CALCULATING KILN FIRING COSTS

This is a fairly simple calculation, to work out the firing cost of your kiln you will need to have the following information

Unit cost of electricity
Kilowatt Loading of Kiln
Total Length of firing time

Example

What is the firing cost for a 4.5kW kiln that takes 11½ Hours to fire.

For this example the unit cost of electricity is 0.07p per unit (1 kilowatt = 1 unit)

A 4.5kW kiln can draw a maximum of 4.5 units of electricity per hour.

4.5kW x 0.07p = 31.5p per hour (this is the maximum cost of the kiln per hour if it was continually firing at full power).

The firing time for the kiln is 11½ Hours, this is multiplied by the maximum cost per hour.

11.5 Hrs x 31.5p = £3.62 (this is the maximum cost of the firing if the kiln was continually firing at full power).

As a kiln is normally ramping for the first part of the firing (does not fire at full power) we would reduce the cost of firing by a third.

$\frac{£3.62}{3}$ x 2 = £2.42 firing cost of kiln.