

**HOT AIR OVEN Nx™**  
 (New Technology oven with Digital Controls S.Steel Chamber)

**INTRODUCTION**

The Hot Air Oven is used to determine the effect of ageing on various physical properties of any type of materials i.e. Fabrics, Yarns, Plastics, Paper, etc. The material is usually kept inside the oven so that effects of long-term ageing are reproduced within a much shorter duration of time. To do the analysis, the physical properties of the material, under test, are determined before ageing and again after ageing to assess its suitability for a specific purpose. In Textiles, it is specifically used for drying as well as Perspiration Fastness Test.

**EQUIPMENT**

Paramount Hot Air Oven Nx™ is ergonomically designed with latest German Technology for guaranteed performance. The Equipment has a user friendly, head-up Control panel for convenience and ease in operations. It has a triple walled inner chamber made of special grade stainless steel. Two perforated Stainless Steel shelves are provided for keeping the samples. The inner walls are made of Stainless Steel and outer walls of mild steel sheet, duly powder coated for striking appearance. The forced air circulation system, with a horizontal blower, keeps the temperature in the inner chamber uniform and consistent. The Temperature Range is from ambient to 250 °C with an accuracy of ± 2 °C. It has 2 special Heaters of 750 watts each. The Heaters are made of high-quality chrome wire and finest ceramic Beads. The Heaters are duly placed in, specially fabricated deep drawn ribs, in the Inner Stainless Steel Chamber, for uniform Temperature in the Oven.

The insulated Door is fixed with toughened Glass view panel, so that the sample inside can be viewed without disturbing the Temperature. The complete circuitry is on the top, with a special cooling Fan, to let the Oven run continuously for unusually longer hours. A specially fabricated door with specially designed handle keeps the inside temperature completely stable. The specially fabricated footrest keeps the whole oven in correct equilibrium. The equipment adheres to CE requirements as a special MCB is provided at the back to protect the unit from sudden (high or low) Voltage fluctuations. The unit is fixed with Caution and other stickers, as per International Safety norms. The Equipment is provided with ventilation port with adjustable opening on the control panel to monitor natural change of air inside through convection.

**SALIENT FEATURES**

- Specially designed equipment used for heating, drying and to determine the effect of ageing.
- Ergonomically designed equipment with excellent aesthetics and guaranteed performance. The only equipment of its kind available in India incorporating German Technology.
- Digital Temperature Controller having Range : Ambient to 250° C degrees ± 1° C.
- Double Walled Body with air curtains on the Front and Booth sides to keep the outer body Cool. Inside Chamber completely made of Stainless Steel (Grade SS 316).
- A special Thermostat to control the flow of current to Heaters for uniform Heating.
- Insulated Glass Window to view the sample without opening the Door.
- Twin Blowers are fitted to keep the Door and the Body Cool and the third Blower to keep Inside Temperature Uniform.



- Air Slider unit to eject the inside humidity of the chamber.
- Supplied complete with Two stainless Steel (Grade SS 316) Trays to keep the samples.
- Supplied with inspection & calibration Certificates.

**Hot Air Oven Nx™ is supplied complete with below accessories.**

Main Unit (Complete Inside Made of SS 316 Grade)	: 01 No.
S.Steel Shelves (Made of Stainless Steel Special Grade)	: 02 Nos.
This User's Manual	: 01 No.
Calibration Certificate (Traceable to NPL)	: 01 No.
Inspection & Conformance Certificate	: 01 No.

**TECHNICAL DETAILS**

Heat Circulation	: Horizontal Fan Assisted
Usable Volume	: 3.375 cubic feet
Capacity	: Up to 4 perspiroMETER Units
No. of Shelf's	: 2 Stainless Steel Shelves (Detachable)
Maximum Temperature	: Ambient to 250 °C
Least Count	: 1 °C
Accuracy	: ± 2 °C
Heater Capacity	: 750 watt x 2 Heaters = 1500 Watt
Electric Supply	: 220 ± 10% Volt. 50 Hz Single Phases. AC.
Blower I	: To keep the control panel cool
Blower II	: Keep the internal chamber temperature uniform.
Blower III	: Keep the door cool.
Rate of Heating Thermostat (19) 20 %	: 1° C Per 1 ½ Minute
Thermostat at (19) 50 %	: 2° C Per Minute
Thermostat at (19) 100 %	: 3° C Per Minute
Overall Dimensions of the UNIT	: 550 (L) x 700 (W) x 820 (H) mm. 21.5" (L) x 27.5" (W) x 32.5" (H) Inch.
Net weight of the unit	: 84 kg. (185 lbs)

**RELATED STANDARDS**

ASTM D 5427 - 98