



Qii connect

MANUAL

Ver 1.0

Intentionally Left Blank

INTRODUCTION

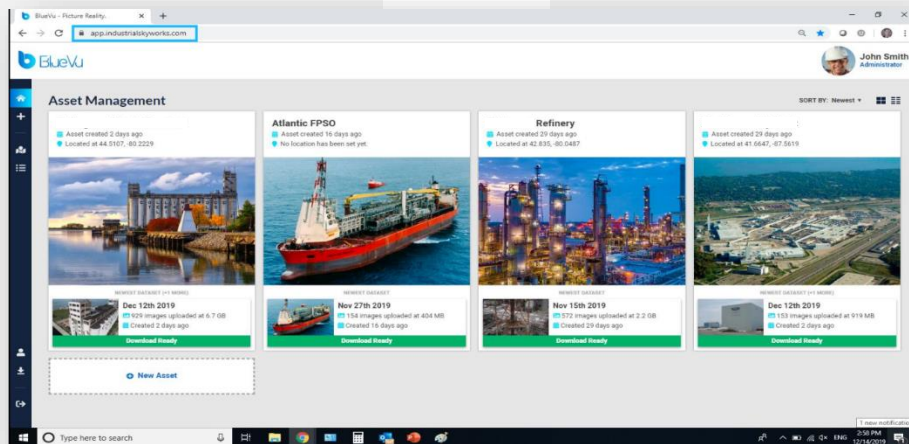
Qii Connect is a web application than can be run through a browser. The goal of the application is to make inspections easier by harnessing the power of a digital twin. It allows you to navigate using the digital twin and review the high resolution photo. You can then mark up the anomaly and save this to the database. You can then automatically generate a report, share it or output a pdf.. Qii Connect is part of family of applications including Qii Edge (desktop) and Qii Studio (portal).



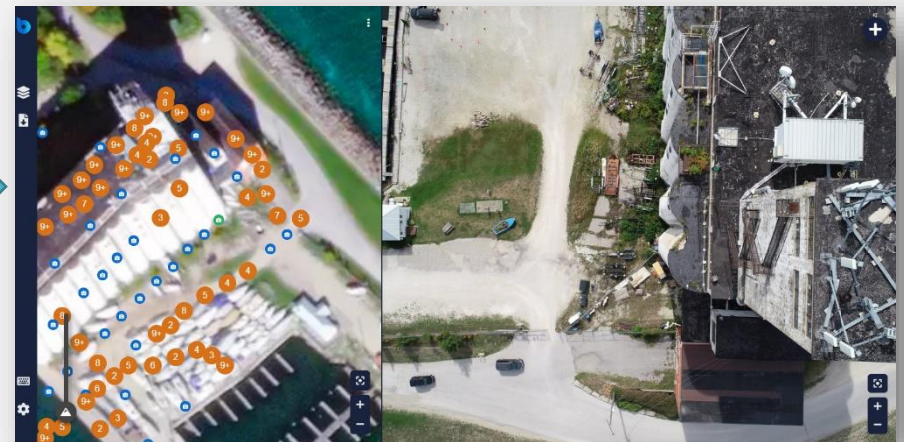
KEY POINTS:

- No stitching of images, you work with the raw untouched images for your inspection work.
- You can quickly navigate large amounts of data either through a digital twin (3D model) or a map view
- Works with large datasets that create a Digital Twin or with a small number of pictures for a 2D view.
- Annotation is fast and easy
- In 3D annotations are marked not just on the 2D photo but in 3D space and are measurable.
- Class leading reports are generated automatically with a few simple clicks.
- Local servers can be set up, so your data never leaves the security of your companies' network.
- Works with Qii Studio for auto processing of data

