



The Facts

Zone Control

Zone control is a feature that allows the kiln to fire each section of the kiln independently. This is done by placing a thermocouple in each section of the kiln. The controller reads each thermocouple and cycles each section on or off if it varies to much from the desired program. It is a great way to even out the heat in the kiln when the load is not uniform. It is also great for firing glass.

The variance in temperature from the desired program is referred to as “the lag”. The lag can be adjusted for tighter or looser variances. A tight variance will cause more cycling of the sections and usually results in longer firing times. If the lag is set too tight the kiln may not reach temperature. This is because each time a section is cycled off it is reducing the overall power of the kiln.

For instance when you are using a 3 section kiln you are running on 2/3rds power when 1 section is turned off. If the other 2 sections do not have enough power to compensate for the loss the kiln will stall out. Because of this we only offer Zone Control on models with the right Power to Volume ratio.

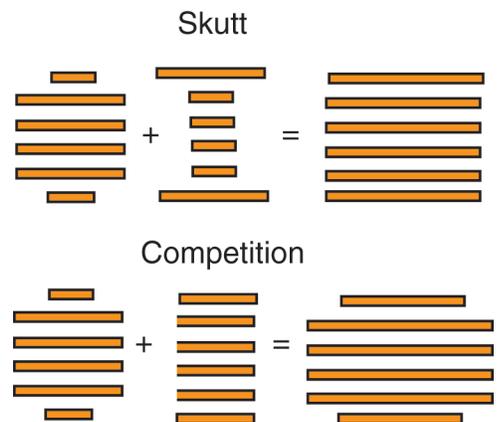
In order for a Skutt Kiln to be offered in Zone Control it must be able to handle a reasonably unbalanced load to it’s designated cone rating with the lag set at 10F. Some competitive models factory set their lags at 40F. That means that the sections need to vary by nearly a whole cone before Zone Control even kicks in.

Balanced Elements and Zone Control

Nearly all Skutt kilns have [Computer Balanced Elements](#). This means we design the elements so that more heat is put in areas of the kiln that naturally fire cooler. The top and bottom of the kiln lose heat faster than the center so Skutt puts hotter elements (more power) in those areas.

This has a tremendous impact on the efficiency and capability of Zone Cone. By balancing the heat in the chamber to start, Zone Control does not have to work as hard. You have less cycling and when the kiln needs to cycle the power is didtributed in the areas that need it the most.

The bottom line is money saved on electricity, tighter controls, and faster turn around times.



It's Not Needed For Most Applications

Since Skutt does balance their elements most people will not need Zone Control. For many people it is just two more thermocouples that they need to figure out how to load a shelf around or replace down the road.