



**WHEREVER
THERE'S
MINING,
WE'RE
THERE.**

AFTER-SALES SUPPORT





CAT®

DAVID

Hard Yakka



WE DO MORE THAN
S U P P O R T
PRODUCTS.

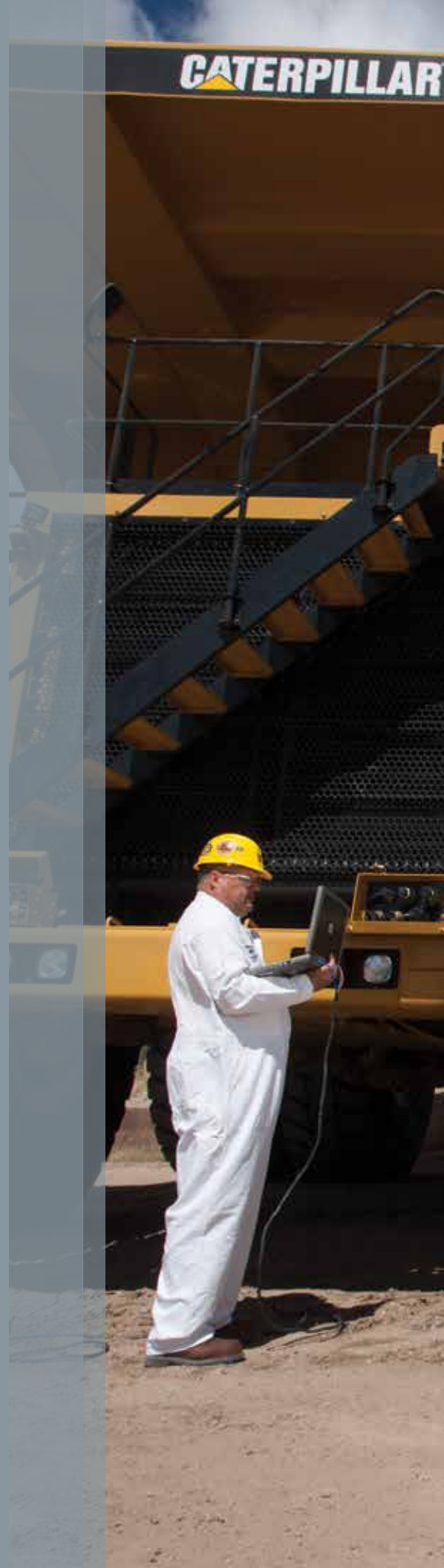
W E S U P P O R T
PRODUCTIVITY.

Caterpillar customers expect us to provide high-quality, long-lasting machines that run efficiently and offer high availability. But it's the support provided after the machines go to work that truly demonstrates the full value of Cat® equipment. We're committed to doing all we can to help you get the most from your investment.

WE SUPPORT YOU ON THE GROUND

Supporting products is a primary role of the world-class Cat dealer network, backed by the tools, processes and expertise of Caterpillar.

The one-of-a-kind, on-the-ground support network delivers expert service, integrated solutions, after-sales support, fast and efficient parts fulfillment, world-class remanufacturing capabilities and more. Dealers partner with customers to help them improve operations, maximize machine productivity and minimize costs.





ON-THE-GROUND SUPPORT

PROVIDING GLOBAL SUPPORT ON A LOCAL LEVEL

The Cat product line is unmatched in the industry. But one of our biggest differentiators isn't our products themselves; it's the way they're distributed and supported. When it comes to service and support, the global Cat dealer network is unparalleled.

From parts availability to expert service diagnosis, planned maintenance to web-enabled condition monitoring, dealers work alongside customers to improve machine uptime and lower cost per ton.

Because of the diverse industries Caterpillar serves, Cat dealers are on the ground in nearly every location in the world. Whether you're in a highly populated mining region or developing a greenfield site in a remote location, there's a Cat dealer nearby.

