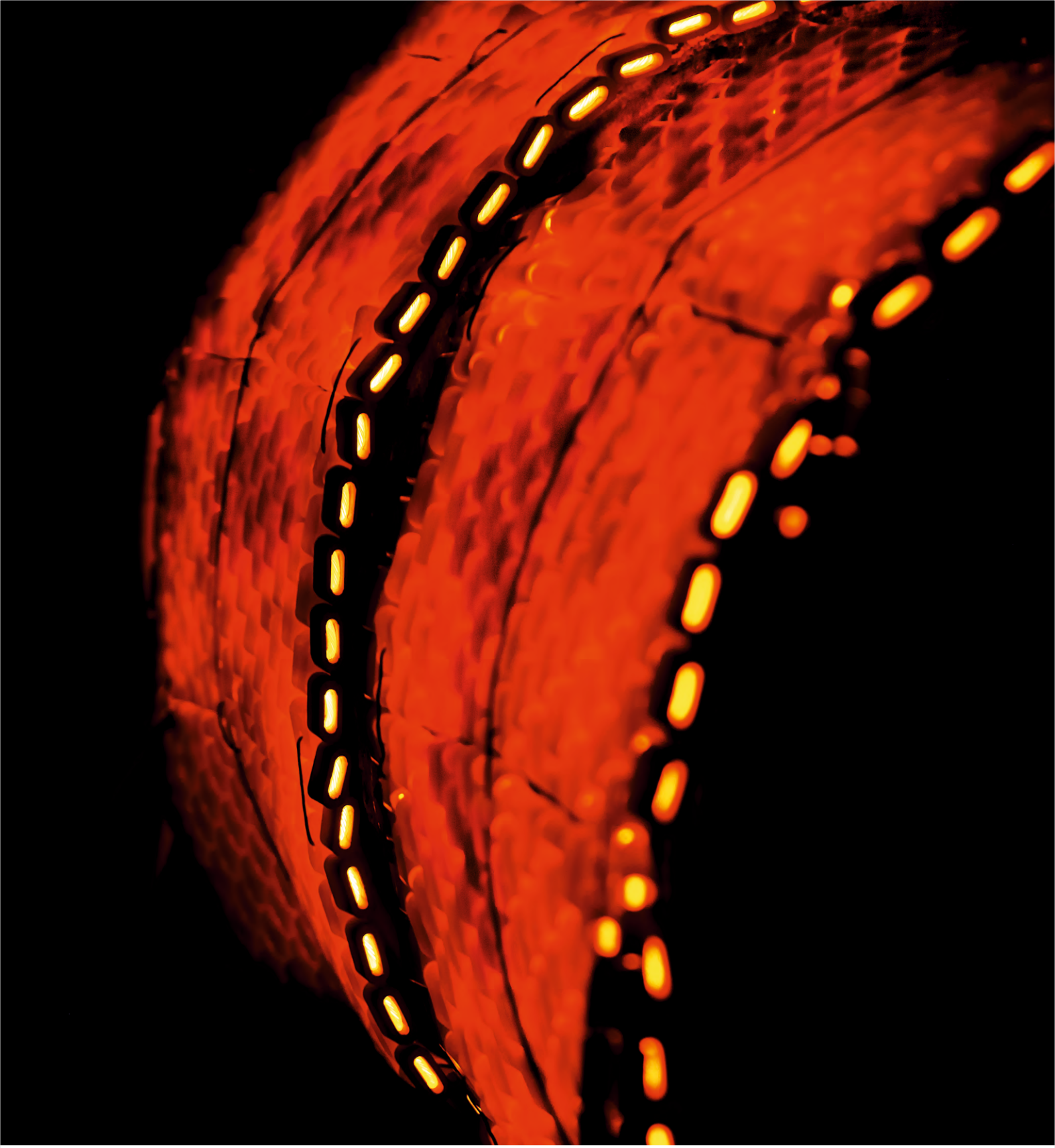

AGENT For **incertech**

Post Weld Heat Treatment Equipment & Consumables

MZ Construction
Consumable Supply LTD
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UB3 2JE
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+447432885472
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Contact Email:
MZ@mzccs.co.uk
Web site: www.mzccs.co.uk

Company Registration No:
10347411
VAT Registration No: 250
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EORI Registration No:
GB250730531000

FURNACE

Incertech designs and manufactures industrial furnaces used for post weld heattreatment and stress relieving. Incertech can supply both permanent and temporary furnaces which can be gas fired,oil fired or electrically heated. Incertech has the skill and expertise to supply range of versatile furnaces specially designed to meet the needs of operators and industries.

1) Permanent Low Thermal Mass Furnaces for heat treatment by Oil / Gas / Electrical mode of heating.
2) Temporary Low Thermal Mass Furnace for Stress Relieving, Normalizing, Solution Annealing etc.

Types of furnaces under the category are:

- Bogie Hearth Furnace
- Top Hat Furnace
- Fixed Hearth Furnace
- Pit type Furnace
- Box Furnace
- Roller Hearth Furnace

