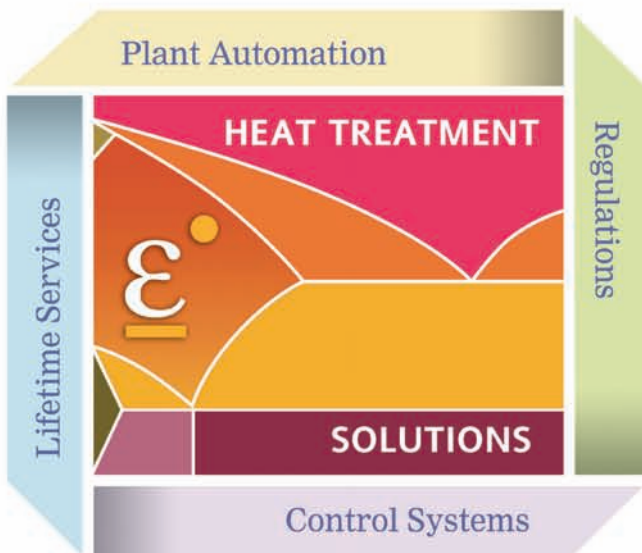
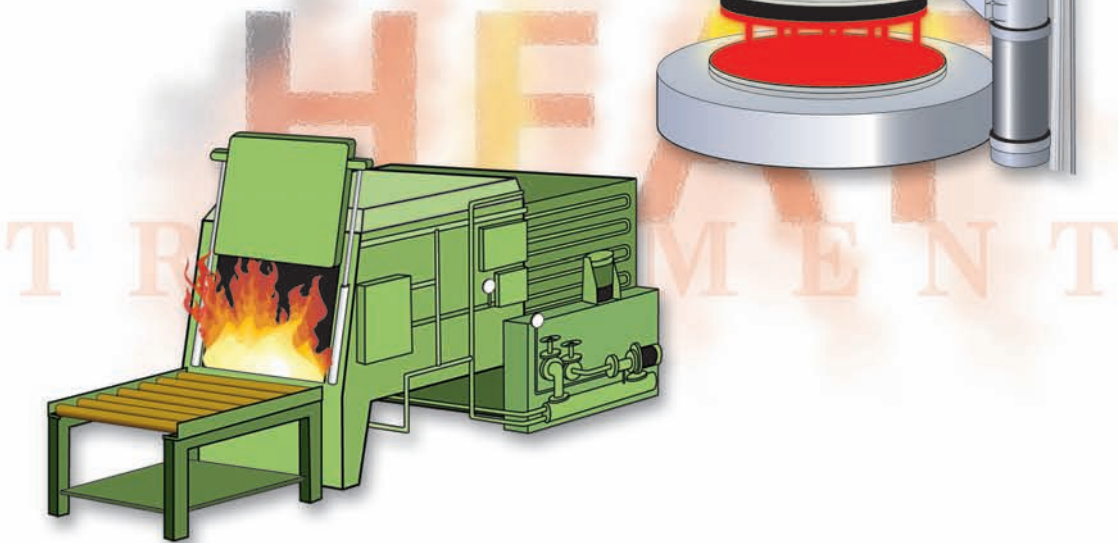
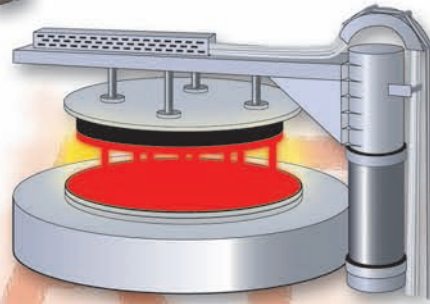
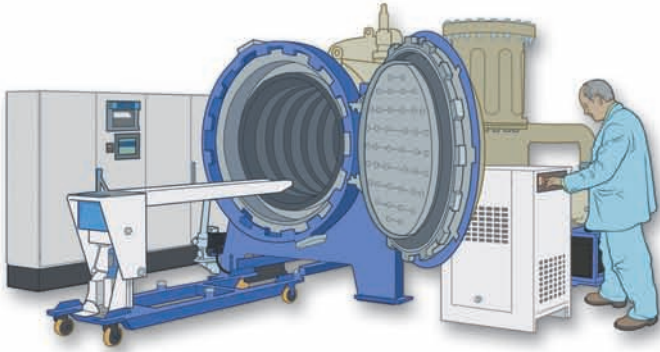


EUROTHERM® HEAT TREATMENT SOLUTIONS

ECProbe

IN-SITU CARBON PROBE



In-Situ Carbon Probe for Carbon Control Systems

The ECProbe from Eurotherm offers a unique, patented design and features a cylinder of special zirconium oxide formulation welded into the end of an alumina tube by means of an eutectic welding process. The resultant homogeneous structure provides a very robust design. The probe sheath is a high temperature special alloy with a flow through tip design to minimise soot collection. External connections are made with quick disconnect plug. The probe can measure very low oxygen partial pressures with extreme accuracy and repeatability. It will control furnace atmosphere and gas generators over a full range of carburising and hardening applications

WHY EURO THERM?

