

Increase productivity, improve quality, reduce costs... with vertical format curing solutions from Heller.



Lift your process to new heights in productivity... with in-line, continuous cure, vertical format ovens from Heller.



In-line, vertical automation of the epoxy cure process produces immediate, significant benefits in three areas. In-line automation increases productivity by eliminating the labor needed to load and unload batch ovens. It improves process consistency, and therefore quality, by reducing the time and temperature variations caused by the frequent opening of batch oven doors. And, as floor allocation costs rise on all factory floors....and particularly in clean rooms...a vertical format oven requires as little as six feet of floorspace for cure cycles as long as four hours.

To increase line productivity and improve process consistency...automate your epoxy cure process.

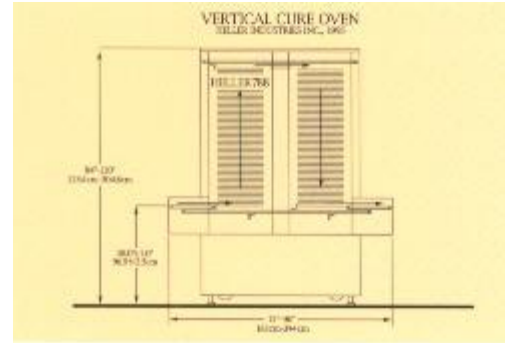
To save valuable floor space and reduce allocation costs...expand into the unused airspace above your factory floor.

To achieve both objectives...select from the Heller family of in-line, continuous cure ovens with cycle times of up to four hours in footprints as small as 72 inches (183 cm).

[Additional Literature](#)

The Heller 788 in-line, continuous cure, vertical format oven

The Heller 788 in-line, continuous cure, vertical format oven conveys product from the assembly line onto rails inside the oven...then transports it up, across and back down to the line in a continuous stream...with cycle times as short as 25 seconds. Four internal thermal zones with independent time and temperature controls produce virtually any recommended curing or encapsulant profile, including two-step curing. Curing times may be set as short as a few minutes or as long as several hours, with a pass-through cycle also available.



Heller Vertical format ovens consume unused air space, not valuable floor space.

The 788 is clean room compatible and engineered to maintain temperature uniformity in either air or nitrogen atmospheres. Conveyor width adjustability ...carrier versatility...the only magazine interface in the industry ..and a variety of shuttle mechanisms...enable the 788 to convey product from two to 18 inches (five to 46 cm) in width, and as thin as .015 inch (.4mm)



Versatile Heller in-line cure ovens transport standard to ultra-thin boards.

Replace up to three batch ovens with one Heller 788 oven...and enhance die attach security as well. Continuous processing eliminates fluctuations in curing temperatures when oven doors are opened for loading and unloading. The immediate processing and the uniform temperatures obtainable only with in-line curing ensure more consistent output, first piece to last.

Heller Industries: the new market leader in oven technology.

With the largest installed base of US-made in-line vertical ovens in the world, Heller is the preferred choice of many leading electronics manufacturers. Just as we pioneered SMT solder reflow advances... including full convection and economical nitrogen usage... we are now the first to offer a family of customized ovens for a variety of curing needs. As a market leader, Heller has the versatility, flexibility and engineering capabilities to develop custom solutions for your individual curing requirements.

Heller's global customer base knows it can depend on our reliable equipment... continuous innovation... and responsive engineering. We provide a global service network, supported by a 24-hour beeper number. And we offer leading-edge support through RMATS (Remote Modem-Accessible Technical Service). This state-of-the-art system enables our service engineers to access your oven's internal electronics and answer your questions, wherever you are, whenever you have a concern.

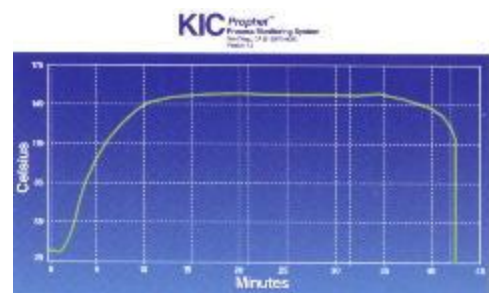
For die attach, flip chip underfill and COB encapsulation...

Heller's in-line continuous epoxy cure ovens provide:

- - Curing cycle time of up to four hours in footprints as small as 72 inches (183 cm).
 - Customized heights of 7, 8, 9, and 10 feet (213, 244, 274, and 305 cm) to meet any throughput requirement.
 - Four-zone heating with independent time and temperature controls for single and double step profiling.
 - Stainless steel mechanism for high temperature strength, low maintenance.
 - Cooling zone capability.
 - Class 1,000 or 10,000 clean room compatibility.
 - Air or nitrogen atmosphere.
 - Six-thermocouple profiling capability and optional pyrometers.
 - Center board support for ultra-thin boards.
 - Conveyor width adjustable from two to 18 inches (5-46 cm) for PCBs, Auer boats, JEDEC trays and recalculating pallets.
- - Pitch between product carriers may be specified from 3/8 to 1 1/2 inches (9.5-38 mm) in 3/8-inch (9.5 mm) increments.
 - Magazine loader interface.
 - User-friendly Windows™ software.
 - Easy eye-level access to internal controls.
 - SMEA compatibility.
 - Meets CE standards.
 - Optional KIC profiler for 24-hours process monitoring.
 - Breakdown design for ease in shipping/setup of tall ovens.



Easy-open side doors provide rapid access to product, when required.



Forced convection heating ensures consistent, uniform cure profiles