Cat dealers operate as nearly 200 local businesses—each one fully embedded in and committed to the geographic area it serves. That means you work with people you know, who know your business, respond on your timeframe and care about making your community a better, safer place to live and work.



ON-THE-GROUND SUPPORT

SUPPORTING OUR EXPANDED PRODUCT LINE

In 2011, our acquisition of Bucyrus International Inc. added more than 100 new products to our equipment lineup. While we're still in the process of integrating the two companies, our customers can rest assured that all of their products will continue to be supported and that there will be no disruption in the service they have come to expect.

Our goal is to ensure that sales, parts fulfillment, technical support and all other customer services continue uninterrupted throughout the integration process. Until your Cat dealer represents the complete product line, your legacy Bucyrus products will be supported by former Bucyrus employees who now work for Caterpillar. Traditional Cat products continue to be supported by dealers with support from the Caterpillar Global Mining organization.

When the integration is complete, the expertise you have come to depend on will continue in the Caterpillar organization, whether through a Cat dealer or from Caterpillar—combining the best of both organizations to create one unparalleled source for support. As we combine the proven strengths of each organization, we're creating a unified team unlike any other in the mining industry.







WE SUPPORT YOUR MACHINE UPTIME

Machine availability is vital to meeting production targets. Cat dealer technicians help deliver that critical uptime by providing expert maintenance and repair services, or technical assistance and training for sites that choose to do their own. Repairs are expedited by fast and efficient parts fulfillment, leveraging Caterpillar's global logistics support system and parts facilities.

In addition, dealers leverage information gained from machine health systems, preventive maintenance programs and other initiatives to predict maintenance and repair needs and anticipate the parts and components that will be required.

We partner with customers in the planning that is essential to a successful maintenance organization, then together we execute these activities to deliver the highest possible machine availability.



MACHINE AVAILABILITY

EXPEDITING REPAIRS THROUGH FAST PARTS FULFILLMENT

Availability of parts is essential to machine uptime. We leverage Caterpillar's global logistics support system and parts facilities to expedite repairs. With 22 facilities worldwide, and 930 000 square meters (10 million square feet) of storage space, there is no other logistics system in the world that can offer the same support. Regional parts centers located close to our customers are being created for the sole purpose of supporting parts needs for our expanded product line while we continue to integrate these parts into the Caterpillar distribution system.

Most Cat dealers maintain extensive parts inventories and leverage sophisticated forecasting systems to make sure they have or can quickly obtain the parts their customers need. Whether you want a new, used, exchange or remanufactured part, Cat dealers can quickly locate and communicate a timeline for delivery in a matter of minutes.

Customers can order from more than a million items in our online parts books. Genuine Cat parts are engineered to be the best fit for Cat machines. They're designed to work and wear as a complete system, and their quality and design drive system life. They're manufactured in our own facilities and under the highest controls and standards.









MACHINE AVAILABILITY

MANAGING COMPONENT LIVES

Component Management is a vital tool in reducing total machine operating costs. It has a direct impact on increasing component life, which in turn delivers higher machine availability. We offer a number of tools to help dealers and customers understand historical and current component life as well as how to extend it by utilizing the value built into the component.

In order to increase component life, it's important to track the history of that component. Through our Major Component Tracking System, dealers can accurately catalog durability data for components, as well as track the components from cradle to grave. This web-based system has the ability to track any component or critical part that has been assigned a unique serial number.

Component tracking delivers a number of significant benefits. It can monitor life-cycle performance, identify positive or negative trends, maximize parts reusability and extend planned component replacement intervals.





MACHINE AVAILABILITY

IMPLEMENTING CONDITION MONITORING

Condition Monitoring (CM) is a primary way to get maximum uptime out of your machines. This proactive program uses machine and site data to help you identify potential problems or conditions early—before they lead to machine shutdowns.

