

NDT SOLUTIONS

THE ULTIMATE 3D SCANNING SOLUTIONS FOR SURFACE DAMAGE ASSESSMENT

(POWERED BY VXintegrity)

Corrosion	
Maximum Depth	0.261 in
Effective area RPR (MAOP)	1.59



WATCH PRODUCT VIDEO

CREAFORM

AMETEK

HOW CAN NDT COMPANIES ADAPT TO THIS NEW MARKET REALITY? HOW CAN THEY FACE THESE CHALLENGES, COUNTER THESE DIFFICULTIES, AND MAKE IT THROUGH THIS STORM?

The challenges facing NDT service companies are becoming increasingly prominent. First, these issues exist in a market made up of old, rapidly-aging infrastructure, which causes an increased demand for inspection. Second, there is a shortage of skilled labor as well as the increased departure of retiring experienced technicians, which provokes a drop in service offerings.

This combination of an increase in inspection demands and a decrease in service offerings constitutes a perfect storm for the industry, making it difficult to meet customers' needs.

SURFACE DAMAGE ASSESSMENT MODERNIZED AND ACCESSIBLE TO ALL NDT INDUSTRIES

With its prominent expertise and credibility earned in the field of metrology, Creaform has developed disruptive solutions for surface damage assessment that are now accessible to all NDT industries. Simply put, Creaform's 3D scanning technologies and innovative NDT software platform offer the solution to these challenges.

Intuitive to learn and easy to use, Creaform 3D scanning solutions involve only a short learning curve and require fewer certifications than traditional techniques. They are also much faster than manual tools, offering rapid field deployment and instant reports directly accessible in the field.

Investing in Creaform Solutions allows
NDT service companies to:

- Modernize not only their equipment but also their service offerings
- Counter the lack of skilled labor
- Meet the growing demand for inspection
- Increase their efficiency, therefore becoming more productive and capable of serving more customers with fewer resources
- Acquire new market shares and increase their income

OUR PORTFOLIO OF NDT SOLUTIONS AND SOFTWARE

VXintegrity™ is a powerful NDT software platform that integrates all analytical functions and tools into an intuitive, user-friendly working environment. Composed of four software modules designed specifically for the NDT industries, VXintegrity combines NDT knowledge and market intelligence to raise the quality of analysis and reporting to a higher level.

Creaform 3D scanners bundled with VXintegrity form the only technique available on the market that offers metrology-grade accuracy, traceable data over time, as well as human-independent results that eliminate measurement variations and ambiguity in result interpretation.



UNBEATABLE ACCURACY

- Ensure the highest data quality on digital reconstructions
- Get reliable diagnoses and trustworthy inspection results



INFINITELY TRACEABLE DATA

- Follow and compare damage evolution over time
- Establish trends



MANY USERS, SAME RESULT

- Obtain the same and unique scan regardless of the technician's skills and experience
- Proceed with data acquisition and analysis with little human intervention

WHAT CAN CREAFORM 3D SCANNERS BUNDLED WITH VXintegrity OFFER YOU?

