SHAPING DIGITAL REALITIES

PART OF HEXAGON

- when it has to be **right**

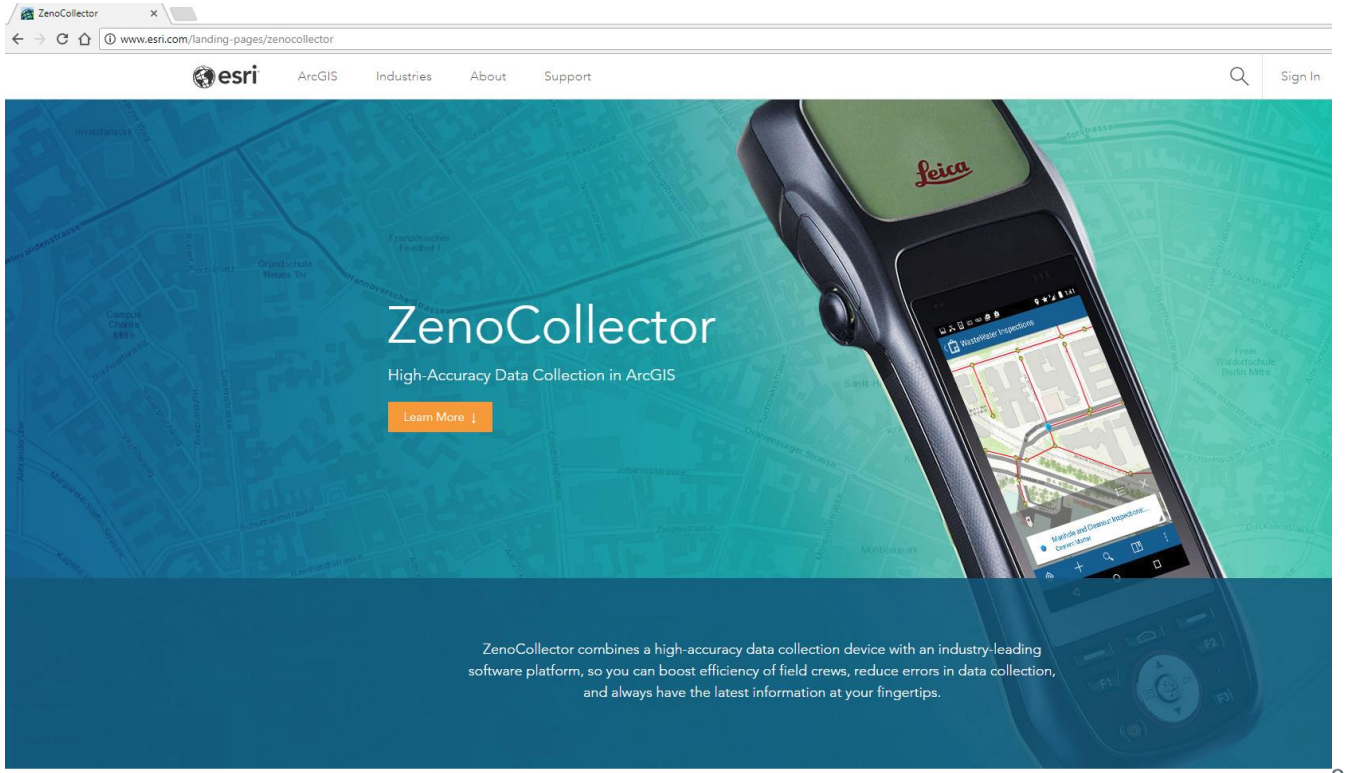
Leica Geosystems

"To be smart, cities must be digital, safe and connected," said Hexagon President and CEO Ola Rollén "At Smart City Expo World Congress, we will demonstrate how our sensors and data, industry expertise and technologies and platforms empower cities to reach their fullest potential."

