



Thinking solutions.

Gateshead District Energy Centre

Gateshead Council, United Kingdom



Project

- Heating Plant
- user: Gateshead Council

Performance parameter

- System volume: appr. 660,000 litres
- Power: 22.5 MW

Task

Reflex was commissioned to create a robust, customized solution to facilitate a district energy network and Combined Heat & Power (CHP) Centre in the Gateshead Quays area. Due to on site space constraints, the specification demanded a great deal of flexibility in the pressurisation maintenance station manufacturers approach. The task was to create a solution which could not only accommodate the system heat load but to also satisfy the space restrictions within the plant room.

Product solution

- 1 x **Variomat Giga** GS 1.1, control unit
- 1 x **Variomat Giga** hydraulic module
- 1 x 8,000 litre **Reflex basic vessel**
- 3 x 8,000 litre **Reflex secondary vessels**
- 1 x **extension module**
- 4 x **diaphragm rupture detector**
- 1 x **Servitec special system 90-4**
- 1 x **skid base** incorporating all but the 8,000 litre vessels

Achieved goals

- Creating a customized solution including a packaged pressure maintenance station/ vacuum degasser and specific vessels resulted in lower installation costs and a more efficient solution. Residents in the area will be able to enjoy reduced exposure to Carbon Reduction Commitment (CRC) and Climate Change Levy.
- On-going heating plant maintenance, servicing and replacement costs will be reduced.
- An estimated 400 homes and 6 public buildings will benefit with capacity to significantly increase the network in the future.