



PROCESS HEATING COMPONENTS

FOR MANUFACTURING AND INDUSTRIAL APPLICATIONS



AIR PROCESS HEATERS
BAND AND CAST HEATERS
CARTRIDGE HEATERS
CARTRIDGE HEATER PROBES
FAN OVEN & HOT CABINET HEATERS

FORMED HEATING ELEMENTS
INFRA RED HEATERS
PTC ELEMENTS
STRAIGHT ROD HEATERS
STRIP HEATERS
SILICONE HEATER MATS

STRAIGHT ROD HEATERS



B BACKER
HOTWATT

Flexible Way to Meet Design Criteria for Heating Liquids or Gasses Forming into Customised Shapes

- Range of wattage, materials, termination types and sizes to meet a specific design
- Incoloy materials ideal for immersion in water
- Metric & imperial sizes
- Round & rectangular cross sections



Air Conditioning Defrost



Catering Equipment



Hot Cupboards and Test Ovens



Laboratories



Water Boilers



UL Standards Also Available

CARTRIDGE HEATERS



Provides a Highly Controllable Source of Localised Heat in a Restricted Work Area, Including Immersion in Water

- Low, medium & high watt densities suitable to 760°C
- Highly customisable to meet exact design and specifications
- Metric & imperial sizes
- Round or rectangular cross sections



Catering Equipment



Food Processing



Plastic Moulding



Research Laboratories



Textiles



UL Standards Also Available

CARTRIDGE HEATER PROBES WITH MULTIPLE POINTS



Combining a Cartridge Heater with a Thermocouple to Create and Maintain a Highly Accurate Temperature

- Additional measurement and control for applications requiring a high degree of accuracy
- Highly customisable to meet bespoke requirements



Catering Equipment



Food Processing



Plastic Moulding



Research Laboratories



Textiles



UL Standards Also Available

STRIP HEATERS



Compact Source of Rapid, Consistent and Energy-Efficient Heat Making It Ideal for Restricted Spaces

- Flat or finned stainless steel
- Temperatures up to 650°C
- Watt densities up to 6 watts per square cm
- Seamless sheaths ensure ceramic insulated heaters are dimensionally stable in milled slots



Catering Equipment



Foodservice Packaging



Plastic Moulding



Scientific Laboratory Equipment



Vacuum Forming & Heat Sealing



UL Standards Also Available



BAND AND CAST HEATERS



Minerally Insulated for High Power Density With Notched Construction To Fit Over a Pipe

- Mica insulated heaters suitable up to 450°C
- Ceramic insulated heaters suitable up to 650°C
- Roll bolt clamps fitted
- Various lead lengths and terminations



Chemical Storage



Craft Brewing



Cylinders & Tanks



Industrial Process Control



Plastic Moulding



UL Standards Also Available

PTC ELEMENTS



Energy-Efficient & Self-Regulating Cartridge Heater with a PTC Ceramic Component

- No need for separate temperature control
- Self-regulation means energy consumption is reduced as temperature increases
- Fully hermetic for immersion in water & resistance to corrosion
- Easy & fast installation



Catering Equipment



Commercial Refrigeration & Air Conditioning



Food Processing



Foodservice



Foodservice Packaging



UL Standards Also Available

AIR PROCESS HEATERS



Highly Efficient Air Heaters for High Temperature Applications

Usually supplied with a suitable control solution

- Used for air, steam and gas processes
- Ideal for temperatures up to 800°C where heat must be controlled within narrow parameters
- Range of blower sizes & wattages available



Automotive



Foodservice Packaging



Industrial Process Control



Plastic Moulding



Research Laboratories



UL Standards Also Available

ALSO AVAILABLE... COMPREHENSIVE CONTROL SOLUTIONS

Our full product portfolio includes a range of control components.

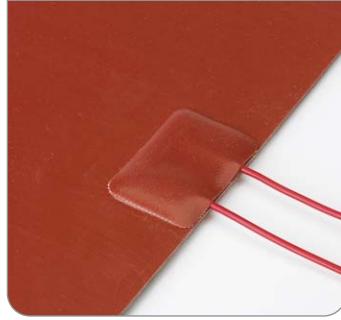
We offer digital controllers from established brands like Pixsys, LAE Electronic and Carel.

We can advise on suitable thermal cut-outs, snap discs or temperature sensors for your chosen application. We also supply thermistors and thermocouple probes to meet any specific design.

Many of these products are available with other internationally-recognised certifications. Ask our team for more details.