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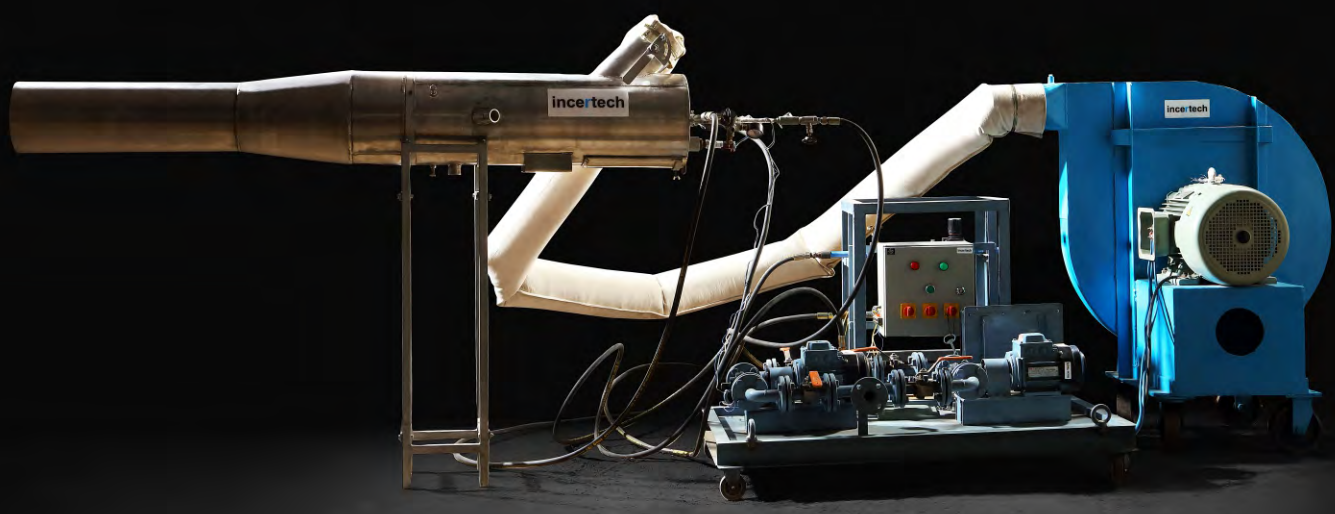
BURNERS



HIGH VELOCITY OIL FIRE BURNER

Gas / Oil fired high velocity portable combusion system are used for Post Weld Heat Treatment, Refractory Dryouts and curing. TheOil / Gas high velocity burner systems provide from 5,00,000 kcal/hr up to 8,000,000 Kcal/hr (2000,000 Btu/hr to 32,000,000 Btu/hr).The unit is designed for manual operation. Automatic control can also be provided.

1. Fuel can be LPG, Natural Gas or Propane for gas fired burners and HSD, LDO or Kerosene for Oil Fired Burners.
2. It is suitably controlled by PID type controllers for automatic burners and by operating valve train for manual burners in order to achieve complete combustion.
3.Combustion air is fan blown, requiring 380/440 v,50 hz, 3 phase electrical supply.
4. Flame supervision is by flame relay and U.V. flame sensor.
5. Ignition is achieved by direct spark ignition transformer and fitted spark probe.

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HIGH VELOCITY GAS FIRE BURNERS

High velocity oil / gas fired burners creates a 'scrubbing action' of hot gases against the walls of the component eliminating any cold spots. This ensures convective heat transfer to achieve temperature uniformity and efficient distribution of heat throughout the furnace chamber. The combustion system inputs high volumes of turbulent hot gases which maintain a positive pressure within the chamber. This purges the chamber of oxygen, minimizing oxidation effects after PWHT.

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CE

HEAT TREATMENT EQUIPMENTS

INCERTECH's Heat Treatment Equipment has been robustly constructed to provide power to electrical resistance heaters at 65 / 85 volts, suitable for site and shop working. The output from the unit is split into six individual heating circuits for temperature control.

I. ICT50 – 50 kva II. ICT65 – 65 kva

a. ICT50 – 50 kva – 6 channel heat treatment equipment without programmers

Each output circuit has 8.1 kW of power, which is sufficient capacity for 3 standard ceramic pads rated at 2.7 kW or 2 standard ceramic pads rated at 3.6 kW connected in parallel. Each of the six circuits may be controlled individually using either energy regulators in manual mode or using external programmer in automatic mode to gain control over rates of heating and cooling as well as soak conditions.

Primary Input:	380/415/440 Volts
Output:	65 Volts / 85 Volts or both as requested
Auxiliary Supply	2 x 220 Volts or 110 Volts as requested

b. ICT50P – 50 kva – 6 channel heat treatment equipment with programmers

Each output circuit has 8.1 kW of power, which is sufficient capacity for 3 standard ceramic pads rated at 2.7 kW or 2 standard ceramic pads rated at 3.6 kW connected in parallel. Each of the six circuits may be controlled individually using either energy regulators in manual mode or using inbuilt 6 individual programmer for each channel in automatic mode to gain control over rates of heating and cooling as well as soak conditions.

Primary Input:	380/415/440 Volts
Output:	65 Volts / 85 Volts or both as requested
Auxiliary Supply	2 x 220 Volts or 110 Volts as requested

C. ICT65 – 65 kva – 6 channel heat treatment equipment without programmers

The output from the unit is split into six individual heating circuits for temperature control. Each output circuit has 10.8 kW of power, which is sufficient capacity for 4 standard ceramic pads rated at 2.7 kW or 3 standard ceramic pads rated at 3.6 kW connected in parallel. Each of the six circuits may be controlled individually using either energy regulators in manual mode or using external programmer in automatic mode to gain control over rates of heating and cooling as well as soak conditions.

Primary Input:	380/415/440 Volts
Output:	65 Volts / 85 Volts or both as requested
Auxiliary Supply	2 x 220 Volts or 110 Volts as requested

D. ICT65P - 65 kva – 6 channel heat treatment equipment with programmers

The output from the unit is split into six individual heating circuits for temperature control. Each output circuit has 10.8 kW of power, which is sufficient capacity for 4 standard ceramic pads rated at 2.7 kW or 3 standard ceramic pads rated at 3.6 kW connected in parallel. Each of the six circuits may be controlled individually using either energy regulators in manual mode or using inbuilt 6 individual programmer for each channel in automatic mode to gain control over rates of heating and cooling as well as soak conditions.

Primary Input:	380/415/440 Volts
Output:	65 Volts / 85 Volts or both as requested
Auxiliary Supply	2 x 220 Volts or 110 Volts as requested

Specifications – ICT65 power source

- Length: Approx. 800 mm
- Width: Approx. 800 mm
- Height: Approx. 900 mm
- Weight: Approx. 465 kg
- Material: 3.5 mm angle frame & 14/16 gauge steel painted cabinet
- Handling: Four top lifting eye lugs and forklift access.

