High Yield Quality for Everything you Bake

Focused on Quality, Driven by Passion
6-Channel M.O.L.E.™ Kit for FSMA Compliance Kill Step Profiling

The new M.O.L.E.™ EV6 brings deep data collection and touchscreen convenience to thermal profiling for commercial and artisan baking operations.

- On-screen instrument status display:
  - Live temperature readings
  - Thermal profile
  - KPI table
- Built-in calibration reminders
- Battery life/charge indicators
- Memory status
- Supports multiple thermocouple types
- Sampling at up to 100 samples per second
- USB C communications and charging
- 2-button control (on/off and record)

Web short link: ecdusa.co/mev6-bake
3-Channel Rack Ovens V-M.O.L.E.™ Baking Kit
Perfect Solution for smaller bakeries and those with narrower ovens and budgets who require high yield quality and food safety analytical data to obtain that competitive edge.

- Complete kit includes V-M.O.L.E. thermal profiler, Calibration Certificate, Thermal Barrier choice, 7’ or 3’ set of thermocouples, MAP Software, USB cable and carrying case. 2-year warranty
- The entry-level profiler compatible with Thermocouples, 3-channel BreadOMETER™, CakeOMETER™, VaporWATCH™ and BakeWATCH™ Kill Step Calculator
- Balance Rotating Rack Ovens High-Mid-Low & Lateral balance in Tunnel Ovens
- Ensure optimum crumb set and texture without over or under baking
- Direct USB to PC communication and charging, same 2-button control as 6-channel M.O.L.E.
- From Fresh to Frozen to Par Bake –
When enough data points are never enough Quality Assurance, MEGAM.O.L.E. 20 is the solution!

- 4 banks of 5 channels may be organized into a 20-input Mini Adapter box for easy wires management and customized lengths
- Useful for detailed Oven Mapping and internal/external entrée trays cooking & freezing applications
- Three-piece interchangeable flexibility w/ M.O.L.E., I/O Module and Power Pack
- Complete kit includes MEGAM.O.L.E. 20 thermal profiler, Calibration Certificate, Thermal Barrier choice, customized array of 20 input thermocouples, MAP Software, Charger & USB cable and carrying case. 2 -year warranty
The Versatile Displaying Logger

Kit Includes: Datalogger with LCD Display, Start Magnet, USB Download Station & M.O.L.E.™ MAP Software. Dual kit also available.

- Designed for monitoring & recording proofer conditions and mixing and dough room environments
- Large LCD display is easily read from a distance
- Works stand-alone, frees up M.O.L.E. thermal profiler for ovens work
- Records temperature and humidity over time (2 channels)
- MiniM.O.L.E. rH Environment in M.O.L.E. MAP reports both rH and degrees F or C
- Records data that helps maintain proper proofer setup for all your varieties
- Reliable, Accurate, Easy to use

Professional S-Curve Measurement

Kit includes: BreadOMETER™ with 18” lead to M.O.L.E.™ thermal profiler, MAP Software, Quick Reference Guide & Carry Case.

- Reformulate to Clean Label with perfect crumb and shelf life
- 1 air & 2 or 5 dough sensors in a patented single probe design deploys quickly.
- Provides consistent data, regardless of operator. Superior to individual thermocouples.
- Easily adjust zone temperatures and bake times necessary to align yeast kill, gelatinization and arrival appropriate for the dough mix using the automatic % of bake time display.
- Same Depths Consistently and Repeatably – Train Operators Quickly
- Works with 6 & 3 channel thermal profilers. M.O.L.E.™ EV6, SuperM.O.L.E.™ Gold 2 and V-M.O.L.E.™
OvenBALANCER™ is the new, easier way to balance tunnel and rotating rack ovens without the need to insert and strain-relieve thermocouples.

- Independently validate the lateral balance of oven zone temperatures and convective heat flow efficiency for burners, baffles and coloraider adjustments
- Integral magnet securely attaches each of 3 Sensor Panels to pans or directly to belt or shelf
- Flexible placement with up to a 14’ / 4.2M separation – suitable for all oven types
- Light and compact to pack, carry and deploy – not a fixed bar or pallet type product
- Cables from M.O.L.E. thermal profiler play out and retract on Cable Winders (included)
CakeOMETER™ is setting the new standard for cake baking consistency with an all-in-one solution that combines ease-of-use with deep data collection.

Kit includes: One 4-legged Base Unit, One ambient (36in) SSOB 30-gauge thermocouple, Two depth (36in) SSOB 30-gauge thermocouples, MAP Software and Quick Reference Guide.

- The unique design provides in-batter sensor stability and depth control to ensure accurate temperature measurement throughout the cake baking process.
- When integrated with ECD’s 3-channel V-M.O.L.E.™ or a 6-channel M.O.L.E.™ EV6 and SuperM.O.L.E.™ Gold 2 thermal profiler, CakeOMETER allows cake temperature data to be captured for simple download to evaluate baking time and temperature, delivering repeatable results.