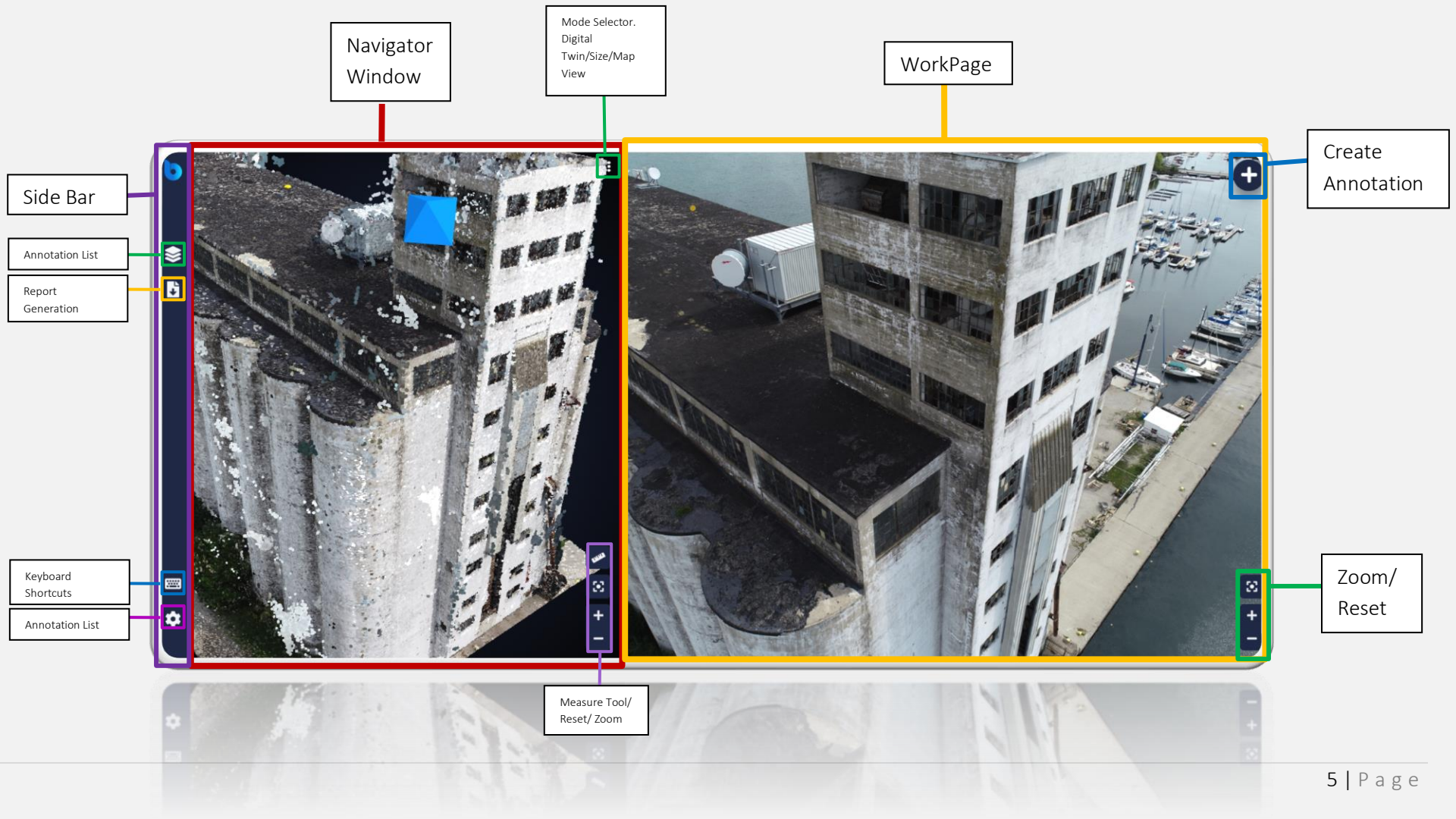
Qii Studio



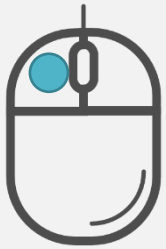
Qii Connect



LAYOUT

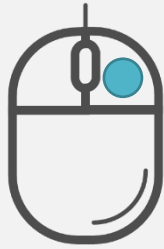


CONTROLS

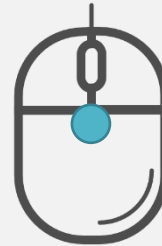


NAVIGATOR WINDOW

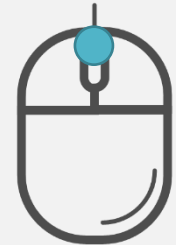
Rotate



Pan



Zoom



Zoom

WORKSPACE WINDOW

(With Anomaly tab open)

