

Atlas Copco compressors help ground stabilisation specialist Tensar save energy and reduce CO₂ impact

Compressed air solution plays integral role in company's sustainability programme and commitment to reduce impact on the environment.

Tensar International, a world leader in technology driven solutions for ground stabilisation and soil reinforcement, is predicted to save over £22,000 in annual energy costs and achieve a 141 tonne reduction in its carbon footprint after installing an energy efficient compressed air system from Atlas Copco.

On reviewing the performance of the compressed air system at its Blackburn site in early 2015, Tensar saw an opportunity to improve productivity, reduce maintenance outage frequency and meet carbon reduction targets.

This was confirmed following an energy audit of the compressed air installation carried out by Atlas Copco who identified the potential for significant energy savings. The audit recorded the annual electricity cost to run the existing compressed air system as just over £61,000. By comparison, the recommended replacement system's equivalent cost of consumption was about £39,000, representing an annual saving of over £22,000. In addition, the calculations revealed a significant potential carbon footprint reduction of 141 tonnes of CO₂.

The new Atlas Copco installation comprises a GA 37 VSD FF full-feature rotary screw workplace compressor with integrated dryer, filter, ancillaries and Mk5 Elektronikon graphic controller that provides full performance monitoring. This VSD-driven machine supplies up to 185 cfm of 13 bar compressed air to match the variable demands of Tensar's manufacturing equipment.



Atlas Copco compressed air installation at Tensar International Ltd

The installation was completed with two fixed speed GA 37 FF full-feature compressors, with each machine supplying up to 243 cfm of compressed air at 7.4 bar. For optimum performance and process optimisation, the combined compressed air system is centrally controlled by an ES41 unit programmed to match Tensar's shift working and workload requirements.



Commenting on his company's sustainability programme and the benefits of the new compressor installation, Joe Crane, Tensar International's plant engineering manager said:

"The Atlas Copco system has brought a new level of reliability and energy saving opportunity to our manufacturing output. What's more it has enabled us to meet our commitment to significantly reduce our carbon footprint."

For over 30 years, Tensar International has designed and manufactured sustainable construction solutions, such as its geogrids and geotextiles products and systems. Compressed air performs a vital role in the manufacturing processes for these products, not only for air cylinder actuation duties but also polymer materials extrusion and stretching operations.