



NON-CONTACT MEASUREMENT
Measurement of all guides in one pass



FAST DEPLOYMENT
~20 minutes typical setup time



USES EXISTING CONVEYANCE
Clamps to existing fixtures



DEPTH-INDEXED RESULTS
Guide measurements synchronized with hoist depth data.

INSTALLED ON CONVEYANCE (Four-guide configuration)



SYSTEM OVERVIEW

ShafTrack Core is a modular, non-contact laser measurement system designed for rapid installation on existing mine conveyances. The standard system includes two laser arrays and can be expanded to four arrays for additional guide measurements. The arrays continuously measure shaft guide geometry during travel, while an independent tablet records hoist depth using camera-based OCR. Following the survey, both datasets are automatically synchronized to produce depth-indexed guide measurements for review, analysis and reporting.

Laser array
(1 per guide)



ShafTrack Data Logger

- Rugged enclosure
- Wi-Fi hotspot
- Makita battery power
- Magnetic mounting

Rugged tablet

- ShafTrack application
- Wi-Fi connection

MOUNTING OPTIONS



Clamp to handrails
(Common configuration)



Clamp to wheel housings
(Alternative configuration)

LASER ARRAY



- Three laser sensors per array (centre + left + right)
- Robust industrial design
- Visible laser for easy alignment

SHAFTRACK DATA LOGGER



- Collects laser measurements and sensor data
- Wi-Fi hotspot for tablet connection
- Rugged housing for underground conditions
- Powered by Makita 18 V battery standard

SYSTEM INSTALLATION & SETUP

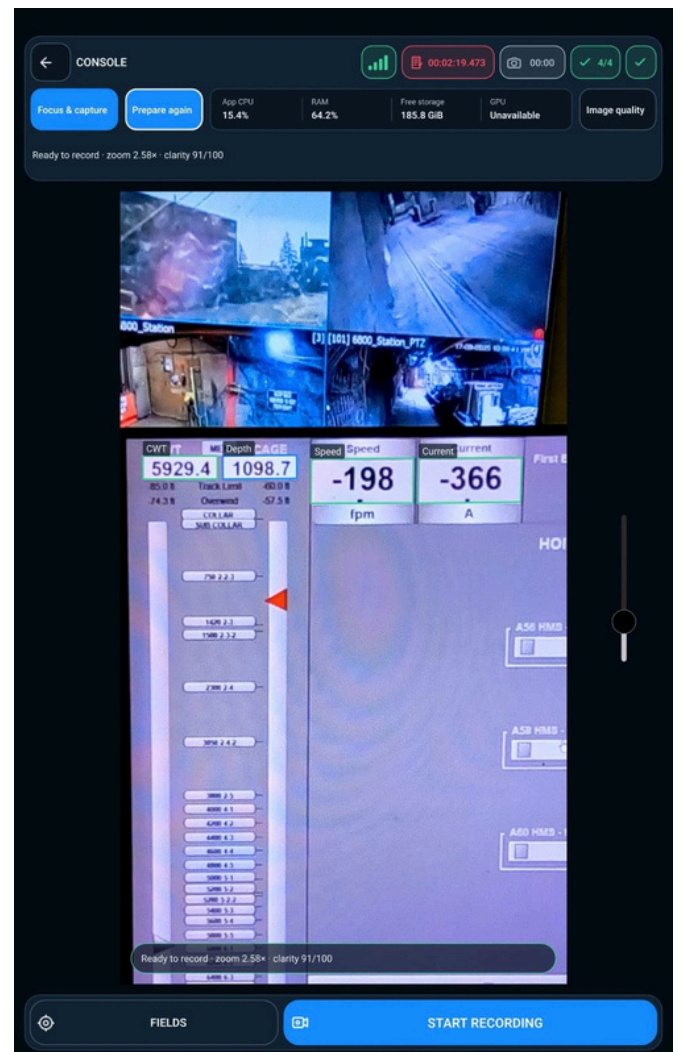
- **Rapid Deployment:** Approximately 20-minute installation.
- **Flexible Mounting:** Clamps to handrails, wheel housings or rigid structural members.
- **Plug-and-Play:** Single cable connects each laser array to the Data Logger.
- **Wireless Setup:** Tablet connects directly through the ShafTrack Wi-Fi hotspot.
- **Battery Powered:** Makita 18V battery eliminates external power requirements.

