HTS08 Systems

For CAB and vacuum brazing

...where experience counts !

Data logger

PhoenixTM data loggers are designed for use in harsh industrial environments. The electronics are protected by a robust, water resistant, machined aluminum case. Cold junction compensation with feedback error detection and noise reduction ensures accurate and reliable data. Optional two way RF telemetry is available, allowing real time data analysis and for the data logger to be reset and downloaded remotely. All loggers are shipped with a factory calibration certificate traceable to national standards. Optional certification to UKAS (UK) or DKD (Germany) can be supplied if required. For convenience and future reference, a copy of the original calibration certificate and the calibration data are stored within the data logger and can be accessed as required.

Type	PTM1-206, PTM1-210, PTM1-020
No. of channels	6,10 or 20
Thermocouple type	K or N
Measurement range	Type K: -100°C - +1370°C
	Type N: -100°C - +1300°C
Accuracy	+/- 0.3°C
Resolution	0.1°C
Max operating temperature	80°C
Battery type	2 x Alkaline (AA)
Sampling rate	Adjustable from 0.2 second to 1 hour
Memory	Up to 3.8 M data points,non-volatile memory
Start trigger	Time, temperature, start button or software
PC connection	Hard wire or Bluetooth
Dimensions	20 x 98 x 200mm (h x w x l)

Two way radio transmission as an option

Robust and waterproof housing for reliable use in hostile environments

Standard batteries: 1000h measurement time, widely available
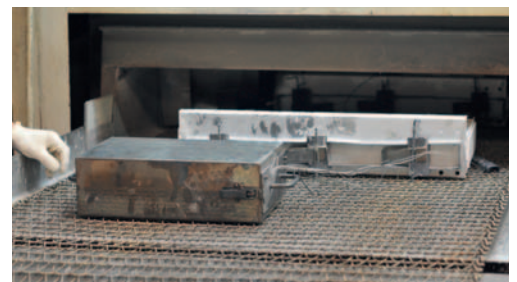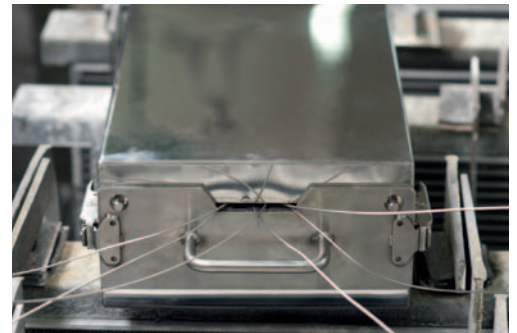
Bluetooth PC connection

What is temperature profiling?

All industrial ovens or furnaces use 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 heat treatment specification is adhered to.

PhoenixTM can provide a solution:

Our monitoring system travels through the furnace with the product, logging temperatures from up to 20 thermocouples connected to the product or distributed in the load to get an accurate thermal 'balance'. The system is easily placed on the line with the product causing less disruption and gives a more accurate picture of true product or load temperature. At the end of the profile run a powerful software package analyses the logged data to determine whether the specification has been met.

The profiling trials can be quickly carried out allowing you to resolve any furnace problems quickly, and to provide your customers with an assurance of a consistent process control.

TS08 thermal barriers

Built specifically for Aluminiuum brazing applications. The TS08 thermal barriers are designed to eliminate exposed insulation, protecting against acid attack and extending the life of the thermal barrier. Oxygen presence within the thermal barrier is reduced by maximising the amount of nitrogen in the insulation material during manufacture which minimises possible oxygen contamination in the furnace. For processes sensitive to oxygen contamination the TS08 can be fitted with an optional facility to allow a nitrogen purge of the thermal barrier prior to each run, significantly reducing oxygen contamination.

Robust and rigid logger tray for reliable long-term performance and easy data logger installation.
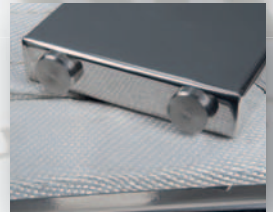
Standard TS08 range performance:

Type	TS08-85	TS08-104	TS08-125	TS08-185 vac
500°C / h	0.7	1.1	1.5	4.0
600°C / h	0.6	0.8	1.3	3.0
700°C / h	0.5	0.6	1.0	2.3
Height / mm	85	104	125	185
Width / mm	272	272	272	294
Length / mm	516	516	516	447

High temperature materials and highest quality workmanship!

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.

Heat sinks with very high thermal capacity and gas tight seals allow use in vacuum or pressure applications up to 20 bar.

An application specific construction to maximise life and minimise process impact.

Thermocouples

For temperatures above 250°C mineral insulated thermocouples are generally the first choice. The thermocouples wires are insulated by magnesium oxide and protected by a high grade alloy sheath. For special applications we can supply thermocouples with other insulation materials.

Thermocouples can be mechanically held, or retained in holes to record temperatures at critical points.