Shaping smart change by empowering the mobile workforce

50cm
5cm
1cm
BYOD
Bluetooth
Zeno

Zeno Collector - High-Accuracy Data Collection in ArcGIS



PART OF HEXAGON

o be right

Leica Geosystems

rte.ie

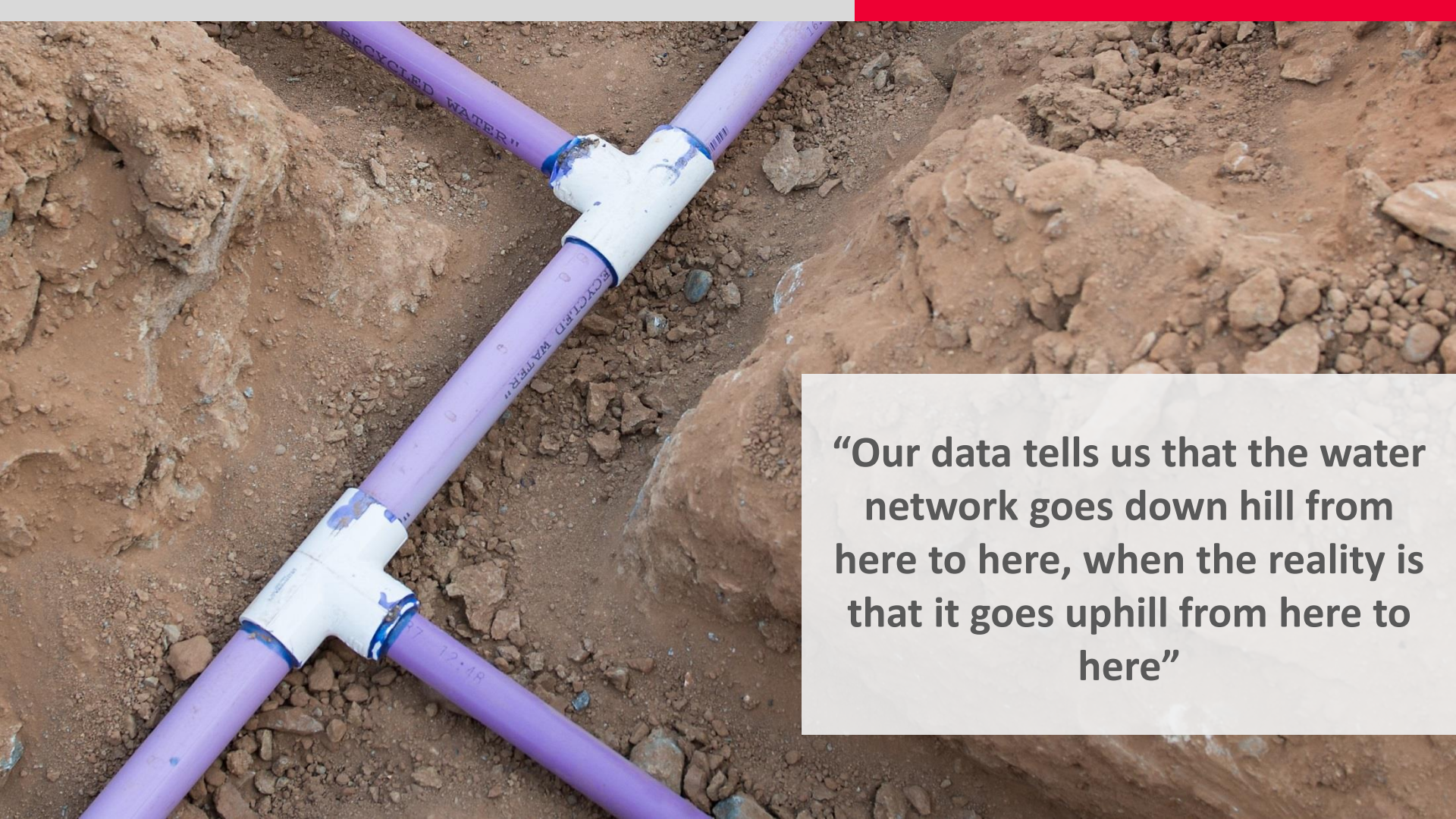
City centre power cut cost up to €1m, business group says

