www.DMIDifference.com

# Difference

A publication for and about DMI customers • April 2018



# A MESSAGE FROM THE CHAIRMAN



#### Dear Valued Customer:

Economists and industry organizations predict further strength in construction throughout 2018. Many see growth across several market sectors, and if Congress delivers on new infrastructure legislation, that would also add to the positive outlook. At DMI, we are hopeful that will be the case.

Growth in the construction industry means more machinery in the field. DMI is aligned with great manufacturers who we believe engineer and build the best equipment in the industry. Komatsu is a perfect example. No other company can match its *intelligent* Machine Control dozers and excavators, which are making businesses like yours more productive, efficient and profitable. You can read about one such firm in this issue of your DMI Difference.

Of course, there are times when standard machinery is your best choice. Komatsu's extensive lineup of Dash-11 excavators stands out for its unrivaled power, durability, reliability and productivity. Read about several models inside.

These, and many other Komatsu Tier 4 products, are covered by Komatsu CARE for the first three years or 2,000 hours. Our technicians perform the scheduled maintenance at times and locations convenient for you, which minimizes your downtime. We track your machines' hours, contact you when services are due and get them done.

DMI can also service your older Komatsu machines, other brands we carry and competitive equipment as well. If there is anything you need, from sales and rentals to parts, maintenance and repairs, we have you covered. Call or stop by one of our branch locations for more information.

Construction remains in positive territory

Pat Healy
Chairman of the Board

Sincerely,



# IN THIS ISSUE

#### QUINN CONSTRUCTION, INC. pg. 4

This Rapid City firm thrives on the challenges involved with out-of-the-ordinary projects. Read more inside.

#### SPECIAL EVENT pg. 8

Ride along with DMI customers as they preview new technology and test the latest products at Demo Days.

#### **GUEST OPINION** pg. 11

Learn why building information modeling for virtual designs could lower infrastructure spending.

#### CONSTRUCTION OUTLOOK pg. 12

Take a look at industry leaders' predictions for growth in the construction field this year.

#### FOCUS ON EXCAVATORS pg. 14

Explore Komatsu's extensive line of excavators, which use Tier 4 Final technology.

#### FIELD NOTES pg. 18

See how one contractor improves efficiency using a Komatsu D51EXi dozer.

#### KOMATSU & YOU pg. 21

Get to know Walt Nichols, General Manager of Komatsu's Chattanooga Manufacturing Operation.

Published by Construction Publications, Inc. for



**DIESEL MACHINERY, INC** www.dieselmachinery.com

#### SIOUX FALLS

4301 North Cliff Ave. P.O. Box 85825 Sioux Falls, SD 57118-5825 (605) 336-0411

(605) 336-0411 (800) 456-4005

#### RAPID CITY

I-90 & Deadwood P.O. Box 2473 Rapid City, SD 57709 (605) 348-7438 (800) 658-3047

#### **ABERDEEN**

39288 133rd Street (East Hwy. #12) Aberdeen, SD 57401

(605) 725-4364 (888) 762-6312



Printed in U.S.A. © 2018 Construction Publications, Inc.