Draw Rectangle box or

Polygon (with shift key)

Pan

N/A

Zoom

SIDE BAR



Annotations



Report Generation



Short Cut Menu

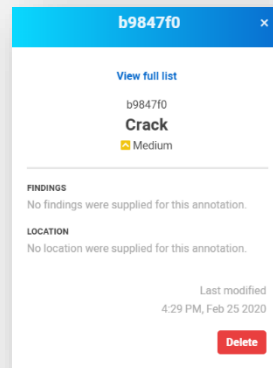


Settings

ANNOTATIONS

Annotations				
Search for keywords				
<input type="checkbox"/>		Category	ID	Last Modified
<input type="checkbox"/>	⬆	Coating breakdown	b6a152e	4 days ago
<input type="checkbox"/>	⬆	Coating breakdown	1c593a4	5 days ago
<input type="checkbox"/>	✓	Wear and tear	d3db371	5 days ago
<input type="checkbox"/>	⬆	Wear and tear	9c07881	5 days ago
<input type="checkbox"/>	⬆	Staining	e938169	6 days ago
<input type="checkbox"/>	!	Crack	3678116	7 days ago
<input type="checkbox"/>	⬆	Crack	b9847f0	8 days ago

This tab contains the list of annotations.
 You can search the list using the search box.
 You can sort the list by clicking on the name of each category.
 You can select all or individually and delete them.
 By Clicking on a Annotation you open up details on the annotation
 The Workpage also opens the image where the annotation is made.



REPORT TAB

Report Generation

Step 1 of 3 - Cover Page

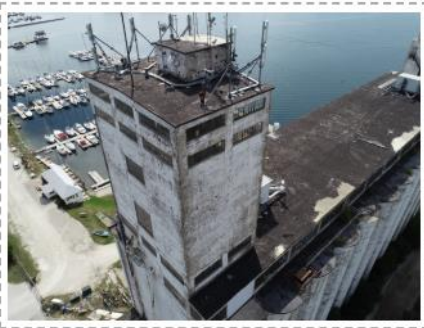
* Report Title

Silo Building

Date Of Issue

03/03/2020

COVER IMAGE



* COMPANY LOGO

This tab allows you to generate reports from the annotations you have created. You have several optional dialog boxes that can be filled in. You may optional chose to paste comments from a word processor.

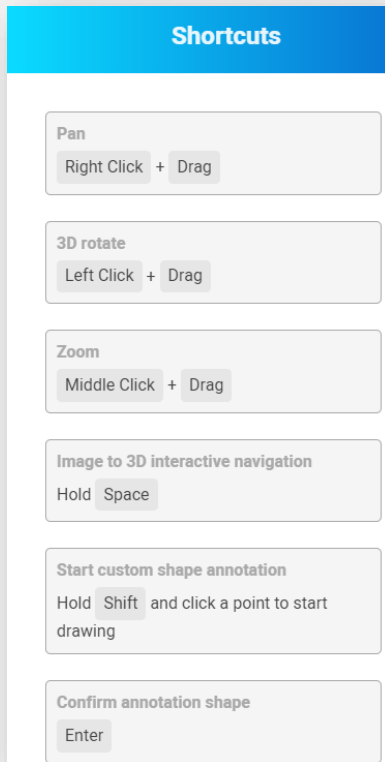
Report Title	Name of the report
Date of Issue	Date of Report
Cover Image	Picture for the front page of the report
Company Logo	Company Logo (optional)
Company Name	Company Name
Company Address	Company Address
Inspection Team	Inspection Gathering Team
Reviewed By	Name of Report Inspector
Approved By	Name of Supervisor
Brief Summary	Overview of the Inspection purpose
Statistics Chart	You can select Bar or Pie chart display
Inspection Scope	Ground based or Aerial and overall Scope
Reference Document	Reference of previous inspection document
Inspection Limitations	Any limiting factors in the inspection gathering
Weather	Weather conditions while data gathering

 **Preview Live Report**

Clicking on “Preview Live Report” Generates the report.



