

# *PUSHING AHEAD*

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## **IMPROVED EXCAVATION**

New PC210LC-11 features  
better lift capacity and  
increased fuel efficiency

**KOMATSU**<sup>®</sup>

# A MESSAGE FROM THE PRESIDENT



Ronald Zagami

**A broad range  
of new  
equipment**

## Clairemont Equipment Company Parts • Rentals • Sales • Service

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Dear Valued Customer:

This issue of your Clairemont Pushing Ahead magazine showcases the broad range of equipment that Komatsu carries. It features everything from a new tight-tail-swing PC78US-10 excavator to larger equipment, such as the HM400-5 articulated haul truck and the D155AXi-8 dozer.

Yes, you read that correctly – Komatsu introduced an *intelligent* Machine Control (iMC) D155 dozer. The 90,610-pound, 354-horsepower construction/quarry machine is now the largest in the Komatsu iMC-dozers lineup. Like its predecessor, it features the patented SIGMADOZER blade, and like its iMC brethren, it works without the mast and cables associated with traditional aftermarket GPS systems. Read the article to see if the D155AXi-8 is a good fit for your company.

You will also want to read the article on Komatsu's new PC210LC-11 excavator. With this latest model, Komatsu has once again raised the bar for excellence in excavators. The PC210LC-11 offers more horsepower and operating weight, while using less fuel and making less noise.

Finding ways to be more productive and efficient is a big part of doing business for excavation, mining, forestry and other types of companies that use equipment. If you are looking to get the most out of your Komatsu machinery, check out the article about Komatsu's "Kwick Tips" videos, produced to help you better understand the functions and features of your equipment.

This time of year tends to be very busy with multiple projects and deadlines. It can be easy to forget about scheduled maintenance. If you have a Komatsu Tier 4 machine, such as those featured here, rest assured that we're on top of them and will take care of your scheduled maintenance through the Komatsu CARE program. We can help with your older machines too.

Please call or stop by one of our branch locations and let us show you how we can be of service.

Sincerely,  
CLAIREMONT EQUIPMENT COMPANY



Ronald Zagami, President

**Clairemont  
Equipment**  
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# BIRDS-EYE VIEW

## Expect drone, UAV use to gain prominence as construction moves into the future

*Here is a look at new technology that's being used by some in the construction industry. Information was gathered from a variety of resources. The article is not intended to be all-encompassing, but rather a general look at what the future may hold.*

Construction technology during the past few years has largely been focused on two places. One is on the ground, where increasingly sophisticated equipment is used to dig, grade and haul materials. The other is in space, where global positioning satellites pass over Earth and relay information to man and machinery for automatic grading and tracking equipment location, hours and other important information.

It seems that the next wave of technology is somewhere between the two as the use of drones/unmanned aerial vehicles (UAVs) in construction gains momentum. (Though technically drones and UAVs are not the same thing, the terms are used interchangeably in this article.) Companies are looking at employing "quadcopters" and other devices equipped with cameras to document projects. The UAVs can be controlled by computer, or in many cases, by smart devices, such as

phones and tablets, and allow the drones' birds-eye view to be seen on the screen in real time.

The technology has been around for a while, but it's still in its infancy and the debate is ongoing as to its effectiveness at this point.

The Federal Aviation Administration (FAA) continues to develop guidelines for its use, such as the current 400-foot flight ceiling for hobbyists. As long as the drone/UAV remains at that elevation or below, no special permit from the FAA is required, so construction companies use that as a measuring stick, along with keeping the device in "line of sight."

### Groups speak with FAA

Under a 2012 law, the FAA is required to have UAVs integrated into U.S. airspace by the end of September 2015. It continues to develop regulations with input from various interested parties. Among them is the Association of Equipment Distributors (AED) which recently submitted comments to the federal agency's "proposal that would update the regulations that govern general aircraft operations to incorporate the use of the vehicles commonly referred to as 'drones' under certain circumstances."

The organization pointed out that many of the most common uses of UAVs are in sectors served by its members, and FAA regulations will have a significant impact on the market and dictate how businesses can take advantage of their use. AED suggested the FAA "provide a clear definition of 'direct participation' that includes a range of employees who might be operating at a construction site, and provide more flexibility to the rule's restriction to visual line-of-sight

Many companies have begun to employ drones/unmanned aerial vehicles (UAVs) in an effort to map and document jobsites. Numerous models are available that range greatly in price and quality.





