



ON TRACK



A publication for and about our valued Michigan customers • www.CECOnTrack.com • November 2021

KOMATSU



Compton Inc.

Three-generation family
business services the
South Haven, Mich., area

Marc Compton,
Owner

Stanford Compton,
Former Owner

A Message from Continental Equipment Corporation



**Mark Kelso,
General Manager**

**Join us in
celebrating
Komatsu's 100th
anniversary**



Dear Valued Customer:

We could not be more proud of our association with Komatsu, which is celebrating its 100th anniversary. I believe you will find the article about Komatsu's rich history and how it is "creating value together" with distributors like us and customers like you to be an interesting read.

In this issue, learn more about Komatsu's new D71-24 base and intelligent Machine Control (iMC) 2.0 D71i-24 models. Previewed at CONEXPO last year, they were introduced to rave reviews. Advanced technology in the iMC models allows operators to run in automatics from grass to grade. This saves time, labor, surveying and staking. As one Komatsu product manager said, "They are equally adept at precise, high-speed grading and rough dozing."

Komatsu's latest addition to its intelligent Machine Control 2.0 lineup includes D39i-24 dozers with integrated GPS. They can push a sizable load and finish grade like no other, in a package that can be easily transported between job sites on a small trailer.

If you are working in tight quarters, such as a lane of traffic or against a building, a compact excavator is a great choice. Check out the new PC88MR-11 which has several updated features that increase productivity and efficiency — including a swing boom that moves independently of the cab. This allows operators to get right next to what needs to be dug without worrying about the counterweight swinging into something.

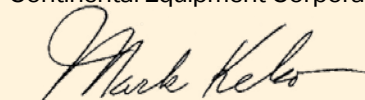
GPS systems have come a long way since their introductions and have continued to gain popularity because they were proven to work. The last few years have seen the genesis of value-added technology, such as telematics, that not only helps with your earthwork practices, but also tracks machinery so you can see trends, production and more. Discover how Komatsu's Smart Construction Dashboard can improve your management skills.

There are also product support articles that I think you will find valuable, including one on why Supercoolant is a great choice for your machines.

The last century saw Komatsu lead the way in equipment and technology innovation. We are looking forward to what it has in store for the future.

As always, if there's anything we can do for you, please call one of our branch locations.

Sincerely,
Continental Equipment Corporation



Mark Kelso,
General Manager

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In this issue

Compton Inc. pg. 4

Meet this three-generation family business that takes projects from demolition to final grade in the South Haven, Mich., area.

CEC News & Notes pg. 8

Read about CEC's 60th anniversary celebration.

In Memoriam pg. 11

Remembering Richard "Dick" Doyle, a 52-year CEC employee, who sadly passed away in July.

Be Productive pg. 12

Learn how to protect your business against cyberattacks and keep your valuable data safe.

Roots Run Deep pg. 14

Celebrate Komatsu's 100th anniversary by learning about its historical impact on the construction industry and future plans for improvement and innovation.

All-around Machine pg. 19

Find out how Komatsu's newest intelligent Machine Control 2.0 mid-sized dozers save time and lower costs.

Project Notes pg. 22

Check out Komatsu's smallest intelligent Machine Control 2.0 dozer: the 105-horsepower D39i-24.

Project Points pg. 25

Take a look at Komatsu's new PC88MR-11 excavator that can get close to structures without the worry of a large counterweight.

Longer Coverage pg. 26

Discover how an extended warranty program could help you better determine the total cost of ownership over the life of large machinery.

Maintenance Notes pg. 29

Get tips on how using the proper coolant at correct intervals helps ensure that your equipment delivers the maximum performance.



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Compton Inc. takes projects from demolition to final grade for the South Haven, Mich., area



**Marc Compton,
Owner**



**Stanford Compton,
Former Owner**

As a three-generation family business, Compton Inc. has a long history that dates back to the conclusion of World War II.

"The company started in 1946, when my grandpa returned from deployment," explained Marc Compton, owner of Compton Inc. "He grew up on a farm in Michigan, and it took several years before they could hire a company to tile and drain the farm. My grandfather saw that there was a need for another company that could offer those services, and he subsequently bought a trencher and started his own tiling business. From tiling, he picked up a water main job and a drainage job with a municipality. That got us into the public works and other piping jobs. As the company evolved and my dad bought the business in the '80s from my grandparents, he transitioned the focus towards site work, piping and drainage."

In 2016, Compton left his nine-year teaching career to rejoin the firm as a third-generation employee.

"I started working here as a laborer while I was in college," recalled Compton. "After I received

my teaching degree, I continued to work for the business during the summers. In 2015, I obtained my Construction Management Certificate and spent several months working for a general contractor out West. I left that position to buy Compton Inc. from my parents."

Currently, Marc Compton owns and operates Compton Inc. — taking over for his father, Stanford Compton, as he retires.

Taking on anything

Under Compton's guidance, the South Haven, Mich., based firm has nearly doubled in size to 15 employees. The firm takes on a wide array of projects, including road construction, grading, municipal and emergency response services, demolition, drainage and erosion control, backflow prevention, site work excavation, and revetment. Compton believes staying connected to the people in the field has allowed the company to remain diverse and successful.

"I wear a lot of hats, whether that's owner, project manager or laborer, because I want to show all of our employees that I'm willing to do whatever is necessary to make a project successful," stated Compton. "We have the experience, personnel and people to get jobs done right the first time. Our customers trust that our work will perform to their standards when we're finished, and that we offer them the best value on the project."

Compton Inc. services a 50-mile radius. Private work comprises 50% of its project revenue, with the remaining portion a combination of municipal and infrastructure repair jobs.

"Our projects range from \$100 up to \$800,000," said Compton. "Our sweet spot is about \$100,000; however, we don't have a typical job. We try to stay nimble and not place all of our eggs in one project. That allows us to take on a wider range of jobs."

Recently, the firm completed a number of Lake Michigan revetment projects. "We're installing limestone rock revetment walls along the Lake Michigan waterfront for private homeowners that want to prevent land retreat into the lake," explained Compton. "The process involves

An operator moves dirt with a Komatsu D51PXi-24 dozer. "(The first time we used the dozer) we had to shape, prep and bring to elevation a 15,000-square-foot pad," said Marc Compton, owner of Compton Inc. "We were able to cut straight to grade without having to move material multiple times. The dozer was a money saver that increased our efficiency, time savings and quality."





An operator shapes the side of a ditch using a Komatsu PC210LCi-11 excavator. "The GPS excavator has become an indispensable piece of equipment for us," noted Marc Compton, owner of Compton Inc. "The grade control on the excavator has given us a lot of confidence."

placing 36- to 60-inch stones along the waterfront as breakwater then building back up behind them, or other methods, and driving down 10-foot metal sheets. We provide this as a turnkey service, as well as restoration and revegetation of a slope."

