

A publication for and about DMI customers • www.DMIDifference.com • June 2021

Production to finishing

Discover how the new D71i-24 dozers with intelligent Machine Control 2.0 increase productivity by using automatics from first pass to last

A Message from the President



Dan Healy

Hope for an infrastructure boom?



Dear Valued Customer:

It's no secret that our nation's infrastructure needs to be updated. There appears to be growing optimism, and even confidence, that real support for this will happen. Congress continues to work on plans that will hopefully be passed sooner rather than later. Long-term legislation is in the works to replace the current Fixing America's Surface Transportation (FAST) Act that expires at the end of September.

That could be a boon for the construction industry. There would be a significant increase in the need for aggregate products, concrete and earthwork. If you service any of those or related industries, we have the equipment you need to get your job done more productively and efficiently.

That equipment includes the latest dozers, such as 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."

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 modern 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.

If you are considering using a breaker to bust up old pavement or to perform demolition, the new ones from Komatsu are made specifically to match up with your PC78 to PC490 excavators. You can read more about your options in this issue and learn how to choose the right one for you.

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.

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

Sincerely,

Dan Healy President

The Difference Difference

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Guest Opinion

Value engineering should empower project teams to optimize designs by examining all functions and their associated costs

Completing construction projects on time and within budget can seem like a daunting task. With additional pressures like fluctuating material costs, skilled labor availability and operational costs, clear and creative planning from the start become even more crucial. This is where value engineering can offer several benefits.

When value engineering is referenced in our industry, our minds may immediately go to a process that reduces project cost by slashing the scope or decreasing the quality of materials used. However, that is not necessarily what the definition should be.

In construction, value engineering empowers project teams to improve value by examining the function of each element and its associated cost. By examining the cost-benefit ratio, integrated design and construction teams can make suggestions for alternate delivery methods, designs or materials that enhance project value.

It's critical to note that boosting the value of projects does not mean reducing costs. It means optimizing project components through an analysis of all factors – cost, upkeep, wear and tear, aesthetic value, etc. To provide truly advantageous value engineering, design and construction teams must first understand the project as a holistic effort. Every project is different, as is every business' definition of value.

Live and breathe entire project life cycle

Value engineering assesses the functionality of a product, good or service in relation to cost. With this service, consideration is provided right from the beginning of the project regarding availability of materials, labor and material costs, construction delivery methods, construction site constraints and more. By evaluating these factors upfront and limiting possible difficulties that could arise during the project, owner expenses may be reduced, and the schedule can be tightened.

In combination with value engineering, the best way to achieve successful results during a project is to have a fully integrated design and construction team that lives and breathes the entire project life cycle. The design, construction and, ultimately, the end user need to be joined together on every decision, from design inception through training and turnover. This allows the team to not only suggest innovations and value propositions during the project, but also to offer solutions for the most efficient yet reliable results for years to come. ■

Author bio: John Maranowicz oversees design-build projects ranging from major airport expansions to work involving industrial manufacturing, food and consumer products, aerospace, and surface transportation at Burns & McDonnell. He is experienced in every facet of construction management, including preconstruction, estimating, design management, value engineering, scheduling and direct supervision of self-perform projects.

Editor's note: This article is excerpted from a blog by John Maranowicz at Burns & McDonnell. To read the piece in its entirety, visit: https://blog. burnsmcd.com/optimizing-construction-projectswith-value-engineering.



John Maranowicz, Regional Construction/ Design-Build Group Manager, Burns & McDonnell

John Maranowicz, Regional Construction/Design-Build Group Manager with Burns & McDonnell, says, "Value engineering empowers project teams to optimize designs by examining the function of each element and its associated cost. By examining the cost-benefit ratio, integrated design and construction teams can make suggestions for alternate delivery methods, designs or materials that enhance project value."



AGC, Fisher Phillips offer guidance to employers about policies related to COVID-19 vaccinations

In February, President Joe Biden said that the United States would have enough COVID-19 vaccines to inoculate 300 million Americans. That would mean everyone in the country could potentially be vaccinated by this summer – which is significant considering the drive to put shots in the population's arms began in late 2020.

The plan to vaccinate Americans includes phasing the shots in with essential frontline workers, such as healthcare professionals, in Phase 1A. Those in the construction industry were slated for Phase 1C, which was expected to begin in late spring of this year.

The Associated General Contractors of America (AGC) and the law firm Fisher Phillips put together a document to help construction employers answer questions with regards to vaccines and their employees. The piece is for informational purposes and should not be considered legal advice or recommendations, according to the organization and attorneys. Here are a few of the highlights.

Can we require employees to be vaccinated?

The Equal Employment Opportunity Commission (EEOC) issued updated guidance on this issue in December of 2020. The agency's updated FAQs do not unequivocally state that "employers can require the vaccine." However, it repeatedly answers questions discussing what actions employers can take in response to various circumstances after an employer has mandated the vaccine. This language plainly suggests there are circumstances where employers may require vaccine immunization of their workers without violating the Americans with Disabilities Act (ADA), Title VII, and other federal anti-discrimination laws.

The only scenario explicitly described by the EEOC as a permissible basis to mandate vaccination under the ADA is when a worker poses a "direct threat" to themselves or others by their physical presence in the workplace without being immunized.

Should we require our employees to get a vaccine? AGC takes no position. This is a decision that employers should make based on their particular legal obligations and business needs.

