

A certain company's Original schedule #3 calculation example **For SPEED sintering**

Super Speed Cycle (Total time = **90 minutes**)

	Program	Rate/Minuite	Temp	Time
stage 1	Heating Ramp	60°C	900°C	
stage 3	Heat Ramp	33°C	1555°C	
stage 4	Hold/Heat Soak		1555°C	45min
stage 5	Cooling Ramp	65°C	800°C	



Transfer to **Zircon SPEED with Carbon tray** Firing programing calculate example

Step 1 900°C-20°C(room temp)=880°C
 $880 \div 60^\circ\text{C}/\text{min} = 14.6(15\text{min})$

Thus, **Step 1 900°C Time 00:15**

Step 2 1555°C-900°C=655°C
 $655 \div 33^\circ\text{C}/\text{min} = 19.84(20\text{min})$

Thus, **Step 2 1555°C Time 00:20**

Step 3 1555°C, Hold 45min

Thus, **Step 3 1555°C Time 00:45**

Step 4 1555°C-800°C=755°C Cooling time
 $755 \div 65^\circ\text{C}/\text{min} = 11.61(12\text{min})$

Thus, **Step 4 800°C Time 00:12** **Table position 3 (eg)**

NOTE:Zircon SPEED has both type of trays, Ceramic and Carbon.

As a parameter,Above 5 hours sintering use for Ceraminc tray,

Under 5hours sintering use for Carbon tray.

KDF do not recommended Speed sintering for regular Zircon machine.

Only Zircon SPEED programing for Very Quick Cooling. Manual page 12

Caution: The quick firing stand and the muffle will be HOT.

Be sure use the tong and heat-resistant glove when placing the firing tray onto the quick firing stand.