The firm also works closely with the city. "We partner with South Haven to take on everything from drainpipe camera investigations to asphalt patches and sewer taps," said Compton. "We have the equipment and knowledge to take on more complex projects and emergency repairs that require ditch boxes, sheets and other equipment."

CEC support

When Compton rejoined the firm in 2016, he wanted to decrease the amount of time spent staking out a job site and cut to grade more efficiently. After talking with the Continental Equipment Corp. (CEC) sales representative Tim Ferguson, Compton added a Komatsu PC170LC-11 excavator.

"We needed an upgrade, and the PC170 excavator got our attention because it's nimble and able to get in and out of tighter areas on a job site," explained Compton. "Primarily, we liked

that we were able to outfit it with an aftermarket laser system to measure our digging depth."

When the company landed a parking lot grading project for a wedding event barn, it added a Komatsu D51PXi-24 dozer to its fleet — its first piece of equipment with integrated intelligent Machine Control (iMC) technology.

"We had to shape, prep and bring to elevation a 15,000-square-foot pad," said Compton. "We were able to cut straight to grade without having to move material multiple times. The dozer was a money saver that increased our efficiency, time savings and quality."

Recently, the firm added a PC210LCi-11 excavator to its fleet. "The GPS excavator has become an indispensable piece of equipment for us," noted Compton. "The grade control on the excavator has given us a lot of confidence."

When it comes to machine support, Compton relies on CEC and the service department to maximize uptime. "The service from CEC has been excellent over the last five years," stated Compton. "The support we receive for our iMC equipment has made us confident to continue investing in the machines. Whenever we call

Continued...

'Working smarter'

... continued



(L-R) Compton Inc.'s former owner Stanford Compton and current owner Marc Compton partner with Continental Equipment Corp. (CEC) and CEC sales representative Tim Ferguson to support their Komatsu equipment. "The service from CEC has been excellent over the last five years," stated Marc. "The support we receive for our intelligent Machine Control equipment has made us confident to continue investing in the machines."

with a question, they respond promptly and get us the answers we need. Their support staff is preemptive. They're very knowledgeable about the machines and answer some of our questions before we even know to ask them. They've put our mind at ease about the GPS machines, which has allowed us to focus on the projects and be successful."

Looking ahead

Compton likes the size of the company and plans to continue refining its process.

"We're not in a large commercial market, which means we want to be competitive at both ends of the projects' size spectrum," explained Compton. "I plan to keep the company at its current size because that allows us to take on the larger mass grading projects and still be nimble enough to take on the smaller basement grading jobs. We're able to fill in all of the gaps. Since we've added iMC machines, we want to continue working smarter, not harder. Our goal is to be the first choice for any project within a 30-minute radius of South Haven. We believe in our investment in the iMC technology, and that it has set us up to be successful for the short term and the long term." ■

Compton Inc. completed the parking lot, drainage ponds and other site work for a wedding event barn in South Haven, Mich.



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CEC brings together customers, employees and their families for the company's 60th anniversary celebration

Continental Equipment Corp. (CEC) recently celebrated its 60th anniversary at the Lake Odessa fairgrounds. Customers, employees and their families gathered to celebrate the history and continued growth of the oldest equipment distributor in Michigan.

"Throughout my time with CEC, the family values and ethics that the Behrenwalds

(owners of CEC) have instilled into every part of the business have impressed me," said CEC Area Manager Chad Fullerton. "From day one, our approach has always been to build a relationship and establish trust with the customer. Our goal is to support our customers better than anybody else in the industry. We're able to do that because there's a level of trust within the company that we'll take care of the customers first, and go above and beyond to do the right thing."

Since opening the first branch 60 years ago, CEC's service has grown to six branch facilities and multiple satellite locations throughout Michigan. The steady growth shows CEC's commitment to taking care of its customers and improving the customer service experience.

"Over the 40 years of my career, I've seen the company grow from small, 10-mechanic shops to our current facilities," said CEC Area Manager Craig Williams. "That's allowed us to dramatically increase the product support end of our business. To know that the company has been around for 60 years and continues to be successful and innovative in our approach to servicing our customers means we're well-positioned heading into the future. The anniversary party was a great way to celebrate that history and bring together everybody that has been a part of making this company successful." ■



Machines hold a banner welcoming guests to CEC's 60th anniversary party at the Lake Odessa fairgrounds in Michigan.



Customers, employees and their families gathered at the Lake Odessa fairgrounds to celebrate the history and continued growth of CEC.





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Remembering Richard "Dick" Doyle

Richard "Dick" Doyle (12/15/1934—7/28/2021) was a respected and well-liked salesman and friend to many people throughout Michigan. Doyle worked for Continental Equipment Corp. (CEC) for 52 years before retiring on Dec. 31, 2020. His commitment to treating customers fairly and creating relationships that extended beyond equipment sales helped him build a network of clients, friends and colleagues who will miss his presence.

"Dick found enjoyment and fulfillment in doing what he did until the day he retired," said CEC General Manager Mark Kelso. "His commitment to working for CEC for almost his entire life is a testament to how much he cared about his customers, and that his customers were truly a part of his life. He never wanted to let them go.

"There are not very many people in the state of Michigan in the construction industry that don't know Dick's name," continued Kelso. "If you asked Dick a question, he always gave you the honest answer. And if he didn't know the answer, he was going to find it for you. He may have worked for CEC, but he was always on the customer's side."

Richard was a loving husband, father, grandfather and great-grandfather. He proudly served in the U.S. Army during the Korean War. He was preceded in death by his son, Steven Doyle;

parents, Cedric and Dorothy Doyle; and sister, Sandy Tortellet. He will be lovingly remembered by his wife of 67 years, Lorraine Doyle; children, Debra and Edmund Lehmann, Sherri and Hank Katerberg, Brenda and Richard Kreuger, Linda and Ross Johnson; grandchildren, Chadd and Patti Lehmann, Kelli and Brad Bramer, Kimberly and Brian Mitchell, Matthew Hoffman, Michael and Ashley Hoffman, Codey Hoffman, Sarah Kreuger, Hannah and Leo Lach, Joseph Kreuger, Tyler and Bridget Johnson, and Trevor Johnson; 17 great-grandchildren; brother and sisters, Carl and Joan Doyle, Janet and Roger Wittenbach, Judy and Jon Walters; and many nieces and nephews. ■



Lorraine Doyle lovingly remembers her husband of 67 years, Richard "Dick" Doyle.

