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A MESSAGE FROM THE CHAIRMAN & PRESIDENT



Robert S. Benard



Paula F. Benard

Komatsu adds value while meeting regulations

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Dear Valued Customer:

When new emissions regulations were introduced several years ago, Komatsu decided to provide more for its customers than simply machines that lowered emissions. Yes, it met the standards to reduce NO_X and soot, but it went a step further by producing machines that offer greater efficiency, while maintaining or improving production.

Komatsu has already introduced a significant number of new products this year, and we anticipate even more throughout the year. Some are Tier 4 Final and some are intelligent Machine Control products. Komatsu built all of them on the solid foundation of the Tier 1 machines it introduced 20 years ago. Several of these new machines are featured in this issue of your Wood Works magazine, including the PC210LCi-10, the world's first intelligent Machine Control excavator.

Komatsu's value goes far beyond the machines themselves. A decade ago, it introduced its first version of KOMTRAX, the remote machine-monitoring system that allows users to track their equipment. Throughout the years, Komatsu bolstered the information available in an effort to give customers additional vital statistics. For more information on KOMTRAX, read the featured article and see what customers have to say about it.

Komatsu added additional value once again by providing complimentary scheduled maintenance on its Tier 4 and iMC machines through the Komatsu CARE program. For the first three years or 2,000 hours, our technicians perform the services, and at the same time, conduct a 50-point inspection at no charge.

You expect maximum uptime. Komatsu CARE, KOMTRAX and what we believe are the best construction, forestry, specialty and mining machines in the industry, help meet your expectations. We'd love to show you Komatsu's value, as well as how the other outstanding manufacturing lines we carry can meet your unique and specific needs.

If there's anything we can do for you, please call or stop by one of our branch locations.

Sincerely,

C.N. WOOD COMPANY CO., INC.

Robert S. Benard

Chairman

Paula F. Benard

President



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APPLIED TECHNOLOGY

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THE PEOPLE INSIDE

If it involves parts – or anything else – Parts Department/ Administrative Support professional Jessica Lanigan is ready to lend a hand.

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COLONIAL CONTRACTING & EXCAVATING

On-the-job learning equals success for Westminster, Mass., site-work contractor



Randall Gifford, President

In the construction industry there are countless stories of successful individuals who learned their craft on the job. Count Randall Gifford among them, although he did give college a try.

"I did well in school, but I honestly hated it," said Gifford. "I'm not in any way knocking education. In fact, I encourage it and have put considerable resources into training for my staff. My son Rick is in school for engineering right now, which is wonderful. I just wanted to work, so one day I decided I'd had enough of school and dropped out."

Gifford's trade was cement flatwork. He brought that to the table when he teamed up with some partners to form Colonial Contracting & Excavating in 1992. Today, he's President and sole Owner of the Westminster, Mass.,-based company. When he's not in school, Rick helps out.

"In our early days, we focused on residential work, such as house pads and driveways," recalled Gifford. "During the years, we transitioned toward commercial jobs, and now 90 percent of our projects are construction on electrical substations that involve a combination of earthwork and cement flatwork."

Complex projects

Colonial Contracting & Excavating mainly stays in Massachusetts, often on tough projects with large scopes of work. It offers full site development

A Colonial Contracting & Excavating operator digs into a stockpile of dirt with a Komatsu WA200-7 wheel loader.



that can include clearing and leveling, utility installation, demolition, erosion control, irrigation and drainage, surveying, site layout and more.

"It seems like the more complex and challenging the project, the more I like it," said Gifford. "That might be why we've gravitated toward the electrical substations, which sometimes seem like putting together a giant puzzle. As an example, the plans for the Shrewsbury Substation showed a few miles of cables that had to be run in a 1-acre area. We had to calculate and engineer how to most effectively do that. During the past few years, we've gained the experience and confidence to take on and deliver projects like that. The skill, ingenuity and fine-tuning involved in making it all come together is enjoyable to me."

In addition to substation work, Colonial Contracting & Excavating recently provided site work for a new Massachusetts State Police barracks. It took out old pavement, graded and installed utilities, including a water line that had to be run through an existing building.

"It was either that, route it way out and around or drill down to existing water, which is about 700 feet deep," explained Gifford. "The latter two options were cost prohibitive, so I figured saw cutting and excavating in the building to hook onto a water line was the better choice. Fortunately, it was also a state building, so getting permission wasn't an issue. It worked fine and saved a lot of money."

Colonial Contracting & Excavating is also working on an electrical substation project in Wakefield. The project is similar to most of the company's electrical substation projects in the sense that the site is tight, there are a lot of pieces to the puzzle and the foundations for the transformer towers are deep.

"As always, we'll do whatever is necessary to get it done on time," said Gifford. "That's our calling card and why customers continue to ask us to work



Colonial Contracting & Excavating President Randall Gifford (left) works with C.N. Wood Sales Representative Bill Perla to acquire Komatsu equipment. "I know he's as invested in the success of my business as I am, and I believe the same holds true when it comes to C.N. Wood," said Gifford. "Bill and C.N. Wood have done an outstanding job of ensuring I have the right equipment for my needs."

with them. Fortunately, I have an excellent staff of experienced people with a solid work ethic who are willing to go the extra mile for customers and are conscientious about working safely, which is critical in all types of work, but especially in what we do. I have to give them a lot of credit for the company's success."

Gifford is helped by a staff of about 10 people, including Office Manager Tina Lemoine, who is an electrical engineer and does estimating, and Operator Nick Kolodka, who takes care of in-house surveys and GPS.

New Komatsus part of updating fleet

Gifford admits the early days were a struggle for Colonial Contracting & Excavating and getting equipment was a challenge. "Few people will take a chance on a new business, especially under the economic conditions at the time. A partner and I met with Bill Perla, who's now my Sales Rep at C.N. Wood, and he helped us get credit and a machine. We've been friends ever since. I know he's as invested in the success of my business as I am, and I believe the same holds true when it comes to C.N. Wood."