One factor to consider is the "general duty" clause of the OSH Act, which requires that employers "shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees."

If we decide not to require employees to be vaccinated, how could we best encourage

In February, President Joe Biden said that the United States would have enough COVID-19 vaccines to inoculate 300 million Americans. Those in the construction industry were slated for Phase 1C, which was expected to begin in late spring of this year.





The Associated General Contractors of America and the law firm of Fisher Phillips put together a Q&A for construction employers to give them guidance on employee vaccinations. To view the entire piece, visit https://www.agc.org/sites/default/files/Galleries/enviro_members_file/Vaccine%20QAs.pdf.

employees to get vaccinated? Employers can and should educate themselves and their employees regarding the benefits and safety of the vaccine, especially compared to the risks of not being vaccinated. They should also explore ways to make it easier for employees to get access to the vaccines, such as providing information about local vaccination providers, arranging for mobile units or clinics at or near job sites, paying for any vaccinated during paid work hours.

What should employers consider before requiring employees to be vaccinated?

Employers should ensure that they can articulate the reason for the mandate, specifically how the vaccination is job-related and consistent with business necessity. Employers should also ensure that policies fully inform employees of applicable requirement and explain how employees may seek an exemption as an accommodation, based on a medical condition or a sincerely held religious belief. If an employee seeks an exemption on either or both bases, employers must engage in and document an interactive exchange with the employee to determine whether a reasonable accommodation would enable them to perform their essential job functions without compromising workplace safety.

Are there state and local laws that should be considered? Yes. Fisher Phillips has a 50-state chart on vaccines, exemptions and related issues.

If we require our employees to be vaccinated, are we liable for any adverse reaction an employee might have from taking the vaccine? Individuals who experience adverse side-effects may assert claims against the manufacturer, the pharmacy or provider who administers it and possibly the employer, depending on the facts. This does not mean the claims would be successful. In most states, workers' compensation is the exclusive remedy for illness or injury acquired at work, in the absence of an intentional action or gross negligence.

Do we have to pay for our employees to get a

vaccine? If the employer requires the vaccine, the employer must ensure the employee pays no cost. Further, the most conservative approach would be for the employee to be paid for the time spent getting the vaccine in that scenario.

Editor's note: Information provided here is excerpted from a piece by the Associated General Contractors of America and the law firm Fisher Phillips. The full piece can be accessed at https://www.agc.org/sites/default/files/Galleries/enviro_members_file/Vaccine%20QAs.pdf.

We encourage you to visit the site for more comprehensive information.

Six machines named to magazine's list of best products deliver improvements driven by in-the-field customer conversations

What does a new intelligent dozer, two excavators of vastly different sizes, a specialty pipelayer and two mid-to-large-size wheel loaders have in common? For one, they were named among the Top 100 products by *Construction Equipment* magazine. More importantly, they were built with new efficiency and production features driven by customer input.

Among the prominent machines on the list are intelligent Machine Control 2.0 D51i-24 and D61i-24 dozers with integrated GPS technology that is proven to boost production by as much as 60%. They feature proactive dozing control that lets operators cut and strip like an experienced operator from first pass to last. (See related article on page 9 for additional features.)

Large, small excavators

Earthmoving companies of all sizes appreciate a basic digging machine that's easily transported from job to job. They like it even better when the machine offers fast cycle times, deep digging capabilities and high production, such as the new PC130-11, according to Andrew Earing, Komatsu Senior Product Manager.

"Mobility is a real asset with the PC130-11," said Earing of the 28,660-pound excavator that digs



Earthmoving companies of all sizes appreciate a basic digging machine that's easily transported from job to job. They like it even better when the machine offers fast cycle times, deep digging capabilities and high production, such as the new 28,660-pound PC130-11.

more than 17 feet deep. "When a contractor finishes one job, they can quickly load this excavator and be on the way to the next site. When they get there, it's a matter of minutes to unload and start digging. That increases production time."

He added that the PC130-11 is built with steel castings in the boom foot, boom nose and arm tip for exceptional durability. It is available with plus-one piping as an option, so you can run attachments for a wide range of applications and potentially boost profits.

The much larger 200-ton class PC2000-11 mining excavator is built for high-volume digging and can move up to 17.9 cubic yards of material in a single scoop.

"Customers told us they want better multifunction performance and productivity than the previous model and the competition," said Joe Sollitt, Komatsu Senior Product Manager, Mining Support Equipment. "With more available engine horsepower, we were able to increase pump absorption and re-engineer the engine-pump-control logic. In combination with a more efficient hydraulic system, the PC2000-11 can load out more material per shift."

Sollitt emphasized that Komatsu designed the 1,046-horsepower excavator for greater reliability and durability with thicker, stronger boom plates and castings that are highly resistant to bending and torsional stress. The center and track frame were strengthened, and it has larger diameter carrier rollers for extended service life. He added that a ground-level service center is standard, and the power module that service personnel grew to love was maintained.

Loaders prove more productive

Komatsu incorporated next-generation technology with considerable benefits to make its new WA475-10 wheel loader an ideal fit for quarry, waste, infrastructure, forestry and non-residential applications. Feedback received in the field guided improvements, which made it 30% more fuel efficient than its predecessor, leading to savings that can potentially make you more competitive and profitable.



Intelligent Machine Control 2.0 D51i-24 and D61i-24 dozers feature patent-pending proactive dozing control that automatically cuts and strips from existing terrain like an experienced operator – 100% of the time, from grass to grade. The dozers also have improved automation with patent-pending lift layer control, tilt steering control and quick surface creation.