In 1979, Richard "Dick" Doyle received an award for the "First Two Million Dollar Sales Achievement."



Richard "Dick" Doyle poses for a picture in front of his airplane.



Cyberattacks are on the rise, but there are ways to protect your valuable systems and data

Is your business vulnerable to a cyberattack? If you use the internet, it is.

Cyberattacks are attempts to access or damage a computer system. They come in various forms, but the most common are hacking and malware threats. Hacking can be done in several ways and involves criminals gaining unauthorized access to your systems, which allows them to view and change information. Malware (short for "malicious software") is "designed to cause damage to a single computer, server or computer network," according to Microsoft. It often "infects" a computer when a user clicks on an unknown link in an email that installs a virus, trojan horse or worm.

Once hackers gain access, they can wreak havoc. Currently, a popular method of attacking systems is through the use of ransomware that encrypts files. Payment is demanded in exchange for the decryption

key. The consequences can be significant, as highlighted by the recent \$5 million Colonial Pipeline paid in ransom to the hackers who shut down its pipeline. The ripple effects can spread far beyond the original victim, such as the gas shortages on the East Coast that resulted from the pipeline attack, or the shortage of meat after a similar cyberattack on JBS.

While it could be easy to dismiss these attacks because they happened to large corporations, experts say you shouldn't. Companies of all sizes are potential targets. Recent data shows that hackers attack a computer in the United States every 39 seconds, and one in four businesses face the risk of a security breach. A release by the Small Business Committee of the U.S. House of Representatives showed that 71% of cyberattacks occur at businesses with fewer than 100 employees.

Stay up to date and back up data

The prospects of your business being hit with a data breach or ransomware are real. However, there are steps you can take to protect it from cyberattacks. Most are basic, easy-to-follow practices such as keeping anti-virus software updated.

"It's not clear yet which of Colonial Pipeline's systems were compromised by hackers. But many ransomware attacks in the past have been deployed against outdated operating systems and legacy applications that don't have the latest security patches and software updates in place," according to a CMIT Solutions article titled "Gas Shortages Highlight the Severity of Ransomware Threat." "Working with a trusted IT (information technology) provider, this process can be automated to run behind the scenes, keeping your computers safe without interrupting your employees' day-to-day work."

You need to be proactive, according to Murray Goldstein, vice president of marketing & sales operations at Cox Business, in the article "4 Ways Small Businesses Can Protect Themselves from Cyber Attacks." Doing so will help to protect your company against new threats and make sure your infrastructure is secure. Goldstein stated that precautions should include:

Employees should be trained on how to handle information and on the best practices to prevent cyber risks. They should also know the warning signs of an attack and what to do in the event of one. "Establish rules of behavior describing how to handle and protect customer information and other vital data," said the Federal Communications Commission.





There are steps you can take to protect your business from cyberattacks. Among the most basic, easy-to-follow practices is keeping anti-virus software updated.

- Using a Firewall for your internet connection.
- Installing, using and regularly updating anti-malware, anti-virus and anti-spyware software on every computer in your business.
- Downloading and installing software updates as they become available.
- Securing your workplace Wi-Fi networks within the office and ensuring employees working outside the office are logged in with secure connections.
- Monitoring your systems continuously to detect potential problems.

In addition to staying up to date, it's essential to have data backed up. A recent article by Mark Rosanes for Insurance Business titled "Ten Ways to Protect Your Business from Cyberattacks" said that data backup is among the most cost-effective ways of making sure information is recovered in an event of a cyber incident or computer issues. Recommendations include using multiple backup methods, such as daily incremental backups to a portable device or cloud storage, as well as end-of-week, quarterly and yearly server backups.

Train your employees

Employees should be trained on how to handle information and on the best practices to

prevent cyber risks. They should also know the warning signs of an attack and what to do in the event of one.

"Establish basic security practices and policies for employees, such as requiring strong passwords, and establish appropriate internet use guidelines that detail penalties for violating company cybersecurity policies," says the Federal Communications Commission (FCC). "Establish rules of behavior describing how to handle and protect customer information and other vital data."

If an attack occurs, you can limit the damage, according to the FCC. It recommends immediately changing passwords; scanning and cleaning devices; turning off the device and possibly taking it to a professional to scan and fix; letting the IT department know immediately; and contacting banks, credit card companies and other financial accounts.

"As cybersecurity threats evolve and the general public becomes more aware of ransomware's impact, businesses across North America can leverage this moment to better protect their information and operations," said CMIT Solutions. "However, that can only happen if we take ransomware more seriously." ■

Komatsu continues to shape the future of construction and mining operations as it celebrates its 100th anniversary



Discover more

One hundred years ago, Komatsu City, Japan, faced a potential crisis with the closure of a nearby copper mine that was a vital source of jobs. Meitaro Takeuchi, an entrepreneur dedicated to advancing educational opportunities and improving mine efficiency, knew there had to be a way to save the livelihoods of the community members who relied on the mine.

In 1917, he established Komatsu Iron Works, a machinery company for maintaining mining equipment. In 1921, Takeuchi and a group of investors founded Komatsu Ltd., which began producing cast steel products, providing new employment to those who had been dependent on the now-depleted mine. The first product, produced in 1924, was a one-cylinder sheet-forming machine.

While Komatsu continues to manufacture industrial presses, over the past 100 years it has expanded its portfolio of products to include forklifts as well as construction and mining equipment. The first machine Komatsu shipped outside of Japan was in 1955, when it sent a motor grader to Argentina. A Komatsu dozer

arrived in North America in 1964, marking the company's presence in that market.

Komatsu celebrated its official 100th anniversary on May 13, 2021. Throughout the next year, there will be a series of activities focused on the company's commitment to its new brand promise of "creating value together." That value will be created "through manufacturing and technology innovation to empower a sustainable future where people, businesses and our planet thrive together," according to Komatsu.

The company added that its core values include:

- **Ambition:** With a 'challenging spirit' and without fear of failure, we innovate and always aspire to do more.
- **Perseverance:** Even when the work is difficult, we remain committed to our promises and reliably carry them through to completion.
- **Collaboration:** Creating value comes from teamwork, inclusion, respect, diversity and a win-win approach to all relationships.
- **Authenticity:** To earn and maintain trust, we always act with sincerity, integrity and honesty, and communicate transparently.

Continual innovation

Back in 1902, prior to founding Komatsu Ltd., Takeuchi was already helping the community and mine employees by taking over operations at the copper mine. He funded projects to mechanize processes and teach new skills to the people. Takeuchi established schools, sent staff overseas to learn the latest techniques, and purchased machines to improve efficiency. He funded and supported a science and engineering department at a university in Tokyo, as well as a local industrial school to significantly advance educational opportunities and options in the rural areas near Komatsu City.