Gifford recently worked with C.N. Wood and Perla to purchase a Tier 4 Final Komatsu PC290LC-11 hydraulic excavator, multiple buckets and a Tier 4 Interim WA200-7 wheel loader with a bucket and forks. He also uses an older Komatsu PC300 excavator with a long stick and a big bucket.

"During the past few years, I've been in the processes of updating and adding to my fleet, and Bill and C.N. Wood have done an outstanding job of ensuring I have the right equipment for my needs," said Gifford. "For instance, the substation work is often done with limited space, so we needed a machine that could work productively in those circumstances, as well



A Colonial Contracting & Excavating operator digs and moves dirt with a Komatsu PC290LC-11 hydraulic excavator. "Our work is often done with limited space, so we needed a machine that could work productively in those circumstances, as well as in open areas. The PC290 is the right fit for us," said President Randall Gifford.

as in open areas. The PC290 is the right fit for us.

"At the same time, I don't want to give up dependable pieces that have proven they are productive," he added. "The PC300 has been one of our best machines. It has more than 7,000 hours on it, and we've done very little to it other than the scheduled services and replacing a hose or two."

Colonial Contracting & Excavating services its older machines itself, calling on C.N. Wood as needed. C.N. Wood performs scheduled maintenance on the Komatsu Tier 4 machines through the Komatsu CARE program. It's complimentary for the first three years or 2,000 hours and includes a 50-point inspection.

"What a great value," Gifford said. "It's peace of mind to know it's taken care of, and that C.N. Wood will do it at a convenient time for us. Komatsu also has great financing rates and is easy to work with. Service like that stands out and makes a big difference when it comes to equipment-buying decisions."

Valuable lessons

Gifford says he has learned valuable lessons through the years about how to approach projects with best practices and customer satisfaction in mind. There were times when staying afloat was as challenging as the projects Colonial Contracting & Excavating takes on, but perseverance saw him through.

"The last of the partners left about five years ago, and he handled the sales and estimating while I ran the field," said Gifford. "It took some time for me to get up to speed on that end of the business, and admittedly our workload took a hit. The past couple of years we've come back strong, and our immediate goals include continuing to grow, as well as challenging ourselves with projects that few other companies are willing to take on."

BEYOND THE BASICS

Comprehensive training builds a better workforce that's more invested in your business

It's rare that employees come fully prepared to do the jobs for which they were hired. Skilled construction workers know how to move dirt, build buildings and put pipe in the ground, but do they know your expectations and how you approach projects? With comprehensive training, they will.

"I've talked with many companies that wonder whether training is worth it, considering that in

Comprehensive training should include several items, such as safety, company policies, compliance and more. Training should be ongoing to keep skills updated.



today's world, most employees only stay with a company for a relatively short amount of time," said Karla Dobbeck with Human Resources Techniques, Inc. "Training is essential. It keeps employees up-to-date, and it tells them that you value their service to the company. In the end, it may motivate them to stay long term. Look at it this way: The only thing worse than training an employee who leaves is not training one who stays."

Dobbeck suggests a comprehensive approach that goes well beyond just training employees to do their jobs. The list should include safety, company policies, compliance and more. Training should be ongoing to keep skills updated.

"New employees should know about the company – where it came from, how it got to where it is today and how they fit into it," said Dobbeck. "They should know its history; changes and expansions; the industries it serves; who its customers are, and if they are mainly new or repeat; how it interacts with the community; and more. This gives the employees perspective, and it may tell them why they were hired and how their skills are valuable to the team.

"The company information should include its corporate culture and policies," Dobbeck added. "Culture encompasses its community involvement and working relationships. Policies cover everything from attendance to housekeeping, telephone use and those unwritten 'hot buttons' that management views as pet peeves but may not be in a handbook. They also need to know basics, such as breaks and lunch periods, as well as more important items, such as how to report grievances, maintenance and quality issues and the overall



Employees should receive job-specific training that helps them understand what their jobs entail and how they relate to others. Include training on where they will be working and where to find necessary tools.

chain of command. This falls under what I call 'performance management.'"

Job-specific, safety measures

Even experienced hires need job-specific training. While their positions may be similar to the ones from where they came, there may be different perspectives on how to approach tasks and projects. Employees must know exactly what their jobs entail and how they relate to others. Added questions to address include: where they will be working and where to find necessary tools; quality information, such as policies and systems; recordkeeping expectations; what to do when customers call or stop by a jobsite; technical terms and phrases that involve how to read and complete paperwork; and terms of equipment usage.

Construction creates special challenges when it comes to safety, and it's essential that employees know all your company's policies. Include information on personal protective equipment, lock out/tag out procedures, hazard communication, emergency evaluation, accident and hazard reporting, and what to do when OSHA is on site. If you use equipment such as cranes, hoist and crane-safety practices must also be explained.

"Processes and procedures related to equipment have to be part of any training program," said Dobbeck. "Part of that is planning for transport, loading and unloading practices, mobilization and setting up when you get to the jobsite. Consistency is a key component, because it results in fewer errors."

Understanding legal obligations

Employees must also understand their legal obligations. For instance, if they drive trucks, they must be licensed and drug-free. Their status affects more than just them. An accident could affect your company's insurance rates and safety rating.

Additionally, employees are responsible for their behavior on the jobsite and in the office. Harassment and discrimination should never be tolerated, and clear definitions of what those constitute are essential. Employees need to understand their roles in reporting, assisting with investigations and what likely management action will result from incidents.

Dobbeck says that payroll procedures fall under legal obligations, because it's up to everyone to keep count of their time and report errors. Understanding when pay dates occur is essential as well.

Recordkeeping and assessing

Part of an excellent training program is good recordkeeping that makes sure everyone gets the same information, according to Dobbeck.

"Companies should use checklists," she points out. "They ensure consistency and

Information in this article
was obtained from a
presentation by Karla
Dobbeck at the annual
Associated Equipment
Distributors Summit.
Dobbeck founded Human
Resources Techniques, Inc.
in 1997 and is a personal
human resources advisor.
For more information
about Dobbeck or Human
Resources Techniques, visit
the company's website at
www.askhrt.com.

