

# CURVE-X2

Oven Temperature Profiler



THE QUALITY LINK

The **CURVE-X2** offers easy-to-use, high quality temperature datalogging for paint curing ovens. Measurements, analysis levels and report options are fully customizable to provide you with tailor-made information on the quality of your curing processes. The datalogger is fitted with a large display for easy menu-driven operation and quick display of measurement results. TQC's Ideal Finish data analysis software allows you to analyse the logged data and create detailed reports. These advanced features, together with a wide range of display and printing options, makes Curve-X-2 the most flexible temperature datalogging solution available, excellently suited for both field use and laboratory conditions.

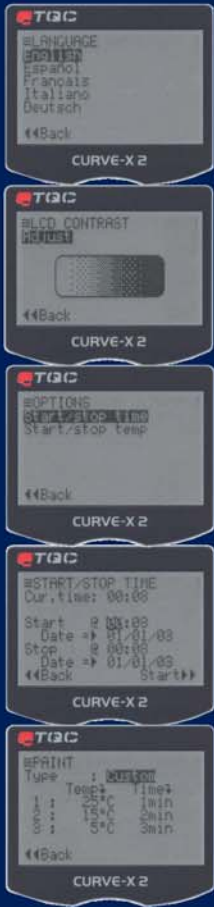
**SAVE ON PRODUCTION TIME,  
ENERGY, REWORK AND SCRAP  
COSTS**

### **Curve-X2:** A profitable investment in the quality of your products

- Maximise productivity
- Minimise energy costs
- No more rejects or rework
- Optimise finishing quality
- Document and prove process control following Qualicoat®, GSB®, ISO9000, QIB®, etc..



# A datalogger with unique features



- Large display for easy menu-driven operation. Simply follow the instructions on the display.
- Menus in five languages: English, Spanish, German, French and Italian.
- Start and stop logging at a pre-set time and date.
- Start and stop logging at a pre-set temperature.
- Programmable (via PC) for up to 15 paint-types, for accurate calculation of the Cure-index.
- If a paint-type is not available in the library, it can be entered in the logger on site.
- Variable measurement interval, date, time, C°/F° and language.
- Displays the results of every stored batch, including Cure-index.
- Standard AA-batteries guarantee 1200 hours of continuous operation.
- Extended memory stores 10 batches of 25.000 measurements each.

## Extendable

Optional add-on to convert the 6 channel datalogger into a 12-channel system.



THE EASIEST WAY TO MEASURE, RECORD AND ANALYSE YOUR PRODUCT TEMPERATURE

## Simple 3-step operation for basic features:

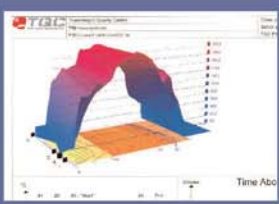
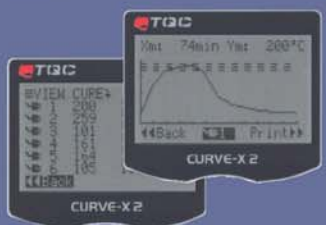
- 1 Connect the probes to the product and switch the logger "on".
- 2 Place the logger in the box and send it through the oven.
- 3 Read the results from the display or send them to a printer or PC.



## Flexible evaluation

### Quick display

The logger display shows maximum temperature and Cure-Index figure, percentage and pass/fail sign, or graphic per probe.



### Extensive analysis

For extensive analysis, comprehensive calculations and fully customizable reports every system is supplied with powerful "Ideal Finish" data analysis software.

### Wireless print

The optional TQC Irp portable infrared printer can print (wireless) a brief report including Cure-index, maximum temperature and graphs.



