

ScanCrete Solution

Spray. Capture. Compare.
Optimise.



ScanCrete is a solution from Leica Geosystems that empowers users to spray, capture and compare, to optimise sprayed concrete (shotcrete) application. This end-to-end solution improves data capture efficiency, minimises waste and streamlines productivity consequently reducing hazardous environments exposure time. Conduct easy-to-understand visual reporting on site or in the office, through industry-proven technology for accurate and real time as-built analysis.

KEY BENEFITS

- End-to-end workflow from field to office provided exclusively by Leica Geosystems
- Efficiently perform real time layer thickness analysis of structures using intelligent sensors and software that work seamlessly together
- Simplify as-built inspection of sprayed concrete layer-by-layer
- Conduct as-built analysis and verification instantly in hazardous environments without revisits or delays
- Saves costs by ensuring there is minimal waste of materials and reduce the number of personnel required for the task

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- when it has to be **right**

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Spray



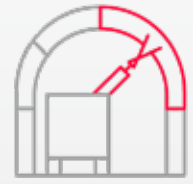
Capture



Compare



Optimise



SPRAY

Sprayed concrete (shotcrete) application is an essential task during conventional tunnel excavation. The entire area of sprayed concrete must be measured for layer thickness, not only at isolated specific locations. If measurement results of the sprayed concrete layers are available in real time, maximum operation efficiency of the concreting operation can be achieved without waiting for external validation. The visualisation of measurement results is fast and easy to understand, enabling better-informed decisions in the field.

CAPTURE

With the Leica RTC360 or Leica BLK360, users can position a 3D laser scanner close to the area of interest for the tunnel surface and perform an initial scan. Concrete can then be sprayed and after completion a second scan is performed and transmitted to the Leica CS35 tablet computer, running Captivate Inspect Layer application.

COMPARE

The Captivate Inspect Layer application compares two or more scans to identify the thickness between the layers or surfaces. If the instrument's position and orientation is changed between scan setups, the app automatically adjusts by aligning the scans, delivering real time results, visually, simply and efficiently. The scanned surfaces are compared within the app to visually identify too much or too little sprayed concrete compared to the desired layer thickness requirement.

OPTIMISE

With in-field real time validation of layer thickness, instant corrective actions can be taken without disruption to the workflow. Delays awaiting 3rd party validation are minimised due to availability of real time data at the worksite.

Additionally, for construction site records and performance reviews, users can download the captured data via Wi-Fi or USB from the CS35 tablet computer, then perform further analysis in the office with Leica Cyclone 3DR. This allows users to not just view data in real time, but adds a post processing step to transform their captured data into accurate and meaningful results.

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Leica RTC360
Data Sheet



Leica BLK360
Data Sheet



Leica CS35 Data
Sheet



Leica Cyclone 3DR
Data Sheet

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