COMPRESSOR SYSTEMS
MADE IN GERMANY

ALMiG Compressor Systems

Case Study

ThyssenKrupp Materials Processing Europe GmbH Stuttgart relies on two screw compressors screw compressors of the F-Drive series from ALMiG.

ThyssenKrupp Materials Processing Europe GmbH Stuttgart manufactures the right and optimally processed product for its customers from carbon steel, stainless steel, aluminum or nonferrous metals. Compressed air is required for control air and the machine air for the fabrication of steel rolls. This is now supplied by two speed-controlled screw compressors of the F-Drive series from ALMiG.

FACTS

» **Customer:** ThyssenKrupp Materials Processing Europe GmbH Stuttgart

» **Application:** Control and working air for machines

» **Requirement:** Reduction of operating costs & replacement of rigid-running competitor's system

» **Solution:** F-Drive 30 screw compressors

THE GOAL

The operating costs of the compressed air system were to be reduced and the rigid-running competitor system replaced.
In addition, the compressed air treatment was to be optimized.

THE SOLUTION

The energy-efficient & space-saving F-Drive 30 compressors from ALMiG //
As ThyssenKrupp Materials Processing Europe GmbH was already very satisfied with the first ALMiG unit (an ALLEGRO 30) and the very good and reliable factory customer service, they approached ALMiG for the replacement of a fixed-speed compressor.
A compressed air audit with ALMiG's energy balancing system showed a good savings potential of about 20%, as a fixed speed compressor was to be replaced with a variable speed compressor.
The concept of the F-Drive series with its very high energy efficiency due to speed control and permanent magnet motor (efficiency comparable to IE4 or better) and the integrated heat recovery as well as the optimal price-performance ratio convinced the decision makers.
Together with the ALMiG ALM-RD 660 refrigeration dryer with built-in filters and a compressed air tank with a capacity of 2000 liters, the compressed air system now ensures a reliable and energy-efficient compressed air supply with quality class 1:4:1 according to DIN 8573/1.

THE SUCCESS

High energy savings and a reliable compressed air supply //
The F-Drive generates compressed air with very low energy requirements thanks to its speed control and highly efficient permanent magnet motor.
The F-Drive's speed control allows the plant to respond to the changing demand for compressed air. The compressors always produce the demand that is needed at any given time and thus only consume the appropriate amount of energy. When idling, standard compressors without speed control require about 25 to 40 percent of the energy consumed under full load - without producing any compressed air. The load-idle control of a standard compressor in conjunction with a fluctuating compressed air demand therefore causes expensive idle times. These are avoided with the F-Drive.
Another success: For even more energy efficiency, the ALLEGRO 30 with already 75,000 operating hours was replaced by another F-Drive 30 with heat recovery. In addition, 40% of the investment costs were subsidized by BAFA.