Training develops a solid workforce, reduces turnover

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provide evidence of employee training. They also provide accountability and identify gaps in training that need to be filled. Additional effective measures include training guides. Weekly evaluations are good ways to maintain focus, and they're proven to help avoid unemployment."

Finally, businesses must constantly assess the effectiveness of their training practices and hold themselves accountable.

"Just as they measure employees, businesses should test themselves to see where they may be lacking when it comes to training, so they can improve," said Dobbeck. "Companies should look beyond just using supervisors to train new hires. They should consider an assigned trainer or auditor. Those individuals should set clear goals for everyone, using 'carrots' to incentivize positive behaviors and help employees understand how they can 'earn' raises.

"Training is one of the most valuable and effective tools for developing a solid workforce," Dobbeck added. "It must be an essential component of good business practices. A comprehensive program will not only help to ensure employees have the right information and skills to do their jobs, but it's also shown to be effective in reducing costly employee turnover."

Avoid costly mistakes by calling before you dig



Call before you dig to identify underground utilities and help you avoid them and potential harm to your employees and others.

Call before you dig. It's a simple, easy and free way to avoid mistakes. There's even an easy-to-remember number: 811. It will help you avoid the mistake that thousands make each year when they hit unmarked utility lines.

The intent of the 811 call line is to provide a single number where those performing excavation, or even demolition, can call and have utility companies locate buried lines. It's a way to avoid hitting one, causing potential injury and/or disruption of services.

The law requires that anyone who wants to begin excavation, including private homeowners, must call at least 48 hours in advance to have the underground utilities marked. Failure to do so can result in everything from a fine to serious injury or death from hitting an unmarked electrical or gas line.

When calling 811, a representative will ask for some basic information, such as what you are planning to do. The rep will want to know the location, length of time you plan to dig and other pertinent information. Once you've made the call, the rep will notify the local utilities. All you have to do is wait at least 48 hours before digging.

Utility companies mark the lines, giving you a reference point so you know how close your excavation will be. Should you accidentally hit a line, stop digging and immediately call authorities.

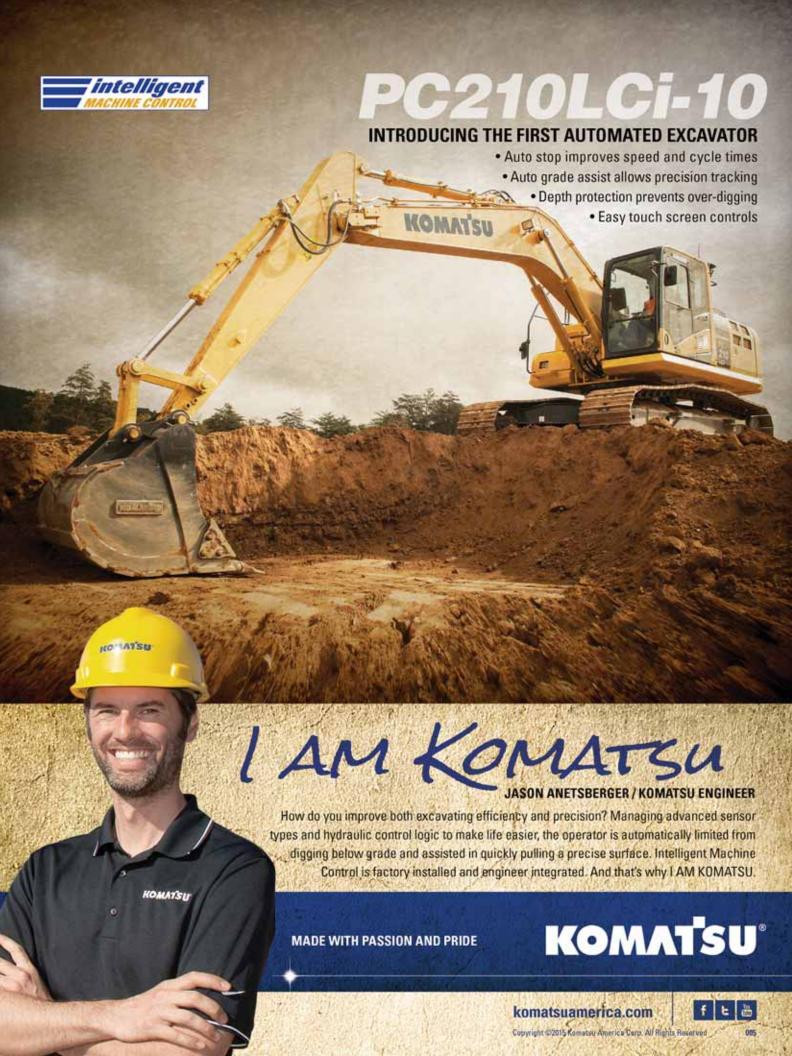




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EXCAVATION EXCLUSIVE

Komatsu's PC210LCi-10, world's first intelligent Machine Control excavator, minimizes overexcavation

Excavation companies want to move dirt as quickly and efficiently as possible, but conventional methods sometimes limit their ability to do that. Constantly checking grade is time consuming, and overexcavating is costly. Komatsu's new PC210LCi-10, the world's first intelligent Machine Control excavator, is a huge step forward in solving those issues with exclusive control function that goes beyond simple guidance to semi-automatically limit overexcavation and trace a target surface.

"From rough-digging to finish-grading, the PC210LCi-10 offers improved efficiency and accuracy compared to traditional methods," said Peter Robson, Senior Director of Intelligent Machine Control. "Once the target elevation is reached, no matter how hard an operator tries to move the joystick control to lower the boom, the excavator won't allow it. Minimizing overexcavation also reduces wasted time and the costs associated with placing and compacting new, expensive material to replace what didn't need to be removed in the first place."