As Takeuchi and his team worked to grow operations, he remained true to his principles: quality first, technology innovation, globalization and the development of people.

"As we expanded around the world, we leveraged the strengths of global production while nurturing local leadership and creating

Continued ...

In 1970, the first Komatsu headquarters in North America was established in San Francisco. Subsequent headquarters were in Atlanta and the Chicago suburbs. The company is now based in the city of Chicago.

*Komatsu arrives in the U.S.A.
This machine is travelling the
streets of San Francisco*

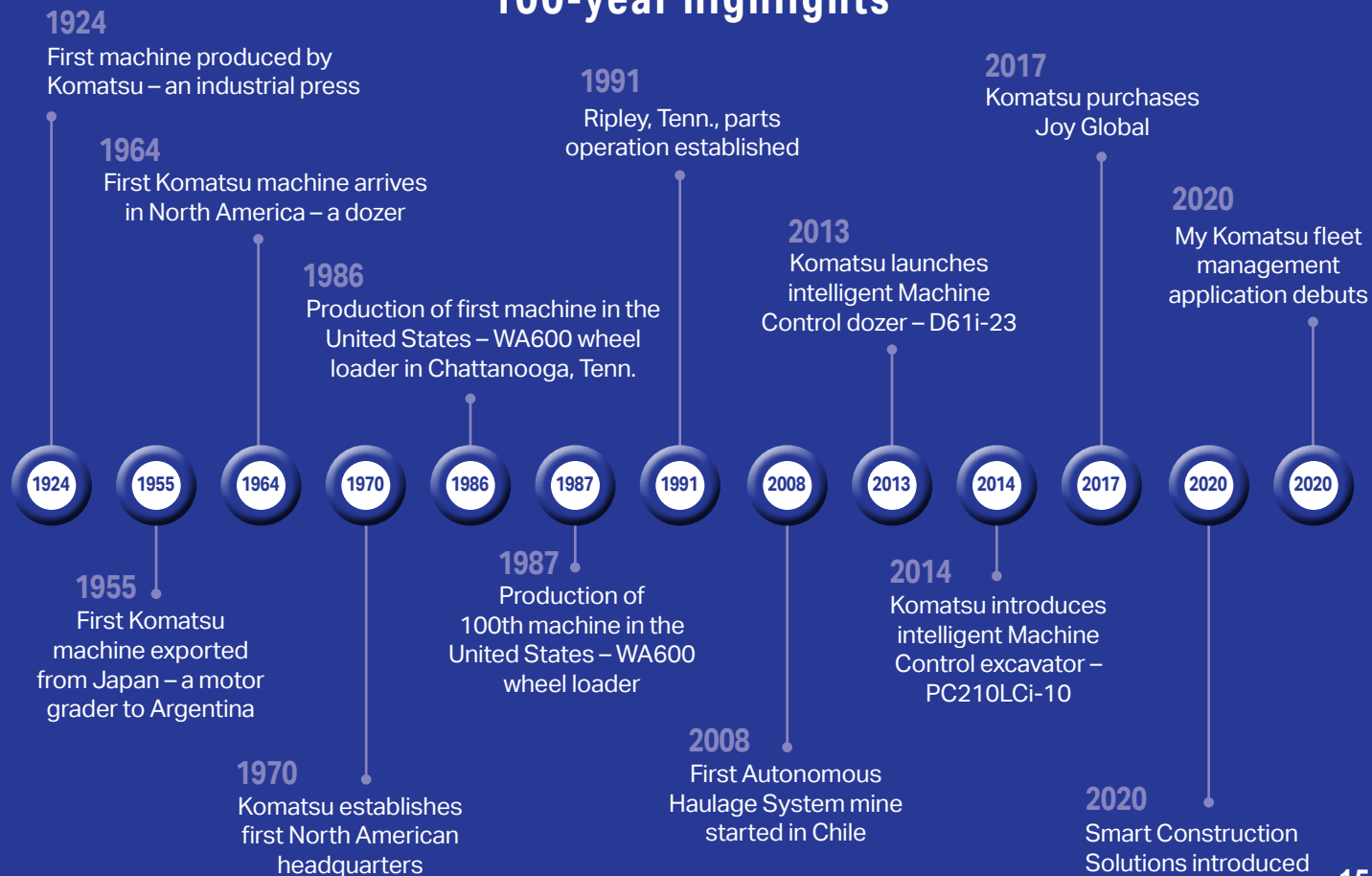




► VIDEO

Komatsu Ltd. was founded in 1921 by Meitaro Takeuchi and a group of investors. Takeuchi was an entrepreneur with a humanitarian vision committed to enhancing the quality of life, developing future generations and growing with society's needs.

100-year highlights



Takeuchi's innovative spirit

... continued

value for the customers we serve, investing in every community and supporting society where we worked. With each challenge faced, Komatsu teams pushed forward together, working to innovate, diversify into new markets and expand globally," Komatsu's origin story states.

Takeuchi's innovative spirit can still be seen today. Komatsu pioneered autonomous technology and has had driverless trucks in mines around the world since 2008, and by July 2020, over 3 billion metric tons had been hauled autonomously. It brought integrated GPS to dozers and excavators with intelligent Machine Control to help operators get to grade faster with less staking and without masts or cables. It introduced complimentary, scheduled maintenance and tools such as My Komatsu to provide more efficient fleet management. To help customers manage projects from preconstruction to project closeout, increase productivity and efficiency, and digitize the job site, Komatsu is rolling out its suite of Smart Construction solutions.

"In our next 100 years, Komatsu will focus on supporting the mining, construction, forestry, industrial machinery and agriculture industries in their transformations to the digital workplace of the future: equipment and people, connected through smart technologies on an open platform, driving towards zero harm, zero waste

and zero emissions. By helping to digitize job sites worldwide, our customers can optimize on-site operations towards a carbon-neutral environment," the company stated.

Long-term sustainability efforts

Takeuchi's vision and strong guiding principles stood the test of time. Through the years, Komatsu's continued investment in core capabilities and strategic acquisitions have connected smart, diverse people and cutting-edge technologies with a shared belief that partnerships are the best way to solve challenges and meet society's needs.

"Komatsu's philosophy is passed down from generation to generation through our principles, strategies, The Komatsu Way and the belief that Corporate Social Responsibility is part of our core business and the value we create," the company said. "In regions across the globe, Komatsu continues to provide products and solutions which address social needs and give back to communities where we do business by leveraging the skills and the passion of our people. We seek to play an active role in supporting the long-term success of society through sustainable efforts that reach far beyond Komatsu.

