

General Purpose Industrial Oven - GP

General Information

The GP general purpose 300°C industrial ovens are supplied in three sizes and two configurations: vertical (A) and horizontal (B) airflow.

The industrial oven range also provides a foundation upon which a large variety of custom modifications can be added. Typical examples of which are the more sophisticated control systems and data recording that is required for applications such as AMS2750E heat treatment under Nadcap, or modifications to handle heavier loads or assist in loading and unloading the oven, or simply larger chamber sizes than are offered in the standard range.



Standard features

- 300°C maximum operating temperature
- Carbolite Gero 301 controller, with single ramp to set-point & process timer
- Powerful vertical (A) or horizontal (B) airflow for optimum uniformity
- Built to withstand the rigours of a production environment
- Long lasting, polished 430 grade ferritic stainless steel internal case
- Robust external construction from steel section & zinc coated mild steel panels
- Mineral insulated metal sheathed heating elements
- Low thermal mass insulation for high energy efficiency
- Adjustable chamber ventilation

Options (specify these at time of order)

- Over-temperature protection (recommended to protect valuable contents & for unattended operation)
- A range of sophisticated digital controllers, multi-segment programmers and data loggers is available. These can be fitted with RS232, RS485 or Ethernet communications
- Access port for independent thermocouple
- Cable entry ports
- Bespoke specifications are available for AMS2750 (Nadcap) compliant applications
- Additional shelves
- Heavy duty reinforced base and shelves
- Optional floor stand
- Stoving & curing option for extraction of small volumes of volatile solvents

Technical Specifications

General Purpose Industrial Oven - GP

GP220A

| | |
|---|------------------|
| Max temp (°C) | 300 |
| Volume (litres) | 220 |
| Heat-up time (mins) | 75 |
| Recovery time (mins) | 24 |
| Temp stability (°C) | ±0.5 |
| Temp uniformity (°C) | ±5.0 |
| Dimensions: Internal H x W x D (mm) | 610 x 610 x 610 |
| Dimensions: External H x W x D (mm) | 1240 x 862 x 850 |
| Shelves fitted / accepted | 3 / 5 |
| Shelf loading each / total (kg) | 15 / 45 |
| Optional heavy duty reinforced base max. weight (kg) | 150 |
| Optional heavy duty shelves max. quantity | 3 |
| Optional heavy duty shelves max. weight / shelf (kg) | 50 |
| Doors | Single door |
| Configuration | Bench-top |
| Air changes / hr | 160 |
| Max power (W) | 3000 |

GP330A

| | |
|---|------------------|
| Max temp (°C) | 300 |
| Volume (litres) | 330 |
| Heat-up time (mins) | 80 |
| Recovery time (mins) | 28 |
| Temp stability (°C) | ±0.5 |
| Temp uniformity (°C) | ±5.0 |
| Dimensions: Internal H x W x D (mm) | 915 x 610 x 610 |
| Dimensions: External H x W x D (mm) | 1545 x 862 x 850 |
| Shelves fitted / accepted | 4 / 8 |
| Shelf loading each / total (kg) | 15 / 60 |
| Optional heavy duty reinforced base max. weight (kg) | 200 |
| Optional heavy duty shelves max. quantity | 4 |
| Optional heavy duty shelves max. weight / shelf (kg) | 50 |

General Purpose Industrial Oven - GP

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| Doors | Single door |
| Configuration | Floor-standing |
| Air changes / hr | 110 |
| Max power (W) | 4500 |

GP450A

| | |
|---|------------------|
| Max temp (°C) | 300 |
| Volume (litres) | 450 |
| Heat-up time (mins) | 75 |
| Recovery time (mins) | 30 |
| Temp stability (°C) | ±0.5 |
| Temp uniformity (°C) | ±5.0 |
| Dimensions: Internal H x W x D (mm) | 1220 x 610 x 610 |
| Dimensions: External H x W x D (mm) | 1850 x 862 x 850 |
| Shelves fitted / accepted | 5 / 11 |
| Shelf loading each / total (kg) | 15 / 75 |
| Optional heavy duty reinforced base max. weight (kg) | 250 |
| Optional heavy duty shelves max. quantity | 5 |
| Optional heavy duty shelves max. weight / shelf (kg) | 50 |
| Doors | Single door |
| Configuration | Floor-standing |
| Air changes / hr | 80 |
| Max power (W) | 6000 |

GP220B

| | |
|---|------------------|
| Max temp (°C) | 300 |
| Volume (litres) | 220 |
| Heat-up time (mins) | 75 |
| Recovery time (mins) | 24 |
| Temp stability (°C) | ±0.5 |
| Temp uniformity (°C) | ±5.0 |
| Dimensions: Internal H x W x D (mm) | 610 x 610 x 610 |
| Dimensions: External H x W x D (mm) | 910 x 1190 x 850 |
| Shelves fitted / accepted | 3 / 5 |
| Shelf loading each / total (kg) | 15 / 45 |
| Optional heavy duty reinforced base max. weight (kg) | 150 |

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|--|-------------|
| Optional heavy duty shelves max. quantity | 3 |
| Optional heavy duty shelves max. weight / shelf (kg) | 50 |
| Doors | Single door |
| Configuration | Bench-top |
| Air changes / hr | 160 |
| Max power (W) | 3000 |

GP330B

| | |
|--|------------------|
| Max temp (°C) | 300 |
| Volume (litres) | 330 |
| Heat-up time (mins) | 80 |
| Recovery time (mins) | 30 |
| Temp stability (°C) | ±0.5 |
| Temp uniformity (°C) | ±5.0 |
| Dimensions: Internal H x W x D (mm) | 610 x 915 x 610 |
| Dimensions: External H x W x D (mm) | 910 x 1495 x 850 |
| Shelves fitted / accepted | 3 / 5 |
| Shelf loading each / total (kg) | 15 / 45 |
| Optional heavy duty reinforced base max. weight (kg) | 225 |
| Optional heavy duty shelves max. quantity | 3 |
| Optional heavy duty shelves max. weight / shelf (kg) | 75 |
| Doors | Double door |
| Configuration | Bench-top |
| Air changes / hr | 110 |

GP450B

| | |
|--|------------------|
| Max temp (°C) | 300 |
| Volume (litres) | 450 |
| Heat-up time (mins) | 75 |
| Recovery time (mins) | 35 |
| Temp stability (°C) | ±0.5 |
| Temp uniformity (°C) | ±5.0 |
| Dimensions: Internal H x W x D (mm) | 610 x 1220 x 610 |
| Dimensions: External H x W x D (mm) | 910 x 1800 x 850 |
| Shelves fitted / accepted | 3 / 5 |

General Purpose Industrial Oven - GP

| | |
|--|-------------|
| Shelf loading each / total (kg) | 20 / 60 |
| Optional heavy duty reinforced base max. weight (kg) | 225 |
| Optional heavy duty shelves max. quantity | 3 |
| Optional heavy duty shelves max. weight / shelf (kg) | 75 |
| Doors | Double door |
| Configuration | Bench-top |
| Air changes / hr | 80 |

Please note:

- Uniformity is measured in an empty chamber with vents closed, after a stabilisation period
- Shelf loadings are based on evenly distributed weight
- Maximum power and heat up times based on a 240V supply
- The uniform volume is smaller than the total chamber volume
- Minimum operating temperature is approximately ambient +30°C