- High accuracy and repeatability
- Type N thermocouple available
- Tip designed for reduced sooting
- ISO9001 Management System
- Next day despatch and 24 hour repair service
- Interchangeable with all probes
- Burn off port as standard

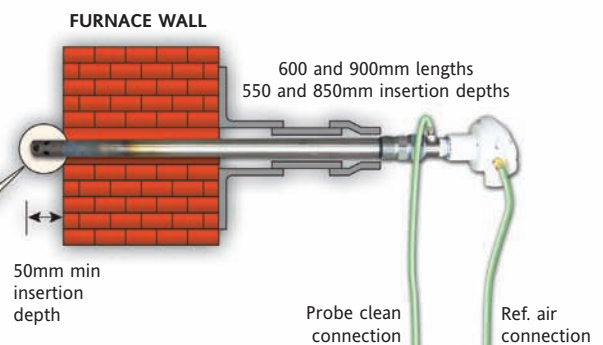
Ideal for

- Carburising Furnaces
- Annealing
- Endo-generators
- Carbo-nitriding
- Sintering
- Hardening



CROSS SECTION
END OF PROBE

Well ventilated and open tip design reduces sooting. The Alloy used for the probe sheath reduces the catalytic effect on free methane giving a more representative atmosphere reading.



PROBE AIR SUPPLY BOX

CARBURISING FURNACES

SINTERING

HARDENING

HEAT TREATMENT

ANNEALING

CARBO-NITRIDING

ENDO-GENERATORS

Service and Warranty

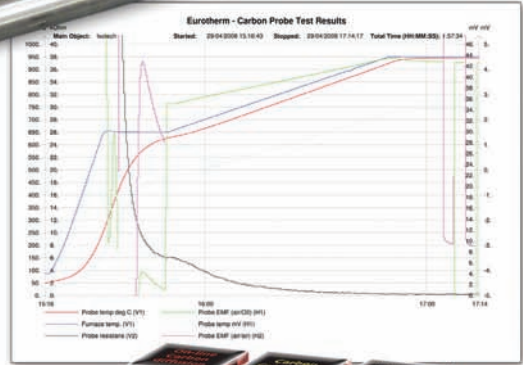
Eurotherm ECProbe's, manufactured in an ISO9001 certified facility in Worthing, England, are provided with a full 12 months warranty. Equipped with full testing and repair facilities Eurotherm provides a fully refurbished replacement service with a 24 hour despatch within Europe, to minimise the turnaround and reduce the costly downtime associated with probe replacement.



TYPE N THERMOCOUPLE AVAILABLE

TIP DESIGNED FOR REDUCED SOOTING

NEXT DAY DESPATCH & 24 HOUR REPAIR SERVICE



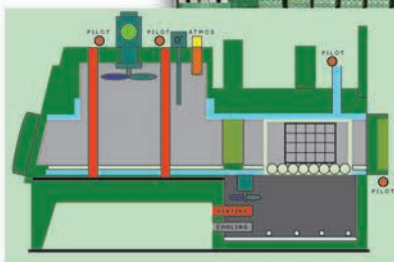
Applications Expertise from Eurotherm

Eurotherm, with its wide range of products and application expertise, provides the building blocks for solutions for the Heat Treatment Industry.

Gas Carburising of Steel

Surface hardening of steels by the chemical diffusion of carbon into the surface layer of a component requires the precise control of temperature, furnace atmosphere and time.

