

Prefabricated Boiler Houses for Natural Gas Pre-heating Systems 6kW to 18MW

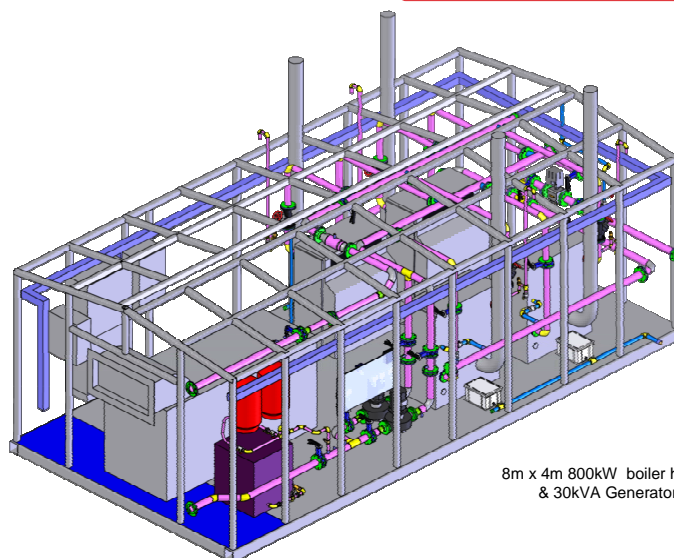
Potterton Commercial is the market leader in design and manufacture of prefabricated boiler systems for natural gas heating in gas transmission networks. The company has over 20 years experience in this highly specialised field with over 300 successful installations.

To compliment the pre fabricated boiler house applications Potterton Commercial have developed combined boiler and instrument housings and stand alone prefabricated Instrumentation rooms offering clients the benefits of our superior enclosure design.

Features

The Boiler House

- High efficiency boilers - modulating condensing boilers offering operating efficiencies of 107%(net).
- Compact design - minimises site space required for installation.
- Self contained enclosure - factory complete enclosure including insulated galvanised base, galvanised superstructure, architectural cladding panels and anti slam aluminium doors.
- Heating system – factory complete including pipe work, pumps, flues and controls minimising on site work.
- Quality finish - architectural insulated steel building panels available in a wide range of colours. The panels have a high level of colour stability, are durable and are resistant to mould and mildew.
- Fire Resistance - the external and internal faces of the architectural panel are class O in accordance with the building regulations when tested to BS476: part 6 1989 and part 7:1987 and have passed all the requirements of LPS 1181: 2003: part 1: issue 1 wall lining test.
- Wind Loading – the enclosure is designed to withstand wind loadings in accordance with BS 6399 Pt.2.
- Manufactured to ISO9001 quality systems – quality guarantee with comprehensive documentation and certification.
- 3D modelled mechanical design for accurate on time manufacture bespoke to clients requirements.
- 25+ year design life.
- Proven product - backed by extensive experience and expertise developed through HAZOP analysis and supported by our service organisation.



8m x 4m 800kW boiler house & 30kVA Generator

The Control System

- Factory complete electrical installation - including power distribution, lighting and controls.
- In house qualified professional electrical design. Design calculations provided for compliance with BS7671.
- Fully automatic operation - automatic rotation of boilers and pumps with in built redundancy. Minimal maintenance and supervision required with auto inhibit when no heating demand to maximise operating efficiency.
- P.I.D control system - efficient, accurate gas temperature control modulated between 0-100% heat output ensures accurate gas temperature control, low running costs and minimum emissions.
- Low voltage control system – allows on line maintenance and faultfinding.
- Comprehensive alarm system - integral monitoring of equipment with alarm annunciation giving local and remote high and low priority alarms.
- Auxiliary output for boiler fuel gas heating.
- Single or Multiple gas stream control - single boiler house available to control one or more heating streams independently.
- Control system SIL rated to IEC 61508 for functional safety.



External view of 3m x 4m instrument room



12m x 4m Combined boiler house & instrument room

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The Benefits

- Cost savings over traditional on site construction and installation of heating equipment.
- Fast track off site manufacturing.
- Pre delivery factory testing and inspection in a controlled manufacturing environment.
- Cost savings of up to 40% on alternative heating systems.
- Accurate gas temperature control – maximises operating efficiency.
- Lifetime Guarantee on boilers*.

Proven Design & Services Support

- Proven product design - backed by extensive experience and expertise from our mechanical and electrical design engineers.
- Service support - dedicated mechanical and electrical field support engineers from our service organisation provide service and maintenance on the complete pre heating system to maintain maximum system efficiency and reliability throughout the life of the installation.
- Full support package – comprehensive operating manual and operator training provided and 24/7 telephone technical support contracts available.

Supply Options

The heating system can be supplied with the following options factory installed.

- Gas fired generator (10 kVA - 260 kVA).
- External lighting fixed to the enclosure.
- Security systems.
- Gas and fire detection systems.
- Integral instrument compartment with the option of welfare facilities (W/C & Hand Basin).
- Compartmental battery room for UPS applications.
- Wind turbine for eco friendly battery charging.
- PV Solar panels for eco friendly battery charging.
- Inverter system for non mains powered site applications.



Internal View of 1MW Boiler House

All descriptions and Illustrations contained in this leaflet have been carefully prepared but we reserve the right to make changes and improvements in our products which may affect the accuracy of the information contained on this leaflet.
*Conditions apply