Inputs:

- Voltage: 380-415-440, 3 Phase
- Current: 100 amp
- Power: 75 KVA Isolated Copper Wound
- Frequency: 60 Hz / 50 Hz

Output Per Zone:

- Zones: 6
- Voltage: 65 or 85 VAC, single phase
- Current: 194 amps @ 65 V or 152 amps 85V
- Power: 12.5 KVA
- Activation: 200 amp contactor
- Control per zone: Digital temperature control via Programmer / Controller

Control Circuit:

- Voltage: 230 VAC, single phase
- Current: 5 amp circuit breaker
- Power: 1.2 KVA winding on power transformer
- Auxiliary: 230 VAC supply, single phase

6 Channel Temperature Programmer/Controller

- Temperature Range: 0-2000°F or 0-1200°C
- Thermocouple: Type “K”

Protection:

- 230-VAC Control Circuit: 5 amp circuit breaker
- Heater Power: Isolation contactor for each zone
- Console Power: 100 amp main circuit breaker
- Power Transformer: 160°C thermal protection
- Cooling fan: 208 CFM

CE


incertech
ZONE 1
ZONE 2
ZONE 3
ZONE 4
ZONE 5
ZONE 6

PROGRAMMERS

Model ICT 2000

Description: Single input, Single profile of 16 steps Ramp / Soak
Programmable PID/On-Off Temperature Controller
Size w x h x d (mm.) :48 x 96 x 110

Features:

- Accepts standard type of thermocouple, RTD, Voltage or Current signal.
- Control output of Relay / TRAIC / DC pulse / (4-20)mA/ (0-5)Volt.
- Servo start from the current process temperature.
- 1 to 16 programmable ramp/soak steps with rate programming facility.
- Master / Slave concept with 1 master and max. 30 slaves.
- Each controller can be configured as master or slave with 1 master and many slaves.
- Can be used as single set point control with online set point change facility.

Applications:

- Furnace / oven control
- PWHT and SR heat treatment cycle

Technical Specifications:

Controller Model	:	MultiZone Temperature Profile Controller
Sensor Input	:	K type Thermocouple
No of Channels	:	Six Channels
Display	:	Graphic LCD panel 128 x 64 pixels Backlight Continuous white LED
Display Facia	:	Polycarbonate front graphic
Buttons	:	8 Tactile key switches with buzzer feedback
Display Resolution	:	1.0 °C
Temperature Range	:	0 to 1200 °C
Controller Output	:	6 Relays – Potential free contacts rated for 2A @230Vac
Control Type	:	Proportional / PID
Proportional band	:	Editable (Default is 10 °C)
Cycle time	:	Editable (Default is 20 seconds)
Hold band	:	1, 2 or 3 times prop band
Sensor Open	:	Displayed on the LCD and Control action is Turned OFF for that particular zone.
RTC with Battery	:	Provided
PC Serial interface	:	Optional – Modbus RTU - Rs485

Each controller has the following independent parameters

Control Mode	:	Manual or Automatic or off
Set point Range	:	0 to 1200°C in 1 degree increments
Auto s/p Trim	:	+/- 50°C in 1 degree increments
Auto s/p Clamp	:	0 to 1200°C in 1 degree increments

Ramp and Soak Parameters:

The Profiler has the following parameters:

Heating rate	:	0 to 1000 °C per hour in 1 increment
Soak temperature	:	to 1200°C in 1 degree increment
Soak time	:	0 to 100.0 Hrs in 0.1 Hr increment
Cooling rate	:	0 to 1000 °C per hour in 1 increment
End temperature	:	0 to 1200°C in 1 degree increment

General

Panel cut out	:	92 x 92 x 170(in mm including terminals)
Bezel Size	:	100 x 100
Enclosure	:	MS Powder coated
Supply	:	85-264 Vac, 47 - 63 Hz
Environment Operating	:	0 - 50 C, 5 - 95% rh non-condensing
Storage	:	-10 - 65 C, 5 - 95% rh non-condensing

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CE

MAIN VOLT *HEAT TREATMENT* UNITS

THYRISTOR - BASED MAIN VOLT HEAT TREATMENT UNIT

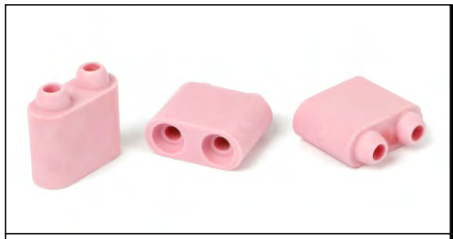
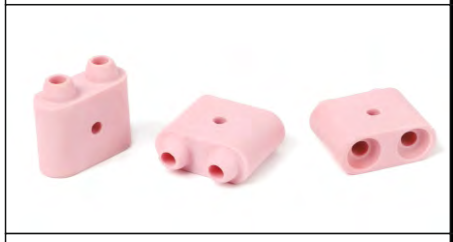
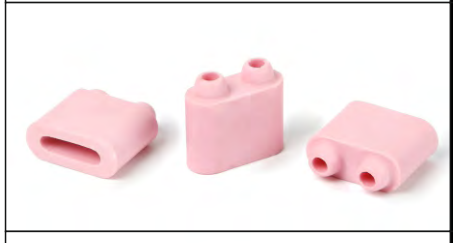
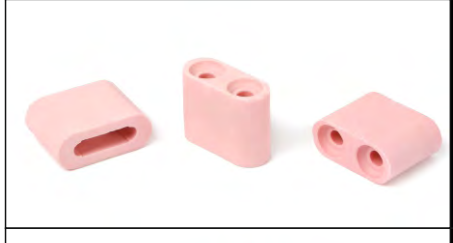
INCERTECH makes heat treatment unit that are equipped to provide power to 220 volt channel elements and other main volt resistance heaters. Our main volt channel heaters have thyristor - based switching. Using thyristor in place of contactors helps in avoiding switching noise and has a long life compared to contactors.

