



RAVINE

# Rapid Visual Inspection for Aerospace

# Project Manager



## Liam Wilburn

- Research & Development Engineer
- 2+ Years Experience in the role

## Primary Responsibilities:

- Project Management
- Technical Project Delivery

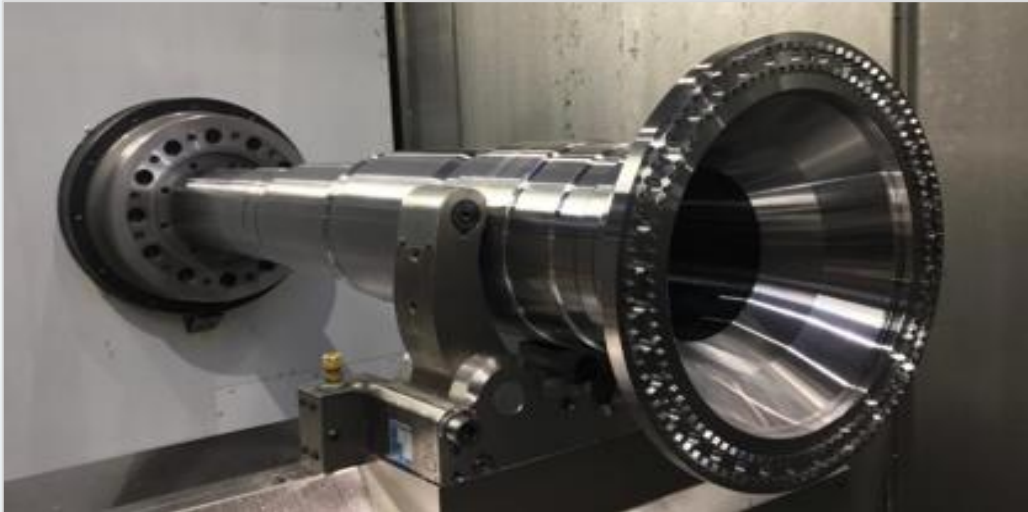
Current Portfolio value of £2 Million

## Contact

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LinkedIn: [Liam Wilburn](#)

# Lead Partner



## Advanced Manufacturing (Sheffield) Limited

Specialized in the development of manufacturing solutions & production services

- 1<sup>st</sup> spinout of the AMRC
- 3 Units
- 60 Staff
- 15 Machine Tools
- 3 CMMs



**AEROSPACE**



**ENERGY**



**DEFENCE**

Email: [enquiries@amlsheffield.co.uk](mailto:enquiries@amlsheffield.co.uk) Phone: 01709 373 673 LinkedIn: [AML Sheffield](#)



# RAVINE Overview



## Background

- Metrology Testing of Components
- Currently done by CMM
- Up to 20 minutes for a single scan.

## Scope

- Reduce the time impact of the metrology process
- Application of rapid visual scanning
- Focus on complex aerospace components.

## Collaborators

- Advanced Manufacturing Limited
- Advanced Manufacturing and Research Centre



# RAVINE Overview



## Innovation

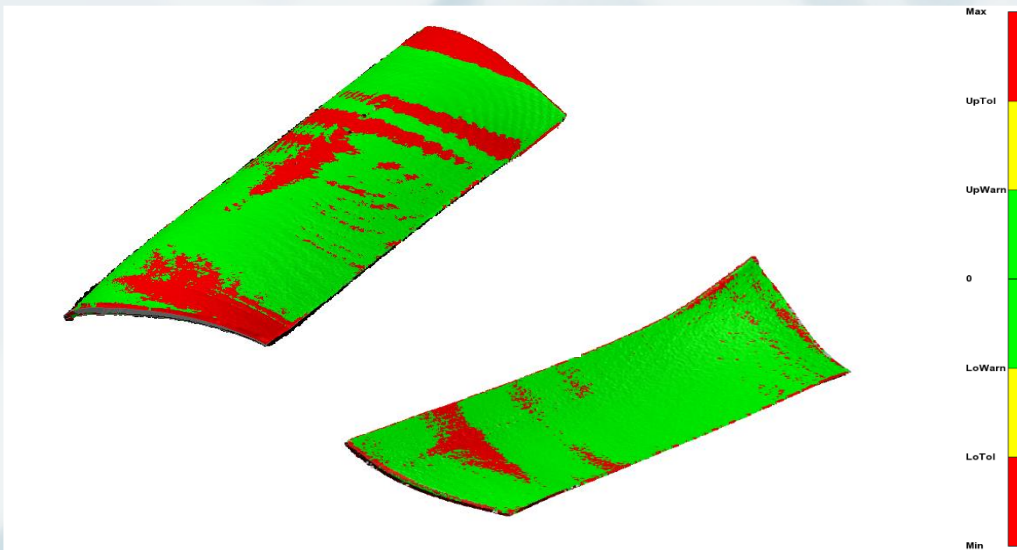
- Rapid Measurement of Tight tolerances
- Enhanced Information & Automated Output Filing
- SME Suitability