Drones/UAVs can be controlled from the ground with computers, smart phones and tablets and provide a birds-eye view of a site on the device. Users control the flight path, and cameras can take pictures for documentation and other purposes. Aerial photo courtesy of Cadre Solutions Group.

operations to allow for drones to operate beyond the line of sight.”

AED said the federal government “will have to learn to keep pace with the constantly evolving industry as all manner of unmanned systems take to the skies... allowing more flexibility in the rules now for future technological development will save both industry and the agency considerable resources, given the complex and lengthy rulemaking process.”

### Getting permission

The FAA seems to be giving due consideration. It recently granted a Vermont company an exemption from the prohibition of unmanned aerial vehicles for commercial use.

“Our main focus area is commercial and industrial,” said AirShark’s Jon Burdreski in a post on Vermont Public Radio’s website. “Energy plants, such as solar and wind systems that are difficult to access or consume large areas and need to be checked, can really benefit from these UAVs. Additionally,

certain construction projects need constant documentation, including bridge projects or larger commercial buildings. We believe these UAVs can greatly help the energy, transportation and construction markets.”

Keeping an eye on transportation infrastructure and the workers who build it is behind the Michigan Department of Transportation’s consideration to use drones. Engineer of Operations and Maintenance Steve Cook told TheTrucker.com, a website that covers the transportation industry, that safety is one good reason to use the devices.

“It takes workers out of the path of vehicles so they can operate these drones from the shoulder of the road or somewhere else,” he told TheTrucker, noting that drones could collect data much more quickly than people and to the benefit of drivers. “This way, all lanes of traffic can stay open, which will alleviate congestion,” he continued.

Drones or UAVs can also get close to objects, such as the underside of bridge decks. Workers can be on the ground controlling

Continued . . .

# Drone technology provides a competitive edge

... continued

a device's flight path, and high-resolution cameras can take pictures of cracks or other potential hazards for documentation and maintenance/repair planning.

## Mapping jobsites

As the technology improves, drones may someday play a prominent role in surveying and mapping jobsites. Earlier this year, Komatsu launched a service in Japan called Smart Construction in an effort to further study and advance those potential capabilities. It includes a platform called KomConnect that will connect machinery and workers to a cloud platform in an effort to improve overall efficiency.

Komatsu teamed with Skycatch, a U.S. company, for its Smart Construction service, which uses Skycatch devices to conduct surveys and produce 3-D models that are turned into interactive jobsite maps. Drones are programmed to automatically fly over a set area and use sensors to collect data on

Komatsu teamed with Skycatch, a U.S. company, for its Smart Construction service, which uses Skycatch devices to conduct surveys and produce 3-D models that are turned into interactive jobsite maps. Drones are programmed to automatically fly over a set area and use sensors to collect data on the terrain below. One day, Komatsu expects to overlay civil-engineering plans onto the drones' 3-D models, which can then be loaded as data into machinery, such as *intelligent* Machine Control dozers.



the terrain below. One day, Komatsu expects to overlay civil-engineering plans onto the drones' 3-D models, which can then be loaded as data into machinery.

"Measuring a large construction site from the air is much easier than measuring it from the ground," said Akinori Onodera, President of the Komatsu unit overseeing Smart Construction, in a January Wall Street Journal article titled "Drones' Next Job: Construction Work." "The old way of measuring needed two people for one week. The drones can do it in one or two hours."

"Right now, drone technology is providing a competitive edge to the companies who've successfully adopted it," Skycatch CEO Christian Sanz told Gizmag Emerging Technology Magazine. "They use their equipment and resources more efficiently; communicate better through accurate maps and data; and now have a highly quantitative means of measuring their progress against their schedule. In the future, the construction industry will realize aggregate benefits, such as a much better safety record and fewer projects that are late and over budget."

He told the Wall Street Journal that he hopes Skycatch will provide drones to "thousands of Komatsu's sites all over the world, shaving costs and time," adding that Komatsu plans to lease at least 200 drones from Skycatch during the next several years.

## Considerations before buying

Buying a drone or UAV is largely a personal decision. This is obviously a "you get what you pay for" proposition. Prices vary widely from a few hundred dollars to several thousand dollars, depending on exactly what it will be used for. If you want one that will simply record a jobsite, a smaller, less-expensive version with a camera mounted on it is probably fine.

Considerations include how much you're willing to spend; return on investment; what you will use it for; and the amount of time you are willing to devote to learn how to use it, as there is more to it than just sending it up to take pictures and video. ■



Discover more

## NEW TIGHT-TAIL-SWING MODEL

### Komatsu's PC78US-10 increases productivity in limited-space applications

Even on congested jobsites, you expect outstanding productivity. Komatsu's new PC78US-10 hydraulic excavator delivers with a tight-tail-swing radius, offset boom and contoured cab design that allows operators to work with ease in confined spaces.

