



AVLS

Advanced Volumetric Loading System

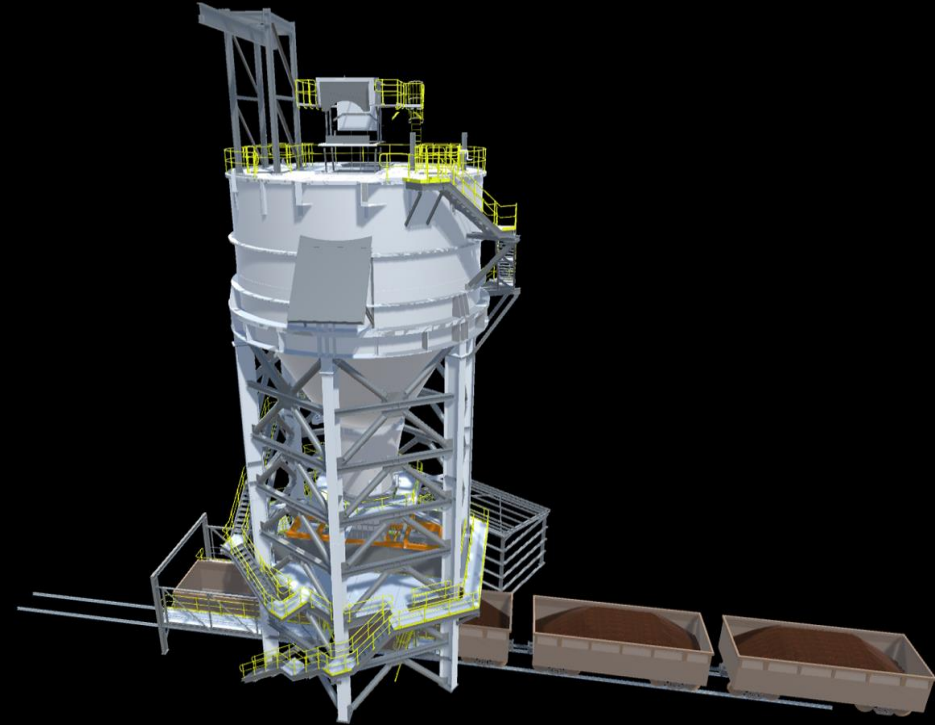
About Us

BEC has a long history of developing and supporting innovative solutions, tailored for the materials handling sector.

These include:

- Stockpile Profiling System.
- Partially Dumped Ore Car System.
- Mobile Machine Collision Avoidance System
- Reclaimer Stockpile Faceup System.
- Bin Profiling System.

And now...