# THE PRODUCTS PLUS THE PEOPLE TO SERVE YOU!

#### **SIOUX FALLS**

Pat Healy, Chairman of the Board

Dan Healy, President

Dan Rude, General Manager

**Stan Burgers,** Controller (605) 366-3482

**Steve Ward,** Director of Product Support (605) 221-1963

**Herb Lohnes,** Sales Manager (605) 361-7979

**Roger Horstmeyer,** Territory Manager (605) 366-6000

**Tim Kelly,** Territory Manager (605) 212-9997

**Darwin Ellis,** Territory Manager (605) 330-0448

**Jon Winklepleck,** Territory Manager (605) 361-7224

Caleb Hinkkanen, Sales (605) 838-5453

**Loren Fuhrmann,** Topcon/GPS Sales (605) 809-6886

Nick Wallin, Customer Service Rep (605) 254-7002

**Kate Hansen,** Parts Manager (605) 251-2935

**Lyle Ruesch,** Service Manager (605) 366-4670

**Eric Anderson,** Shop Foreman (605) 351-5119

### **RAPID CITY**

Mark Barry, Branch Manager/ Territory Manager (605) 342-1767

**Peggy Wolf,** Territory Manager (605) 430-4580

**Justin Larson,** Territory Manager (605) 484-5699

Scott Houk, Parts Manager (605) 574-9043

**Joe Bowman,** Service Manager (605) 391-1307

#### **ABERDEEN**

Chad Casanova, Branch Manager/ Territory Manager (605) 380-0180

**Jarod Heinz,** Territory Manager (605) 228-4434

**Justin Herreid,** Parts Manager (605) 290-3878

**Jerald Bankston**, Service Manager (605) 228-4821



# QUINN CONSTRUCTION, INC.

# Meeting the challenges of unique jobs keeps this Rapid City company motivated



Bob Quinn, President



Eddie Seieroe, Field Superintendent

Bob Quinn is always game for a challenge. Reviewing a list of assignments that his company, Quinn Construction, Inc., has completed throughout the past 25 years is proof. Quinn wasted little time in setting a precedent for his business.

"On our first job we had to use 8,000 tires to complete a breakwater project for a marina south of Rapid City," recalled Quinn, who is President of the Rapid City-based firm. "That was odd enough, but to find those 8,000 tires, we had to inspect 40,000 others to make sure we had the right ones. That set the tone for us."

Since then, Quinn and his crews have been drawn to similar contracts with unique elements.

"We've been a part of many out-of-the-ordinary jobs through the years," noted Quinn. "Many of our projects involve some form of water. Lagoon repairs and sewer-pond construction are two of the most common requests we get. There are a lot of

small towns in South Dakota that can't afford sewage-treatment plants, so they use these ponds. We've built several and continue to maintain them."

As Quinn Construction grew, it evolved by adding more services to its repertoire, including highway work and utility installation for light commercial projects.

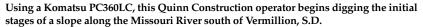
"Approximately 10 years ago, we started doing more excavating for sewer and water and recently began branching out into additional site work," detailed Quinn. "Today, we do a lot for the local military bases, cities, counties and the DOT. We also help the South Dakota Game, Fish and Parks Department."

Currently, Quinn Construction employs roughly 35 people and operates primarily in western South Dakota, but will travel throughout the state and into Wyoming occasionally, focusing on projects in the range of \$500,000 to \$5 million.

#### Wet and wild

While the company has an expanded list of offerings, difficult assignments that include water elements remain its bread and butter. Whether that requires drilling 3,000 holes to blast and remove 120,000 cubic yards of rock for a sewage-treatment lagoon at the Crazy Horse Memorial or installing 5,000 tons of riprap underneath a bridge to help reinforce the banks of a high-velocity river bend east of the Black Hills, Quinn's team relishes the challenge.

"We have a lot of experience with water," explained Quinn. "We have developed a niche in that area, and our employees really enjoy it. We have the experience and equipment to handle that kind of work, plus there tends to







Field Superintendent Eddie Seieroe uses Quinn Construction's Komatsu PC350LC with a long stick to create an 80-foot, two-to-one slope along the Missouri River. "We needed the reach of the PC350LC to complete this job," said Seieroe. "At full extension, I still have excellent power and control. There is no jerking from the controls. It's a smooth machine."

be less competition as the job description gets more out of the ordinary."

The company put its knowledge and passion to the test on a project near Vermillion in 2017 for the U.S. Army Corps of Engineers and the South Dakota Game, Fish and Parks Department as it tackled a shoreline-protection job along the main channel of the Missouri River.

"We reinforced a half-mile stretch that the river was eroding away," detailed Quinn. "The project was also necessary because that area included wells for the Lewis and Clark Water District, which supplies 25 million gallons of drinking water every day to residents of eastern South Dakota, Iowa and Minnesota."