- Quench oil control and integral quench cycle control
- Case depth diffusion control or direct carbon potential control
- Precise loop control for temperature and carbon
- Endothermic gas generator controllers
- Integral quench programmes
- Furnace sequence control
- Robust atmosphere probe
- Secure recipe management
- Setpoint profiling
- Secure data management

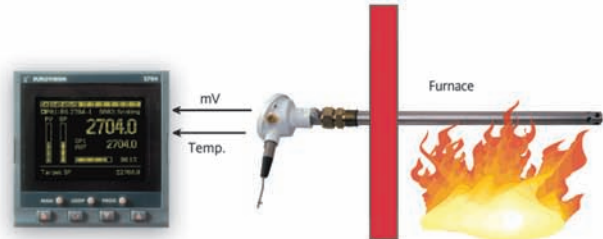


Furnace Sequencing
Product Transfer
Temperature Programming & Control
Furnace Diagnostics
Recipe Management
Carbon Potential & Diffusion Control
Power/Gas Control

Three Gas IR
Atmosphere Probes & Gas
Sequencing
Data Management
Endo Generator Control
Quench Sequence Control
Quench Recipes
Quench Oil Control

Furnace Atmosphere Control

- Specialist atmosphere probes
- Probe impedance monitoring
- Calculations for oxygen, carbon potential and dewpoint
- Reference air supply with failure alarms
- Advanced atmosphere solution using 3G Plus, 3 Gas IR (CO, CO₂ and CH₄) with oxygen probe compensation



Case Depth Diffusion Control

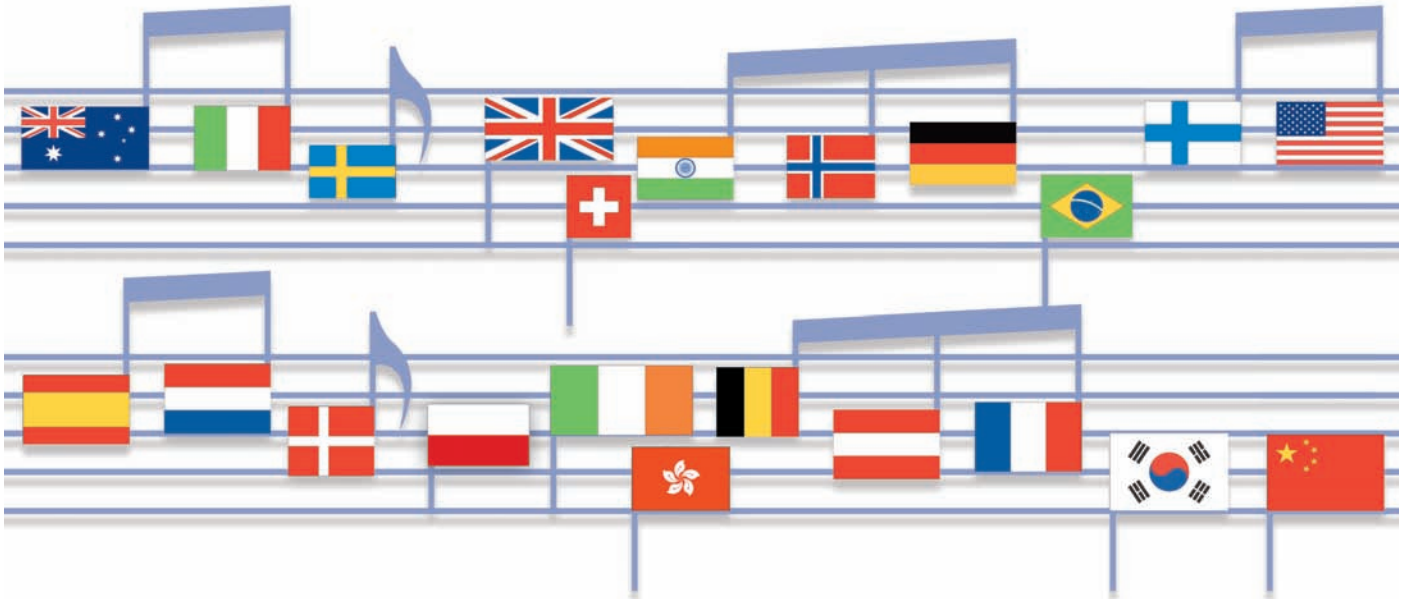
On-line carbon diffusion control allows the user to accurately set case depth targets to produce the correct carbon depth profile in the component.

A typical case depth profile is shown in the picture opposite.



Eurotherm: International sales and service

Understanding and providing local support is a key part of Eurotherm business. Complementing worldwide Eurotherm offices are a whole range of partners and a comprehensive technical support team, to ensure you get a service you will want to go back to.



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<i>Bosnia and Herzegovina</i>	<i>Nigeria</i>
<i>Bulgaria</i>	<i>Oman</i>
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<i>Greece</i>	<i>Saudi Arabia</i>
<i>Guinea-Conakry</i>	<i>Serbia and Montenegro</i>
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