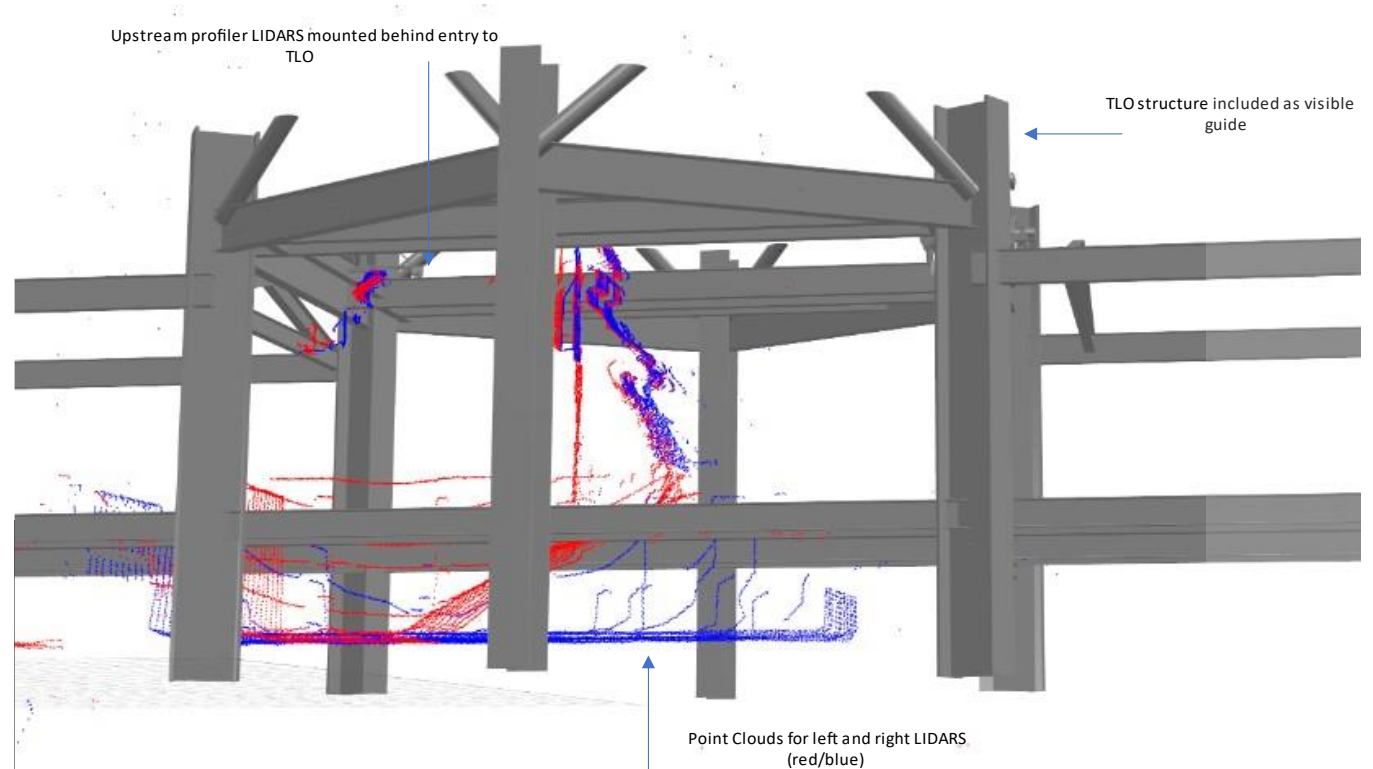
AVLS

The system provides real-time volumetric data and precise wagon position tracking for accurate loading of bulk materials.

Overview

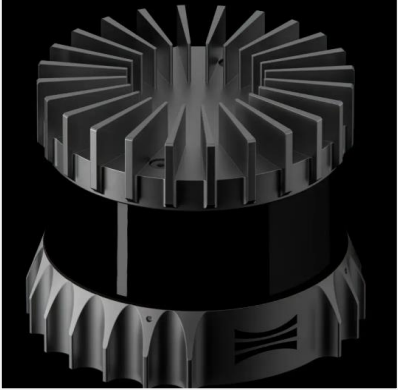
System uses advanced Lidar scanners mounted above each loading chute to provide:

- High accuracy position tracking of the wagon to ensure precise load control.
- Realtime volumetric profile of the wagon to accurately measure total loaded volume and distribution.
- Combined with the wagon RFID tag, all data can be logged to a central database for reporting and analysis.



Lidar sensors provide a complete point cloud of the entire wagon surface during loading.

Key Features



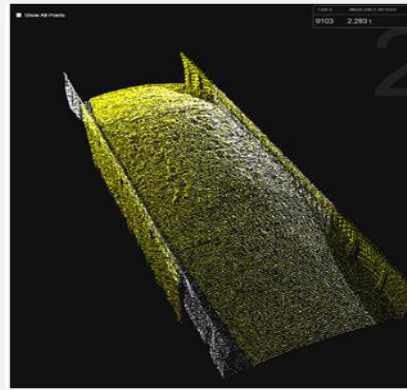
High Accuracy

Utilizes industry leading 128 Plane 3D lidar scanners producing high accuracy point cloud.



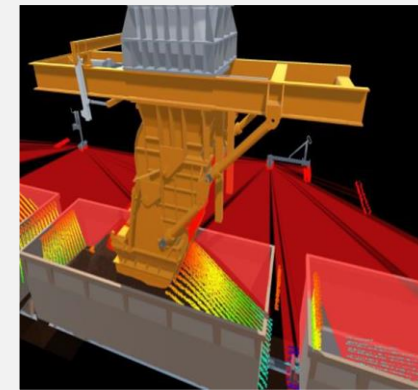
Reliable

Proven under the harshest conditions to operate 24/7 with no intervention.



