



Application

Industrial Ovens used for Component Processing for the Aerospace industry.

Challenge

To deliver a precise level of process control for component processing with accurate record-keeping to meet NADCAP standards

Solution

Use the CAL 9500P programmable temperature controller for its profiling power in conjunction with the process monitoring and datalogging software, CALgrafix.

The flexibility and profiling power of the CAL 9500P temperature controller has provided an exceptionally powerful solution for Active Magnetic Inspection Inc. (AMI), a US company that treats and inspects fasteners for the aerospace industry.

AMI performs plating, stripping, stress relief and magnetic particle inspection processes for fastener manufacturers.

In the aerospace industry, which is highly regulated due to the extreme need for safety, manufacturing precision is key and a business such as AMI

depends on meeting quality control requirements. In order to achieve this, a precise level of process control and accurate record-keeping is required.

AMI had decided to raise the bar and establish a process system that would earn accreditation from Nadcap (National Aerospace and Defense Contractors Accreditation Program) and thus enable the company to strengthen its position in the aerospace fastener business. To meet this need, AMI's systems were enhanced by temperature controllers from West Control Solutions.

AMI enlisted the services of R.J. "Skip" Schaefer of Titan Industrial Heating Systems, an expert in the design and construction of temperature-controlled manufacturing processes.

Skip's task was challenging as many points of control were required. These included two stress relief ovens that each required monitoring of 60 product containers.



CAL Controllers Boost Business For Aerospace Component Processor

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R.J. “Skip’ Schaefer
Titan Industrial Heating Systems

In order to achieve Nadcap accreditation it was also necessary to establish a thorough quality system, including well-documented process instructions and complete records for all production lots including time and temperature data, to meet the needs of the annual audit.

“The customer needed to provide 100% traceability on its output,” Skip explained. *“I’ve been using CAL temperature controllers for around 25 years and I can count the number of failures on one hand so it had to be CAL. Aside from the reliability and durability of the CAL product, West Control Solutions are also very helpful with background information*

when I’m planning a system build.”

The CAL 9500P process controller was chosen as the front end for its flexibility and profiling power. In order to satisfy Nadcap process data requirements, all of the instruments are tied to a central PC that runs CALgrafix process monitoring software. The result is that every point is monitored and stored on a minute-by-minute basis.

When the process system was inspected by Nadcap, the results were outstanding and AMI was issued with its certificate, enabling AMI to strengthen its position in the aerospace fastener business.

“There have been zero flaws in the system,” Skip said. *“That’s with two ovens: one with 36 controls and one with 34, both working 24 hours a day, seven days a week. A system such as this requires absolute reliability and CAL controllers have guaranteed that.”*



West Control Solutions is a global specialist in temperature and process control instrumentation. Through its four leading product brands, CAL, West, PMA and Partlow, it has been supplying the industrial and scientific industries with reliable, easy-to-use temperature control equipment for over 100 years. For more information on the temperature control product range from West Control Solutions please visit www.West-CS.com.

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