Screening Eagle — revolutionising asset inspection and management

Collect, analyse and collaborate on all information throughout an asset's lifecycle. Complete visibility from 2D to 3D across all devices from mobile and desktop to augmented and virtual reality.

CHALLENGE

Vast amounts of data are generated throughout the lifecycle of an asset from design, construction, inspection and facilities management; however, the data is often stored in different systems between various uses. Furthermore, data collection still relies mainly on human input and paper-based record keeping processes.

OPPORTUNITY

Asset owners are living in two different worlds. On one side, people are celebrating technology breakthroughs on smart phones, AI, drones, and AR/VR. On the other side, construction is among the least digitised industries where productivity gain has been sluggish. Inadequate maintenance of infrastructure incurs billions of dollars of economic and social cost every year. Lack of skilled workers substantially increases construction project cost. The industry is a prime target for digital disruption.

SOLUTION

Our vision is that the industry will transition from reactive to predictive maintenance. Screening Eagle is developed to collect and manage all asset data in the cloud, accessible across platforms and throughout the entire lifecycle. By combining technological advances in smart devices, wearables, Internet of Things (IoT), drones, artificial intelligence, and predictive analysis, Screening Eagle will give every physical asset a health certification and remove all guess work when it comes to valuation and condition assessment.

PARTNERS

Agency for Science, Technology and Research (A*STAR), National University of Singapore (NUS), Singapore Economic Development Board (EDB), Singapore Building and Construction Authority (BCA), Proceq, and Singapore Engineering & Construction.

Screening Eagle Video

Tectus Dreamlab Pte Ltd
1 Fusionopolis Way
Connexis South Tower #20-03
Singapore 138632

info@tectusdreamlab.com | +65 6331 4151
www.tectusdreamlab.com

LATEST SCREENING EAGLE USE CASES

▶ SCREENING EAGLE FINDS SUCCESS ON SINGAPORE CONSTRUCTION SITE

Digitised inspection workflow and 3D issue tracking

Singapore Engineering & Construction Pte. Ltd. has successfully deployed Screening Eagle's issue tracking module in the Wisteria project, a S$186 million mixed-use development in Singapore.

The module enables users to record an issue in a 3D building model, assign it and communicate with their team as they work to solve it. Data is visualised in 3D with full traceability, enabling analytic capabilities and making issue tracking more intuitive and comprehensive.

By adopting Screening Eagle, Singapore Engineering & Construction minimised its paperwork and streamlined the communication for enhanced quality assurance.

➕ GPR TOOL POWERED BY SCREENING EAGLE BREAKS NEW GROUND

Penetrating the ground, managed in the cloud

Global non-destructive testing (NDT) leader Proceq has taken its ground penetrating radar (GPR) to new levels with an intuitive and deeply functional Screening Eagle powered app.

It is the world's first IoT-enabled GPR device that connects wirelessly to an iPad and synchronises data through the Screening Eagle cloud. The lightning-fast app makes GPR measurements a breeze with intuitive controls, and offers real-time and 3D views for easy data interpretation. No more hard work to download scan data to a PC and do time-consuming post-processing to get your 3D data.
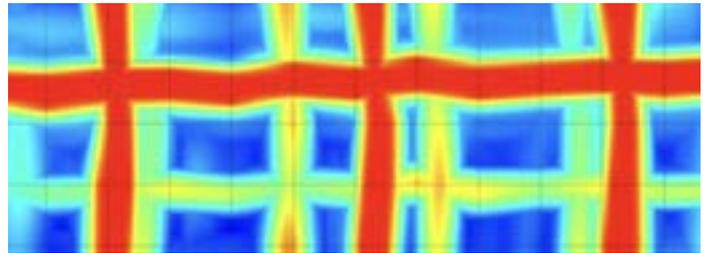

➕ ULTRASONIC STRENGTH TESTER MANAGED BY SCREENING EAGLE MODULE A WORLD-FIRST

Ultrasonic tool's supersonic iOS boost

Proceq, a global NDT leader, leverages Tectus Dreamlab's Screening Eagle to manage its ultrasonic concrete testing tool. The partnership has resulted in the world's first wireless, artificial intelligence (A.I.) - assisted and cloud-enabled instrument of its kind.

The Pundit Live Array tool uses the app to measure with real-time image adjustment, assisted calibration and A.I. positioning system. Just connect the transducer to your iPad and easily measure the concrete thickness, detect defects and localise objects. All the data is managed using the Screening Eagle platform.

▶ SCREENING EAGLE AUGMENTED REALITY DELIVERS INSPECTOR SUPERPOWERS

Real-time tomography takes inspection to a new level

A world-first, augmented reality visualisation tool for inspection gives you real-time tomographic views by looking at a test object through an iPad.

Put simply, users collect and visualise inspection data in 3D. The iPad automatically aligns the 3D view with the ground. In real-time, it gives a highly accurate view of objects underneath by superimposing a computer-generated model onto the real world.

Based on Apple's ARKit 2, the tool has been developed for Proceq's Live system and integrated into the Screening Eagle platform.

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