

# **VC.acquire & VC.review**

The most powerful image acquisition and evaluation software



by VisiConsult

## VC.acquire & VC.review

The acquisition and evaluation software

The **VC.acquire** and **VC.review** software solutions form the core components of the x.OS platform, and combine to provide the most powerful image acquisition and evaluation tools available. VC.acquire includes highly sophisticated filters and measurement functions, and is equipped with a customizable and easy to use interface. VC.review is optimized to rapidly review and

annotate large quantities of X-ray images.

#### **Key functions**

- Full control of the imaging chain (generator, detector, and peripherals)
- Extended functionalities: IQI measurements, filters, overlays, etc.
- Sequence builder enables simple configuration of complex combinations of any and all functions
- Multiple and configurable user levels via advanced rights management
- Optimized for offline evaluation requirements

- Provides quick evaluation and annotation functionalities
- Fully customizable and configurable according to individual or company requirements
- Seamlessly integrated with ADR productivity tools (e.g. assisted or automated defect recognition)
- Compliant with leading data management and imaging formats such as DICONDE
- Fulfills all latest standards in Aerospace, Space, Automotive, and Oil & Gas industry

# X-RAY SOURCES

- ✓ Portable tubes
- ✓ Micro focus tubes
- Mini focus tubes
- ✓ Meso focus tubes
- Pulsed tubes
- Isotopes
- ✓ Linear Accelerators

- ✓ AITM 6-7007
- ✓ ASTM E2737
- ✓ ASTM E2597
- ✓ ISO 17636-2
  ✓ ISO 17656
- ✓ ISO 17656
  ✓ BSS7044 Rev c (2016)
- ✓ D337044 Net
  ✓ NADCAP

## **STANDARDS**



Our solutions can also be integrated with other non-VisiConsult installations as well.



# One software for every task

The flexible user-friendly interface can be tailored to match the preferences of each individual user. A comprehensive range of tools aids you in analyzing and evaluating, with a setup that can be uniquely configured for each user. OPERATOR TAILOR-MADE EXPERT MODE ONLY NECESSARY EASY TO MODE FEATURES MODIFY

#### Easy customization of frontend and workflows

- Fresh graphical user interface (GUI) adaptable to any language
- The flexible and intuitive user interface can be completely customized to each user's preference. A wide range of tools, which you can adapt according to your needs, supports you in the analysis and evaluation of images - ensuring compliance with established standards.
- The software can be tailored to the specific needs and application of the customer, regardless of the manufacturer of the inspection hardware used.
- Drag and drop tools can be configured according to your comfort level
- Comprehensive user access rights management functionality
- Generate your own user interface templates

Unleash productivity. No need to adapt to the software, let the software adapt to you.

#### Advancements Ad

#### **Touchscreen control interface**

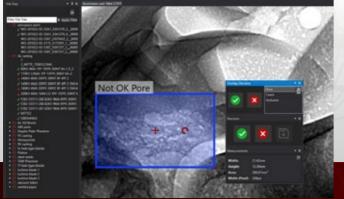
The VC.acquire is also available with a touchscreen mode, which is optimized for usage on tablets or machine interfaces (HMIs).

- Dedicated design for touch operation
- Can be operated with gloves and in rough environments
- ✓ Full feature set available even in touch mode
- Optimized for ease of use



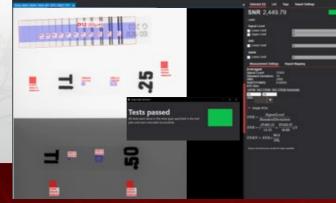
# Let's talk about benefits

Explore some of the comprehensive feature sets available on our software platform.\*



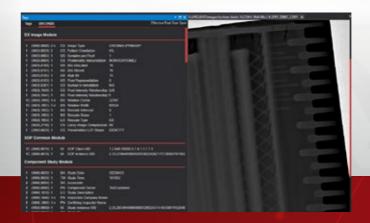
**Confident Decision Making!** Accept or Reject decisions

Make inspection calls with ease. Quality disposition decisions can be done within seconds through the decision plugin. Decisions can be done on an indication level or based on the full image.



**Quality Confidence!** Image quality assessment

A comprehensive set of advanced measurement tools assist you with your inspections according to standards such as SNR, SNRN, CNR (ASTM E2737, ASTM E2698), Contrast Sensitivity, Duplex Wire (SRb), Histogram ROI, Signal Level, and more.