Full Visualisation

A real-time web-based user interface provides continual feedback, configuration and diagnostics.



Integration

Integrates seamlessly with standard PLC and SCADA systems via industry standard protocols.



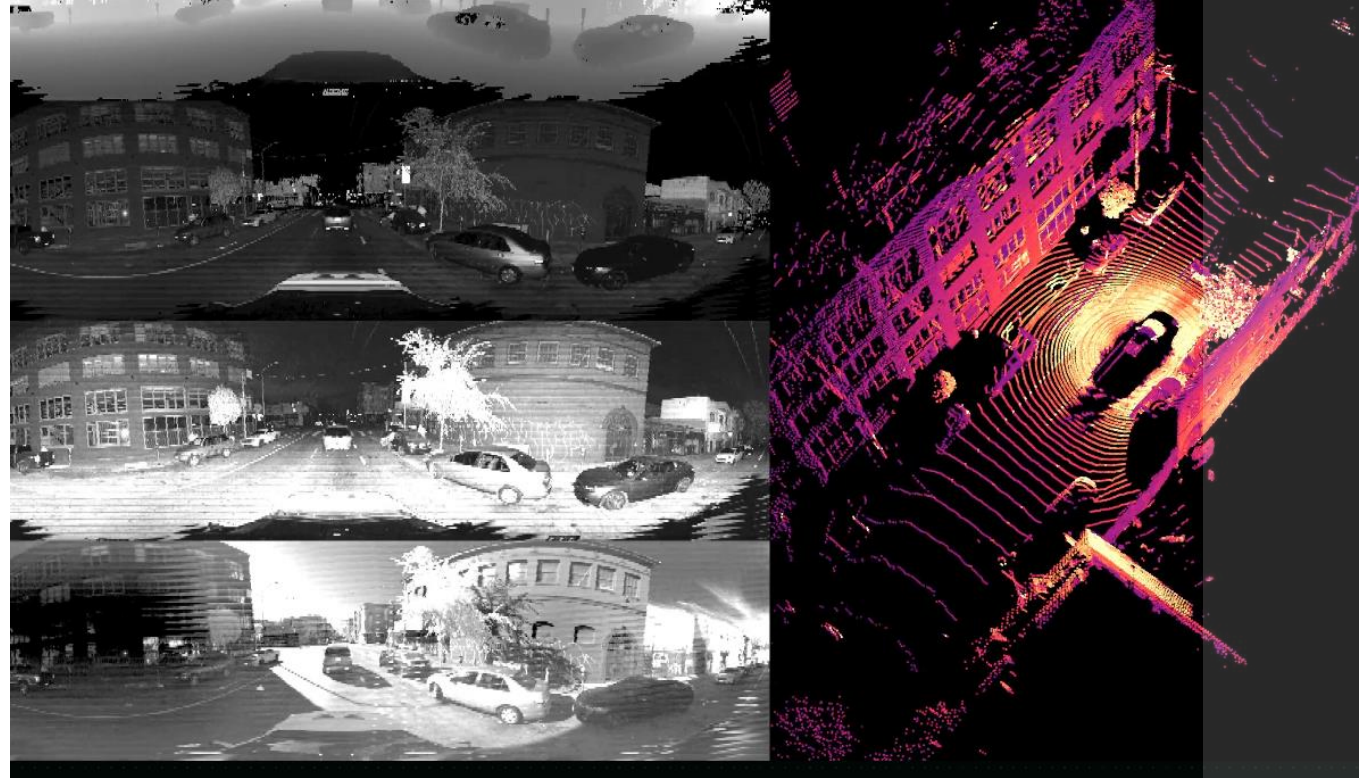
Support

Ongoing remote technical support available.

Technology

System incorporates the latest Ouster Lidar sensors:

- Ultra-Wide 128 Channel High Resolution scanning in 360 degrees providing complete coverage of the wagon.
- Operates in harsh environments (IP68).
- Small, compact unit weighing less than 500 grams.
- Ethernet based communications transmitting over 500,000 points per second.