"From our founding city to the global community in which we operate today, we know we are stronger when we are creating value together." ■

Komatsu's collaboration with customers has led to innovative solutions, such as intelligent Machine Control and Smart Construction, that leverage the latest technology to digitize and optimize the job site.





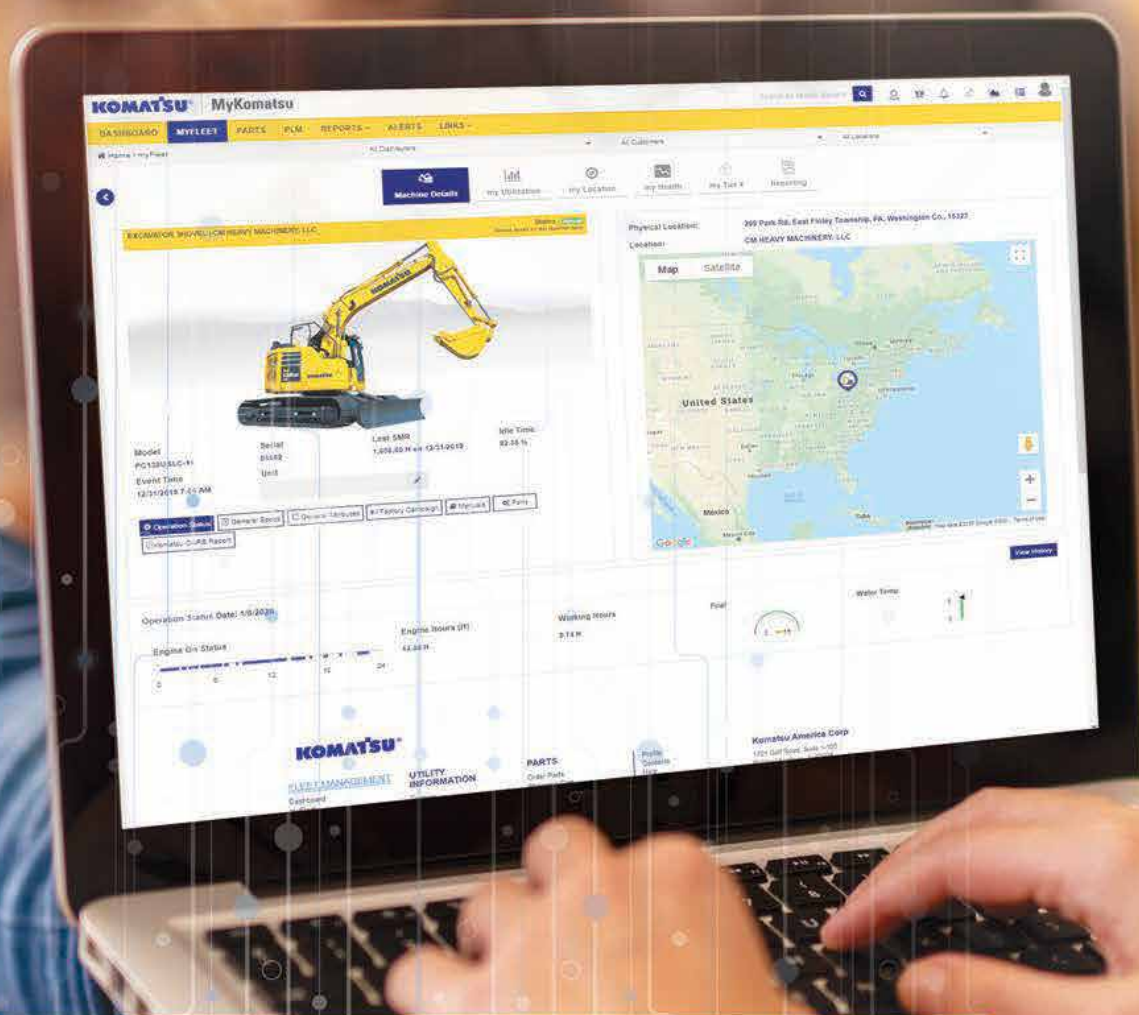
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Want a single mid-sized dozer that saves you time, lowers your costs and makes your new operators more effective?

Do bigger jobs always require larger or multiple machines? What if you could get the same amount of work done with a mid-sized dozer that allows you to push large loads while also giving you the ability to get to finish grade? How much savings in time, owning and operating costs would that give you?

"These are considerations you should take into account when approaching every project," said Jon Jennings, Komatsu Product Marketing Manager. "Choosing the right machinery makes a significant difference in production, efficiency and profitability. A single dozer that can push, side cut, finish and work in soft ground gives you a real advantage."

Jennings added that technology such as GPS systems can make the dozer and the operator even more effective at moving dirt productively and efficiently. These systems decrease the time it takes to get to grade, which reduces staking and surveying costs, and virtually eliminate overcutting and the need for expensive fill.

"GPS systems and additional technologies continue to reduce owning and operating costs," stated Jennings. "They are also helping new operators become productive faster. With a shortage of skilled operators, that's a tremendous help."

Manufacturers such as Komatsu are factoring in all of these needs as they design and build new machines, according to Jennings. Komatsu

introduced its first intelligent Machine Control (iMC) dozer with factory-integrated GPS about eight years ago and has developed several new models with additional technology since. This includes their new iMC 2.0 models with added satellite systems to improve satellite coverage – which gives operators the ability to work in more challenging areas, such as near woods or on urban job sites.

New technology features

The newest iMC 2.0 D71EXi-24, D71PXi-24 and D71PXi-24 Wide dozers combine several features designed to further increase production. Among them are:

- Lift layer control that optimizes earthwork productivity with the press of a button. It maintains compaction quality by automatically controlling lifts to the desired height. Excess fill is eliminated as automatic blade control follows the finished surface once lifts have reached finished grade.



Discover more

Continued...

Quick Specs

Model	Net Horsepower	Operating Weight	Blade Capacity*
D71EX-24	237 hp	49,824 lb	5.8 cu yd
D71PX-24	237 hp	50,927 lb	6.1 cu yd
D71PX-24 Wide	237 hp	52,690 lb	6.6 cu yd
D71EXi-24	237 hp	50,045 lb	5.8 cu yd
D71PXi-24	237 hp	51,147 lb	6.1 cu yd
D71PXi-24 Wide	237 hp	52,911 lb	6.6 cu yd

* Power angle tilt blade

The new D71i-24 intelligent Machine Control 2.0 dozers feature the super-slant nose design that offers outstanding visibility to the cutting edges. "Seeing the front of the machine with reduced blind spots increases awareness of the job site," said Jon Jennings, Komatsu Product Marketing Manager.