Simply put, Condition Monitoring is used to reduce or avoid equipment failures—supporting a repair-before-failure approach to equipment management. Condition Monitoring is predictive. It tells the maintenance team that something is going to break—and helps the team recommend how to prevent it, how to fix it before it gets worse, and how to schedule the repair to avoid more downtime.

CM for the mining industry involves studying the state of machine systems and components, as well as site conditions such as high altitude or extreme cold, that could—and do—impact equipment health and longevity as a whole. Information sources include Electronic Machine Data, Fluid Analysis, Equipment Inspections, Repair History, and Site Condition/Applications.

Condition Monitoring is not a product; rather, it's a process that can be implemented, with supporting tools and expertise, to:

- Reduce the number of failures and unscheduled downtime repair events
- Favorably impact overall operation and maintenance costs
- Promote efficient use of labor resources
- Improve equipment reliability / availability
- Increase production and reduce cost per ton

A new web-based tool, Cat® Equipment Care Advisor, enables the Condition Monitoring process by combining equipment and application information with analytics and Cat dealer interpretive expertise to help customers make informed maintenance, repair or component replacement decisions. Using sophisticated analytics and knowledge management, the tool analyzes data, provides reports, recommends actions that should be taken as a result of the analysis, and then tracks those actions.





WE SUPPORT EXISTING PRODUCT IMPROVEMENT

From the moment we develop a product, integrate a technology, manufacture a machine or put it to work, we're already looking for ways to improve.

Product innovation is key to our continuous improvement efforts. It begins at our Technical Center, where every day we are making something better. We use high-tech modeling tools and proven processes to develop quality designs that meet our customers' requirements. We concept products and test them in virtual reality simulators, then we build components and prototypes and test them in soil labs, cold rooms, sound rooms, shake tables and, finally, in the field.



PRODUCT IMPROVEMENT

IMPROVING PRODUCTS IN THE FIELD

When a Cat product leaves the assembly line, it includes the latest features, technologies and enhancements. As we introduce new and improved products, we make sure our existing machines can also benefit from these innovations.

Working closely with our New Product Introduction teams, we evaluate innovations and make selected features available for existing machines and engines. Retrofitting equipment allows customers to extend the life cycle of older models by adding updated technologies and features released on newer equipment models. Many of these features are enhancements that help improve machine safety and reduce lost-time accidents. Others enhance performance, ergonomics, owning and operating costs and serviceability. Retrofits and upgrades can increase resale value, improve operator satisfaction and extend the product life cycle.

FOCUSING ON PRODUCT PERFORMANCE

Our focus on continuous improvement doesn't end when a new machine begins production on a mine site. Caterpillar and Cat dealers immediately start looking for ways to make that product work more efficiently, safely and productively. From addressing performance issues, to training operators and technicians, to calibrating the VIMS system—our support of your productivity is ongoing and continually improving.

If a piece of equipment isn't performing to Cat standards, we follow a defined process to address and resolve problems. Our Product Health initiative focuses on the identification, evaluation, documentation, prioritization and resolution of product issues that impact your productivity.