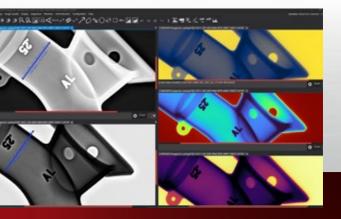


#### Interoperability made easy! DICONDE

DICONDE file format support, ensures that images can be viewed and processed by any other DICONDE-compatible system.

Even X-ray images created by other suppliers can also be easily imported and evaluated.

\* These are only a fraction of available productivity features. To review the full list, please request the technical specification.



#### **Discover the invisible!**

Filters and image enhancements

Image filters and tools make simple and effective evaluation possible. To streamline the process, you can also save optimal evaluation settings for future use with additional images.

## ..and more benefits

Explore some of the comprehensive feature sets available on our software platform.\*



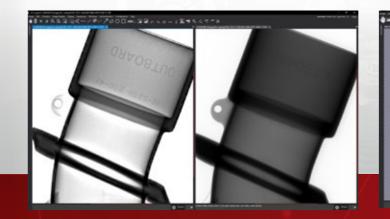
**Rapid annotations!** Annotations / Overlays

Mark and highlight indications and defects using our annotation and overlay tools. Whether circles, squares, polygons, arrows, or simply text. The software offers a comprehensive palette of tools. Each overlay can be individually styled and configured. In order to preserve the original image, overlays are added in a non-destructive manner as additional layers.



Shortcuts! Keyboard and mouse shortcuts!

The device's image acquisition is extremely fast and intuitive, with real-time inspection, automatic defect detection, and a perfect in-line integration configurable for simple keyboard shortcuts or mouse clicks.



Lightning-fast! One-Click Quick Enhancements

Discover hidden defects using our image processing and filtering tools. Our single-click Quick Enhancements are designed for rapid analysis and evaluation. Experts can easily build their own custom filters through the software. As Lev Th

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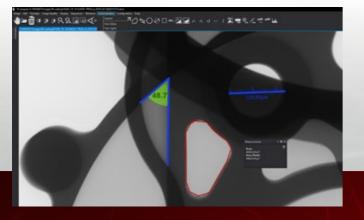


#### Assisted Defect Recognition! Leverage Artificial Intelligence (AI)

The software platform can be upgraded with an extensive Al-powered defect detection module. It can detect, annotate, classify, and measure defects within less than a second.

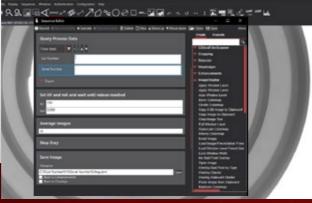
## ..and even more benefits

Explore some of the comprehensive feature sets available on our software platform.\*



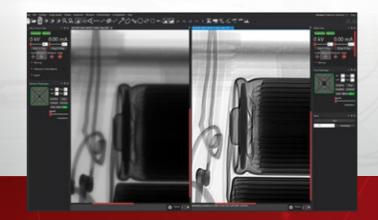
**Become a measurement hero!** Extensive suite of measurement tools

Precise and reliable measurements are a key factor to achieving great inspection results. The software offers a comprehensive suite of tools such as line profiles, histogram measurements, angles, area measurements and many more.



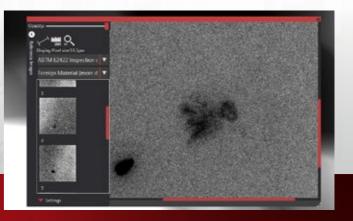
Automate anything! Record and replay inspection steps

Easily automate repetitive tasks with the sequence builder. Every function in the software can be quickly recorded into a macro that can be replayed later. This allows for rapid execution of even the most demanding processes.



**One spot to control everything!** Embedded hardware control

No need for additional software and tools. Control all image chain devices like detectors, X-ray generators, collimators, or filter units directly from the VC.acquire. Hardware controls can also be easily automated using sequences.