Advanced functions contribute to the PC210LCi-10's ability to effectively reach target elevation without overexcavating, including Auto Grade Assist. As the operator moves the arm, the boom adjusts the bucket height automatically, tracing the target surface and minimizing digging too deep. This allows the operator to rough-dig without worrying about the design elevation, as well as fine-dig by operating the arm lever only. By holding down the lever to move the boom down, the working range is expanded.

Another new function is Auto Stop Control. During boom or bucket operation, the work equipment automatically stops when the bucket edge reaches the design surface.

The excavator also comes equipped with Minimum Distance Control. The PC210LCi-10 controls the bucket by automatically selecting the point on the bucket closest to the target surface. If the machine is not facing a sloped surface at a right angle, it will still follow the target surface and minimize digging below it.

New large touchscreen display

The PC210LCi-10 features a factory-installed, fully integrated intelligent Machine Control system that includes Global Navigation Satellite System (GNSS) antennas; stroke-sensing hydraulic cylinders for the boom, arm and bucket; and an IMU (inertial measurement unit). The system works in harmony to provide real-time bucket-edge positioning in relation to the machine

Continued . . .

Komatsu's new PC210LCi-10 intelligent Machine Control excavator semi-automatically limits overexcavation and traces a target surface



Peter Robson, Komatsu Senior Director, Intelligent Machine Control



Jason Anetsberger, Komatsu Product Manager, Intelligent Machine Control

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|-------------------|---|----------------|------------------------|--|--|--|
| Qu | Quick Specs on the Komatsu PC210LCi-10 Excavator* | | | | | |
| Model | Operating Weight | Net Horsepower | Bucket Capacity | | | |
| PC210LCi-10 | 48,950-52,036 lbs. | 158 hp | 0.66-1.57 cu. yd. | | | |

*All specifications are the same as a conventional PC210LC-10.



The PC210LCi-10 brings automatic features to excavators

.. continued

and the job surface, limiting the ability to dig beyond the target elevation and making accurate finish grading possible.

The bucket tip/edge and the design surface are always displayed on the new, full-color, multifunction 12.1-inch touchscreen monitor, eliminating the wait time associated with conventional systems. Information such as real-time and as-built status, a magnified fine-grading view or a 3D view, may be displayed simultaneously.

The PC210LCi-10 makes grading easy and accurate with a facing-angle compass, a light bar and audio guidance that alerts operators as they get closer to final grade. The orientation and color of the facing-angle compass's arrow shows the operator the facing angle of the bucket edge relative to the target surface, allowing for the bucket to be accurately positioned square to the target surface, which is especially useful when finishing slopes.

Colors on the light bar also show the bucket-edge position relative to the target surface. It's located on the left side of the monitor for easy viewing during operation and increased efficiency. Audio alerts help the operator recognize the target through unique tones that can be programmed for various bucket-edge distances from the target surface.

"Operators always know where they are in relation to where they eventually want to be," said Jason Anetsberger, Product Manager, Intelligent Machine Control. "Operators can set audio guidance alerts so that different tones are heard the closer the bucket is to final elevation. For instance, one tone may indicate 2 feet away, while a different tone is heard at 1 foot. Customers who tested the machine really liked the audio alerts because they allow the operator to focus on digging without stopping to check relation to final grade."

Two-way communication

The PC210LCi-10 comes standard with a cellular modem that supports troubleshooting from afar, via the Internet. Additionally, this hardware can be used by Topcon's jobsite management solution, Sitelink3D Enterprise,

which sends as-built data to the office and design data to the machine.

"The PC210LCi-10 represents a huge leap forward by bringing automation features to excavators,"

said Anetsberger. "Thanks to the exclusive semi-automatic control function, customers will unearth their productivity and operators can focus on moving material while the

> machine semi-automatically protects the target

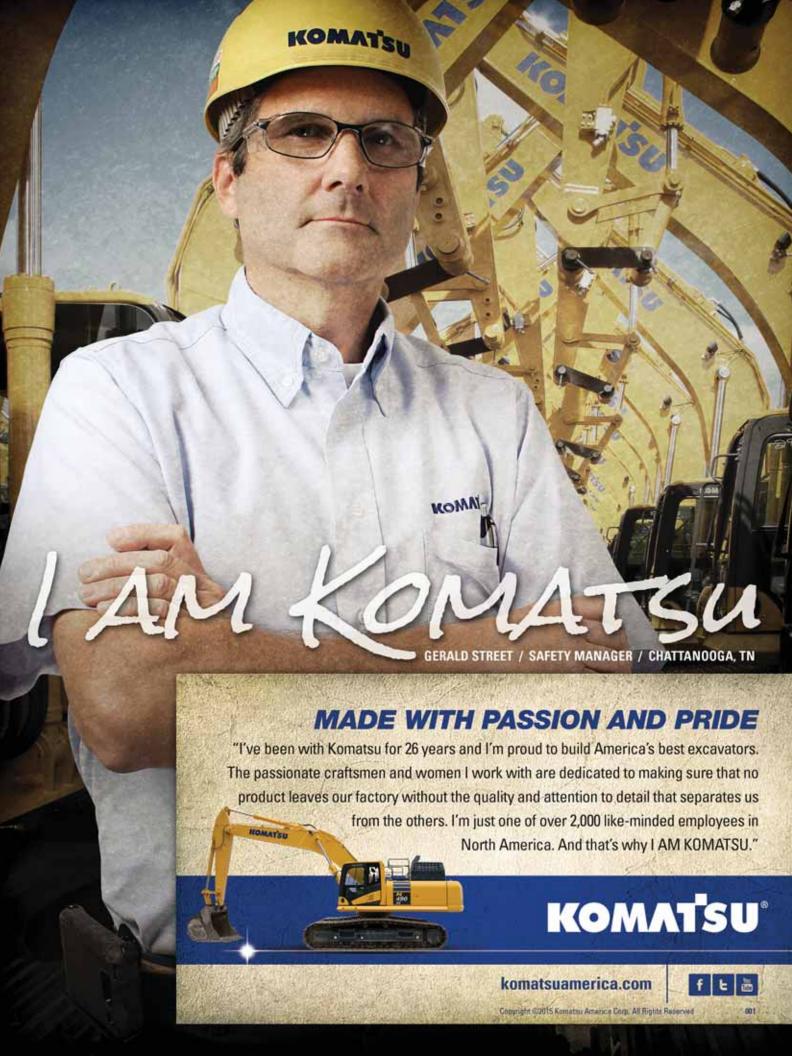
surface. The efficiency improvement, greater value and operation simplicity mirror what has been proven with Komatsu's established intelligent Machine Control dozer products

inexperienced operators alike will realize the benefits." ■

The PC210LCi-10 intelligent Machine Control excavator features a factory-installed, fully integrated intelligent Machine Control system that includes GNSS antennas, stroke-sensing hydraulic cylinders for the boom, arm and bucket and an IMU (inertial measurement unit).











