

# Stanton Kilns A Division of Control & Construction Ltd Foley Works, off King St. Fenton, Stoke-on-Trent ST4 3DE Tel: 01782 312316 Fax: 01782 598978

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Stanton's top-loading & front-loading electric kilns are available in the range of sizes preferred by Schools, Colleges, Studio Potters & Industry. We also manufacture kilns to customers' specifications.

The kilns are craftsman-built using the best quality materials and carry an optional 1 year warranty. Our business has been built on customer recommendation over more than 30 years during which time our designs have been continually developed to offer the highest standards of safety, efficiency & reliability.

We stock a full range of temperature controllers including the userfriendly Stafford Instruments ST range.

Also stocked are temperature trips and a full range of spares & accessories. We can manufacture elements for all makes & types of electric kilns on a rapid turn-around.

Our service department supports our kilns and offers an onsite repair & factory refurbishment service for all makes of electric kilns.

# Common Features of the Stanton Kilns range of products

- ♠1300°C maximum firing temperature
- ODouble skin casing construction with air gap
- Low density brick construction to all surfaces including lids or doors
- Low energy usage
- Two-tone stove-enamelled case finish
- One year warranty

## Top Loading Kilns



Our Firebird 'T' range of toploading kilns is a 6 model range covering the size range 74 to 297L (2.6 to 10.5 cubic feet). Elements are inserted into each of the four side-walls. Dual gas struts are fitted to all models.

# Front Loading Kilns

Two ranges are available - the Firebird 'E' range & the Firebird 'K' range



The Firebird 'K' range of front-loading kilns is an 8 model range covering the size range 106 to 708L (3.75 to 25 cubic feet). Elements are inserted into the side walls, back wall, base & door. A roof damper fitted to models of size 283L (10 cubic feet) and above.

# T Range

# Top Loading Kilns

#### **Features**



- Show density, dry lined construction for ease of replacement
- §1300°C firing temperature for all models
- Observe the Double skin casing including stainless steel inner panels
- SLow kilowatt input for maximum size of chamber
- Oual gas struts fitted to all models
- Two tone, stove enamelled finish casing
- All electrical connections concealed behind hinged front control panel
- Sull range of kiln furniture & control equipment available
- One year warranty

Туре	Capacity	Firing Chamber			External Dimensions			Weight	kW	Amps	Price
		W	D	Н	W	D	Н				
	L	mm	mm	mm	mm	mm	mm	kg		1 ph	£ Pounds
	ft <sup>3</sup>	in	in	in	in	in	in	lb.		3 ph	Sterling
<b>T</b> 0.F	74	381	381	508	673	783	838	120	_	22	1224
T25	2.6	15	15	20	26.5	31	33	265	5	8	1334
<b>TOF</b>	106	475	457	508	737	864	838	124	_	30.5	1.405
T35	3.75	18	18	20	29	34	33	273	7	10	1495
	145	533	533	508	813	940	838	142		39	4.600
T50	5.0	21	21	20	32	37	33	313	9	13	1620
<b>-</b>	154	457	457	737	737	864	1057	150	1.0	44	1020
T55	5.5	18	18	29	29	34	42	330	10	15	1920
T60	210	533	533	737	813	940	1067	159	12	52	2099

	7.5	21	21	29	32	37	42	350		18	
	297	914	533	610	1270	1092	1245	400		78	
T80	10.5	36	21	24	50	43	49	882	18	26	3340

Note: All prices are ex-works and exclude V.A.T.

#### **Product Description**

These kilns have been developed to meet a growing demand for a good quality, efficient top-loading kiln for use at up to 1300°C, operating with a minimum heat loss and a sensible outside casing temperature. The kilns are compact in design with detailed attention paid to both the construction and the quality of materials used. The casing has a double skin with air-gap. The inner skin is stainless steel to give added protection against corrosion. The kiln is fully lined with low density brick, including the lid. The brickwork is of dry lined construction for ease of replacement. The lid is fitted with two gas springs on all models.

Heating elements are inserted in all four walls terminating behind the hinged front control panel. All electrical repairs can thus be carried out from the front. All models are available in single phase or 3-phase and neutral operation.

When planning the installation of a kiln attention should be given to the size of the kiln room, floor strength & ventilation requirements. Space should be allowed to enable the kiln to be manoeuvred into position and to meet the minimum clearance distances. The floor must be level and strong enough to support the weight of the kiln and its workload. If sited in an enclosed space forced ventilation is recommended possibly by means of wall mounted fan and airbrick inlet. We would suggest a minimum air volume change value of five per hour whilst kiln is in operation.

