

Furnace Tracker[®]

Controlled Atmosphere Brazing (CAB)

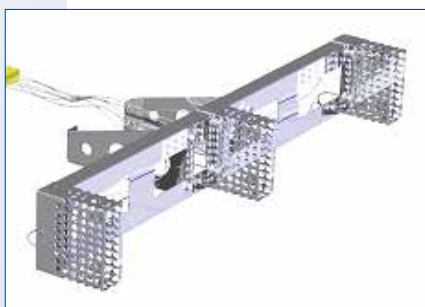
The DATAPAQ[®] CAB furnace solution helps ensure your process meets the narrow time and temperature window brazing requires – with the repeatability you need, and information that will help you solve production problems before they begin.

With 30 years of design and application experience, the innovative DATAPAQ CAB system has been designed to meet the toughest and most demanding specifications.

The thermal barrier has been designed specifically for CAB furnaces, where sealed micro-porous insulation prevents acid and moisture attacks during the process, prolonging the life of the system. The barrier body is built using high grade stainless steel to resist flux attacks. The innovative design of the thermocouple jig allows quick, easy and safe retrieval of the logger, post run. The system's high thermal capacity guarantees safe operation all day with cooling periods between runs.



DATAPAQ CAB system



Surveyor arm assembly



Thermal barrier TB4000

ADD A SURVEY JIG TO TRANSFORM THE THERMAL BARRIER TO A SURVEY SYSTEM

The Surveyor's thermal barrier is connected to a jig, which keeps the thermocouples in the same location for consistency and repeatability of measurement. Once a "perfect braze profile" is obtained by using thermocouples on the product, the CAB Surveyor can be used to verify the base line profile without the need to profile another product. Any deviation from pre-set tolerances or drift highlighted by trend analysis will be seen and rectified. Dedicated CAB software for full survey and process analysis lets you see issues before they occur.

SYSTEM FEATURES

- Sealed insulation design for longevity and minimal repairs
- Thermocouple wire channel for ease-of-use
- 6 and 10 channel compatible, RF telemetry-ready
- Reduced cooling down period for back-to-back runs
- Upgradeable to Surveyor system by adding a Surveyor arm
- Surveyor: thermocouples maintained in same positions to ensure consistency and repeatability
- Surveyor: go/no-go provides clear traffic light indication of results

SYSTEM BENEFITS

- Monitor brazing windows on the product itself, make changes for optimization
- Statistical analysis (SPC) for furnace trending historical analysis
- Multiple run capability; profile multiple brazing lines before extracting data at the office
- Visual alarms on the software notifies the operator if set tolerances are shifting
- Flexible system with optional Surveyor, RF telemetry and a choice of 6 or 10 measurement channels
- Report generation for electronic or hard copy archiving
- ISO, CQI-9 and AMS2750E traceability through fully certified software packages

TECHNICAL SPECIFICATIONS



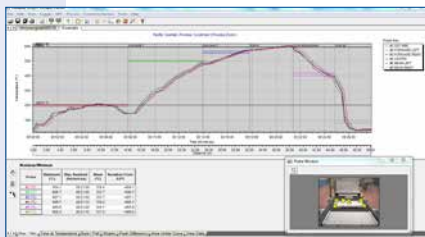
DATAPAQ TP3016 data logger



DATAPAQ DQ1860 data logger



DATAPAQ Insight™ software



CAB surveyor software

THERMAL BARRIER

Model number	TB4000
Dimensions H×W×L (including handles and catches)	103 × 273 × 477 mm / 4 × 10.75 × 18.8 in
Max. operating temperature	800 °C (1472 °F)
Thermal duration	80 minutes at 600 °C (1112 °F) 4 × 45 min runs at 600 °C / 1112 °F (1 hour cooling time between runs)
Weight (including heat sink)	12 kg (26.4 lb) (heat sink TB9970)
Heat sink	TB9970

Other sizes available. Contact DATAPAQ for details.

CAB SURVEYOR SYSTEM (THERMAL BARRIER + SURVEY JIG)

Model number	TB4010
Dimensions (H×W×L)	103 × 602 × 650 mm / 4 × 23.7 × 25.6 in

DATA LOGGER

Model number	TP3016	DQ1860
Temperature range	-100 °C to 1370 °C (-148 °F to 2498 °F)	-100 °C to 1370 °C (-148 °F to 2498 °F)
Connectivity	USB or Bluetooth®	USB
Max. operating temperature	70 °C (158 °F)	85 °C (185 °F)
Memory capacity	3.2 Million data points	18,000 readings per channel
Number of channels	10 or 20	6
Sampling interval	0.3 sec – 50 min no telemetry 1 sec – 50 min RF telemetry	0.5 sec – 10 min no telemetry 1 sec – 10 min RF telemetry
Accuracy	±0.3 °C (±0.5 °F)	±0.5 °C (±1.0 °F)
Battery	NiMH rechargeable or alkaline	NiMH rechargeable
Thermocouple type	K (other types available)	K (other types available)

INSIGHT™ SOFTWARE FOR FURNACE TRACKER FOR PROFILE ANALYSIS

Analysis functions include maximum temperature, time at temperature, slope calculation, rise and fall calculations, view data, etc.:

- Carry out survey during a production run
- Hardcopy graph or full user-defined report generated in PDF
- Stores logger calibration certificate and correction factors (TP3 only)
- Applies instrument (logger) calibration offsets
- Applies thermocouple calibration offsets

PART NUMBERS

Software	DATAPAQ® Insight™ CAB Surveyor or Insight Furnace Tracker
Thermocouples	PA0919 (4) 700 mm (27.6 in) for two outer ends of arms PA0918 (2) 385 mm (15.2 in) for center thermocouples

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01/2018 DS_FT_CAB, Rev. C

