

ServiceMax for Digital Mining

Uptime, productivity, and safety with digital industrial transformation

The mining industry is undergoing a profound transformation, shaped by technological, social, environmental, and market trends. Volatility in commodity types, aging equipment, workforce fluctuations, as well as competitive pressures are building the imperative for digital industrial transformation. To stay ahead of the game, field service leaders are being asked to help their companies achieve maximum equipment availability and productivity, improve engineer efficiency—all while maintaining site safety and compliance standards. Never has the need—and opportunity—been greater to empower the field service teams in the mining industry with modern, digital tools to transition from reactive state to a proactive and optimized business models to develop and operate mines.

ServiceMax from GE Digital provides a comprehensive, mobile, cloud-based solution to enable field service teams to attain Operational Excellence and reduce unplanned downtime when servicing mining assets. Mining engineers, operators, dispatchers, and managers can achieve performance and productivity goals, while keeping their workers safe by:

- Minimizing equipment downtime with predictive maintenance
- Increasing productivity with mobile access to accurate equipment location, history, entitlement, and contract information
- Stay compliant by providing the right information to each engineer and by maintaining digital records

Operational Excellence in service delivery

13% 12% 15%

INCREASE IN MACHINE UPTIME

REPAIR TIME

REDUCTION IN **SAFETY INCIDENTS**

ServiceMax average customer results from 2016 Customer Survey



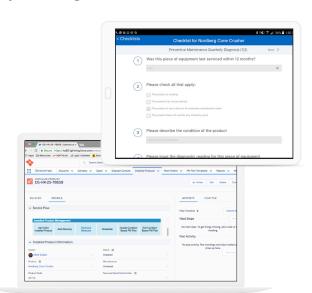
Benefits

Deploy predictive maintenance to maximize uptime

Achieve of predictive maintenance with Asset Performance Management (APM) and field service management. Now, machine signals can be automatically analyzed for potential failures and service requests created in real-time, enabling true predictive service. Predictive maintenance helps forward-thinking leaders maximize equipment uptime and complete maintenance at the right time for the market.

Schedule the right engineer for the right job at the right location

Instantly view and dispatch your engineers based on their skillset, qualifications, certifications, availability, history, or your pre-set conditions, so you can effortlessly schedule the right crew for the job at the right location.



Enable your crew with modern productivity tools

With the mining industry facing strong generational challenges, it is essential to keep knowledge and share it with new workers. ServiceMax helps companies create a knowledge base of all field service-related information and share it easily among mining engineers. With built-in collaboration tools that enable team chats anytime and anywhere, your engineers will be onboarded faster and improve their first-time fix rates.

• Improve safety and compliance

Safety of people, equipment, and the environment is a top priority for mining industry leaders. Whether your standard is TSCA, REACH, or MITI, ServiceMax keeps your engineers safe by helping them follow regulations—ensuring that the right process steps are enforced, the correct data is captured, and audit trail is maintained for all service activities.

Keep track of every asset on site

Whether you are a site manager, a dispatcher, or an engineer, installed base visibility helps you know which assets are in the field; their location, configuration, and service history; and when to replace them. ServiceMax makes it easy for workers to update asset information while on the job with an intuitive app—which also works in offline environments often encountered in the mining industry.



Feature highlights

Powerful work planning and scheduling

Generate work orders based on alerts from APM or connected devices

The solution seamlessly connects IIoT machine data with a service delivery platform to receive service requests and schedule work orders. The device information is delivered to your engineers to deploy more agile service with connected diagnostics, contextual repair, and more. After maintenance has been performed, the information travels back to your APM to improve predictive algorithms.

• Schedule the right engineer for every job at the right location

The highly visual Dispatch Console enables dispatchers to see every resource prioritized by skillset, availability, and location. With simple drag and drop functionality you can trigger scheduling for everything from simple visits to long jobs staffed by teams of engineers.

• Automatic schedule optimization

Smart scheduling to achieve priority outcomes, such as drive time, SLA attainment, and multi-skilled engineers matching. Now your dispatchers can focus on higher-value jobs, such as unresourced work orders, constraint violations, and jeopardy cases.

Modern, mobile solutions

• Tools to drive employee productivity and satisfaction

Today's workforce expects modern, easy to use tools that instantly connect them with the right

information, teams, and training. ServiceMax can be deployed on a myriad of mobile choices—including smartphones, tablets, laptops—whether consumer-grade, ruggedized, or specialized non-sparking equipment to service your remote location.

• The right information when you need it

With Installed Base Management, your engineers gain instant access to accurate asset information and connected devices data through an intuitive mobile app.

• Work seamlessly with or without connectivity

ServiceMax Field Service app works whether Internet connection is available or not, so you have instant data at your fingertips everywhere you deliver service. Your engineers can also update records and add attachments offline with automatic sync.

• Stay on top of safety and service requirements

With powerful checklists functionality built into Service Flow business processeses, you can be sure that your engineers will see the right safety documents at the right time and record compliance information, as required.

Efficient logistics and work order debrief

Fast on-site debrief

Engineers can complete work order debriefs, account for time and material costs, conduct survey and data collection, and capture digital signatures while on site, eliminating the need for additional back office processing.

Manage parts inventories

Track parts in all stocking locations and ensure optimal restocking levels through trigger-based auto-replenishment.

Proven analytics and integrations

• Benchmark your performance

You can't improve service delivery if you don't know where you stand. ServiceMax provides key performance metrics for your organization—utilization, first-time fix rate, mean time to repair, and more—so you can minimize unplanned downtime and achieve your reliability objectives.

• APM for predictive field service

Achieve record uptime rates with predictive field service driven by GE Digital's APM. Traditional asset monitoring leaves important questions unanswered—how critical is the asset to meeting business outcomes; what is the chance of failure; and how is the risk of failure eliminated? Leveraging APM and ServiceMax from GE Digital, you can not only answer these questions, but also empower your workforce for the right service at the right time.

• ERP and GIS integrations

Connect and enable updates from your ERP, and GIS to ServiceMax. You will improve worker readiness and efficiency with instant information about assets, contacts, and locations.



About ServiceMax

ServiceMax, from GE Digital, leads the global industry of field service management software – an estimated \$25 billion market worldwide. The company creates solutions for the 20 million people globally who install, maintain, and repair machines across dozens of industries as the leading provider of complete end-to-end mobile and cloud-based technology for the sector.

About GE Digital

GE Digital is the leading software company for the Industrial Internet, reimagining industry's infrastructure by connecting software, apps and analytics to industrial businesses to drive a Predix-powered world.

GE Digital creates software to design, build, operate and manage the entire asset lifecycle – enabling industrial businesses to operate faster, smarter and more efficiently. For more information, visit www.ge.com/digital.