

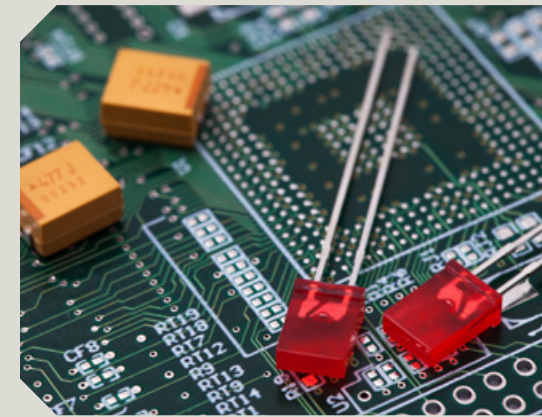
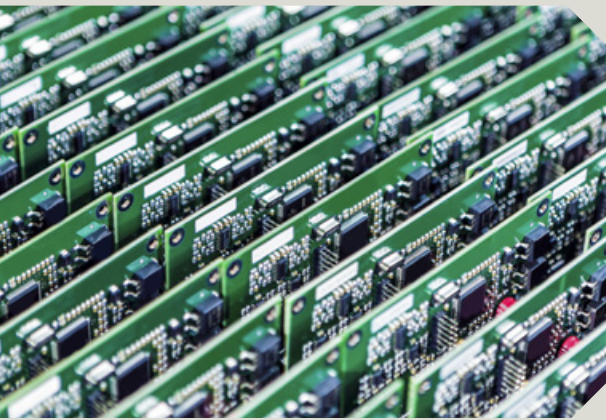
Despatch

Thermal Processing Technology

TW EAE

ELECTRONICS PRODUCT PORTFOLIO

INNOVATIVE TECHNOLOGY FOR ELECTRONIC COMPONENT AND SEMICONDUCTOR MANUFACTURING





◆ For Critical Electronic Components, Failure is Not an Option

Manufacturers trust Despatch ovens to deliver the uniform and repeatable thermal processing required for critical components to operate flawlessly and ensure reliable product performance. Despatch never cuts corners, the products we build are manufactured to the highest standards. A Despatch oven is able to deliver invariable, uniform temperature for as long as the oven is in service thanks to its solid build quality.

Despatch is the world's premier supplier for clean process, low oxygen, fast cycle curing of adhesives and polymers used in high-volume semiconductor packaging and assembly.

- Superior temperature uniformity of $\pm 0.5\%$ of setpoint
- CE, SECS/GEM communication
- Low particulate environmental controls to protect contamination
- Low oxygen levels to prevent oxidation

Applications

Components

• Pre-heating • Bake out • Drying • Adhesive Bonding and Curing • Solder reflow • Annealing

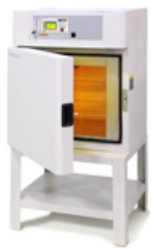
Electronic Devices and Semiconductor

• Encapsulant curing • Underfill curing of CMOS optical sensors • Die attach and BGA
• B-Stage adhesive curing • Reliability testing • Polyimide curing • Burn-in and testing • Tool handling
• Metallic thin film annealing • Polyimide curing • Photoresist curing • Reliability testing

◆ Despatch Innovation Center

- ◆ Test your process prior to purchase
- ◆ Work with our engineers to optimize performance-critical processes
- ◆ Advanced equipment to simulate whatever conditions your application demands





LAC HIGH-PERFORMANCE OVENS

A combination of forced convection and horizontal airflow provides exceptional temperature uniformity and the shortest possible processing time. The result is proven reliability in demanding production and laboratory applications, such as curing, drying, sterilizing, aging, and other process-critical procedures.

LCC/LCD CLEAN PROCESS OVENS

These clean process ovens are designed to save valuable floor space and provide a variety of tailored options for manufacturers based on their specific needs. Typical applications for these ovens include die-bond curing and other semiconductor packaging processes.

