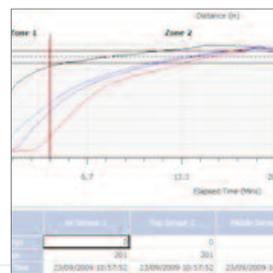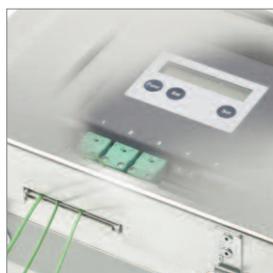# Squirrel OMK610 paint oven profiling system

A comprehensive temperature profiling system designed for the paint and finishing industry

Overview

Everything you need for paint oven profiling and paint cure calculations in one easy-to use and convenient system. At the heart of the system is the Squirrel OQ610 temperature logger, capable of taking up to 8 readings per second and storing over 260,000 readings. The logger is protected by either the TB610 or TB612 thermal barrier specifically designed for use in paint and finishing ovens.

Key features

» Clear LCD screen indicates cure % at the end of the cycle
» Oven / process tolerance bands easily configured
» PaintView software configures, stores and allows detailed cure cycle analysis
» Enhanced thermal barrier gives maximum protection
» Up to 6 temperature channels
» Fast response probes for both air and surface temperature
» The comprehensive report generator allows fully customisable reports to be created, including company logos or digital image incorporation
» Multi-zone ovens can be easily configured
» Easy data storage and archiving within PaintView allows inclusion in audited and approved quality controlled processes

OMK610 kit comprises of:

» OQ610 data logger
» PaintView software
» Thermal barrier
» Carry case
» Quick start guide
» USB cable
» Set of batteries

At the end of a production run, the logger gives user a percentage cure result on the integral screen. Further analysis or data storage is then possible

Multi-language LCD display in English, German, French, Spanish or Italian

The Squirrel OQ610 can record up to eight readings per second from each sensor and store over 260,000 readings in its memory

Four robust, fast response type K thermocouple probes with clamp and magnet fastener can be used for both surface and air temperature measurement

Squirrel OQ610 specifications

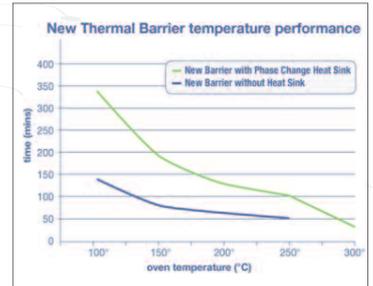|	
No. channels	6 K-type thermocouples
Temp range	-200°C to 1300°C
Operating temperature	-30°C to 65°C
Log interval	8 per sec to 1 per hour
Accuracy	± 0.5 °C
Memory	260,000 readings or 8 production runs
Display	LCD, alpha numeric, 2 by 16 characters
Power supply	2 x AA cells
Data transfer	USB (1.1 and 2.0)
Size	153 x 101 x 23mm (l x w x h)
Weight	450g, coated steel case

* For applications outside the paint and finishing industry SquirrelView software is used with the OQ610, and probes and thermal barrier (if required) can be selected from the relevant sections of this catalogue
** SquirrelView supplied as standard with every new Squirrel. SquirrelView Plus available at extra cost.

Stainless steel thermal barrier

The all-stainless steel construction of the barrier produces a very robust and user friendly protection for the logger. The internal heat sink (TB612) is also manufactured from stainless steel and uses advanced phase change technology, offering up to 100 minutes of protection at 250°C for the logger.

Barrier		TB612 with Heat Sink					TB610 without Heat Sink			
Temp	°C	100	150	200	250	300	100	150	200	250
Duration	mins	340	195	130	100	30	140	80	60	50
Size (l x w x h)	mm	245 x 245 x 115								
Weight	kg	6					4			

New Thermal Barrier temperature performance

— New Barrier with Phase Change Heat Sink
— New Barrier without Heat Sink

time (mins) vs oven temperature (°C)

Thermocouple Probes

The K-type (NiCr-Ni) thermocouples are constructed to be flexible and durable, meeting the requirements of the DIN IEC 60584-2 standard. Full details available in the accessories section on page 34.

