

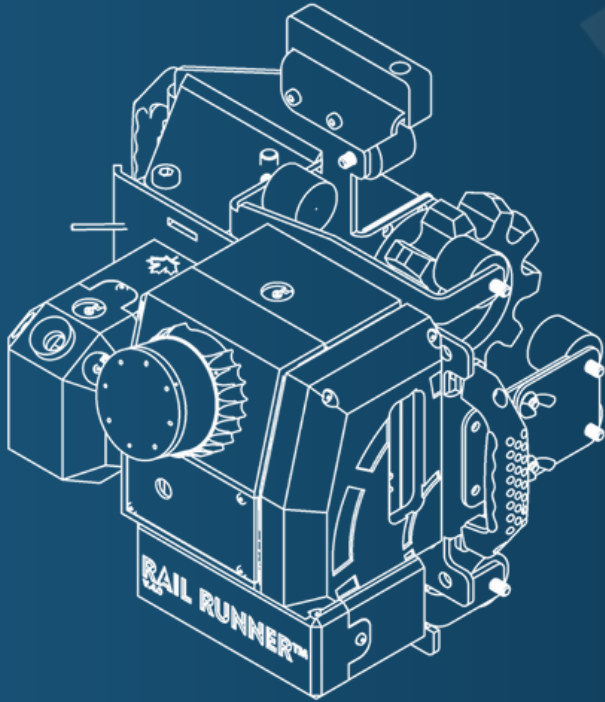


Rail Runner

Safer & Faster Raise Development



www.safesightxp.com



MRC Rail Runner

Real-Time Raise Intelligence. Actionable Results.

The SafeSight Rail Runner™ is a specialized, autonomous scanning system purpose-built for the Alimak rail. Engineered to transform how teams inspect and map vertical infrastructure, it delivers high-definition visual intelligence and precision 3D LiDAR data in minutes. By automating data capture in hazardous raises, the Rail Runner™ helps operations eliminate human exposure while making faster, more confident decisions.

The need for better vertical data.

Modern raise development depends on immediate, accurate data to verify safety and progress. The Rail Runner™ delivers instant access to 3D insights and HD visuals in GPS-denied vertical environments where traditional survey methods are often too slow or high-risk.

Key Benefits

- **Rapid Deployment:** Securely locks onto the Alimak rail and deploys in under 2 minutes.
- **Autonomous Operation:** Automatically ascends the rail and returns to the point of origin.
- **Multi-Sensing Capability:** Captures 3D LiDAR, HD video, and peak gas readings simultaneously.
- **Live Render Visualization:** Confirm point cloud coverage in real time via the SafeSight App.
- **Safety as a Standard:** Removes the need for personnel to enter unsupported or post-blast raises for inspection.

Live Render – In the SafeSight App





The Rail Runner difference.