360LC-11 PC3

IMPROVED PERFORMANCE

Enhancements give PC360LC-11, PC390LC-11 increased performance and lower per-ton costs

Building on the success of the previous models, Komatsu has designed its new PC360LC-11 and PC390LC-11 excavators to increase production. These Tier 4 Final versions have 257-horsepower, environmentally friendly engines that provide high levels of performance, while reducing operating costs and improving fuel efficiency.

Komatsu enhanced the new excavators' Power mode with improved hydraulic-control logic, resulting in better performance, according to Kurt Moncini, Komatsu Product Manager, Excavators. Power is one of six working modes that allow operators to match the machine performance to the application.

"The enhanced Power mode combines flow from both pumps and has an improved engine power match to the hydraulics when digging," said Moncini. "That creates better cycle times and digging performance and lowers per-ton costs. During testing, we saw up to 4-percent improved performance, although, it would not surprise us to see even greater performance with experienced operators."

Additional new features include an Operator Identification System, which reports key information for different operators, applications or job locations, and the Auto Idle Shutdown function that helps reduce idle time, as well as operating costs. Both features can be tracked through the latest KOMTRAX technology,



Kurt Moncini, Komatsu Product Manager, Excavators

Continued . . .

Quick Specs on the PC360LC-11 and PC390LC-11 Model Net Horsepower Operating Weight Bucket Capacity PC360LC-11 257 hp 78,645-80,547 lbs. .82-2.56 cu. yds. PC390LC-11 257 hp 87,388-89,248 lbs. .89-2.91 cu. yds.

Komatsu's new excavators feature an enhanced Power mode with improved hydraulic-control logic, resulting in better performance.



Operator comforts and technology upgrades built into cab

.. continued

which provides essential data, such as fuel and diesel-exhaust fluid levels, operating hours, location, cautions and maintenance alerts.

"Snappy response"

The excavators maintain the horsepower of their predecessors, with a less-than-1-percent increase in operating weight. The PC390LC-11 continues to feature a one-class-size-larger undercarriage with heavy-duty components, which gives it high lift capacity and lateral stability. The larger undercarriage has a 6-percent-wider track gauge and offers up to 18-percent-greater over-the-side lift capacity than the PC360LC-11.

"The PC360LC-11 is a good fit, right in between a utility-size machine and bigger excavators," said Moncini. "It's great for site development, trenching, pipeline and general construction applications. It's easy to transport and provides high performance.

"When a company needs extra lift capacity, that's where the PC390LC-11 comes in," he added. "Even though we didn't change the

The new PC390LC-11 continues to feature a one-class-size-larger undercarriage with heavy-duty components, which gives it high lift capacity and lateral stability. The larger undercarriage has a 6-percent-wider track gauge and offers up to 18-percent-greater over-the-side lift capacity than the PC360LC-11.



horsepower, we're seeing a better response from this model. During testing, users described it as 'snappy' and were extremely pleased with the increased production they were getting."

Large, comfortable cab

Both models feature a large, comfortable cab specifically designed for hydraulic excavators. It is both ROPS and OPG Level 1 certified and gains strength from a reinforced box-structure framework. The cab is mounted on viscous isolation dampers, which provide low vibration levels. A standard, heated, air-suspension high-back seat with fully adjustable armrests provides improved comfort. In addition to a standard AM/FM stereo, an auxiliary input for connecting external devices is provided to play music through the cab's speakers. Additionally, both models feature two 12-volt power ports, and optional joysticks are available with proportional controls for attachment operation.

For global support, the high-resolution, 7-inch LCD color monitor has enhanced capabilities and displays information in 33 languages. The monitor panel provides information on DEF level, eco guidance, operational records, fuel-consumption history and utilization. A new display interface combines vehicle information with a wide landscape view from the standard rearview camera, so the operator can easily view the working area directly behind the machine.

The new excavators are equipped with the exclusive Komatsu EMMS (Equipment Management Monitoring System). The system has diagnostic features to give operators and technicians greater monitoring and troubleshooting capabilities for preventive maintenance, which minimizes diagnostic and repair time.

"Komatsu covers routine scheduled service complimentary through our Komatsu CARE program for the first three years or 2,000 hours," said Moncini. "The PC360LC and PC390LC have been among our most popular models for many years due to their productivity and efficiency, and these new models build on the foundation of their predecessors." ■

racklesi



- Work Mode/Travel Mode

- Save up to \$4,000 per year
 Reduce fuel consumption by 50%
 Reduce CO₂ emmissions by 17,000 lbs per year
- 110 horsepower Tier 3 Cummins turbo diesel
- Joystick control for attachment functions
- Eléctronically controlled hydrostatic system
- Ergonomic and comfortable operation

















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Flail Mower, Boom Flail Mower 6',10' & 14' Rotary Finishing Mowers **Turf Equipment**