To complete the venture, Quinn Construction's crew performed a two-to-one slope – which required two feet of distance per foot of elevation – that started four feet below water level and extended as high as 40 feet in some places. The surface was layered with quartzite, dirt, riprap and field rock to create a solid barrier between the river and the wells.

"From one to 10, this was about an eight or nine on the difficulty scale for us," admitted Quinn. "We removed trees, cut the slope and reinforced it with the rock – we had to truck in 35,000 tons of riprap from more than 100 miles away to complete it. Then, we went back and placed field rock, so it all looks natural and also helps maintain the integrity of the slope. In the spring, we'll return to reseed and plant trees.



Quinn Construction completed a shoreline-protection project for the U.S. Army Corps of Engineers and the South Dakota Game, Fish and Parks Department in December. The company created and reinforced a slope that started four feet below the Missouri River and extended as high as 40 feet in some areas to protect the Lewis and Clark Water District's wells.

"In addition to those tasks, we accommodated the wildlife that inhabits the area as well," he added. "We stopped work for a few weeks to make sure we weren't disrupting the bald eagles and again for the mating season of the bats in the area. It took longer, but we saw it as just another challenge. We started in July and wrapped up before Christmas."

## Using 'the best'

Unique jobsites and challenging maneuvers are common for Quinn Construction. One aspect that is stress-free for the company is its

Continued . . .

# 'Big fans of Komatsu wheel loaders'

... continue

Komatsu equipment from Diesel Machinery, Inc., (DMI) and Branch Manager Mark Barry.

"I've run every brand of machine, but I believe Komatsu is the best," revealed Quinn. "When I started Quinn Construction, I knew I wanted Komatsu equipment, especially excavators. They have excellent fuel efficiency. I only burn six gallons an hour in an 68,000-pound machine. That's better than my truck."

The firm deployed its newest excavators, a PC350LC with a long stick and a PC360LC, on the Missouri River assignment.

"We bought the PC350 specifically for that project," said Quinn. "The long stick gave us the necessary reach to complete the slope. We had it fully extended and were digging in

SUINN COMPRINCIPAL BARBOOT VE SE GARBOOT VE SE

(L-R) Quinn Construction Field Superintendent Eddie Seieroe and President Bob Quinn call on Diesel Machinery, Inc., Branch Manager Mark Barry for their Komatsu equipment needs.

To manage a pile of debris, a Quinn Construction operator uses the company's WA500-3 wheel loader. "(It has) more than 20,000 hours on it," said President Bob Quinn. "I'm convinced it'll run forever."



mud and water with plenty of power. Plus, we asked DMI to outfit it with Easy Dig, a guidance program that helps us find and stay on grade. That was a huge benefit. We were able to complete the job much faster, and we didn't need someone checking grade while standing in the mud and water. We could get in the excavator and get to work."

The company's equipment fleet also includes two Komatsu wheel loaders - a WA500 and a WA380.

"We are big fans of the Komatsu wheel loaders," shared Quinn. "We have a WA500-3 with more than 20,000 hours on it that we use all of the time. I'm convinced it'll run forever."

In addition to top-of-the-line equipment, Quinn relies on DMI to supplement his company's mechanics.

"Knowing that DMI is there to stand behind their equipment is a nice option for us," noted Quinn. "We have mechanics on our staff, but when we are out of town, DMI is there to help. The service they provide makes their equipment bulletproof."

