GENCOA

OPTIX

FOR VACUUM HEAT TREATMENT AND VACUUM METALLURGY

Gencoa Optix is a robust and easy-to-use compact gas sensor that provides critical information from vacuum environments. Optix is ideally suited to improving productivity and preventing failed production cycles on vacuum metallurgy and heat treatment processes.

Perfect your process
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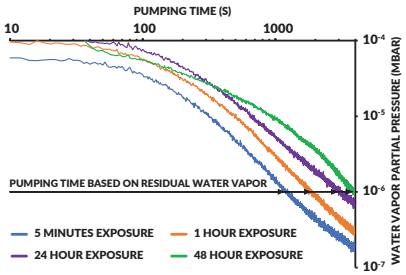
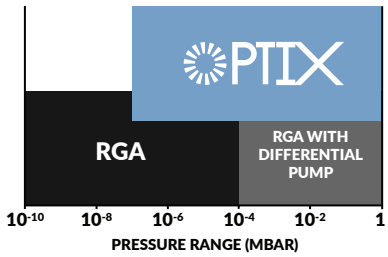
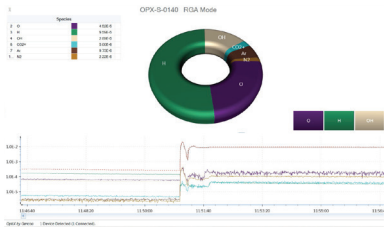
OPTIX







OPTICAL GAS SENSING

Optix is a robust and easy to use device to track the gases present during vacuum processing. The nature of a vacuum means that any potential problem can be identified by monitoring the different gases present.

In contrast to in-vacuum mass spectrometry-based gas detectors, Optix uses light from a small remote plasma on the chamber wall to detect the gas concentrations. The detector (spectrometer) is located in atmosphere, and therefore protected from damage at all times.

Another major advantage is the ability to work from near atmosphere down to 10^{-7} mbar, without the need for any differential pumping. As the chamber pressure achieves 0.5 mbar early in the pump down cycle, Optix will switch on automatically and begin monitoring.

ADVANTAGES FOR HEAT TREATMENT PROCESSES

Leak Detection
Automatically leak check chambers during production cycles. The ingress of nitrogen from the atmosphere is used to determine leak tightness, with Argon sprayed to locate the problem.

Process Optimization
Optimise pump-down times by sensing the vacuum atmosphere to determine when to switch to processing.

Process Monitoring
Check substrate condition is suitable for processing - monitor the moisture and other outgassing from component parts to avoid failed production cycles.

Traceability
Obtain definitive quality control data from each cycle by logging the pressure and gas traces during all stages of production.

EASY TO USE, POWERFUL SOFTWARE

The Optix sensor is 'impossible' to break, and comes equipped with advanced Windows software that provides clear visualisation of the leak check and powerful tools for recording and referencing complete process data. Up to 20 gases can be monitored simultaneously with update speeds as fast as 10ms. A patent pending method to calculate the partial pressures or PPM of gases is key feature of the software.

FURTHER INFORMATION

Contact: sales@gencoa.com or visit
www.gencoa.com/optix

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