The LCC and LCD ovens are affordable solutions which offer the highest standards in HEPA filtration for production environment processes where minimal contamination is essential. Recirculated airflow is 100% HEPA filtered for operation at ISO Class 5 (Class 100) and better within the oven chamber. A magnehelic™ gauge monitors the HEPA filter pressure drop, indicating when to replace the filter.

PCO214™ POLYIMIDE CURE

The Despatch PCO2-14™ oven was designed to meet the specific process requirements for hard baking polyimide coatings in an inert atmosphere. It provides temperatures to 350°C.

This high-performance, clean process oven (ISO Class 5/Class 100 recirculated airflow) offers many unique components, including a pressure relief system, an oxygen control system and a process monitoring system which allows the oven to achieve the strict oxygen level and atmospheric requirements involved in polyimide curing.

The PCO2-14™ optimizes the polyimide cure process for semiconductor wafer devices. It enables short cycle times and a consistent, reproducible cure process for all wafers in the product load.

CONTINUOUS OVENS

Our continuous ovens achieve superior temperature uniformity in all interior parts due to high-volume, vertical air flow. Typical applications include pre-heating, curing, bonding, drying, heat treating and pyrolysis of tantalum capacitors. There are several standard models available as well as large custom models.

RBC STACKABLE BURN-IN

The stackable burn-in chambers offer maximum flexibility for small lot qualification testing, burn-in, reliability testing and research and development. The stackable burn-in benchtop ovens allow users to run concurrent tests utilizing different temperatures or different cycle times. They are ideal for qualification testing with small lots, because a new test may be started on the second chamber while the first test is still in progress. This oven configuration is designed to maximize throughput and equipment utilization.

High volume recirculation fans maintain consistent, uniform temperatures required by MIL STD 883 while removing heat generated by the load. Despatch's stackable burn-in benchtop ovens are ideal for high dissipation applications.

CRB TOOL HOLDING OVENS

The CRB oven is used to keep semiconductor parts and tooling clean, dry and ready for immediate installation. It is specifically designed for atmosphere controlled storage of parts, tooling and deposition targets.

PBC BURN-IN CABINET OVEN

The PBC burn-in cabinet oven is engineered specifically for applications such as high dissipation forward bias, high-temperature reverse bias, dynamic and static burn-in of IC, RAM, ROM, microprocessors and other semiconductor devices.

High volume recirculation fans maintain consistent, uniform temperatures required by MIL STD 883 while removing heat generated by the load.

The rear wall is disassembled and removed to simplify fixturing of power leads or feed-through boards into oven.



Together in Process Perfection

ITW EAE *Electronic Assembly Equipment*

ITW EAE is the Electronics Assembly Equipment division of Illinois Tool Works, Inc. The group brings together the world-leading brands of electronics assembly equipment. Brands with reputations for driving process perfection. Manufacturers need speed, accuracy and repeatability over time in order to produce reliable products. Every product we make is measured by its ability to deliver on this promise. The combined knowledge and experience of the ITW EAE group is sure to drive further innovation and speed the development of next generation technology.



MPM | Camalot | Electrovert | Vitronics Soltec | Despatch

Service and Support: Global Presence, with Local Expertise

Despatch provides expert technical service, a range of installation options and an extensive parts inventory to all of our customers worldwide. At Despatch, we believe in exceeding customer expectations and going above and beyond what an average equipment manufacturer will provide.

Rest assured that when you call our Service Help Line, you will be speaking with experienced, knowledgeable personnel, fully capable of assisting you with any equipment questions you may have. Our network of Certified Service Representatives is spread out across the globe to provide technical support and service to Despatch customers worldwide.

Equipment installation and training

Our global service team offers a complete range of installation, start-up and testing services. Choose the option that best fits your company's needs: turnkey installation, installation supervision, start-up, testing, validation services.

Our training courses cover a wide variety of subjects, including general operations, gas-fired systems, electrically heated systems, equipment maintenance, preventative maintenance, controller operation and calibration, and temperature uniformity surveys. We offer Operator, Maintenance and Engineering training courses.

SERVICE AND TECHNICAL SUPPORT

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Despatch

Thermal Processing Technology **ITW EAE**

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