The PC78US-10 increases productivity up to 3 percent compared to the Dash-8 model it replaced. At the same time, it lowers fuel usage up to 5 percent with no loss of performance, thanks to a Tier 4 Final engine that provides an additional 10 horsepower more than its predecessor. The result is time and cost savings, which are further reduced because the PC78US-10's engine requires no diesel particulate filter or diesel exhaust fluid (DEF).

"The PC78US-10 uses a Komatsu Diesel Oxidation Catalyst after-treatment system that is designed specifically to provide 100 percent passive regeneration," said Kurt Moncini, Komatsu Product Manager, Excavators. "The fact that the PC78US-10 has no diesel particulate filter and uses no DEF really sets it apart. It helps reduce owning and operating costs, and puts more profit back in our customers' pockets."

#### New cab design

A new cab design comes with several standard features, including ROPS and OPG Level 1 certification with a reinforced framework; high-resolution LCD screen with ecology-guidance data; rearview monitoring system with camera; a secondary shutdown switch; and in-cab-monitor control of up to 10 attachments. Other operator-friendly enhancements include a new side-by-side radiator and oil cooler to simplify cleaning, and placing all major maintenance items in

areas that are accessible from the ground level. These include the engine hood, right-side hood and side-service doors.

"This is the ideal machine for anyone working on urban, utility contracting or homebuilding worksites," said Moncini. "Between the extra horsepower and generous use of boom-area castings, operators should feel confident when trenching, clearing and working on site development projects." ■



Kurt Moncini,  
Komatsu Product  
Manager, Excavators

Komatsu's new tight-tail-swing PC78US-10 increases productivity up to 3 percent compared to the Dash-8 model it replaces. It also lowers fuel usage up to 5 percent with no loss of performance, resulting in time and cost savings.

#### Quick Specs on Komatsu's PC78US-10 Excavator

Model	Net Horsepower	Operating Weight	Bucket Capacity
PC78US-10	65 hp	17,747 lbs	0.37 cu yds





# PC210LC-11

**MORE POWER WITH BETTER FUEL ECONOMY**

- 165 hp with up to 6% better fuel consumption\*
- KOMTRAX® equipped for system monitoring
- Komatsu Auto Idle Shutdown feature
- Enhanced working modes



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**JEFF MARTIN / PAINTER / CHATTANOOGA, TN**

"I've worked for Komatsu for over two decades. My team loves to get feedback from Komatsu owners and operators and hear how satisfied they are. That motivates us every day to take extra pride in the meticulous detailing we put into every product that comes out of Chattanooga. The PC210LC-11 is one of my favorite works of art. And that's why I AM KOMATSU."

**MADE WITH PASSION AND PRIDE**

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[komatsuamerica.com](http://komatsuamerica.com)

\*Compared to previous Komatsu model.

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Discover more

# IMPROVED EXCAVATION

## New PC210LC-11 features better lift capacity, increased fuel efficiency

More and less. Both words fit when describing Komatsu’s new Tier 4 Final PC210LC-11 excavator. More describes horsepower and operating weight. The PC210LC-11 provides up to an additional seven horsepower compared to its predecessor. It also has an increased operating weight thanks in part to a standard heavy counterweight that provides improved lift capacity. Those features contribute to the PC210LC-11’s ability to maintain or improve performance and productivity, depending on application.

Less comes in the form of fuel, noise and time. The PC210LC-11 uses up to 6-percent-less fuel than the previous model. Noise levels are lower thanks to a new viscous fan clutch that also improves cooling system efficiency. The wide, spacious ROPS and OPG Level 1-certified cab has design upgrades that reduce noise by two decibels, making the cab one of the quietest in its class. Three travel speeds also help eliminate time lost moving around the jobsite.

“If you need a machine capable of doing many things well – for example, going from loading trucks, to excavating trenches, to placing pipe and back again – this is the excavator for you,” said Kurt Moncini, Komatsu Product Manager, Excavators. “For versatility and long-term value, the PC210LC-11 is tough to beat.”