Jon Jennings, Komatsu Product Marketing Manager

When experienced operators retire, they take with them their knowledge about how to move dirt as productively and efficiently as possible. That could potentially slow down your operations. What if it could be faster for your new or less-experienced operators to become as productive as those who left? It's possible.

One of the key attributes of Komatsu's new intelligent Machine Control (iMC) 2.0 dozers is patent-pending proactive dozing control that automatically cuts and strips from existing terrain like an experienced operator – 100% of the time, from grass to grade. This technology increased production by as much as 60% compared to the first-generation dozers, according to Komatsu Product Marketing Manager Jon Jennings.

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

The system provides the real-time position of the dozers to the job site to create a highly accurate elevation for it to drive the blade to the precise grade needed. During operation, the dozers measure the terrain as they track and use the track-level data to plan the next pass.

New automation, satellite systems

Improved automation is also part of iMC 2.0, including patent-pending lift layer control, which automatically spreads

fill from existing terrain with the press of a button. Much like proactive dozing control, this feature tracks the terrain and uses the data to plan the next pass, which doubles production and achieves consistent layers for quality compaction.

Additional automation features include tilt steering control that automatically tilts the blade to maintain straight travel during rough dozing, reducing the need for operator steering input by 80%. Quick surface creation produces a temporary design surface with one press of a button without the need for a complex 3D model.

Other upgrades include a second GPS antenna, which Jennings noted will aid in side-slope work. The new machines also gain access to three additional satellite systems.

"The biggest advantage is greater overall accuracy," he said. "More satellite systems increase production through the ability to use GPS in places where it may have been a big challenge before, such as at the edge of a wooded area or close to buildings on an urban project."

In addition to the new D51i-24 and D61i-24 models recently touted by *Construction Equipment* magazine as top products, the D39i-24 and the highly anticipated D71i-24 that was introduced last year at CONEXPO will soon be available.

"We had numerous orders for these machines before they were available because customers realized how much the new dozers will increase their production," said Jennings. "We encourage anyone looking for the same in their business to contact their distributor for a demo, more information or to add one to their fleet."

New features improve cycle time

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The WA475-10 has 18% greater horsepower but achieves increased fuel efficiency with its Komatsu hydraulic mechanical transmission. Contributing to better economy and productivity is the independent work equipment control that simplifies operation by separating the accelerator pedal from the speed of the work equipment.

To further boost productivity, the boom lift force was bolstered by 20% and breakout force increased by 8%. A new bucket design improves pile penetration and better retains material in load-and-carry applications.

"Additional conversations with equipment users also led to an improved operating environment that includes an updated cab with floor-to-ceiling glass, ergonomically designed switch layouts and a fully adjustable five-axis console for enhanced operator comfort," noted Bruce Boebel, Komatsu Senior Product Manager.

The WA800-8 wheel loader also has a new bucket shape that incorporates an increased radius and floor inclination to make it easier to fill and retain material. The spill guard

Komatsu incorporated next-generation technology with considerable benefits to make its new WA475-10 wheel loader an ideal fit for quarry, waste, infrastructure, forestry and non-residential applications. It's 30% more fuel efficient, has 18% greater horsepower, 20% more boom lift force and a breakout force increase of 8% compared to its predecessor model.



The new D155CX-8 pipelayer has an oval design nine-roller track that features 12 feet, 10 inches of track on ground for stability. With a 170,000-pound lift capacity, the D155CX-8 can handle up to 36-inch steel pipe. It offers a K170 pipelayer package with a standard 24-foot boom length.



was adjusted to give operators improved visibility to the pile, and sweeper wings on either side protect the front tires. In larger quarry, aggregate and mining applications, the 254,700-pound machine is an ideal match for 60- to 100-ton trucks.

The loader features new, key automatic and semi-automatic systems that assist operators and contribute to productivity and efficiency. The three features can be used together or separately to automate the work phases when V-cycle loading, one of which is automatic dig to optimize bucket load. This actuates the bucket and lifting operations by sensing the pressure applied to the work equipment.

A semi-automatic approach raises the boom automatically when reversing out of the pile. The lift arms elevate until reaching the upper setting of the boom positioner, allowing the operator to focus on the travel path of the loader.

Semi-automatic dump raises the lift arms automatically and dumps the bucket with the push of a button. After dumping, it levels the bucket and returns the lift arms to the lower boom positioner setting; however, the lift arms will not lower until the bucket has cleared the truck.

"We also responded to customer requests by introducing a modulation clutch for optimal tractive effort and throttle lock that improves cycle times by maintaining high work-equipment performance and saving fuel with auto deceleration," said Komatsu Product Marketing Manager Robert Hussey.

New pipelayer designed for exceptional stability

Komatsu worked closely with pipeline companies to develop its new D155CX-8 pipelayer that has an oval design nine-roller track with 12 feet, 10 inches of track on ground for stability. It also features 32-inch track shoes.

Heavy final drive components are close to the ground, which lowers the center of gravity. The rollers are fixed suspension and don't oscillate like a dozer for greater ground contact.

With a 170,000-pound lift capacity, the D155CX-8 can handle up to 36-inch steel pipe. It has a K170 pipelayer package with a standard 24-foot boom length. An optional 28-foot boom is available.

