MEDUSA SENSING · MINING

Every flying rock, measured at launch and located on landing.

Radars that track every rock through the dust.



WORKS IN DUST AND AT NIGHT · MEASURES THE LAUNCH, COMPUTES THE LANDING · TWO-PHASE PILOT

THE PROBLEM

Flyrock from a blast can travel more than 600 m, and is blamed for 24% to 30% of open-pit blasting accidents. With the same input data, the formulas that set the evacuation zone give anywhere from 65 to 1,400 m.

Nobody measures where the rocks land: it is only known when one hits something. Dust blinds the cameras at exactly the moment that matters.

MATURITY

Not yet measured in the field. The first step, on a test bench and without blasting, measures how far away the radar can see a rock.

REFERENCE FIGURES

Speed	Rocks up to about 180 m/s; MEDUSA tracks targets up to 359 m/s
Range	35 to 55 m for a 10 cm rock: enough to measure the launch
Deployment	3 to 5 portable, armoured nodes per blast
Conditions	Works in dust and at night, where cameras degrade
Pilot	2 to 3 week test bench; then 10 to 20 blasts

THE ASK

A bounded two-phase pilot, with a decision gate between the phases: access to a sector with scheduled blasts, coordination with the drill and blast team, and funding defined jointly. No purchase commitment or exclusivity.

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