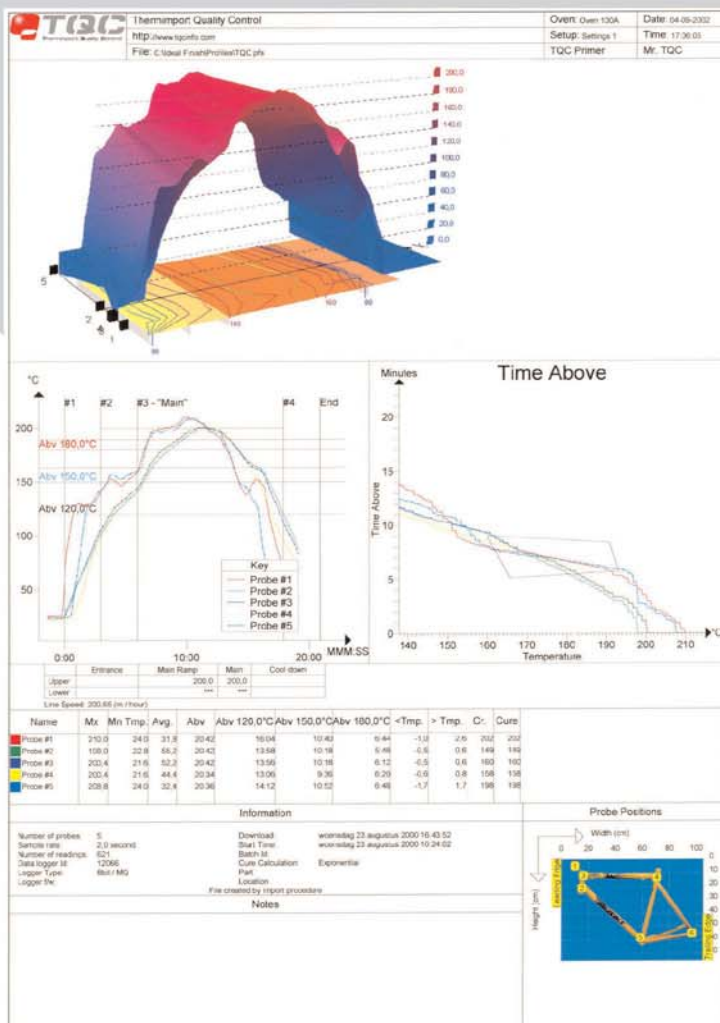
### Logger to printer

A complete, full-colour report can be printed directly to any HP-Deskjet printer using the optional printer-link. No computer required!

## Optimising the quality of your products. 'Ideal Finish' software.

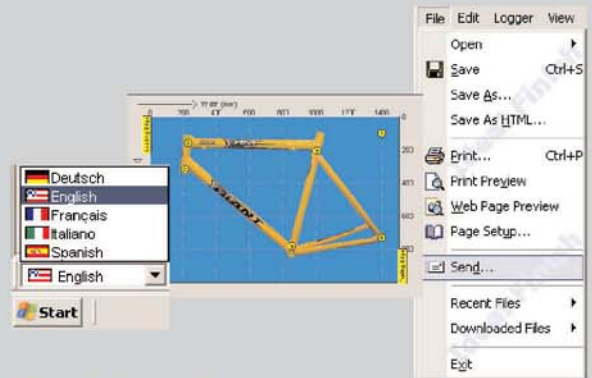


The Curve-X-2 datalogger is supplied with Ideal Finish, the most advanced temperature monitoring software package available today. With two user levels Ideal Finish offers user-friendly report functions for standard production work as well as advanced calculations for in-depth analysis of the curing process and oven performance. Detailed graphic representations and customizable reports help you to make the right decisions to optimise your production line.



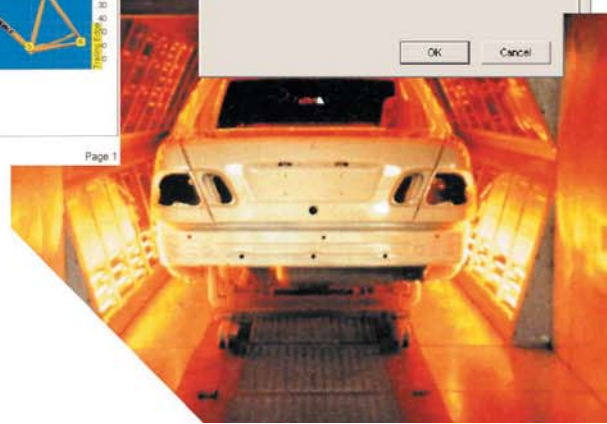
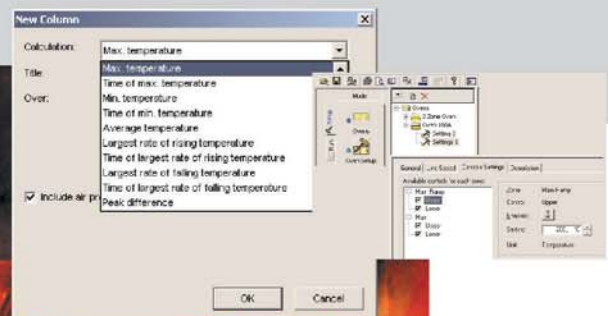
©1995-2002 Ideal Finish - Version: 3.0.0.23

PRODUCE THE BEST POSSIBLE PAINT JOB, BATCH AFTER BATCH, DAY AFTER DAY ...



