

# HVAC News

**AMBIRAD** **AIRBLOC** **NORDAIRNICHE** **BENSON**

## » Skills For The Future

Committed to helping young people into work

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## » Aircraft Hangar & Maintenance Shed Heating

Application Guide - aim to improve on energy efficiency

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## » Case Study: Universal Engineering

HVAC solution to ensure a comfortable working environment throughout Universal Engineering's new multi-million pound centre of excellence.

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## » New Service Team

Completed amalgamation across all brands - creating a unified offering.

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## » Stock Take

Information referencing our annual stock take.

## » Skills For The Future

Through our new Skills for the Future programme, we are committed to helping young people into work.

Brierley Hill-based Nortek – has been investing in the scheme for the past 12 months, taking on five apprentices, an intern & providing two student summer work placements. Now, the company is looking to recruit three more apprentices.

Helen Hawkins, European HR Manager at Nortek Global HVAC, says: **“Skills for the Future creates a balance between work & education & is good for the business as well as the young people we support.”**

**“Students become more commercially aware, as they benefit from a broad experience in a short space of time, & school-leavers are encouraged to consider earning while they learn through an apprenticeship. At the same time, we benefit from the different perspectives the young people bring & a welcome injection of fresh ideas.”**



In a highly competitive employment market, Nortek believes work placements & internships help young people to stand out from the crowd. When applying for jobs, the skills they have learnt & their improved knowledge of the business environment are likely to stand them in good stead with prospective employers.

Harriet Parker worked as an intern in Nortek’s HR & Marketing departments during the second year of her BA (Hons) degree in Business Studies. As well as giving her an insight into the business world in general, the experience has helped her decide how she would like her career to develop.

Harriet says: **“I thoroughly enjoyed my time working with Nortek. I was lucky enough to experience a variety of challenges before spending the last three months working on a HR project.”**

**“The placement gave me an opportunity to contribute ideas on certain processes & help with assessment centres, personnel development programmes & business integrations. I’d like to thank Nortek for the support I received throughout my employment. Everyone made me feel at ease from the very start & I feel the whole experience has contributed a great deal to my overall development.”**

Opportunities have now arisen for three apprentices in Nortek’s IT, Service & R&D departments. The successful applicant for the IT role will work within the team that provides frontline support & will be involved in network & server projects, while the apprentice engineer will gain experience in maintenance in the gas, plumbing, refrigeration & HVAC sectors. Using AutoCAD systems & working in Nortek’s in-house laboratory testing facilities, the R&D apprentice will be able to make a meaningful contribution to the design & development of existing & new products.

## » Aircraft Hangar & Maintenance Shed Heating

This guide aims to help those responsible for designing, building, refurbishing or maintaining aircraft hangars or maintenance sheds, to reduce operating costs, & improve comfort & safety, by introducing cost-effective energy efficient heating into their premises.

Whether it is a military, civil aviation or maintenance hangar considerable energy resources can be expended on delivering an adequate solution to providing comfort in these traditionally hard to heat environments.

This guide advises on the selection, design & operation of the most appropriate heating system.

AmbiRad has substantial experience having heated hangars & sheds around the world, saving many of our clients up to 65% of their annual heating costs.

- > Hangars are invariably very large interior spaces that have high ceilings, contain a large volume of air & are prone to high air change rates.
- > Hangar doors are large, may even be the size of the existing walls & are frequently open. This means that air infiltration can severely disrupt comfort conditions within the interior. A heating system need to be able to sustain a comfortable environment in these conditions & especially provide rapid recovery to full operating temperatures once the doors are closed.
- > Hangars are often used at irregular time intervals & with partial occupation, it is therefore important, for efficient use of energy, that the heating system can be easily & effectively zone controlled.
- > Hangars, particularly military, house very expensive equipment often containing highly explosive fuel or armaments. It is therefore essential that the heating system complies with the mandatory fire regulations of the prevailing authority.



**AMBIRAD**  
HEATING AND VENTILATION SOLUTIONS  
**Application Guide**  
Aircraft Hangar & Maintenance Shed Heating

Complete Application Guide on Aircraft Hangars & Maintenance Shed Heating available for download on our website [www.ambirad.co.uk](http://www.ambirad.co.uk)

## » Energy & Fuel Considerations

Natural gas is, on balance, the most efficient environmentally friendly practicable form of energy. Although slightly less efficient at the point of use than electricity, natural gas produces nearly 2¾ times less 'greenhouse' emission in its overall production, & is on average only one quarter of the cost.

Therefore natural gas clearly is the most cost-effective, clean fuel, for aircraft hangars.