SHORTCUTS



Shortcuts shows the keyboard shortcuts in using the software.
Some shortcuts are modifiers and require the use of both mouse and keyboard.

Pan

Right Click + Drag

3D rotate

Left Click + Drag

Zoom

Middle Click + Drag

Image to 3D digital twin interactive navigation

Hold Space Bar, release to get photo.

Start custom shape annotation

To create a polygon Hold the shift key

Confirm annotation shape

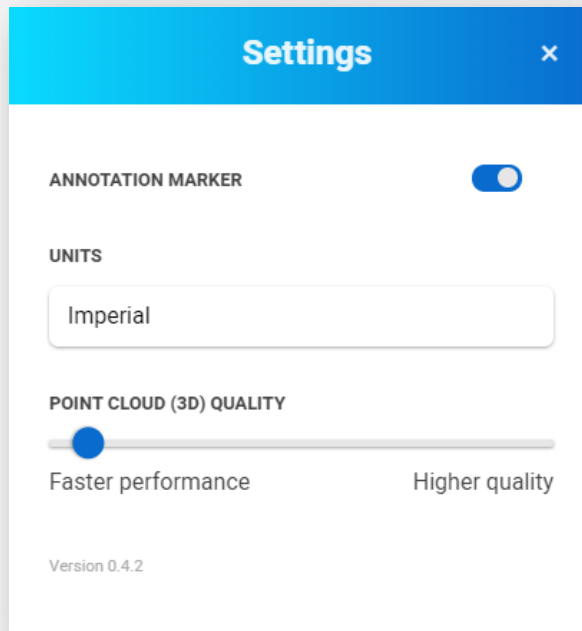
Enter Key

Cancel annotation shape

Esc Key



SETTINGS TAB



Annotation Marker

Turns On or Off the marker on the digital twin

Units

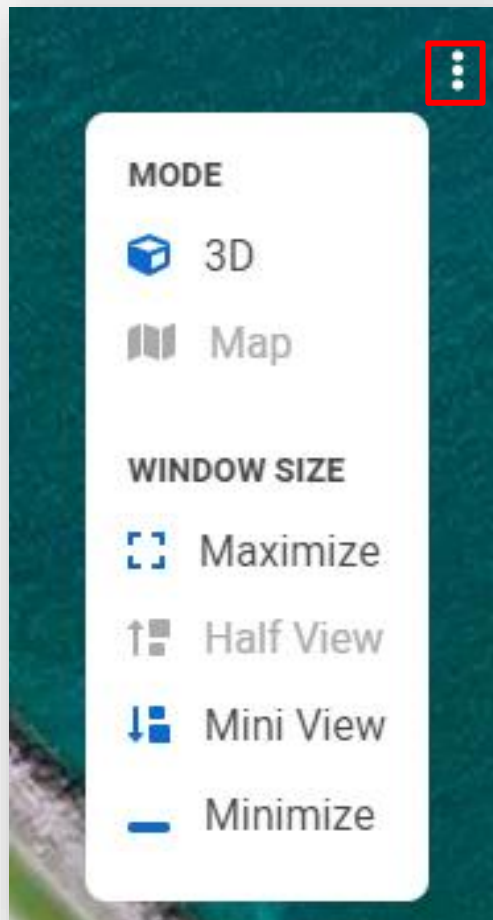
Metric or Imperial

Point Cloud Quality

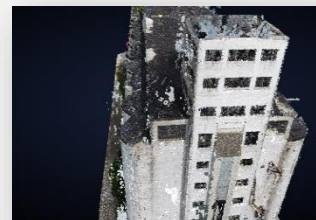
If you are working with a slow internet, you can adjust this for faster performance, the trade off is the digital twin will be in lower resolution.