CERAMIC PAD HEATERS ACCESSORIES

HIGH ALUMINA CERAMIC BEADS FOR CERAMIC PAD HEATER

Material

95% Alumina Ceramic Beads is manufactured by dry press method and is sintered at temperature up to 1700°C. It enjoys high temperature resistance, excellent insulating property, and efficient thermal conductivity and heat transfer. Thanks to its excellent characteristics, the ceramic beads is widely used as components of ceramic heating pad at operation of pre- and post-weld heat treatment, welding process, stress-relieving, ship-building, other heat-resistance-environment.

		MAIN BODY BEADS
		MAIN BODY BEADS WITH HOLE
		MALE END BEADS
		FEMALE END BEADS
		TAIL BEADS

Other Shapes Available

- Tank track bead
- Tank Track Bead with hole
- Channel Bead
- Junction Bead
- Olive Bead
- Stepped Bead
- Castle Bead

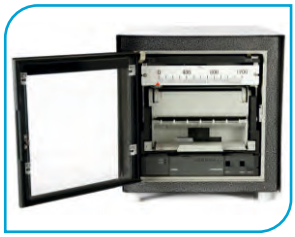
*Available in Pink and White color

Properties	Unit	Value
Alumina Content	(m/m) %	95%
Bulk density	g/cm3	3.65-3.70
Grain Size	Um	6
Compressive strength	MPa	1800
Flexural strength	MPa	280
Vickers Hardness	Hv 10	min. 1100
Young's Modulus	GPa	300
Thermal Conductivity (20-100°C)	W/m*K	16 – 24
Specific Heat	J/kg*K	700 - 850
Electric strength	KV/mm	10

RECORDERS

Twelve Point Temperature Recorder - ANALOG

A popular, robust and simple to operate, analogue, temperature chart recorder used within the heat treatment industry throughout the world.



Applications

Used for recording pre and post weld heat treatment processes up to 1200°C, in conjunction with Incertech's range of low voltage power source transformer heat treatment units. The recorder is housed within a resilient, powder coated, mild steel* case enabling it to withstand normal site conditions in all regions of the world.

Features

- Twelve type K thermocouple sockets fitted to the rear of the unit
- Six chart speeds (12.5, 25, 50, 75, 100, 150 mm/h)
- Chart and scale illumination allowing the operator to view the chart detail low light conditions
- High level of accuracy ±0.25%
- Twelve separate colour traces for clear identification of each temperature trace on the chart.
- One EH05035 (0-1200°C) chart paper supplied as standard
- Ergonomic folding handle fitted to each side of the case

Specification	
Supply Voltage	110V AC @ 50/60 Hz (230V AC available on request)
Thermocouple Input	Type K (NiCr/NiAl)
Recording System	Twelve colour dotting inkpad
Temperature Recording Range	0 to 1200° C
Measurement Accuracy	±0.25%
Illumination	White LED lamp with three user selectable levels of brightness or off
Operating Temperature	0 to 50° C (Storage: -20 to 40° C: 5 to 90%RH, 40 to 60° C: 5 to 65%RH
Replacement chart paper pack	EH05035 (0-1200°C) Chino chart
Case Material	Standard unit is powder coated, mild steel (*stainless steel case available on request)
Weight	18 kg

RECORDERS

Twelve Point Temperature Recorder - HYBRID

The AH4712- is a hybrid analogue/digital temperature recorder with an LCD screen displaying the twelve channel's temperature values either one channel at a time, or multiple channels at the same time with the option for digital display and simultaneous bar graph display.

The recorder has the facility of printing to the paper chart and saving the data to SD card (sold separately) which can then be displayed on a PC using Report Maker software (sold separately) or the measurement data can be saved as a CSV file and displayed in an Excel worksheet. The Recorder can also be connected to a network and monitored using the supplied software or from a web browser.

Applications

For recording pre and post weld heat treatment processes up to 1200°C. The recorder is housed within a resilient powder coated, mild steel* case enabling it to withstand normal site conditions in all regions of the world.

Features

- Twelve type K thermocouple sockets fitted to the rear of the unit
- Chart speeds 1 to 1500mm /hour in 1mm Increments
- Chart and scale illumination allowing the operator to view the chart detail in low light conditions
- One EH05035 (0-1200°C) chart paper supplied as standard
- SD Card (supplied separately ICT 2514) to export data to PC via report maker software (supplied separately ICT 2482)
- Ethernet connection for Web Viewer and E-mail Alarm notifications (via supplied software - KIDS)

Specification	
Supply Voltage	110V AC @ 50/60 Hz (230V AC available on request)
Thermocouple Input	Type K (NiCr/NiAl), Twelve Channels
Recording System	Wire-dot type six-colour ribbon: Dotting Interval 5 or 2.5 seconds/point
Temperature Recording Range	0 to 1200° C
Digital display	Full dot monochrome LCD 264 x 48 dots Display area 184 x 22mm
Measurement Accuracy	±0.1%FS ±1digit
Illumination	White LED backlight (turned off after 3-minute unused period when selecting AUTO)
Operating Temperature	0 to 50° C (20 to 65%RH, non-condensing)
Replacement chart paper pack	EH05035 (0-1200°C) Chino chart
Case Material	Standard unit is powder coated, mild steel (*stainless steel case available on request)
Dimensions	430mm x 355mm x 365mm
Weight	18 kg

CERAMIC HEATING ELEMENTS

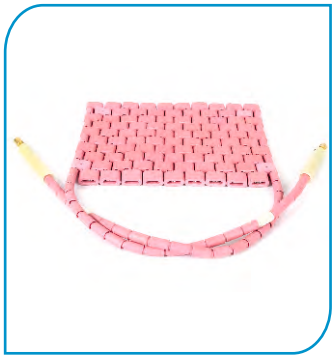
FLEXIBLE CERAMIC PAD HEATERS

These are extremely flexible heating elements. They provide heat through conduction heat transfer for Preheat / PWHT of welded joints. Stranded Nickel-Chromium wire is threaded through two-hole and single-hole ceramic beads which are staggered such that a cohesive mat is formed
The ceramics are extremely hard and durable sintered alumina content. They should not be confused with regular ceramics which are breakable. These ceramics are designed to transfer heat quickly. The heat conductivity is excellent. The electrical strength is high at elevated temperatures.