IMPROVE CUSTOMER RELATIONS

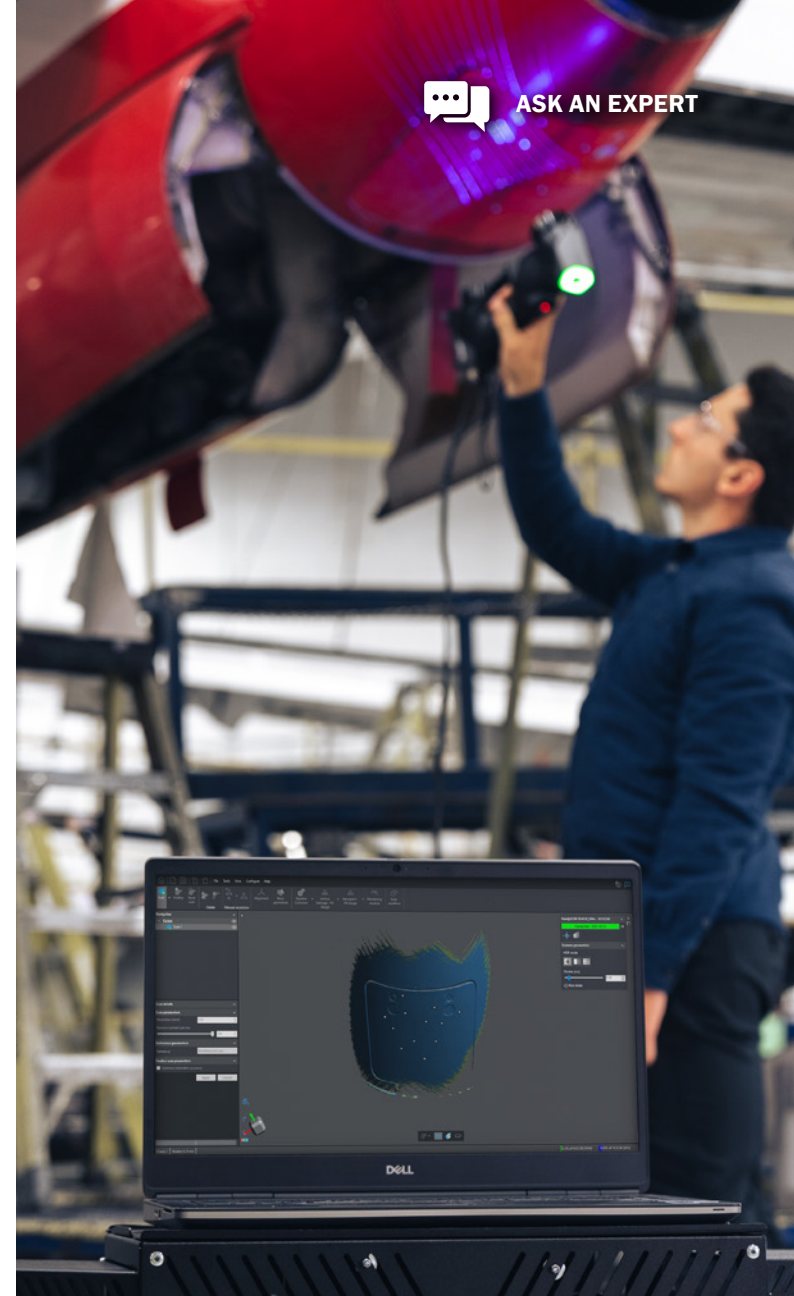
Asset owners demand irrefutable diagnoses based on accurate, user-independent data that they can fully trust when making maintenance decisions. Creaform 3D scanners with VXintegrity turn you into the NDT service provider capable of finally providing them with the results they can rely on with full confidence.

REDUCE TECHNICIAN STRESS

NDT technicians are under constant pressure when taking measurements, and they are continually challenged on the results they get with manual tools. With Creaform 3D scanners that supply technician-independent data, you can eliminate result variations and any ambiguity in their interpretation.

BUILD EXPERTISE WITH HIGH-END TECHNOLOGIES

NDT service companies seek to earn credibility and visibility in the market by establishing their unique and solid expertise and by differentiating their service portfolio. Creaform 3D scanners and VXintegrity enable you to gain a competitive advantage with its high-end technologies, as well as acquire new market shares, win new accounts, and increase your income.





ASK AN EXPERT

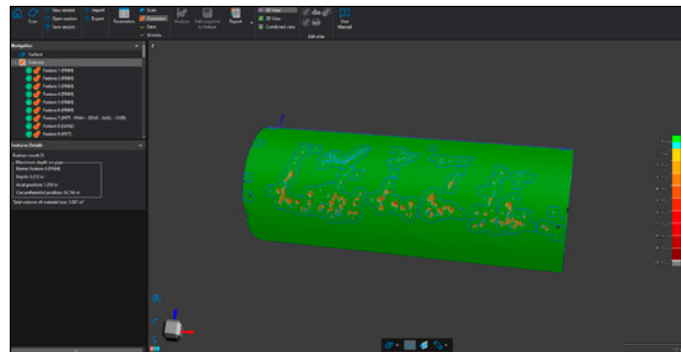
VXintegrity

PIPELINE MODULE

Proven NDT Solution for Pipeline Integrity Assessment

Pipeline owners face constant pressure from regulatory authorities and environmental groups to guarantee pipeline network integrity. Despite this pressure, they often base their maintenance decisions on non-traceable and error-prone manual measurements, even though an incorrect diagnosis can lead to severe consequences.