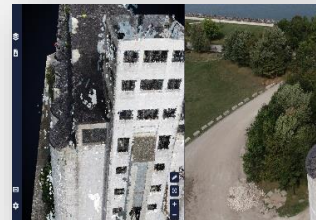
MODE SELECTION



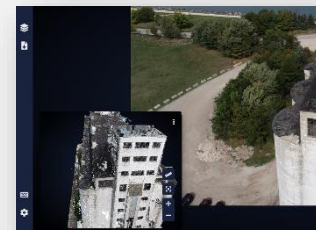
Opening the Mode Selection allows you to switch the Navigator window to different view points.



Maximize View gives the whole screen to the digital twin

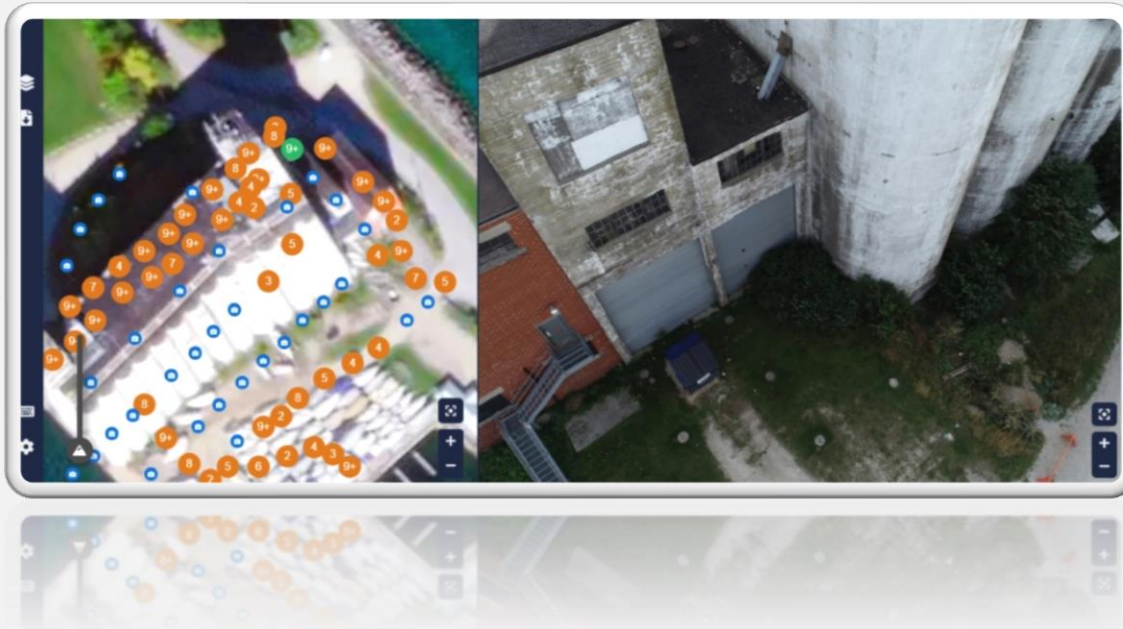


Half View Splits the screen between digital twin and Workpage



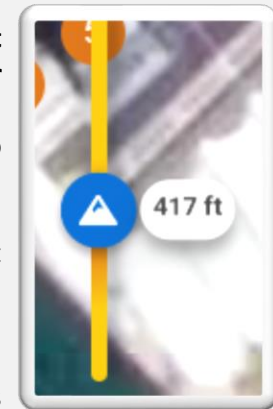
Mini View Shrinks the Navigator Window. Allowing more visibility in the WorkPage.
Minimize removes the Digital twin window completely

MAP VIEW



Height Filter

You can filter the photo locations by altitude. Slide the marker up or down to show cameras at that altitude. Slide the icon to the bottom to show all the cameras



By Selecting map view you are given a top down view of all the camera positions.

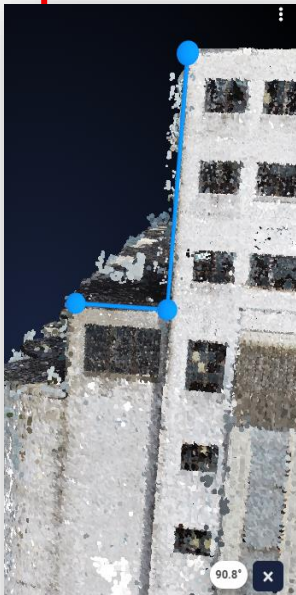
Blue Icons represent individual camera positions. Clicking them brings up the image taken at that location.