These elements are basically of 60 V, 2.7 kW with a current carrying capacity of 45 Amps (max). The heating elements can be simply wrapped around the pipes or jobs and secured in position with strips. The element tails are connected to the power source by suitably rated cabling system.

X (mm)	Y (mm)	Volts	kW
75	665	60	2.7
100	500	60	2.7
150	330	60	2.7
205	245	60	2.7
255	205	60	2.7
305	165	60	2.7
380	145	60	2.7
405	120	60	2.7
450	100	60	2.7
535	100	60	2.7
610	85	60	2.7
1220	45	60	2.7

CERAMIC PAD HEATERS



CERAMIC PAD HEATERS

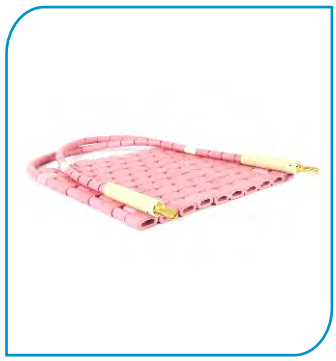
X (mm)	Y (mm)	Volts	kW
75	910	80	3.6
100	680	80	3.6
150	450	80	3.6
205	350	80	3.6
255	290	80	3.6
305	230	80	3.6
380	185	80	3.6
430	165	80	3.6
535	145	80	3.6
840	85	80	3.6
1675	40	80	3.6

CERAMIC PAD HEATERS

CERAMIC PAD HEATERS

X (mm)	Y (mm)	Volts	kW
255	85	30	1.3
510	45	30	51.3
380	85	40	51.8
760	45	40	1.8

X (mm)	Y (mm)	Volts	kW
610	355	220 v	9.9
660	355	240 v	10.8
710	355	255 v	11.4
755	270	220 v	89.9



CERAMIC PAD HEATERS

CE

STRANDED RESISTANCE WIRES

Stranded resistance wires are used to construct ceramic pad heaters by insulating it in high alumina ceramic interlocking beads.

STRANDED NICHROME WIRE :

Nichrome wire, is a composite of 80% nickel and 20% chrome, creating a tough hard to bend wire, with a high temperature tolerance, this alloy has won universal acceptance among users of metallic resistance materials & it is used for a range of applications, including foam cutting, interior ribbing for clay models, heating elements and much more.

It is an excellent choice for heating elements operating at temperatures up to 1100°C, it can be welded with ease to the required components, as another option of joining.

Specification:
Gauge: 8SWG, 10SWG, 12SWG, 14SWG and 16SWG

Different types of stranded wire:

ALLOY	Total Dia. (mm)	STRAND CONSTRUCTION (MM)		RESISTANCE (Ohms/M)	STOCK OPTIONS
		No. of strands x size	King wire size		
NiCr 80/20	2.8	19 x 0.55	0.55	0.26	On Request
NiCr 80/20	2.67	19 x 0.523	0.574	0.28	Ready Stock
NiCr 80/20	2.76	37 x 0.385	0.508	0.27	On Request
NiCr 60/16	2.67	19 x 0.523	0.574	0.29	Ready Stock
NiMn2	2.87	19 x 0.61	0.71	0.02	Ready Stock

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CABLES

COMPENSATING CABLE:

Designed for interconnection between thermocouple cable & control and recording instruments. Each roll has 100m length of cable. It is suitable for use with Type K thermocouple.

Specification:

- PVC double insulated
- Material: 2 x 13/0.2mm Copper/Constantan
- Maximum working temperature: (-25 ?105°C)
- Standards: Conforms with ASTME230-1993
- Jacket colour: Outer-Red Inner-Blue+White
- Length of wire: 100m

THERMOCOUPLE WIRE:

Type K thermocouple wire is Grade A, providing accuracy within. Two core conductors are insulated with high temperature glass braid, with a maximum working temperature of 800°C, it is used to convert the thermal energy at the hot junction of thermocouple to an electrical mV signal which can then be used by temperature control & recording instruments to accurately record & control the temperature of the item being heat treated. Each roll has 100m length of wire.

Specification:

- Length of wire: 100m
- Type K: A Grade
- Colour: Red (-) & yellow (+)
- Maximum working temperature: 800° C
- Standards: Conforms with GB/T 2614-2010, BSEN 60584-2, ASTM E230-1993, ANSI MC96.1-1982

Inner-Blue+White

- Length of wire: 100m

HOFR WELDING CABLE:

Our heavy duty flexible welding cable is highly performance & excellent flexibility to last longer applications. The cable is heat & oil resistant & flame retardant (HOFR), double insulated & best to carry the required current. It is suitable for all kind of welding generators.

Specification:

Size: 16SQMM, 25SQMM, 50SQMM

TRIPLE CABLE SET

The triple cable set consists of two lengths of heat and oil resistant and flame retardant (HOFR), double insulated copper cable and one length of compensating cable. The end of the cables that connect to a heat treatment unit are fitted with 300A male twistlock connectors on the two HOFR cables and a thermocouple plug on the compensating cable. The other end of the cables, that connect to the splitter cables and thermocouple at the workpiece being heat treated, are fitted with 300A female twistlock connectors on the two HOFR cables and a thermocouple socket on the compensating cable.