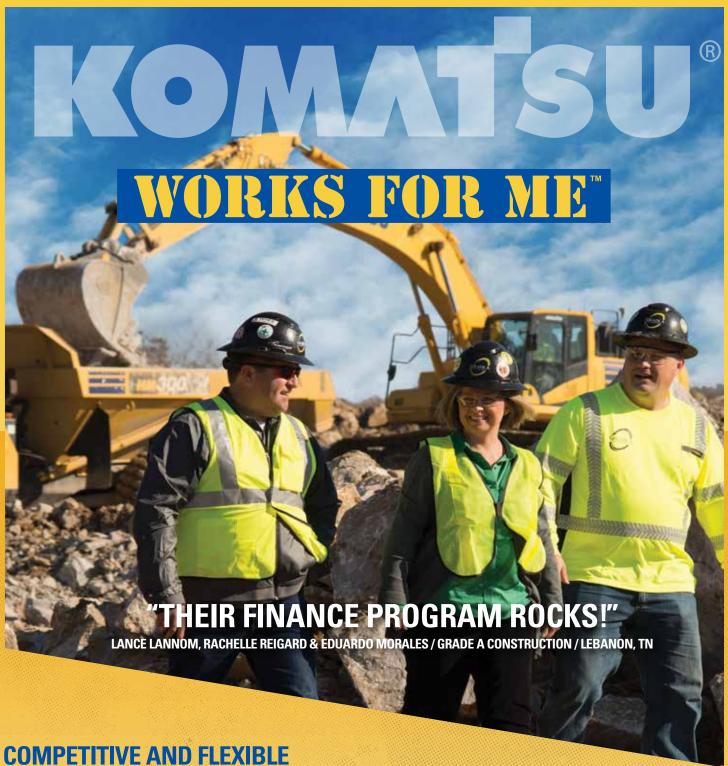
## The next phase

Quinn knows that change is on the horizon for his company, in terms of cutting-edge innovations, size and management.

"The technology that has come into our industry is amazing," recounted Quinn. "Right now we have some aftermarket systems that use stakes and lasers, but I imagine we'll have integrated technology soon. We tested the Komatsu *intelligent* Machine Control excavators at Demo Days in Cartersville, Ga., and we were really impressed. It's the future."

Along with ushering in new tools, Quinn has been grooming the next generation of management.

"I've been in the industry for 40 years, so retirement is around the corner," he said. "We have a succession plan in place. Derek Suhr has worked here for 10 years, and he's very ambitious. He's going to be a great fit to take over when I retire. He plans to grow the company, promote it and looks to add services. He will do well."



CONTRETTITIVE AND FLEXIBLE

KOMATSU FINANCIAL "Komatsu has been a great partner for us. They've been with us through the years, even when we started small and not many other places wanted to talk to us. They believed in us and helped us grow. From a custom financing plan to tech like KOMTRAX, to customer service and Komatsu CARE, and of course reliable products—they offer everything to help our bottom line grow." Rachelle Reigard, President

**KOMATSU®** 

THAT'S WHY I AM KOMATSU







# **JUMP RIGHT IN**

# Demo Days gives customers opportunity to operate latest equipment



Bill Chimley, Director of Training and Publications

More than 300 customers and industry professionals attended Komatsu's most recent Demo Days event at its Cartersville Customer Center in Cartersville, Ga. Attendees were treated to an abundance of sunshine and warm temperatures as they enjoyed the latest Komatsu has to offer.

"It was a great event to showcase our machines, technology and employees to a large group of customers," explained Director of Training and Publications Bill Chimley. "Demo Days is the perfect opportunity for customers because they can come here and operate the newest machines, and our staff members can answer any questions they have."

The entire lineup of Komatsu *intelligent* Machine Control dozers and excavators – the industry's first machines with integrated GPS and machine control technology – were available for attendees to operate. In total, nearly 30 pieces of equipment were on-hand for demonstration, including a remote-control D155AXi *intelligent* Machine Control dozer and

a Hybrid HB365LC excavator in addition to haul trucks, dozers, excavators and wheel loaders.

"The intelligent Machine Control pieces are always a big hit at Demo Days," noted Chimley. "Customers get the chance to jump in an integrated dozer or excavator and see exactly what the technology can offer. Plus, they can operate it in a safe, controlled environment with an expert right there to provide proper training. There is a lot of interest in the technology, and Demo Days is a great opportunity to test it out."

