Qii Net

user manual V1.0

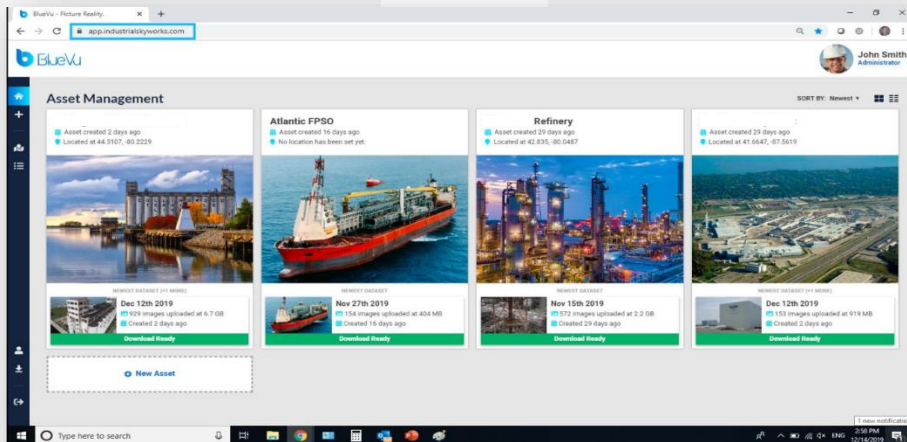Intentionally Left Blank

INTRODUCTION

Qii Net 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 Net is part of family of applications including Qii Edge (desktop) and Qii Studio (portal).
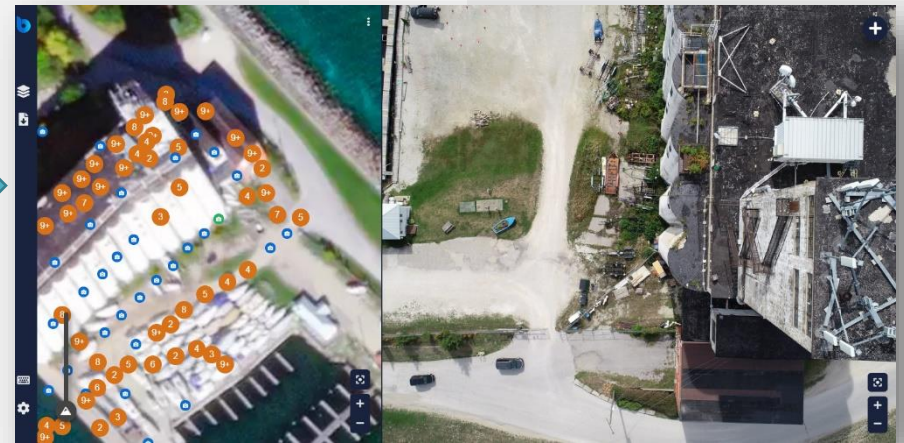
KEY POINTS:

- 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.
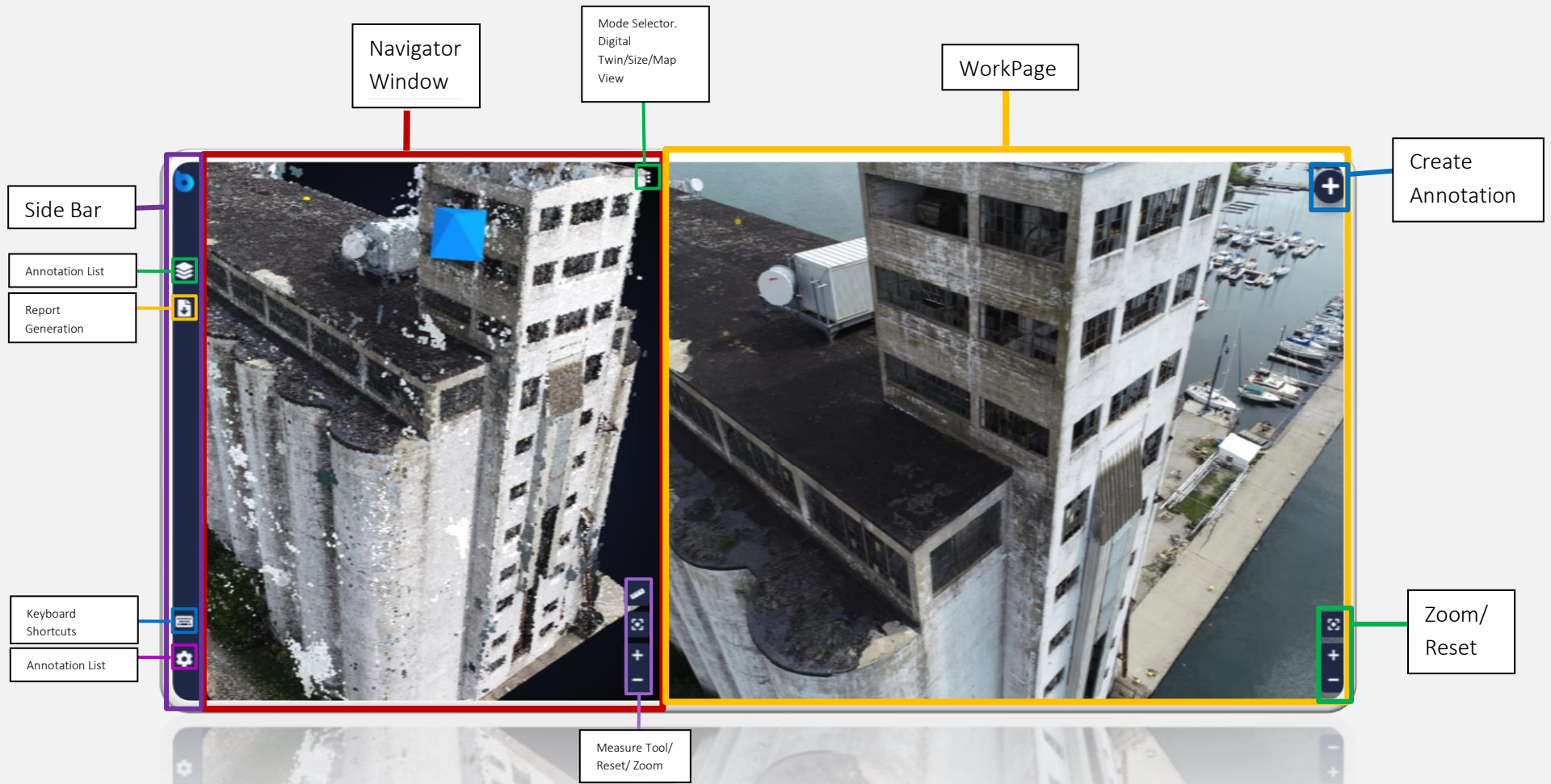- Works with Qii Studio for auto processing of data
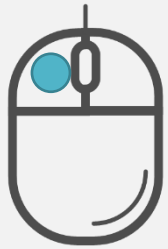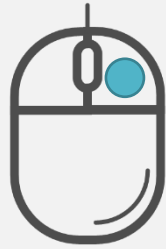
Qii Studio

Qii Net

LAYOUT

Navigator Window

Mode Selector. Digital Twin/Size/Map View

WorkPage

Create Annotation

Side Bar

Annotation List

Report Generation

Keyboard Shortcuts

Annotation List

Measure Tool/ Reset/ Zoom

Zoom/ Reset

![Qii.ai logo]

CONTROLS

NAVIGATOR WINDOW
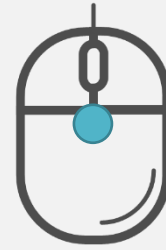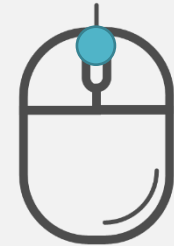
Rotate   Pan   Zoom   Zoom