### Added features, improvements

The PC210LC-11 features six work modes to match engine speed and pump flow to various attachments, as well as Komatsu’s Closed-Center Load Sensing System that provides quick response and smooth operation to maximize productivity. Also standard is KOMTRAX Level 5 technology. This feature gives the operator machine data such as fuel and diesel exhaust fluid (DEF) levels, Komatsu

Diesel Particulate Filter (DPF) regeneration status, location, cautions and maintenance information, all on an updated 7-inch LCD monitor. A split-display mode provides information as well as a rear-camera view. Other upgrades include a standard pattern-change valve, to easily switch joystick patterns to accommodate specific operator preferences, and centralized engine checkpoints that provide easy access to engine oil, filters and drain valves.

“As with other Tier 4 Final construction-size machines that are purchased, leased or rented, it’s covered by Komatsu CARE for the first three years or 2,000 hours. It also covers two DPF exchanges and DEF tank flushes in the first five years,” said Moncini. “We encourage individuals looking for a new 50,000-pound-category machine to contact their distributor to find out more about how the PC210LC-11 can be a great addition to their fleet.” ■

### Quick Specs on Komatsu’s PC210LC-11 Excavator

Model	Net Horsepower	Operating Weight	Bucket Capacity
PC210LC-11	165 hp	51,397-53,882 lbs	0.66-1.57 cu yds



Komatsu’s new PC210LC-11 features up to an additional seven horsepower and increased operating weight compared to its predecessor. It also has increased fuel efficiency and additional features that reduce noise and help increase productivity.

# D61PXi-23



## PUSHING AHEAD WITH *INTELLIGENT* MACHINE CONTROL

- Automated operation from rough dozing to finish grade
- *intelligent* Machine Control dozing mode and load control features
- No cables between machine and blade
- A factory-installed integrated system



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CODY GASTON / KOMATSU DOZER DESIGN ENGINEER / CHATTANOOGA, TN

"I'm proud that our Komatsu dozer designs are always breaking new ground, like our forward cab small dozers and now our *intelligent* Machine Control equipment with integrated technology. But it's a team effort and it takes dedicated team members to build in the quality it takes to meet our customers' demands. And that's why I AM KOMATSU."

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## GREATER INTELLIGENCE

### Komatsu introduces its first *intelligent* Machine Control construction/quarry dozer

Komatsu's *intelligent* Machine Control (iMC) jumped into a new class when it introduced the D155AXi-8, the first construction/quarry dozer that features automated operation from heavy dozing to fine grading. Similar to other iMC dozers, the D155AXi-8 senses and controls blade load to optimize the start of a cut and minimize track slip, resulting in up to 8-percent-greater efficiency compared to typical aftermarket systems.

"When Komatsu introduced iMC dozers, the focus was on mid-size and smaller dozers often used on residential and commercial projects," said Jason Anetsberger, Komatsu Product Manager, Intelligent Machine Control. "The automated and integrated system has proven to make operators of all skill levels more productive and efficient, leading to a better bottom line. Contributing to the cost savings is eliminating the process of installing and removing masts and cables, so that time can be better spent in moving more material."

The lack of blade-mounted sensors also means there's no need for an operator to climb on the blade to install or remove antennas, no coiled cables to snag and no electrical connections to worry about at the start and end of every shift.

#### Reduced fuel consumption

The D155AXi-8 has an automatic gearshift transmission and lock-up torque converter that work together to select the optimal gear range, depending on jobsite conditions and load, and are designed to maximize operational efficiency. The electronically controlled transmission locks up the torque converter to transfer engine power directly to the transmission, eliminating horsepower

loss and cutting fuel consumption by up to 10 percent.

It features Komatsu's patented SIGMADOZER blade, which is designed to dig and roll more soil at the blade's center, hold more material, reduce digging resistance and doze up to 15-percent-more material while using less power compared to a typical Semi-U blade.

"The D155AXi-8 is ideal for highway construction and large residential or commercial site-prep projects," said Anetsberger. "It shares many of the same great features of our standard and popular D155, with the added iMC technology. If you're looking for something that accurately and efficiently moves massive amounts of material, look no further." ■



Jason Anetsberger,  
Komatsu Product  
Manager,  
Intelligent  
Machine Control

Komatsu's D155AXi-8 dozer brings *intelligent* Machine Control to its construction/quarry size machines. It is ideal for highway construction and large residential or commercial site-prep projects.

#### Quick Specs on Komatsu's D155AXi-8 Construction/Quarry Dozer

Model	Net Horsepower	Operating Weight	Bucket Capacity
D155AXi-8	354 hp	90,610 lbs	12.3 cu yds



# WA470-8

## INCREASE PRODUCTION WHILE LOWERING FUEL COSTS

- Komatsu SmartLoader Logic for optimal energy savings
- Large capacity torque converter with lock-up
- All-new cab for comfort and visibility
- Powerful 272 HP engine



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OLANJUWON LUKIE / ASSEMBLER / NEWBERRY, SC

"Komatsu loaders are tough. The loaders I assemble here in South Carolina are built to high standards. I know because my team and I meet and exceed those standards every day. Our goal is to build you a product that will handle the jobs you throw at it and keep coming back for more. And that's why I AM KOMATSU."

