

# LaseBVH

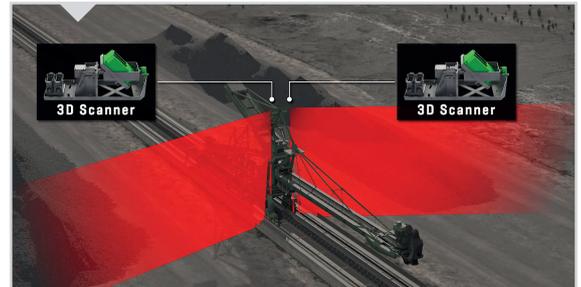
## BULK VOLUME HEAP

LaseBVH is a high-precision three-dimensional laser measuring system specially designed for bulk material stockpiles. The measurements are taken from stackers and/or reclaimers working either in the mining area or stockpiles.

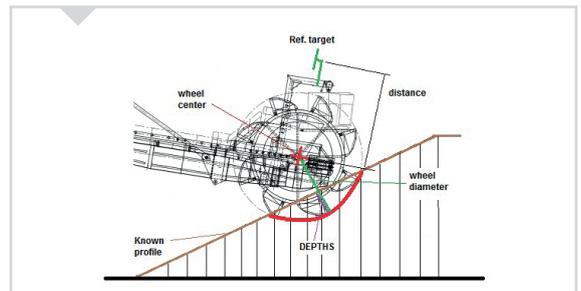
### THE MEASUREMENT SYSTEM

Depending on the stockpile size and the machine, one to two 3D laser scanners are installed on a stacker/reclaimer. The 3D laser scanner measures from the machine onto the stockpile and scans the stockpile profile. In conjunction with the machine position, a 3-dimensional stockpile profile is generated. During calibration, a so-called „zero profile“ is created. During later operation, the 3D image of the stockpile can be compared with this profile, and the volume and profile can be determined precisely.

The system can be easily and intuitively controlled and operated by a user-oriented interface. The LASE software evaluates the raw data from the 3D scanner using special filter algorithms and divides the measured volume into checkerboard-like fields. The measurement data is transferred to the LASE system, which can now calculate the actual volume profile of each field. Automatic inflow or outflow movements of the material can thus be precisely determined. All relevant status information on volume profile and slope topography is clearly displayed and logged for documentation purposes. The application is highly versatile and is used to determine the volume or profile of a wide variety of stockpile types.



Retrofit solution: up to two 3D laser scanners are installed on a stacker/reclaimer.



How the calculations works: automatic inflow or outflow movements can be precisely determined.

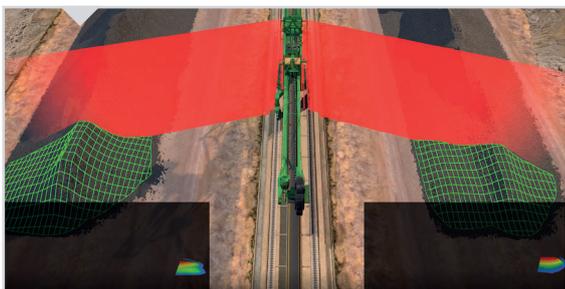
### THE FEATURES

- ✓ Highly accurate 3D stockpile volume and profile measurement
- ✓ Recognition of stockpile structure for inventory purposes
- ✓ Performance of a continuous and reliable inventory
- ✓ Control and management of all stockpile material

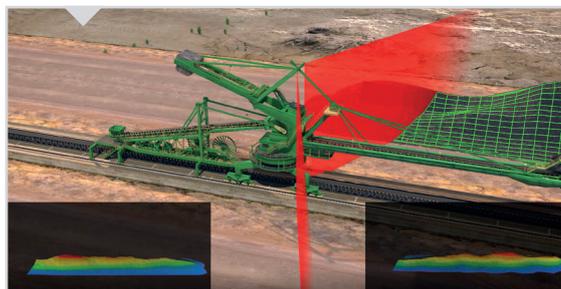
### THE BENEFITS

- ✓ Enables fully automated operation of stackers/reclaimers
- ✓ Optimized distance of the bucket wheel to the stockpile
- ✓ Real-time scan model of the respective stockpile area
- ✓ Accurate volume and profile measurement
- ✓ Facilitated material management

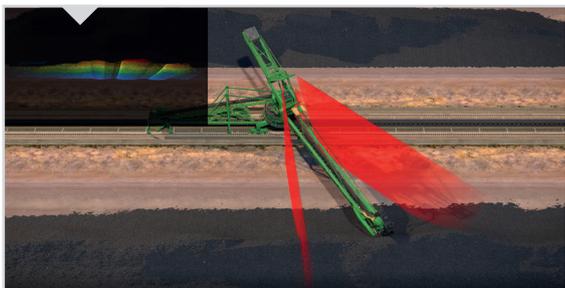
## THE FUNCTION PRINCIPLE



In motion, the height profile of the bulk material is measured by the scanners.



The application creates a 3D profile from the data.



Continuous scanning records the in- and outflow.

WATCH  
THE  
PRODUCT  
VIDEO



Scan the QR code with your mobile phone. Discover the product video and more innovative solutions from LASE!

## GLOBAL PLAYER FOR LASER MEASUREMENT SYSTEMS

For more than 30 years, LASE Industrielle Lasertechnik GmbH has been the global contact for high-precision and robust laser measurement technology for the industrial sectors port, bulk material handling, steel and logistics. With our 1D, 2D, 3D and multi-layer sensors as well as in-house developed applications, our systems stand for more safety and efficiency. Our goal is to drive the automation of industry with easily retrofittable solutions. With 30 offices worldwide through subsidiaries and partners, we are always at your side.