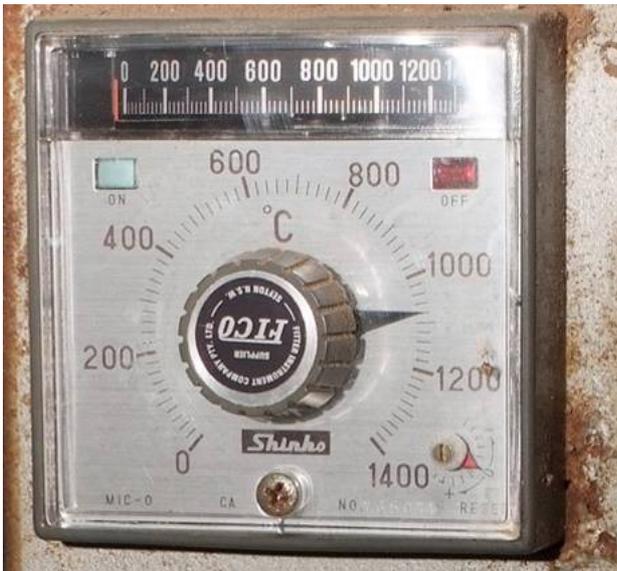


## Older Type Controller Manual

### SEMI-AUTO With Energy % Regulator



*(Controller appearance may vary)*

**NOTE:** Please read instructions before using your kiln.  
Failure to do so may result in damage to the kiln and it's contents.

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## SECTION 1 - Getting to know your Controller

Your controller may look different but should be similar with a controller, power % dial and various lights. There may be a cover and the door switch may activate differently, but the basic principles of how to run these controllers are the same.



Current Temp inside Kiln

Set Top Temp

Reset Button between Cycles  
& Cycle Complete Light

Elements ON , Power ON

% Power Adjustment / Speed

Door Switch

## **SECTION 2 – Programming your Controller**

### **2.0 Turning the Kiln On**

- I. Turn power ON at the power point/ wall switch.
- II. The “Cycle End” light should be illuminated.

### **2.1 Setting the Firing temperature**

Set the Temperature by adjusting the dial to the appropriate temperature you want the Kiln to switch OFF at. The kiln will fire and automatically turn OFF once it reaches that temperature.

**NOTE: The shelves and props in a Kiln can only handle up to 1280°C. Do not set the Temperature higher than 1280°C.**

## **SECTION 3 - Running the Kiln**

### **3.1 To Start the Firing**

When you have closed the door and engaged the door switch the Kiln should make a ‘clunk’ sound as the Kiln begins to run.

The Element light should be lit.

As the kiln rises in temperature you will see the ‘Current Temperature’ indicator rise.

**PLEASE NOTE:** If you have one of these Kilns is now more 30 years old. You should keep close supervision of Kilns that are this old and if you have significant rust in the frame you may need an inspection to ensure the kiln is safe.

## SECTION 4 - Firing Time

### 4.1 Energy Regulator Settings

When firing a Kiln you do not want to fire the Kiln too fast especially at lower temperature (if trapped moisture turns to steam the ware will break) otherwise you may experience breakages inside the kiln. In a Semi-manual Kiln the speed on the Kiln is adjusted by changing the % of power going to the elements.

To adjust the firing rate we can suggest the following settings for the % Energy Regulator given the temperature the kiln is at:

Kiln Temp	Energy %	Bungs
0-100C	25%	Out
101-250C	33%	Out
251C-800C	50%	In
801C +	100%	In

Bungs call also be left out to help with cooling down the Kiln.

The Kiln is cooling once the End Cycle Light is ON.

### 4.2 Influences on Firing Time

For kilns fitted with Non Indicating Control firing time depends upon many use factors including the type of ware, the mass of the ware and the temperature which the furnace is required to operate at. Once the operator has learned the heating time taken for the particular process for which the kiln is being used, this time should be noted so that in future, the kiln can be checked to observe that it is not taking an unusually long time to reach the set temperature- which could indicate a problem with the kiln.

**NOTE:** The firing time will vary slightly with variations in the mass of the load, but this is normal.

### 4.3 Firing Time - Influences on Firing Time

It is possible to set the firing rate to a speed that is faster than the kiln power can provide. Therefore it is important to learn what the kiln is capable of providing particularly at the very end of the firing. The maximum firing rate will be influenced by many factors including the type of ware, the mass of the ware and the maximum temperature to which the kiln is required to operate. Once the operator has learned the maximum heating rates and has the times, then the firing rate can be set so that it is always controlling the kiln and so the firing time (for a particular setting rate) from one firing to another will always be the same. The kiln can be checked to observe that it is not taking an unusually long time to reach the set temperature-which could indicate a problem with the kiln.