Orange icons represent several photos taken at that location.

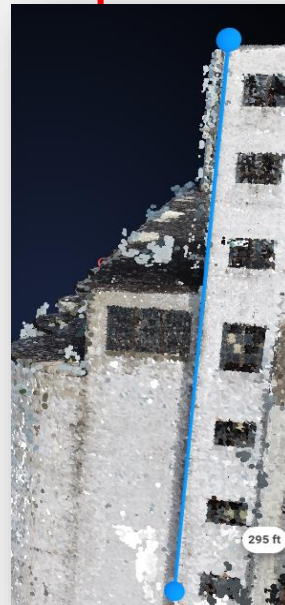
*Repeat clicking on the circle icon goes through
All the photos at that location.*

MEASURE TOOL

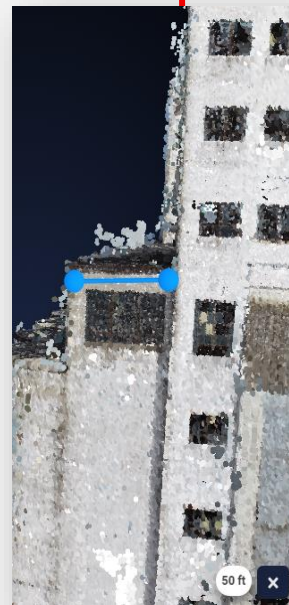
Measure Angle between
3 points



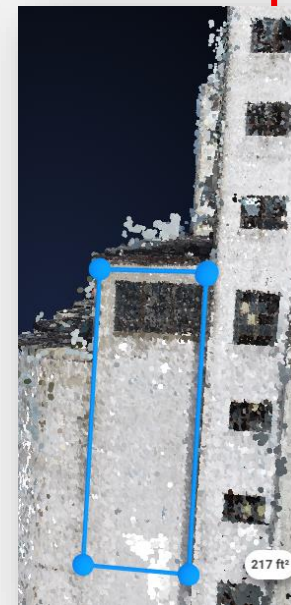
Measure vertical Height



Measure horizontal distance



Measure Area



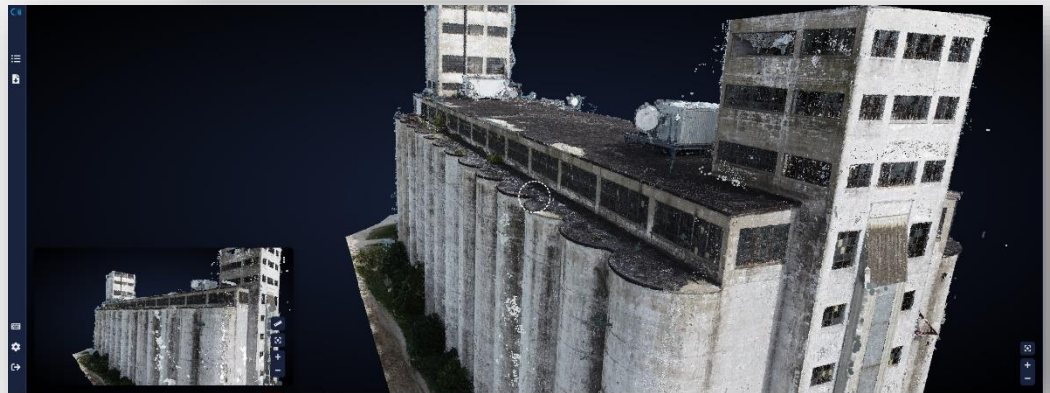
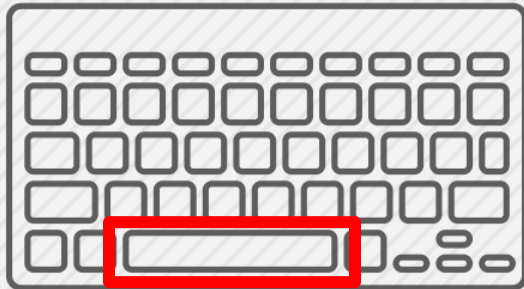
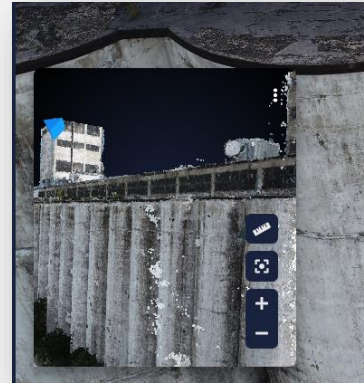
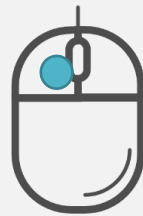
In Settings you can switch to Metric or Imperial units