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# NEW ARTICULATED TRUCK

## Komatsu's HM400-5 delivers high production with Tier 4 Final engine that optimizes performance

The goal of moving materials is to do it as productively and efficiently as possible. Komatsu's new HM400-5 articulated dump truck provides what you need with high levels of performance and minimal operating costs. It includes a low 10-foot, 5-inch loading height, 70-degree dump angle and selectable working modes that allow operators to match its performance to the application or conditions.

The HM400-5 maintains the productivity and performance of the previous Dash-3 model, with a new Tier 4 Final engine to deliver its 44.1-ton payload. The Komatsu-designed engine uses an advanced electronic-control system to manage airflow rate, fuel injection, combustion parameters and aftertreatment functions to optimize performance.

"With its low loading height, the HM400-5 matches well with 40- to 60-ton hydraulic excavators and 5.5- to 7.5-cubic-yard wheel loaders," said Joe Sollitt, Komatsu Product Marketing Manager. "It's ideal for a variety of applications, including site prep and large-scale material processing operations with challenging haul profiles. Even in less-than-ideal conditions, it delivers great fuel economy and outstanding production."

### Standard Payload Meter

Komatsu's Traction Control System automatically provides optimum traction when operating in soft ground conditions. If conditions worsen and the HM400-5 detects tire slippage, the inter-axle-lock kicks in. If tire slippage continues, four independent brakes are automatically applied to the slipping wheels to regain traction.

Owners and operators can keep track of production with a standard, integrated Payload Meter that displays loaded-material weight on an LCD monitor inside the cab. A pair of external lamps illuminate green, yellow or red as the payload increases through three different ranges to help prevent under- and over-loaded haul cycles. Data is stored on board and is accessible by plugging a laptop into a port in the truck or remotely via KOMTRAX.

"Users can monitor daily, weekly or monthly production with very detailed data to allow for full production studies," said Sollitt. "We made service more convenient with a lightweight, fiberglass engine hood and a cab that tilts rearward for easy access to the transmission and hydraulics. The HM400-5 is a great fit for anyone looking to move mass amounts of material with lower costs in mind." ■



Joe Sollitt,  
Komatsu Product  
Marketing  
Manager

Komatsu's new Tier 4 Final HM400-5 articulated dump truck has a 44.1-ton-payload capacity and matches well with 40- to 60-ton excavators and 5.5- to 7.5-cubic-yard wheel loaders. It features a new standard Payload Meter and easier serviceability.

### Quick Specs on Komatsu's HM400-5 Articulated Dump Truck

Model	Net Horsepower	Max Gross Vehicle Weight	Payload
HM400-5	466 hp	165,644 lbs	44.1 tons