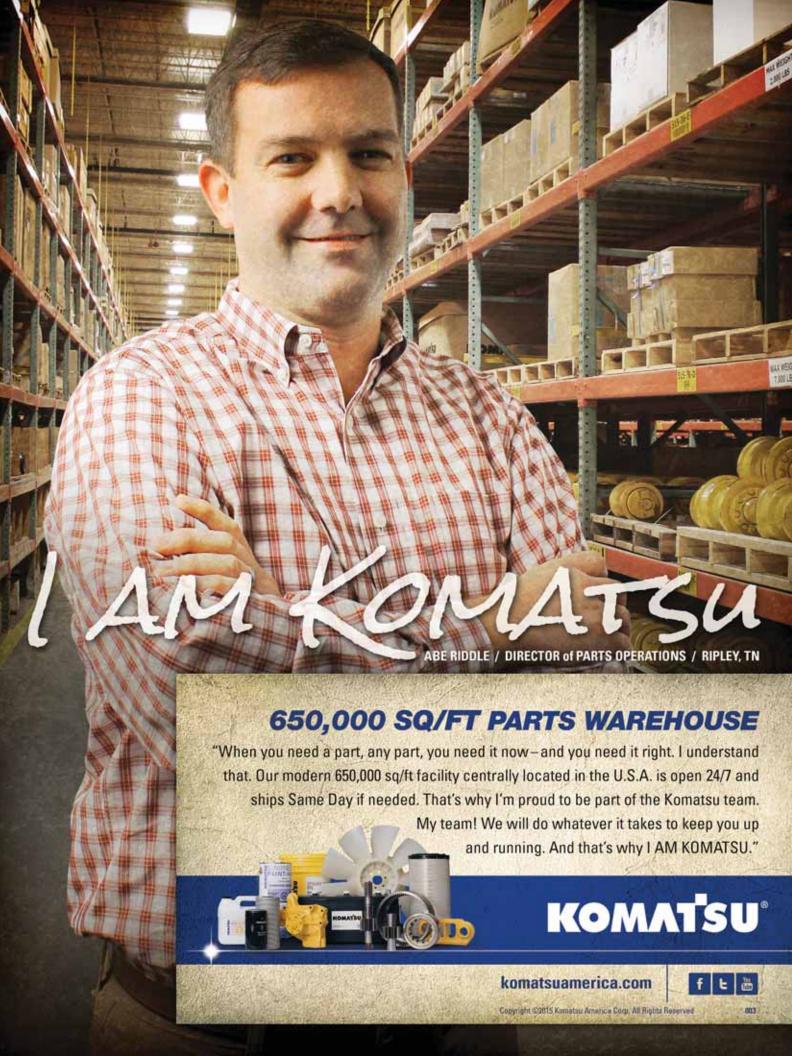


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STRONG CHOICES

Komatsu introduces new *intelligent* Machine Control, Tier 4 Final version of popular D65 dozer

Komatsu continues to lead by example in dozer automation and integration with its new D65PXi-18. Like the other members of the integrated machine-control family, the new dozer offers automatic blade control from rough-cut to finish grade.

The D65PXi-18 is an *intelligent* Machine Control (iMC) dozer with factory-integrated machine-control system components, which eliminate the need for traditional blade-mounted masts and cables. A Global Navigation Satellite System antenna is

Quick Specs on the Komatsu D65i-18 and D65-18 Dozers

mounted on top of the cab. Additional components include robust, stroke-sensing hydraulic cylinders, an enhanced inertial measurement unit and a touch-screen display mounted inside the cab.

A stroke-sensing angle cylinder measures the actual angle of the blade for high-precision grading accuracy on a cross-slope, whether the blade is angled or not. The dozers are significantly more efficient compared to



Jason Anetsberger, Komatsu Product Manager, Intelligent Machine Control

Continued . . .

^t With standard SIGMADOZER

| blade | |
|-------|--|
| 264 | |

Chuck Murawski, Komatsu Product Manager, Dozers

| Net Horsepower | Operating Weight | Blade Capacity | ** With standard PAT blade |
|----------------|--|---|--|
| 217 hp | 45,780 lbs. | 7.3 cu. yds.* | The second secon |
| 217 hp | 50,420 lbs. | 5.8 cu. yds.** | 《一个人 |
| 217 hp | 45,628 lbs. | 7.34 cu. yds.* | |
| 217 hp | 48,760 lbs. | 7.72 cu. yds.* | The second |
| 217 hp | 51,960 lbs. | 5.78 cu. yds.** | 不是心神智学 |
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| | 217 hp 217 hp 217 hp 217 hp | 217 hp 45,780 lbs. 217 hp 50,420 lbs. 217 hp 45,628 lbs. 217 hp 48,760 lbs. | Net Horsepower Operating Weight Blade Capacity 217 hp 45,780 lbs. 7.3 cu. yds.* 217 hp 50,420 lbs. 5.8 cu. yds.** 217 hp 45,628 lbs. 7.34 cu. yds.* 217 hp 48,760 lbs. 7.72 cu. yds.* |

Komatsu's new D65PXi-18 intelligent Machine Control dozer features automatic blade control from rough-cut to finish grade. Operators can also adjust the blade-load settings to match actual material conditions for added efficiency.

The new D65s reduce fuel consumption, increase productivity

.. continued

conventional aftermarket machine-control systems, depending on operation and conditions.

"The system senses excess blade load during rough-cut and automatically raises the blade to minimize track slip, as needed, and to maintain momentum," said Jason Anetsberger, Komatsu Product Manager, Intelligent Machine Control. "It also automatically lowers the blade to push as much material as possible until the grade is reached, thereby maximizing production in all situations."

Selectable dozing modes

Operators can select different dozing modes, which tailor the system response to the machine operation and optimize performance. Operators can also adjust the blade-load settings to match material conditions for added efficiency.

"As with all of our *intelligent* Machine Control dozers, the D65PXi-18 produces results that lower owning and operating costs associated with traditional blade-mounted sensors and makes the next generation of machine operators more productive and efficient," said Anetsberger.

New Tier 4 Final D65-18 dozers have more powerful engines, and the D65EXi-18, D65EX-18 and D65WX-18 dozers are equipped with a patented Komatsu SIGMADOZER blade that provides large-capacity dozing of 7.3, 7.34 and 7.72 cubic yards, respectively.



