



DAES Group

# MRO 4.0: Digitalization, precision measurement and speed

The aviation industry faces several challenges, particularly maintenance, repair, and overhaul (MRO). Experts from the DAES Group discuss how the scarcity of essential parts, labor, and skilled workers affects the industry, providing insights into how they continuously improve efficiency in their operations. They discuss adopting innovative, industry-flexible metrology solutions like CMM and optical metrology systems, improving accuracy, expediting processes, and ultimately increasing profitability.

# **Industry**

Aerospace

# Challenges

- Shortage of qualified personnel.
- Supply chain issues, including lack of materials and parts.
- Need for sustainability and greener practices.

# **Systems**

ZEISS PRISMO, ZEISS ScanBox, ATOS 5 for Airfoil

# Solution

- Leveraging technology, such as automation and artificial intelligence.
- Utilizing 3D scanning and software solutions to streamline and automate inspection processes.
- Reduction in fixtures and templates
  with flexible ZEISS ScanBox solutions.
- Employing digital twin to make data-driven decisions.

### Software

ZEISS INSPECT Airfoil

### **Benefits**

- Consistent and high-quality results.
- Avoid unnecessary scrap and reduce maintenance costs for airlines.
- Improving the performance of parts and engines, leading to longer on-wing times and fuel savings.