



PhoenixTM 
Phoenix Temperature Measurement

Compact System

Temperature Profiling For Curing Ovens



... Where experience & value counts !

Compact Systems For paint and powder coating processes up to 572 °F

The Compact Finishing System is designed to travel through the curing oven measuring actual product temperatures, providing a low cost durable profiling solution. The system uses a data logger, protected by a thermal barrier, to record the temperature of product as it passes through the oven. Information obtained can then be used to optimize the process.

Data Logger

Combining rugged reliability, accuracy and ease of use, the Phoenix™ Compact data logger is designed specifically for use in curing applications. Protected by a robust aluminum case the data logger design includes cold junction compensation and an over temperature cut off to ensure the accuracy of data recorded. Supplied as standard with a calibration certificate traceable to national standards and with the option to certificate to UKAS (UK) or DAkkS (Germany).



Type	PTM1-006C	
No. of channels	6	
Thermocouple type	K	
Specification	°F	°C
Measurement range	32 to 932	0 to 500
Accuracy	+/- 0.5	+/- 0.3
Resolution	0.2	0.1
Max operating Temperature	176	80
Dimensions	inch	mm
Height	0.8	20
Width	2.8	70
Length	7.9	200
Weight	0.9 lbs	396 g
Battery type	2 x Standard Alkaline (AA)	
Memory	440.000 data points, non-volatile memory	
Start trigger	time, temperature, start button or software	

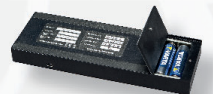
Real time measurement while connected to a PC via USB for batch oven profiling



Robust housing for reliable use in harsh industrial environment



Up to 1000 hours measurement time



What is temperature profiling?

All industrial ovens use installed thermocouples to control the zone temperatures. However, these thermocouples measure only atmosphere temperature in their respective zones and do not indicate the true temperature of the product, which is vital to ensure the product coating cure schedule is attained.

The Value of Product Temperature Profiling

Quality

Provide evidence that the coating is cured correctly against coating suppliers cure schedule.

Fault Finding

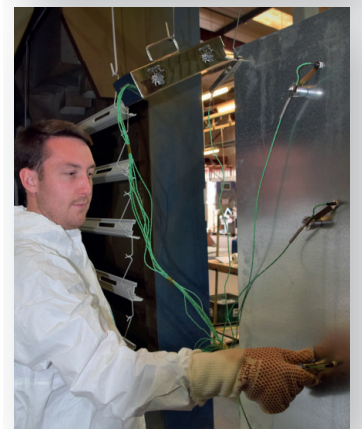
Identify process problems "Cold Spots" quickly and use profile data to recommend and validate corrective action. Minimize costly production downtime.

Process Optimization

Use profile data to fine tune oven operation to maximize product throughput (Line Speed) or improve energy efficiency without compromising quality.

Regulatory Compliance

Provide traceable and certified process QA documentation to meet essential quality standards CQI-12, Qualicoat or Accredited Applicator Status.





TS04 thermal barriers

Featuring robust aluminum case*, microporous insulation, phase change heatsink and 100% silicone free construction, the TS04 thermal barrier range offers ease of handling and high performance.

*Stainless steel case options also available



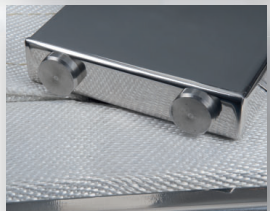
Thermal Barrier range performance:

Type		TS04-090-4	TS04-090-4	TS04-113-3	TS04-113-3
°F	°C	Hours	Hours	Hours	Hours
210	100	2.0	2.0	7.5	7.5
300	150	1.4	1.4	3.5	3.5
390	200	1.0	1.0	2.2	2.2
480	250	0.8	0.8	1.6	1.6
Dimensions		inch	mm	inch	mm
Height		3.5	90	4.5	113
Width		6.3	161	6.3	161
Length		12.2	311	12.6	320
		lbs	Kg	lbs	Kg
Construction		Al	Al	Al	Al
Weight		5.1	2.3	8.2	3.7
Heat Sink		NA	NA	TS00-537	TS00-537

Magnetic plate for thermocouple storage and efficient transfer to the product.



Heat sinks with very high thermal capacity and gas tight seals.



Dual thermocouple exit to reduce wear and increase thermal barrier life. Silicone free construction.



Need a thermal barrier to suit your application?

Tell us your requirements and if it's possible we'll design and manufacture it for you! We are constantly developing and looking forward to any new challenge.

Thermocouples

All PhoenixTM finishing thermocouples are manufactured using the highest quality materials and conform to ANSI 96.1 special limits specification.

The thermocouples are designed to withstand rough handling and uniquely include **user replaceable* sensors to minimize long term running costs.**

Available as magnetic, clamp or exposed junction, the thermocouples are PTFE insulated, triple wrapped with stainless steel braid, and have a final overall PTFE insulation.



TC52 Clamp Surface*



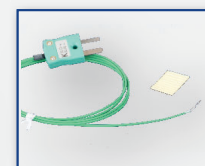
TC50 Magnetic Surface*



TC60 MiniMag Compact Magnetic Surface*



TC54 Exposed Junction



TC55 Fast Response Self Adhesive



TC56 Washer

Thermal View

The easy way to get a perfect result!



PhoenixTM
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PhoenixTM Thermal View software has all the essential functions required to understand and optimize your process.

All results are saved in a database for easy access which can be organized in a logical manner using the multi column sorting facility.