Updated / Monday, 19 Feb 2018 **16:34**

Traffic lights are out of action in parts of the city centre

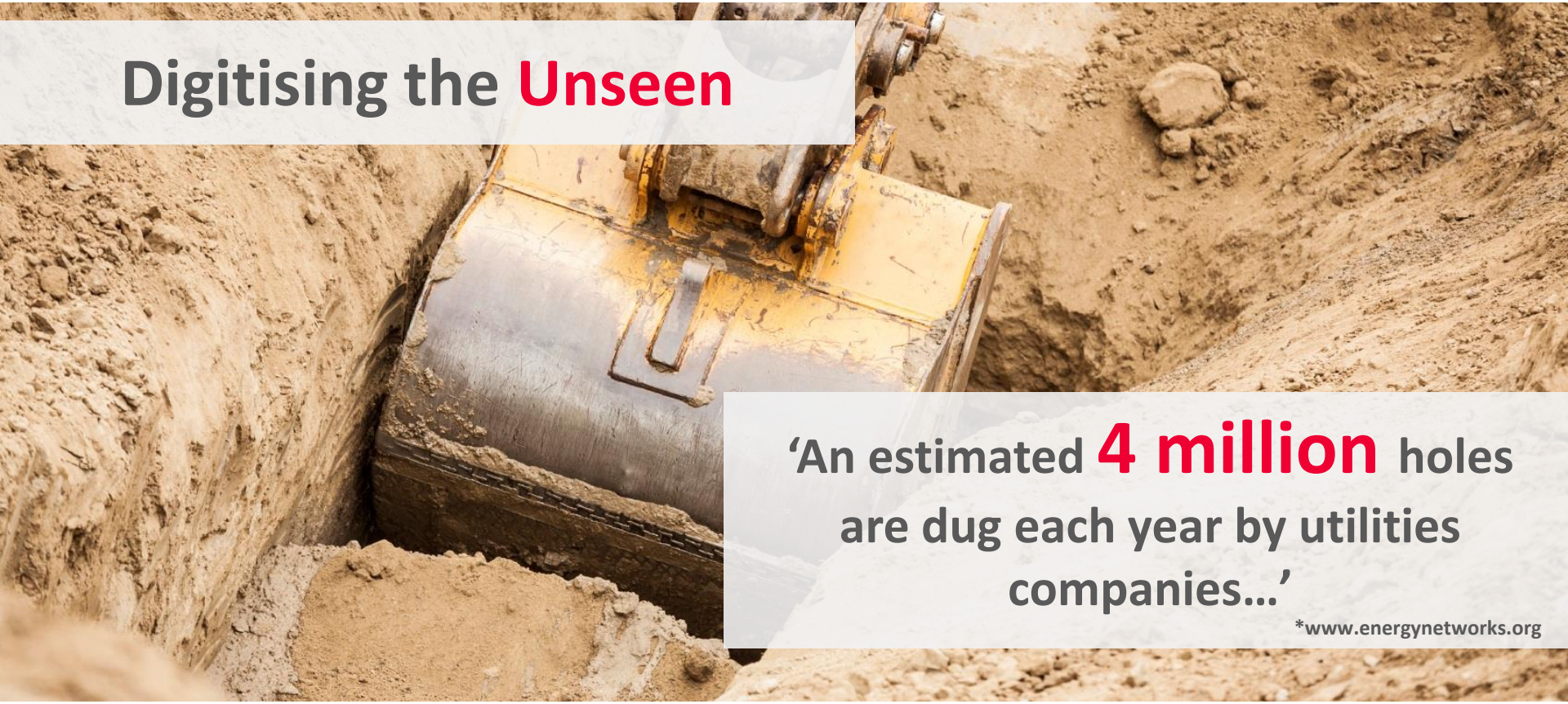
- when it has to be **right**

While you’re there, **measure** new installed assets whilst the ground is open



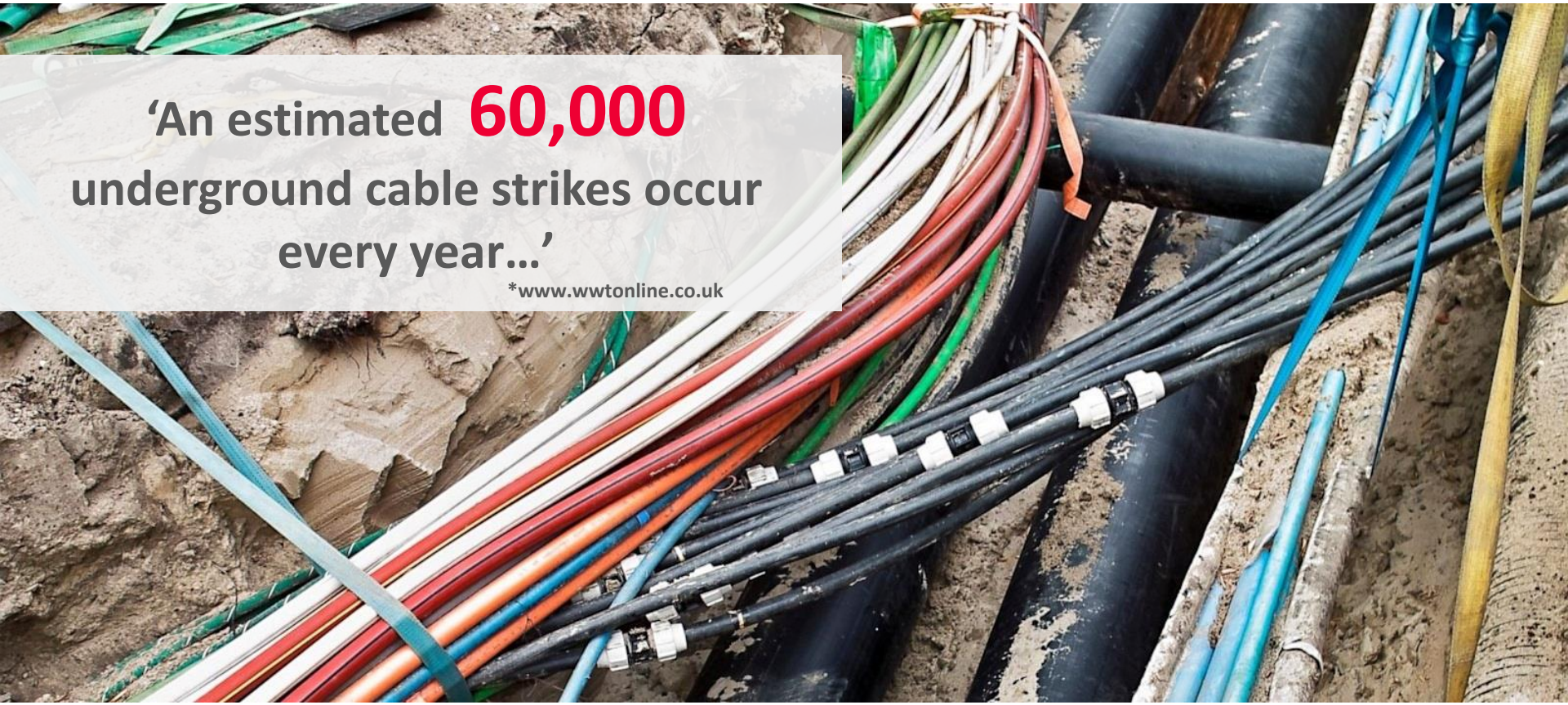
“Our data tells us that the water network goes down hill from here to here, when the reality is that it goes uphill from here to here”

Digitising the Unseen



‘An estimated **4 million** holes are dug each year by utilities companies…’

