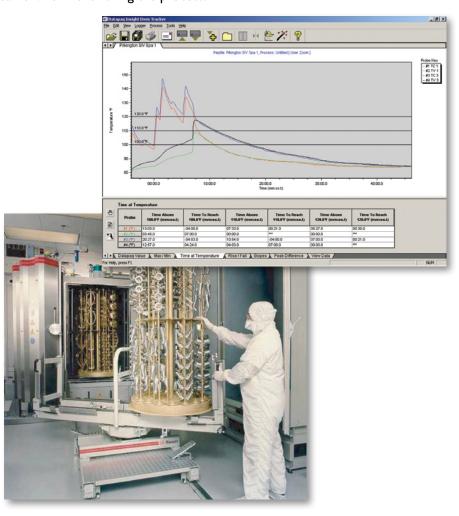


# Oven Tracker<sup>®</sup> System

for Physical Vapor Deposition (PVD)

The Datapaq<sup>®</sup> Oven Tracker<sup>®</sup> Temperature Profiling System accurately collects and analyzes temperature information needed to monitor and improve your Physical Vapor Deposition (PVD) process. The PVD process requires precise temperatures to achieve an extremely durable and smooth finish. Because product temperature may not equate to set temperature, it is important to identify product temperature, so oven cycles can be adjusted to give the optimum profile. The Oven Tracker system can withstand the hostile conditions of vacuum ovens/furnaces, while maintaining a clean environment during the process.



#### SYSTEM BENEFITS

- Profiles can be used to 'match' products and optimize production cycles
- Oven setting can be adjusted to ensure coating adherence
- Highly polished thermal barrier prevents contamination
- Compression fittings on mineral insulated probes withstand high voltage in vacuum chamber – no trailing thermocouples needed
- No out-gassing of insulation or adhesives around thermal barrier sealing gasket

## **TECHNICAL SPECIFICATIONS**





TB5014 Barrier

Thermocouples



| Туре                          | Tpaq21   |
|-------------------------------|--|
| Channels                      | 10 Type K  |
| Measuring Range               | -100°C to 1370°C (-148°F to 2498°F)                                      |
| Accuracy                      | ±0.3°C (±0.5°F)  |
| Resolution                    | 0.1°C (0.2°F)  |
| Sampling                      | No telemetry $-$ 0.1 sec to 50 mins RF telemetry $-$ 2 secs to 50 mins   |
| Memory                        | 130,000 datapoints   |
| Maximum Operating Temperature | 70°C (158°F)   |
| Battery                       | NiMH rechargeable  |
| Battery Life                  | No telemetry – 340 hours<br>RF telemetry – 40 hours (3s sample interval) |

#### THERMAL BARRIER

| Barrier Model          | TB5014 with (2) TB1001 Heatsinks                        |
|------------------------|---|
| Weight                 | 7.8 kg (17.2 lbs)                                       |
| Dimensions (H x W x L) | 100 mm x 146 mm x 303 mm<br>(3.9 in x 5.7 in x 11.9 in) |
| Operating Temperature  | Maximum temperature 400°C (752°F)                       |
| Thermal Duration       | 4 hours @ 200°C (392°F)<br>6 hours @ 150°C (302°F)      |
| THERMOCOUPLES PA0710   | Mineral Insulated, Nicrobel 1.0 m (3 ft)                |
| PA0711                 | Mineral Insulated, Nicrobel 2.0 m (6 ft)                |

#### INSIGHT™ ANALYSIS SOFTWARE FEATURES

Datapaq Insight<sup>™</sup> software is a powerful software package that quickly converts raw data into meaningful information. Complete documentation is generated in seconds with a detailed analysis of the curing cycle.

- Wizard driven for ease-of-use
- DatapaqValue, Reference and Tolerance Curves, SPC, and Bakechart analysis
- Time at Temp/Peak Temp shows time spent above pre-determined temperature thresholds and the maximum temperature reached
- Analysis alarms for when the process is out of tolerance
- Import and export data into spreadsheets for further analysis
- Notification for logger recalibration

### The Worldwide Leader in Temperature Profiling





Europe and Asia DATAPAQ Limited, Deanland House, 160 Cowley Road, Cambridge CB4 OGU, UK

# 51 # 51 # 51 # 51

Tel· +44 (0)1223 423 141 Fax: +44 (0) 1223 423 306 E-mail: sales@datapaq.co.uk Web: www.datapaq.com

North and South America DATAPAQ Inc,

187 Ballardvale Street. Willmington, MA 01887, USA Tel: +1 978 988 9000

Fax: +1 978 988 0666 E-mail: sales@datapaq.com Web: www.datapaq.com

Germany DATAPAQ GmbH, Valdorfer Straße 100

D-32602 Vlotho, Deutschland Tel: +49 5733 9107 0 Fax: +49 5733 9107 27 E-mail: sales@datapaq.de Web: www.datapaq.de



© 2011 Datapag (2023 Rev B) 3/2011 Datapaq, the Datapaq logo and Oven Tracker are registered trademarks of Datapaq. Specifications subject to change without notice.