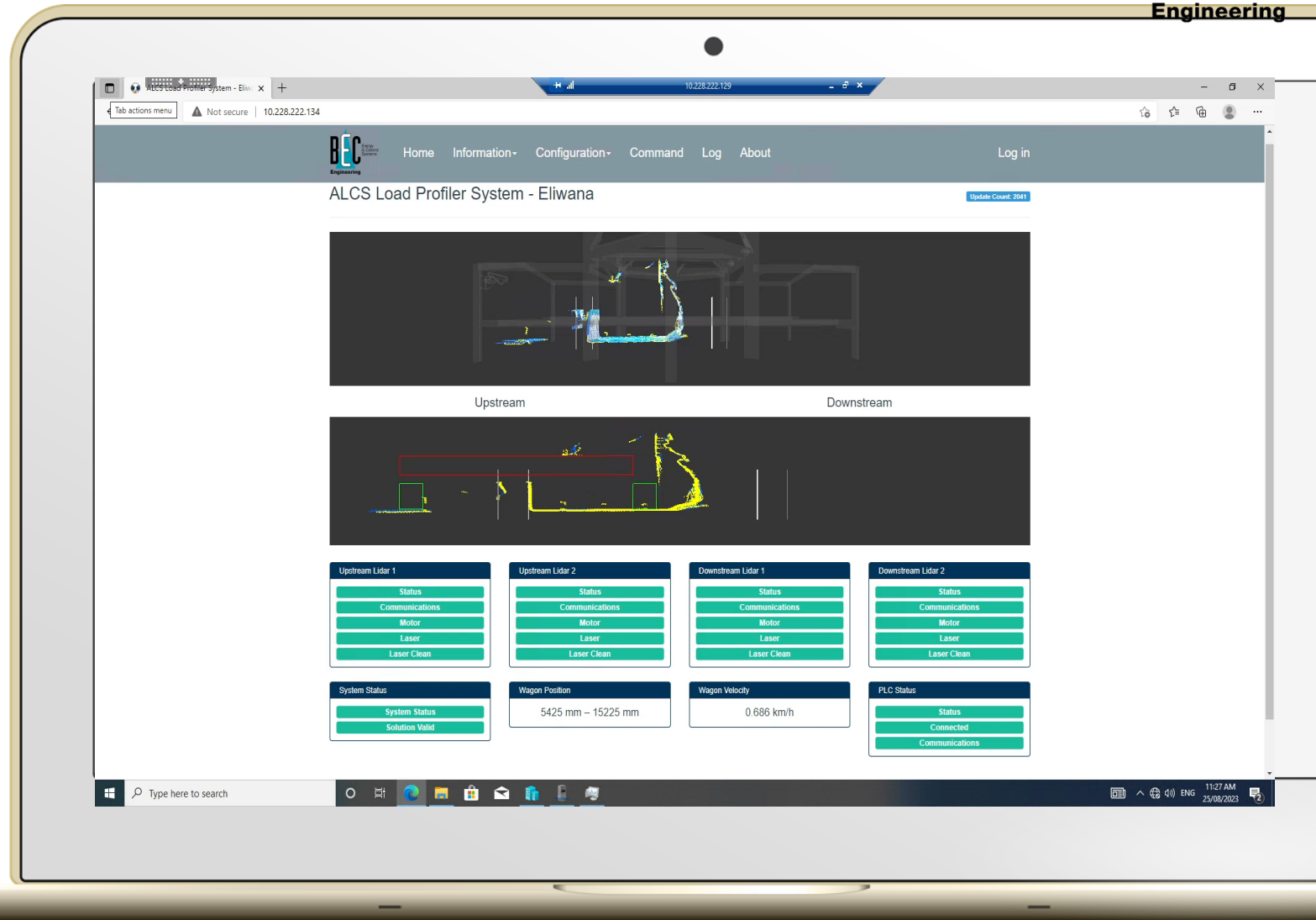


Ouster Lidars have been proven in mapping and scanning applications around the globe.

Web-Based Visualisation

Full visualisation of the wagon position and volume during loading.