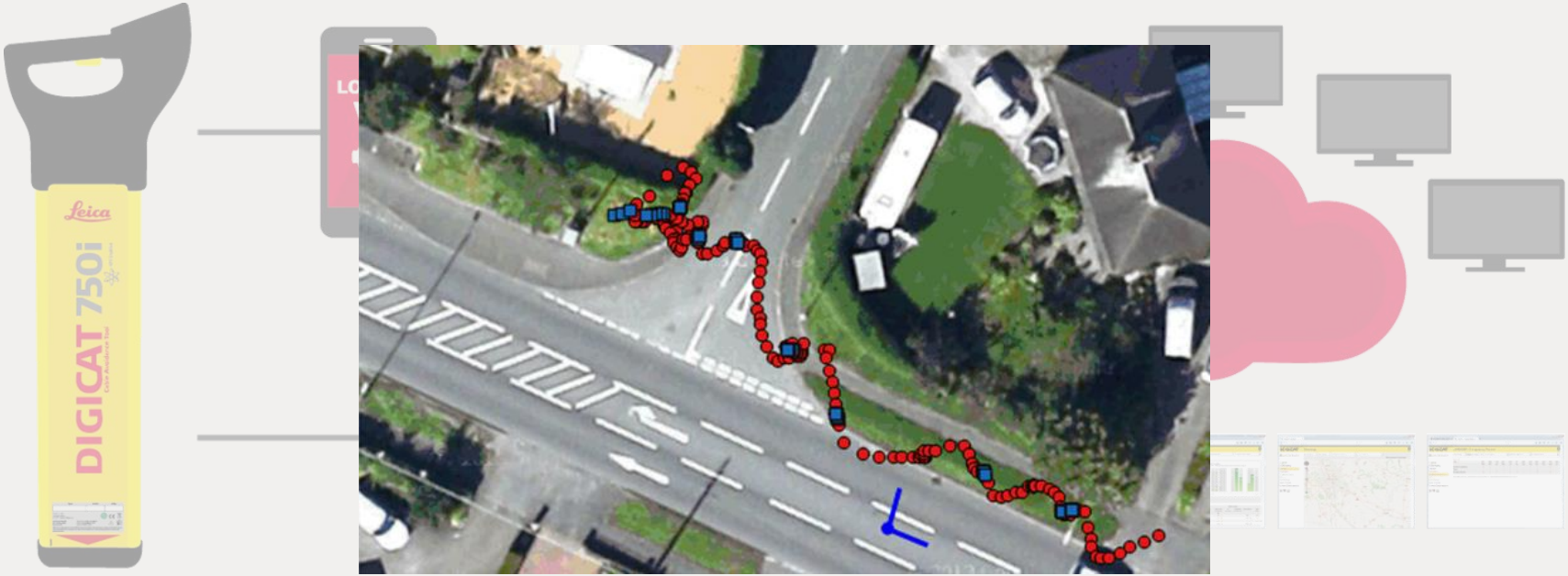
*www.energynetworks.org

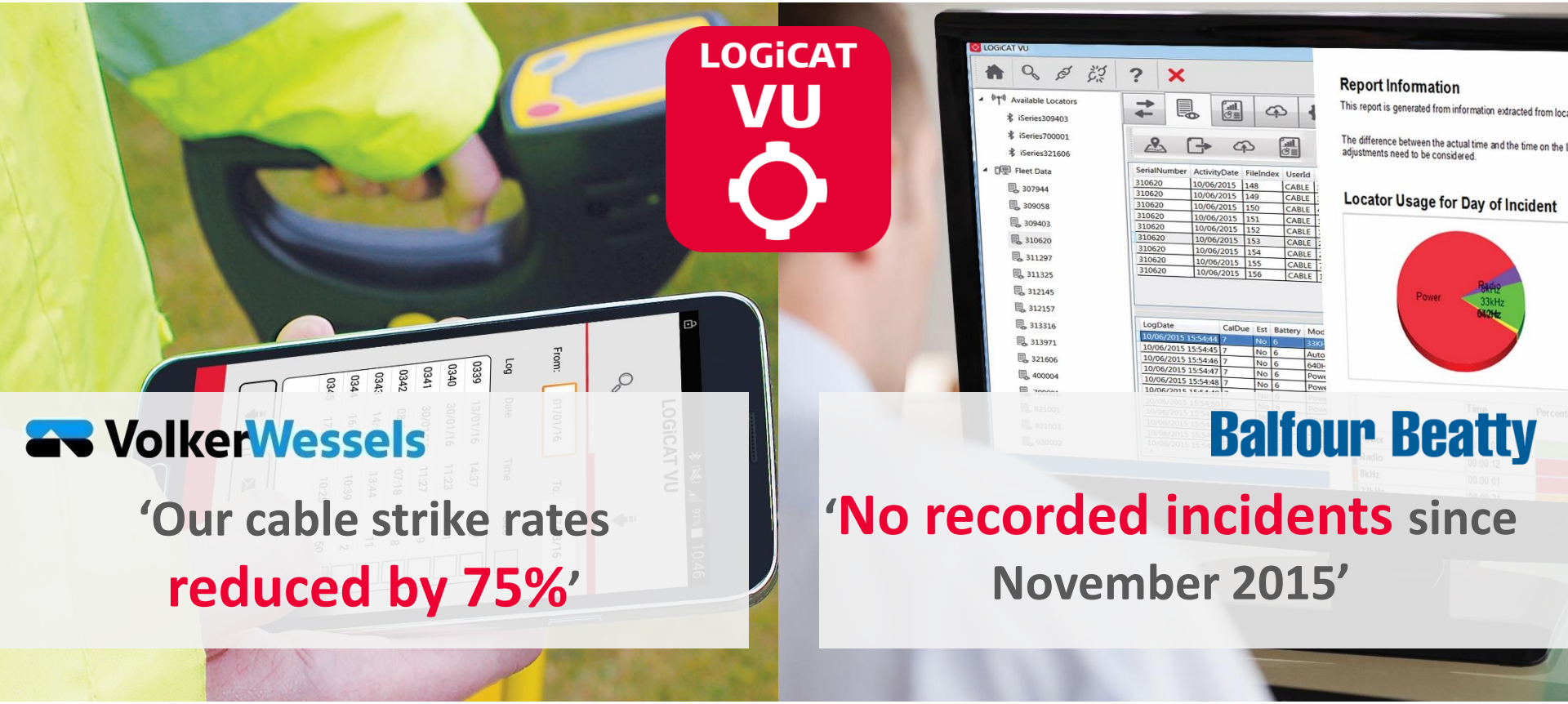


‘An estimated **60,000** underground cable strikes occur every year…’

*www.wwtonline.co.uk

Leica
DIGICAT 700i
TB175
Balfour Beatty
VolkerWessels


Leica
DIGICAT 750i
Mobile
Windows platform
Cloud platform



VolkerWessels

‘Our cable strike rates **reduced by 75%**’

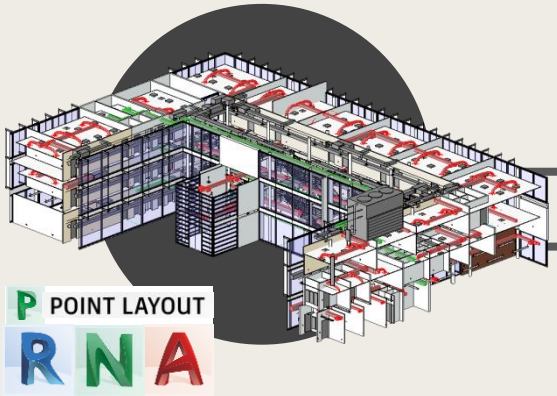
Balfour Beatty

‘**No recorded incidents** since November 2015’