SURVEY DATA & ANALYSIS

- **Continuous Profiling:** Records guide dimensions throughout the shaft inspection.
- **Depth-Indexed Data:** Measurements synchronized with actual hoist depth.
- **Interactive Visualization:** Review guide measurements and trends directly on the tablet.
- **Data Export:** Transfer completed surveys for further analysis and reporting.
- **Minewise Support:** Professional data processing and inspection reporting available.

HOIST DEPTH CAPTURE & SYNCHRONIZATION

- **Camera-Based OCR:** Captures hoist depth directly from the existing hoist console display.
- **Automatic Field Detection:** Press and hold on displayed values to identify and select the required data fields.
- **No Hoist Integration Required:** Eliminates the need for electrical connections to the hoist control system.
- **Independent Recording:** Tablet records hoist depth while ShafTrack collects laser measurements on the conveyance.
- **Automatic Synchronization:** Recorded depth is synchronized with laser telemetry after the survey.
- **Depth-Indexed Results:** Guide dimensions can be reviewed and analyzed against their corresponding shaft depths.



SURVEY METHODOLOGY

01 INSTALL LASER ARRAYS

- Clamp one array per guide to rigid handrails, wheel housings or structural members.
- Centre laser aligned with guide face centre; left/right lasers aligned with idler-wheel path.
- Secure mounts.



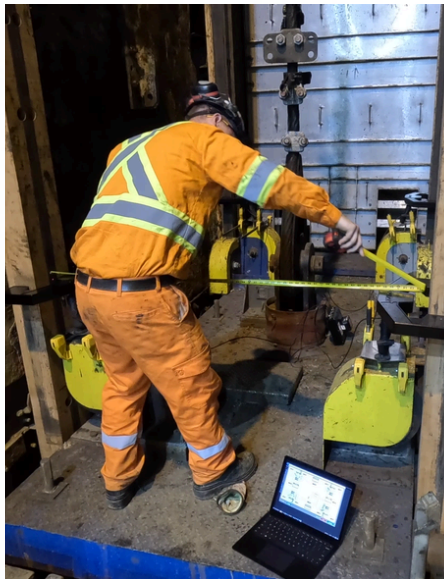
02 CONNECT & POWER

- Magnetically mount Data Logger centrally on conveyance.
- One cable from each array to logger.
- Install Makita 18V battery; check visible lasers and alignment.



03 INITIAL GUIDE MEASUREMENT

- Connect tablet to ShafTrack Wi-Fi hotspot.
- Open app, verify live measurements.
- Enter starting Face to Face dimensions; start laser recording.



04 CAPTURE HOIST DEPTH

- Release Conveyance
- Bring tablet to hoist console and align with dynamic depth.
- Press and hold to select depth field, confirm field; start independent OCR recording.
- No electrical hoist integration required.



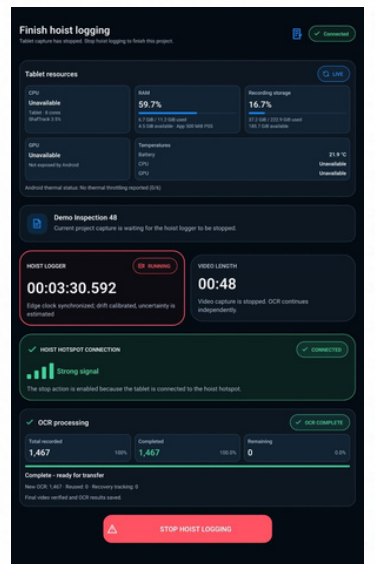
05 SURVEY

- Hoist operator travels at approximately 100–200 ft/min subject to site conditions.
- Logger measures guides and tablet independently captures depth.
- Return conveyance to surface.



06 RECONNECT & SYNC

- Tablet reconnects when conveyance returns to wireless range.
- Stop logger recording; synchronize guide measurements to hoist depth; transfer dataset to tablet.



07 REVIEW & EXPORT

- Review face-to-face, guide widths, applicable front-to-back measurements in tablet graphs.
- Export depth-indexed data for reporting

Existing conveyance • Typically ~20 min installation
• No hoist electrical connection

