

Medical & Pharmaceutical



Heat sealing solutions
for Medical & Pharmaceutical applications



Heat Sealing Solutions

The manufacture of products for the Medical & Pharmaceutical industries are some of the most demanding and stringently regulated. Supplying heat sealing technologies to manufacture critical products, equipment and packaging means we have to meet the highest demands in product integrity.

We provide a complete design and build service to enable our customers to fulfil their most challenging heat sealing requirements. With over 20 years of heat sealing experience, our mechanical and electrical engineers are able to find the most suitable and economical solution for each Medical & Pharmaceutical application.

Design & Development

With a wide range of core products we provide our customers with a reliable sealing solution - even in the most demanding of applications.

We support your engineers with a complete design service from start to finish.

When designing a new heat sealing system or machine we use FEA simulation programs to replicate load and temperatures within each application.

At our in house test facility we can run performance trials on all of our heat sealing technologies with dedicated test rigs.

This allows us to run extensive test programs on our customer materials and provide detailed reports on performance before recommending a heat sealing technology fit for application.

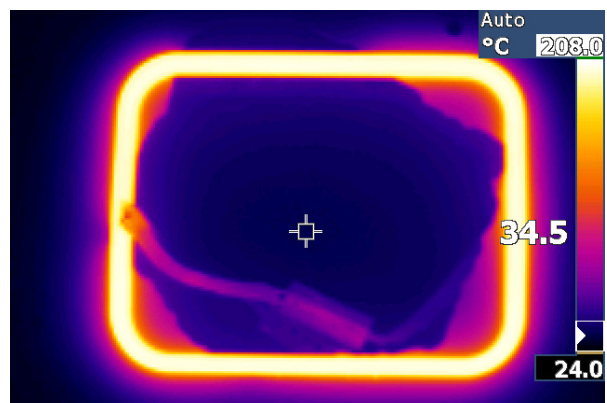


Validation

We integrate highly accurate PID temperature controllers into our machine builds to ensure stable temperatures and consistent welds, therefore producing the highest of integrity seals for our customer's end products. We design and integrate validation programmes to provide verified data reports for these critical application environments.

System temperatures are measured 50 times per second and maintained via loop feedback to ensure the required temperature is consistently achieved and remains stable.

By using infrared thermography we can provide supporting data on the consistency of temperature across our heat sealing bars and to determine the best machine set-up and gain ultimate performance from our heat sealing technologies.



Patient Care products



Our versatile sealing profiles can be designed to seal and manufacture a wide range of products for patient care including;

- Waste drainage products (colostomy/catheter)
- Transfusion bags (blood/drug/fluids)
- PPE (masks/coverings)
- Surgery consumables (protective drapes/coverings)

Our technologies seal a range of thermoplastic materials used for a variety of medical packaging applications including:

- Diagnostic devices
- Surgical tools
- Test equipment consumables

Our machines and retrofit modules are designed to operate in sterile environments and can provide validation data to ensure consistent high quality seals to meet the stringent regulations involved in medical product packaging.

Medical Packaging



Biotech & pharmaceutical

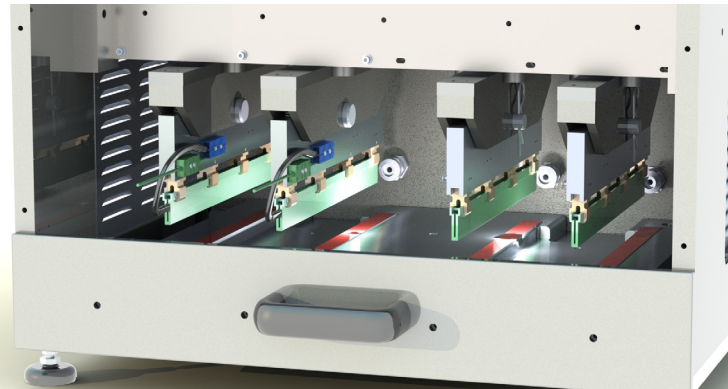


With highly valuable contents and stringently controlled cleanliness regulations, seal integrity is key in the production of these products.

Our heat sealing technologies manufacture products for the transportation and dosing of pharmaceutical powders and liquids.

We can also produce bespoke machines for the sealing of packaging for drug products.