Leica Geosystems complete detection and underground mapping solution

icon
intelligent construction

PinPoint
R1000
icon

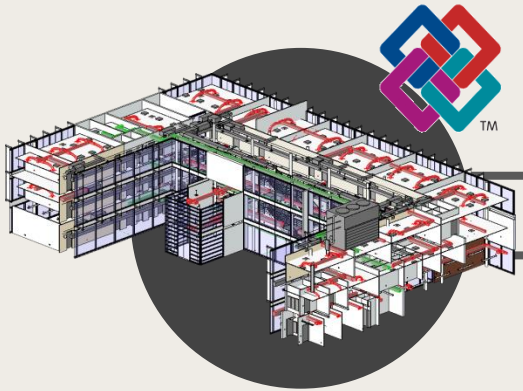


3D Digital Model

+ Digital Layout Points

BIM / VDC Focused Solution for
BIM Professionals

Leica iCON 50 or 60
Robot



IFC 3D Digital Model:
Most 3D Modelling Software

Leica iCON Workflow:
Construction Focused Solution

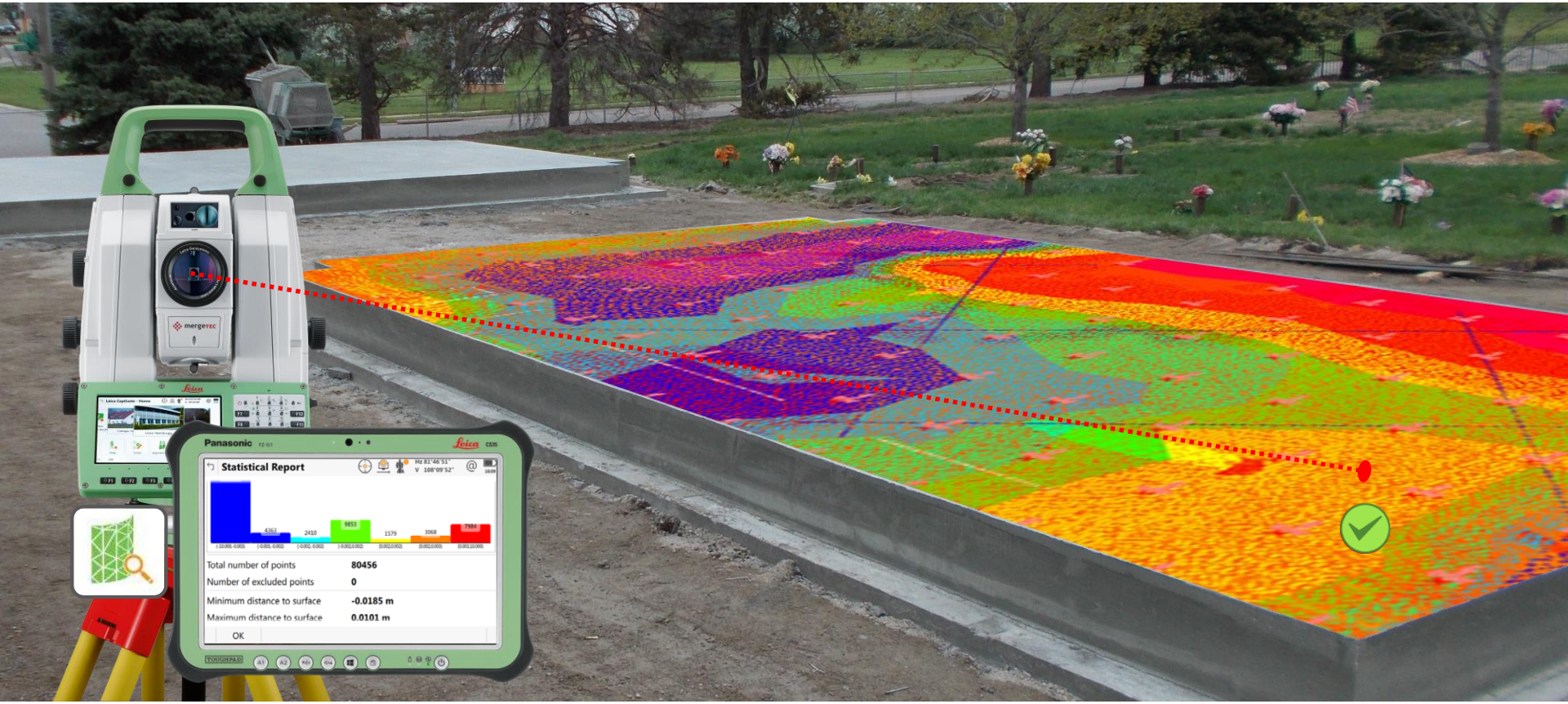
Leica iCON50 or iCON60

Machine Control

Panasonic
FZ-M1
Leica
Demo
0.000
Adjust elevation range or enter limit values
10 m
45.276
-2.702
TOUGHPAD
iCON

Captivate

GRAPHISOFT
AUTODESK.
Tekla
Bentley
Sustaining Infrastructure
.IFC File Format
infinity
EXCHANGE
3D Digital Model
+ Digital Layout Points:
Leica Infinity
Leica Captivate Workflow:
Leica Exchange Cloud Solution
to Captivate Controller
Leica TS16 or MS60



- when it has to be right

Machine Control

Drillers & Pilers

GNSS solution for drill, piling, ground stabilisation rigs.

Rollers

Achieve highest compaction quality as basis for long-lasting infrastructure projects or buildings of any kind.

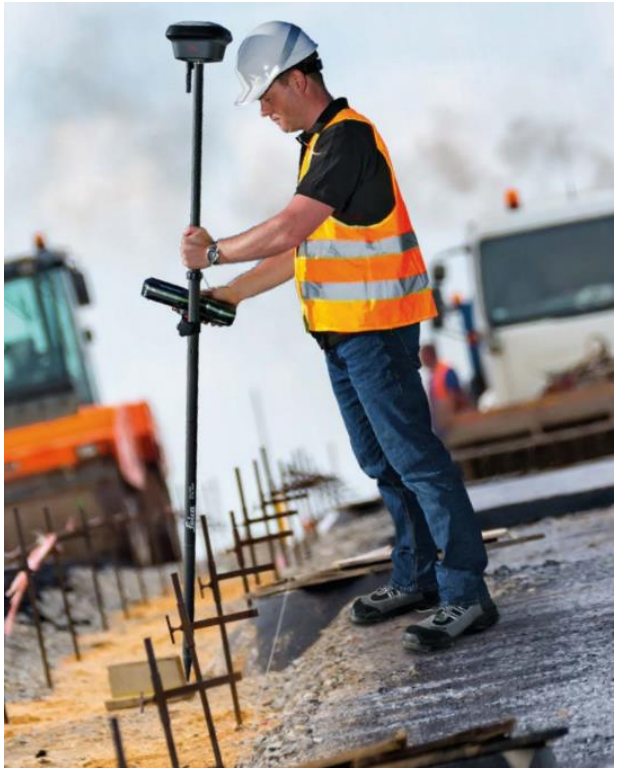
Pavers & Cold Planers

Integrated paving and milling control systems that automatically provide the smoothest surfaces.