"It's essential that we get feedback from the contractors who will ultimately use a pipelayer like our new D155CX-8," said Chuck Murawski, Product Manager, Dozers. "One item they recommended was a larger steering motor, so we incorporated one into the machine to give it better displacement and more torque." ■

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.



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		
D71 PX-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

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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," notes Jon Jennings, Komatsu Product Marketing Manager.



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CG Jones, LLC Construction looks to technology to help take projects from concept to finish, on time and on budget



Trey Alexander, Co-owner



Brad Williams, Co-owner

In 2013, civil engineers Trey Alexander and Brad Williams started a business to meet the overwhelming demand for project design solutions in their area. Their stated goal was to offer quality civil engineering and surveying services as well as common-sense solutions.

Through the next five years, clients expressed the need for new site and civil general contractors, so in 2018, Alexander and Williams formed CG Jones, LLC Construction to provide innovative solutions to complicated problems. It has since grown to 20 employees.

"We'll take on any public or private civil construction project, but our forte is design-build," expressed Alexander. "By partnering with the engineering side of our company, we're able to take our clients' projects from concept to finish. We've built a reputation on ensuring that whatever our clients need, we'll finish on time and on budget."

Alexander said a major factor in their ability to do that is due to the machines the company runs. Because of his experience through a former employer, he knew industry-leading technology would play an integral role at CG Jones Construction. That's why the firm utilizes Komatsu dozers and excavators with integrated intelligent Machine Control (iMC) GPS systems. Its fleet includes D51PXi-24 and D61PXi-24 dozers, as well as PC210LCi-11 and PC290LCi-11 excavators.

"The first piece of equipment I bought was an intelligent machine because the entire precept of our business is built on using leading-edge technology," explained Alexander. "The iMC capabilities make hitting grade easier for our operators and also make them more productive. I expected we would be more efficient with an iMC machine, and that's proven true."

Operators prefer iMC machines

During the past few years, Alexander and Williams have acquired other companies. A crew from one of them was accustomed to operating a competitive brand of equipment. They now prefer Komatsu, according to Alexander.

"They realized they're much more productive in the Komatsu equipment because they know where they are (in relation to target elevation) at all times," Alexander said. "They know what a job site is supposed to look like when it's done, and they're able to achieve that more efficiently with the iMC equipment. Every operator I've put in the seat of an iMC machine, no matter how much experience they have, prefers them."

A CG Jones Construction operator grades with a Komatsu D51PXi-24 dozer. "Our operators have realized they're much more productive in the Komatsu equipment because they know where they are (in relation to target elevation) at all times," said Co-owner Trey Alexander. "They know what a job site is supposed to look like when it's done, and they're able to achieve that more efficiently with the iMC equipment. Every operator I've put in the seat of an iMC machine, no matter how much experience they have, prefers them."



New iMC 2.0 excavator delivers greater accuracy, comfort and versatility for increased productivity

What if you could dig basements, footings or utility trenches without worrying about overexcavating? How about using the same machine to accurately excavate slopes and finish grade ponds with limited movement? What if you could do it all with little or no need for a finish dozer, stakes or surveying?

According to Komatsu Senior Product Manager Andrew Earing, Komatsu's new intelligent Machine Control (iMC) 2.0 PC210LCi-11 excavator with integrated GPS lets you do all of those tasks and more. Earing noted that testing showed the latest-generation machine improves production by up to 33% and efficiency as much as 63% compared to conventional excavation and grading methods.

"The new iMC 2.0 PC210LCi-11 has added additional satellite systems improving satellite coverage and ability to work in more challenging areas such as near woods or on urban job sites," said Earing.

Bucket angle hold, new monitor

With iMC 2.0 comes bucket angle hold. When activated, it automatically holds the bucket to the design surface during arm-in operation. "It's less fatiguing for operators, which makes them more productive throughout a shift," said Earing. "It also produces a better finish-grade surface, so there are multiple benefits."

Additional new features include a smaller, slimmer 10.4-inch monitor with more memory and faster processing speed. It has pinch-to-zoom and swipe functionality similar to a smartphone or tablet.

"Customers told us they wanted a more streamlined monitor," said Earing. "This is intuitive and easier to use, so there's decreased downtime navigating through it and more time producing."

Options up versatility

Earing added that users can boost efficiency further with optional features such as automatic tilt bucket control. Using an add-on inertial measuring unit, it allows machine control to manage the angle movement of a tilt bucket to dig and grade surfaces that are not perpendicular to the machine. Users provide their choice of bucket.

KOMATSU

Continued . . .



Andrew Earing, Komatsu Senior Product Manager

A new feature of the latest-generation PC210LCi-11 intelligent Machine Control 2.0 excavator includes bucket angle hold. When activated, it automatically holds the bucket to the design surface during arm-in operation. "It's less fatiguing for operators, which makes them more productive throughout a shift," said Komatsu Senior Product Manager Andrew Earing. "It also produces a better finish-grade surface, so there are multiple benefits."

'Useful on projects with varying contours'

... continued



"While excavating a deep trench, you can slope the sides back without moving the excavator," explained Earing. "It's also useful on projects with varying contours, such as swales and ponds. Operators can sit in a fixed position and shape those transitions. Less movement saves time and wear and tear on the machine and the operator. We believe most contractors will want to take advantage of this.

"Another feature is optional pressure and flow control for plus-one piping," he continued. "This lets you fine-tune hydraulic pressure and flow on attachments such as hammers, vibratory compactors, processors and more for improved control and versatility."