WORKFLOW



To Create an inspection you must first identify an anomaly.

Using the Digital twin you can rotate it to find the area to inspect

Click on the digital twin to look at the 2D photo of that area



Using space Bar and mouse you can quickly convert the 2D Workpage image into
The 3D digital twin, by releasing the space bar the nearest matching 2D Image is found.
This is a quick and effective way of fine tuning where you are looking.

Use the  icon to open the annotation window. Icon will change to .

Use the left mouse button to draw a rectangle around the anomaly



Or hold down shift key if you want to create a polygon shape

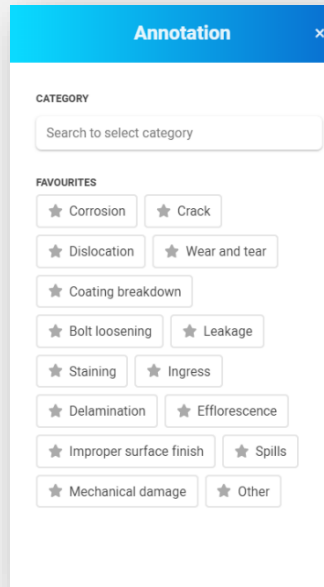


+SHIFT KEY

In Polygon mode you can confirm shape,(you can do just a line without closing the polygon) undo and redo points or Close the polygon using the icon (or snap the beginning and end Point together).



On the Left hand side select the type of anomaly
You can favourite commonly used ones by clicking
On the star, this puts them at the top of the list.



Annotation ✕

CATEGORY

Search to select category

FAVOURITES

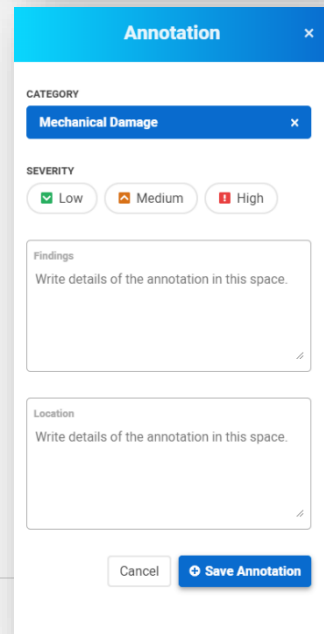
- ★ Corrosion
- ★ Crack
- ★ Dislocation
- ★ Wear and tear
- ★ Coating breakdown
- ★ Bolt loosening
- ★ Leakage
- ★ Staining
- ★ Ingress
- ★ Delamination
- ★ Efflorescence
- ★ Improper surface finish
- ★ Spills
- ★ Mechanical damage
- ★ Other

Once the type of anomaly is selected you must select
The severity. You can choose between Low/Med/High

You may also choose to make notes about what the
Problem is, and where it was found. These are optional.

When done click Save Annotation.

This will leave the colour coded box on the Workpage
and (if selected in settings)a 3D marker on the digital



Annotation ✕

CATEGORY

Mechanical Damage ✕

SEVERITY

☒ Low ☐ Medium ☐ High

Findings

Write details of the annotation in this space.

Location

Write details of the annotation in this space.

Cancel **Save Annotation**



twin.