The Pipeline module delivers accurate results and in-depth analyses directly onsite, enabling pipeline owners to establish valid diagnoses and make appropriate repair decisions quickly. This allows them to stick to their budget and schedule, ensure employee safety, and maintain public health and trust.



Corrosion damage on a pipeline analyzed with VXintegrity / Pipeline module

KEY FEATURES

- Data analysis and report generation directly onsite, allowing for rapid decision-making
- Peace of mind through accurate, repeatable, and traceable results
- Reduced latency, as pipes are reburied more quickly
- Ability to conserve data over time, making it possible to compare damage evolution
- Prevention of environmental catastrophe

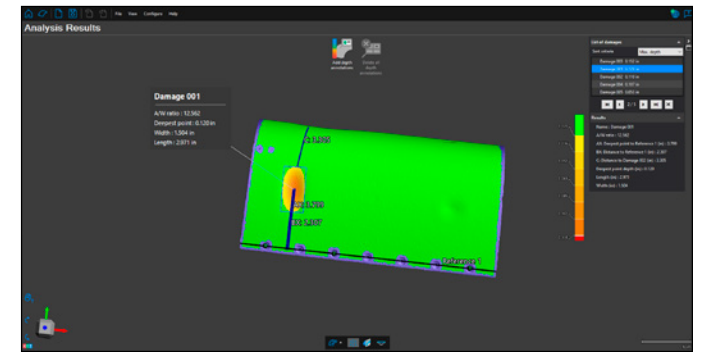
VXintegrity

AEROSPACE MODULE

Fast and Accurate Inspection Solution for Aircraft Surface 3D Assessment

MRO companies, aircraft manufacturers, and airlines that perform NDT inspections for in-service aircraft maintenance face increasing pressure to complete their assessments as quickly as possible without sacrificing accuracy. The problem is that NDT inspections take time and, the longer an airplane is grounded, the more airlines lose money.

The Aerospace module is the first dedicated 3D visualization software on the market designed for aircraft assessment and the characterization of dent damage located on aircraft surfaces. More accurate and faster than traditional methods, the software limits the operators' impact on measurements and shortens the time needed to generate final reports, providing OEMs with comprehensive data on issues that require further analysis.



Dents on the leading edge of an aircraft wing measured with VXintegrity / Aerospace module

