FILTRATION PROTECTION FOR GAS TURBOCOMPRESSOR

For Dry Gas Sealing System

When it comes to the operating safety of its plant and machine units, MAN Turbo AG, one of the world's leading manufacturers of turbo machineries, relies on BOLLFILTER. High demands on technical parameters and quality make BOLL & KIRCH Filterbau GmbH the ideal partner in the field of liquid and gas filtration.

For the extension of the diesel production facilities of one of the largest refineries in Scandinavia, the Porvoo Refinery in Finland, MAN Turbo AG supplies the hydrogen gas turbo compressor for a capacity of 3,900 m³/h. The dry gas sealing system of the compressor, driven by hydrogen and nitrogen, demands absolute purity and is protected by the BOLLFILTERs Duplex Type BFD-C seal gas filter and Type BFD-P buffer gas filter. Both filters retain particles of up to 3 micron.

The seal gas filter Type BFD-C is a combination of a 3 micron particle filter and a coalescer for the separation of dirt and moisture from gas. The three control levers (see fig. 2) characterise the "double block and bleed" execution, where the switch-over valve is double sealed. BOLLFILTER Duplex is designed for an operating pressure of 210 bar and an operating temperature of 240°C.

Edgar Prellwitz, MAN Turbo Lead Engineer for seal gas systems, explains the choice of filtration system: "We cannot accept any disturbances of our highly sensitive machine sealing systems. Thanks to BOLLFILTER, we can exclude defects and breakdowns caused by contaminated seal gas."

Client: MAN Turbo AG

System: BOLLFILTER Duplex Type BFD-C
BOLLFILTER Duplex Type BFD-P

Fig. 1: MAN Turbo Hydrogen Gas Turbo Compressor

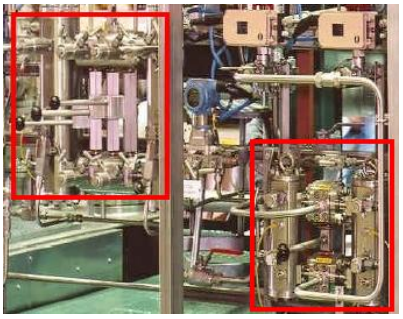

Fig: 2: BOLLFILTER Duplex Type BFD-C *(left)* and Type BFD-P *(right)*
(Fig. 1 + 2 by courtesy of MAN TURBO AG, Oberhausen)

Fig. 3 Porvoo Refinery, Finland

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