A REVIEW OF 3D SCANNER CAPABILITIES BEYOND DENT MAPPING: FROM MAINTENANCE TO SURVEYS AND AOG

2018-09-20 A4A NDT Forum

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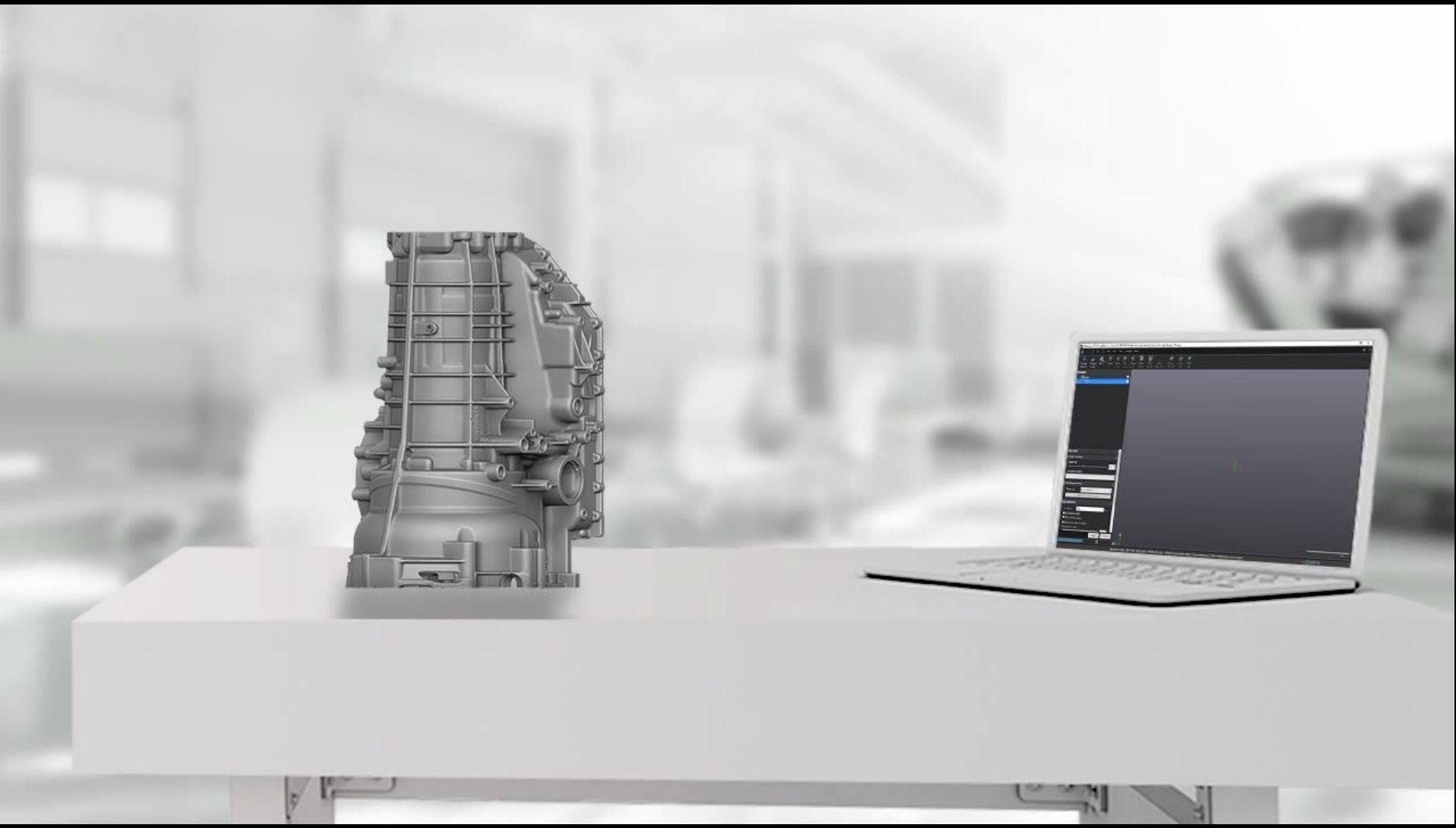
CREAFORM:
WORLD CLASS LEADER OF PORTABLE 3D MEASUREMENT SOLUTIONS

