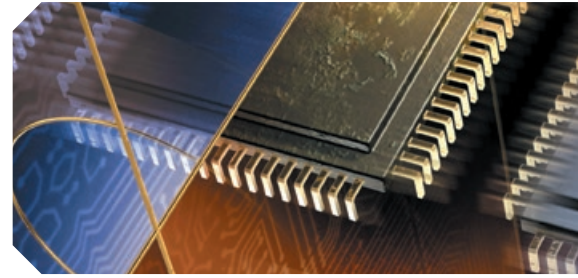


◆ LCC and LCD Stackable Clean Process Ovens

Save valuable floor space

Stainless steel interior and exterior



The Despatch LCC/LCD stackable clean process ovens are designed to save valuable floor space and provide a variety of tailored options for 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 oven is configured for 220-240 volts, 1 phase, 50-60 hz.

For production environment processes where minimal contamination is essential, the LCC and LCD Series ovens offer the highest standards in HEPA filtration. Re-circulated airflow is 100% HEPA (High Efficiency Particulate Air) filtered for operation at ISO Class 5 (Class 100) or better within the oven chamber. This oven can also be ordered without HEPA filtration.

FEATURES AT A GLANCE

- ◆ Available in air or nitrogen atmosphere configurations (100ppm oxygen capability). Forced exhaust is standard on all models for rapid cooling. Programmable control of the nitrogen and cooling water is standard on the nitrogen atmosphere units.
- ◆ Lockable disconnect switch on the control panel for easy servicing.
- ◆ Protocol 3™ control with large LCD display, integrated data logging capabilities and USB port for simple oven set-up and data export.
- ◆ Stainless steel interior and exterior with all interior seams continuously welded on the insulation side to protect the work chamber from contamination.
- ◆ Programmable door lock with electronic release prevents operators from opening oven door when cycle is in process.
- ◆ Stackable design allows for independent batch processing.
- ◆ HEPA filtration— Recirculated airflow is 100% HEPA 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.
- ◆ 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

- ◆ Two sizes: 1.6 or 5.1 cu ft (45 or 144 liter)
- ◆ Maximum temperature of 260° C (500° F) with LCC 350° C (662° F) with LCD
- ◆ With or without HEPA filtration
- ◆ Fast rate HEPA filter
- ◆ Air or nitrogen atmospheres



| LCC/LCD | 1-16 | 1-51 |
|--|---|---|
| PHYSICAL SPECIFICATIONS | | |
| Chamber size (width x depth x height) * Clear opening width is reduced by 1.5" (3.8 cm) due to 3/4" (1.9 cm) shelf supports on each side. | 15* x 14 x 14 inches 38* x 36 x 36 cm | 23* x 20 x 20 inches 58* x 51 x 51 cm |
| Capacity in cubic feet (liters) | 1.6 (45) | 5.1 (144) |
| Overall size (width x depth x height) | 32.5 x 39.0 x 21.5 in. 83 x 99 x 55 cm | 41.5 x 46.0 x 28.0 in. 106 x 117 x 71 cm |
| Electrical single phase 50/60 HZ * Heater capacity based on 240 volt supply. Operating at 208V will result in 25% reduction in heater output. | 220-240 volts,* 15.5 amps Heater: 3 kW | 220-240 volts,* 27.3 amps Heater: 6 kW |
| Number of shelves provided | 2 | 2 |
| Maximum number of shelves | 5 on 2" (5 cm) centers | 8 on 2" (5 cm) centers |
| Approximate net weight | 250 lbs (114 kg) | 525lbs (238 kg) |
| Approximate shipping weight | 370 lbs (168 kg) | 700 lbs (318 kg) |

| FUNCTIONAL SPECIFICATIONS | | |
|---|--|---|
| Time to temperature with no load (40°C to 100°C) | 7 minutes | 5 minutes |
| Time to temperature with no load (40°C to 200°C) | 30 minutes | 27 minutes |
| Time to temperature with no load (40°C to 260°C) | 45 minutes | 35 minutes |
| Time to temperature with no load (40°C to 350°C) *For LCD only | 65 minutes | 50 minutes |
| Cooling time to temperature with no load (100°C to 55°C) *Based on cooling water supplied at 2 GPM (7.6lpm), 16°C | 35 minutes (air) 30 minutes (nitrogen)* | 40 minutes (air) 25 minutes (nitrogen)* |
| Cooling time to temperature with no load (200°C to 55°C) *Based on cooling water supplied at 2 GPM (7.6lpm), 16°C | 65 minutes (air) 55 minutes (nitrogen)* | 75 minutes (air) 40 minutes (nitrogen)* |
| Cooling time to temperature with no load (260°C to 55°C) *Based on cooling water supplied at 2 GPM (7.6lpm), 16°C | 75 minutes (air) 60 minutes (nitrogen)* | 85 minutes (air) 45 minutes (nitrogen)* |
| Cooling time to temperature with no load (350°C to 55°C) (For LCD only) *Based on cooling water supplied at 2 GPM (7.6 lpm), 16°C | 90 minutes (air) 80 minutes (nitrogen)* | 100 minutes (air) 50 minutes (nitrogen)* |
| Temperature uniformity at 100°C | +/- 1°C | +/- 1°C |
| Temperature uniformity at 200°C | +/- 2°C | +/- 2°C |
| Temperature uniformity at 260°C | +/- 3°C | +/- 3°C |
| Temperature uniformity at 350°C (For LCD only) | +/- 4°C | +/- 4°C |
| Control stability | +/- 0.5°C | +/- 0.5°C |
| LCC operating range with 20°C ambient - air atmosphere (nitrogen atmosphere). | 40°C-260°C (35°C-260°C) | 45°C-260°C (35°C-260°C) |
| LCD operating range with 20°C ambient - air atmosphere (nitrogen atmosphere) | 40°C-350°C (35°C-350°C) | 45°C-350°C (35°C-350°C) |
| Maximum load capacity | 200 lbs (90 kg) | 200 lbs (90 kg) |
| Maximum shelf capacity | 50 lbs (23 kg) | 25 lbs (11 kg) |
| 1/4 HP recirculating fan | 240 CFM (113 lps) | 435 CFM (205 lps) |

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 are based on 20°C ambient temperature measured at the fresh air inlet with cooling water supplied at 2 GPM (7.6 lpm), 16°C for water-cooled units.

SERVICE AND TECHNICAL SUPPORT

service parts: 1-800-473-7373
international service/main: 1-952-469-8230
service fax: 1-952-469-8193
service@despatch.com
usparts@itweae.com

GLOBAL HEADQUARTERS

main phone: 1-800-726-0110
international/main: 1-952-469-5424
sales: 1-800-726-0550
international/sales: 1-952-469-8240
sales@despatch.com

OPTIONS

- ◆ Silicone-free construction
- ◆ Non-HEPA filtration model
- ◆ Fast rate-HEPA filter
- ◆ Nitrogen atmosphere
- ◆ Door interlock switch turns off heater and fan when door is opened
- ◆ Chart recorders
- ◆ Three color process stack light
- ◆ Skirted stands with leveling legs
- ◆ Extra shelves
- ◆ Data acquisition software
- ◆ 208 volt service
- ◆ CE compliance



Warning: Despatch Stackable Clean Room Ovens are not to be used with flammable solvents, combustible materials or enclosed containers. If your process involves flammable solvents, consult factory about modifications.

Specifications are subject to change without notice. If the existing specifications differ from yours, ask about our customizing capabilities.

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Despatch
Thermal Processing Technology **ITW EAE**