Minocular

MINING OPERATIONS SOFTWARE · BY BLUEBANYAN TECHNOLOGIES



ENHANCING
MINING
OPERATIONS

minocular.com



About us

SOFTWARE BUILT **NEXT TO THE MINES** IT SERVES

Minocular digitizes open-pit and underground mines. Fleet dispatch, fuel monitoring, drone survey, maintenance, safety and compliance run on one platform built by BlueBanyan Technologies in Raipur, India.

Founders Mohit Sahu, a mining graduate of NIT Raipur, and Puru Agrawal started Minocular in July 2016. The first deployments went live in 2017–18 at mines operated by large cement and steel producers in India.

It fits any make of machine, keeps working where there is no mobile network, and runs on AWS or Azure.

20+
mine sites

1,100+
connected machines

2016
founded in Raipur

Any make of machine

Retrofit trackers, terminals and sensors on dumpers, shovels, dozers, drills and bowsers from any OEM.

No network needed

Devices store data where there is no GSM signal and sync at the gateway within 10–15 minutes.

THE WHOLE MINE, **PIT TO PLANT**

One equipment list and one shift calendar connect every stage. Each stage feeds the next, so shift reports, contractor bills and statutory records come from the same data.

Survey & plan

Drone orthomosaic, DTM and contours; the approved plan overlaid on each flight.

Drill & blast

Depth, burden, spacing and charge per hole; blast areas on the drone map.

Load & haul

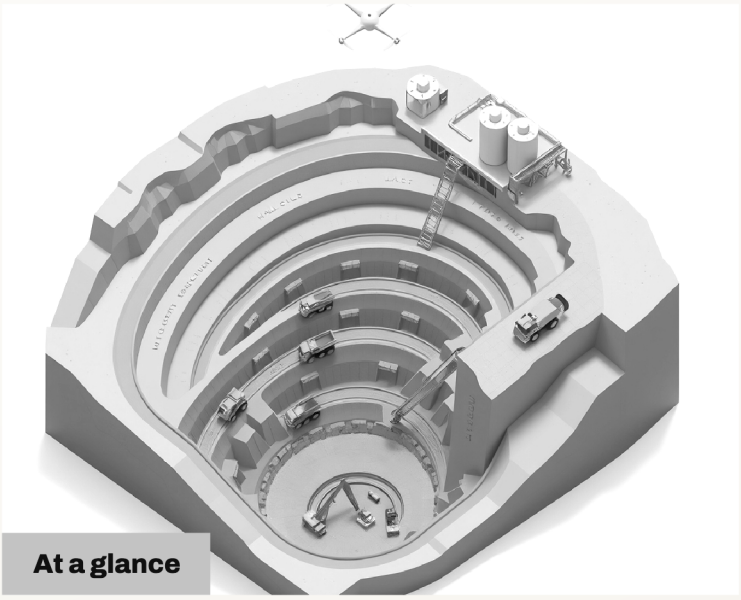
Live dispatch, trip counts, payload, cycle time, idle time and fuel.

Crush & blend

Grade by face and a crusher blend that keeps LSF, SM and AM on target.

Report

Shift and daily reports in DGMS formats, emailed on schedule.



At a glance



Control room



OUR PRODUCTS **ONE SUITE** FOR THE MINE

01	**Fleet Management**	Every HEMM on a live map: trips, payload, cycle time, idle time and utilisation.
02	**OITDS Dispatch**	Operator-independent truck dispatch: an algorithm pairs dumpers with shovels from live GPS and payload.
03	**Fuel Monitoring**	Fuel level, refuels, drops and litres per hour for each machine and bowser.
04	**Drone Survey**	Orthomosaic, contours, DTM and stockpile volumes for the whole lease, following MCDR 2017.
05	**Mine Planning**	Import the approved plan, Surpac or KML files and track excavation against plan.
06	**Drill and Blast**	Hole-by-hole logs, blast areas on the map and explosive stock.
07	**Haul Road AI**	Finds slow segments, shovel queues, under-loaded trips and high fuel burn on bad road.
08	**Grade Control**	LSF, SM and AM by mining face, and a crusher blend that stays on target.