PORTABLE SCANNER: HandySCAN



TRACKED SCANNER: MetraSCAN

TRUaccuracy **with dynamic referencing capabilities**

GLOBAL CUSTOMER FOOTPRINT

AIRBUS

KLM

NASA

BAE SYSTEMS

COMAC

Rolls-Royce

RENAULT

EMBRAER

BMW

NISSAN

HONDA

MITSUBISHI
MOTORS

mazda

SUZUKI

DAIMLER

PEUGEOT

BOMBARDIER

FCA
FIAT CHRYSLER AUTOMOBILES

Ford

MAGNA

LOCKHEED MARTIN

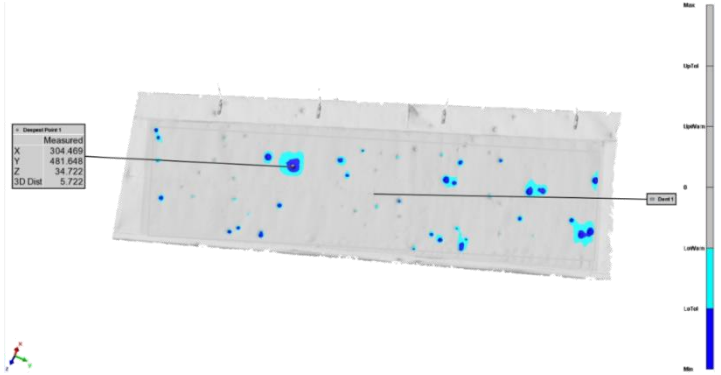
United
Technologies

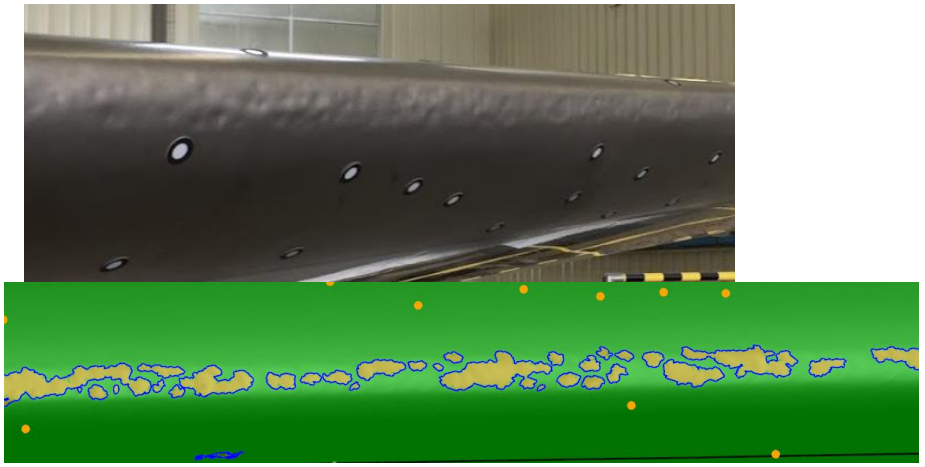
BOEING

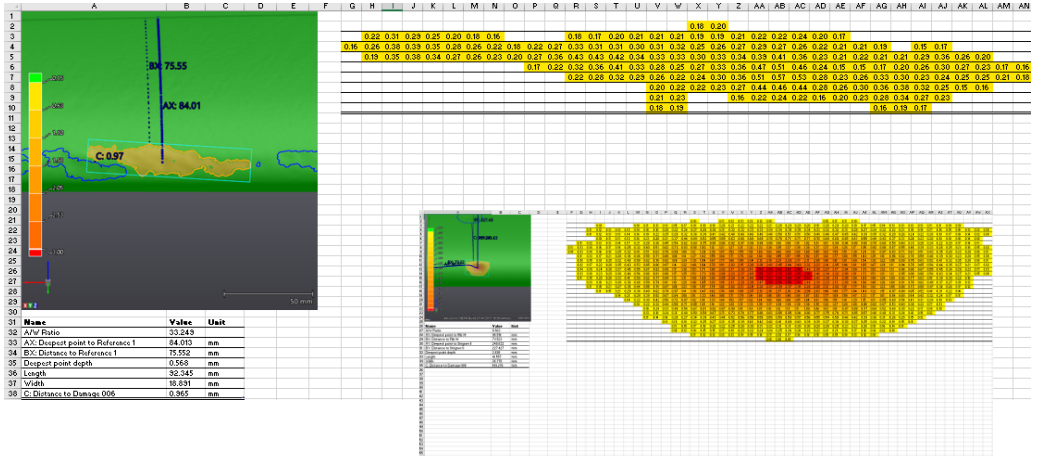
3D APPLICATION EXAMPLES

SMARTDENT

- Use 3D scans to perform accurate (0.002”) inspection independently of user experience
- Report generated onsite in seconds
- 80% reduction in time compared traditional method
- **<u>Completely automated process</u>**