New, more powerful engine

The iMC dozers were one of many machines to receive an upgrade. All Komatsu D65PXi-18 dozers, whether iMC or not, feature a stronger, 217-horsepower engine that delivers high performance and low fuel usage and operating costs.

The all-new D65-18 also has an automatic transmission with lockup torque converter, which lowers fuel consumption and raises powertrain efficiency. The lockup mechanics of the torque converter automatically transfer engine power directly to the transmission, reducing fuel consumption by as much as 10 percent. Operators can easily choose from two gearshift modes, Automatic and Manual, to fit the appropriate application: Auto for general dozing and Manual for dozing and ripping in rough ground.

Patented SIGMADOZER blade

The D65-18 SIGMADOZER blade increases soil capture and limits spillage by rolling material to the center of the blade. It also reduces digging resistance, producing smoother material flow; more dozed soil with less power; and up to 15-percent-more productivity, compared to conventional Semi-U blades.

"The D65-18s are great, all-around machines," said Chuck Murawski, Komatsu Product Manager, Dozers. "They remain among the most popular in their size class because they offer excellent production for large dozing jobs but are small enough for finish grading on most jobsites. They manage to burn less fuel, while being more productive than their predecessors."

The D65-18 dozers come standard with Komatsu's new Operator Identification System, which reports key information for multiple operators, and the new Auto Idle Shutdown function that helps reduce idle time and operating costs. The new dozers have the latest version of KOMTRAX, providing data on fuel and DEF levels, operating hours, locations, cautions and other vital information. The machines are also covered by the pioneering Komatsu CARE maintenance and service program. ■

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A DECADE OF KOMTRAX

Komatsu's remote monitoring system evolves into useful tool for lowering O&O costs

The past decade saw huge advancements in machine technology. One prominent area is remote machine monitoring, and Komatsu led the way with its KOMTRAX system, which was designed for users to track equipment performance and plan for maintenance needs. It is also used as a teaching tool to make operators more productive and efficient.

"The initiative behind KOMTRAX was driven by Komatsu's senior management, and many give the company's legendary former CEO Masahiro "Shank" Sakane credit for the vision," said Ken Calvert, Komatsu Director, KOMTRAX. "KOMTRAX fits with the 'Komatsu Way,' which is our philosophy of core values that feature seven guiding principles. For instance, one is commitment to quality and reliability. Our design and quality engineers all use KOMTRAX to make sure that Komatsu equipment works well and performs as intended. Another principle is to be customer oriented. KOMTRAX helps customers improve their operations through jobsite efficiencies and lower owning and operating costs."





Ken Calvert, Komatsu Director, KOMTRAX



Rizwan Mirza, Komatsu Manager, KOMTRAX



KOMTRAX on Tier 4 machines includes information such as diesel particulate filter levels, idle time and other pertinent information to help reduce owning and operating costs.

KOMTRAX improves to benefit customers' bottom lines

.. continued

What users are saying about KOMTRAX

"It allows us to locate a piece of equipment from the office and see vital information, such as hours and idle time. It's a valuable tool."

Jerry Morgan, President, Kart Construction

"We often work in remote locations, so I can't always be on site. KOMTRAX allows me to see a machine's location, hours, idle time and other necessary information. It helps me be a better manager. I wouldn't have a machine without it."

Steve McNew, Vice President, DKM Enterprises

"It's a great tool that allows me to see fuel usage and if someone is idling excessively. I also like that Komatsu tracks the machines and alerts me to error codes."

Andy Fornea, Owner, A.S. Fornea Construction Komatsu first introduced KOMTRAX as an option that buyers could have installed on their Komatsu equipment. The first generation provided three basic pieces of information – machine location, service meter readings and daily hours of operation.

Within a short time, Komatsu made KOMTRAX standard on almost all new machines, and added even more valuable information, such as cautions; error codes; load frequencies; maintenance notifications; average hourly fuel consumption; fuel level and water temperature readings; geofencing; engine lock for theft prevention; and monthly and annual reports.

Several means of accessing info

Calvert said that the technology used to meet emissions regulations led to even further changes. Tier 4 Interim machines allowed users to monitor the diesel particulate filter's performance. With Tier 4 Final, KOMTRAX provided information on diesel exhaust fluid consumption. The latest iteration, KOMTRAX 5.0, allows users to track idle time and other pertinent information related to owning and operating costs, such as travel hours and distance, working modes and cycle times.



Customers can now access information from smart phones and other mobile devices, which was not available in earlier versions. In its latest iteration, KOMTRAX 5.0, users can track idle time and other pertinent information related to owning and operating costs, such as travel hours and distance, working modes and cycle times. The KOMTRAX team continues to look for improvements to benefit its customers' bottom lines.

Users can access information in a variety of ways from a secure website. Office and home computers, tablets and smartphones can all be used to view specific, detailed information.

"Construction has always been a highly mobile field, and the KOMTRAX Mobile app plays right into that," said Rizwan Mirza, Komatsu Manager, KOMTRAX. "Similar to traditional KOMTRAX, users can find information through the app that helps them make decisions to potentially reduce their owning and operating costs, without being tied to an office or a laptop. Many equipment users now carry a mobile device, so we evolved KOMTRAX to the mobile world."

Proven to work

As always, the evolution will continue. Today's KOMTRAX is much more comprehensive than its first version, and Calvert and the KOMTRAX team continually look for improvements that will benefit their customers' bottom lines. The system is on hundreds of thousands of machines worldwide, all of which Komatsu can track for critical information to help companies see trends, plan inventories, contact customers with information, such as error codes, and more.

"KOMTRAX remains popular because it has proven that it works," said Calvert. "The system is robust, accurate and provides valuable information. It drives decisions and business practices, especially after the Great Recession, when everyone started looking more closely at their operations and balance sheets. A system such as KOMTRAX offers greater information on utilization and proper machine deployment, and it helps owners identify training and coaching opportunities for maintenance staff and operators.

"All forward-thinking business leaders realize that leveraging information from systems such as KOMTRAX will be key to remaining competitive, whether it's an equipment manufacturer using KOMTRAX to track machines for maintenance issues or machine owners who know KOMTRAX will help them get their work done on time, on spec and under cost."

