Case study 190

Andrews Heaters responds to hangar boiler failure

An airport located in the South East was forced to find a temporary solution following the disastrous failure of their ageing boiler system. Temporary equipment was urgently required to keep workers warm and ensure the continuous running of daily operations until a permanent boiler replacement could be sourced.

The size and scale of the average hangar makes them notoriously difficult to heat in a cost-effective manner, as pointed out by the client. Essentially, they were looking for a short-term source of heating that could deliver large volumes of warm air economically while their boiler system was out of action. Large numbers of people work inside the hangar each day, ranging from mechanics, transport staff, strategists and cleaners. The working environment is therefore extremely important, with low temperatures a potential safety issue.

Having assessed the application at close quarters, our regional engineer recommended the installation of an Aurora FH111 indirect fired heater. The unit was deployed external to the hangar, with lengths of 18" ducting fed into the building to ensure large volumes of warm air were circulated inside. A single Aurora FH111 unit has the capacity to heat areas of up to 2,440m³, which was the approximate size of the hangar in this case. This heater is one of the most economical units of its kind available on the hire market and can operate at 92% fuel efficiency when running at full capacity.

Once set up on site, the client was extremely pleased with the impact of our heater hire package which kept indoor temperatures warm despite the challenges posed by doorways constantly opening and closing. The hire lasted for a total of 10 weeks and only came to an end once an alternative boiler unit was installed.

Nominal heating duty: 110 kW 375,320 btu
Air flow (max): 8,000 m³/h
Power supply: 230/110 V 1 ph 50 Hz Run 9.2/22 A
Noise level (max): 79 dBA @ 1 metre
Weight (kg): 350 kg
Plug type: BS4343 230 V 16 A BS4343 110 V 32 A
Duct length (max): 40 metres
Generator size: 10 kVA
Duct size: 450 mm
Fuel Consumption: 10.9 l/h
Typical heated area: 2,440 m³
Fuel type: Gas Oil
Tank capacity: Separate fuel buggy/tank required
Dimensions (L x W x H): 2,230 x 780 x 1,340 mm
Control: Manual (external controls available)
Flue size (min): 1 metre x 200 mm
Fuel tank: Remote fuel tank required