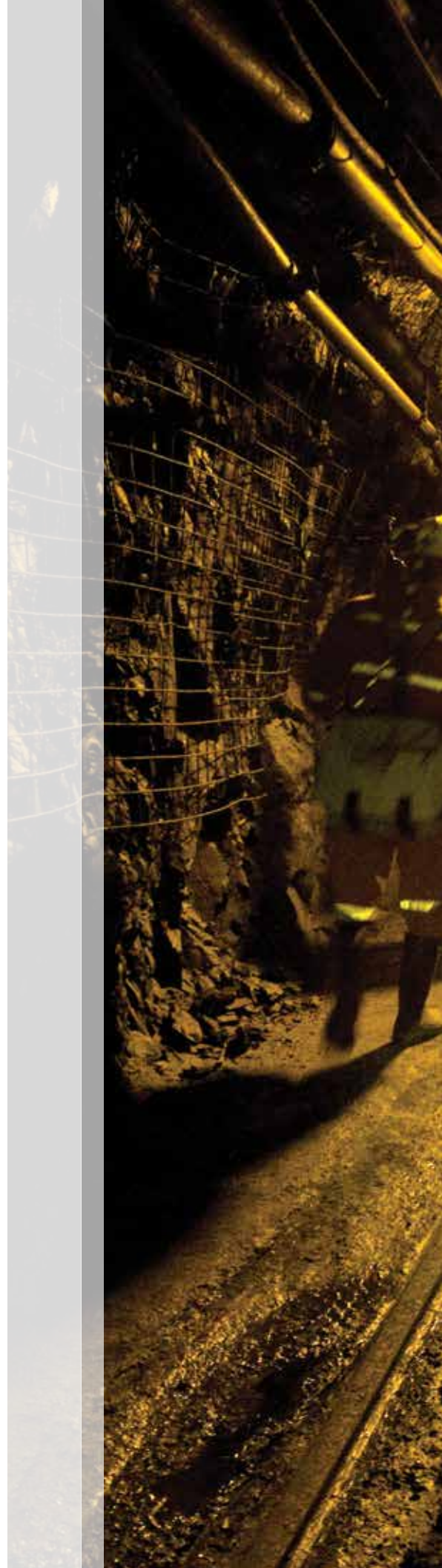
Our first goal is to make short-term modifications and repairs that bring that equipment back to production until a permanent, long-term solution is identified. Cat dealers have access to a 24/7 help desk that provides support and direction. Our unparalleled parts delivery system ensures that parts are ready and available to implement the identified changes.





WE SUPPORT **KNOW-HOW**

Machine productivity is about more than maintenance; it's also about knowledge. So we share what we know, helping you understand your machine ownership and operating costs so you can make informed decisions about maintaining, operating, rebuilding and replacing equipment. We use technologies to help mines lower costs, improve efficiency and increase productivity. And we partner with you to develop and implement projects designed to improve safety, operations, maintenance, and supply and inventory efficiencies.









KNOWLEDGE-SHARING

SHARING BEST PRACTICES

One of our goals is to ensure that our customers experience the same high levels of excellence in equipment management, wherever they are in the world. Our Mining Dealer Best Practices program leverages the knowledge of the Cat dealer network by gathering and sharing proven methods for improving business processes and performance.

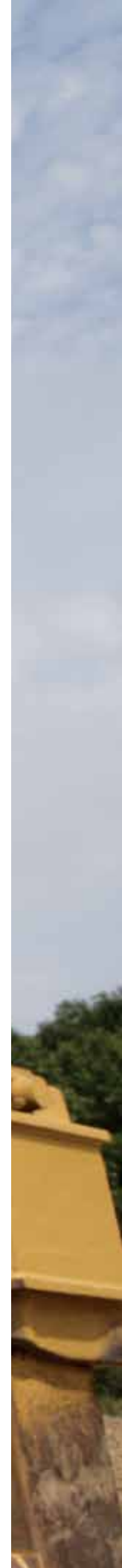
The global program includes hundreds of dealer-submitted and validated processes available to help create a consistent level of dealer excellence to our customers. Best Practices enable both equipment management and production optimization and cover five process categories: Maintenance & Repair, Application, Component Life Management, Component Rebuild (CRC) and MARC Management.

IMPLEMENTING CONTINUOUS IMPROVEMENT PROJECTS

In addition to ensuring that Cat dealers achieve top performance, the Best Practices that Cat dealers share can be implemented on customer sites to help lower costs and increase productivity and profitability.

One of the ways we do this is through Continuous Improvement initiatives, which are customer-focused programs that leverage a formal process to help you improve all aspects of your operation. Continuous Improvement initiatives can be used to enhance safety, improve production, lower operating costs, create more efficient logistics and site operations, and reduce maintenance costs.