Type K or N mineral insulated thermocouples in 1.5 and 2.0mm diameter.
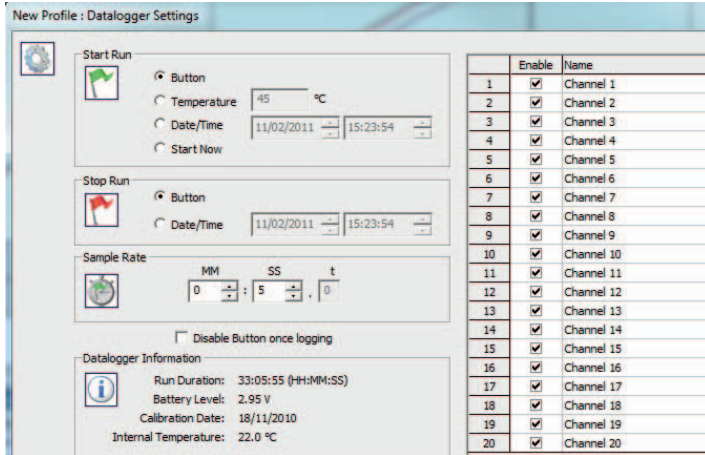
Thermal View Plus

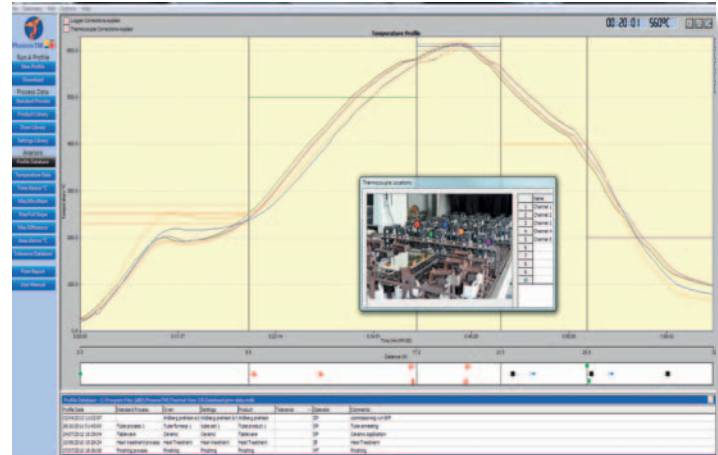The easy way to get a perfect result!
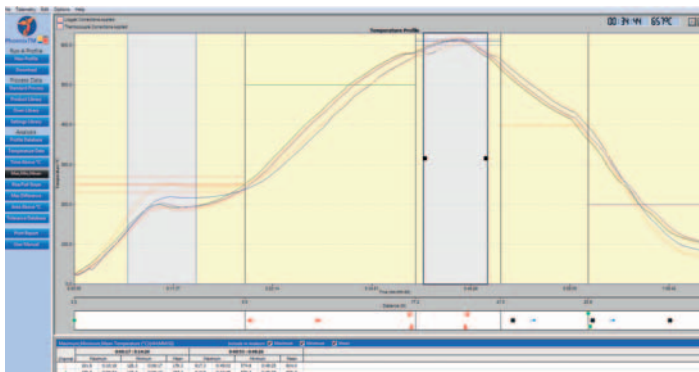
PhoenixTM
Phoenix Temperature Measurement

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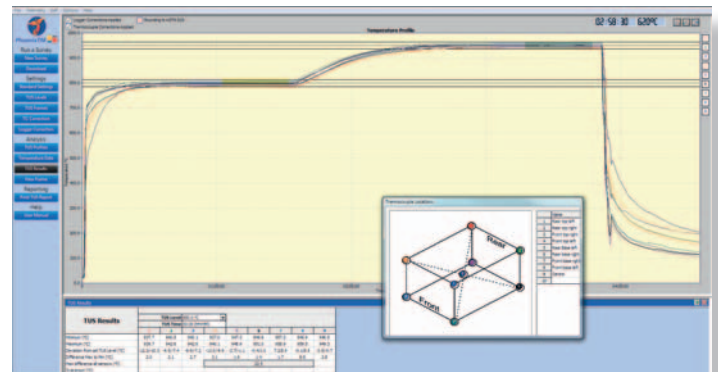- The number of thermocouples to be used.

For regular measurements these can be set with one mouse click or pressing the data logger start button.

The temperature profile is displayed in the graphics window of the Thermal View software. Thermocouple profiles can be switched on or off individually and you can zoom in for more detailed analysis.

Comprehensive analysis tools are located on the left side of the screen for single click analysis and report generation. Data import and export in both .csv and PhoenixTM formats are available allowing electronic transfer of process data.

A seperate software package, "Thermal View Survey" is avaliable for surveying furnaces to industry requirements. Featuring thermocouple and data logger correction factors, user defined TUS leves and tolerances, View Frame anaylsis, over shoot search, data import / export, printed report. Contact us for a demo version!