WORKSPACE WINDOW   Pan   N/A   Zoom

(With Anomaly tab open)

Draw Rectangle box or

Polygon (with shift key)

![Qii.ai logo]

SIDE BAR
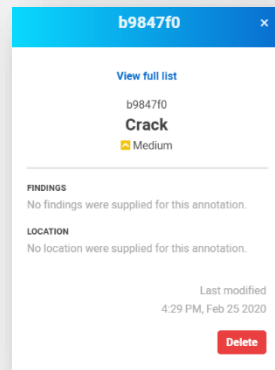
Annotations

Report Generation

Short Cut Menu

Settings

ANNOTATIONS

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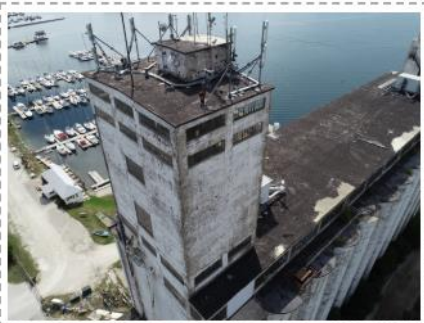
This tab allows you to generate reports from the annotations you have created. You have several optional dialog boxes that can be filled in. You may optional chose to paste comments from a word processor.

|	
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

Clicking on "Preview Live Report" Generates the report.

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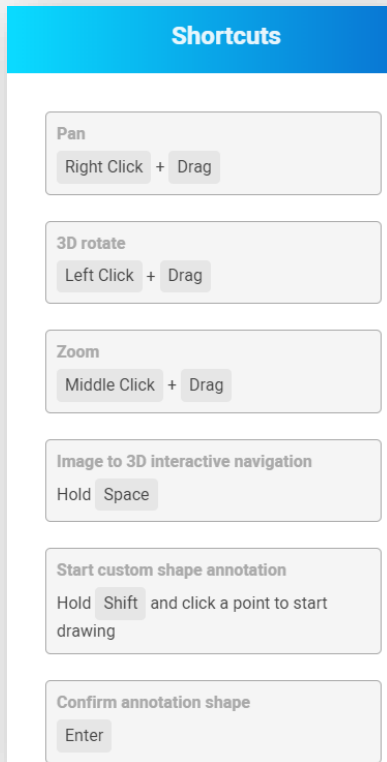
Shortcuts shows the keyboard shortcuts in using the software.
Some shortcuts are modifiers and require the use of both mouse and keyboard.

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
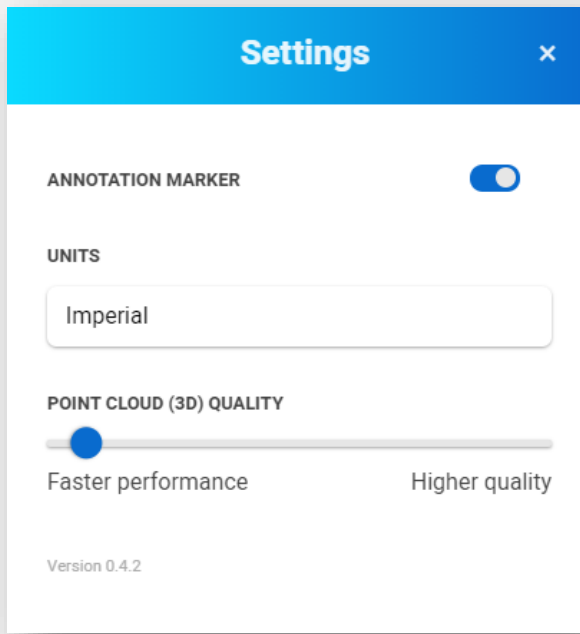To create a polygon Hold the shift key
Confirm annotation shape
Enter Key
Cancel annotation shape
Esc Key

