

Mark 5 Series Reflow System

ADVANCED TECHNOLOGY FOR DEMANDING PROCESSES



TECHNOLOGY FOR
THE ENVIRONMENT

2011
BEST NEW PRODUCT



HELLER
INDUSTRIES
THE TECHNOLOGY LEADER

THE TECHNOLOGY LEADER

Heller Industries was founded in 1960 and pioneered convection reflow soldering in the 1980s. Over the years, Heller has partnered with its customers to continually refine the systems to satisfy advanced applications requirements. By embracing challenge and change, Heller has earned the position of World Leader in Reflow Technology. This leadership was confirmed when Heller won Frost & Sullivan's prestigious Global Reflow Company of the Year Award in 2010 and Best New Product Award in 2011 for the Mark5 Reflow System.



Benefits of Partnering with the World Leader

In addition to getting the best oven technology, working with the industry leader carries many other important benefits:

- Partnership:** By working closely with our customers, we provide the kind of V.I.P. service and support that has come to symbolize Heller Industries.
- Corporate Strength and Longevity:** Over 51 years in the electronics industry gives us a solid corporate and management base that ensures stability and continued support.
- Direct Access to Upper Management:** Our upper management staff is continually traveling to meet our customers to gain their feedback and input. *We find that by listening we can better serve our clients.*
- Distributed "Lean" Manufacturing:** With factories in China, Korea and Malaysia, we can provide "local" sourcing and utilize a "copy exactly" paradigm that ensures Six Sigma performance oven-to-oven and factory-to-factory.



Heller China

We welcome you to visit any of our four Centers for Excellence — USA, China, Korea and Malaysia. In addition to a world class manufacturing environment, operators and engineers can attend "Heller University" to learn about lead-free processing, troubleshooting and advanced applications solutions.



Heller Korea

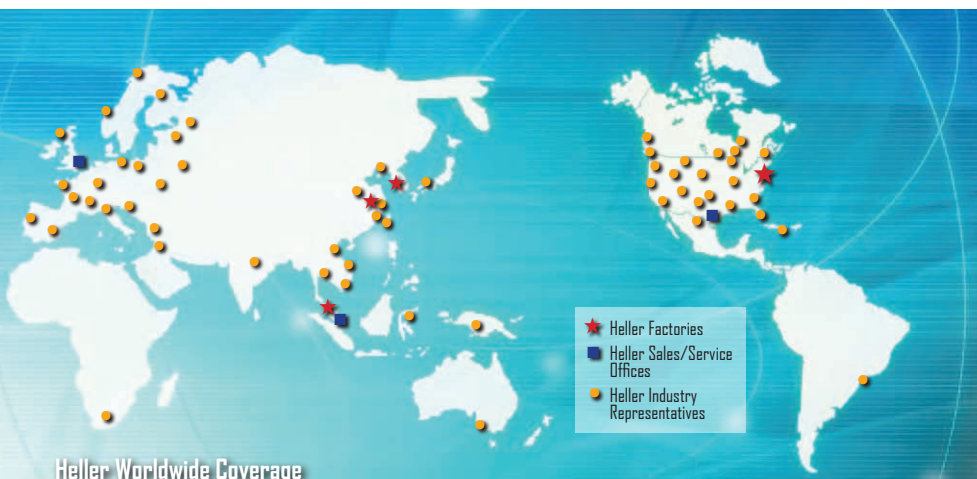
Combining our unmatched engineering expertise with a business model that focuses on regional manufacturing and strategic support centers, Heller provides a "local" presence that goes beyond simple manufacturing. Localized engineering, service, spares, process support and training facilities separate Heller from the competition and make us the obvious choice for reflow soldering solutions worldwide.



Heller Malaysia



Heller USA



Heller Worldwide Coverage

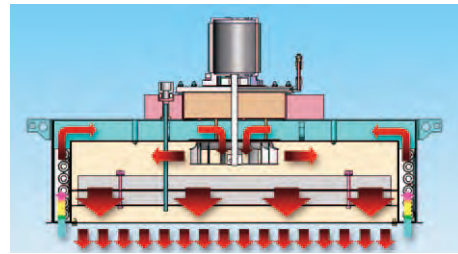
Heller is committed to driving environmental leadership through the design of its oven products and the use of its technology. We strive to minimize our environmental footprint and raise environmental consciousness in everything we do.



The World's Best Convection Reflow Oven

Mark 5

The latest breakthroughs associated with the Mark 5 reflow system now provide you with an even lower cost-of-ownership. Heller's new heating and cooling advances deliver up to 40% reduction in nitrogen and electrical consumption. This makes the MK5 system not only the premier reflow soldering system but the best overall value in the industry!



Enhanced Heater Modules

Enhanced flow heater modules with 40% larger impellar, blanket the PCB with heat for the lowest delta Ts on the toughest boards! Additionally, the Uniform Gas Management system eliminates net flow which results in nitrogen consumption reductions of up to 40%!

One-Step Profiling

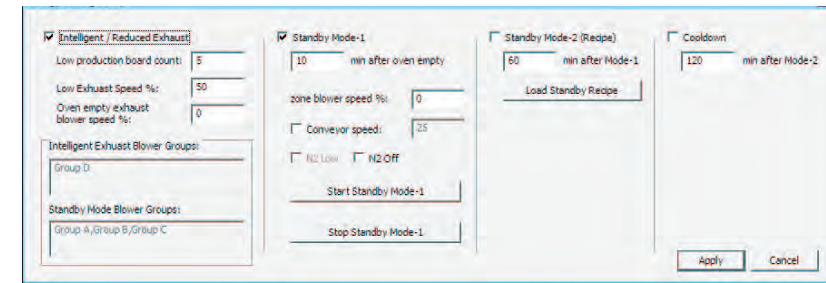


Developed in partnership with KIC, you can now have instant profile settings by simply entering the length, width and weight of your PCB. An extensive profile and paste library with dynamic structure does the rest of the work for you!