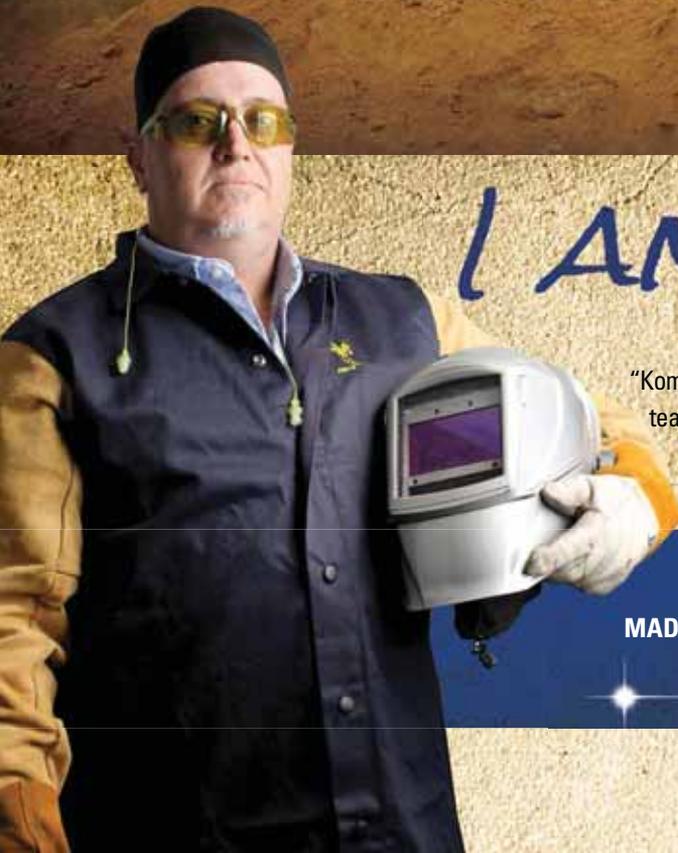




# PC240LC-11

## TIER 4 FINAL HYDRAULIC EXCAVATOR

- New higher performance 177 HP engine\*
- More efficient through lower fuel costs\*
- Larger LCD color monitor panel\*
- Wide access service doors



I AM KOMATSU

MICHAEL THOMAS / WELDER / CHATTANOOGA, TN

"Komatsu excavators come with the latest in technology. I'm proud to be part of the production team that builds them to hold up to years of daily punishment. I make sure they're as rugged as Komatsu's quality reputation, because it's not just Komatsu's reputation on the line—it's mine and all my friends' too. And that's why I AM KOMATSU."

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[komatsuamerica.com](http://komatsuamerica.com)

\*Compared to previous Komatsu model.

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## FINDING ANSWERS FAST

### Komatsu's Kwick Tips videos put valuable machine information at your fingertips

How do I get the most out of my equipment, and what features allow me to do that? Those are questions you probably ask yourself often. Komatsu is making it easier and faster to get answers to those and more with its Web-based Kwick Tips videos.

"People use the Web to immediately access all kinds of information, such as recipes or how to change parts on their cars," said Komatsu Product Marketing Manager Craig McGinnis. "These Kwick Tips videos are just like that. For instance, the equipment owners or operators may want a refresher on how a particular button or feature, such as traction control, affects their productivity and efficiency. The videos are a way for them to quickly get answers, and they can do that from anywhere they have an Internet connection. It could even be while sitting in the cab of the machine using a smart phone or tablet."

Users have multiple avenues to access the videos from Komatsu America's website, [www.komatsuamerica.com](http://www.komatsuamerica.com). At the top of the home page is an icon for YouTube. Clicking on that will take you directly to a Komatsu YouTube channel where all the Kwick Tips videos are listed, as well as some more in-depth Komatsu training videos on topics such as Tier 4 Final and diesel exhaust fluid.

Another way to access the videos is to use the search box on Komatsu's website to find a specific machine. When the page for that machine pops up, click on the Watch Our Videos tab, which will show a drop-down menu of topics. Click the one that interests you to see the video. If you are looking for a particular machine, you can also click on the equipment tab on the home page and

continue to follow the tabs until you get to the model you are looking for.

#### Positive feedback

McGinnis noted that the launch of Kwick Tips was well-received by users, as early traffic to the videos was encouraging. "The video series trained almost 1,500 viewers the first few months of availability. That's a good foundation to build on.

"Kwick Tips are short and to-the-point," added McGinnis. "We're constantly adding more. The main focus as we started was wheel loaders. We continue to expand on those, and we're also producing videos for our motor graders, excavators and other products. We envision having a very comprehensive list in the near future." ■



Craig McGinnis,  
Komatsu Product  
Marketing Manager

Komatsu's Kwick Tips videos provide valuable insight into machine functions and features that can potentially increase production and efficiency. The Web-based videos can be accessed anytime at [www.komatsuamerica.com](http://www.komatsuamerica.com).



# FUNDING ASSESSMENT

## DOT auditing state-highway spending amid push to pass new legislation

The Department of Transportation recently announced it is launching an audit of state-highway spending. The agency's inspector general said the review is intended to make sure federal funding that's allocated to states is being properly used, noting that the Federal Highway Administration's (FHWA) State Transportation Improvement Program (STIP) provides more than \$37 billion annually for road and bridge construction.

"The objective of this audit is to assess FHWA policies and procedures and to ensure STIPs receive comprehensive, consistent reviews and meet federal requirements, including coordination with the Federal Transit Administration," according to officials with the inspector general's office.

Auditing the states comes at a time when many are pushing to renew and increase transportation funding. The previous highway

bill expired nearly a year ago, and Congress has passed short-term patches since. Even with bills in place, funding has fallen short of meeting needs. The current gas tax has not been raised in more than 20 years, and more fuel-efficient cars have led to decreased revenues.

