# Operating Instructions for ArtClay kiln AC Silver

has kiln been purpose designed for firing Artclay Silver. With the specially constructed fully programmable kiln with regulator and specially written software, it is easy to carry out the controlled firing of all ArtClay Silver products. It is possible to carry out fully automated firing, with a preliminary drying period, controlled temperature and firing time. The large inspection window enables the firing process to be observed.





- 1) Heating control lamp (LED)
- 2) Increase button
- 3) Decrease button
- 4) Set key (enters program selection)
- 5) Pre-set temperature
- 6) Current temperature

#### **Technical Data**

Max. temperature

Supply voltage

Capacity

System of protection

Probe

Weight

Dimensions of the firing chamber

Overall size

AC Silver kiln

900°C

230 Volts, 50 Hz

900 Watts

1

thermo couple NiCr-Ni (type K)

6 kg

 $(H \times W \times D)$ 

70 x 120 x 130mm

 $(H \times W \times D)$ 

275 x 225 x 245mm

# Operation

**Important:** The kiln should be used in a dry well ventilated room and placed on a fireproof surface. Any flammable materials should be kept at a safe distance from the kiln. See safety advice.

The kiln is ready for use apart from fitting the temperature sensor. Remove the sensor probe from the cardboard tube and carefully push the probe up to the mark into the opening at the back of the kiln. The probe should protrude by about 35mm into the firing chamber. The temperature probe is very fragile, fit with care. The sensor lead is plugged into the socket under the kiln. The kiln is now ready for use; plug into the mains (we recommend the use of a circuit breaker) switch on at the main switch - red knob on the right of the regulator. The kiln will start to heat on the default cycle, or previously programmed cycle.

After turning on the regulator displays all programmes and then the current control software. Then the **preset temperature** in red and current temperature in yellow. for the **first part of the cycle** (Drying). Use keys 2 and 3 to change the pre-set temperature of setpoint 1 (drying temperature). Keep the key depressed to scroll through changes.

To select the **second stage of the cycle** press the set key once. Again, the current temperature is shown on top in yellow and the **pre-set temperature** below in red. Use keys 2 and 3 to change the temperature of setpoint 2 (firing temperature). This is possible only while the value is displayed. The display will switch after a few seconds to the current stage in the program cycle.

If the set key is pressed once again the display shows in yellow the **heating time in degrees per hour** for the **first stage** and below indicates GrAd. Use keys 2 and 3 to change. If the Set button is pressed again the display shows the **hold time for the temperature of setpoint 2 in minutes** in yellow. The lower display will show TIME. Change with keys 2 & 3. The Heat control lamp (OUT1) is on while the regulator turns on the heating of the kiln. LED "OUT2" has no function.

**Note:** To bypass the drying cycle set the temperature of setpoint 1 (drying temperature) to 20°C.

### Pre-programmed example

- 1. Programme section = drying phase Heating up rate: 150°C per hour (press SET twice) up to 150 °C (thus duration = 1 hour)
- 2. Programme section = heating up to firing temperature 800°C (press SET once) without delay
- 3. Programme section = the firing temperature is held for 30 minutes (press SET 3 times)

## **Safety Advice**

Be careful not to touch the heated kiln, as the surface can become very hot. Always use the appropriate knob to open the hot kiln, never touch the metal bar. The kiln may only be operated on a fireproof surface. The distance to combustible materials should at least be 30 cm at the sides. The space above the kiln should at least be 50 cm. The working area should be sufficiently ventilated. The properties (maximum temperature, release of gas, health hazards, etc.) of the material to be fired should be known, otherwise avoid firing. If there is a risk of hazardous gas or vapour being released during firing, the kiln must be operated under an extraction hood with an appropriate exhaust capacity. Make sure that no molten material runs onto the lining of the firing chamber (muffle). A kiln with a damaged firing chamber should no longer be operated.