**Energy Efficient Solutions**

## » Nortek Global HVAC Service

At Nortek Global HVAC delivering unbeatable customer service is an integral part of our business as we sell an extensive range of HVAC products through a network of heating contractors based in the UK to which we offer significant after sales support via our Service department.

We endeavour to give constant improvement within our Service sector; the Service Team has now amalgamated across all AmbiRad, Reznor, Benson, Nordair Niche & Airbloc branded products to create a unified improvement of our current service.

The department consists of a large group of Gas Safe ACS/OFTEC registered field agents located throughout the UK whom are also supported by an internal Service Control Team, by combining all sectors of our Service Team it will provide one consolidated national function.

The merging of the sector will dramatically improve response times as we will have engineers covering all areas of the UK reporting to one internal Service Team managing all enquiries.

Graham Fage Nortek Service Manager comments

**“This is a worthy project to help the department & the business develop within the ever growing industry which will adhere to thus benefit the customers after-care needs”.**

In creating an integrated Nortek Global HVAC Service department we have confidence in moving forward to create the highest level of after-care throughout the UK to match the high level of HVAC products that we now produce.



Energy Efficient  
Solutions

## » Universal Engineering, Llantrisant - South Wales

Universal Eng is an engineering service provider with a mix of manufacturing capabilities that support the needs of sub-sea oil & gas, defence & aerospace customers. They have produced a large number of systems for the UK Military of Defence (MoD) These include the design & production of over 1500 ruggedized military trailers that are currently in-service across the globe with the MoD & other prime contractors.

“Project Ichthus” is the refurbishment of an existing facility, a new heating system & overhead cranes were a major part of the refurbishment requirement of the multi-million pound factory. Founded on core competence of value Eng & project management, Universal Eng build systems, manufacture components & programme work packages for customers who require high quality, thus having a high quality, efficient working environment is essential to the Company in designing the new factory which will employ 200 highly skilled engineers & fabricators at the Llantrisant site.

The Nor-Ray-Vac continuous radiant system was ideal for this project as it's designed specifically for the factory it's required to heat. Radiant heat works by emitting infra-red rays that warm only people & objects. By taking the chill off objects, radiant heating effectively prevents the formation of condensation within a building. It operates without air movement & is very quiet. The Nor-Ray-Vac system is designed to provide uniform coverage over the entire floor area, alternatively, the system can also cater for distinct zones providing a varied degree of comfort level within the overall layout of the building.

The Nor-Ray-Vac systems installed during this refurbishment were designed in specific zones to create flexibility & to ensure that blanket coverage was obtained due to the large floor area of the building, thus being divided into 19 defined work areas. M&E Contractors JW Morris installed 74 Nor-Ray-Vac burners in 19 temperature zones, each zone being controlled by a SmartCom Controller.

We consider the following criteria to form the basis of each particular design:

- Heat loss of the building for the required thermal environment
- Local climate conditions
- Type of activity in the building
- Specific architectural features relating to the structure

Working together with the Company in question, the architect & contractor, a bespoke Nor-Ray-Vac heating system can be specifically designed to provide optimum results; reducing overall costs, with savings of up to 60% being achieved over conventional heating systems.

### » Energy Efficiency

Installation Summary:

- Universal Engineering invested in Nor-Ray-Vac continuous Radiant Tube heating in 19 temperature zones.
- Uniform Blanket heat coverage.
- Benefit from even heat distribution at constant temperatures.
- Savings of up to 60%

Technical Summary:

- Area: 167m x 133m roof at 8.7m to 10.7m
- Heaters: X 74 NRV Heaters in 19 Zones  
X 19 SmartCom Controllers

**“We manufacture premium quality components & systems & expect the same standards in our premises, so were very happy with the heating system, the benefits of cost savings & heat distribution capabilities”** says Mark Holland Sales & Marketing Director – Universal Engineering.



**Energy Efficient  
Solutions**

## » Stock take Information

May we take this opportunity to advise you that our annual stocktake will take place prior to the heating season.

To keep all our customers inconvenience to an absolute minimum we intend the stocktake to take place from Monday the 28th September through to Wednesday 30th September.

We plan to be back fully operational from Thursday morning the 1st October.

Should you require deliveries of any of our products and Spares during this short period please contact either customer services or your local area sales manager and we will do all we can to make alternative arrangements.

We appreciate your understanding and we all look forward to working with you over the coming months.

There are huge advantages to not only our business but also our customers when completing a stock take; having a better understanding of stock levels enables us to manage our business and effectively our customers orders much more efficiently.

We endeavour throughout the process to cause as little disruption to you the customer as possible with the fundamental aim being to improve on our working environment and improve on our inventory management systems; in doing so resulting in an improvement on customer satisfaction levels.



**Energy Efficient  
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