

CASE STUDY

HEALTHCARE
MANUFACTURING



Gardner Denver helps Thermo Fisher Scientific meet air purity standards with new Ultima compressor

Global life sciences company, Thermo Fisher Scientific, has invested in a range of new oil-free compressor solutions from Gardner Denver, delivering increased energy efficiencies of more than 30 per cent and predicted cost savings of £12,000 a year.

Application details

The company was seeking compressed air solutions that could help meet its demanding air quality requirements for one of its healthcare manufacturing sites.

The new compressor technology has been supplied and installed by distributor Pneumatic Solutions Ltd to Thermo Fisher Scientific's manufacturing facility in Newport, south east Wales.

Overview

- ▶ **Customer**
Thermo Fisher Scientific
- ▶ **Location**
Newport, South East Wales
- ▶ **Application**
Healthcare manufacturing facility
- ▶ **Product**
CompAir Ultima oil-free compressor and D-Series oil-free compressor
- ▶ **Customer Benefit**
Helping to meet the company's stringent air quality standards, while offering high-performance and efficient compressed air solutions

“Product lines in the pharmaceutical industry site can vary, which means compressed air demands will not always be constant. Ultima can quickly adapt to these variations.”

**Nick Weed, Sales Director
at Pneumatic Solutions Ltd**

CASE STUDY

HEALTHCARE MANUFACTURING



Ground-breaking oil-free technology

One of Thermo Fisher Scientific's new compressor technologies is Ultima, a ground-breaking oil-free solution from Gardner Denver. Launched as part of the company's CompAir PureAir range, Ultima offers oil-free compressed air via its innovative U-Drive technology. This uses a low-pressure and high-pressure dry screw airend, which – unlike conventional variable speed machines – are driven directly and independently, for even greater performance.

These variable-speed motors, powered by an inverter, can achieve speeds of up to 22,000 rpm and deliver efficiencies greater than IE4.

Combined with the model's compact size, which is 37 per cent smaller than a conventional two-stage oil-free compressor, Ultima offers the highest levels of air quality for Thermo Fisher Scientific's manufacturing operations, in an easy-to-install and easy-to-maintain package.

The organisation has also invested in a CompAir D-Series compressor from Gardner Denver. Featuring a motor power of 75 kW, the oil-free, two-stage screw compressor provides 100 per cent air purity to help Thermo Fisher Scientific meet its stringent quality standards. The closed water circuit for airend cooling achieves a constant low temperature level, which means less gearboxes are required.

Both the Ultima and DH compressor are certified to ISO 8573-1: 2010 Class Zero for air purity standards, as well as being silicone free.

Ultima can also be connected to iConn, Gardner Denver's new cloud-based air management platform. Enabling operators to stay in full control of compressed air usage, iConn can help remove any potential risks before they become an issue, improve productivity and reduce energy consumption.

Nick Weed, Sales Director at Pneumatic Solutions Ltd, adds: "Not only were we able to demonstrate the energy efficiency that Ultima offers, but also how flexible the system is. Product lines in the pharmaceutical industry site can vary, which means compressed air demands will not always be constant. The fact that Ultima can quickly adapt to these variations to achieve the highest possible efficiency levels, and low running costs, is a testament to the compressor's capabilities. The result for Thermo Fisher Scientific? Improved energy efficiencies of over 30 per cent and predicted annual cost savings of £12,000.

"In addition to Ultima's outstanding efficiency capabilities and guaranteed air quality, the compressor delivers a whole host of other key benefits too. When compared with a conventional two-stage, oil-free machine, Ultima offers 12 per cent better overall heat recovery, uses 45 per cent less energy when idle, and requires 20 per cent less maintenance parts. Furthermore, featuring a noise level of only 69 dB (A), the compressor can be easily installed at the point of use as well.

"Having supplied a CompAir DH compressor and Bellis & Morcom VH9 unit for PET bottle blowing in the past, as well as installing compressed air and chilled water pipework at the Newport site too. We are thrilled to continue our successful working relationship with a leader in the life sciences industry."