09	**Dashcam Telematics**	Road and in-cab cameras with fatigue, distraction, seatbelt and collision alerts.
10	**AI Safety Surveillance**	Video analytics on your CCTV flags zone intrusions, missing PPE and unsafe acts.
11	**Workshop & Maintenance**	Health feeds, service alerts, breakdown prediction and a workshop kiosk with job cards.
12	**In-Cab Terminals**	Rugged 7-inch terminals: assignments, voice prompts, pre-start checklists, cameras.
13	**Operations Dashboard**	Production, quality, fuel, breakdowns and shift KPIs on one screen, with a view for each role.
14	**Reporting & Analytics**	Shift and daily reports built automatically, in DGMS formats.
15	**Contractor Management**	Contracts, approvals and payments, with each bill checked against automatic trip records.
16	**Alerts**	Idle dumpers, fuel drops, geofence breaches, services due and harsh driving, sent to supervisors.
17	**Statutory Compliance**	DGMS filings, registers, licences, training and inspections, with due-date alerts.
18	**Underground**	Wi-Fi RTLS for underground mines: vehicle and personnel tracking, trip reports, fuel and gas monitoring.



Workshop



Fuel

PROVEN ON SITE, **ON THE CLIENT'S OWN DATA**

Four live deployments in India. Client names withheld.

CASE 01 · CEMENT LIMESTONE MINE

TPH held on a longer haul

176 → 177 t/h

dumper TPH while lead grew 2.20 → 2.52 km

Loaded haul speed rose 16.1 → 17.1 km/h; dumper LPH fell 39 → 37 L/h.

CASE 02 · WEIGHBRIDGE × SHOVEL

Fewer under-loaded trips

20% → 7.5%

under-loaded trips

+8 t average payload per trip, from live under-weight alerts and a daily shovel report.

CASE 03 · BIOMETRIC × GPS

Faster shift start

63% → 83%

operators punched in on time

Time from shift start to first loaded dumper fell from 32 to 17 minutes.

CASE 04 · TIPPER FLEET

Less diesel per tonne

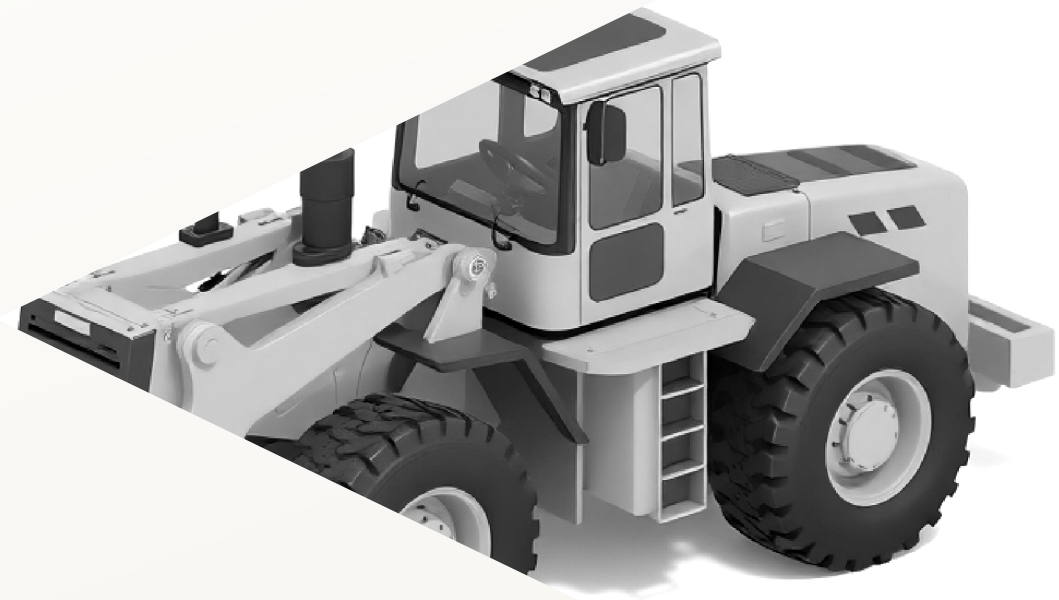
−20 to −36%

diesel cost per tonne, Jun–Aug YoY

Tonne-km per hour rose 164 → 181 after cutting idle time at excavators and dumps.

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BOOK A **30-MINUTE DEMO** FOR YOUR MINE



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