You may use these furnaces after carefully following the instructions below.

- Log on to instrument in FOM when you start and log off when you finish.
- Maximum temperature of 1100 °C. The maximum ramp rate of 40°C/min may overshoot your setpoint temperature so lower ramp rates may be desired.
- The furnaces have 3-stage control meaning three unique ramp/temperature/hold settings can be programmed. 6-stage control can be performed by running two programs in sequence (see below).
- Opening the door during operation should suspend power to the elements.
- Setup menu is accessed when the furnace is powered on:
  - To access the setup menu, press ENTER when SETUP? Is displayed.
  - END OF PROGRAM should be set to ‘3’ which means the furnace will shut off at the end of the program.
  - If END OF PROGRAM is set to 1 or 2, the furnace will hold indefinitely at the final setpoint temperature
  - Do not adjust Tmax, Tcal, or Power Door settings.

Programming the furnace to run:

1) Press a number 1 through 9 to access a program number (if desired).
   a. Estimated run time will be displayed.
   b. Program 0 is a single setpoint program that will hold a set temperature till the STOP button is pressed.
2) To set Ramp/Temperature/Hold times for stages 1,2,3 (stage 1,2, or 3 lights will light when pressing buttons below):
   a. Press R to set ramps rates for stages 1,2,3 (0 to 40°C/min).
   b. Press T for stage 1,2,3 setpoint temperatures (50 to 1100°C).
   c. Press H for stage 1,2,3 hold times (0 to 99:59 hours).
3) For air-exchange furnace only (3-1750A furnace), the air exchange fan speed can be set:
   a. Press A once to set Stage 1 fan speed.
   b. Enter 0 for off, 9 for full speed, then ENTER. (Setting of 9 is ~5 air exchanges per minute, and may reduce the maximum possible temperature).
   c. Press A again to set fan speed for other stages, S1, S2, S3.
   d. Fan speeds are stored in memory along with Ramp/Temperature/Hold settings.
4) Press S key to start the program or Press D for delay start duration, followed by S to start the delay timer.
5) Two programs can be linked to run in sequence to enable 6-stage programming.
   a. Press the S key to start the current program.
   b. Use the digit keys to enter the next program number, then ENTER.
   c. The program cycle time displayed should be the combination of the two programs and the program number will alternate between the two selected programs.
6) Press STOP at any time to abort the current program

Consult the Vulcan Furnace Manual for explanation of any other features.