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# Mattei wins case for vane technology

Mattei Compressors has helped Burckhardt Compression, a manufacturer of custom-built large reciprocating gas compressors, to meet its own compressed air requirements, after the company opted for Mattei's rotary vane technology due to its excellent power consumption and reliability.

Burckhardt Compression specialises in compressors for the oil refining, gas transportation and petrochemical industries. The company recently relocated to new premises in Bicester and kitted out a grit blasting facility, which is used to service and clean compressor parts. Mattei supplied its Optima 30 plus variable speed drive compressor with integrated dryer to provide the compressed air used in the cleaning process and the ring main to power the air tools.

## Good feedback

Colin Webb, managing director for Burckhardt Compression, explained: "Grit blasting is one of the most common methods for cleaning valves and other key components for our compressors. The process actually involves compressed air, which is used to blast glass beads onto the surface being cleaned, to maintain the efficiency and life expectancy of the machine. In addition, we also use compressed air for tools in the workshop. While we were looking for a machine that would reliably deliver compressed air with minimum power consumption, we visited our parent company in Switzerland and found they were using Mattei compressors. Up until this point, we had been going down the route of rotary screw technology, but when we saw the Mattei compressors in action, we were impressed and the feedback from our colleagues in Switzerland was really positive."

After weighing up the benefits of vane technology over screw, Burckhardt

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## Considerations

Andy Jones, general manager for Mattei, commented: "When it comes to choosing which type of compressor to opt for, companies really need to think about energy efficiency, operating speeds, wear and maintenance costs. Screw compressors account for a significant

operate at 1000rpm, whereas the average screw compressor needs to work at 3000rpm to achieve the same result."

The Optima 30 is part of Mattei's energy efficient variable speed drive range. Designed using the company's superior build knowledge, the machine operates within pre-set minimum and maximum pressures of seven to 10 bar and provides between 2.149 and 5.342 m<sup>3</sup>/min (76 - 189 cfm) air flow, while maintaining a low power input.

Designed to deliver the highest levels of energy efficiency, Mattei claims that the Optima 30 is a stand-alone, air cooled stationary air compressor, powered by a variable speed electric motor controlled by

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share of the market but that doesn't mean they are the right choice for everyone, particularly when major advancements have been made in vane technology over recent years. In fact, vane compressors now offer advantages over screw machines. For example, screw compressors need to run at high speeds to compensate for air leakage paths. In contrast, vane machines have always operated at low speeds, which in-turn leads to lower power consumption. Some of Mattei's fixed speed compressors

Mattei's inverter regulation system, offering users best-in-class energy savings when compared to other types of variable speed drive compressors. Mattei reports that, unlike a fixed-speed compressor, this system regulates the compressor's output to the load profile required, providing significant energy savings of typically 30 per cent or more of the annual operating costs, which is standard across the Optima range.

[www.mattei.co.uk](http://www.mattei.co.uk)