Web short link: ecdusa.co/com
VaporWATCH™ Relative Humidity Sensor

Kit includes: VaporWATCH™ Sensor with Rechargeable Battery and Magnet Mount, Charger, Cables, M.O.L.E.™ MAP Software & Users Guide.

- Designed for proofer relative Humidity profiling
- Provides one rH input to any M.O.L.E. thermal profiler
- Remaining M.O.L.E. channels can be a mix of air and dough temperatures
- A precision, rechargeable instrument
- VaporWATCH® environment in M.O.L.E. MAP reports both rH and degrees F or C
- Rugged - Many years of service with yearly calibration
- Records data that ensures consistent dough conditions are delivered by proofer to oven for production consistency year-round

Web short link: ecdusa.co/vw
**ECD Thermocouples**

- **PFA Color-Indexed**

**Thermocouples for oven balancing (7’/2134mm):** Good for rack and tunnel oven balancing and dough profiling. Standard M.O.L.E. Baking FSMA Kits Set.
- Cover breadth of oven; Left-Center-Right or High to Low
- Sets of 6 Micro or Sets of 3 Mini
- Color Indexing matches software channels graphing
- Organize unused length inside barrier on integral winders

**Thermocouples for baked goods profiling (3’/915mm):** Useful to profile adjacent pan straps and trays or smaller ovens. Optional, shorter length.
- Instrument a centrally located pan/strap
- Profiling snack goods on fast, narrow conveyors
- Sets of 6 Micro or Sets of 3 Mini

ECD supplies only Special Limits of Error Grade K-Type Thermocouples in a variety of insulation types

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**Web short link:** ecdusa.co/tc
ECD BakeWATCH™ Thermal Barriers - The M.O.L.E.’s Lifeline to Longevity

- Barriers enable in-transit profiling
- Keep your M.O.L.E. cool during Kill Step work
- Stainless steel construction for easy cleaning
- Wide range of models:
  » BB-45: Flat breads, biscuits & snack goods
  » BB-50: Breads, buns – most common varieties
  » BB-80: Cakes & dense dough

<table>
<thead>
<tr>
<th>Temperature</th>
<th>BB-45</th>
<th>BB-50</th>
<th>BB-80</th>
</tr>
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<tr>
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<td>25min</td>
<td>40min</td>
<td>73min</td>
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<tr>
<td>260°C/500°F</td>
<td>15min</td>
<td>30min</td>
<td>55min</td>
</tr>
</tbody>
</table>

Web short link: ecdusa.co/tb
Easier cable management with Thermocouple Spreader

The Thermocouple Spreader adjusts to secure up to 6 thermocouples to the same pitch as dough pieces to easily profile fast conveyors baking thin crackers, biscuits & flat breads.

- Integral tray for M.O.L.E. thermal profiler and Barrier provides single person 2-hand deployment
- Lateral width adjusts out to 57” / 1.45 m
- Weight 2.15 pounds / 0.925 kg
M.O.L.E.™ MAP – Baker Friendly, Baker Approved!

MAP software is organized by special Environments which drive all ECD thermal profiler and sensor packages, per application. Basic, BreadOMETER, VaporWATCH and MiniM.O.L.E. Environments are ready for use upon responding as a Baker during the installation process.

- Organize and share your ovens and proofers work in separate folders per variety to report, print and network flexibly
- Recipient of exported profile can import into MAP in their local language (get MAP at ECD.com), or share PDF'd reports
- Use the BreadOMETER Environment’s KPI tab for oven balancing and Bake S-Curve tab for baked goods optimization
- Bake S-Curve realizes BreadOMETER’s power; Also works with traditional internal dough thermocouples.
- MAP is compatible with older M.O.L.E. MDM libraries as well as Excel and Text files
- Compatible with current ECD 3, 6 and 20 channel M.O.L.E.s.

Web short link: ecdusa.co/map
BakeWATCH™ Kill Step Calculator – Kill Step Productivity Leaps Forward

BakeWATCH Kill Step Calculator for Windows is the easy-to-use tool that automates the data collection process and report generation in a single program, with no copy and paste required. It’s what you’ve been asking for, and definitely worth the wait!

• **All-inclusive Functionality**: No data exporting required, everything’s built-in
• **No Manipulation or Guessing**: Automatically graphs and tracks each valid dough thermocouple’s profile data
• **Simplified Reporting Process**: When counter reaches 30 valid profiles, the Process Lethality D-Reductions Report can be printed and saved as your record of FSMA Compliance
• **Web-enabled Updates**: Auto Updating of New Varieties online
• **Aligns with existing Protocol & Technology**: Confidentially process Kill Step work with 6-input SuperM.O.L.E. Gold 2 and 3-input V-M.O.L.E. thermal profilers

Web short link: ecdusa.co/killstep
1. REPORT SETUP

2. DOWNLOAD

3. PRODUCE REPORT

NOW WITH CUSTOM VARIETY AND D-REDUCTION CONSTANTS WORKFLOW