# Data Sheet Model: MFSO-ASTM

Minimum Free Space Oven (ASTM)



### INTRODUCTION

Minimum Free Space oven (MFSO-ASTM) is utilized for this drying process which features a compact heated chamber that provides the lowest practical volume, or minimum free space.

A known mass of coal is heated using a Air stream to a temperature of 105 to 110 °C as per ASTM D3173 -11 and held until its mass remains constant. The mass loss is used to determine the coal's moisture content.

The temperature required as per ASTM D3173 -11 is 120  $^{\circ}$ C to 200  $^{\circ}$ C



High end Microprocessor PID controller.

- 2 Flow meters are fitted as standard to monitor gas flow of Air & chamber seal integrity.
- Aluminium loading tray and puller are supplied as standard accessories.
- External Dimensions (mm): 210 x 465 x 548 (H x W x D) (Indicative)

Supply / Power: 230V, Single Phase, 500 Watts.

#### **SPECIFICATIONS**

Maximum Temperature: 210°C

Maximum Continuous Temperature: 210°C

- Chamber dimensions (mm)- 43 x 195 x 300 (2.5L) (H x W x D)
- The ovens have an aluminum chamber that resists oxidation and corrosion, resulting in excellent temperature uniformity over the working volume.
- Before accessing the front of the work chamber, the air flow passes through a preheating chamber and is adjustable via a flow meter mounted on the control panel.
- The MFSO operates with a regulated flow of air as per ASTM D3173 -11.

#### OPTIONS

- Over temperature protection
- Multi segment, multi program storage Controllers
- Crucibles (Quartz/Alumina/Fused Silica) with well-fitting lids
- Vacuum desiccator with gas inlet & gas outlet

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