Next Gen GNSS

Leica GS18 T

“Forget the bubble”

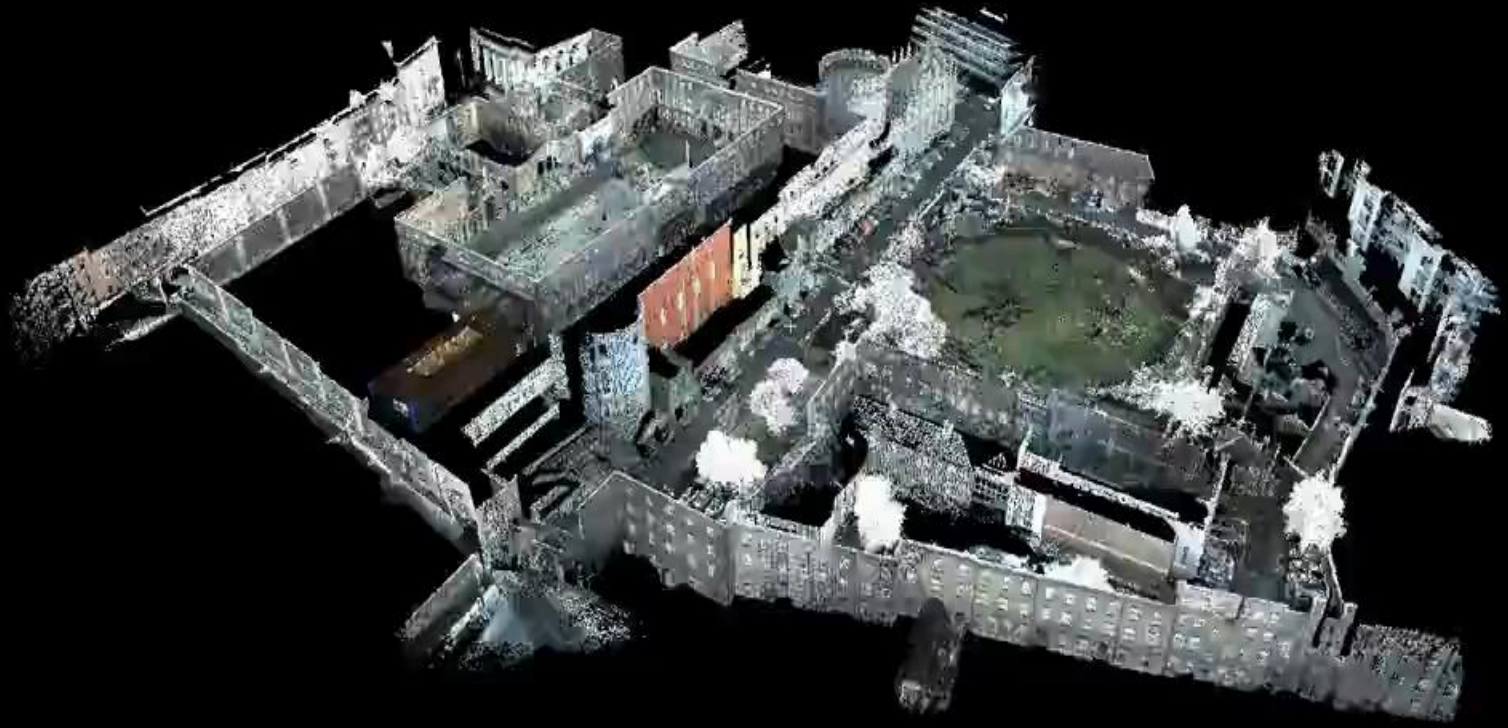


- when it has to be **right**

Leica Geosystems

GS18

Collecting accurate data quickly…



Complete Freedom

Countless possibilities

Infrastructure

Building Construction

Asset Collection

Energy

Disaster Recovery

Virtual Industrial Training

Accident Simulation

Urban Planning

Forestry/Environmental

Safety & Security

Capturing the As-Built

‘Spaghetti Junction was scanned completely in **one afternoon** with no traffic management’