Specification: Double insulated copper cables:

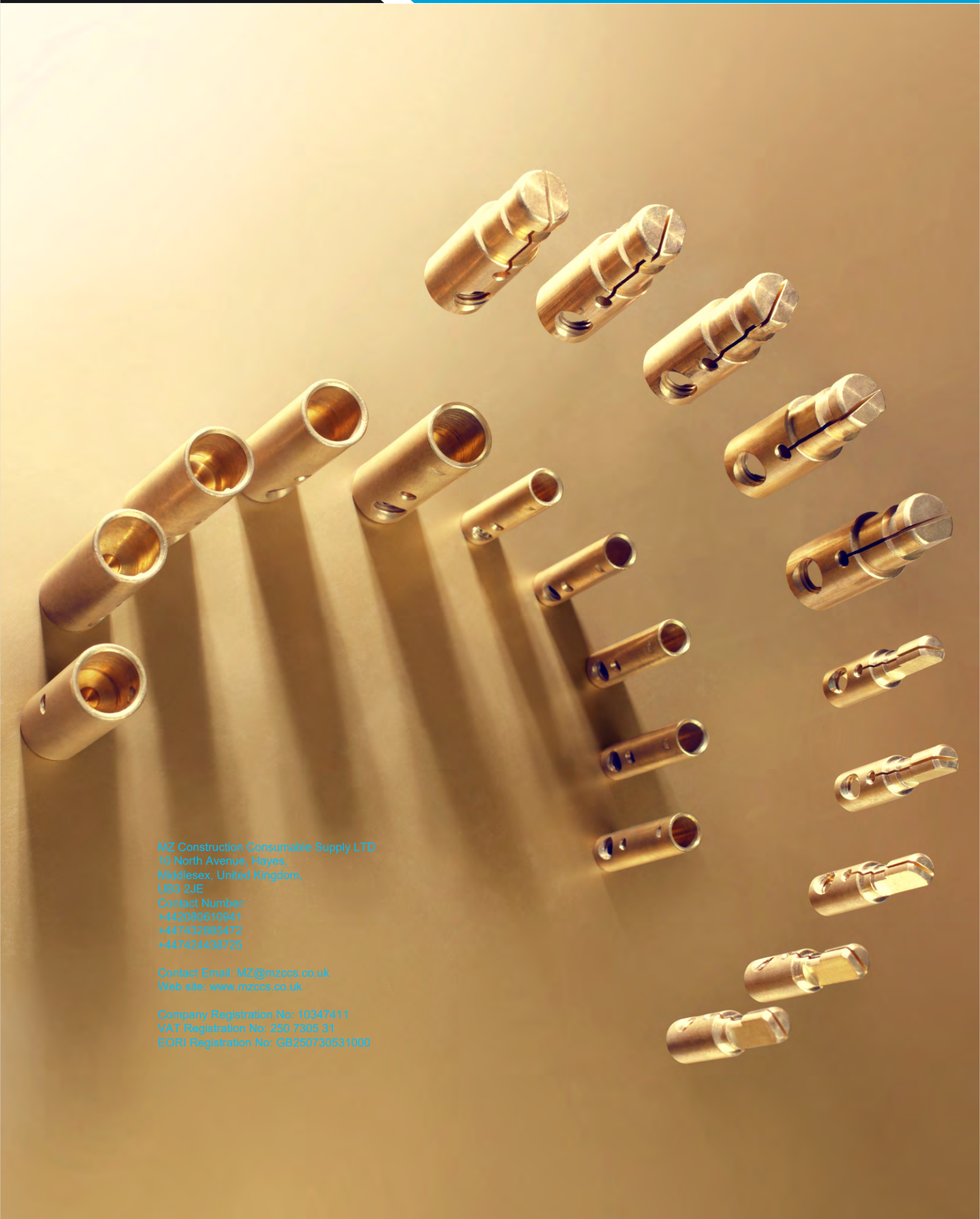
Conductor	Class 6 extra flexible plain copper conductors to BS EN 60228:2005
Separator	PETP (Polyethylene Terephthalate)
Sheath	HOFR (Heat and Oil Resistant and Flame Retardant) Sheath to Bs7655
Voltage Rating	100V
Minimum Bending Radius	6 x overall diameter
Temperature Rating	-20°C to +85°C
Standards	Bs638 Part 4

3 WAY & 4 WAY SPLITTER CABLES

Incertech's splitter cables are made from 16mm² HOFR double insulated copper cable in one metre lengths. The splitters are available in both black and orange coloured sheath making the feed and return connections easily identifiable. The splitters have a 300A male twistlock at the end which connects to a triple cable set and a 60A twistlock is fitted on each of the splitter legs which connect to the ceramic pad heating elements. Care should be taken to ensure that the suitable splitter is selected for the current rating of the heat treatment unit output channel and triple cable set being used.

Specification:

Conductor	16mm² Class 6 extra flexible plain copper conductors
Separator	PET (Polyester tape)
Insulation	EPR (Ethylene Propylene Rubber) type GP4 to Bs7655
Sheath	HOFR (Heat and Oil Resistant and Flame Retardant) Type EM5 to BS EN



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CONNECTORS

CAMLOCK CONNECTORS

Camlocks available in 60 Ampere & 300 ampere. Made out of brass. Used for connection of heaters with cables & cables with power source. Incertech also supplies 300 Ampere Brass panel mounting camlock connector.

300 Ampere Male Brass Camlock

- 300 Ampere Male Brass Camlock with grub Screw
- 300 Ampere Female Brass Camlock with grub Screw
- High Temperature Sleeve for 300 Ampere Male Camlock.
- High Temperature sleeve for 300 Ampere Female Camlock.
- Pin for 300 Ampere Camlock sleeve
- Grub Screw for 300 Ampere camlock

60 Ampere Male Brass Camlock

- 60 Ampere Male Brass Camlock with grub Screw
- 60 Ampere Female Brass Camlock with grub Screw
- High Temperature Sleeve for 60 Ampere Male Camlock.
- High Temperature sleeve for 60 Ampere Female Camlock.
- Pin for 60 Ampere Camlock sleeve
- Grub Screw for 60 Ampere camlock.

MZ Construction Consumable Supply LTD
10 North Avenue, Hayes,
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+442080610941
+447432885472
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Contact Email: MZ@mzccs.co.uk
Web site: www.mzccs.co.uk

Company Registration No: 10347411
VAT Registration No: 250 7305 31
EORI Registration No: GB250730531000

THERMOCOUPLE ATTACHMENT UNIT

A. AC (MANUAL)

The thermocouple attachment unit enables the operatorto attach the thermocouple to the test piece for precision temperature measurements.The TAU is very safe to operate as the maximum voltage between the earth return magnet and the application pliers is at safe volts.

