



## Bathgate Compressor Station

### Compressor Buildings for 2 x 15MW and 2 x 30MW Compressor Units

Cullum were instrumental in the development of the Bathgate Gas Compressor station that was built to extend the network of gas distribution in the UK.

The distribution of gas to end users within the UK is achieved by the transportation of natural gas at ambient temperature by a network of high-pressure pipelines and compressors.

24 compressor stations, operating at powers of up to 27MW, are located throughout the network to maintain flow at high pressures.

Each compressor station consists of two or more turbines of different ratings and these are switched in and out of use as required by the continuous monitoring of the mains gas pressure. 61 Industrial Rolls Royce, Orenda and General Electric jet engines, fuelled by natural gas from the pipelines, are used to power all but two of the compressors. Hot gasses generated by the jet engines drive power turbines which in turn drive the compressors.

Customer

- UK Energy Distribution Organisation.

Cullum scope included:

#### 4 x Gas Turbine and Compressor Acoustic Packages including:

- High performance compressor buildings
- Combustion intake systems including filtration
- Anti-icing system
- Combustion exhaust systems
- Close coupled acoustic enclosures including ventilation systems for the Gas Turbine
- Mechanical handling systems
- Pipework systems
- Mechanical and Electrical installation including turbine compressor and coolers

#### Acoustic performance

- 35dB(A) sound pressure level @ 200 metres with 1 x 15MW and 1 x 30MW running on full power