Minimum clearance distances are:-

Above: 1000mm 39" At side: 150mm 6" At rear: 150mm 6"

# E Range

# Front Loading Kilns

#### **Features**



- SLow density brick lining
- §1300°C firing temperature for all models
- Low kilowatt input for maximum size of chamber
- Casing finished in two-tone stove enamel incorporating air gap for low skin temperature
- ODoor gasket seal
- Full selection of kiln furniture and control equipment available for all models
- One year warranty

Туре	Capacity	Firing Chamber		External Dimensions			Weight	kW	Amps	Price	
		W	D	Н	W	D	Н				£
	L	mm	mm	mm	mm	mm	mm	kg		1 ph	Pounds
	ft³	in	in	in	in	in	in	lb.		3 ph	Sterling
E250	74	381	381	508	660	787	1524	200	5	22	1639
	2.6	15	15	20	26	31	60	441		8	
E350	106	457	457	508	737	864	1524	210	7	30.5	1812
	3.75	18	18	20	29	34	60	463		10	
E375	127	457	457	610	737	864	1727	255	8	35	1869
	4.5	18	18	24	29	34	68	563		12	
E400	170	457	610	610	737	1016	1727	300	12	53	2076
	6	18	24	24	29	40	68	662		18	
E450	227	610	610	610	889	1016	1753	360	15	66	2613
	8	24	24	24	35	40	69	794		22	

Note: All prices are ex-works and exclude V.A.T.

## **Product Description**

With our 5-model Firebird 'E' range of front-loading kilns we aim to supply a robust & reliable kiln at a competitive price.

These kilns are for use at up to 1300°C, utilising a double-skinned casing construction with air-gap. This ensures that they operate with a minimum heat loss and a sensible outside casing temperature. The kiln is fully lined with low density brick including the door. The door can be specified as right or left-hand opening and is gasket sealed.

The frame design incorporates an integral floor stand. All electrical connections including the rear wall mounted thermocouple can be accessed from the rear of the kiln after removing the rear coverplate. Heating elements are situated in the 2 sidewalls and the base. All models operate from 230VAC and are available in single phase or 3-phase and neutral versions.

When planning the installation of a kiln attention should be given to the size of the kiln room, floor strength & ventilation requirements. Space should be allowed to enable the kiln to be manoeuvred into position and to meet the minimum clearance distances. The floor must be level and strong enough to support the weight of the kiln and its workload.

If sited in an enclosed space forced ventilation is recommended possibly by means of wall mounted fan and airbrick inlet. We would suggest a minimum air volume change value of five per hour whilst kiln is in operation. Adequate ventilation is essential especially in enclosed situations - forced ventilation is strongly recommended.

Minimum clearance distances are:-

Above: 750mm 30" At sides: 150mm 6" At rear: 450mm 18"

# Front Loading Kilns

#### **Features**



- SLow density brick lining
- Elements situated in door, back wall, sidewalls & base
- §1300°C firing temperature for all models
- SLow kilowatt input for maximum size of chamber
- Casing finished in two tone stove enamel incorporating air gap to ensure low skin temperature
- ODoor gasket seal
- Nentilation via roof damper on K501-565
- Full selection of kiln furniture and control equipment available for all models
- One year warranty

Туре	Capacity	Firing Chamber			External Dimensions			Weight	kW	Amps	Price
		W	D	Н	W	D	Н				£
	L	mm	mm	mm	mm	mm	mm	kg		1 ph	Pounds
	ft³	in	in	in	in	in	in	lb.		3 ph	Sterling
	106	457	457	508	737	940	1524	227		30.5	
K351	3.75	18	18	20	29	37	60	500	7	10	2032
	127	457	457	610	737	940	1727	272	_	35	
K376	4.5	18	18	24	29	37	68	600	8	12	2192
	170	457	610	610	737	1092	1727	300		53	
K401	6	18	24	24	29	43	68	662	12	18	2560
	227	610	610	610	889	1118	1753	372		66	
K451	8	24	24	24	35	44	69	820	15	22	3025
K501	283	610	610	762	889	1118	1829	399		78	
	10	24	24	30	35	44	72	880	18	26	3670
K551	425	610	915	762	965	1473	1905	600	22	96	5302

	15	24	36	30	38	58	75	1323		32	
	510	610	915	915	965	1473	2057	700		113	
K561	1.0	2.4	26	26	20	F0	0.1	1 5 40	26	20	5759
	18	24	36	36	38	58	81	1543		38	
	708	762	915	1016	1143	1499	2007	1200		157	
K565									36		7038
	25	30	36	40	45	59	79	2646		52	

Note: All prices are ex-works and exclude V.A.T.

#### **Product Description**

The Firebird 'K' 8-model range of front-loading kilns is a natural extension to our popular 'E' range but with additional steelwork and increased insulation. Additional elements are situated in door & back wall for even distribution of heat. Manual roof dampers are fitted to models K501-K565 (optional extra for other models). The dampers can be fully automated at additional cost.

These kilns are for use at up to 1300°C, utilising a double-skinned casing construction with air-gap. This ensures that they operate with a minimum heat loss and a sensible outside casing temperature. The kiln is fully lined with low density brick including the door. The door can be specified as right or left-hand opening and is gasket sealed.

The frame design incorporates an integral floor stand. All electrical connections including the rear wall mounted thermocouple can be accessed from the rear of the kiln after removing the rear coverplate. Heating elements are situated in sidewalls, back wall, base & door. All models operate from 230VAC and are available in single phase or 3-phase and neutral versions.