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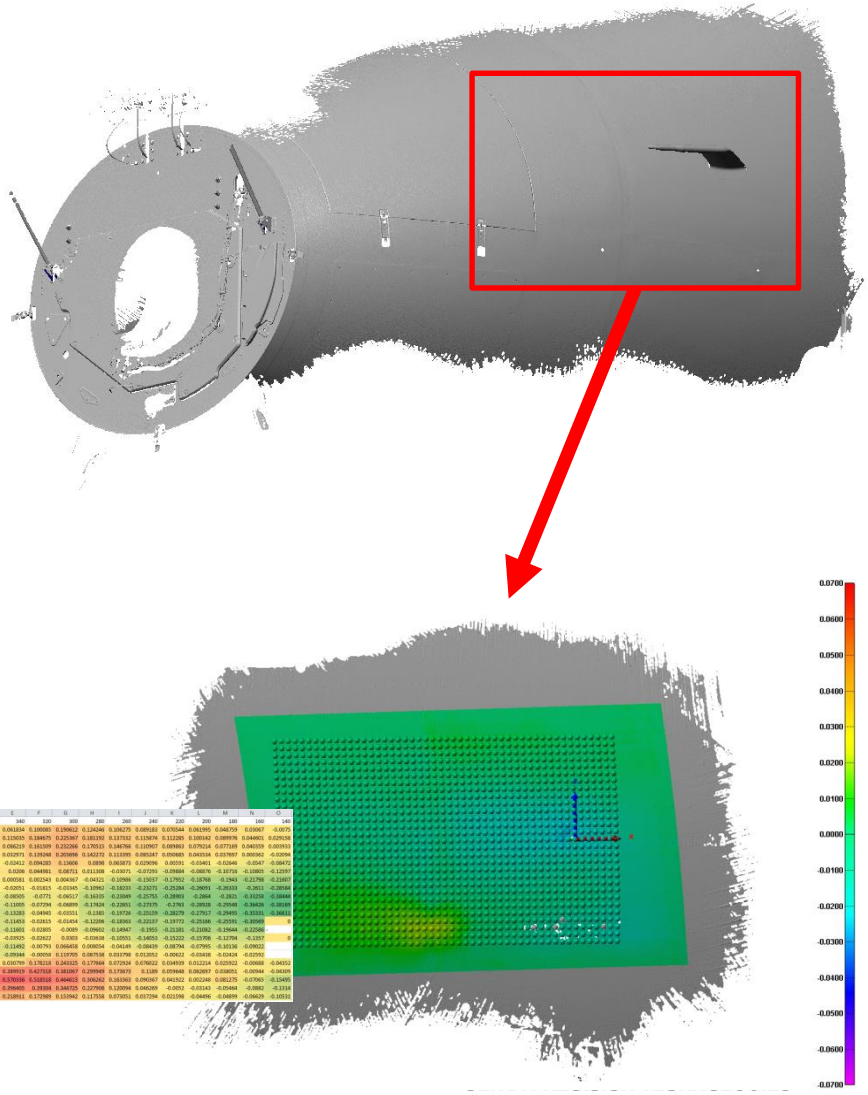
RVSM INSPECTION
SKIN WAVINESS

- No operator error
- Insured repeatability, accuracy and speed
- Automatic depth/waviness inspection (any grid size)
- Digital record available