Semi-automatic functions

The iMC 2.0 PC210LCi-11 maintains the main functions of the first-generation iMC excavators, including the ability to switch from manual to semi-automatic modes.

Among a host of standout features is an exclusive control function that goes beyond simple guidance to semi-automatically limit overexcavation and trace a target surface. Once the target elevation is reached, no matter how hard an operator tries to move the joystick to lower the boom, the excavator won't allow it. This reduces wasted time and the need for expensive fill materials.

Productivity and efficiency features include:

- In semi-automatic mode the boom adjusts the bucket height to trace the target surface and minimizes the chance of digging too deep.
- Auto stop control halts the working equipment when the bucket edge reaches the design surface to reduce design surface damage.
- Minimum distance control regulates the bucket by automatically selecting the point on the bucket closest to the target surface.
- The facing angle compass shows the operator the facing angle in relation to the target surface, allowing the bucket edge to be accurately positioned square to the target surface.

"Existing and new technology in the iMC 2.0 excavators has proven to increase production and efficiency while reducing costs," said Earing. "We encourage anyone looking for those attributes to contact their distributor and test one for themselves." ■

The new intelligent Machine Control (iMC) 2.0 PC210LCi-11 maintains the semi-automatic features of the first-generation iMC excavators, including auto stop control, minimum distance control and a facing angle compass to limit overexcavation.

Project Points

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."



Komatsu & You

Tracey Drechsel says new structure delivers better service as regional teams work together to be your one point of contact



This is one of a series of articles based on interviews with key people at Komatsu discussing the company's commitment to its customers in the construction and mining industries – and their visions for the future.

Tracey Drechsel, Komatsu Business Director, East Region

Tracey Drechsel's career with Komatsu began right out of college. The 1998 Austin Peay State University graduate started with Komatsu Financial and held various roles in operations, sales and marketing. She spent six years as the Finance Sales Manager, working at Komatsu's Newberry, S.C., plant before returning to the Chicago area. Along the way, she earned a master's degree from North Central College.

"As a kid, I never thought construction equipment would be my life. I wanted to be a marine biologist and swim with dolphins," shared Drechsel. "The gig with Flipper didn't work out, so here I am helping people dig holes and push dirt.

"The best part of the industry, and personally, the most rewarding, is the human interaction," she added. "I get to meet people from different backgrounds and find ways to make a difference in their lives. I have been very fortunate to wake up every day for 22 years and enjoy who I work for and who I work with; and I don't take that for granted."

In 2017, Drechsel was promoted to Director/Sales Marketing for the North Region of Komatsu's construction equipment division. In late 2020, she was named Business Director, East Region, which includes states from Michigan to Maine and down to Florida.

A two-sport athlete in college, basketball and softball, she enjoys staying active today. Drechsel likes to run, workout, boat, walk her dogs and travel. She also may be the only person in Chicago who cheers for both the Cubs and White Sox and dislikes deep-dish pizza. QUESTION: Komatsu has made some structural changes with personnel taking on new roles, including those of regional business directors. What's the customer benefit?

ANSWER: As always, our focus is on helping customers find solutions by utilizing our dealer network, products, technology and, most importantly, our people who care at all levels. Speed to market and technical resolution is something we really focused on improving with this new structure. We empowered our people to make more decisions in the field to improve our response times to customers and distributors.

With this new concept, all business units within a region – parts, sales, finance, warranty, etc. – are now part of the same channel, whereas before it was more individualized. We've created small, focused regional teams with diverse skills to address the entire life cycle of customer needs. We are packaging our solutions as "Komatsu" and are aligned to act in the best interest of the customer.

QUESTION: How are members of each regional team working together?

ANSWER: Internally, we are leveraging each other's skill sets in more proactive ways to add value to our individual knowledge base as well as to our customer interactions. In the past, our collaboration had a tendency to be more reactive.

Now, we're meeting and talking on a consistent basis about what's happening within our region. Individuals and groups can bounce ideas off of each other; and we can discuss best practices in customer satisfaction as we share success stories and customer feedback.

Ultimately, it's a great opportunity to better serve our markets and moves us toward our goal of creating one point of contact that our customer value chain can trust and rely on.

QUESTION: Last year was certainly different from many perspectives. How did events



Komatsu's focus is on helping customers find solutions by utilizing its dealer network, products, technology and, most importantly, its people who care at all levels said Tracey Drechsel, Komatsu Business Director, East Region.

affect the construction markets and what do you see looking forward?

ANSWER: COVID-19 accelerated the acknowledgment and need for digital solutions in our industry. The pandemic provided a real-life example of the role technologies, such as online meetings and Smart Construction (the digital transformation of the job site), can play in keeping customers' businesses and projects on track. Those customers who were hesitant or skeptical about adopting GPS systems, intelligent machines and Smart Construction, now see the value in investing in those solutions.

Many are also utilizing our fleet management site, My Komatsu, more often. It enables them to remotely track production, idle time, fuel usage and other data with a tablet, smartphone or desktop computer. It allows them to reference manuals for their fleet, find the needed parts and purchase them quickly and easily. Again, it's actionable information they get without the need to be present at the job site. The complimentary service can save time and improve practices.



The use of Smart Construction solutions and My Komatsu for fleet management increased during the past year. "COVID-19 accelerated the acknowledgment and need for digital solutions in our industry," said Tracey Drechsel, Komatsu Business Director, East Region. "The pandemic provided a real-life example of the role technologies, such as online meetings and Smart Construction (the digital transformation of the job site), can play in keeping customers' businesses and projects on track."

