

## H&E 31L-200C Vacuum Oven

- COMPACT SIZE WITH 31 LITERS
- POPULAR AND HIGHLY RELIABLE
- DIGITAL PID CONTROLLER FOR EASY AND FASTER TEMPERATURE SETTING WITH OVER TEMPERATURE ALARM INDICATION
- INDEPENDENT OVER TEMPERATURE SAFETY PROTECTION
- EASY TO READ VACUUM GAUGE
- HIGHLY VERSATILE OVEN FOR ATMOSPHERIC OR REDUCED ATMOSPHERE OPERATION
- SUITABLE FOR SOLVENT REMOVAL
- TOUGH STEEL CONSTRUCTION WITH STRONG DOOR CLOSURE
- TOUGHENED GLASS WINDOW WITH POLYCARBONATE SAFETY SCREEN
- FRONT MOUNTED PUSH-ON CONNECTORS



### Versatile

By using reduced pressure, *H&E Vacuum Oven* enables heat sensitive materials to be dried at low temperatures. Alternatively, more stable samples may be dried more rapidly at higher temperatures, without fan circulation.

This oven is also particularly useful for controlled atmosphere heating (e.g. curing of resins under nitrogen or reduced oxygen conditions). Since the inner chamber is sealed, it may also be suitable for solvent removal work, subject to adequate exhaust and ventilation conditions being provided for the oven and room respectively.



### Construction

*The H&E Vacuum Oven features a spacious rectangular chamber with toughened glass viewing window and shatter-resistant safety screen*  
*This oven is NOT designed for use at positive pressures. The vacuum level achievable is a function not of the oven but of the pump used with it.* The outer case is tough, baked epoxy-polyester painted steel, to look good even under the most demanding working conditions.



The vacuum chamber is a robust light alloy casting supplied with two shelves and three shelf positions. The large size viewing window allows inspection of the test materials. The chamber is heated by large area heater panels strapped to its outer surface.

Door closure is achieved via a strong and positive twist action latch



Glass fibre insulation maintains safe, low outer case temperatures. The chamber is closed by a 12.5mm thick toughened glass plate sealing onto a silicone rubber gasket.

This glass plate is mounted onto the door by 4 spring-loaded pins to ensure an excellent, even seal to the chamber.



As an extra safety precaution a 4mm thick shatter resistant polycarbonate safety shield covers the door window.

### Temperature Control

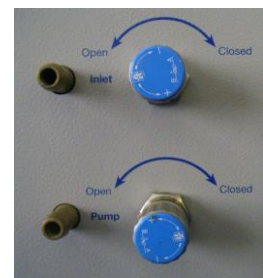
An electronic digital PID controller allows for easy and faster temperature setting with integral over temperature alarm indication.

Temperatures up to 200°C are possible via the PID controller. An independent over-temperature safety circuit protects sensitive samples from over-heating.



### Vacuum Controls

Reliable, needle type inlet and exhaust valves are fitted. These are situated near the bottom front corner of the oven for convenient connection to a vacuum pump, vapour trap or exhaust. The serrated nozzles accept flexible vacuum tubing of 10-12mm bore. A vacuum gauge is fitted showing vacuum pulled, from 0 to 1000 mbar.



Technical Specifications			
Capacity Litter	31	Temperature control	Digital PID
Temperature range [Ambient temperatures <25°C]	To 200°C	Power rating	230v/1000w
Shelf ( w x d ) mm	366 x 290	Internal dimensions (h x w x d) mm	260 x 375 x 310
Number of shelves	2	Overall dimensions (h x w x d) mm	420 x 630 x 425
Number of shelf positions	3	Weight, kg	43
Interval between positions, mm	75	Tubing connections	10-12mm bore