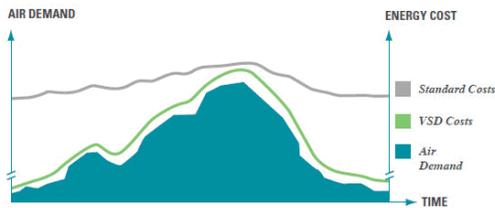
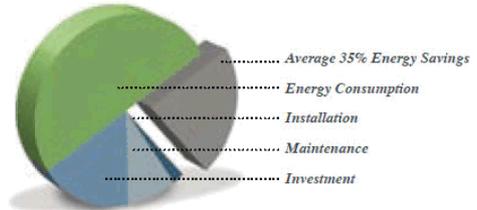


Sustainability projects and low-carbon initiatives need compressed air, gas and vacuum equipment

HELPS INDUSTRY TO ACHIEVE BETTER ENERGY EFFICIENCY

Variable speed drive compressors: Why? How? What are the advantages?

A few points to illustrate the issues at stake: 70% of the cost of a compressor during its lifecycle is generated by its energy consumption. Up to 35% of this cost could be saved by using a variable speed drive.



Over 80% of compressed air systems experience from 40 to 80% fluctuations in air demand.

Why use a variable speed drive compressor?

On most industrial sites, the demand for compressed air varies according to the time, the day or the season. If a compressor is not able to adjust the production of compressed air by varying the speed of the motor, the energy bill is unnecessarily high. Variable speed technology can change this.

There are three main reasons why it is useful:

1. Precise control of pressure

By supplying the correct output at the correct time, a variable speed system maintains the network pressure in a range of 0.1 bar. This stabilization is beneficial for several reasons: quality is improved, pressure and reserves of air are reduced, and the risk of leaks is minimized.

2. Up to 35% in energy savings

All of the energy used by the compressor is necessary. When the demand for air is reduced, the motor slows down and idling is eliminated. The compressor produces the amount of air required with the minimum of energy use, because it always operates at an optimal speed.

3. Increased flexibility and reliability

With a variable speed system, surges in power are progressive and the compressor does not interfere with other equipment. Therefore the electrical installation is simple and safe.



USEFUL TIPS!

1 bar saved = 7% energy saved
 1 leak of 2mm in diameter repaired =
 17.3 m³/h saved (at 7 bars)

Example provided by Profluid member companies