From Ascent to Action

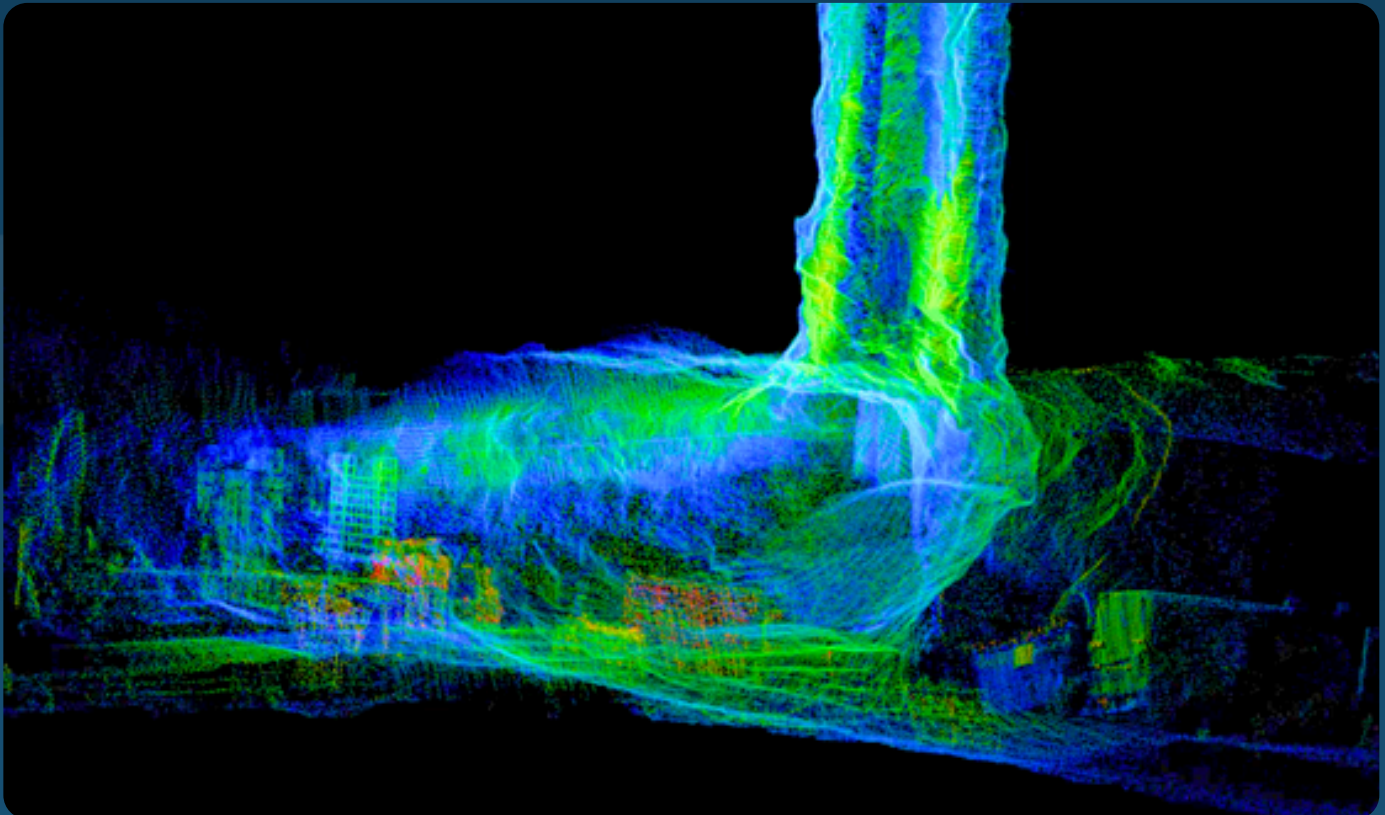
Turn hazardous raises into measurable, shareable 3D models and HD inspections moments after the unit returns to the nest.

Gas Detection

The Rail Runner captures 5 core gas peak readings (O_2 , CO_2 , H_2S , NO_2 , SO_2) during its run. Because it lacks "prop wash," it provides pure, uncontaminated air quality readings from the top of the raise.

Why It Matters

- **Unmatched Safety:** No worker should enter a raise without knowing its condition.
- **Reduced Delay:** Inspect post-blast immediately with no additional setup.
- **Structural Integrity:** Assess brackets, anchor bolts, and rail orientation remotely.



A 3D Scan of an Alimak Raise base captured by the Rail Runner

Product features.

