PROJECT REPORT



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CUSTOMER OberSelters Mineralbrunnen Vertriebs GmbH

PROJECT

Implementation of a dual network compressed air system with superior visualisation

BOGE PRODUCTS IN USE

Two screw compressors, SLF 30-3 and an S 31-3 in a joint network, controlled by BOGE airtelligence provis 2.0; and EO 11 D in a separate network, but also visualised by airtelligence provis 2.0



Oil-lubricated and oil-free combined successfully: **How OberSelters errs on the side of caution while making savings**

Why waste oil-free compressed air of class 0 when it is not required in all operations? This initial question was expedient in the design of a dual network system for the traditional company OberSelters, as their aim was more efficient energy management. Naturally, for the manufacturer of five different types of mineral water, it is essential that the filling of 70 million bottles each year deploys oil-free compressed air – as process air for filling as well as for sterile air.

Maximum efficiency was in the specification

To optimise efficiency in all operations, certain areas in the process that do not come into contact with the product can be supplied with oil-lubricated control air. For our partner company Druckluft-Schorsch, a family-run company in which all three sons of the founder hold positions, it was an easy task (as a fullservice provider the company manages everything itself up to the operation of open sea high pressure containers): Two BOGE scroll compressors, EO 11 D, which produces up to 2.5 cubic metres of oil-free compressed air per minute, ensure a food-safe filling process. And not only that: as scroll compressors run ultra-quietly and with particularly low-vibration, they can be used very close to the workplace. Just as efficiently, two oil-lubricated BOGE SLF 30-3 and an S 31-3 offer sterling service in less sensitive areas. Special feature: Both systems are controlled separately but all data - including both EO 11s is sent to the airtelligence provis 2.0 They are then visualised, which enables excellent control. It is apparent here, in the age of Industry 4.0, how savings are achieved using networked systems: The modern consumption-orientated interlocking control, airtelligence provis 2.0, which can be connected up to 16 compressors and up to 24 accessory components, visualises both independent compressed air networks via a 9" TFT colour display with touch function, and thereby harmonises the use of both compressed air networks - oil-free and oil-lubricated - in the name of maximum energy efficiency.



PROJECT INFORMATION

> THE CHALLENGE

100% oil-free air is essential for production at OberSelters, but is not required in all operations. Two parallel networks were therefore required – oil-lubricated and oil-free (with no filtration) – visualising via one control.

> THE BOGE SOLUTION

Two BOGE EO 11 D scroll compressors, which compress completely oil-free, supply 100 % oil-free compressed air – without any costly filtration measures. The oil-lubricated section is managed by three screw compressors (2 x BOGE SLF 30-3 and 1 x S 31-3). The airtelligence provis 2.0 controls the oillubricated network and uses the data from both systems for visualisation.

> THE RESULT

100 % oil-free air – but only where it is really required. This dual network compressed air system shows how Industry 4.0 works: The highly intelligent control ensures harmonised processes in two different networks and therefore actually helps save costs.