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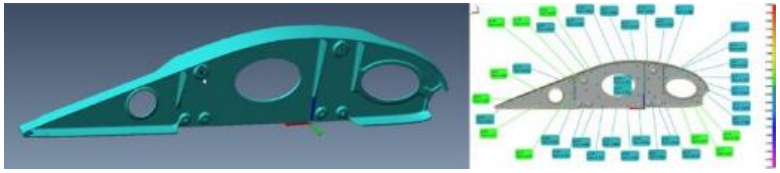
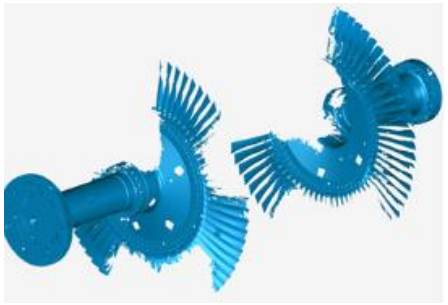
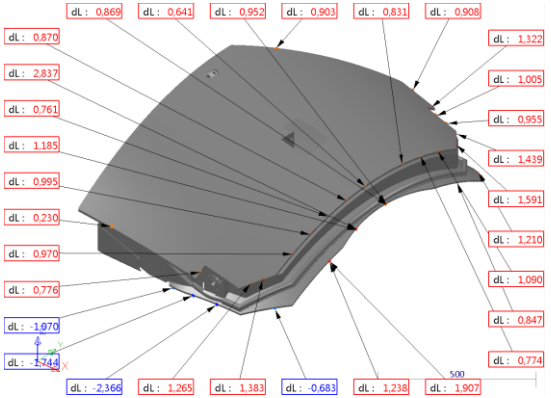
QUALITY CONTROL / REVERSE ENGINEERING

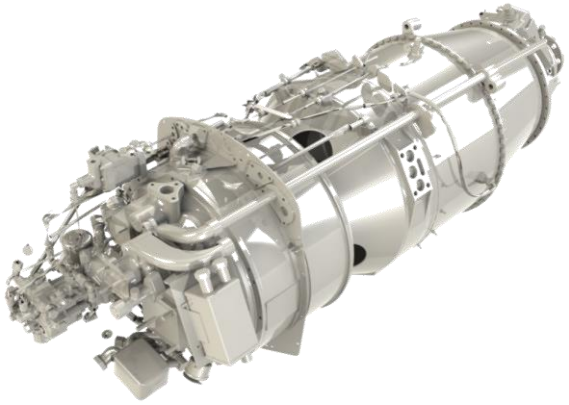
- Quality Control:

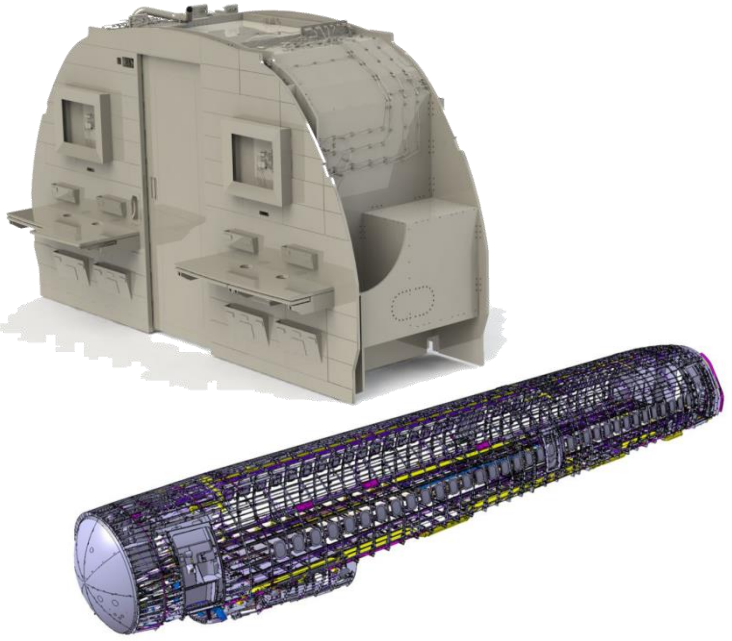






- Reverse engineering:





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“AUTOMATIC” REVERSE ENGINEERING

- Reverse engineering applied to fabrication
- Corner brackets are all different in shape
- Use acquired data to create automatically a fitted 3D model → CNC

