# MUFFLE FURNANCE 1200





### **TECHNICAL DATA**

Model AVI-100HA / HB / HC / HD Max.Temp : 1150°C Contious (max1200°C)

Model AVI-100 A/B Max.Temp : 930°C Continous (max1000°C) Supply : 230V, Single Phase, 50Hz

Muffle furnace sometimes referred to as retort furnace in historical usage is a furnace used to isolate the subject material from fuel and all products of combustion, which includes gases and flying ash. Muffle Furnace in the lab environment is used to change the physical properties of samples at very high temperatures with low risk of cross-contamination in order to determine what proportion of a sample is non-combustible and non-volatile (i.e., ash).

With the advances of high-temperature heating



elements there is no combustion involved in the temperature control of the system, which allows greater control of temperature uniformity and assures isolation of the material being heated from the byproducts of fuel combustion. The newer furnaces can produce working temperatures of up to 1,800 degrees Celsius and incorporate programmable digital controllers, allowing automatic execution of ramping, soaking, and sintering steps.

AVANTE manufactured Muffle Furnaces are constructed to conform with the robust requirements of Laboratory & Industrial applications. It is used for engineering examinations of soils, aggregates, cement testing, ashing organic and inorganic samples, gravimetric analysis, ignition tests, etc.



#### CONCEPTION

The heating element wounded on the muffle and is created of best quality Nichrome wire for 930 C & Kanthal A1 wire O for 1200 C. The heating element is coiled with superior quality Cerawool (Ceramic Fiber) blanket and the spacings are insulated appropriately. The door is constructed of brickwork and cementing tailored with an aperture at the Center. The powerful Microprocessor based auto tuned PID controller provides the temperature control to circumvent overshoot. The display is dual sided, CE certified and featured to enter set value & process value.

## **TECHNICAL DATA**

AVI-100 SERIES(Maximum Temperature 930 Deg.C.)					
Models	Internal Size H x W x D (cm)	External Dimension H x W x D (cm)	Rating kw	Max Temperature	
AVI-100A	10 x 10 x 23	113 x 71 x 98	1.6	930°C	
AVI-100B	15 x 15 x 30	133 x 81 x 98	3.3	930°C	

AVI-100H SERIES(Maximum Temperature 1150 Deg.C.)					
Models	Internal Size H x W x D (cm)	External Dimension H x W x D (cm)	Rating kw	Max Temperature	
AVI-100HA	10 x 10 x 23	61 x 46 x 72	1.8	1150°C	
AVI-100HB	15 x 15 x 30	67 x 47 x 68	3.5	1150°C	
AVI-100HC	20 x 20 x 30	67 x 59 x 82	3.5	1150°C	
AVI-100HD	22.5 x 22.5 x 45	87 x 55 x 79	7	1150°C	

#### OPTIONAL FEATURES

- Data Logger
- CFR 21 part 11 compliance software for data logger
- Safety digital temperature controller
- Timer

#### S --> Standard Model

STANDARD MODEL

Inner made of ceramic pot, Outer case made from thick gauge Mild Steel (CRCA) sheet.

# G --> GMP Model

Inner made of ceramic pot, Outer case made from thick gaug Stainless Steel(S.S.<sup>304</sup>).



Note : Available in GMP & Standard Model.

Note: The design, color, specification, and models are subject to transformation due to ending research, development, and technological advances.

# India

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