

SUCCESS STORY 104

COMPOSITES CURING FOR AEROSPACE INDUSTRY



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How can the quality of aerospace composites be ensured to correspond to the strict requirements of NADCAP AMS2750E?

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Situation and background

One of the largest composites suppliers to aerospace in Asia (civil and military aircrafts) has been using a Datapaq® system for temperature uniformity surveys or TUS according to AMS2750E.

Composites make up over 50% of civil aircraft structures and thermal curing is a critical process for final quality. The autoclaves, where the composites are cured, need to be surveyed regularly and audited by governing body NADCAP.

Datapaq won the contract to supply TUS systems. The system operates under a 10 bar atmospheric pressure up to a temperature of 350°C (662°F).

TUS data is collected through the ever reliable and accurate Tpaq21 data logger and transmitted through TM21 radio telemetry for live data, reducing TUS durations.

The winning solution

- Datapaq is the only supplier that meets this customer's exact requirements, especially AMS2750E.
- TUS specialized software for AMS2750E
- Tpaq21 data logger
- TM21 radio telemetry
- Local training and support by a Datapaq agent with over 20 years experience in the industry and products

Savings made

- Reliable telemetry reduced TUS cycle time by 50%, saving 100s of hours.
- TUS dedicated software reduced report generation and data collection from 3 days to 2 hours.
- Setpoint Information processing time was reduced from 60 to 15 minutes.

KEY FACTS

Customer's End Product
Aerospace composites

Max Temperature Reached
85°C (185°F) and 350°C (662°F)

Duration of Process
3.5 hours, 7-10 bar pressure

PRODUCT AND BENEFITS



Data logger Tpaq21
Thermal barrier TB4056
Furnace Insight Survey
Telemetry TM21

- Optimize your oven performance
- Save time/man hours/downtime and money on TUS
- Datapaq global service and support