the user decided to optimize his compressed air system.

#### Solution:

After careful consideration, the company decided to purchase new oil-injected screw compressors for compressed air production. For compressed air treatment, the company decided to use the catalytic converter BEKOKAT® CC-120 with appropriate filtration.

BEKOKAT® sets a high standard in process safety in the treatment of oil-free compressed air by completely converting hydrocarbons into carbon dioxide and water through total oxidation in the catalyst. Regardless of the ambient temperature, air humidity and oil input concentration, this process consistently produces oil-free compressed air with a maximum residual oil content of hardly measurable 0.003 milligrams per cubic meter, which corresponds to the residual oil content class 1 according to ISO 8573-1.

The combination of oil-injected compressors and the BEKOKAT® resulted in consistently good compressed air quality.

#### Conclusion:

The compressed air quality was optimized and the operating costs were reduced.

#### Products:

1 x catalytic converter BEKOKAT® CC-120

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