Patent-pending Proactive Dozing Control logic

... continued

- Tilt steering control automatically tilts the blade to maintain straight travel during rough dozing and reduces operator steering input by up to 80%.
- Quick surface creation lets operators create a temporary design surface with the press of a button. Combined with other iMC 2.0 functions, crews can begin stripping or spreading using automated input while waiting for the finish grade model.

"The D71i-24s also have our patent-pending Proactive Dozing Control logic that enables even less-experienced operators to cut/strip automatically from existing terrain," said Jennings. "The dozer measures the terrain while tracking over it and uses that data to plan the next pass, improving productivity by up to 60% compared to previous-generation models. The ability to use automatics from first pass to last, instead of just during finish grading, significantly reduces the time it takes to reach target elevation. Proactive Dozing Control decides on the action of the blade — such as whether to cut and carry material, spread or fill that material or whether it should finish grade."

Better visibility for more efficient grading

Jennings said visibility plays an important role in operator productivity. Being able to see the

blade's cutting edges increases production, especially during fine grading work near curbs. The D71i-24 is now the largest of Komatsu's hydrostatic dozers, and it maintains the unique super-slant nose design.

"Seeing the front of the machine with reduced blind spots increases awareness of the job site," said Jennings. "That's important when running a large machine such as the D71, which has the biggest standard blade in its class size. It increases operator confidence and, in turn, their ability to be more productive."

In addition to the iMC 2.0 D71i-24 models, base D71-24 dozers are also available. EX dozers have a ground pressure of 6.3 psi. With a ground pressure of 5.8 psi, the PX models work well in soft conditions; and for highly sensitive areas, PX Wide models with a ground pressure of 5 psi are available.

"With the D71-24s, we specifically matched the track shoes' width to the blade length to ensure optimal performance," said Jennings. "Additional new performance features include improved steering response and maneuverability. In the new Fast Mode during turns, the outside track speeds up while the inside track slows down."

"From golf course construction to highway projects, the D71-24s are all-around crawler dozers," said Jennings. "Equally adept at both precise, high-speed grading and at rough dozing, they are designed to provide outstanding wearability and functionality with a high-capacity, wear-resistant dozer blade. We encourage anyone looking for a solid mid-sized dozer with the versatility to perform on practically any job site to contact their distributor to set up a demonstration." ■

New technology combined with integrated intelligent Machine Control allows automatic grade control from rough cut to finish grade on a wide range of job sites. "Choosing the right machinery makes a significant difference in production, efficiency and profitability. A single dozer that can push, side cut, finish and work in soft ground gives you a real advantage," noted Jon Jennings, Komatsu Product Marketing Manager.



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Small dozers with integrated technology give you the ability to run automatics from grass to grade



Jon Jennings,
Product Marketing
Manager, Komatsu

Small dozers have generally been considered finish grading machines. They are usually put on job sites to clean up or place the topsoil.

"House pads and sites where space is at a premium have mostly been the applications where you find dozers under 22,000 pounds," said Jon Jennings, product marketing manager, Komatsu. "They normally have not been viewed as 'grass to grade' or high production machines where you are doing everything from stripping to finishing."

Jennings said that view is evolving with today's technology.

"If you have a site that involves a large amount of dirt where thousands of yards have to be moved each day, larger dozers are still your best bet," explained Jennings. "However, smaller dozers equipped with GPS are gaining popularity on medium-sized projects. As the needs for staking and surveying are reduced, there is less need to stop and check grade, so operators can continue to push dirt and be more productive. The ability to do that with a smaller dozer that uses less fuel is a significant advantage."

It's even better when the technology is integrated because it further reduces owning and operating costs, according to Jennings.

"Not having to take down and put up masts and cables gives you more production time, and there is a reduced risk of injury," stated Jennings. "You also don't have those items getting damaged, so the expense of replacing them is eliminated."

Quick Specs

Model	Net Horsepower	Operating Weight	Blade Capacity
D39EXi-24	105 hp	21,848 lb	2.89 cu yd
D39PXi-24	105 hp	22,774 lb	2.89 cu yd

New technology, such as Proactive Dozing Control, combined with integrated intelligent Machine Control allows automatic grade control from rough cut to finish grade on a wide range of job sites. "The ability to use automatics from first pass to last, instead of just during finish grading, significantly reduces the time it takes to reach target elevation," said Jon Jennings, product marketing manager, Komatsu.



Learns as it works

Komatsu introduced factory-integrated intelligent Machine Control (iMC) GPS on dozers nearly a decade ago. It recently brought iMC 2.0 to market with added technology that enables operators at all skill levels to be even more effective at moving dirt productively and efficiently, according to Jennings.

Among Komatsu's iMC 2.0 dozers is the 105-horsepower D39i-24, the smallest in the lineup. Like its larger counterparts, it has the same new features, including Proactive Dozing Control that enables operators to cut/strip from existing terrain, regardless of their experience level. The dozer measures the terrain as it tracks over it and uses the data to plan the next pass — improving productivity by up to 60%, compared to previous models.

"The ability to use automatics from first pass to last, instead of just during finish grading, significantly reduces the time it takes to reach target elevation," said Jennings. "Proactive Dozing Control decides on the action — such as whether to cut and carry material, spread or fill that material, or whether it should finish grade."



New technology features combined with iMC 2.0 give operators of small dozers the ability to do more with one machine. "The D39i-24 offers greater versatility," said Jon Jennings, product marketing manager, Komatsu. "It can be the biggest machine a contractor needs, or it can be a scalpel on a larger job site. The possibilities are extensive."

Additional new technology features include:

- Lift layer control, which optimizes earthwork productivity with the press of a button. Time savings are realized because each layer is precise, reducing or eliminating the need for rework for over or under compaction.
- Tilt steering control that automatically tilts the blade to maintain straight travel during rough dozing and reduces operator steering input by up to 80%.
- Quick surface creation that lets operators create a temporary design surface with the press of a button. Combined with other iMC 2.0 functions, crews can begin stripping or spreading using automated input, while waiting for the finish grade model.
- iMC 2.0 models with dual antennas and added satellite systems to improve satellite coverage, which gives operators the ability to work in more challenging areas, such as near woods or on urban job sites.

"The D39i-24 offers greater versatility, and the new technology opens up a lot of possibilities for all types of businesses," said Jennings. "It can be the biggest machine a contractor needs, or it can be a scalpel on a larger job site. For instance, a small homebuilder could use it to level house pads, or a landscaper can build a pond or create a unique surface. A large site work company may backfill curbs or build a drainage ditch with it, while it utilizes a bigger dozer for mass cut/fill operations.