CI initiatives follow a team approach, joining Caterpillar, Cat dealers and customers in structured efforts to discover operational inefficiencies, identify and implement solutions, and measure the value of the efficiencies gained.



WE SUPPORT THE TOTAL EQUIPMENT LIFE CYCLE

When you put a Cat product to work on a mine site, that's just the beginning of our relationship with that piece of equipment. We're partners through the entire machine life cycle — from delivery, through the day-to-day operation and maintenance, to major repairs and rebuilds.

Every decision made during this cycle will have an impact on the cost per ton you achieve. We offer a number of processes, tools, technologies and knowledge-sharing that help you better manage your equipment. These activities combine with your own processes, programs, resources and strategies to help lower total owning and operating costs and improve production.







DESARME MOTOR n°1

PERNOS



EQUIPMENT LIFE CYCLE

REBUILDING AND REMANUFACTURING COMPONENTS

Cat machines are designed so that components can be rebuilt several times over the life of the equipment. One way Cat dealers help customers fully leverage this benefit is through Component Rebuild Centers (CRCs).

CRCs help Caterpillar customers achieve optimum component life and reliability through world-class rebuild practices. Equipped to rebuild and test all major components of the largest equipment Caterpillar produces today, CRCs meet the same safety, quality and contamination standards as a Caterpillar factory. These Caterpillar certified facilities offer the least cost, quick turnaround, better quality through standardization, improved contamination control and the latest updates for Cat equipment.

Another option is Cat Remanufactured parts and components, which provide same-as-new performance and reliability at a fraction of the cost of new—while reducing impact on the environment. Reman products are available over the counter to give you more options at repair and overhaul time.



EQUIPMENT LIFE CYCLE

PROVIDING MAINTENANCE AND REPAIR

Dealer-provided Maintenance and Repair Contracts (MARC) allow Caterpillar customers to outsource the maintenance of their equipment and enable them to focus on their core competency—mining.

MARCs are individualized plans customized to each mining operation's needs. Some are "do it all for me" arrangements, where dealer technicians perform all maintenance and repair on a customer's fleet. Others are "help me do it" arrangements, where customers and dealers share these activities. Cat dealers work with you to determine the best arrangement that will maximize productivity and minimize costs for both your Cat and non Cat equipment.

Partnering in a MARC contract makes it possible for you to better forecast and budget for equipment maintenance; outsource the planning, scheduling and labor of maintenance; and guarantee the cost per hour of your equipment. MARCS deliver improved machine performance, increased availability and reliability, and typically result in an overall reduction in maintenance costs.





EQUIPMENT LIFE CYCLE

REBUILDING MACHINES TO LIKE-NEW STANDARDS

When most competitive models would require replacement, Cat equipment can be rebuilt to deliver multiple lives — significantly reducing owning and operating costs while ensuring optimum machine uptime.

Cat Certified Rebuild (CCR) is a complete rebuild process endorsed by Caterpillar, performed only by certified Cat dealers. Machines are rebuilt to like-new specifications, using only genuine Cat parts. Critical engineering updates are incorporated into the machines and oftentimes they perform even better after the CCR than they did when they were new. Customers get a like-new machine with a like-new warranty and a new serial number, at a fraction of the cost of a comparable new machine.

The program starts with a complete machine inspection. Then the machine is completely disassembled and rebuilt from the ground up to include all Cat product updates. More than 350 tests and inspections (plus the automatic replacement of more than 7,000 parts) ensure the same high level of quality as a new Cat machine.

Rebuilds can usually be completed at around 60 percent of what a new machine would cost. They're also a sustainable solution, with most re-using up to 90 percent of the original machine.





WE SUPPORT YOUR SITE OPTIMIZATION EFFORTS

At Caterpillar, supporting products goes way beyond taking care of the machines we manufacture. Our goal is to help you get the most from your products — and the conditions in which you use them have a significant impact on the value you receive.

