

# TnB Series Operating Instructions

Firing is the final step in bringing your piece of ware to life. The end result depends on you. Automatic firing is convenient but is not a substitute for personal care. Attention should be paid to every firing for best results.

Most ceramic bodies have only one exact point at which they will mature to their greatest degree of perfection. However, most of the ceramic bodies used in ceramics today have a firing range of one to two cones for maturity in which satisfactory results can be obtained. In no way can we control or guarantee the kiln turning off at just the right point. Only using the proper cone for the ware being fired and watching it closely can you protect the ware and the kiln. The warranty on the kiln does not cover damage from overfiring, regardless of circumstances involved. It is your responsibility to watch the cone at regular intervals and turn the kiln off as soon as the cone has bent.

Check the kiln frequently during the first few firings and note the color inside the kiln. After a while you will be able to determine, with considerable accuracy, the relationship color has to pyrometric cones.

Allow the kiln to cool before opening the lid. Cooling is usually twice the firing time.

All TnB series kilns have an infinite control switch and one or two integrated switch timers. The infinite switch controls all or part of the elements and the heat level of the entire firing as it regulates the percentage of time that these elements receive power.

The integrated switch timer controls all or a portion of the elements after an adjustable delay, it gives full power to these elements. It, therefore, controls the heat rise. In the case where there are two of these timers, they will control the heat rise in successive steps.

The best place to adjust the time required to fire is at the lowest temperatures, when the kiln is controlled by the infinite control switch. This is done by one of two methods or a combination of both. The first would be to adjust the infinite control switch to a higher or lower setting depending upon the effect you want. This raises or lowers the power given to this portion of the elements. Another method to control the firing is to adjust the switch timers to a longer or shorter interval, controlling the time that the kiln is firing on only a portion of the elements. This can be extended further in the case of the three switch kilns.

## Switch and Element Configuration

### Evenheat Models TnB 1210 & TnB 1413

These models differ slightly from other TnB models in that the infinite control switch (Switch #1) controls all four elements and functions in the same manner as the other models. The switch timer (Switch #2) also controls all four elements and when the timer runs down it turns all four elements up to full power, overriding any setting on the infinite switch.

### Evenheat Models TnB 1822

The infinite control switch (Switch #1) controls the power to half of the elements (second, fourth, sixth and eighth) by regulating what percentage of time these elements receive power. An indicated position of 1 will give 25 percent power to these elements. Position 3 will give approx. 50% power to these elements. Max will give 100% power to these elements.

## **Integrated Switch Timer**

These switches control the elements by giving them full power when the timer runs down. While the timer is running, the kiln is firing on the elements controlled by the infinite control switch only. When the timer runs down all or the remaining portion of the elements will begin to glow and receive full power.

## **Recommended Settings**

### **Models TnB 1210 and TnB 1413**

Before you fire

- Turn switches 1 & 2 to the OFF position
- Install desired cone and load kiln
- Engage lid prop if desired
- Leave top peephole open

Firing Procedure

- Set limit timer for total estimated firing time + 15 minutes
- Engage Kiln Sitter

Rotate Infinite switch (#1) to:

- 3 when firing to cones 022 through 015
- 4 when firing to cones 014 through 04
- 5 when firing to cones 03 through 8

Rotate Switch Timer (#2) to:

- 2 hrs. when firing to cones 022 through 015
- 2 hrs. when firing to cones 014 through 04
- 5 hrs. when firing to cones 03 through 8

## Recommended Settings

### Model TnB 1822

#### Before you fire

- Turn switches 1 & 2 to the OFF position
- Install desired cone and load kiln
- Engage lid prop if desired
- Leave top peephole open

#### Firing Procedure

- Set limit timer for total estimated firing time + 15 minutes
- Engage Kiln Sitter

Rotate Infinite switch (#1) to:

- 3 when firing to cones 022 through 015
- 6 when firing to cones 014 through 04
- Max when firing to cones 03 through 8

Rotate Switch Timer (#2) to:

- 2 hrs. when firing to cones 022 through 015
- 2 hrs. when firing to cones 014 through 04
- 3 hrs. when firing to cones 03 through 8