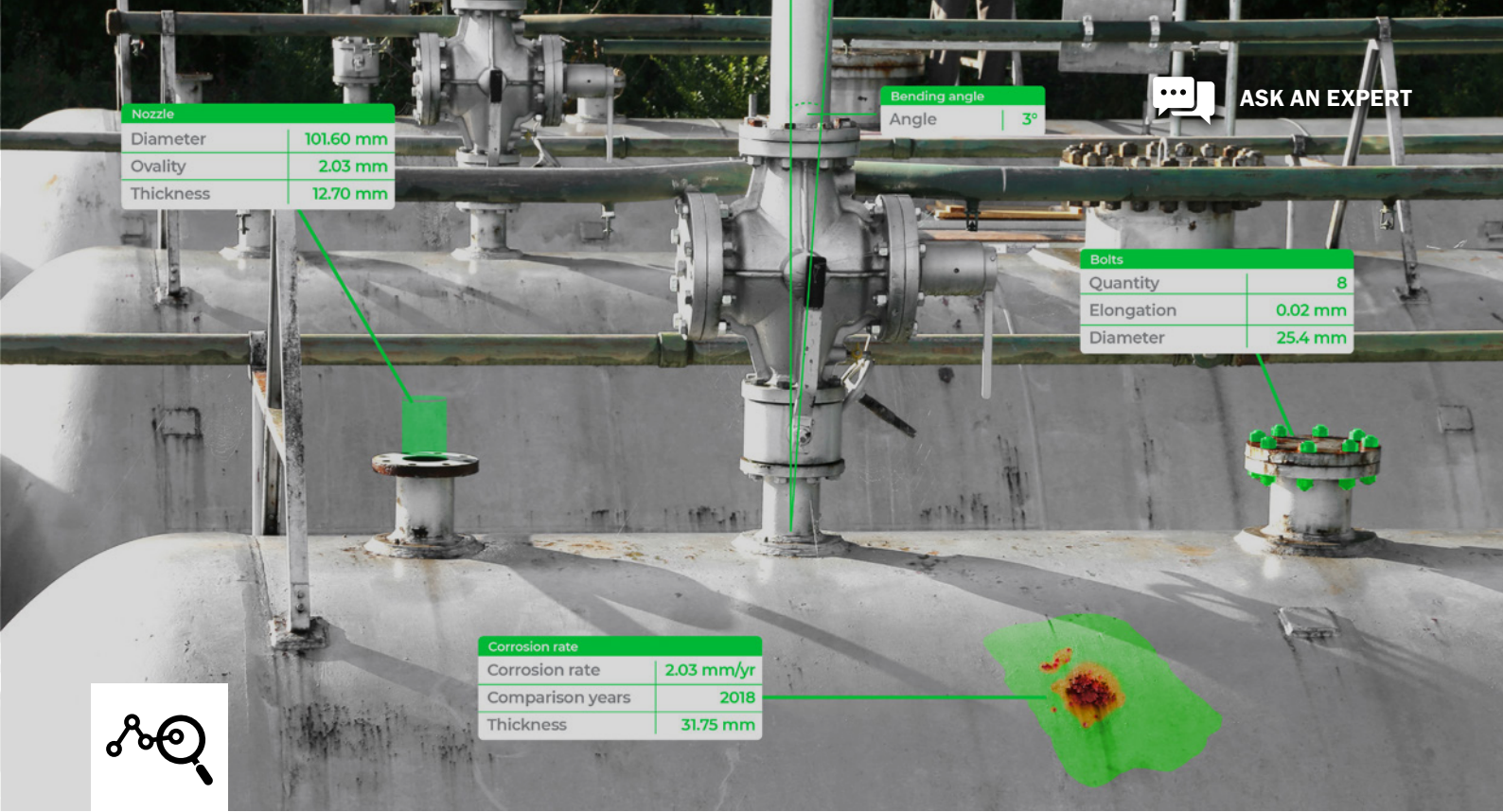
KEY FEATURES

- Operator-independent measurements
- Algorithm sensitive to the finest detail
- Interaction rule optimized for aerospace, facilitating communication on the extent of damage
- Defect characterization on different aircraft components, sizes, and surface finishes
- Guided workflow approach that simplifies the measurement extraction of 3D scan data and obtains the exact dimensions required for the assessment



Corrosion #1	
Damage depth	3.2 mm
Residual thickness	8.4 mm
Damage length	117 mm

Corrosion #1	
Damage depth	4.3 mm
Residual thickness	9.7 mm
Damage length	53 mm



Nozzle	
Diameter	101.60 mm
Ovality	2.03 mm
Thickness	12.70 mm

Bending angle	
Angle	3°

ASK AN EXPERT

Bolts	
Quantity	8
Elongation	0.02 mm
Diameter	25.4 mm

Corrosion rate	
Corrosion rate	2.03 mm/yr
Comparison years	2018
Thickness	31.75 mm

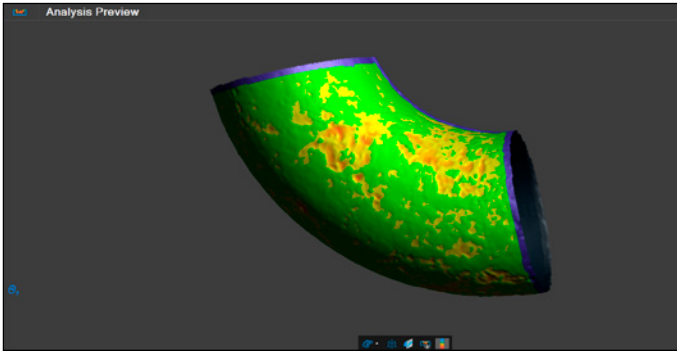
VXintegrity

SURFACE DAMAGE MODULE

Proven NDT Solution for
Plant and Refinery Integrity Assessment

Plant owners come up against constant difficulties in obtaining accurate and traceable thickness-loss measurements on curved and complex geometries. The current manual techniques are not repeatable enough, as the measurements are too dependent on the technician's skills and experience. Because determining the thickness-loss profile is challenging, safety factors are added, caused by a loss of confidence in the results.

The Surface Damage Inspection Module delivers absolute measurements of thickness loss—with no possibility of human error—on curved and complex geometries that plant owners can fully trust when making the decision to shut down their plant or refinery for maintenance work.