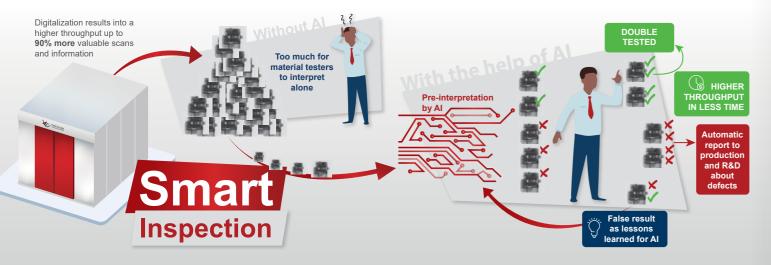


#### **Refer to the standards!**

*In-software display of reference images* 

Reference images can be viewed inside the image processing software side-by-side with the image of the inspected object. Make faster and even more accurate calls by referring back to the right ASTM levels or your own defect reference catalog.

## **Automated Defect Recognition (ADR)**





Evaluating thousands of images a day is already quite a challenging task - especially considering the potentially catastrophic consequences of a single, missed defect. Imagine a digital helper that locates defects and automatically measures them in realtime. Our **COMPASS X-ray ADR** employs cutting-edge machine learning tools to identify defects in a wide variety of applications from casting to welding. With a single click, it highlights, measures, and docuements all indications. Operators can rapidly remove or add missing defects. That enables a significant increase in productivity while simultaneously improving the inspection quality.



- Enhanced Efficiency Significantly increase inspection throughput by automating indication detection.
- Accuracy and Consistency Reduce human error and provide more consistent results through assisted measurements.
- ✓ Get insights Automatically compile powerful defect statistics and POD documentation.
- Business continuity Eliminate bottlenecks in inspection and mitigate labor constraints.



## COMPASS The X-ray Co-Pilot

#### Make better decisions faster!



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Time for an ADR decision, 0.7 seconds

**COMPASS** can be applied to your inspection task

Contact us now info@vc-xray.com Get your live demo now!

## x.OS - X-ray Operating Suite

The software platform for maximum reliability

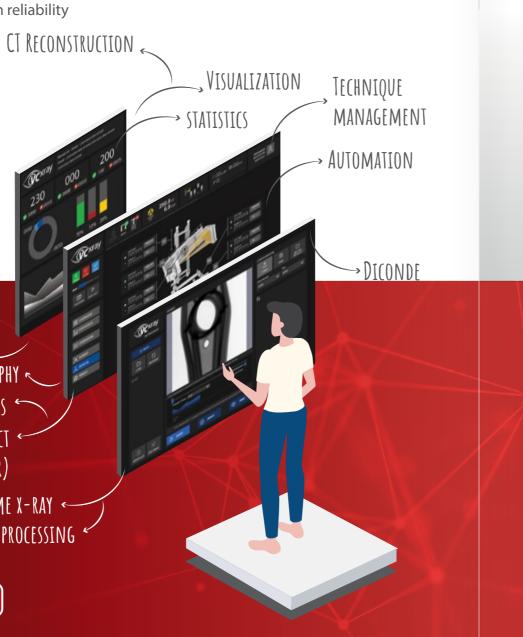
#### What is the x.OS?

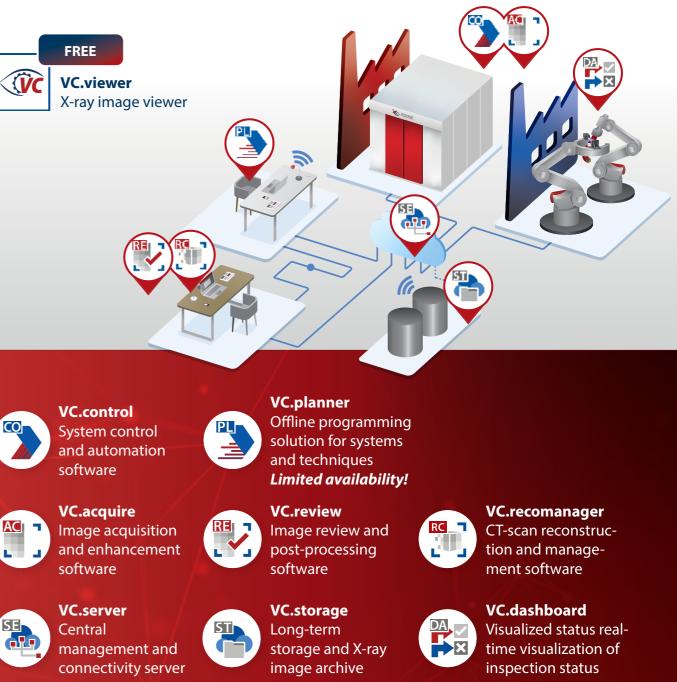
The leading software suite that enables digital transformation within the NDT department and even across organizations. A broad portfolio of solutions allows a fully digital experience from acquisition to archiving.