## Flexible software

- Select your own language
- Create and store oven-layout and oven settings
- Create your own paint-library, complete with cure specifications
- Choose from more than 30 different calculations
- Set your own parameters to create an "Ideal Cure Window"
- Send your reports by e-mail with a single mouse-click
- Insert a picture of your product and have your probe position calculated automatically. Complete with automatic position-lag compensation.
- Create professional reports and documentation in your own style.



## A complete range of probes

All Curve-X-2 probes have been especially designed to guarantee accurate readings:

- Perfect probe-surface contact
- Low mass and optimised shape to avoid influence on temperature behaviour
- Cable with easy to clean Teflon outer shield, highly flexible due to the twisted cable cores and extremely strong due to the braided metal mesh armour.

### Magnet surface probe

This probe is fitted with an ultra strong magnet but still has a very low mass and size. The actual sensor is thermally isolated from the magnet in order not to affect the part's temperature. This sensor is suited for use on round parts, such as tubes.

### Clamp-type surface probe

Small and elegant surface probe for any type of material. Silver tipped sensor is thermally isolated from the clamp by ceramics.

### Ring-type surface probe

Universal probe with aluminium ring at the tip for fast response

### Air probes

Available with either clamp or magnet.

### Probe-cable

Most of our standard probes are quipped with our special probe-cable. This cable is easy to clean due to the Teflon outer shield.

### Wire-type probe

Universal probes that can be used for either air or surface temperature measurements. Measuring element is an open thermocouple that can be attached by adhesive tape or other mechanical means.

### Infrared probes

The infrared probes are designed to profile the IR-radiance inside an oven. Because of their shape and design they will give reproducible results each run. Note the actual part temperature is not necessarily equal to the temperature of the IR-probes.

- Each logger comes with a set of metal probe-tags to match the probes with the channels.



## THE BEST MATERIALS FOR DURABLE QUALITY



Prod. code	Cable length cm.	Cable Type	Application	Probe Type	Max. T.
CX2020/21/22	150/300/500	Teflon	Air	Clamp	300°C/570°F
CX2069/68	150/300	Teflon	Air	Magnetic	300°C/570°F
CX2030/40/41	150/300/500	Teflon	Surface	Clamp	300°C/570°F
CX2050/60/62	150/300/500	Teflon	Surface	Magnetic	300°C/570°F
CX2065/66/72	150/300/500	Teflon	Universal	Ring ø 6 mm.	300°C/570°F
CX2063/64/67	150/300/500	Teflon	Universal	Wire	300°C/570°F
CX2055/56	150/300	ss braided lead	Surface	Magnet	480°C/900°F
CX2048/49	150/300	ss braided lead	Surface	Clamp	480°C/900°F
CX2085/86	150/300	ss braided lead	Universal	Ring ø 6 mm	480°C/900°F
CX2023/24	150/300	ss braided lead	Air	Clamp	480°C/900°F
CX2090/91/92	150/300/500	Inconel tube	Universal	Ring ø 6 mm.	1000°C/1830°F
<b>Infrared Probes</b>					
CX2095	150	ss braided lead	"Surface"	Clamp	480°C/900°F
CX2096	150	ss braided lead	"Surface"	Magnet	480°C/900°F
CX2097	150	ss braided lead	"Air"	Clamp	480°C/900°F

Special cable length or probe designs are available on request.

## Maximum protection for your Curve-X2

All Curve-X2 systems come with a high quality insulation box:

- Outer shield and latches of high-grade stainless steel.
- Magnet plate for holding probes when not in use.
- Cable storage device, allowing surplus length of cables to be stored inside the box. This prevents loose cables that could get stuck in the oven.
- Efficient heat sink to extend the protection time even longer.



Other boxes for special applications are available on request:

- Teflon box
- Slimline box
- High Temp box

## Specifications standard box and heatsink:

Dimensions : height 140 mm, width 225 mm.,  
length 255 + 30 mm (handle)

Weight : 4200 gram

Heatsink : height 70 mm, width 140 mm,  
length 190 mm.

Weight : 1900 gram



## Technical specifications Curve-X2 Datalogger

Size : 85 x 105 x 30 (50 with add-on) mm.

Weight : 285 Gram

Channels : 6 or 12 with "add on" unit

Range : -50°C to +1200°C / -58°F to +2200°F

Accuracy : ± 0.3°C / 0.6°F

Resolution : 0.1°C / 0.2°F

Interval : From 1 sec. to

Memory : 10 batches of 25000 readings each

Batteries : 3 pcs. 1.5V AA-type

Battery life: 1200 hours continuous use or 10.000 hours stand-by

## TQC produces a complete line of quality control equipment for the surface treatment and coatings industry.



Physical test-equipment



Inspection instruments for pre-treatment



Lab-equipment for coatings test