# minesense

Maximize your mine's potential

# ShovelSense®
## Game changing technology to improve the profitability and sustainability of your mine



Mine Plan Material
- High Grade
- Waste

Mine Plan



0   0.2   0.4   0.6   0.8   1
Cu Grade (%) by ShovelSense Bucket

Stringer Veins Identified
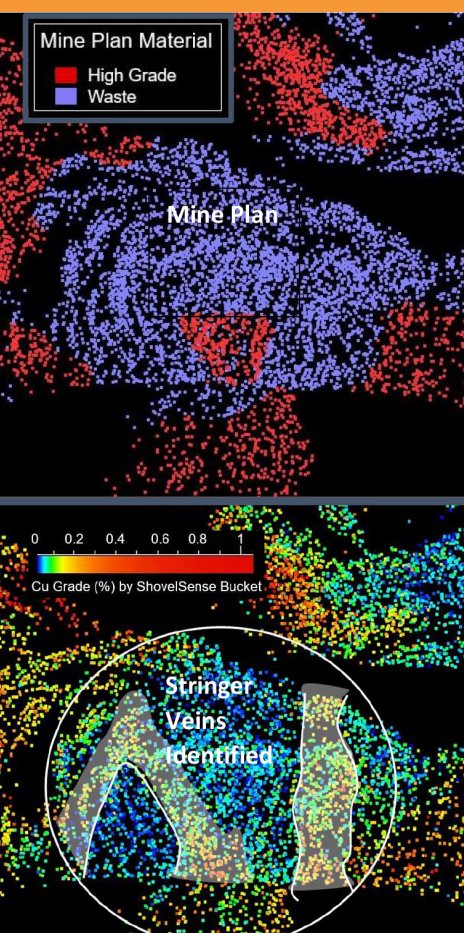
## The at the face advantage
The MineSense Solution consists of proprietary hardware, software, and AI algorithms that measure ore grade in real-time

- ShovelSense generates thousands of data points that have never been available before, achieving real-time operational impact and drastically improved continuous characterization of the mine's ore body.

- ShovelSense collects ore characterization data in every bucket to unlock the profitability of your mine operations and extends mine life.

- Real-time ore characterization provides superior actionable data to enable automated smart truck diversions greatly reducing both ore losses and dilution.

- ShovelSense is installed on all mobile equipment typically used either on the surface or underground - cable shovels, front end loaders, hydraulics shovels, and scoops/LHDs.

- The MineSense Solution is the only one that works with run-of-mine (ROM) material at the face and at any mine throughput. This maximizes the value of ore and waste classification where the heterogeneity is greatest, at the extraction face.

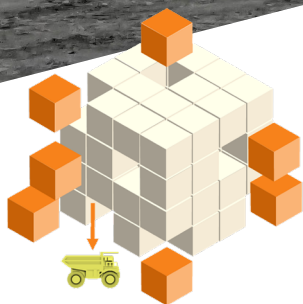Real-time data collection **at the face** → Data aggregation and material classification → Data visualization and modeling
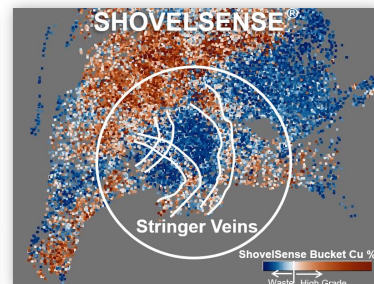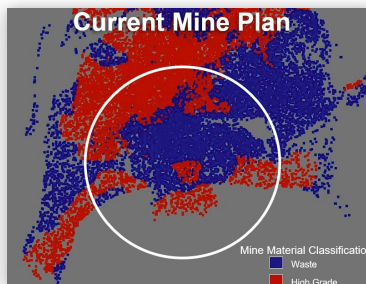
# Advantage at the mine face



Maximum heterogeneity at the mine face to extract ore from waste and waste from ore

ShovelSense®
real-time ore characterization in each bucket enables ore sorting at extraction face

Enhanced resolution and increased ore body knowledge provide unmatched actionable insights to maximize profitablity



Automated smart truck diversions are enabled to instantly route trucks to mill, stockpile or waste dump

BeltSense®
compliments ShovelSense® to provide enhanced ore control at the mill

Stockpiles managed and optimized with informed campaign and blending

Sustainable mining using less energy and water

MineSense is a pioneer in digital mining solutions, supplying real-time, sensor- based ore sorting for mines. Our signature solution is ShovelSense, a robust sensor installed on mining equipment to scan and measure the grade of the material in every shovel and bucket. The increased real-time visibility of your orebody provided by ShovelSense drives improvements in your mine's efficiency, profitability and sustainability.

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