severn partnership

Capture Reality

Extract Features

Build Database

Maintain Assets

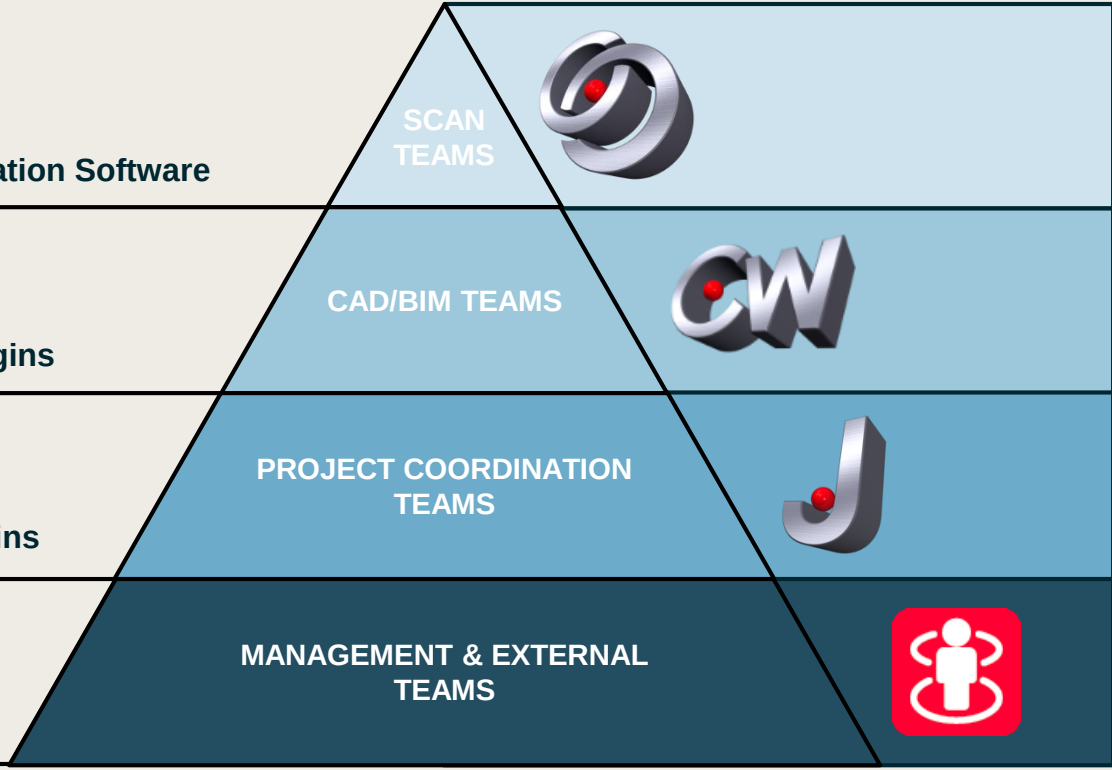
Leica
Pegasus:Backpack

3D Laser Scanners, Registration Software

Point Cloud Software & Plugins

Point Cloud Viewers & Plugins

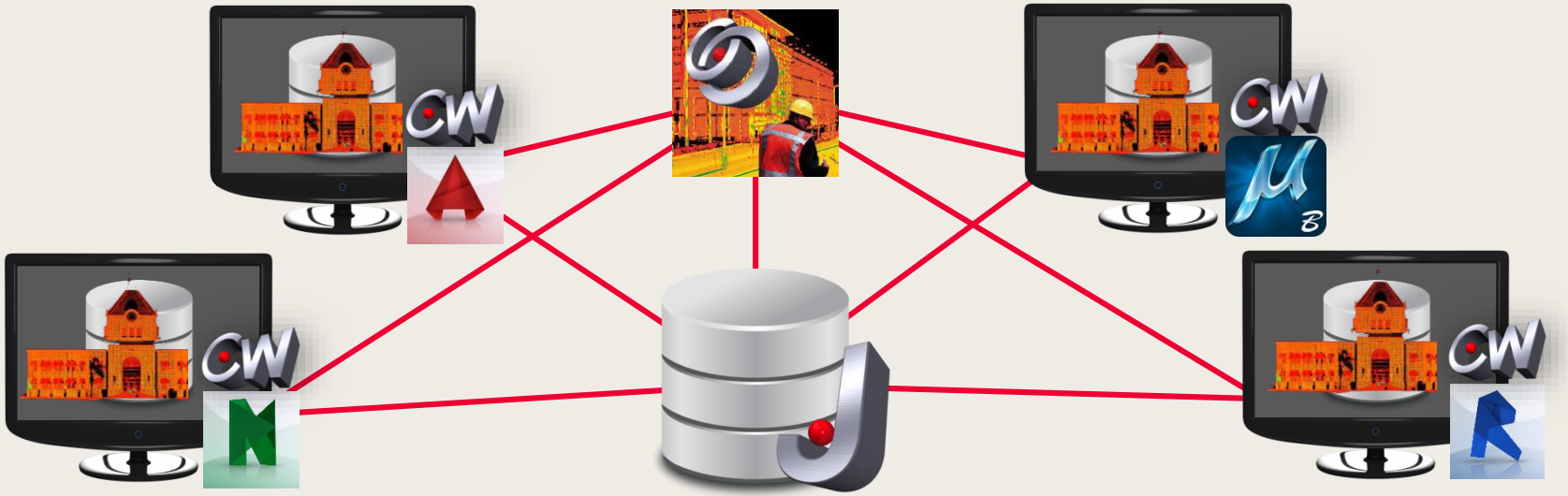
Simple Point Cloud Viewer



- when it has to be right

BIG DATA LOADING

Performance : Manage : Archive : Share



- when it has to be right

INSTANT

Live image and scan data streaming
< 3 min for complete reality capture
1KG
100 mm x 165 mm

SIMPLE

One button
360° activity indicator

SPHERICAL

3-camera system
full dome view 360° by 300°
HDR
LED flash

THERMAL

Longwave infrared panorama image
Broad scene temperature range
High thermal sensitivity

MILLIMETER PRECISE

360'000 3D points per second
Full dome 3D 360° by 300°
60 m range
Invisible infrared laser
Laser class 1 eyesafe

INDEPENDENT

No cables
Storage for 70+ reality captures
Battery for 50+ reality captures
Indoor and outdoor use

INDEPENDENT

No cables, MIMO wireless
Storage for 70+ reality captures
Battery for 50+ reality captures
Indoor and outdoor use

AUTOMATIC

Tilt
Positioning
Altitude

CLICK

Fast, secure tripod mounting
upright and upside down use

BLK360

SWISS MADE

Leica
Suspend Project
Warehouse 1
248
Scan 129
cancel
Scan 128
synced, waiting for registration
Scan 127
synced, waiting for registration
Scan 126
cancel
Scan 125
1.4m points - registered
Scan 124
1.4m points - registered
BLK360 - 1
General
Details
Profiles
Storage
Remove

Leica

Review cloud projects

Store for offline uses

Take measurements

Make comments

Collaborate

Designed for iPad Pro.

