

CASE STUDY

A&D manufacturers deploy Prediction Guard beside MES software for process transforming (and secure) intelligence

AI is set to transform manufacturing with predictive maintenance assistants, supply chain analyses, process optimization agents, and more. However, Aerospace and Defense (A&D) manufacturers work under strict data protection and environment constraints, which prevent them from integrations with third party AI systems. One of the leading Manufacturing Execution System (MES) software vendors for the A&D industry is overcoming this challenge by powering their transformative AI functionality with Prediction Guard. This allows them to deploy a complete, best-in-class AI system (PG) next to their MES software stack in secure on-premise and air-gapped environments.

MES SOFTWARE INTEGRATION

Prediction Guard is being integrated into this MES software vendor's applications to power: (1) a "digital SME" providing informed answers to manufacturing questions; (2) a "data intelligence" system that connects to the MES database allowing users to quickly generate reports and answer questions about work orders, discrepancies, etc.; and (3) a document processing pipeline to automatically load PDF process plans into the MES software. All of these functionalities are being powered by a private AI system (Prediction Guard), which can be bundled in a secure deployment (in customer infrastructure) right beside their core software stack.

PREDICTION GUARD BENEFITS

Support for on-prem and air-gapped infra

Most AI systems require you to send data into their remotely hosted infrastructure. Prediction Guard can be deployed to any on-prem or cloud VPC environment without reliance on or exposure of data to third parties.

Alignment with the NIST AI RMF

A&D manufacturers require compliance with AI security and privacy best practices, which come built-in with PG.

AT A GLANCE

AI Solution

- Intelligent assistants that provide key manufacturing information. Process improvements including automated parsing of PDF process plans.

Benefits

- Data privacy Air-gapped deployment
- Alignment with NIST standards



"Industrial AI must be integrated into early-stage design processes for any manufacturing tied to national security or strategic importance..."

Choosing software architectures that meet national security standards is now a policy issue."

ARC Advisory Group