

# News from CompAir

## **Quantima technology helps maintain high quality standards at Mercedes Benz**

As part of the process of modernising one of its two compressed air stations, the Mercedes Benz truck plant in Wörth replaced two ageing piston compressors with an energy-saving Quantima Q-52 compressor from CompAir.

Following an independent engineering audit, the machine is now delivering up to 5% more energy savings than originally anticipated.

### **Energy efficiency - a top priority**

Daimler decided to replace the compressed air station, as the existing piston machines were becoming expensive to maintain and could not offer the same efficiency as newer models.

Energy efficiency was a major factor in the choice of compressor as Matthias Kreiner (Dipl.-Ing. (FH)), planning engineer with responsibility for compressed air and industrial gases for Daimler explains; "We have always been mindful of the energy usage and costs involved in our processes. For example, there are energy meters fitted at both compressed air stations, so we know the cost of running the compressed air system as a whole as well as the cost per cubic metre."

### **Maximum savings**

Following a visit to a pilot user in Finland, Daimler's planning department opted to replace the two existing piston compressors in the 6-bar network with one Quantima compressor

Each of the three machines in the compressor station is linked to a desiccant dryer.

In a conventional desiccant dryer, the desiccant material is often regenerated by blowing externally-heated hot air through it. The Quantima installation differs by using the hot air generated from the second stage of compression to regenerate the desiccant, which would otherwise be lost as waste heat .

This is enabling Daimler to make significant energy savings and the overall efficiency of the compressor station is improved again.

### **Exceeding specifications**

Following installation, an independent engineering consultancy tested the performance of the compressor station. The results were even better than CompAir's original forecasts. Energy efficiency was up to 5% higher and the air quality also exceeded specifications, with low residual moisture content after drying: at average ambient temperatures a pressure dewpoint of around -40°C is achieved.

### **Reliability and efficiency assured**

The Quantima compressor is monitored by the intelligent Q-Master control system, which continually records and checks all system parameters. The system is connected online to a central CompAir control room enabling the company to offer Daimler its comprehensive Q-Life preventive maintenance package. Combined with ongoing remote maintenance, this provides high compressor reliability with a ten-year warranty.

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