We consider ourselves partners not just in the equipment, but in the entire productivity cycle. So we work alongside you to help you find ways to optimize your operation. We'll evaluate your site to help you select the right equipment, then work to ensure the conditions are ideal for operating and maintaining your equipment at its full potential.









SITE OPTIMIZATION

MANAGING PAYLOAD TO LOWER COST PER TON

Mine sites can increase production in two ways: by purchasing more equipment or optimizing the performance of the equipment they already have. One way to improve the performance of equipment is to properly manage payload. Operating trucks within the guidelines for payload management helps sites haul at the lowest cost per ton—minimizing spillage, improving component life, reducing fuel consumption, extending tire life and reducing downtime. It's also essential to match these trucks with the proper loading tool and bucket size.

To help customers in this effort, Caterpillar partners with Transcale, a leading global company that specializes in the practices and technology required to achieve proper payloads consistently over time. Using a scale truck, we validate empty weights, loaded weights and payload measurement systems.

We balance the production and cost-per-ton needs on the mine site and make recommendations on how they can improve payload practices to best meet those needs.

IMPROVING OPERATING CONDITIONS

There are a number of mine site conditions that can't be changed, such as altitude, depth and climate. But there are many aspects that can be managed — and improved — to lower cost per ton and increase uptime. Application management encompasses all areas of a site operation that are controllable.

For example, the design of a mine is a key part of a site's economic equation. Design determines road parameters such as grade, traffic layout, curves and switchbacks. Designs for certain grades may also affect access to the ore body, exposing more minerals for extraction, and may affect ratios of waste to ore.

Caterpillar and Cat dealer staff have expertise in a broad range of applications, whether it's optimizing loading and maintenance practices in a surface application, or helping to customize chute loading or continuous haulage systems in underground applications.

Our Mining Dealer Best Practices program provides a variety of recommended processes, training and tips that we use to help customers in their efforts to manage the conditions in which their equipment operates.





WE SUPPORT TECHNOLOGY INTEGRATION

Over the last decade, the mining industry has seen a revolution in technologies—those that are improving the way mines operate today, and those that will be the foundation for the mine sites of the future.

Caterpillar is constantly developing and refining advanced technologies to help make equipment more productive and efficient, and to help you more effectively manage equipment fleets and operations. We partner with you to choose the technologies that are right for your operation, and then use our knowledge and expertise to help you gain the full benefit of what these technologies make possible.





DEFINING THE NEXT GENERATION OF MINING

Miners are always looking for ways to enhance mine site safety, reduce costs, improve profitability and boost efficiency. Cat® MineStar™ System helps you do that, providing the most comprehensive suite of mining technology products in the industry. It consists of a number of configurable capability sets that allow you to scale the system to your mine site needs.

The system helps you manage everything from material tracking to sophisticated real-time fleet management, machine health systems, autonomous equipment systems and more. The capability sets—Fleet, Terrain, Detect, Health and Command—can be used in combination or individually to allow your operation the flexibility and scalability it needs to be more productive, efficient and safe.

Cat MineStar System lets you integrate products, processes and people like never before. Whether you implement a semi-autonomous solution on a single machine, or build a fully autonomous site using Command, we're committed to being a partner as you define what next generation means for your operation.

LEVERAGING THE VALUE OF TECHNOLOGIES

Installing technologies on the products at your mine site is only the beginning. It's how well you use them, and what you do with the information they provide, that leverages the true value of technologies. In addition to providing installation, training and troubleshooting support for the technologies you implement, we'll help you take information gleaned and use it to reduce your total cost of ownership.

Health, for example, delivers critical event-based machine condition and operating data for your entire fleet. It includes comprehensive equipment health and asset monitoring capabilities, with a wide range of diagnostic and analytic reporting tools.

Fleet allows you to track all types of equipment, across one site or many, giving you the information you need to improve production, monitor and optimize fleets. Data sharing allows you to share information with other mine management systems, and multi-site capabilities enable management of multiple fleets from a single control center.