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Job Site Solutions

Thinking about a breaker? Here are some considerations to help you decide what's right for your operation

Hydraulic breakers for excavators were introduced a little more than 50 years ago. They soon gained popularity because they added versatility – and greater profitability – to what was previously a one-dimensional machine. In addition to digging, operators could now hammer rock, break up pavement and perform demolition.

During the past five-plus decades, the number of breakers introduced to the marketplace continued to grow. There are numerous models and types today. Choosing the right one takes careful consideration to ensure optimal production and efficiency.

"There are several variables that should be taken into account when choosing a breaker; it's definitely not a one-size-fits-all deal," said Eric Chudzik, District Manager of the Komatsu North America Attachments Division. "The first consideration is looking at what model of machines you have available. Next, you have to look for a breaker size that will tie into the type of material you want to break – is it hard rock, concrete or both? What is the application? What type of production do you want to achieve? Purchase price should also be a factor in choosing a breaker."

Another major consideration is purchasing versus renting. How often a breaker will be used and where you work play key roles in

determining which is the right choice for you. Areas with rocky soils that have local ordinances prohibiting blasting would be prime locations for opting to purchase a breaker.

"If you encounter rock on a daily, or near-daily, basis, buying makes perfect sense," said Aaron Scarfia, Regional Manager of the Komatsu North America Attachments Division. "If your projects are in areas where you only run into rock occasionally or not at all, then rental is the way to go. However, you may also do a lot of demolition. In that case, making the investment in a purchase could be justified."

> Chudzik added that the type of demolition you perform should factor into which breaker you need. "Bridge decks and abutments, roadways, curb and gutter,

> > Continued . . .

Aaron Scarfia, Regional Manager, Komatsu North America Attachments Division



Eric Chudzik, District Manager, Komatsu North America Attachments Division

Komatsu recently introduced its initial line of branded breakers. The product offering includes the JTHB-G (Gas) series dual-energy type and the JMHB-H (Hydraulic) series with eight models in each series. All are designed and tested to fit Komatsu excavators from the PC78US-11 to the PC490LC-11 models, and their high-percussion efficiency and unique variable energy technology provide high production in multiple applications.

Breakers designed and tested to fit Komatsu excavators

... continued

and heavy foundations are all different. If you choose one for curb and gutter and try to use it for heavy foundations, the production is likely to be disappointing. Think about how much you do in this segment, what you're breaking and match the attachment to the machine and tasks."

To help you choose the right breaker and be most productive with it, Komatsu has a dedicated attachments sales and service team to support both you and your distributor. The specialists are factory trained and experienced in installation, operation, service and rebuilds, noted Scarfia.

New breakers that match

Komatsu recently introduced its initial line of branded breakers. The product offering includes the JTHB-G (Gas) series dual-energy type and the JMHB-H (Hydraulic) series with eight models in each series. All are designed and tested to fit Komatsu excavators from the PC78US-11 to the PC490LC-11 models. Their high-percussion efficiency and unique variable energy technology provide high production in multiple applications, said Scarfia.

"Komatsu breakers are specifically paired to a machine size. The model numbers of the breakers and the machines match, so that you can easily identify the right attachment for your excavator," explained Scarfia. "They are approved for each model to use in breaker mode – which is single-direction hydraulics with hydraulic fluid traveling from the control valve



Komatsu built in several features and benefits to protect the breaker, carrier and operator – including an accumulator that recycles high-pressure oil internally and reduces surges back to the carrier. This allows the creation of more energy with lower flow and reduces hydraulic pressure spikes. The breakers also have blank fire protection and automatic pressure regulation.

to the attachment and back to the source. That makes them very efficient for your machine."

Komatsu built in several features and benefits to protect the breaker, carrier and operator. "Komatsu breakers have an accumulator that recycles high-pressure oil internally, reducing hydraulic surges returning back to the carrier," Chudzik said, noting that some other manufacturers do not include this feature. "That allows us to create more energy with a lower flow. It also reduces hydraulic pressure spikes leaving the breaker, protecting the hydraulic system of the carrier."

Blank fire protection reduces firing when the tool is not in contact with material being broken. This system reduces misfires, increasing the longevity of the hammer while allowing the operator to concentrate on the job.

"Automatic pressure regulation keeps the breaker operating at a constant operating pressure to ensure consistent energy and peak performance," said Chudzik. "Also included are suspensions that reduce vibration going back to the carrier and operator; fully enclosed 'soundproof' cradles and housing that reduce noise; and the breaker packages feature automatic greasing for ease of maintenance."

Rebuild periodically for longer life

How you use the breaker and maintain it factor into its useful life, according to Chudzik. He's seen breakers that needed to be replaced within two years due to neglect and some that have lasted more than two decades thanks to diligent servicing.

"The user is a key component, not only in production but also in longevity," said Chudzik. "They should be well-trained in how to avoid blank firing and how not to use the breaker for prying as that will prematurely wear out the bushings and break working tools. If you treat it right with proper maintenance and rebuilds when required, it may last for 10, 20 years or longer."

Scarfia noted that Komatsu has a rebuild program. "For a flat rate, we provide the labor and genuine parts to repair the breakers. This service is offered through our distributors and our dedicated breaker repair center with factory trained technicians. If you adhere to the recommended maintenance schedule, an extended warranty is possible. New breakers come with a standard 12-month warranty.