### Groups push for solutions

The funding shortfall has put many of the country's roads and bridges in serious disrepair. An American Road & Transportation Builders Association (ARTBA) review of the 2014 U.S. Department of Transportation National Bridge Inventory database showed that more than 61,000 bridges are classified as structurally deficient. Those bridges are crossed 215 million times per day, and data shows a current backlog of more than \$115 billion in bridge and \$755 billion in highway work.

"State and local governments are doing the best they can to address these significant challenges, given limited resources," said ARTBA Chief Economist Dr. Alison Premo Black. "Many of the most heavily traveled bridges are nearly 50 years old. Elected officials can't just sprinkle fairy dust on America's bridge problem and wish it away. It will take a committed investment by legislators at all levels of government."

An Associated General Contractors of America (AGC) campaign known as #DriveBetterRoads highlights the benefits of fixing transportation infrastructure, such as reduced commute times.

"Drivers don't have to settle for bad roads, lousy traffic and unsafe bridges," said AGC member Dale Stubblefield during an organization event to announce the initiative. "As long as drivers speak up, we can all 'drive better roads.'" ■

The Department of Transportation says it is auditing state-highway spending. The agency's inspector general said the review is intended to make sure federal funding that's allocated to states is being properly used. Industry groups are calling for more surface transportation funding.



# STAY ALERT

## AGC urges motorists to proceed with caution in highway work zones

Forty-six percent of highway contractors reported that motor vehicles had crashed into their construction work zones during the past year, according to the results of a new highway work-zone study conducted by the Associated General Contractors of America (AGC). Association officials urged summer-travel motorists to stay alert while driving through work zones, noting that drivers and passengers are more likely than highway workers to be hurt or killed in work-zone accidents.

“If the thought of saving someone else’s life isn’t enough to get you to slow down, just remember that you and your passengers are more likely to suffer in a highway work-zone crash than anyone else,” said Tom Foss, President of Brea, Calif.-based Griffith Company and the Chairman of AGC’s Highway and Transportation Division. “In most work zones, there just isn’t enough margin for error for anyone to speed through or lose focus.”

Foss said that 41 percent of contractors reported that motor vehicle operators or passengers were injured during work-zone crashes this past year, and 16 percent of those crashes involved a driver or passenger fatality. Highway work-zone crashes also pose a significant risk for construction workers, Foss noted. He said 16 percent of work-zone crashes injure construction workers, and 9 percent of those crashes kill them.

Work-zone crashes also have a pronounced impact on construction schedules and costs, Foss said. He noted that 26 percent of contractors reported that work-zone crashes during the past year have forced them to temporarily shut down construction activity. Those delays were often lengthy, as 48 percent of those project shutdowns lasted two or more days.

### Tougher penalties would help

Association officials said that 69 percent of contractors nationwide feel that tougher laws, fines and legal penalties for moving violations in work zones would reduce injuries and fatalities. In addition, 80 percent of contractors said that an increased use of concrete barriers will help reduce injuries and fatalities. Additionally, 70 percent of contractors nationwide agree that more frequent safety training for workers could help. They added that many firms and associations have crafted these types of highway safety programs.

Foss suggested that the best way to improve safety is for motorists to be more careful while driving through highway work zones. “Our message to every motorist is this: When you see construction signs and orange barrels, take your foot off the gas, put the phone down and keep your eyes on the road.” ■

*This article is based on a press release from Associated General Contractors of America (AGC).*

**Forty-six percent of contractors reported that motor vehicles crashed into their construction work zones during the past year. AGC is urging motorists to stay alert and obey posted signs.**



### Poll: More than 70 percent support 10-cent gas-tax increase

A Mineta Transportation Institute poll showed 71 percent of voters would support a 10-cent increase in the federal gas tax if the money was used specifically for transportation improvements. There was also strong support if the increase was spent on projects to reduce accidents and improve safety, as well as for projects to add modern, technological systems.

The federal gas tax has been the traditional source of funding for roads and bridges since the 1930s and was last increased in 1993. Because it didn't keep up with inflation – and cars are more efficient – a gap in transportation

funding was created. Congress typically spends about \$50 billion annually on transportation, but the gas tax only brings in approximately \$34 billion.

“Conventional wisdom says that Americans strongly oppose any increase in the federal gas tax,” said Dr. Asha Weinstein Agrawal, the study's director. “However, this survey shows that significant majorities want the government to provide better transportation infrastructure, are willing to pay for improvements, and want gas-tax revenue spent on public transportation, as well as on roads and highways.” ■

### Komatsu announces equity participation in technology firm

Komatsu recently announced its equity partnership in ZMP, Inc. The companies will work together to automate construction and mining equipment, as well as other areas. Komatsu will continue to develop construction equipment and next-generation mining machinery by applying information and communication technologies while collaborating with other companies for innovation.