B. DC (BATTERY OPERATED / AUTOMATIC)

Thermocouple welding unit provides a positive attachment of the thermocouple wire to the work piece surface by capacitance discharge. The operation is fast and reliable, giving accurate temperature readings under conditions where other methods of attachment have registered error of up to 50°C at 650°C.

The Thermocouple Welder Unit also features a recharging necessity shown by 'Low Battery' LED, the mains LED shows when the battery is on charge.

BATTERY RECHARGE TIME: 6-8 HOURS

Lightweight and portable, it is supplied complete with rechargeable battery, housed within the carrying case. The Unit can be charged from 230V/110V supply and is ideal for working in areas with restricted access.

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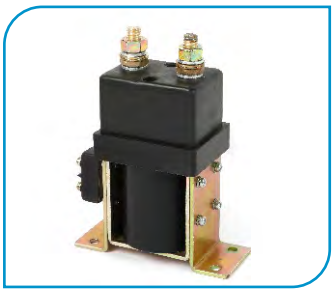
HEAT TREATMENT EQUIPMENT ACCESSORIES



250 A SINGLE POLE CONTACTORS

AUTO / MANUAL SWITCH

NEON INDICATORS

PANEL MOUNTED FUSE HOLDER

COOLING FANS

AUXILIARY SOCKET- 110 V / 230 V

ENERGY REGULATOR

AMPERE METER

100 AMP 4 POLE MCB
6 AMP SINGLE POLE MCB

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CERAMIC FIBER BLANKET:

Ceramic Fiber Blanket are made from high quality spun ceramic fiber, double sides mechanically needling makes it high strength and surface integrity.
Ceramic Fiber Blanket have good character of superior insulation performance, light weight, flexibility and chemical resistance, low thermal conductivity, low heat storage. Fiber blanket are ideally suited to individual customer applications and are available in a wide range of thicknesses and densities. The maximum continuous use temperature depends on the application.

APPLICATION:

- High temperature pipe and casting mold insulation.
- Repair, insulation and linings for furnaces, kilns, ovens, generators, reformers, boilers,
- Duct and turbine insulation- Forging furnaces linings- High-temperature seals and gasket Furnace door seals -Glass furnace crown insulation -Heat processing equipments.
- Car bottom furnace lining insulation -Fire protective

TYPE: RTZ Grade. Max. Serving Temp.Up to 1260^{0}C.
HTZ Grade. Max. Serving Temp.Up to 1400^{0}C.

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BLANKET WITH MESH

CERAMIC FIBER BLANKET(WOOL WITH MESH)

Ceramic fiber blanket wool with mesh insulation mats provide improved handling strength and enhanced thermal properties, in addition to which large nuisance dust particles have been effectively eliminated making the product less irritating during use. Incertech's range of meshed insulation mats exhibit outstanding insulating properties at elevated temperatures and have excellent thermal stability whilst retaining their original soft fibrous structure and strength up to its maximum continuous use temperature. To strengthen and protect the ceramic wool insulation, the blanket is protected by a stainless-steel mesh covering forming a strong an resilient insulation mat.

General Application

Used to thermally insulate ceramic pad heating elements during pre and post weld heat treatment processes to minimise thermal losses and to eliminate large temperature differentials away from the heated zone. The insulation mats also provide protection for welders during preheating processes during welding operations.

Features

- Exceptional thermal insulating performance.
- Free of binder or lubricant.
- Immune to thermal shock.
- Low heat storage
- Good resistance to tearing.
- Flexible and resilient.
- Reduced irritation during use.
- High strength before and after heating.

Product:	Application:
300mm x 600mm, 25mm thick, 128kg/m³	Insulating small diameter pipe heat treatments up to 1000°C or 1100°C short term
300mm x 900mm, 25mm thick, 128kg/m³	Insulating small diameter pipe heat treatments up to 1000°C or 1100°C short term
600mm x 600mm, 25mm thick, 128kg/m³	Insulating small diameter pipe heat treatments up to 1000°C or 1100°C short term
600mm x 2800mm, 25mm thick, 128kg/m³	Insulating a range of heat treatments up to 1000°C or 1100°C short term
600mm x 2200mm, 25mm thick, 128kg/m³	Insulating a range of heat treatments up to 1000°C or 1100°C short term
600mm x 1200mm, 25mm thick, 128kg/m³	Insulating a range of heat treatments up to 1000°C or 1100°C short term
600mm x 1800mm, 25mm thick, 128kg/m³	Insulating a range of heat treatments up to 1000°C or 1100°C short term

Specification	
Density	128kg/m³
Continuous use temperature	1000°C
Short term use	1100°C (Dependent upon application)
Thermal conductivity for 128kg/m³ insulation	0.12 W/m.K at 600°C
Chemical analysis %	SiO2: 62-68, CaO: 26-32, MgO: 3-7, Other oxides: <3
Tensile strength of 96kg/m³ blanket	55 kPa
Tensile strength of 128kg/m³ blanket	75 kPa

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INTERNAL FIRING

Internal Firing

Our technicians are well experienced and specialized in-situ heat treatment technique for large structures such as Pressure Vessels, LPG & Mounded Bullet, Thin Wall Tanks & spherical tanks, columns and other large complex fabricated structures. The structure's entire external surface is thermally insulated to accommodate structural expansion during the heating cycle, particularly at peak temperatures.

High velocity Oil/Gas burners are strategically inserted and fired directly into the structure's internal atmosphere converting it into its own self-contained furnace.

Manual control of burner velocity and flue dampers creates a positive pressure internally to achieve optimum temperature distribution and uniformity.

Carefully controlled heating, ventilating & cooling operation produces optimum refractory properties and enhances its campaign life.

Refactory Dry Out

Our burners have an exceptional turndown ratio of 20:1 and provide a high volume low temperature condition needed in a dryout which requires extreme gradual heat increments. Our high velocity convective heating system provides for gradual removal of residual water vapour which has a lower dew point - preventing dangerous condensation during cooling.