- when it has to be **right**

Leica Geosystems

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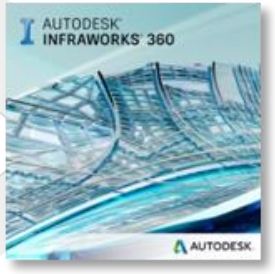

PART OF HEXAGON

- when it has to be **right**

Leica Geosystems

NEW Product Announcements

Leica Cyclone REGISTER 360

Leica Cyclone Cloud & TruView Cloud Services

Leica Cyclone MODEL VR

Leica CloudWorx Ultimate
and CloudWorx Basic for 3DReshaper

- when it has to be **right**

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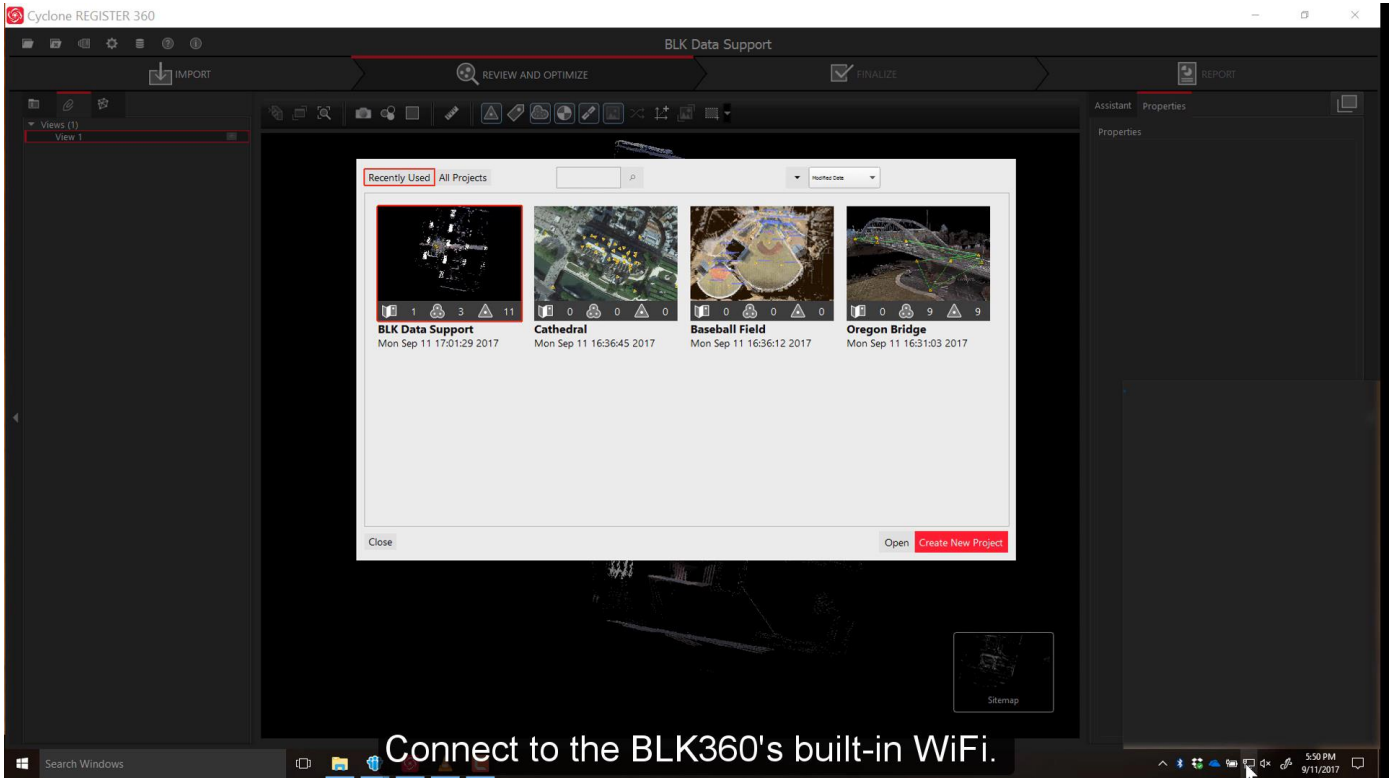
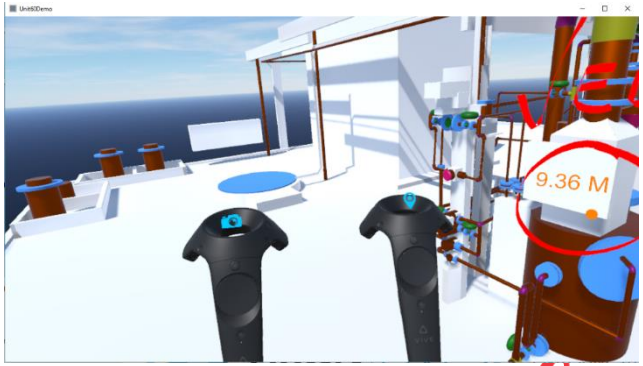

Cyclone REGISTER 360
BLK Data Support
IMPORT
REVIEW AND OPTIMIZE
FINALIZE
REPORT
Recently Used
All Projects
BLK Data Support
Mon Sep 11 17:01:29 2017
Cathedral
Mon Sep 11 16:36:45 2017
Baseball Field
Mon Sep 11 16:36:12 2017
Oregon Bridge
Mon Sep 11 16:31:03 2017
Close
Open
Create New Project
Connect to the BLK360's built-in WiFi.

Excited to Announce…

First VR Product compatible with HTC Vive

- Publishes Cyclone Models

- Free Viewer
  - Teleportation Navigation
  - Interactive Measuring
  - Markups - Simple text, shapes, arrows, etc.
  - Pick points to get Elevations & Pipe Diameters
  - Snapshots
  - GeoTags



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- when it has to be right

Leica Geosystems

SmartNet

SmartLink

Used Equipment Centre

ConX

TRUSTED SERVICES

Active Assist

Technical support

Training

@LeicageoJohn

John Kerrigan

Thank You

Questions?