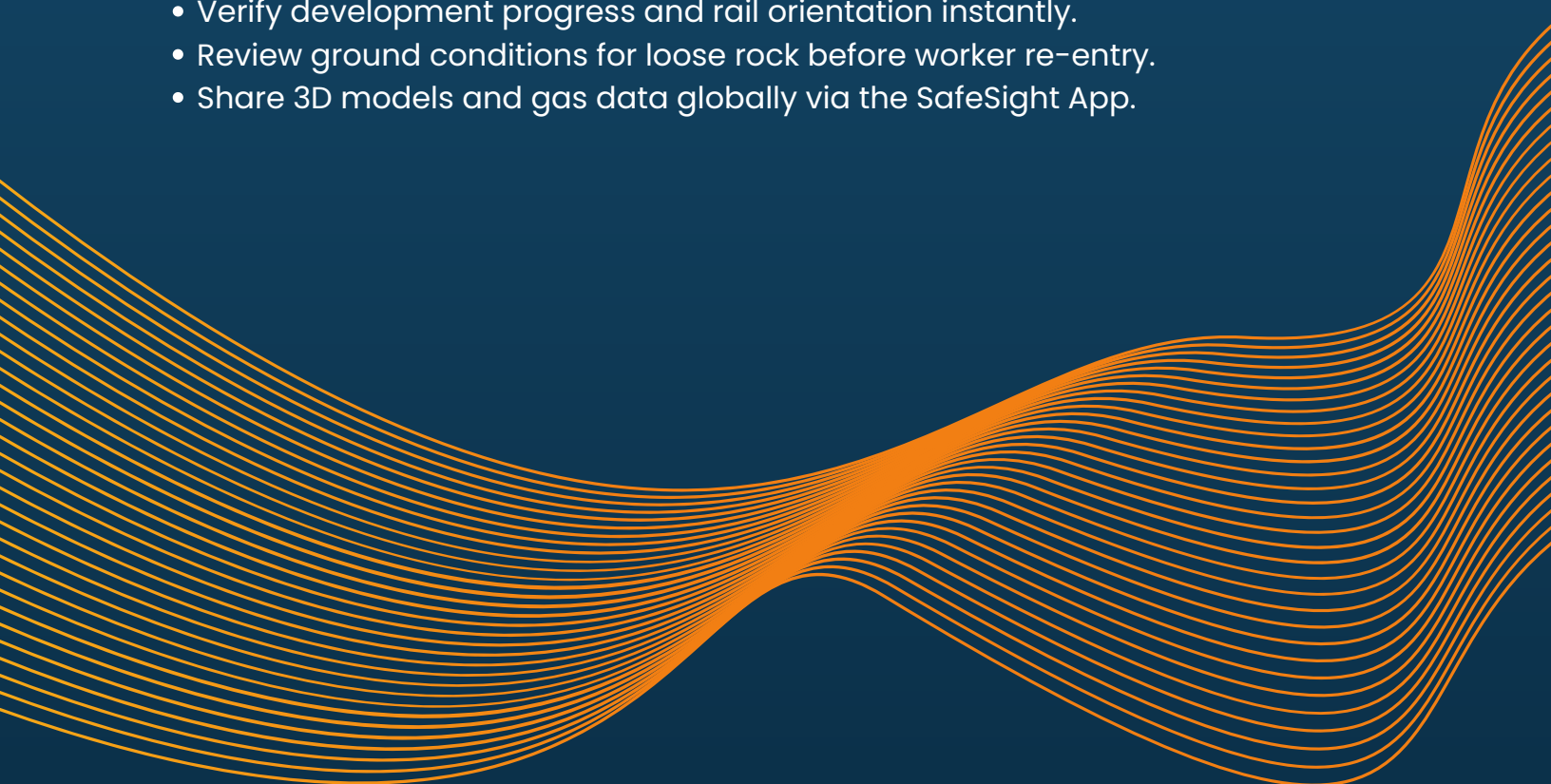
Autonomous Raise Navigation

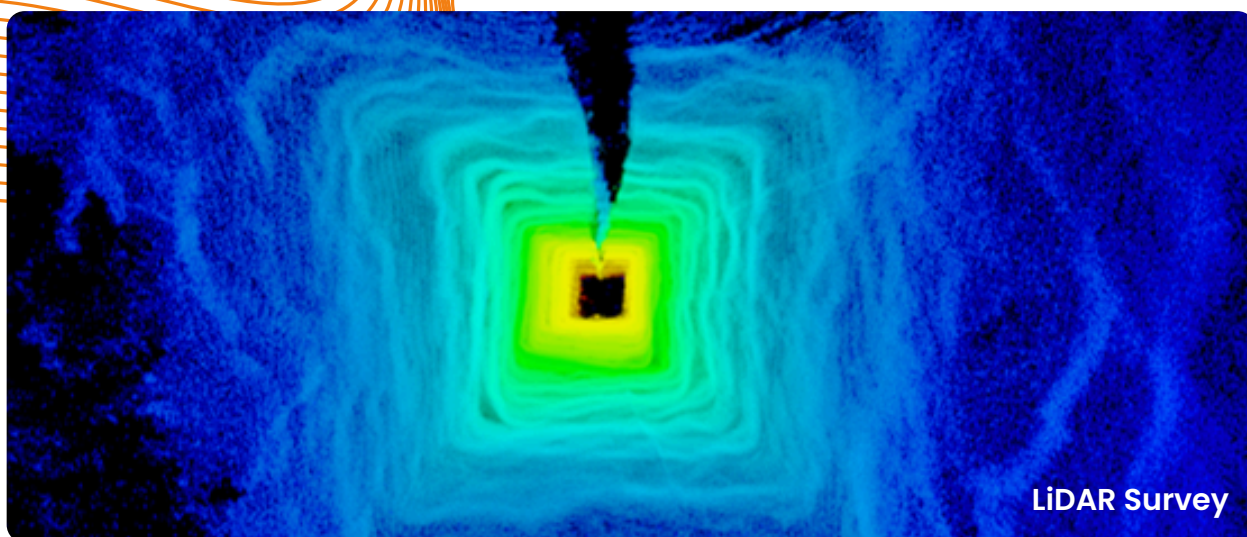
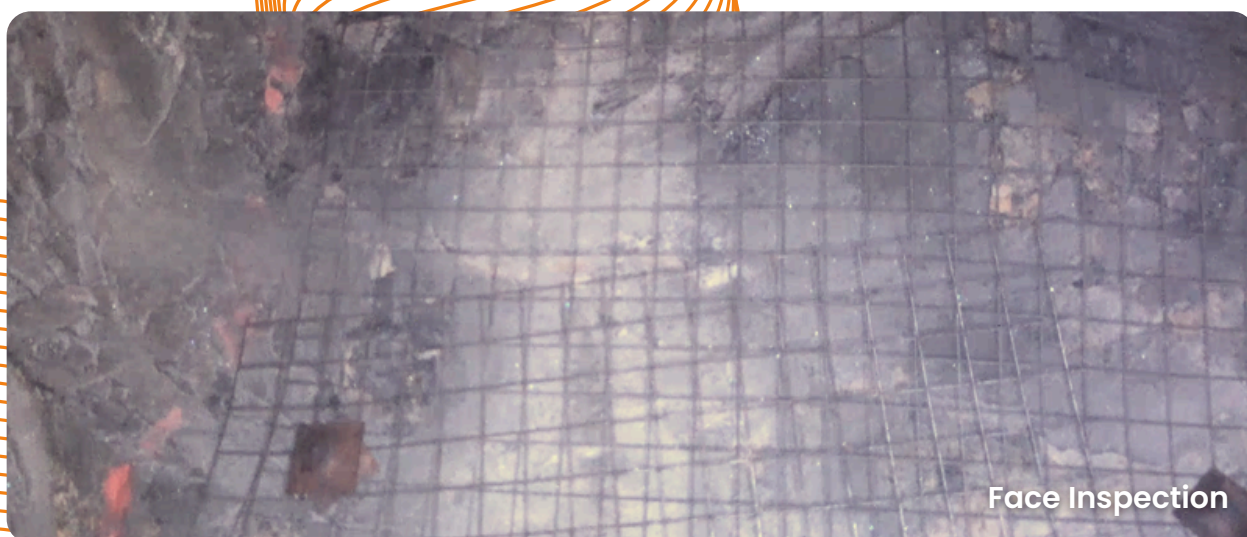
Utilizes the existing Alimak Rail to guide itself, ensuring stable and predictable data capture regardless of the raise length or angle.

Triple-Mode Inspection

1. **Rail Inspection:** Full-length HD video to verify the condition of brackets and bolts.
2. **Face Inspection:** High-intensity lights and HD cameras capture static imagery of the face for ground condition assessment.
3. **LiDAR Survey:** Survey-grade 3D mapping of the entire raise to identify overbreak and structural shape.

Empowers teams to:

- Verify development progress and rail orientation instantly.
 - Review ground conditions for loose rock before worker re-entry.
 - Share 3D models and gas data globally via the SafeSight App.
- 



The SafeSight App displays real-time progress and final results underground or at the surface.