Technology overview

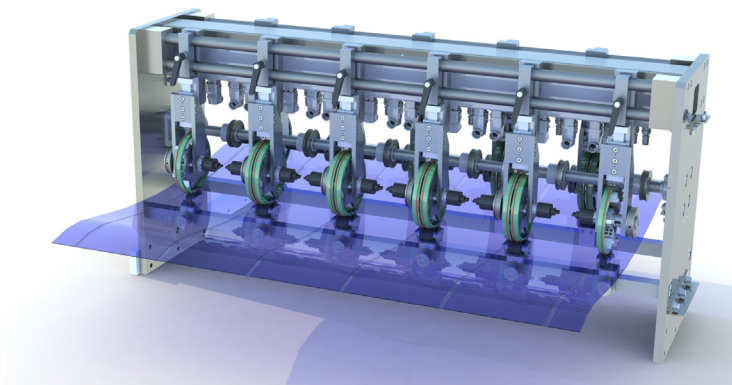
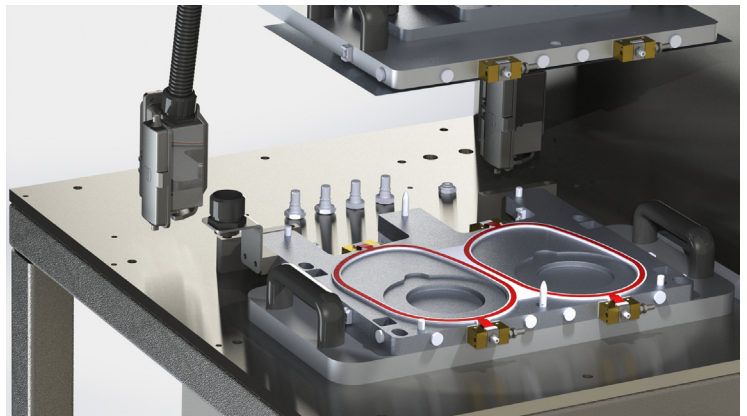


Low Voltage Heat (LVH) Sealing

Features a highly accurate low-mass blade that conducts heat evenly along its axis to create high integrity seals.

ImPulse Heat (IPH) Sealing

A cyclic system with heat up and cool down phases and can be used with any heat seal application.

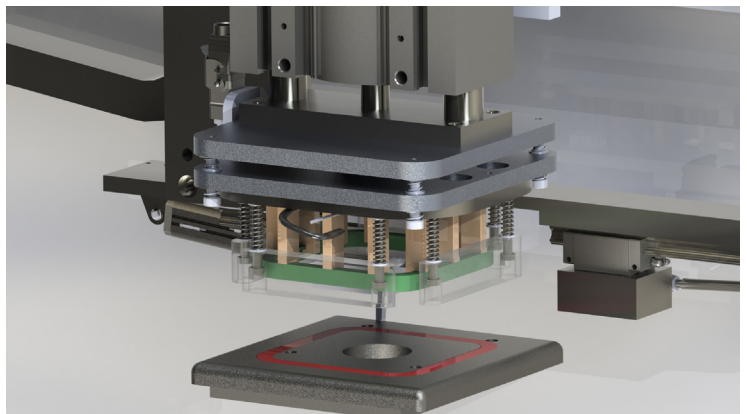


Continuous Rotary Heat (CRH) Sealing

Incorporates an element within a rotary sealing wheel and is used for a continuous running seal along the length of a material.

Profiled Die Heat (PDH) Sealing

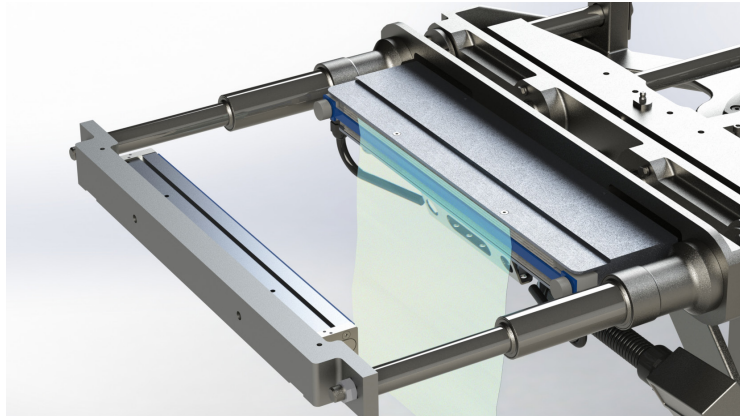
Specifically suitable for sealing non-standard shapes and products. Incorporates highly conductive, small-section dies that heat up to operating temperature and cool down quicker than traditional heat sealing methods.



Technology overview

Quick Pulse Heat (QPH) Sealing

Incorporates a unique seal bar and anvil design to create a narrow width seal with superior performance characteristics and offers material savings.



Benchtop machines

We offer a range of standard benchtop machines to fulfil our medical customers heat sealing requirements.

Bespoke machines

Complete design and build service of bespoke heat seal machinery incorporating our key heat technologies.



Quality Assurance



To meet the highest levels of product integrity (from design to manufacturing) we are ISO9001:2015, ISO14001:2015 approved.

All of our machines and heat sealing technology modules are designed to meet stringent safety regulations and are integrated with safety control system, designed in accordance with EC Directives and are supplied with a full suite of parts and operations manuals.

Our engineers offer both onsite and in-house technical support for even the most challenging applications.



Ceetak Heat Sealing Division

1 Napier Road, Elms Farm Ind Estate,
Bedford, MK41 0QR

Tel: 01234 832200

Web: www.heatsealing.ceetak.com
Email: hsenquiries@ceetak.com