All models are covered by our standard 1-year warranty. An optional 2 year warranty is available, subject to a chargeable service visit at the 12 month period.

When planning the installation of a kiln attention should be given to the size of the kiln room, floor strength & ventilation requirements. Space should be allowed to enable the kiln to be manoeuvred into position and to meet the minimum clearance distances. The floor must be level and strong enough to support the weight of the kiln and its workload. If sited in an enclosed space forced ventilation is recommended possibly by means of wall mounted fan and airbrick inlet. We would suggest a minimum air volume change value of five per hour whilst kiln is in operation. Adequate ventilation is essential

especially in enclosed situations - forced ventilation is strongly recommended.

Minimum clearance distances are:-

Above: 750mm 30" At sides: 150mm 6" At rear: 450mm 18"

Item	Description	Price £ Pounds Sterling
D550	Damper motor only	225.00
HS8	Harting 8 pin instrument socket	25.00
HS15	Harting 15 pin instrument socket	POA
HP15	Harting 15 pin instrument plug	POA
FC10	Flexible cable to suit above (per metre)	6.00
CC3	3m controller cable fitted with Harting style 8 way plug	38.00

Note: All prices are ex-works and exclude V.A.T.

	Thermocouples	Price £ Pounds Sterling
TC1- R	Type 'R' 152mm (6") below flange (disk head)	80
TC2- R	Type 'R' 152mm (6") below flange (angle head)	95
TC3- R	Type 'R' 228mm (9") below flange (angle head)	110
TC4- R	Type 'R' 280mm (11") below flange (angle head)	130
TC1- S	Type 'S' 152mm (6") below flange (disk head)	p.o.a
TC2- S	Type 'S' 152mm (6") below flange (angle head)	p.o.a
TC3- S	Type 'S' 228mm (9") below flange (angle head)	p.o.a
TC4- S	Type 'S' 280mm (11") below flange (angle head)	p.o.a

Note: All prices are ex-works and exclude V.A.T.

Please **contact** us for sizes & types not shown here.

# The Stafford Instruments ST Range

#### Common Features

- Alphabetic display for user-friendly operation
- Status display shown during firing
- Attractive wall-mounted enclosure sealed to IP65
- ©Control range up to 1310°C
- Oblighed Start facility
- Thermocouple burn-out detection
- ⊕Heater element failure detection
- Continuous self-checking of internal operation
- SIntelligent power-failure recovery
- SYear 2000 compliant
- Optional
  internal overtemperature
  trip module
  (field
  installable)



# Model Features

Model	Description	Price £ Sterling
ST312	This is a single programme controller designed for pottery firing. It has 2 fully adjustable ramps followed by a soak. It is based on the ST302 controller with the following features added: larger display, alarm buzzer (sounds in the event of an error condition), energy used (kWh) feature, selectable thermocouple types (R, S, K & N), programme pause and segment advance.	200
ST314	This is a single programme controller designed for glass firing. It can also be used for pottery firing. The programme has up to 9 segments. Each segment is 1 fully adjustable ramp followed by an optional soak. The ramp can either be a controlled heating or a controlled cooling ramp- the ramp type is clearly shown on the mimic display. For simple pottery firing 2 segments will be used. For glass or glazing more segments are available to give complex firings of up to 9 heating or cooling ramps and 9 soaks. The maximum soak time is 99 hours 59 minutes.	215
ST325	This is a fully-programmable multi-stage 32 program controller. Each program can have up to 32 ramps & 32 soaks. Ramps may be heating or cooling with ramp rates in the range 1°C/hr to 998°C + full.	265

# Over-Temperature Trip Module

is an independent overtemperature trip module designed solely for internal fitment to the din rail of the kiln. It is an optional safety device designed to protect kilns from overfiring. It behaves like a resettable heat fuse. Operation of the trip is indicated by a series of beeps which indicate the type of fault

The ST121



# Other Controllers Stocked

Model	Description	Price£ Sterling
ST315	This is a 9 programme variant of the ST314 controller. This is currently the most popular model as it is capable of both pottery and complex glass firing.	225
ST316	This is a 9 programme controller designed for pottery firing. Each programme has up to 9 segments. Each segment is 2 fully adjustable ramps followed by a soak. It is similar in concept to the ST303(linking) controller- however linking is not required on the St316 due to the availability of multiple segments. For simple pottery firing only one segment will be used but more segments are available for more complex firing e.g. crystal glazing. The controller is capable of both controlled heating and controlled cooling so could be used for glass, but we recommend the ST314 or ST315 for glass as the mimic panel clearly shows if the controller is heating or cooling.	230
ST121	Optional DIN rail mounted temperature trip unit	99

Note: All prices are ex-works and exclude V.A.T.

Information package last updated 30/05/2014

In line with the Stanton policy of product enhancement, model specification and colour of kiln may differ from those illustrated.

E&OE.