Probe identity tags

Numbered, brass tags (1 to 6) simply attach to the temperature probes to provide channel identification. See Accessories section for further details. Order code PT-1-6.
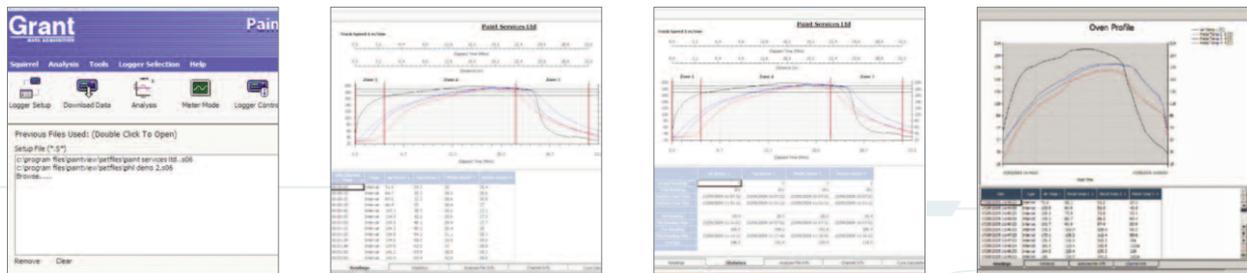
Paintview software

The OMK oven profiling kits are supplied with a full version of the PaintView analyses and archiving PC software. Configure the OQ610 logger, retrieve data via a USB connection, analyse, archive and create reports. Order code Paintview.

Paintview Software
for OMK 610 paint oven profiling system

PaintView – supplied with every OMK610 kit

PaintView is an easy to use software package designed for exclusive use in the paint and finishing industry and is included FREE with every OQ610 temperature logger. It enables easy setup of your logger and automatic download of your data from the logger into a meaningful measure of paint cure. For advanced paint cure calculations, it can also provide rapid interpretation of results. PaintView also gives you the additional benefits of graphically analysing your historical and on-line data, along with advanced reporting.

Key features

» User friendly spreadsheet style software for exclusive use in paint curing applications

» PaintView offers the choice of the Grant 'classic' cure and area integration cure analysis methods

» A database can be built of different paint types from various paint manufacturers

» USPaintView provides zones for optimal paint solving in your process

» With regular usage the software can pinpoint any uneven temperatures within the stoving process

» The tolerance curve feature gives the ability to draw your ideal curve and check that your data fits

» Easily view and control the logger status from one single screen

» Security function protects your data and setup configurations

» The graphing feature within the software offers fully annotated curves, zoom and cursor scrolling analysis

» All settings can be saved for reuse

» The report generator can provide standard reports on all functions of the curing process to provide your customers with proof of compliance to their stoving requirement

» Export data into Excel™ or as a CSV file for customisable data analysis

PaintView System Specifications

Setup

» Setup can be verified before it is sent to the logger
» Converts setup files from previous SquirrelView or PaintView software
» Report options for data presentation
» Hide facility allows you to tailor setup interface to your own requirements
» Printer setup information
» Facility to setup templates

Meter Mode

» Displays up to 6 channels
» 3 Plot types: line graphs, gauges & dials
» Autoscaling: X and Y axis
» Value readout: cursor position
» Saves metered data for re-use in other software packages
» Graph printout facility
» Graph can be presented in various styles

Download

» Download straight to graph
» Download directly as a CSV file

Export

» Easy to use export wizard
» Customisable data export for Excel™, Lotus™ or other applications
» Export viewer allows quickview facility of data format

Additional features

» Tips of the day – provides informative shortcuts
» Logger diagnostics
» Security features enables password setup
» Communication wizard enables easy setup of USB
» Interactive help

Analysis

» Easy analysis for OQ series loggers
» Easy to use Explorer style interface
» Fully configurable data views
» Creation of templates
» Flexibility for customisable reports
» Facility to include text comments with graphs
» Flexible zoom feature including X and Y axis
» Statistics calculator
» Autoscaling of Y axis
» Value readout at cursor position
» High and low level thresholds
» Report facility: prints out graphs, readings,etc
» Tolerance curve
» Oven profile
» Calculated channels
» User notes
» Archives
» File convertor from Paintwise and Squirrelwise
» Product cure calculation
» Append/add datafiles
» Run creator, extracting and joining data by time

Minimum computer requirements

» Microsoft Windows XP™, Vista™ or Windows 7™
» Pentium II 266 MHz
» RAM as specified by PC operating system
» 60 Mb hard disk space and 1 CD drive
» Colour SVGA monitor running at 800 x 600 (1024 x 768 recommended
» USB port