

# Paint & Finishing Oven MONITORING

Grant boasts over 40 years experience in manufacturing oven recorders for the paint and finishing industry. This expertise is demonstrated in the easy to use and affordable, OMK610 oven monitoring system. The OMK610 comes complete with logger, software, a thermal barrier and 4 temperature probes to offer you a total solution for measuring the coating process.

Benefits include improved efficiency and maximum productivity, reduced energy costs, optimised finishing quality and instant production of due diligence reports.

## Why record product temperature?

When passing your product through an oven it is crucial to get the heat process right to ensure consistent quality of your product. In order to do this you need to ensure your product has passed through your process at the right temperature for the right amount of time. Under or over curing your product can lead to problems with adhesion and durability of the finished product. By passing the OMK610 oven monitoring system through your process any uneven oven temperatures can be pinpointed immediately and prompt action can be taken.

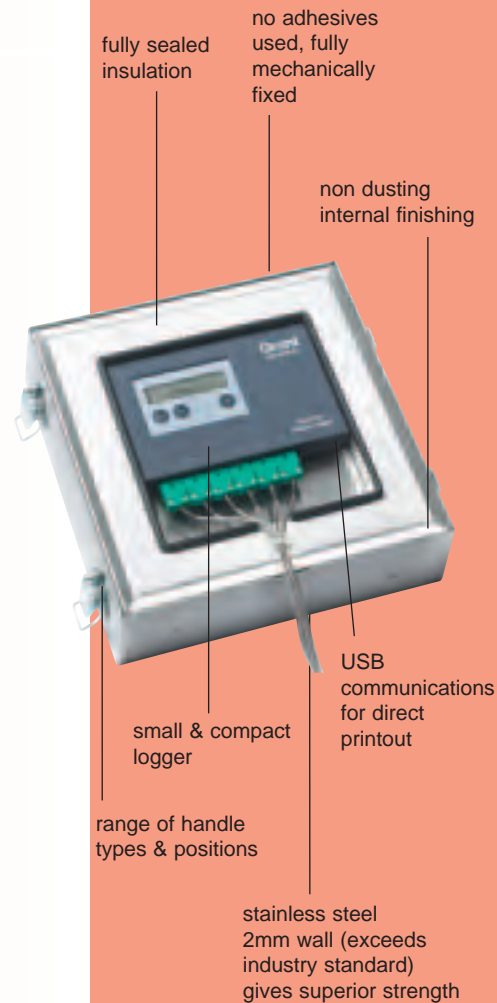
## How does the OMK610 work?

The data logger accurately records the actual temperature of the product during the cure process and not just the air temperature thus ensuring optimum oven performance. Temperature probes are attached to the product and connected to the data logger. The data logger is then placed inside a thermal barrier which is designed to protect the logger from excessive heat as it passes through the oven.

## Benefits of the OMK610:

- Easy to use oven monitoring system; power up the logger, connect the temperature probes, place in the thermal barrier and pass through the oven
- Enables rapid pass/fail decisions to be made, just check the pass/fail display on the logger when the oven cycle is complete or connect the logger to a printer or PC for an immediate graphical printout
- Reduces oven configuration time by pinpointing uneven oven temperatures
- Daily oven monitoring maintains high quality production
- An insight into oven performance teaches the operator how to quickly configure the oven to maximise production, reduce waste and improve profit
- 6 temperature inputs for a fast response and accurate measurement of your paint cure process
- PaintView software (designed for exclusive use in the paint and finishing industry) allows you to easily setup your logger and automatically download your data into a meaningful measure of paint cure
- User-configurable, concise reporting simplifies record keeping and provides ISO 9000 quality records

**Free  
Technical  
Helpline**



## Software

### PaintView:

Easy to use setup and download software for exclusive use in the paint and finishing industry

www.amberinstruments.com

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## System Specification

### The OQ610 Temperature Logger

The Grant OQ610 temperature logger is included in the OMK610 oven monitoring system.

The logger is small, compact and easily portable; making it ideal for passing through all types of ovens. It is battery operated and takes two AA cells to give 200 hours operation at default settings. The logger can be easily set-up via the built in display or from the PC. Cure percentages can be viewed directly from the display allowing the operator to make a rapid pass/fail decision on each product batch.

The logger has a fast sampling speed of up to 8 readings per second. This provides a more detailed analysis to help identify any problem areas such as 'hot spots' and 'cold spots' in the oven to allow remedial action to be taken. The logger has an auto ranging measurement from -200°C to 1300°C and an accuracy range of  $\pm 0.5^\circ\text{C}$ .

The logger can easily be set-up to start logging on temperature changes or at a given time; this makes it easy for the shop floor operator who can put the logger through the oven when required without further setup.

With the touch of a button, the OQ610 can directly printout user configurable, concise reports to simplify record keeping and provide ISO9000 quality records.



### PaintView Analysis Software

PaintView software has been designed for exclusive use in the paint and finishing industry and comes free with the OMK610 oven monitoring system.

PaintView enables easy setup of the logger and automatic download of data into a meaningful measure of paint cure. For advanced cure calculations, it can also provide rapid interpretation of results using paint manufacturers specifications.

PaintView also allows multi zone oven setup along with the additional features of on-line or historical graphing of data with manual and automatic scaling of charts. Readings can be listed in tabular format with timestamps and statistics.

The report generator can provide fully customisable reports on all functions of the curing process to provide customers with proof of compliance to their stoving requirements.

Please refer to separate PaintView datasheet for full specifications.



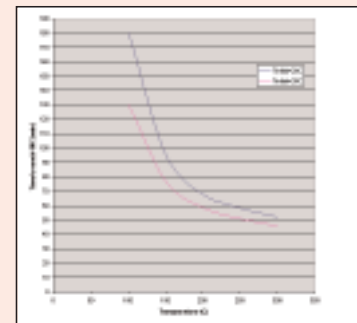
The temperature operating range of the probes is  $-50^\circ\text{C}$  to  $300^\circ\text{C}$  with an accuracy of  $> 1.5^\circ\text{C}$ . If calibrated they can easily be numbered and matched to corresponding channels and are fitted with stainless steel braided cable (1.5m) and miniature thermocouple plugs for extra robustness.

Custom probes are also available along with traditional air and surface probes designed specifically for oven use.

### CI606-Q Thermal Barrier

The CI606-Q is designed specifically for paint and finishing ovens. Small, light and robust it will provide protection for the logger at  $250^\circ\text{C}$  for 50 minutes - long enough for most conveyor processes.

Physical Dimensions (lxxwxh): 230x230x110  
Weight 4kg



### Temperature Probes

4 temperature probes (TC-K-X1.5-3) are supplied with the OMK610 oven monitoring system.

These are universal fast response probes with clamp and magnet fastener which can be used for both surface and air temperature measurement. This means one probe can be used for many different applications.

### Customised Barriers

Grant offer a range of Thermal Barriers for different time/temperature protection and can also design application specific units operating in ovens up to  $950^\circ\text{C}$ . Contact Grant for more details.



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Torque Transducers, Load Cells (general purpose, weighing & fatigue rated). Multi-Axis Force/Torque, Weighing Instruments, Process Instruments, Portable Data Loggers, Pressure Sensors, Proximity Sensors, Laser (Distance Measuring) Sensors & More.

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