

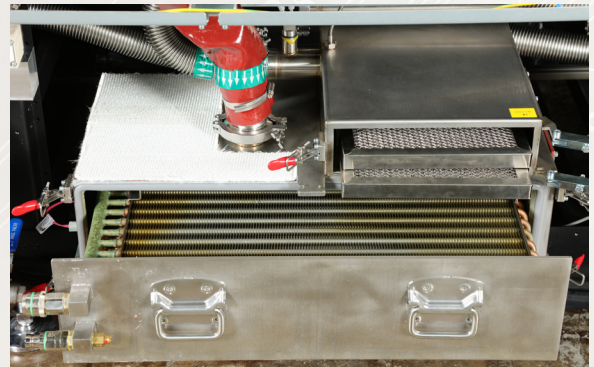
CoolClean Option

Enhanced cooling zone contamination control for improved reliability and reduced maintenance

In nitrogen reflow soldering, managing flux residues is critical to maintaining oven performance and product quality. While traditional systems rely only on heat exchangers to collect contaminants, they often may require maintenance and cause unplanned machine downtime.

Vitronics Soltec's CoolClean option offers a more advanced solution for nitrogen reflow ovens equipped with CATHOX technology. Unlike conventional methods, CoolClean actively extracts contaminated gases from the slot exhaust and the first cooling zone, condensing them on a heat exchanger located outside the process area. This design minimizes flux residue buildup inside the oven, prevents dripping onto PCBs, and significantly reduces overall contamination.

During the reflow process, flux residues—along with solvents, organic acids, and solder mask by products—tend to accumulate, especially in cooling zones. Traditional systems often struggle to manage these contaminants effectively, resulting in unplanned maintenance and potential disruptions. CoolClean addresses this challenge by relocating the condensation process outside the oven, ensuring cleaner operation, enhanced reliability, and reduced maintenance needs.



Key Features and Benefits:

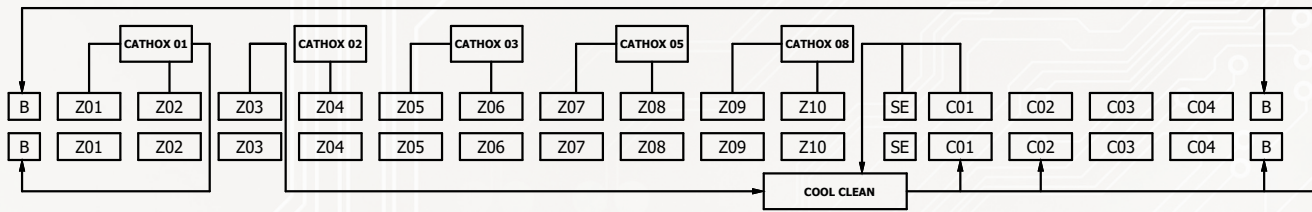
- Removes contaminated gases before they drip onto PCBs or build up inside the oven
- Extend maintenance intervals and reduces the requirement for frequent cleaning
- Compatible with nitrogen reflow ovens using CATHOX technology
- Field upgradeable



CoolClean Option

The CoolClean option is highly effective at preventing flux from dripping in the cooling zones, especially for high paste usage. During the reflow soldering process, flux residues, solvents, organic acids, and solder mask byproducts accumulate – especially in the cooling zones.

Traditional systems often struggle to manage these contaminants, leading to unplanned maintenance and downtime. The CoolClean option mitigates the risk of flux dripping by extracting contaminated gases from the slot exhaust and first cooling zone. The contaminated gases condense in the heat exchanger, away from the process area, then returns the clean gas back into the cooling sections.



Product Details:

- Designed for use with the Cathox flux decomposition option on Centurion Reflow Ovens
- Compatible with all solder paste types
- Available with water type cooling systems
- CoolClean option has no impact on thermal performance (heating and cooling) and no impact on N2 consumption
- Integrated inside of machine with no impact to floor space
- Equipped with temperature sensors, flow sensors, and liquid sensors to predict and detect maintenance Easy access to CoolClean box and filter for easy maintenance accessibility
- CoolClean is field upgradeable to the Centurion



For more information please [contact your local Sales Representative](#).

ITW EAE is a division of Illinois Tool Works, Inc. It is a consolidation of all of its Electronic Assembly Equipment and Thermal Processing Technology. The group includes world-class products from MPM, Camalot, Electrovert, Vitronics Soltec and Despatch.

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