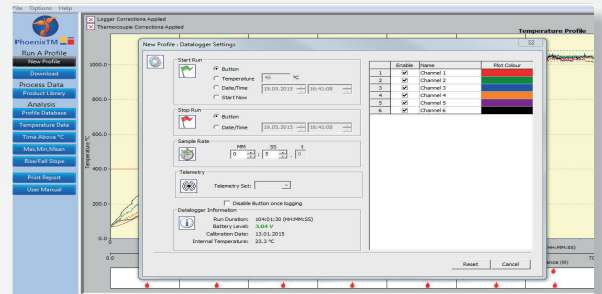
Simplicity: Screen layout is clear, concise and intuitive making the software user friendly, uncluttered and easy to use without compromise to the analysis detail available.

Clarity: Single screen layout provides graphical representation for the process with instant access to analysis options and results.

PhoenixTM software has all the essential functions you require to keep your process under control:

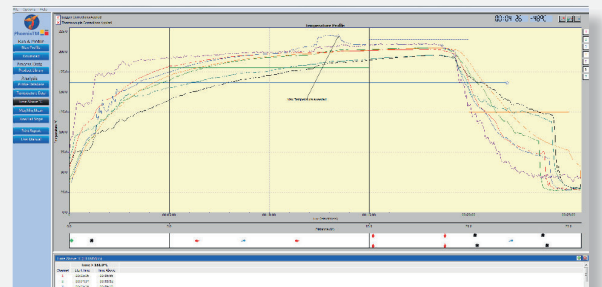
- Temperature Data
- Multi Max, Min, Mean analysis
- Rate of change analysis
- On Screen Notes
- Data import and export
- Real time data (USB Cable)
- Multiuser site license
- Multi Time Above temperature
- Phoenix Factor (Cure Index)
- Reference Profile
- Thermocouple location library
- Oven start and stop correction
- Printed reports

* Software upgrade option to Thermal View Finishing available with even more analysis and reporting power.

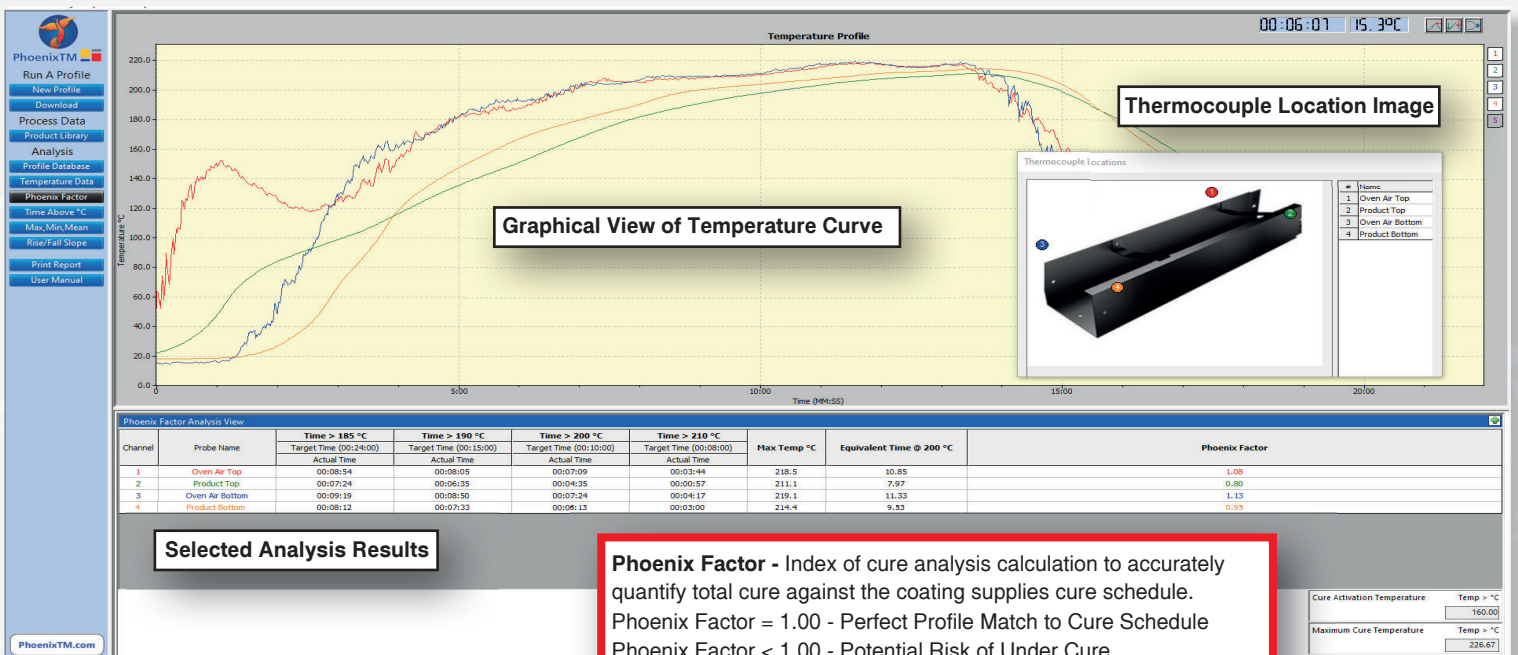


Simply enter:

- How to start the data logger
- The rate at which data is to be collected
- The number of thermocouples to be used.



On screen notes allow for sharing of process information and the highlighting of specific process conditions.



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