"If you think a breaker is the right tool to add versatility to your business or if you want to check out our new line, we encourage you to contact your local Komatsu distributor for more information or to set up a demonstration," Scarfia added.



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Faster Plan Updates

New solution saves time, expense by delivering design changes directly to machines, eliminating travel to job sites



Bryce Satterly, Komatsu Smart Construction Solutions Manager

If you manage construction projects, you know design changes come with the territory. You also realize that delays in updating plans could adversely affect production and your profits.

"It's critical to communicate new information as quickly as possible," stated Bryce Satterly, Komatsu Smart Construction Solutions Manager. "Technology is making that virtually instantaneous. Our Smart Construction Remote solution is a good example. It allows users to send design data to machines in the field and remotely support operators without traveling to the job site, reducing costly downtime."

Managers can log into target machines, pinpoint their location, view the machines' monitors and upload or download files at anytime from anywhere, according to Satterly. He added that updates can be transferred to multiple machines with one click.

Smart Construction Remote's software is compatible with Komatsu intelligent Machine Control dozers and excavators as well as with select aftermarket grade control systems. It's one of several Smart Construction solutions created to help you more efficiently plan, schedule, manage, streamline costs and optimize processes remotely.

Distant troubleshooting capabilities

In addition to project design file updates, Smart Construction Remote provides distanced troubleshooting capabilities. Offsite personnel can view what operators are seeing in the field, and even operate the machine control monitor, through their connected devices.

"The operator, survey manager and others can communicate remotely in real time, and resolve issues faster," said Satterly. "Not having to make that trip to either update a machine or troubleshoot it saves time and reduces fuel costs and emissions associated with driving to the site. Those are added benefits."





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Pipelayer designed with input from customers delivers exceptional stability on energy-sector projects



Chuck Murawski, Komatsu Product Manager, Dozers

Equipment performance and stability are critical to successfully lay pipe in the ground across miles and miles of varying terrain. Komatsu worked closely with crews from pipeline companies to develop a new pipelayer to meet those needs, according to Chuck Murawski, Komatsu Product Manager, Dozers.

"It's essential to get feedback from the contractors who will ultimately use a pipelayer, like our new D155CX-8," said Murawski. "They suggested a larger steering motor, so we incorporated one into the machine and that gives it better displacement and more steering torque."

Quick Specs on Komatsu's D155CX-8 Pipelayer				
Model D155CX-8	Net Horsepower 354 hp	Operating Weight 120,970 lb*	Lift Capacity 170,000 lb**	Industries Pipeline, Energy
*With pipelayer package **Maximum lift at tipping point			point	

The new D155CX-8 pipelayer was designed with pipeline contractors' input and includes a long track on ground and a wider track gauge for stability. It can handle up to 36-inch steel pipe, making it ideal for gas and oil projects, according to Chuck Murawski, Komatsu Product Manager, Dozers.

Murawski added that the D155CX-8's stability comes from an oval design, nine-roller undercarriage that has 12 feet, 10 inches of track on ground, making it Komatsu's largest. The pipelayer has a track gauge that is approximately 10 inches wider than on the standard D155AX-8 dozer and it features 32-inch track shoes.

Large footprint, better ground contact

"The heavy, final-drive components are close to the ground, which lowers the center of gravity and improves stability," Murawski explained. "The rollers are fixed suspension and don't oscillate like with a dozer. That improves ground contact. The pipelayer has a big footprint and was designed to handle heavy loads."

With a 170,000-pound lift capacity, Murawski said the D155CX-8 can move steel pipe up to 36-inches in diameter. It features a pipelayer package with a standard 24-foot boom length. An optional 28-foot boom is available.

"It's ideal for gas and oil projects in the energy sector and, after conversations at CONEXPO last year, we believe there may be other application possibilities to explore," Murawski said.

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 "anti-freeze" 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/anti-freeze 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.

Side Tracks

On the light side



"I get that you want to be a heavy equipment operator like dad, but stop playing with your food."



"It's like a Kindle, but you never have to recharge it."

Brain Teasers

Unscramble the letters to reveal some common construction-related words. Answers can be found in the online edition of the magazine at www.DMIDifference.com

- 1. NSIOREO _____
- 2. ELPOS _____
- 3. OMBO _____
- 4. IDARN _____
- 5. BLTO _____



Did you know?

- Benjamin Franklin attended school for only two years.
- Superman made his comic book debut in June 1938.
- The largemouth bass is the state fish of Georgia, Indiana and Mississippi.
- In 1899, the Eastman Company produced the first hand-held roll-film camera.
- The Revolutionary War was the first war the United States took part in that was partially financed with lottery dollars.
- Professional golfers have the use of just 14 clubs during a round.
- The island nation, Madagascar, produces two-thirds of the world's vanilla.
- Gatorade got its name from the University of Florida football team the Gators after the team tested it.
- The Tenth Amendment (1791) was included in the Bill of Rights to further define the balance of power between the federal government and the states.
- The diameter of the sun is nearly 109 times greater than that of Earth.

Komatsu offers a wide range of genuine batteries proven to perform and last in tough conditions

When you turn the key on a machine or a vehicle, you expect it to start. Several systems play a role in whether this does or does not happen, but one of the most important factors is the battery.