> ARCHIVING < COMPUTED TOMOGRAPHY ROBOTICS AUTOMATED DEFECT RECOGNITION (ADR) REAL TIME X-RAY IMAGE PROCESSING









## **Benefits and fields of application**

Discover our x.OS suite



Proven

Approved by industry leaders and quality experts



**Flexible** 

Holistic software ecosystem for all NDT tasks



#### Universal

One platform for all applications and industries





## **AUTOMOTIVE**

Fulfills leading OEM and industry standards and offers an easy to use interface for the highest efficiency



## **SPACE**

Offers comprehensive, advanced functions to satisfy the strictest requirements for the most critical parts

## X-ray Operating Suite



**OIL & GAS** 

Performs even sophisticated inspection routines with just a few clicks. Adding efficiency without sacrificing safety





#### AEROSPACE

Holistic coverage of all NADCAP and OEM requirements. Dedicated compliance toolboxes

## **Features and packages**

Configure the software to your needs \*

#### Only pay for what you really need! The

VC.acquire and VC.review are available in several variants from a Basic version with the essential tools up to a fully fledged PRO version. Or anything in between.

### BASIC

- Comprehensive
  X-ray viewer
- ✓ Quick enhancements
- ✓ File functions
- Shortcuts and presets

## PRO

- ✓ Measurements
- ✓ Overlays and layers
- Sequences and macros
- Advanced enhancements

- 🤣 Included
- Available to be purchased separately
- Only available in PRO version



### **ADDONS**

- ✓ DICONDE module
- X-ray and image sources
- Image quality module
- ✓ Reference images
- ADR and efficiency module

\* These are only a fraction of available productivity features. To review the full list, please request the technical specification

FEATURE	BASIC	PRO	lmage source	X-ray source	Periphery module	lmage quality	DICONDE	Efficiency add-on	Ref. image
					ā -			<u>ш</u> .,	
File functions	<b>Ø</b>	<b>O</b>							
Image functions	<b>Ø</b>	<b>Ø</b>							
File tree	<b>I</b>	<b>I</b>							
Histogram	<b>Ø</b>	<b>Ø</b>							
Navigation Thumbnail	<b>Ø</b>	<b>Ø</b>							
Window level presets	<b>Ø</b>	<b>Ø</b>							
Invert	<b>Ø</b>	<b>Ø</b>							
General functions	<b>Ø</b>	<b>Ø</b>							
Color maps	<b>Ø</b>	<b>I</b>							
Create window layouts	<b>Ø</b>	0							
Shortcuts	<b>Ø</b>	<b>I</b>							
Quick Enhancements	<b>Ø</b>	<b>Ø</b>							
Thumbnail bar	<b>Ø</b>	<b>Ø</b>							
Basic IQI Tools	$\mathbf{O}$	<b>Ø</b>							
Acquire images	$\mathbf{O}$	$\mathbf{O}$	<b>Ø</b>						
Control generator	$\mathbf{O}$	0		<b>Ø</b>					
Periphery control	$\mathbf{O}$	0			<b>I</b>				
DICONDE	$\mathbf{O}$	$\mathbf{O}$					<b>Ø</b>		
Detector Calibration	0 0		<b>Ø</b>						
Monitor tests	$\mathbf{O}$	0							
ASTM E2595 tests		0							
IQI Toolkit	$\mathbf{O}$	$\mathbf{O}$				<b>Ø</b>			
ASTM E2737	$\mathbf{O}$	$\mathbf{O}$				<b>Ø</b>			
lmage quality test manager	$\mathbf{O}$	$\mathbf{O}$				<b>Ø</b>			
Reference images	Û	Û							<b>I</b>
COMPASS (ADR)	Û	0						<b>Ø</b>	
Overlay	×	<b>I</b>							
Decision	×	<b>I</b>							
Overlay decisions	×	<b>I</b>							
Layers	×	<b>I</b>							
Enhancements	×	<b>Ø</b>							
Measurements	×	<b>Ø</b>							
Enhancement ROI	×	<b>Ø</b>							
Sequences	×	0							
Authentification	×								



## **Regional headquarters**

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