

# OVEN VALIDATION SERVICE

## About

Good reflow oven performance enables factories to manufacture with quality and cost-efficiently. Your manufacturing productivity should never be taken for granted. A routine validation makes a difference between relatively simple repairs and major overhauls. Oven validation helps you detect potential issues in time and maintain peak oven performance.

## Measurements

- Air Temperature Uniformity
- Mass Temperature Uniformity
- Heat Transfer Index
- Conveyor Speed Measurement
- Individual Zone Performance
- Full Oven Diagnostic Report
- Machine Capability Index, Cmk Measurement.
- Oven Stability\*
- Loaded & Unloaded Temperature Fluctuation\*

## Industries We Serve

- |              |                 |
|--------------|-----------------|
| ✓ Aerospace  | ✓ Industrial    |
| ✓ Automotive | ✓ Medical       |
| ✓ Consumer   | ✓ Semiconductor |



### Risk Mitigation

Full equipment inspection to diagnose issues from the reflow oven



### Buy off/Qualify Oven

Validate the performance of a brand new oven for acquisition



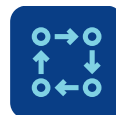
### Maintenance Efficiency

Evaluate the efficiency of each calibration or maintenance



### Assess heat regulation

Analyze heat regulation & distribution of each heater zones



### Repeatability

Gain insights to your oven's performance with Cmk measurement



### Cost Efficiency

Preventing unexpected breakdowns, reducing maintenance cost

Mail us for  
more info



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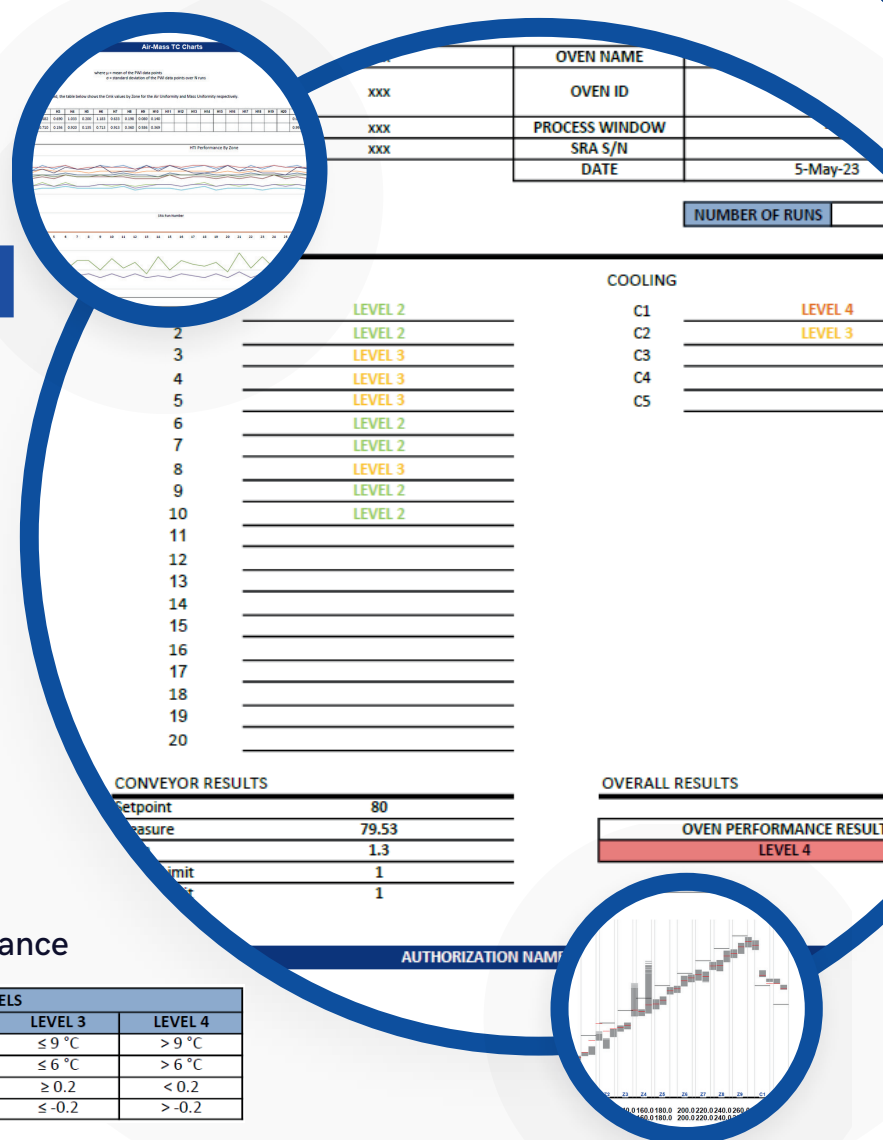


# OVEN VALIDATION REPORT

## OVEN VALIDATION REPORT CONTENT

All reflow ovens validated by KIC include a validation report. The Validation report includes the following information:

- Company details
- Oven brand and model
- Date and time of validation
- Equipment used during validation
- Result of validation
- Statistical charts
- Comments on performance
- Professional recommendations



## Level grading to determine oven performance

MEASUREMENT VALUES	LEVELS			
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
Air TC Uniformity (+/-)	≤ 3 °C	≤ 6 °C	≤ 9 °C	> 9 °C
Mass TC Uniformity	≤ 2 °C	≤ 4 °C	≤ 6 °C	> 6 °C
HTI - Heating (0 - 1)	≥ 0.4	≥ 0.3	≥ 0.2	< 0.2
HTI - Cooling (0 to -1)	≤ -0.4	≤ -0.3	≤ -0.2	> -0.2

## Validation Tools

- Smart Reflow Analyzer
- Footprint\*

\*Subject to existing hardware availability

## OVEN VALIDATION PACKAGES FOR MANUFACTURERS

### BASIC

- ✓ 3 x SRA runs
- ✓ Footprint Measurement\*
- ✓ Temperature Uniformity
- ✓ Heat Transfer Index

### PRO

- ✓ 30 x SRA runs
- ✓ Footprint measurement\*
- ✓ Temperature Uniformity
- ✓ Heat Transfer Index
- ✓ Cmk Measurement

## Validation procedure

- To arrange an appointment for your oven validation, please contact KIC.
- Our team of experts will conduct the data collection process on-site, ensuring that all necessary information is gathered accurately.
- Your comprehensive validation report will be available within 7 days of completion.
- Thank you for choosing KIC for your validation needs.

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