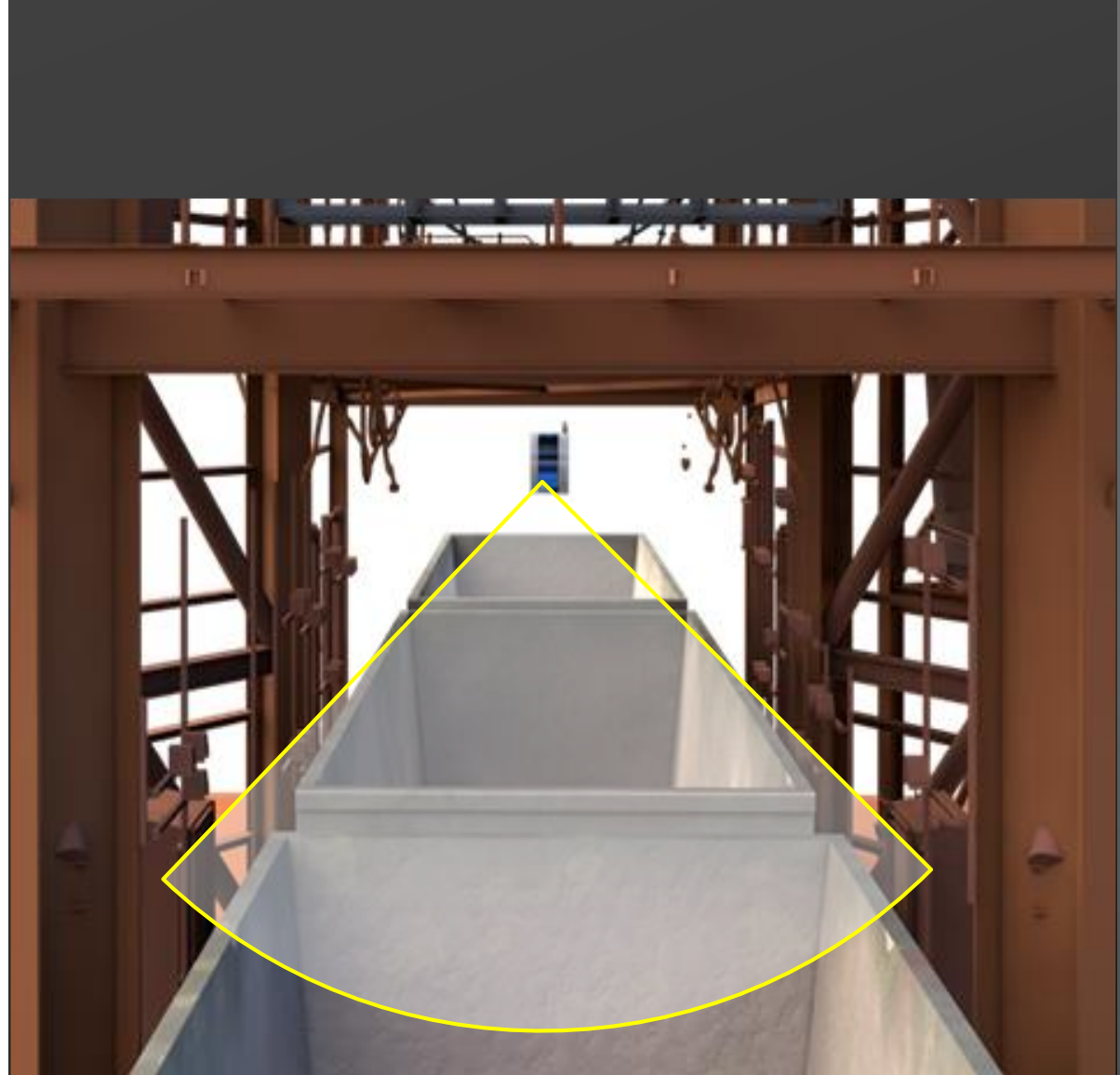
- Realtime laser point cloud updates
- 3D visualisation of laser scan data and wagon profile
- Status and alerts.
- Configuration and diagnostics.
- Browser based UI. No additional software to install.



Turn-Key Installation

BEC can provide a complete turnkey solution, including:

- Full system supply, including mechanical frame and supports.
- Electrical Design and Drafting to Company standards.
- Control Systems Programming.
- Mechanical and Electrical Installation.
- Commissioning and Acceptance.
- Remote Support.





BEC Engineering Pty Ltd

Thank You

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