We'll work with you to make the most of this valuable information. We'll initiate fleet production and costs studies, scale studies and diagnostic studies, in an effort to help you become more efficient, lower your maintenance costs and reduce overall operating costs.

WE SUPPORT LEARNING & TRAINING

The way your Cat equipment is maintained and operated has a significant effect on the value you receive from your investment. One of the ways we contribute to your equipment's productivity is by providing training — both for those who take care of your Cat equipment and those who operate it.

We offer a wide variety of training opportunities designed to meet individual mine-site needs — from online courses to on-site, instructor-led programs. Events are another major component of our training efforts. Customer Mining Forums allow us to deliver information on equipment, operations and maintenance. We also provide training to help Cat dealers improve their shop efficiencies, rebuild practices, maintenance processes and more.

All of these education events have an added benefit — an opportunity for all of us to learn from each other.





TRAINING THE MAINTENANCE TEAM

Cat dealer technicians are experts at maintenance and repair, but we recognize that some of our customers would rather perform a portion or all of their own equipment maintenance. Even if you partner with us for these services, you need basic skills and knowledge to ensure you're properly managing equipment on a day-to-day basis.

Dealers develop technician training programs based on each individual mine site's needs—from routine service to advanced troubleshooting. We also work alongside you to educate you on processes and programs like contamination control, fluid analysis, Condition Monitoring and Component Life Management—important enablers to maintenance and repair that follow a proactive approach to equipment management.

ELEVATING OPERATOR PROFICIENCY

Operator skill is a key contributor to productivity. Our operator training programs and online health and safety e-learning courses help you elevate operators to higher levels of proficiency and realize the full potential of your equipment investment. In addition, operators who are well-trained take better care of equipment, which reduces downtime, and have heightened safety awareness. Training includes instructor-led classroom sessions, in-the-iron sessions, online e-learning classes and self-learning CDs.

A growing trend is the use of simulators for training. This method provides a safe way for new operators to gain familiarization and understanding of machine controls and to learn proper operating procedures before training on the iron. It also provides an opportunity for experienced operators to improve their skills and increase productivity.

The benefits of simulator training are significant. Operators train without risk to machines, themselves, instructors, co-workers or property. They allow operators to repeatedly enact detailed emergency scenarios—something that is impossible to replicate in a real machine. Training is flexible and data shows that simulator-trained operators require less time to achieve competency. Training costs are lowered by pre-screening applicants, decreasing training supervision requirements, and reducing training time and machine operating costs.









WE SUPPORT YOUR EFFORTS TO **MEET GLOBAL DEMAND**

As you strive to meet the world's growing demand for commodities, you need a partner to support you in your efforts. An experienced partner that is committed to the mining industry and that understands the issues you face. Caterpillar is committed to being that partner.

We offer the industry more mining products than any other manufacturer. And we support those products with a global network of Cat dealer and Caterpillar employees who have the knowledge and expertise you need to efficiently manage your equipment and improve productivity.

Our equipment management offerings include:

PARTS FULFILLMENT

COMPONENT LIFE MANAGEMENT

CONDITION MONITORING

MACHINE RETROFITS

CONTINUOUS PRODUCT PERFORMANCE INITIATIVES

BEST PRACTICES

CONTINUOUS IMPROVEMENT

COMPONENT REBUILDS

COMPONENT REMANUFACTURING

CAT CERTIFIED REBUILDS

MAINTENANCE & REPAIR CONTRACTS

SITE OPTIMIZATION

PAYLOAD MANAGEMENT

TECHNOLOGY INTEGRATION & LEVERAGING

LEARNING & TRAINING

A man wearing a hard hat with a headlamp, safety glasses, a dark vest over a light-colored shirt, and blue jeans stands in front of a large, layered rock wall. He is smiling and looking slightly to the right. The background is a bright, outdoor setting with a clear sky.

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