

CASE STUDY:

ROYAL BOLTON HOSPITAL

Bolton



**GEOFFREY
ROBINSON**
SINCE 1971



ENERGY CENTRE – Replace Steam Generator with CHP integration

PROJECT OVERVIEW

In 2017, Geoffrey Robinson completed a year long project to replace 2 coal fired steam generators within the hospital's energy centre and replace them with a Combined Heat and Power (CHP) generation unit, using waste heat and gas fired combination boiler. Uninterrupted heating supply was a necessity throughout the project which were won by competitive tender and originally valued at £1.3 million.

The desired thermal efficiency was 95%, and to attain this the modified plant utilises Flue Gas waste heat from the CHP to assist in meeting the hospital heating and domestic water loads. Energy recovery includes boiler feed water heating, boiler blow down flash steam capture, make up water heating and condensate recovery.

Geoffrey Robinson's time served experienced personnel fabricated the complex ductwork, pipework and thermal insulation.

SERVICES PROVIDED

- Principle Contractor
- Project management and programming
- Strip-out + removal of old boilers (incl. asbestos and hazardous waste)
- Combination Boiler
- Condensate recovery system, maintain live stream throughout
- Production and installation of high-level water feed tanks
- BMS integration and design
- Replacement of steam storage calorifiers with plate heat exchangers
- All pipework, insulation, valves, plant and electrical infrastructure
- Site wide low temperature hot water distribution to utilise waste CHP heat energy

CONSTRUCTION PHOTOGRAPHS



FOR FURTHER INFORMATION CONTACT:

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