Technical Specifications

Performance

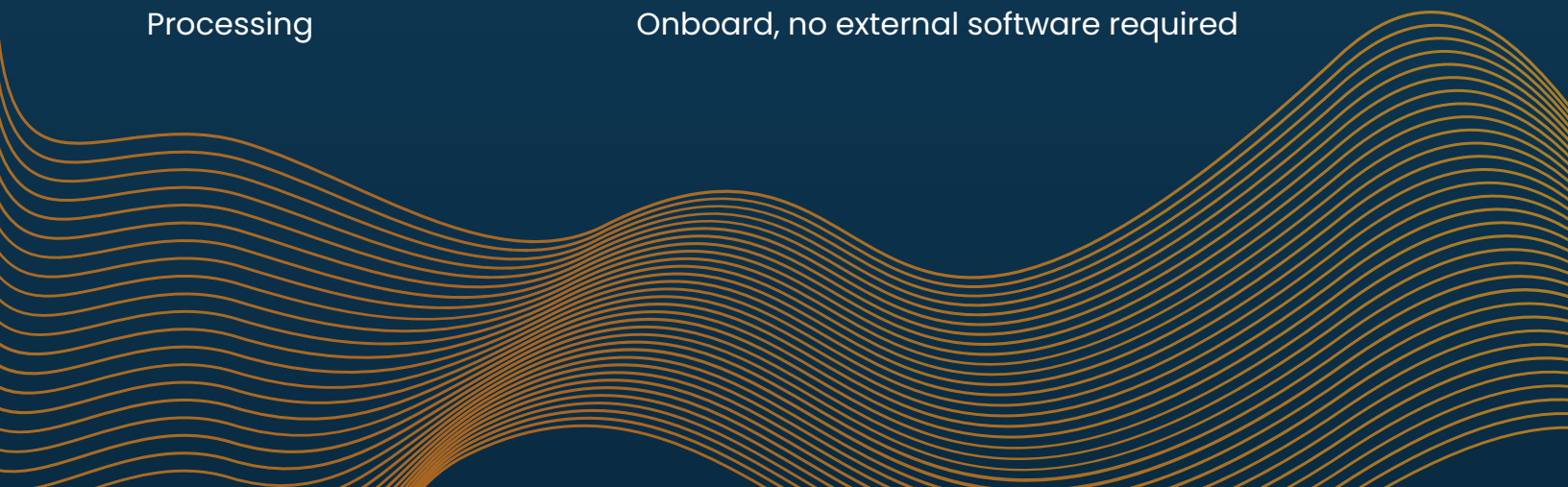
LiDAR Range	0.0m - 200m.
Accuracy	±5 mm
Data Range	up to 5.2M pts/sec
Field of View	45°
Laser Class	Class 1 (eye-safe)
Laser Wavelength	865nm

Hardware

Dimensions	44 x 44 x 35 cm
Weight	11.55kg
Battery Runtime	1 Hour - Swappable battery
Speed	2 kph
Operating Temp	0-50°C
Video Quality	1080p HD
Gas Sensing	O ₂ , CO ₂ , H ₂ S, NO ₂ , SO ₂

Data & Connectivity

Formats	PCD, PTS, LAS, MP4
Interface	SafeSight App, USB 3
Visualization	Live Render, reviewable Video, and point cloud post-inspection.
Processing	Onboard, no external software required



Appendices

Accessories	Tablet, charger, USB, 2 batteries, carrying case.
Battery	Li-ion 22.2V (6S 155.4Wh) - Swappable battery
Safety	Operate in as dry an environment as possible. Eye-safe Class 1 laser.

Integration & Compatibility

Data Ready for Any Platform

Seamlessly compatible with:

- **Mine Planning:** Deswik, Vulcan, Surpac, MinePlan 3D
- **Geology & Modelling:** Leapfrog Geo, Micromine
- **Engineering & Design:** AutoCAD, ArcGIS, SolidWorks

File Outputs

PCD | PTS | LAS | MP4

Downsampling is available in export settings

Deliverable Use Cases

- **Volume Reconciliation:** Compare as-built raise volume against design.
- **Structural Analysis:** Monitor anchor bolts and bracket integrity over time.
- **Asset Management:** Track rail orientation and wear.
- **Post-Blast Clearance:** Verify air quality and face stability before re-entry.

Customer Support

North Bay Office: 2181 Trout Lake Road, North Bay ON, Canada P1B 7S3

Phone: +1 (705) 707-2487

Email: info@safesighxp.com

Web: www.safesightxp.com

Services Include:

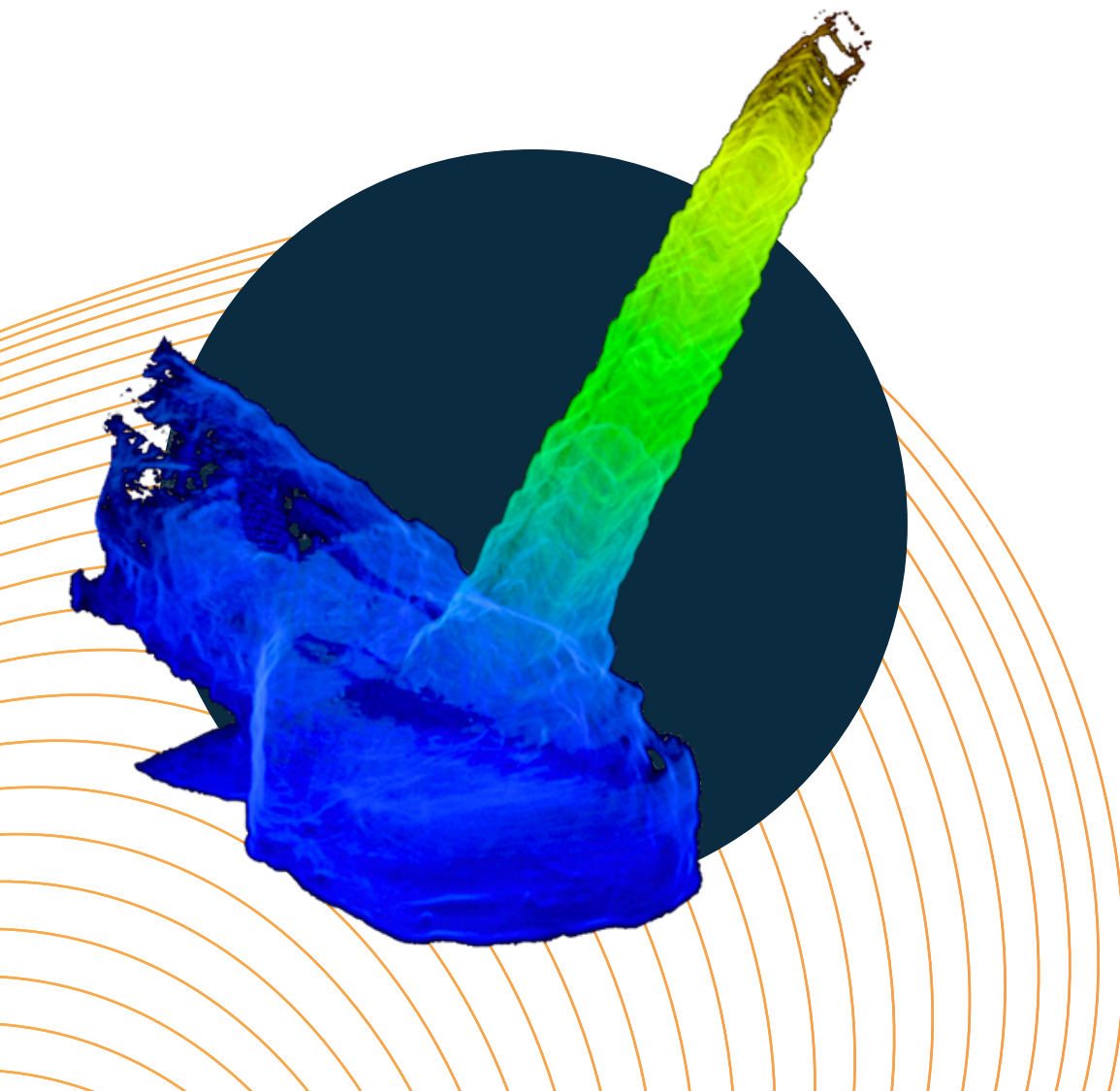
- Product setup and training
- Software updates
- Repairs and maintenance



MRC Rail Runner

Safety. Autonomy. Precision.

Comprehensive 3D raise intelligence,
delivered safely and in real time.



Take the Next Step Toward **Real Time Underground Intelligence**

SafeSight delivers a complete **3D LiDAR ecosystem** designed to improve **survey cycles**, strengthen planning accuracy, and give your teams measurable insight in minutes.

If you are ready to see how this technology can support your site, explore the resources below or connect with our team.

Speak with a SafeSight Specialist



info@safesightxp.com



705-707-2487

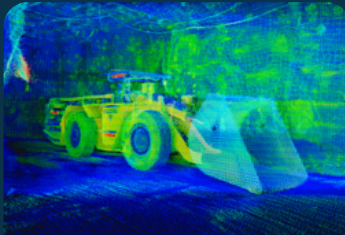


[Book a meeting](#)

Secondary Resources



[Learn more about our LiDAR Ecosystem](#)



[Get a sample of our LiDAR Data](#)



[Read our Ecosystem White Paper](#)

Learn more on our website:

www.safesightxp.com