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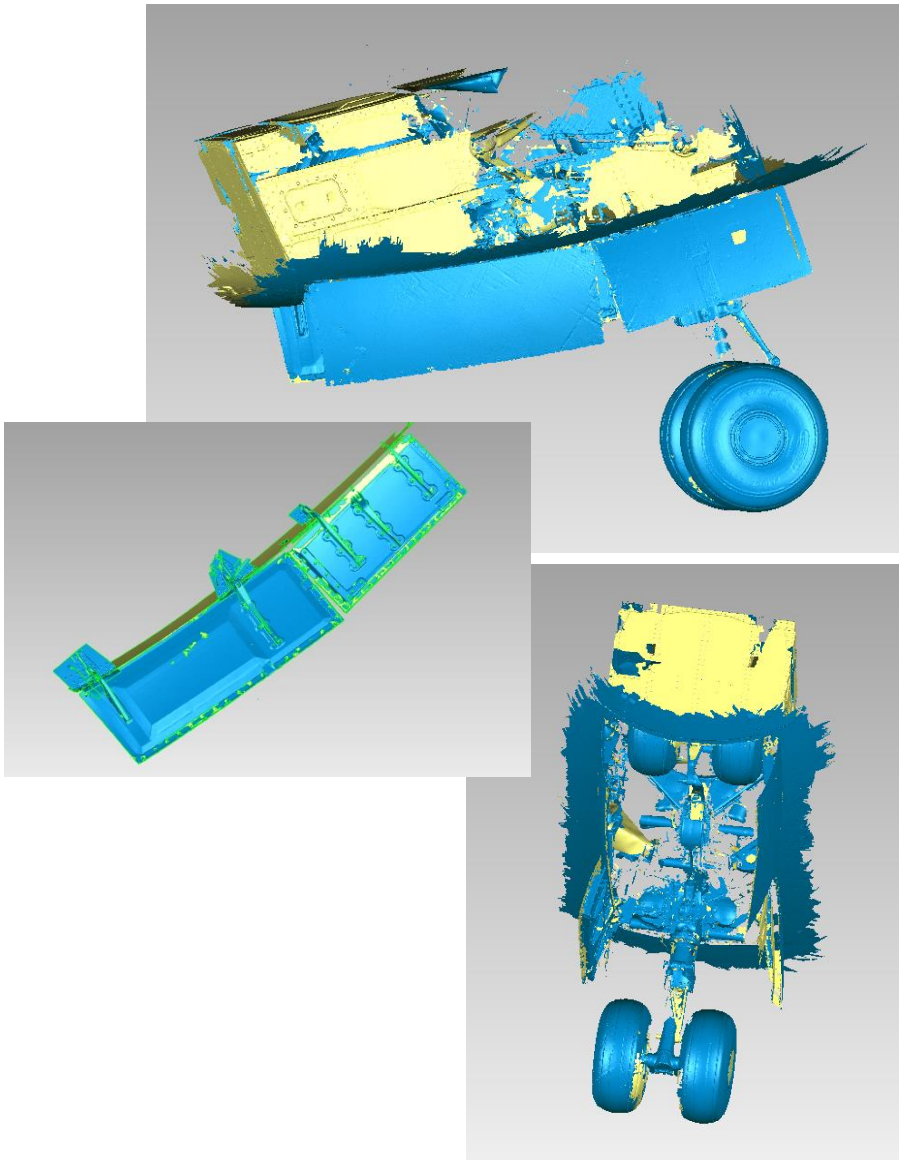
MODIFYING HARD TO REACH AREAS

- Build a guard behind the wheel to protect the engine from debris/rocks

- What space is available? Need to measure volume doors closed and retracted landing gear



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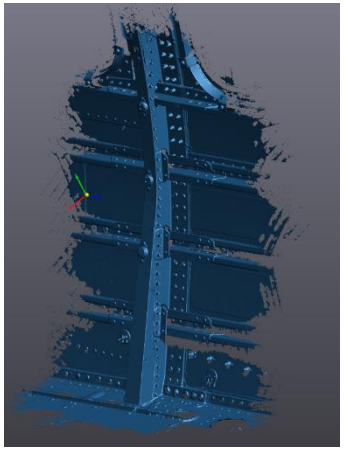
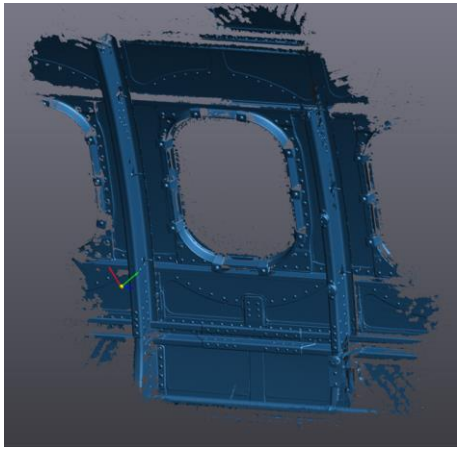
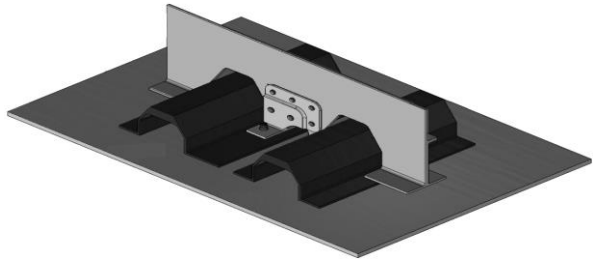
REPAIRS