SETTINGS TAB

Annotation Marker   Turns On or Off the marker on the digital twin

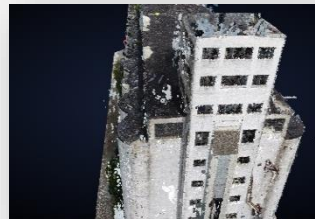Units   Metric or Imperial

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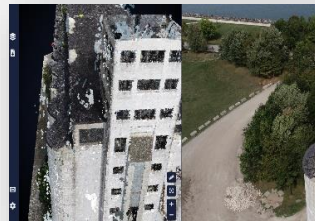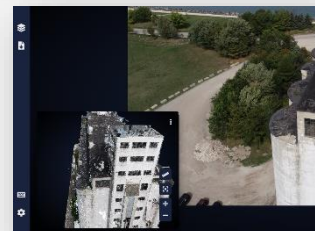
MODE SELECTION
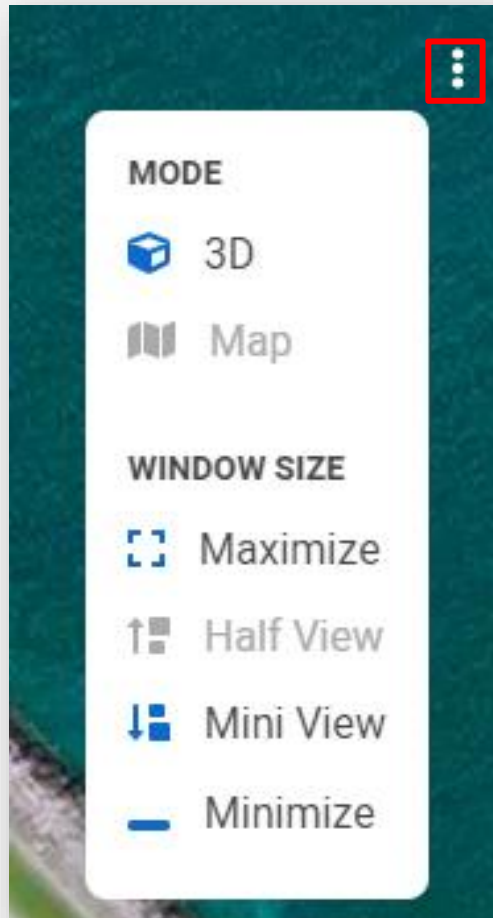
Opening the Mode Selection allows you to switch the Navigator window to different view points.

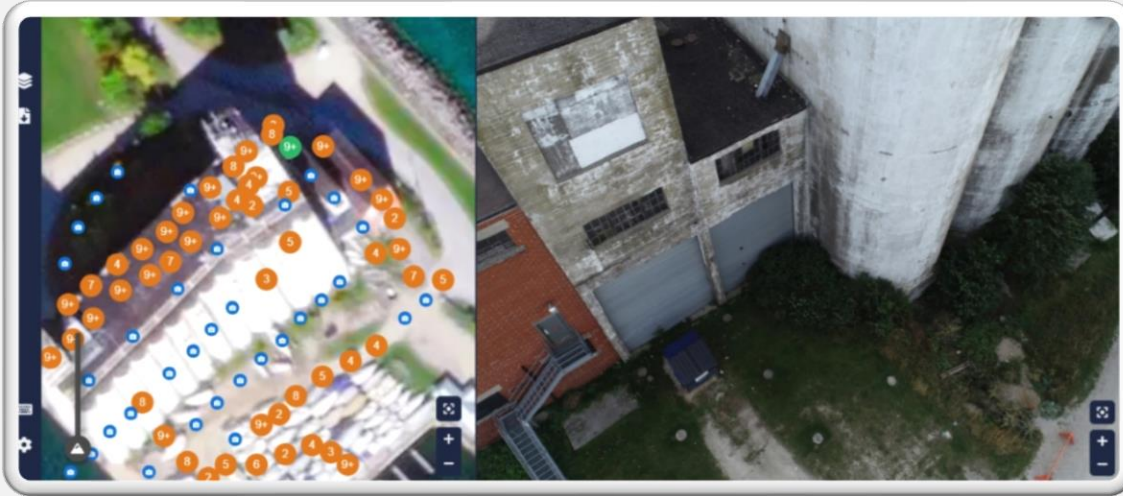Maximize View gives the whole screen to the digital twin

