

PROJECT REPORT



CLIENT

Veolia Environmental Services

PROJECT

Compressed air for the sorting units in a material recycling plant.

BOGE PRODUCTS USED

Frequency-controlled type SF 150 BOGE screw compressor



SORTED! BOGE screw compressors supply Veolia's sorting units

Veolia Environmental Services is based in Nottinghamshire in the United Kingdom, and operates a 14-million-pound materials recovery facility (MRF for short) in Mansfield. This is a state-of-the-art plant in which household waste such as plastic bottles, paper and tin cans is sorted manually and automatically and packed into bales. The custom facility, which sorts between 1,000 and 1,350 tons of material a week, requires compressed air for its sorting, this being used mainly to supply four optical sorting units. These units evaluate the quality of light reflected from the waste as it runs beneath them on a conveyer belt to recognise the size, shape and type of its constituents. Using 64 air jets the units then divide up the material so that it can undergo further processing on various other conveyer belts.

When the plant was built in 2008, Veolia chose a frequency controlled BOGE type SF 150 screw compressor in order to handle the predicted compressed air needs as efficiently as possible. BOGE's SF series frequency controlled screw compressors adapt precisely to compressed air demands by providing exactly the amount of compressed air needed, at the required pressure. The frequency controller reduces idle time and compensates for fluctuations in demand for compressed air. For Veolia MRF in Mansfield this

means the compressed air is produced as efficiently and economically as possible, regardless of fluctuations in demand and in the amount of material being recycled.

Two years down the line Mick Mason, the plant's maintenance manager, reports: "The BOGE SF 150 is still working efficiently and reliably, and helps us sort out up to 85,000 tons of recycled material from all over Nottinghamshire each year."

⊕ HO OE 5-150

Type SF 150 screw compressor

PROJECT INFO

> THE CHALLENGE

More than 85,000 tons of material are sorted out each year at the Veolia Environmental Services plant. The rubbish is pre-sorted according to size, shape and variety, and this requires pulses of compressed air.

> THE BOGE SOLUTION

The amount of compressed air required by the plant fluctuates greatly, and this is dealt with by a frequency controlled BOGE screw compressor of type SF 150. It provides exactly the amount of compressed air required by the sorting units at any given time.

> THE RESULT

Four reliable sorting units with outstanding efficiency levels.

More information about Veolia Environmental Services: www.veoliaenvironmentalservices.co.uk