



CLAYMAN

Supplies Limited

Morells Barn • Park Lane • Lower Bognor Road • Lagness • Chichester • West Sussex • PO20 1LR
Telephone: +44 (0) 1243 265845 (2 lines + ansaphone) • Facsimile: +44 (0) 1243 267582

Email: Info@claymansupplies.co.uk • www.claymansupplies.co.uk

INFORMATION

EXAMPLE FIRING SCHEDULES

The following examples are offered as firing schedules that could be loaded into a controller to fire a kiln automatically. All schedules use two ramps as a simple starting point.

BISQUE FIRING

The principle that must be observed when firing to convert dry clay to pottery is that the first stage must be taken slowly. The "Normal Bisque" firing would cover ware that is thrown or hand built but with an even section. Large or thick pieces could be fired on the "Slow Bisque" firings.

Stages	Normal Bisque	High Bisque	Slow Bisque
Delay-on	0.00	0.00	0.00
First Ramp	100	100	60
Intermediate Temperature	600	600	600
Second Ramp	FULL	FULL	FULL
Cut-off Temperature	1000	1140	1000
Soak/Dwell	0.00	0.00	0.00

EARTHENWARE GLAZE FIRINGS

Stages	Brush-on Glaze 1000° (Cone 06)	Standard Earthenware 1100°C	High Earthenware 1140°C
Delay-on	0.00	0.00	0.00
First Ramp	100	100	100
Intermediate Temperature	300	300	300
Second Ramp	FULL	FULL	FULL
Cut-off Temperature	1000	1100	1140
Soak/Dwell	0.00	0.00	0.00



STONEWARE GLAZE FIRINGS

Stages	Mid-Range Stoneware 1200°	Standard Stoneware 1260° (See Note 2)
Delay-on	0.00	0.00
First Ramp	100	100
Intermediate Temperature	300	300
Second Ramp	FULL	FULL
Cut-off Temperature	1200	1235
Soak/Dwell	0.00	0.00

MISCELLANEOUS FIRINGS

Stages	Onglaze 780°	Lustre 750°
Delay-on	0.00	0.00
First Ramp	100	100
Intermediate Temperature	400	400
Second Ramp	FULL	FULL
Cut-off Temperature	780	750
Soak/Dwell	0.00	0.00

Note 1

Some controllers allow a delay to be input and also a dwell or soak at the end of the firing. These have been deliberately left at zero and can be added to suit the individual user. Two stage controllers vary on the second stage. Some allow a temperature rise to be entered, others operate a full power only and some allow a heat rise or have the equivalent of full power. If a temperature rise has to be set in the second ramp, try 250°C. This will allow the kiln to work at full power, but will probably show a decreasing heat rise over the hours as the kiln naturally slows nearer the higher temperatures.

Note 2

It has been found that kiln controllers give greater heat work as the temperature increases. Therefore to achieve a stoneware firing of cone 8-9 we suggest setting the cut-off temperature to 1235°C. A slight adjustment can then be made after the first firing. It should be remembered that indicators (pyrometers) or kiln controllers are indicators of temperature and the effects of faster or slower firings can cause extreme variations in the end result. This is known within ceramics as "heatwork". Cones are measures of heatwork and it is strongly recommended that cones are always used in conjunction with kiln controllers to appreciate the differences between heatwork and temperature indicated by a controller. Stoneware firings will always demonstrate the greatest potential differences between heatwork and indicated temperature.



Note 3

Kilns supplied for the craft, hobby and education market will often give 1300°C as the maximum temperature the kiln will work to. The manufacturer's mean 1300°C (Cone 10). If 1300°C were put into a controller as the cut-off temperature the kiln would overfire and it probably result in irreparable damage to the kiln.