

BOX TYPE FURNACE, EQUIPMENT SPECIFICATION

Description Box Furnace with retort, Model number FBS-12-12-12-1F

☑ Internal Chamber Dimension 16" H X 20" W X 20" D

☑ Chamber Working Area 12" H X 12" W X 12" D (Inside the retort)

☑ External Chamber (approx.) 70" H X 76" W X 44" D

o This includes the control and atmosphere panel

☑ Connected Load: 16.5 KW, 480V/ 3ph / 60 Hz, Current(calculated) 19.87 Amps for heating

o Maximum Temperature 1,120°C (2,048°F)

o Operating Temperature Up to 1,100°C (2,012°F)

o Type of Heat Iron-Chrome-Aluminum alloy wire helically wound and embedded in the ceramic refractory forms.

o Located both side walls and the floor of the heating chamber

o Insulation Light weight ceramic fiber & fire brick, Hearth Firebrick to support the retort inside the furnace

☑ Shell Construction Fabricated/Welded carbon steel

o Finish Dimenso Blue industrial enamel

o Stand Angle frame, hearth height 42"

☑ Retort and Atmosphere system for Furnace model #FBS-12-12-12-1F

ATMOSPHERE RETORT

☑ The retort inner working chamber is 12" high by 12" wide by 12" deep.

o Retort made of Haynes 230 alloy material with maximum operating temperature to be 1,100°C

o The piping used for the retort will all be Inconel 600

o The retort will be held to the faceplate of the furnace, having a removable insulated retort plug (door) with a pivot

support hinge assembly for moving the retort plug into place

o There will be a removable/replaceable gasket to seal the retort when the plug is in place. There will be latches to seal

the retort plug in place for processing. The retort will have an inlet and outlet for customer supplied gases and a

thermocouple port.

SITE PORT

☑ There is a sealed 2" diameter viewing area in the retort plug with a removable/replaceable Quartz lens.
This will be aligned to

allow direct sight inside the retort of the customer product being processed as needed