ZMP has advanced technological expertise in image recognition and in sensing and controls for vehicle automation systems. It has received outstanding evaluations from the automobile industry, as well as from other industries.

Prior to equity participation, Komatsu was collaborating with ZMP to develop control technology for mining equipment. Komatsu expects to further strengthen collaboration in unmanned operation of equipment, vehicle automation and other fields.

“Komatsu will be able to accelerate the pace of providing products and services that are designed to innovate customers' jobsites, and ZMP will be able to expand its business domains and can expect further growth,” Komatsu noted in a press release announcing the equity participation. “Komatsu believes that the two should be able to develop and enjoy a win-win relationship.” ■

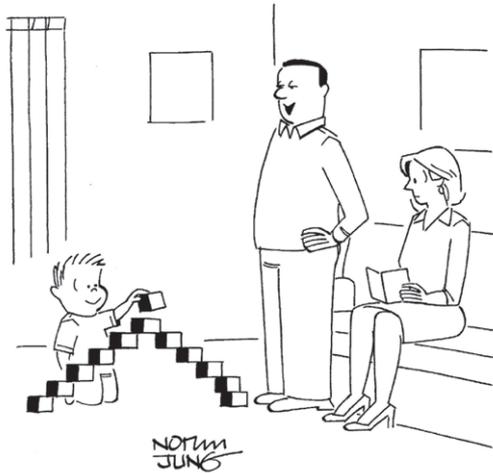
### 2015 World of Asphalt, AGG1 sets records

World of Asphalt and AGG1 broke records for attendance, number of exhibitors, show space and education tickets during the March 2015 event held in Baltimore, Md. Attendance totaled more than 7,600, and 450 exhibitors showcased the latest technologies and products in more than 135,000 square feet of space. More than 10,000 education tickets were purchased.

“Exhibitors and attendees alike cited the value of face-to-face dialog with so many industry professionals and companies in one place and the consistently high-quality environment of the shows,” said Show Manager Rich Prausa of the Association of Equipment Manufacturers.

The 2016 World of Asphalt and AGG1 is to be held March 22-24 in Nashville at the Music City Center. ■

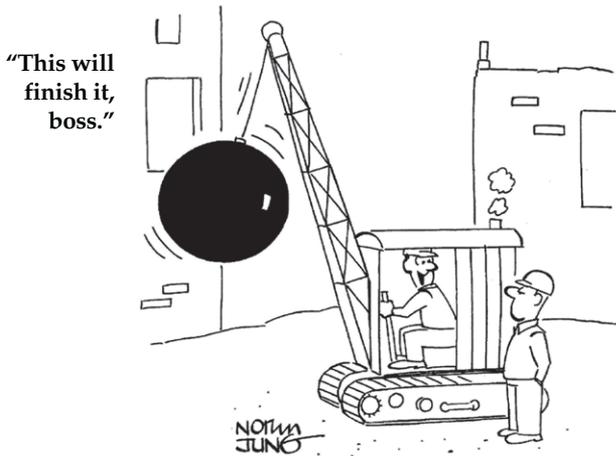
## On the light side



"He definitely has a talent in construction."



"My parents are old-fashioned. We can't have social media at the dinner table. We're expected to actually talk."



"This will finish it, boss."

## 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.CECPushingAhead.com](http://www.CECPushingAhead.com)

1. M P U D \_ \_ \_ \_ \_
2. K T C R U \_ \_ \_ \_ \_ K
3. G R E Y N E \_ \_ N \_ \_ \_ \_ \_
4. C R T A R O T \_ \_ R \_ \_ \_ \_ \_ R
5. R T A L I E M A \_ \_ A \_ \_ E \_ \_ \_ A \_ \_

## Did you know...

- The letter J does not appear anywhere on the periodic table of the elements.
- The ocean is home to nine out of every 10 living things.
- The tooth is the only part of the human body that cannot heal itself.
- The University of Alaska spans four time zones.
- Avocados have the highest calories of any fruit, at 167 per hundred grams.
- Warner Communications paid \$28 million to copyright the song "Happy Birthday."
- The roar we hear when we place a seashell next to our ear is not the ocean, but rather the sound of blood surging through the veins in the ear.
- In ancient times, strangers shook hands to show that they were unarmed.
- Everything weighs 1-percent less at the equator.
- A 1,200-pound horse eats about seven times it's own weight each year.

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