"It is essential to use one that's proven to perform under all circumstances," emphasized Dimitra Balafoutis, Komatsu Product Manager, Consumables. "We recommend using genuine Komatsu batteries in our machines because they are manufactured to stand up to challenging conditions such as extreme temperatures and high vibrations, which are common on our customers' job sites. They were designed and built to ensure durability and reduce downtime."

Balafoutis noted that Komatsu genuine batteries undergo more than 300 quality-control checks throughout the manufacturing process. With proper maintenance, they typically last three years or longer. Komatsu supports all batteries with its standard parts warranty, which is one or two years depending on part number.

"A wide range of 6- and 12-volt sizes are available," said Balafoutis. "Our distributors stock the most common ones, so they are easily available. If a less common type is needed, you can order it through your distributor or on the My Komatsu web application (www.komatsuamerica.com/ mykomatsu) and have it shipped to the distributor or your location."

Power your vehicles too

With Komatsu's all-makes program, customers can also order OEM batteries for their Komatsu equipment and its competitors through their local Komatsu branch, explained Balafoutis. This includes construction, agriculture, mining, forestry and forklift products.

"Those OEM options are available if customers want them; however, Komatsu genuine batteries work in most brands of machinery," Balafoutis pointed out. "Distributors can assist customers in determining the right fit for their needs."

She noted that Komatsu genuine batteries are ideal for cars, pickups or other vehicles.

"If you think they are great in your equipment, consider them for other uses," said Balafoutis. "They power class 1 through class 8 on-highway trucks, boats, recreation vehicles, power sports products such as four-wheelers, golf carts and more. Your Komatsu distributor can be a one-stop shop for all of your battery needs. They will even install them if you like." ■



Dimitra Balafoutis, Komatsu Product Manager, Consumables





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2019 Komatsu WA320-8, Stock #WL 1863

\$159,500



2017 Komatsu D37PX-24, Stock #CD 609

\$125,000

Year	Mfgr./Model	S/N	Stock #	Hours	Price
W	heel Loaders				
2018	3 KOMATSU WA200-8	85032	WL 2210	2,810	\$125,000
2019	9 KOMATSU WA320-8	A38908	WL 1863	965	\$159,500
2019	9 KOMATSU WA380-8	A75054	WL 1874	940	\$234,500

	1			
Crawler Dozers				
2017 KOMATSU D37P <mark>X-24</mark>	85031	CD 609	497	\$125,000
2016 KOMATSU D61PX-24	40154	CD 681	2,928	\$185,000
2015 KOMATSU D61PXi-23	<mark>31</mark> 071	CD 704	3,727	\$165,000

Crawler Excavators				
2016 KOMATSU PC138USLC-11	50533	HE 1057	2,060	\$138,500
2017 KOMATSU PC170LC-11	35213	HE 1224	2,120	\$129,700
2017 KOMAT <mark>SU PC240L</mark> C-11	95169	HE 1203	2,808	\$207,500

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Helping customers expand technology usage is Director of Technical Solutions Nick Freiborg's goal

Nick Freiborg is still adjusting to his new role as Director of Technical Solutions for Diesel Machinery, Inc. (DMI), but he came into the position knowing what he and the company want to accomplish.

"The goal is to expand our customers' use of technology because it's proven to increase productivity and efficiency. If you are not already using it, you are way behind the curve," stated Freiborg, who started with DMI in early February. "Today, it seems like the term 'technology' is generally geared toward GPS systems. Those are great tools, but there are a lot of other technology solutions with significant benefits, such as drones to map sites and give an accurate picture of cut/fill and production, the ability to remotely send plan updates to machines, and much more. We can help contractors get started or expand on what they are already doing."

Freiborg noted that GPS is most commonly thought of because it's been around the longest and is most widely used. "The benefits of GPS are obvious right away: less staking and surveying, getting to grade faster with virtually no overcutting and reduced fuel usage, just to name a few," said Freiborg. "Add Komatsu's intelligent Machine Control and the savings are even greater because there are no masts or cable to put and take down or get damaged.

"That's just the dirt side of the equation," he added. "Now, there is intelligence for paving and compaction. For instance, mapping software shows where asphalt rollers have been, how many times they went over an area and what the temperature of the material was. Operators know when they reach target compaction faster, without having to stop for testing."

Build on customer support foundation

Freiborg knows GPS systems well because he has spent a good portion of his working life dealing with them. After earning an associate degree in civil engineering technology from Southeast Technical Institute in Sioux Falls, S.D., the central Minnesota native worked for a contractor as its GPS technician.

"Eventually, it led me to an opportunity with a local Topcon dealer. I worked there for nine years in sales and service, helping contractors implement aftermarket systems. That included installing some systems on equipment that DMI carries, so I became very familiar with the company.

"DMI is well-known for its outstanding service, and I am happy to be part of their team," added Freiborg. "I want to expand the number of technology solutions experts and training opportunities we have, so we can better support customers in implementing technology. That includes the use of telematics systems that give you the ability to track machines and use the wealth of data they provide to improve practices, as well as order parts online. These are great fleet management tools that can lead to greater production, efficiency, time savings and profits."

Freiborg and his wife, LaDonna, have three sons and enjoy spending time together, especially boating. He also does a "fair amount of bird hunting." ■

Nick Freiborg, Director of Technical Solutions, wants to help customers expand their use of technology because he says it's proven to increase productivity and efficiency. "If you are not already using it, you are way behind the curve," stated Freiborg. "We can help contractors get started or expand on what they are already doing."



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