SILICONE RUBBER MAT



Flexible Heaters for Surface Area Heating Manufactured in the UK

Also see our compatible control options

- Made using either wire wound or etched foil
- Custom shapes, forms and zone designs
- Available with over-temperature bi-metallic cut-outs, thermocouples & self-adhesive backing



Food Processing



Foodservice



Research Laboratories



Room & Space Heating



Scientific Equipment



UL Standards Also Available

INFRA RED HEATERS



Efficient & Controllable Heat Using a Robust Ceramic Element

Available with thermocouples

- Temperature range from 300°C to 700°C
- Range of shapes, sizes, wattages & elements
- Can be supplied with aluminised steel reflectors for targeted heat



Catering Equipment



Food Processing & Foodservice



Industrial Process Control



Plastics Manufacturing & Heat Sealing



Test Ovens



UL Standards Also Available

FAN OVEN & HOT CABINET HEATERS



Compact and Robust Infra Red Heaters

- Features 4 or 5 quartz tungsten/halogen tubes
- Highly polished aluminum steel reflector for optimum efficiency
- Rear mounted axial flow fans keep reflectors cool achieving better directional heat



Catering Equipment



Foodservice



Food Production



Ovens & Hot Cupboards



Research Laboratories



UL Standards Also Available

FORMED HEATING ELEMENTS



Tubular Heating Elements That Can be Formed into Complex Shapes

Can be supplied with thermal cut-outs and other controllers

- Range of heat capacities & termination sizes
- Fan oven elements from 1kW to 2.5kW
- Bespoke designs for specific requirements
- Fully annealed materials like incoloy for use in water



Autoclaves



Catering Equipment



Foodservice



Ovens & Hot Cupboards



Water Boilers & Kettles



UL Standards Also Available



WHATEVER THE APPLICATION... A FEW SUCCESS STORIES

DELIVERING SPECIFIC TEMPERATURES IN SCIENTIFIC RESEARCH EQUIPMENT

We work with Kbiosystems, a specialist manufacturer of scientific equipment used in medical and research laboratories.

Their range of automated plate sealers applies a heat seal over trays of research samples to prevent spillage and cross-contamination. A block of aluminium containing a high temperature cartridge heater supplied by Hawco provides the precise heat required to melt the seal in a rapid, consistent and compact way.



Another specialist OEM customer produces colour measurement instruments for the chemical analysis of solid and liquid materials.

We helped the company design a new portable unit which is used in disaster relief situations in the developing world. The product's design requires test samples to be heated to a particular temperature during transportation and analysis so that biological pathogens can be identified.

To achieve this, we worked with their development team to design a bespoke silicone formed heater mat that wrapped around an aluminium cylinder to control the temperature. A thermal cut-out was also provided to prevent damage to the instrument from overheating.

We work with OEM customers across many different heating applications, including scientific laboratory equipment, sterile production environments, packaging, catering equipment, food production and foodservice.

GIANT IN FOODSERVICE

If you buy a drink from any major coffee chain in the UK, chances are the cup you are holding has been produced using air process heaters that we provide. Our global customer turns out millions of cups using the controlled, reliable and efficient heat that only this type of heater can offer.



Another packaging customer was struggling to find a reliable component to replace strip heaters in an aging forming machine used to produce yogurt pots. We suggested using ceramic infra red heaters to improve both reliability and performance.

STERILE PRODUCTION ENVIRONMENT

We provide strip heaters as part of a production facility used to manufacture contact lenses. These heaters are an ideal way to heat a tray of water at a depth of 20 mm to the required 50°C to ensure the lenses are sufficiently sterilised.

CONDENSATE REMOVAL

A cartridge heater is often used to remove condensate from a drip tray in a refrigerated display case, but the heater needs to stay on 24-hours a day. When The Bond Group wanted a more energy-efficient solution, we suggested a PTC probe which only uses energy to heat when there is condensate present in the tray.

RESEARCH & DEVELOPMENT

Some of our customers ask for help in designing a bespoke process heating system to a stringent set of criteria.

For example, a motorsport team uses a specially designed process heater to cure the carbon frame chassis in their racing cars while at Rolls Royce a similar type of air process heater is used to pre-heat the ceramic components which make up part of a prototype fuel cell system.

GOT A DESIGN PROBLEM? WE CAN HELP

Our engineers love a challenge. Every day, they work with a host of OEM customers, taking the time to understand their specific technical requirements and respond with a practical solution.

In our experience, no two projects are the same. Sometimes we will source the exact part to meet an existing design specification or set of technical drawings. Just as often, we will work with an in-house design team to investigate all viable solutions and assess which one is best suited for the outcome to be achieved.

Not every supplier can offer our level of in-depth product knowledge. This is based on an experienced team of technical advisers who have built strong relationships with our 250 specialised providers of quality components.

**Got a project in mind? Put our team to the test.
Need help finding the right component? Just ask Hawco.**

Our Team

- Experienced engineers across a range of sectors
- In-depth product knowledge
- Dedicated account management & on-site consultation
- Technical support always available

Our Company

- 40+ years' experience supporting OEMs
- Quality products from 250 suppliers approved to international standards
- Stock control & inventory solutions
- Part of Diploma PLC, an international group with a turnover of £450 million



TO DISCUSS YOUR PROJECT, CALL OUR
TECHNICAL SALES TEAM ON **+44 (0) 1483 869 070**
OR EMAIL YOUR ENQUIRY TO **SALES@HAWCO.CO.UK**

We offer a full range of complementary electrical and control components. For further details, refer to our additional line cards - available on request - or visit www.hawco.co.uk for product and technical information.