- Accurate 3D measurement
- 3D surface directly available to reconstruct parts needed
- Major time saving compared to manual methods







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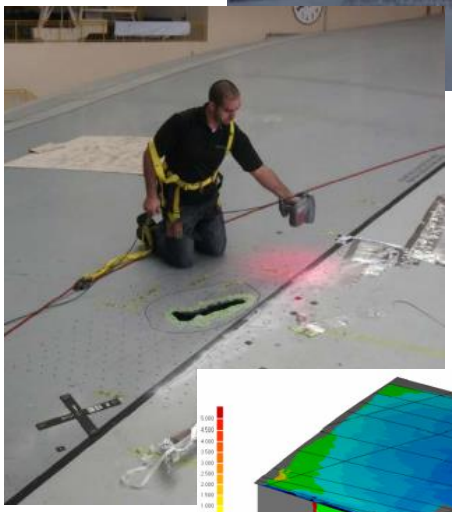
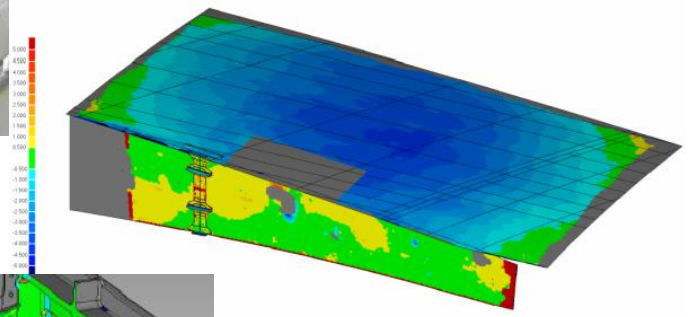
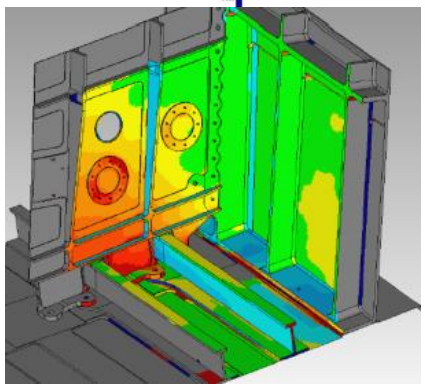
AOG

- Keep traceable information
- 3D data that can be used offsite
- Fast and reliable data acquisition
- QC and reverse applications







