Despatch’s LCC/LCD 2-14 clean process ovens are designed to meet the demands of production and large scale R&D environments. A variety of tailored options are available to meet your specific needs. Typical applications for these ovens include die-bond curing and other semiconductor packaging processes, depyrogenation, sterilization and drying for life sciences. The ovens are configured for 50/60 Hz and available in all voltages used around the world.

Where minimal contamination is essential, the LCC/LCD2-14 Series ovens offer the highest standards in HEPA filtration. Re-circulated airflow is 100% HEPA filtered for operation at ISO Class 5 (Class 100) or better within the oven chamber. This oven can be ordered without HEPA filtration.

**FEATURES AT A GLANCE**

- Available in 3 atmosphere configurations:
  - **Air atmosphere**: Includes a forced exhaust fan for rapid cooling.
  - **Nitrogen atmosphere**: Lowers oxygen to below 100ppm to prevent oxidation. Includes water cooling coil and programmable control of the nitrogen and water.

- Stainless steel interior and exterior with all interior seams continuously welded on the insulation side to protect the work chamber from contamination.

- HEPA filtration—Recirculated airflow is 100% HEPA (High Efficiency Particulate Air) filtered for operation at ISO Class 5 (Class 100) throughout the cycle.

  Magnehelic™ gauge monitors the HEPA filter pressure drop so you know when it is time to replace the filter.

- **Protocol 3™ control** with large LCD display, integrated data logging capabilities and USB port for simple oven set-up and data export.

- Programmable door lock with electronic release prevents operators from opening oven door when cycle is in process.

- Lockable disconnect switch on the control panel for easy servicing.

- Modbus communications connection (RS485) for remote monitoring and recording.

- End of cycle and high limit audible and visual alarm, that can be seen and heard from a distance.

- UL & C-UL listed open control panel.

**MODEL OPTIONS**

- **Maximum temperature of** 260°C (500°F) with LCC2-14
  350°C (662°F) with LCD2-14

- With HEPA filtration (LCC/LCD2-14)
  (Can be ordered without)

- Air or Nitrogen atmosphere configurations
## PHYSICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Chamber size (width x depth x height)</th>
<th>25.5&quot; x 26 x 37 in. (64.5 x 66 x 94 cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity in cubic feet (liters)</td>
<td>14 (396)</td>
</tr>
<tr>
<td>Overall size (width x depth x height)</td>
<td>47.5 x 41.5 x 71 in. (121 x 105 x 180 cm)</td>
</tr>
<tr>
<td>Overall size (width x depth x height) for pass-through</td>
<td>50 x 44 x 74 in. (127 x 112 x 188 cm)</td>
</tr>
</tbody>
</table>

### Electrical:
- Three phase 50/60 Hz, 208 volts, 52 amps
- Three phase 50/60 Hz, 240 volts, 47 amps
- Three phase 50 Hz, 380 volts, 30 amps
- Three phase 50 Hz, 415 volts, 29 amps
- Three phase 60 Hz, 480 volts, 22 amps

Heater: 16 kW

### Number of shelves provided
- 2

### Maximum number of shelves
- 11 on 3" (7.62 cm) centers

### Shelf dimensions (width x depth)
- 25 x 25.75 in. (63.8 x 65.4 cm)

### Approximate net weight
- 955 lbs (434 kg)

### Approximate domestic shipping weight (export adds weight)
- 1500 lbs (680 kg)

## FUNCTIONAL SPECIFICATIONS

### Time to temperature with no load (50˚C to 100˚C)
- 3 minutes

### Time to temperature with no load (50˚C to 200˚C)
- 9 minutes

### Time to temperature with no load (50˚C to 260˚C)
- 15 minutes

### Time to temperature with no load (50˚C to 350˚C)
- 35 minutes

### Cooling time to temperature with no load (100˚C to 65˚C)
- 41 minutes (air atmosphere)
- 15 minutes (nitrogen atmosphere)*

### Cooling time to temperature with no load (175˚C to 65˚C)
- 82 minutes (air atmosphere)
- 20 minutes (nitrogen atmosphere)*

### Cooling time to temperature with no load (260˚C to 65˚C)
- 95 minutes (air atmosphere)
- 25 minutes (nitrogen atmosphere)*

### Cooling time to temperature with no load (350˚C to 65˚C)
- 116 minutes (air atmosphere)
- 30 minutes (nitrogen atmosphere)*

### Temperature uniformity at 100˚C
- +/- 1˚C

### Temperature uniformity at 175˚C
- +/- 2˚C

### Temperature uniformity at 260˚C
- +/- 3˚C

### Control stability
- +/- 0.5˚C

### LCD operating range with 20˚C ambient - air (nitrogen atmosphere)
- 50˚C to 350˚C (30˚C to 350˚C)

### LCC operating range with 20˚C ambient - air (nitrogen atmosphere)
- 50˚C to 260˚C (30˚C to 260˚C)

### Maximum load capacity
- 400 lbs (181 kg)

### Maximum shelf capacity
- 50 lbs (23 kg)

### 1.5 HP recirculating fan
- 950 CFM (448 liter/sec)

### OPTIONS
- Silicone-free construction
- Nitrogen atmosphere
- Door interlock switch turns off heater and fan when door is opened
- Chart recorders
- Three color process stack light
- Extra shelves
- Data acquisition software
- Non-HEPA filtration model
- CE compliance

**Notes:**
- Uniformity figures are based on a nine-point test conducted in an empty oven after stabilization period. Uniformity can vary slightly depending on unit and operating conditions.
- Class 100 HEPA filtration will limit ramp rates.
- Minimum operating temperature and cooling times based on:
  - Air atmosphere based on 20°C ambient temperature measured at the fresh air inlet.
  - Nitrogen atmosphere based on water flow rate of 3 GPM (11 LPM) at a temperature of 55 °F (13 °C).
- Specifications are subject to change without notice. If the existing specifications differ from yours, ask about our customizing capabilities.