

5. NAVIGATING STANDARDS TO AID IN THE SELECTION OF BLADE INSPECTION SYSTEMS

Boiy L., GE Sensing & Inspection Technologies, Berchem, Belgium;
Telesz S., Mills R., GE Sensing & Inspection Technologies, Lewistown, USA;
Portaz J., GE Aviation, Cincinnati, USA

Over recent months, large strides have been taken toward a broader industry acceptance of digital imaging technology for the final inspection of blades and vanes. Extensive, collaborative efforts have proven the technology through probability of detection and film comparison studies. To further promote the acceptance of digital imaging, much work has gone into the creation of industry standards to provide guidance through selection and installation stage, and then ensure continued process quality control in high volume production.

Through the purchasing decision, guidance can be found for the selection for critical imaging chain components. Standards allow for vendor comparisons to select application appropriate Digital Detector Arrays (DDAs). Other tools provide direction in choosing sources to pair with the DDA and assist technique set up.

Ease of use and long-term stability should also be considered. Standards committees stress the importance of ensuring image quality over time and provide guidance to achieving this. Traditional film tools have been converted to digital software versions to create a familiar experience for interpreters. To complete the imaging chain, advanced methods for data retention and management are regulated through the DICONDE imaging communication protocols.