

PROJECT REPORT



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CUSTOMER

Nordbrand Nordhausen GmbH

PROJECT

Replacement of complete compressed air system with 100% grease-free assembly

BOGE PRODUCTS IN USE

Three frequency-controlled type SF 60 BLUEKAT catalytic compressors, particle filters, refrigerant compressed air dryer and 5,000 litre air receiver, BOGE **airtelligence provis 2.0** compressed air management system



In conjunction with BOGE Nordbrand creates a “smart factory” for spirits

Compressed air plays an important role at Nordbrand, a Rotkäppchen-Mumm Group company, which manufactures well-known brands such as Mariacron, Chant-ré, Nordhäuser Doppelkorn and Eckes Edelkirsch, and not just when bottling spirits. As the existing plant was regularly unable to cope with peaks in demand, but also to meet future requirements for 100% oil-free compressed air, the company asked BOGE to carry out a complete replacement of the compressed air system.

In the final analysis what does “oil-free” mean?

Class 0 oil-free compressed air is the gold standard - in this case it is supplied by three frequency-controlled type SF 60 BLUEKAT catalytic compressors. Even if hydrocarbons are high - as a result of lorry exhaust fumes which could be sucked in, for example - the catalytic converters integrated into the BLUEKAT compressors intervene. To avoid even the smallest contamination in the compressed air supply, the pipework and the working section for permanent oil content measurement have been made completely of stainless steel and assembled without the use of grease.

Totally in keeping with Industry 4.0

Today everything at Nordbrand is fully automated. BOGE's **airtelligence provis 2.0** compressed air management system is at the heart of perfect

operation - intelligent compressor management, which independently determines the company's total network volume and trends, such as a sudden rise in compressed air consumption, and counters this by automatically starting the compressors before the demand peak is reached.



The internal network forwards all the control data to the relevant work stations, which is then accessible via state-of-the-art communications tools. Nordbrand's smart factory is therefore ideally equipped for the future.

Project information

> THE CHALLENGE

In order to implement permanently validated oil content measurement which also meets the food industry's future requirements, it was necessary to produce the compressed air without oil and for everything to be piped using stainless steel without the use of any grease at all. Also the entire system and exhaust air ducts had to fit into the vaulted cellar.

> BOGE'S SOLUTION

Three frequency-controlled type SF 60 BLUEKAT catalytic compressors ensure class 0 oil-free compressed air. Preparation of the compressed air using particle filters, refrigerant compressed air dryers and a 5,000 litre air receiver was required for this application. All the data, including energy calculations, maintenance periods and oil content measurement values are incorporated into the intelligent control.

> THE RESULT

A high-performance supply of class 0 oil-free compressed air which supplies the required volume at any time and which is immune to the smallest contamination, such as lorry exhaust fumes which could be sucked in.