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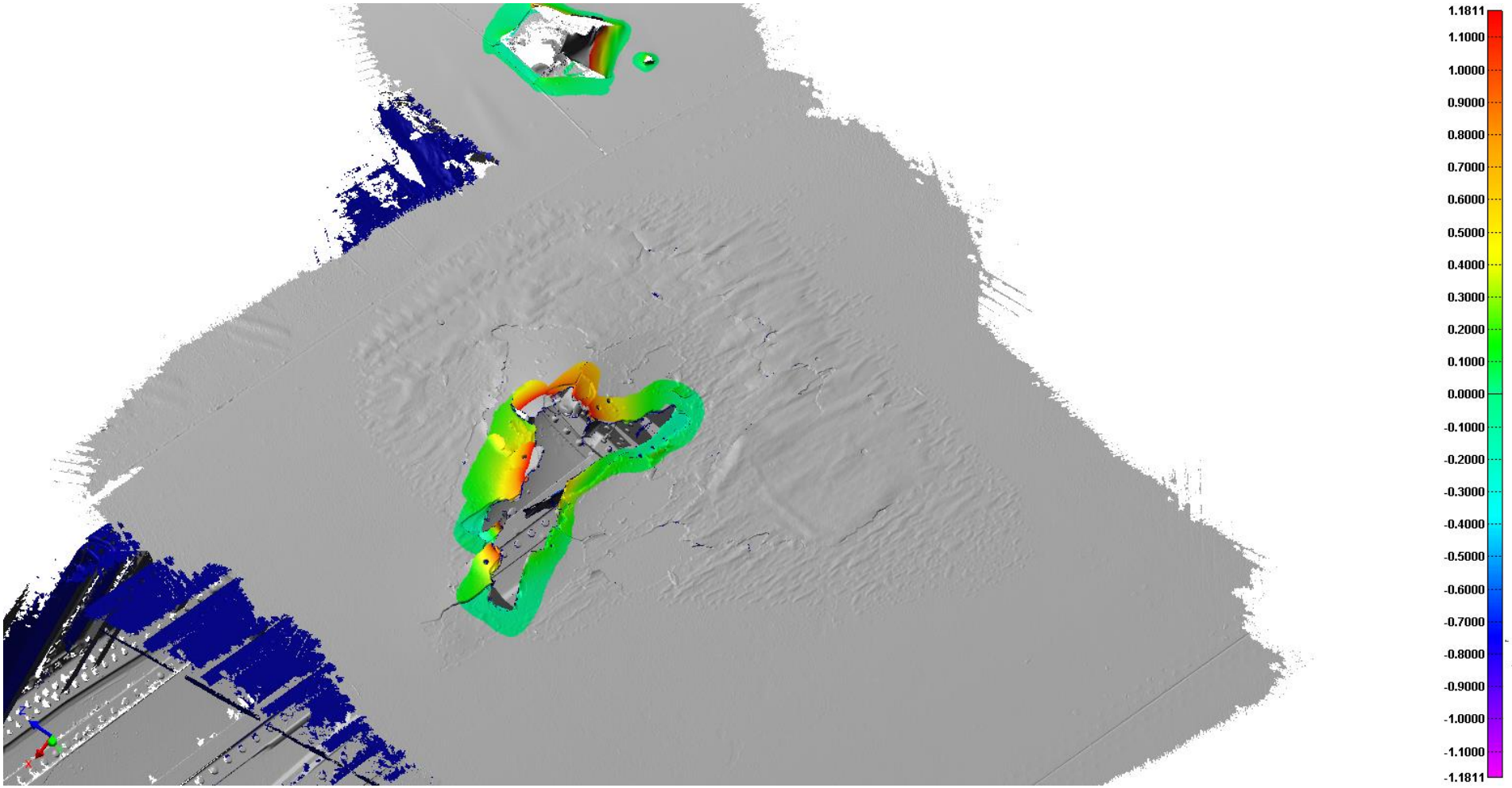
VIRTUAL ACCESS ANYTIME



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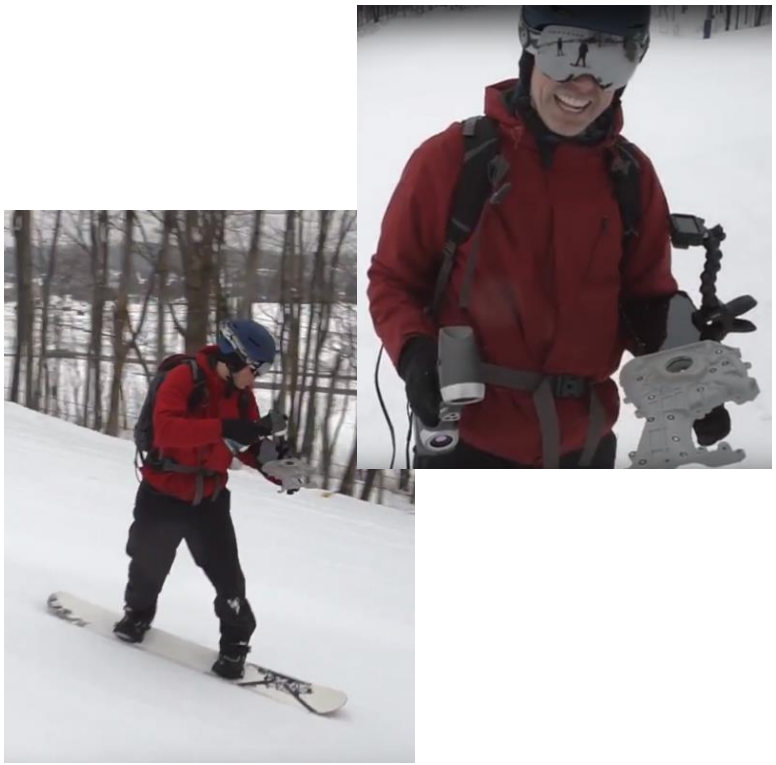
CONCLUSION

- 3D scanners can have huge impact on your day to day activities:
  - Time savings
  - Data quality insurance
  - Traceability
  - Variety of applications
- Much easier to use!



