

## **APPLICATION STORY**

### UEI & Aerospace Design Manufacturing Test Bed

#### WORKING TOGETHER

An aerospace design manufacturer recently completed construction of an aerospace test bed facility. The facility is a massive test bed structure designed to support a new generation of efficient and sustainable engine and propulsion systems. The data systems inside of this facility are more capable and complex than any of the manufacturer's existing test beds and have the capacity to collect and store more than 10,000 parameters of data from an intricate lattice of sensors.



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#### THE IMMEDIATE CHALLENGES

*ndustries* Ametek

Pushing the boundaries of test bed technology caused unexpected issues for the manufacturer, such as rapid weardown of parts, supply challenges and conflicts between disparate proprietary systems; this caused a decrease in reliability, availability, and serviceability.

Uptick in warranty complaints caused losses in profit, resources and time, affected brand reputation and damaged employee morale.

#### UEI'S PATHWAY TO SUCCESS FOR AEROSPACE DESIGN MANUFACTURER



UEI partnered with the manufacturer to standardize on a common iDDS (Instrumentation Data Distribution Service) architecture across the test bed's complex data measurement infrastructure.

UEI's iDDS solution included code written in a common interface definition language and compatible with standard framework shared by publishers and subscribers, greatly simplifying system management and support.

UEI provided rugged hardware capable of withstanding 5 g vibration, 100 g shock, and temperatures between -40 and 85° C, allowing for system placement directly on or near the test bed.

## **END RESULT** UEI'S STANDARDIZED HARDWARE HELPED AEROSPACE DESIGN MANUFACTURER DEVELOP A RELIABLE AND ACCURATE TEST BED MEASUREMENT SYSTEM.

- [WIN] UEI hardware mitigated the risk of adopting new tech with our 3 Year Standard Warranty, 10 Year Availability Guarantee and a standardized hardware system solution.
- [WIN] Manufacturer is now using the common standard across test bed measurement infrastructures all over the world, making part requisition and maintenance much easier.
- [WIN] The hardware and I/O overhaul helped manufacturer's aerospace engine division make a fresh start and win back its long-standing reputation for reliability and quality.

# ASK US HOW UEI CAN DO THE SAME FOR YOUR COMPANY!