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 by altitude. Slide the icon to the bottom to show all the cameras
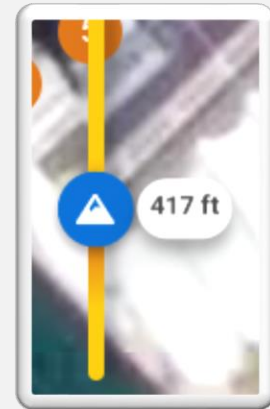

By Selecting map view you are given a top down view of all the camera positions.

Blue Icons represent individual camera positions. Clicking them brings up the image taken at that location.
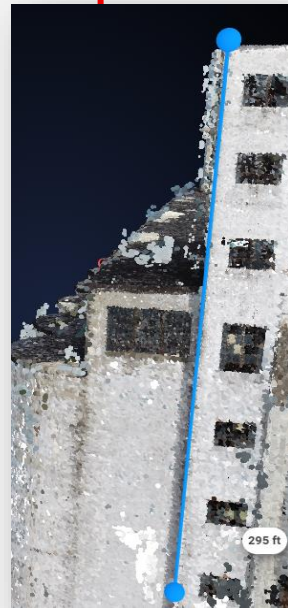
Orange icons represent several photos taken at that location. Repeat clicking on the icon goes through
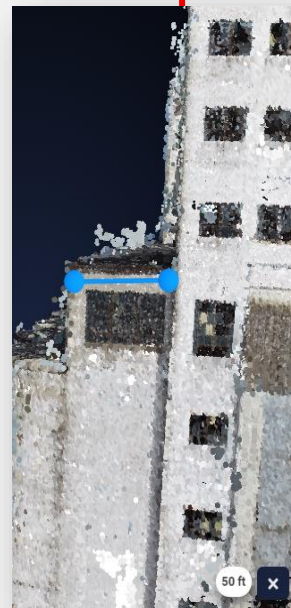All the photos at that location.
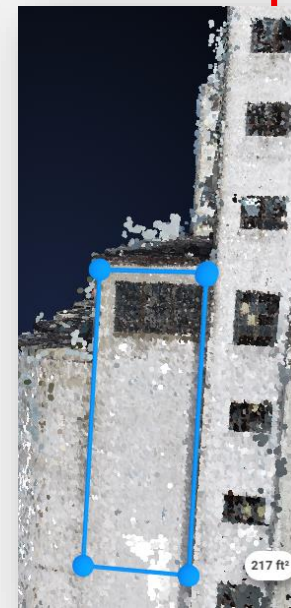
MEASURE TOOL

Measure Angle between 3 points
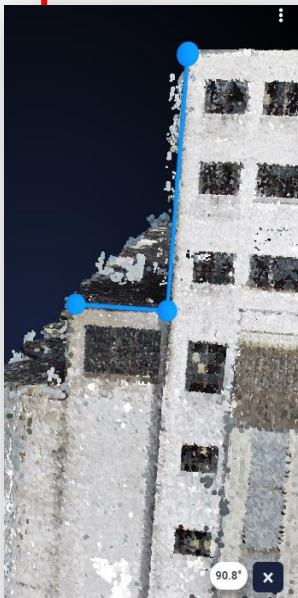
Measure vertical Height