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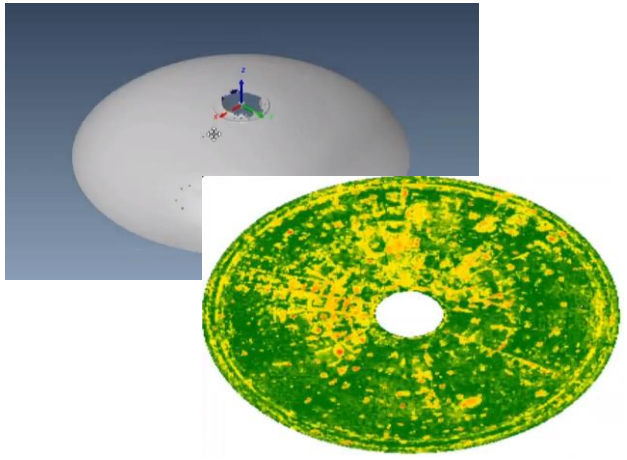
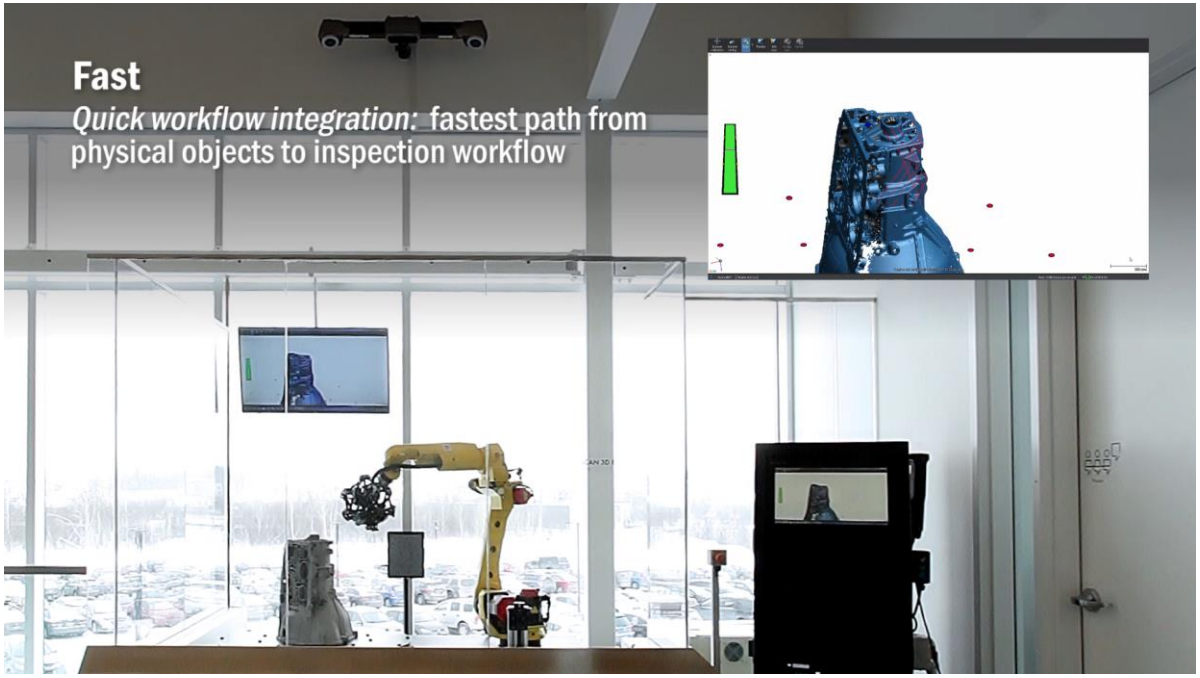
CREAFORM AT YOUR SERVICE

- Help with our QC and reverse engineering expertise
- Build custom solutions
- Set up automated applications





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QUESTIONS?

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