Improper refractory dryout process may lead to premature refractory failure caused by:
1) Localized overheating of the refractory lining due to flame impingement,
2) Spilling of the refractory due to uneven and premature steam generation, and
3) Thermal shocks in the lining leading to uneven expansion and contraction of the refractory. All of which are meticulously avoided in our procedures and dryout / curing processes

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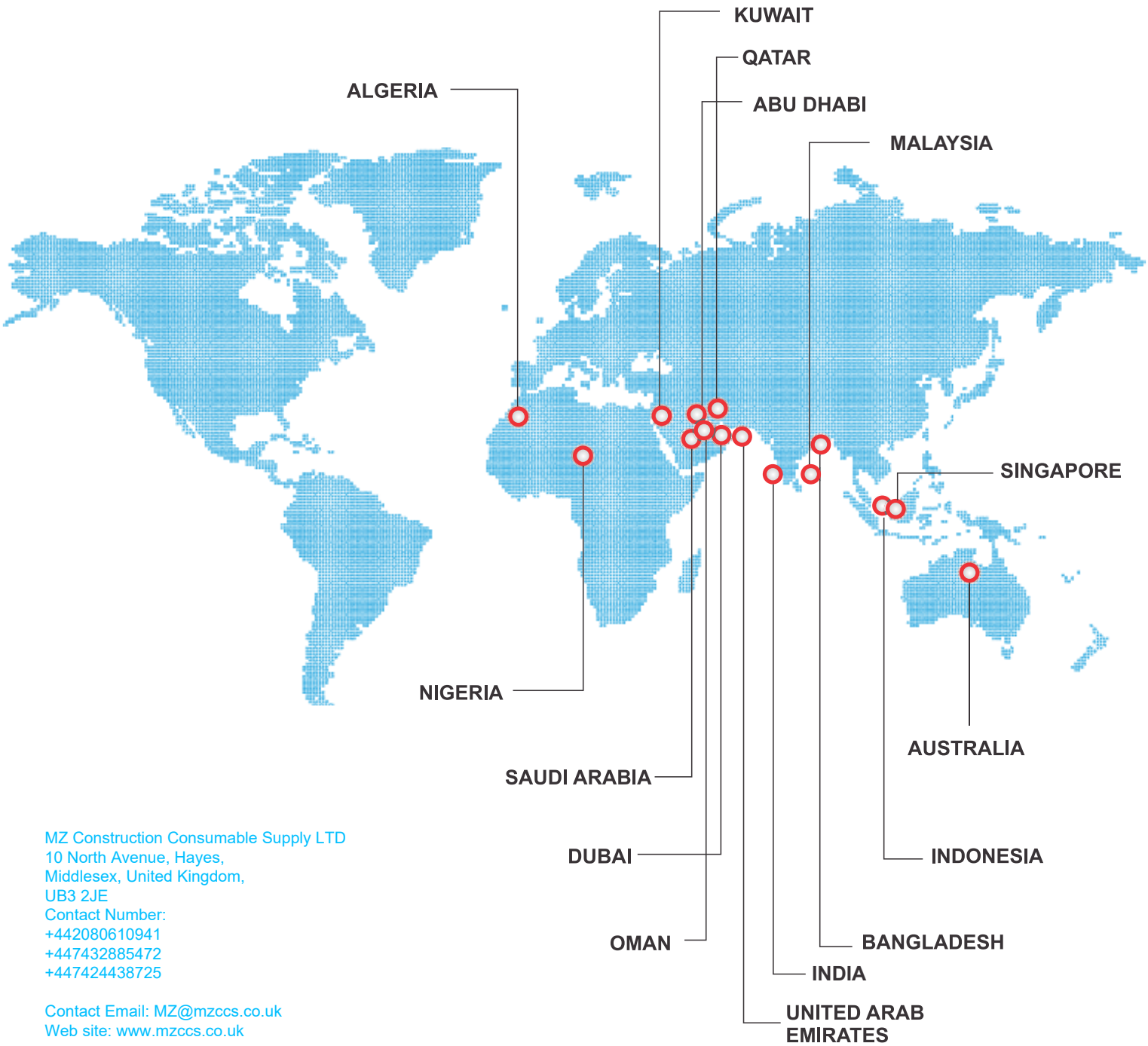
ISO 27001 CERTIFIED
UKAS MANAGEMENT SYSTEMS
8289
British Assessment Bureau

Our Gobal Reach



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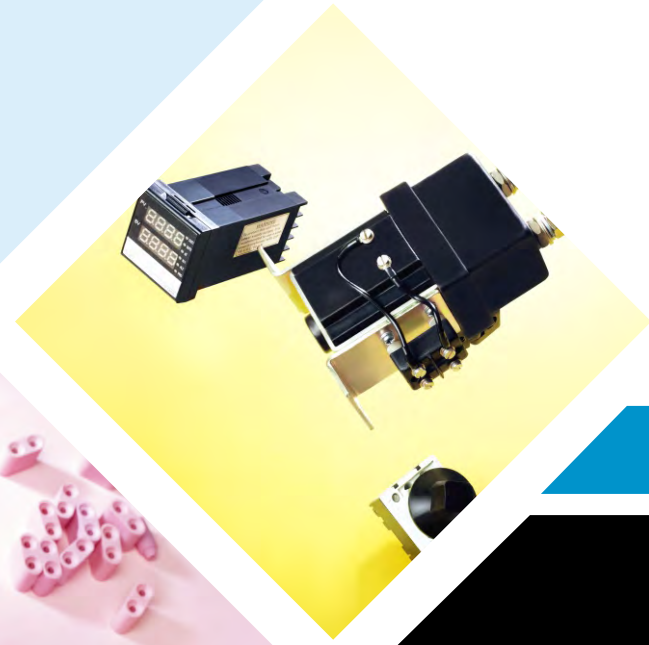
UKAS MANAGEMENT SYSTEMS 8289

British Assessment Bureau



MZ Construction Consumable Supply LTD

AGENT FOR

incertech

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