# Data Sheet Model: TSHvc15/75/450

1500 ℃ Maximum Temperature, Single Zone Horizontal Vacuum Tube Furnace



#### INTRODUCTION

The TSHvc15 furnace is a floor mounted tube furnace ideal for high vacuum or low vacuum processing thermal processing applications.

The TSHvc15/75, Single Zone Tube furnace includes a work tube with internal tube diameter of 75 mm as the vacuum chamber.

TSHvc15/75/450 comes with a heated zone length of 450 mm.

#### SPECIFICATIONS

Maximum Temperature: 1500°C

Maximum Continuous Temperature: 1500 °C

Heating is via silicon carbide elements.

Temperature Sensor: 'R' type Thermocouple.

Energy efficient, high quality, low thermal mass insulation.

Over Temperature protection controller.

High end Microprocessor PID controller.

## OTHERS

The vacuum system comprising of the following is included:

Vacuum vessel- Ceramic tube fitted with stainless steel end seals.

Rotary pump-two stage sliding vane type.

Vacuum Isolation Valve.

A wide range vacuum gauge is used for both High vacuum and Low Vacuum measurements.

Low Vacuum Model: Ultimate vacuum - better than 1 x 10<sup>-2</sup> mbar, with clean empty work tube.

High Vacuum Model has a Turbomolecular pump for a vacuum level of 1 x 10<sup>5</sup>mbar or better with clean empty work tube.



Tube External Dimensions (mm): H x W x D Net Wt. (Nominal) TSHvc15/75/450 1500 x 1700 x 600 195 kg

Supply: 230V- 1 Phase - 50/60Hz

Energy rating: 5.5 kW

### OPTIONAL FEATURES

Multi segment, multi program storage controllers.

Gas inlet with additional safety system for use with combustible atmospheres.

Flowmeters and valves for control of gas throughput.

Semi-automatic or fully automatic vacuum/heating cycles.

Low Vacuum system Cat No.: TSHvc15/75/450-LV

High Vacuum system Cat No.: TSHvc15/75/450-HV

Vertical versions are available which have a separate console

## **Elite Thermal Systems Limited**