"The possibilities are extensive, and as an added bonus, its size allows for transport on a tag trailer behind a dump truck, so it would be a great tool for those just starting their own business, who want to be highly competitive and productive right away," Jennings added. "There are some additional upgrades as well, such as LED lights and Bluetooth. We encourage anyone looking for a small dozer with the ability to be more than a finish grading machine to contact their distributor for a demonstration or more information." ■



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Are you looking for an excavator that can get close to structures, traffic without the worry of a large counterweight?

Tight job sites present unique challenges. In order to be the most productive in those instances you have to carefully consider the type of equipment to use. For instance, an excavator with a large counterweight could swing into an obstruction or into a lane of traffic.

"Tight-tail-swing and compact excavators continue to gain popularity because they are a great solution for these kinds of sites," said Jonathan Tolomeo, Komatsu Product Manager. "On projects where space is at a premium, such as urban areas or during highway reconstruction where you can only work in a single lane, they deliver outstanding production results in a small package. They are also great for tasks that require you to place the machine very close to a house or other type of building."

Tolomeo added that not all tight-tail-swing and compact excavators are right for every limited-space situation. Take foundation repair for example. He emphasized that the best fit for the job is a machine with a swing boom that can work independently of the cab.

"The operator positions the tracks very close to the structure, then only moves the boom," Tolomeo explained. "This allows for digging at various angles while the cab stays in a fixed position. There is virtually no chance of a counterweight swinging into the house or other building as you dig and pile dirt."

Attachments increase versatility

Komatsu recently introduced its latest model, the PC88MR-11, with a host of new features that improve production and fuel efficiency with a viscous fan clutch.

"An improved design of the standard blade rolls material better for more efficient dozing or backfill work, which increases the PC88MR-11's versatility and may provide costs savings by not having to use an additional machine," said Tolomeo. "You can further increase versatility with attachments such as hammers and grapples.

The excavator has two-way auxiliary control with a dual-stage relief valve, as well as a thumb mounting bracket – so it will run

practically any tool in the industry. That capability increases its availability and gives you additional applications and potentially better profitability and return on investment."

He added that productivity increases when you can set hydraulic pressure and flow from inside. The PC88MR-11 lets operators do that, which is a change from the previous model. Additional upgrades include better serviceability with larger service doors and centralized ground-level access to filters located within a common area.

"The list of enhancements, improvements and upgrades is long, and we encourage anyone who is looking for a productive compact excavator that increases versatility, to contact their distributor for a comprehensive list and a demonstration," said Tolomeo. ■



Jonathan Tolomeo,
Komatsu Product
Manager



Discover more

Quick Specs

Net Horsepower
68 hp

Operating Weight
18,739-19,224 lb

Bucket Capacity
0.12-0.26 cu yd

The new PC88MR-11 with a swing boom lets operators position the tracks very close to the structure, then only move the boom. "This allows for digging at various angles while the cab stays in a fixed position," said Jonathan Tolomeo, Komatsu Product Manager. "There is virtually no chance of a counterweight swinging into the house or building as you dig and pile dirt."



Could a new extended warranty program help you better determine total cost of ownership over the life of large machinery?



Felipe Cueva,
Manager,
Genuine Care

Understanding total cost of ownership (TCO) over the lifetime of a machine helps you make highly informed decisions about which equipment to buy. Several factors go into calculating TCO. Some costs are fixed, such as the initial purchase price, while other costs – repair and maintenance, fuel and operators' hourly wages, for example – fluctuate.

Making the variable costs more predictable can help with budgeting and avoiding large, unplanned expenses. It also contributes to higher accuracy in estimating, bidding and determining operating expenses. One way to make costs predictable is by purchasing an extended warranty and extended periodic maintenance with fixed costs for maintenance and repairs.



Komatsu Care Plus III is designed for total cost of ownership for businesses such as quarries or mines that keep equipment for 30,000 hours before rebuilding it or taking it out of service. "Like the other Komatsu Care programs, it covers scheduled maintenance and repairs," said Felipe Cueva, Manager, Genuine Care. "Care Plus III is even more comprehensive because it includes the equipment's consumables or wear parts such as brakes, hoses, pins and bushings."

"Machinery comes with a standard warranty that covers any repairs for the first 12 months," said Felipe Cueva, Manager, Genuine Care for Komatsu. "Once the machine hits those marks, the expenses can be unpredictable and are all covered by you. Car manufacturers started offering extended warranties years ago, and equipment manufacturers have taken up the concept more recently. The advantage is that for a relatively nominal monthly charge, you have the peace of mind that when service or repairs are needed, you won't be hit with a potentially big bill."

Cueva noted that there have been options available for up to 10,000 hours of extended maintenance and repair coverages for some time. Some examples are Komatsu's recently introduced Komatsu Care Plus and Komatsu Care Plus II, as well as its Advantage Coverage. Soon it will offer Komatsu Care Plus III for larger machines, including wheel loaders, rigid-frame trucks and dozers.

"What's been missing is a program designed for those businesses such as quarries or mines that keep equipment for 30,000 hours before rebuilding it or taking it out of service," said Cueva. "Our new Komatsu Care III is a full, comprehensive maintenance and repair program for the first life of the machine. Like the other Komatsu Care programs, it covers scheduled maintenance and repairs. Care Plus III is even more comprehensive because it includes the equipment's consumables or wear parts such as brakes, hoses, pins and bushings."

Clearer profitability picture

Cueva added that Care Plus III's cost is based on utilization. Customers pay a per-hour rate, and Komatsu tracks the machine's hours through its telematics systems. Coverage extends across the country, and contracts are transferrable.

"This is really the first commercialized TCO from a manufacturer," said Cueva. "It makes your profitability clearer because there are no surprises. We encourage anyone who would like to better know their lifetime costs to contact their dealer about any of the Care Plus programs." ■