FAA releases proposed rules for small drones

If you use drones on your construction site, don't fly them at night or out of the operator's site. Those are part of the new rules proposed by the Federal Aviation Administration (FAA) for small commercial unmanned aircraft, which can now map sites and record projects. Final rules are expected in two to three years.

The proposed requirements for commercial operators include passing an FAA-administered test and security checks. Drones could fly up to 100 mph at altitudes of 500 feet or lower. Flights over people, other than those operating the drones, would be prohibited.

Gains made in STEM degrees

A report from the National Student Clearinghouse shows an increase in prevalence of students earning STEM (science, technology, engineering, math) bachelor and doctoral degrees between 2004 and 2014. The rise was seen in both men and women during that time.

"This data demonstrates the importance of tracking science and engineering degree attainment at different levels and within specific

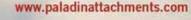
fields of study," said Doug Shapiro, Executive Research Director of the Clearinghouse's Research Center. "Both men and women are increasingly choosing STEM degrees, particularly in hard sciences, including computer science, engineering and physical and biological sciences. But in terms of the shares of degrees earned within individual disciplines, women are gaining ground in some STEM areas, while losing ground in others." ■











JESSICA LANIGAN

If it involves parts – or anything else – Parts Department/ Administrative Support professional is ready to lend a hand

In an equipment dealership, it's good to have someone like Jessica Lanigan. Her attention to detail is part of the reason why C.N. Wood's parts inventory is up-to-date and parts orders are handled in a timely fashion.

"I handle shipping and receiving, track orders, deal with vendors, process returns, issue credits and ensure invoices are correct, among other things," said Lanigan. "Basically, if it has to do with parts, I'm involved in some way, which includes

Jessica Lanigan moved into a Parts Department/Administrative Support role for C.N. Wood about two years ago, after working in the warehouse at the company's Woburn headquarters. While all aspects of parts are her main focus, she also helps out with sales, service and anything that needs to be done.



working with our service department on their parts needs."

Lanigan joined C.N. Wood three years ago, working in the parts warehouse at its Woburn, Mass., headquarters. Almost two years ago, she moved up to her current role, which is Parts Department/Administrative Support. She attended manufacturer training and is certified in inventory management and advanced technical parts by Komatsu.

"I deal with more than just Komatsu parts," noted Lanigan. "I work with all of our vendors, including Gradall, Heil, BOMAG, Mustang, Elgin, Vactor and others. It's a lot of responsibility, but I enjoy it. No two days are ever the same, that's for sure."

"Whatever is needed"

Lanigan does more than work with parts. She also works with accounting and sales, and she even lends a hand answering phones on occasion.

"Whatever is needed," said Lanigan. "I've always had a good work ethic and a desire to help others. I think people trust that when they need something, I'll get it done and get it done right."

Jessica likes to build things in her spare time. Last year she constructed a bench out of used pallets and made a wall hanging that included an outline of the United States. She also recently built herself a coffee table.

"I enjoy building things, doing crafts and gardening," she said. "I am growing chives, tomatoes, peppers, lettuce and lots of herbs. Basically, anything I can pick and eat myself."



USED EQUIPMENT SPECIALS OF THE MONTH

| Manufacturer/Model | Stock No. | Year | Hours | Manufacturer/Model | Stock No. | Year | Hours |
|---------------------|-----------|------|--------|----------------------|-----------|------|--------|
| EXCAVATORS | | | | ARTICULATED TRUCKS | | | |
| Komatsu PC138USLC-8 | KM5805 | | 8,948 | Volvo A35D | CE2427 | 2006 | 11,758 |
| Komatsu PC600LC-8 | KM5669 | 2007 | 7,227 | Volvo A35D | CE2431 | 2005 | 12,348 |
| Komatsu PC450LC-8 | KM5791 | | 4,524 | | | | |
| Komatsu PC170LC-10 | KM5982 | 2014 | 851 | SKID STEER LOADERS | | | |
| Komatsu PC200LC-6 | KM5969 | 1999 | 11,377 | Mustang 1750RT | MU0012 | | 102 |
| Komatsu PC228USLC-3 | KM5886 | 2003 | 9,422 | Mustang 2100RT | MU0015 | 2012 | 295 |
| Komatsu PC360LC-10 | KM5947 | 2014 | 885 | Mustang 2056 | MU0004 | 2012 | 451 |
| Komatsu PC490LC-10 | KM5823 | 2014 | 1,176 | Volvo MC60 | CE2405 | 2012 | 92 |
| Volvo ECR235DL | CE2607 | 2013 | 511 | Volvo MC70C | CE2745 | | 75 |
| Volvo EC220DL | CE2541 | | 926 | | 0 | | |
| Volvo EC300DL | CE2445 | | 2,103 | COMPACTION EQUIPMENT | NT | | |
| MATERIAL HANDLERS | | | | Volvo DD90HF | CE2291 | | 700 |
| MAI ENIAE HANDEENS | | | | Volvo DD90HF | CE2292 | | 567 |
| SENNEBOGEN 835C | SE0036 | 2007 | 9,742 | Volvo DD138FA | CE2867 | 2010 | 1,930 |
| SENNEBOGEN 821R | SE0056 | 2007 | 8,152 | Volvo DD112HF | CE2289 | 2011 | 1,417 |
| | | | | Bomas BW120AD-4 | B00088 | 2012 | 673 |
| WHEEL LOADERS | | | | | | | |
| Volvo L30ZX | CE2645 | 2012 | 1,076 | SEWER TRUCKS | | | |
| Volvo L220E | KM5980 | 2006 | 17,316 | Vactor 2110 | VA0231 | 2002 | 2,400 |
| Volvo L35B | CE2869 | 2005 | 3,726 | Vactor 2112 | VA0228 | 1999 | 5,584 |
| Volvo L30ZSX | CE2402 | 2012 | 2,068 | Vac Con | VA0220 | 1998 | 2,273 |

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