Measure horizontal distance
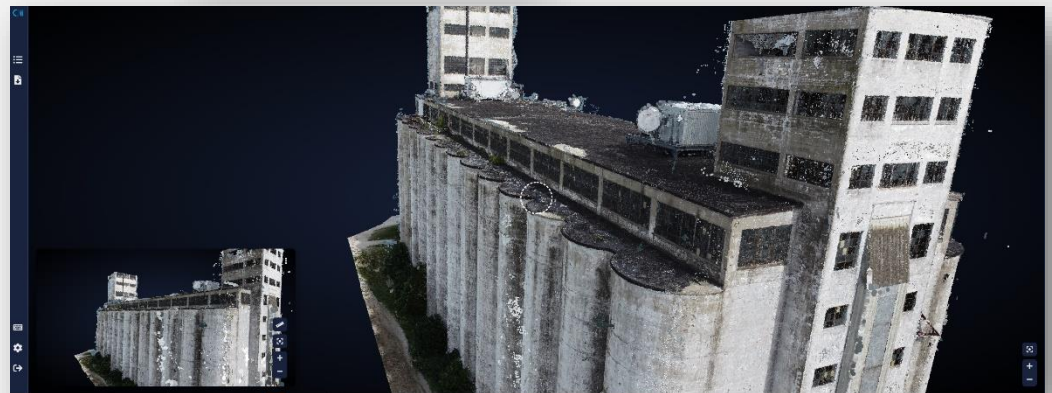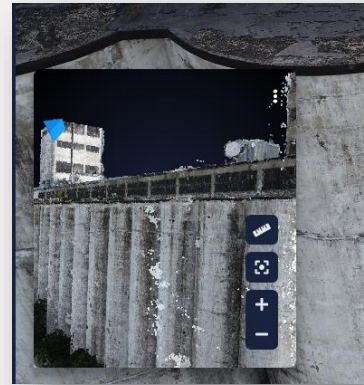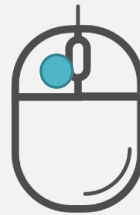

Measure Area

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 he space bar the nearest matching 2D Image is found.
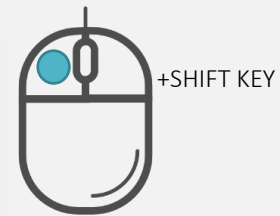
This is a quick and effective way of fine tuning where you are looking.

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
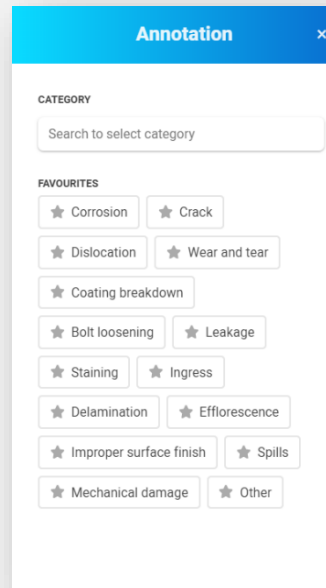
 +SHIFT KEY

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.
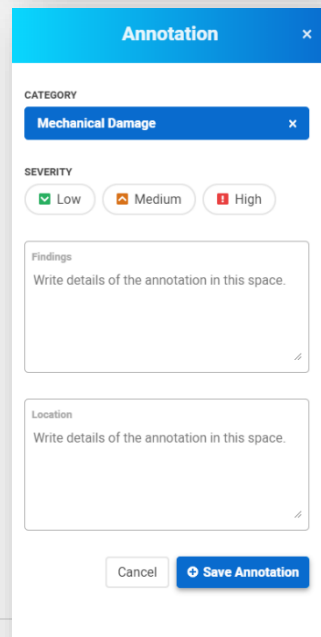
Once the type of anomaly is selected you must select

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

twin.

Ver 1.0