Corrosion on a tank floor analyzed with VXintegrity / Surface Damage module

KEY FEATURES

- Highest accuracy on digital reconstruction
- Technician-independent measurements free from human error at the acquisition stage
- Versatile measurement method for all geometry types, such as spheres, cylindrical heads, tank floors, etc.
- Polyvalent surface damage assessment approach for all types of mechanical damages, such as corrosion, dent, and gouge
- Ability to export inspection results into CSV or STL files for further evaluation

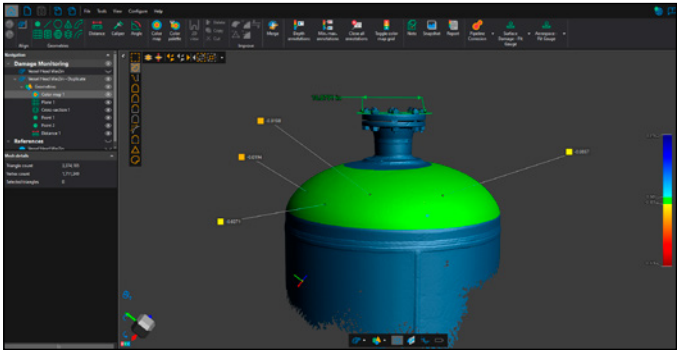
VXintegrity

DAMAGE MONITORING MODULE

Reliable NDT Monitoring Solution for
Prioritizing and Planning Repairs

In a context of aging infrastructure, asset owners do not have the resources or capacity to repair everything. They must be able to digitize measurements and compare data between maintenance rounds. If damages have worsened, they can prioritize and plan the repair appropriately. Tracking damages over time requires a traceable monitoring solution.

The Damage Monitoring enables asset owners to confidently enter the digital age. It is the only NDT technique available on the market with the required accuracy, noise level, and data quality to characterize, follow, and compare damage evolution over time—detecting even the slightest variation in geometry or thickness.



Flange dimensional control and punctual corrosion measured on a pressure vessel head with VXintegrity / Damage Monitoring module

KEY FEATURES

- Calculation of wear, corrosion, and erosion rates, as well as deformation, alignment, and ovality
- Advanced and automatic report generation
- Easy-to-use metrology tool kit, optimized for industrial maintenance applications
- Automatic damage dimensioning based on interaction criteria
- Ability to export inspection results (Depth, Length, Width) into CSV or STL files for further evaluation

WHICH 3D SCANNER CORRESPONDS TO YOUR NEEDS?



Go!SCAN 3D™



**HandySCAN 3D™
SILVER Series**



**HandySCAN 3D™
BLACK Series**



**HandySCAN 3D™
MAX Series**

	The Fastest and Easiest 3D Scanning Experience	The Best Price-Performance Ratio on the Market	The Industry Standard for Portable Metrology-Grade 3D Scanners	The Truly Portable Metrology-Grade 3D Scanner for Large Parts
DISTINCTION	Unique ability to measure texture and color	Economical way to detect material loss from different types of damage	Unique ability to acquire high-resolution 3D scans	New 3D scanner offering 4X larger scanning area with up to 75% fewer targets
ACCURACY	Up to 0.050 mm	Up to 0.030 mm	0.025 mm	0.075 mm
ACQUISITION CONDITIONS	Better results inside or in the shade	Inside or outside	Under direct sunlight and in harsh environments	Inside or outside
COLOR ACQUISITION	Yes	No	No	No
TARGET QUANTITY	+	++	++	+
PRICING	++	++	+++	+++
ACQUISITION SPEED	++	+	+++	+++
WORKING DISTANCE	0.040 m	0.030 m	0.030 m	1 m



CREAFORM / AMETEK®

AMETEK GmbH | Division Creaform Deutschland
 Meisenweg 37
 D - 70771 Leinfelden-Echterdingen
 T.: +49 711 1856 8030 | F.: +49 711 1856 8099
creaform.info.germany@ametek.com | creaform3d.com



VXIntegrity, Pipecheck, SmartDENT 3D, HandySCAN 3D | BLACK Series, HandySCAN 3D | SILVER Series, HandySCAN 3D | MAX Series and Go!SCAN 3D and their respective logo are trademarks of Creaform Inc.
 © Creaform inc. 2023. All rights reserved. V2

Authorized Distributor