## Outputs

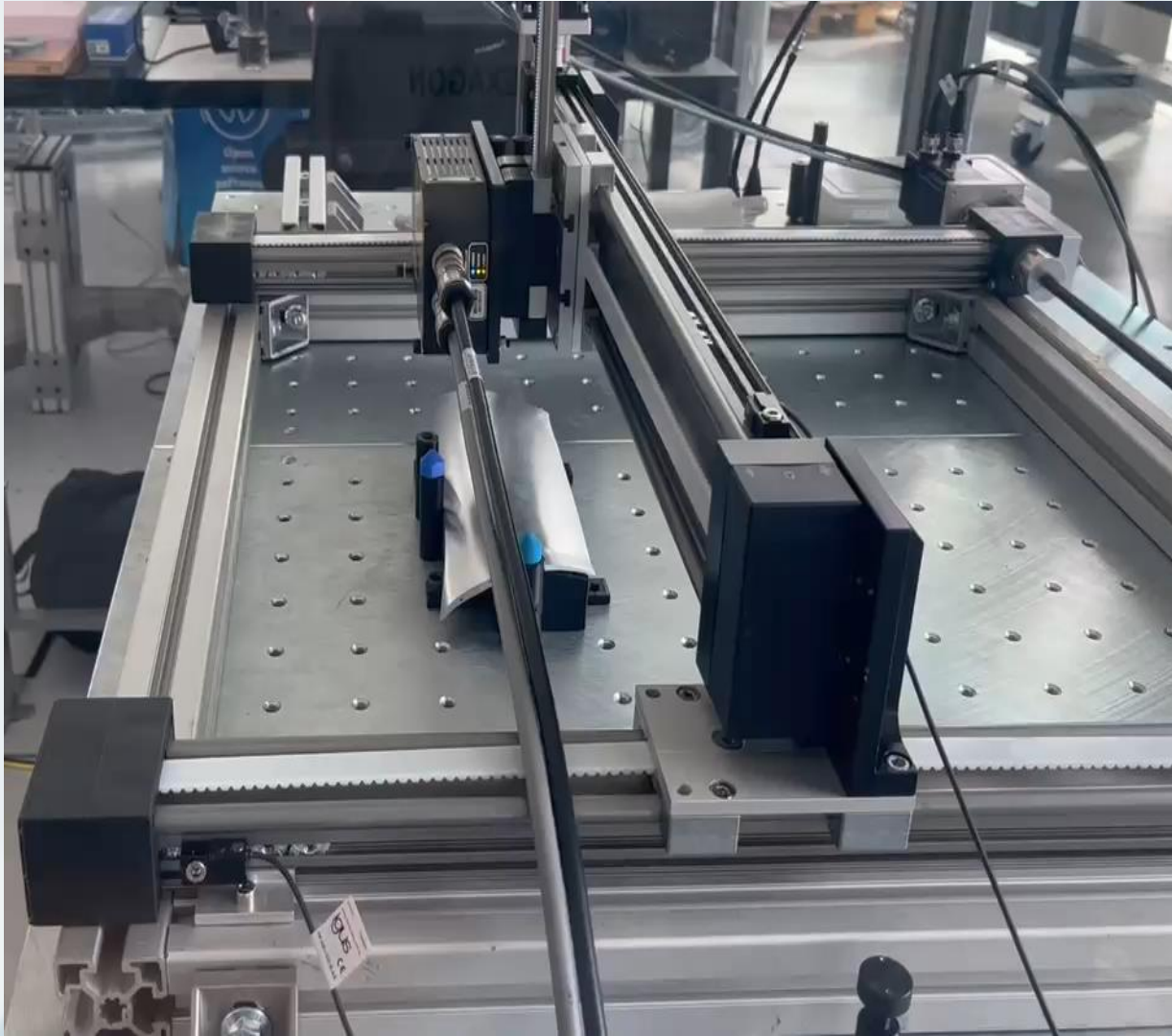
- Significantly reduced measurement times (up to 50%)
- Enhanced Information feedback

## Outcomes

- Increased Metrology Productivity
- New Development Review Capabilities



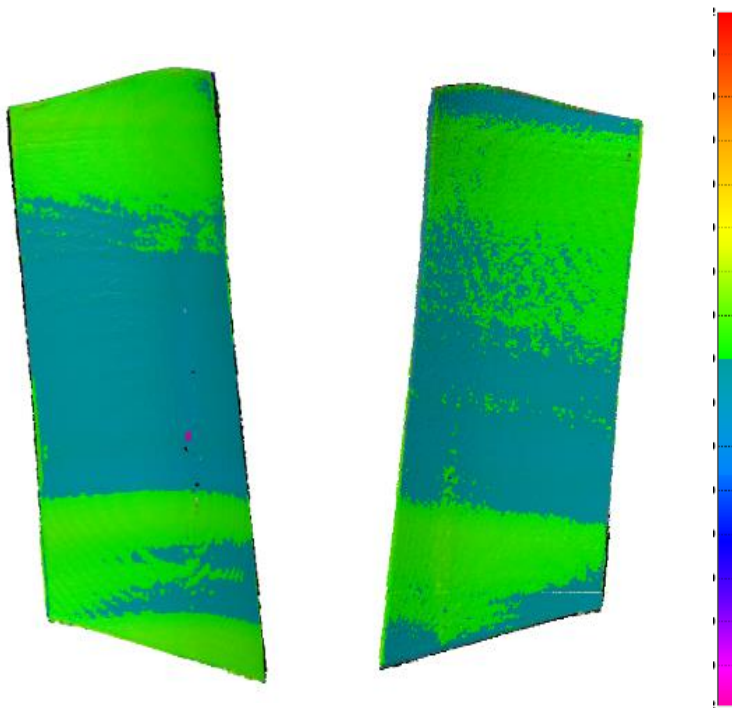
# Project Progress



## Progress to Date

- Down Selection of the Scanning Solution
- Deployed Hardware and Software
- Developed system outputs (Reports, Models etc)
- Automated method of output filing

# Closing Remarks



## Next Steps

- Refine Scanning Accuracy
- Optimise the Scan Time
- Development of a single User Interface
- Pilot Line Trials

## NATEP Support

Without support funding from NATEP the project would not of gone ahead due to the associated business risk especially considering the impacts of COVID 19 at the time of application.

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