Energy Management Software — A Heller Exclusive!



Proprietary software allows you to program exhaust draw to optimize energy consumption during the various production times — heavy, light or idle.

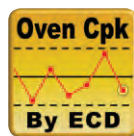


Fastest Cooling Rates

The new Blow Thru Cooling module provides cool rates of $>3^{\circ}\text{C}/\text{sec}$ — even on LGA 775! That rate meets even the most demanding lead-free profile requirements!

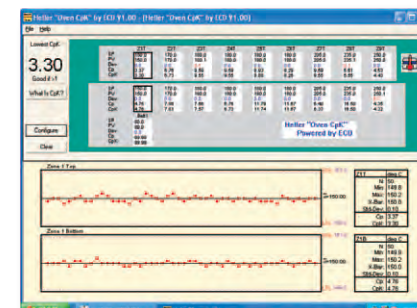


While addressing environmental advances, Heller Industries has been able to provide its customers with ways to optimize their operations and increase their productivity while using fewer resources and enhancing sustainability.



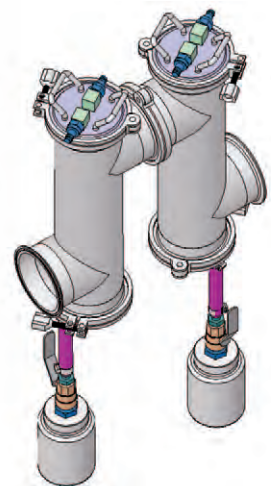
Process Control

Powered by ECD, this innovative software package provides three levels of process control from Oven CpK, to Process CpK and Product Traceability, this software ensures that all parameters are optimized and SPC reporting is fast and easy.



New Cool Pipe Flux System Virtually Eliminates Maintenance

Our new Cool Pipe flux collection system traps the flux in collection jars that can easily be removed and replaced **while the oven is running** — thus saving time consuming P.M. Additionally, our proprietary Flux-Free Grill System limits flux residue on the cooling grills — the result is not only reduced maintenance time, but **recaptured production time** — giving the Heller system the highest production yields of any oven!



ADVANCED TECHNOLOGY FOR DEMANDING PROCESSES





2011 Winner for
Best New Product

Innovation for Your Benefit

Advancements like the invention of the first waterless/filterless flux separation system earned Heller the prestigious Frost & Sullivan Award for Innovation in reflow soldering. But more importantly, this development extended preventative maintenance intervals from weeks to months for our systems. Additional breakthroughs in energy management have helped Heller's customers remain environmentally responsible while still maintaining their sustainability guidelines.



Recognized Leadership

Our focus on technology-driven solutions in partnership with our customers has been consistently recognized throughout the years by several industry agencies including three Vision Awards for new product innovation, two Market Leadership Awards, two Service Excellence Awards, several awards for vendor excellence and appointments to prominent positions on Industry committees and boards. Certainly these awards and appointments validate our market leadership; but they also confirm that Heller is at the forefront of the technology curve — constantly bringing new innovations to market faster and with greater impact than our competitors.



1718 Mark5 Series

The best value in the market! Ideal for labs, start-ups, curing or medium volume production. Includes advanced features previously found on premium systems.

- 1718 Mark5



1826 Mark5 Series

These workhorses provide consistent performance for high volume requirements while minimizing preventative maintenance and floorspace.

- 1826 Mark5




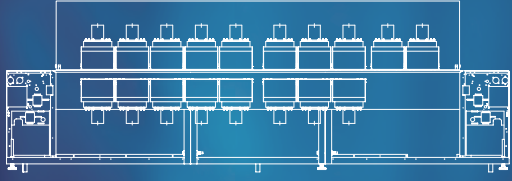

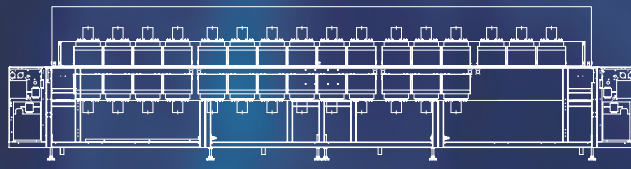
1936/2043 Mark5 Series

The ultimate high volume production solutions with belt speeds up to 1.4 m/min to accommodate the fastest pick-and-place systems. The 1936 and 2043 MK5 systems deliver the highest levels of repeatability with the lowest delta Ts.

- 1936 Mark5
- 2043 Mark5

Mark 5

The Mark 5 Reflow System Series

MK5 Models	Overall Length	# of Heated Zones / Heated Length	# of Cooling Zones
 <p>1718</p>	340 cm (134")	5 Top 5 Bottom / 180 cm (72")	1 Top (std) External Cool optional
 <p>1826</p>	465 cm (183")	8 Top 8 Bottom / 260 cm (102")	2 Top (std) Bottom Cool / External Cool optional
 <p>1936</p>	589 cm (232")	10 Top 10 Bottom 360 cm (141")	3 Top (std) Bottom Cool / External Cool optional
 <p>2043</p>	668 cm (263")	13 Top 13 Bottom 430 cm (170")	3 Top (std) Bottom Cool / External Cool optional

HELLER INDUSTRIES

THE TECHNOLOGY LEADER

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