KOMATSU

Smart Quarry Site

The fleet management solution for your quarry or large construction project

Take control with Smart Quarry Site

In the quarry and large construction business, you're constantly challenged to be more productive and more profitable. Meeting these challenges means incrementally improving every aspect of your operation.
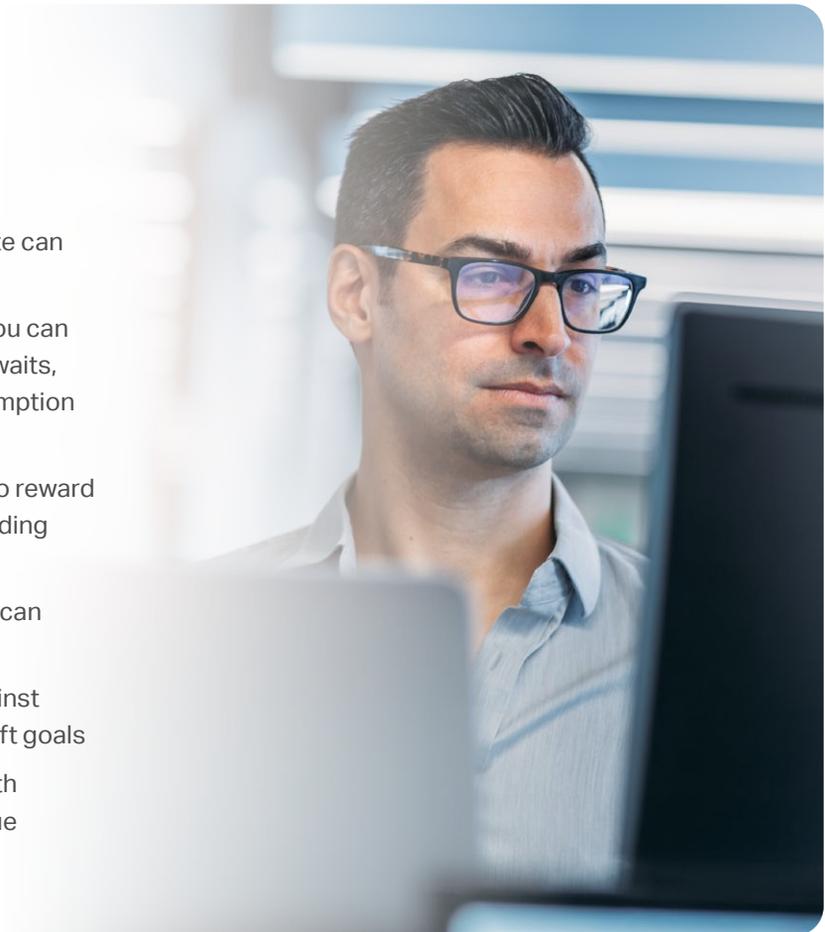
Precisely tracking, digitizing and analyzing every detail of your mobile fleet can unlock the efficiencies you need to meet your targets.

That's why we developed Smart Quarry Site. It is a software and hardware solution that tracks your machines, then transmits and presents machine data for you to take action to improve. Imagine what you could do with a real-time animated overview of every production machine movement — and the materials they are loading, hauling and dumping.

When you know exactly what's happening, you can improve

Here are some of the ways Smart Quarry Site can help your operation:

- View routes and idle times/locations so you can work towards removing bottlenecks and waits, increasing payloads, reducing fuel consumption and decreasing emissions

- Compare operator or shift performance to reward your best operators and coach those needing improvement

- Know how full your haul trucks are so you can optimize payloads to increase efficiency

- See — in real time — your production against target, and make adjustments to meet shift goals

- Ensure your machines stay productive with comprehensive inspection reporting, issue tracking and maintenance management

Your keys to performance: Dashboards

Your Smart Quarry Site dashboards provide real-time and historical information about the production state, health and maintenance of your fleet, so you can review and enact new plans. All data is updated in five-minute increments, and each dashboard can generate custom reports.

We worked with industry experts and end users to design each dashboard to display the information you need in insightful and intuitive ways.

Control dashboard

The control dashboard provides a near real-time overview of your site, showing you the location and status of vehicles and operators. You can replay, analyze and report historical fleet movements to help optimize your operation.

Production management/efficiency dashboards

You have an array of dashboards offering production insights you can use to help boost your efficiency and profitability. Each can be customized by date, operator, shift and other key parameters.

Utilization presents an overview of the machine idle time by location and machine. More detailed data is provided on the Idling Insights and Summary tabs.

With the **Fuel Consumption** dashboard, you can view consumption per ton and per hour, plus consumption per operator. Insights realized here can help you drive efficiencies and save fuel costs.

When it's time to dig deep for production insights, head to the **Production** dashboard. Production can be tracked and analyzed by truck, shift, travel circuit or operator. The **Production Opportunity** tab displays the theoretical fully optimized production compared to actual production in terms of tons and load cycles.

Machines are only as productive as their operators. Analyze them with the **Operator Scorecard**, which looks at utilization, speeding events, PreStart completion, production and fuel consumption. See each workers' individual performance or benchmark against your other operators. Easily see operator efficiency compared to last shift, operator rank and group performance.

Machine health and maintenance

Each operator starts their day with Smart Quarry Site's PreStart. It's an electronic version of the machine checklist, conducted via the in-cab screen. Each report — customized for each machine — is automatically relayed to the maintenance dashboard.

If there is a serious issue, it's immediately sent via email or text message to the team you choose for mitigation.

The maintenance dashboards are smartly designed and show PreStart completion status, event listing and fleet health at a glance. You can create reports over any time frame, and dashboards include quick links to the Komatsu online parts store for quick ordering. These are optional features you can activate to meet your organization's needs.

The Smart Quarry Site system

Smart Quarry Site is most useful when incorporating the entire pit fleet:

- Trucks
- Loaders
- Excavators
- Graders
- Dozers

It's also brand agnostic, so it's every bit as effective with mixed fleets.

Machine equipment

Smart interface cable: Plug-and-play, supporting all Komtrax, Komtrax Plus, PLM and most other OEM Interfaces. Converts proprietary machine data into an open standard suitable for analytics.

BM2

Operator panel: The in-cab display offers operators real-time operational feedback. It's purpose-built, rugged and easy to install.

In-cab Screen

GNSS Antenna

Antenna: Compatibile with legacy GPRS networks, 2.4/5 GHz dual-band Wi-Fi and 4G and 5G networks.

Site networking

The wireless devices installed in machines automatically recognize and talk to each other over Wi-Fi, for example, communicating to a loader operator the current truck payload.

The devices also seamlessly route network data traffic between machines so that data reaches the intended destination in the most efficient way possible. If there is no cellular data in the

pit, trucks take the loader data out of the pit and upload it when cellular signal is reestablished.

Software updates and software maintenance can be wirelessly pushed to machines, eliminating costly in-person visits.

All of the Smart Quarry Site hardware is backed by Komatsu warranty support you can trust.

Get started with a trusted partner

When you commit to Smart Quarry Site, we commit to providing you with the tools and guidance to find success. From site readiness investigation to machine installation and operator training, we're with you every step of the way.

Your subscription includes:

- Site readiness investigation and report
- Initial site master data site set up
- Cloud hosting and server maintenance
- Software and firmware remote updates
- Installation of hardware to each machine
- On-site commissioning for each machine
- One-day operator training for each vehicle
- Komatsu email and phone support

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