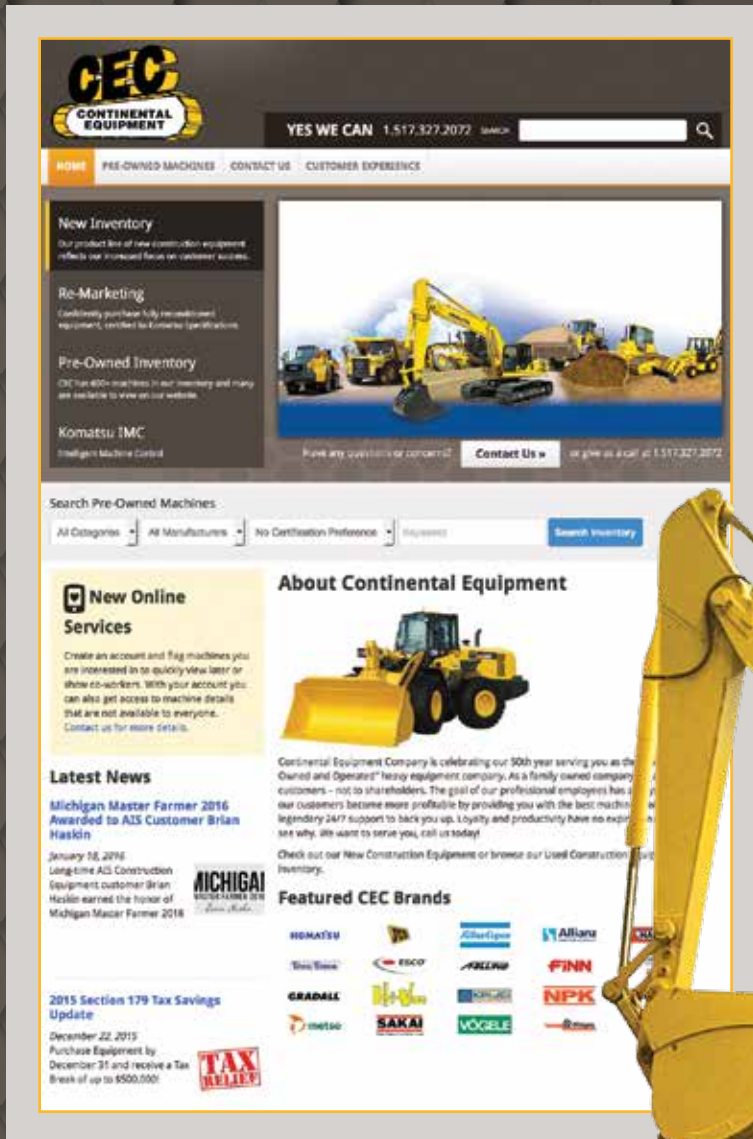


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Using the proper coolant at correct intervals helps ensure that your equipment delivers maximum performance

If you are looking to protect critical engine components and keep operating temperatures steady, you need the right engine coolant/antifreeze. While the word "antifreeze" implies protection from freezing, engine coolant is actually critical in all weather applications, because it transfers heat to prevent both freezing and overheating.

Choosing a coolant specifically designed to work with your machinery is your best option, as it's been tested and developed for those particular systems. Not using the correct type can potentially create issues because each coolant brand has a unique formulation.

"It comes down to how that coolant performs with the other components of the cooling system," said Alexis Crawford, Komatsu Parts Marketing Associate. "If the wrong coolant is used, you are introducing chemicals that may cause premature wear such as leaking seals, which can ultimately affect machine performance."

Each manufacturer has its own stated engine coolant life. Some claim that theirs will last the life of the machine. Crawford said that while this statement may be appealing, equipment users should be cautious about relying on it, as the protection will likely degrade over time. Coolant, like other fluids, should be monitored and replaced as part of your preventive maintenance schedule.

Komatsu distributors can provide oil and fluid wear analysis (KOWA) lab testing to show if there are metals or other minerals in the coolant that have leached in and may indicate a breakdown of internal components. Checking the coolant level daily can tell you if there is any evaporation due to a leak that needs to be addressed.

Product offering

Komatsu recommends using their genuine Supercoolant that is specifically designed to work across the entire product line. It offers two types: a 50/50 pre-mix product that is ready to use and a concentrate product that is mixed with distilled water. Its nitrite-free formula contains a blend of phosphate and organic acid technology (OAT) to help prevent corrosion and oxidation in modern engines.

Supercoolant exceeds all ASTM D3306 and JIS K2234 standards, and is available from your Komatsu distributor or can be ordered directly through My Komatsu.

"Komatsu Supercoolant should be replaced every 4,000 hours but could extend up to 6,000 hours for our 50/50 offering," said Crawford. "Your machine operation and maintenance manuals will tell you how much coolant (refill capacity) your machines need."

Coolant color – why does it matter?

You will notice that Supercoolant has a distinctive blue color. It is important to never mix different brands or colors of coolant as this can cause contamination and damage to the cooling system. If you are using Supercoolant for the first time, be sure to perform a system flush to avoid contamination. ■



Alexis Crawford,
Komatsu Parts
Marketing
Associate



The right engine coolant/antifreeze keeps operating temperatures steady. Coolant, like other fluids, should be monitored and replaced as part of your preventive maintenance schedule. It is recommended that you use a genuine product manufactured specifically for your machinery such as Komatsu Supercoolant.

Construction teams can visualize the status of their job sites in one snapshot with Smart Construction Dashboard

To better manage their businesses, construction operations teams need a go-to solution to visualize the status of their job sites. With Komatsu's Smart Construction Dashboard, they can.

Built to support the digital transformation of customers' work sites, Komatsu's suite of Smart Construction solutions leverages the power of the Internet of Things (IoT) to help customers orchestrate construction planning, with the aim to better handle management and scheduling, streamline costs, and optimize processes remotely — in near real time.

Smart Construction Dashboard is designed to be used daily and combines data from multiple sources into one comprehensive picture. It provides contractors with 3D graphic visualization of all design, drone and machine data to measure cuts/fills, quantities and productivity. Site progress can be viewed with timeline functions (including playback) in terms of whole-site visuals, cross-sections and individual measurements.

With Smart Construction Dashboard you can:

- Confirm a pre-bid topographical map is correct.

- Track job site progress in near real time.
- Document site conditions as evidence for change orders.
- Quickly and easily measure stockpile quantities.

"What is really cool is that the flight surface data from our drone is loaded to the Smart Construction Dashboard, and we can very quickly see changes — the actual progress," said Andie Rodenkirch, project manager for Hunzinger Construction Company. The firm is using the Smart Construction Dashboard as it builds Komatsu Mining Corp.'s new headquarters in Milwaukee. "Technologies that let operators do the job one time — and do it correctly — increase efficiency, so it's been a great tool for us."

Smart Construction Dashboard is powered by the 3D visualization power and geospatial accuracy of Cesium, a leading platform to visualize, analyze and share 3D data. Cesium's 3D visualization engine combines video game computer graphics technology with accuracy that ties data to its precise location on the globe. ■

You can learn more about Komatsu's suite of Smart Construction solutions at <https://www.komatsuamerica.com/smart-construction/solutions>.

Komatsu's new Smart Construction Dashboard is designed to be used daily and combines data from multiple sources into one comprehensive picture. It provides contractors with 3D graphic visualization of all design, drone and machine data to measure cuts/fills, quantities and productivity. Site progress can be viewed with timeline functions (including playback) in terms of whole-site visuals, cross-sections and individual measurements.



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