## Manufacturing operation tour

Customers had two options for the morning. They could attend information sessions at the Cartersville Customer Center focused on Komatsu technology or tour the Chattanooga Manufacturing Operation (CMO) facility in Tennessee to see how the machines are made. The two groups then came together for lunch and a safety briefing before operating machines in the afternoon.

"We want everyone who attends Demo Days to get all the information they need, and the morning sessions are a great way to do that," said Chimley. "Our product managers and technology solutions experts lead sessions on emerging technology and also host question-and-answer sessions.

"The CMO tour is a neat experience as well," he added. "Seeing the machines being assembled and then operating them that afternoon gives customers a chance to really get a feel for our equipment – from fabrication to operation. Sometimes we'll have customers on tour when their machines are being assembled, and we let them sign the frame or do something to personalize it. This year, we had a customer

(L-R) DMI Territory
Manager Peggy
Wolf talks with
Laura and Eddie
Buettner of Buettner
Construction at
Demo Days in
Cartersville, Ga.





Komatsu's recent Demo Days event in Cartersville, Ga., featured nearly 30 pieces of equipment – including excavators, dozers, wheel loaders, haul trucks and a motor grader – available for customers to operate.



Bob Quinn of Quinn Construction (left) and DMI Branch Manager Mark Barry meet at Demo Days.

whose excavator was just assembled, and he took a photo with it."

The Cartersville Customer Center also featured Komatsu's operator-training simulator, Worksite VR. The simulator uses a computer program in conjunction with a virtual-reality headset, an operator's chair, pedals and joysticks to recreate excavator operations at a jobsite. The simulator was available for attendees to test out throughout the day.

"Demo Days provides an opportunity to operate several machines and get a great deal of information in a short time," noted Chimley. "Customers who are interested in attending Demo Days should contact their distributor to set up a visit."



Attendees had the opportunity to operate Komatsu's full family of intelligent Machine Control dozers at Demo Days.



(L-R) DMI Branch Manager Mark Barry checks out the latest Komatsu excavators on display with Doug and Cody Lind of Lind-Exco.



## "Original Innovators of Side Dump Technology."®



STANDARD TANDEM

Side Dump Industries manufactures Tandem Axie, Super-Tri Axie, Quad Axie and Converter Dollies tough enough to handle



HIGH SIDE REVOLUTION SERIES



Side Dump Industries can build any trailer to your exact specifications and needs. Simply call 800-600-3904 and we'll get started on building your Side Dump Industries custom trailer.



SIDE DUMP MINI

Side Dump Min's handle a wide variety of your smaller scale dumping needs. Perfect behind a small tractor or ATV, you can use the Side Dump Min't to hauf stone, gravel, dirt, mulch, sand, firewood, fertilizer, feed, debris...even liquid loads!



CONTRACTOR SERIES



TRUCK BOX SIDE DUMP

built as a removable unit and mount above the fifth wheel coupling, enabling the truck to serve dual functionality.

## www.SideDumpIndustries.com



sidedumpindustries.com

Side Dump Industries' side dump trailers have a dump angle that is 10+ degrees greater than other manufacturers. Loads come out quicker with less sticking, so your tub will be cleaner.

THE PEOPLE WHO MADE IT WORK, MAKE IT BETTER

Give us a call. Get the facts. And get back to business.



**DIESEL MACHINERY, INC** www.dieselmachinery.com

#### SIOUX FALLS

4301 North Cliff Ave. P.O. Box 85825 Sioux Falls, SD (605) 336-0411

(800) 456-4005

#### RAPID CITY

I-90 & Deadwood P.O. Box 2473 Rapid City, SD (605) 348-7438 (800) 658-3047

#### **ABERDEEN**

39288 133rd Street (East Hwy. #12) Aberdeen, SD (605) 725-4364 (888) 762-6312

# **PREVIEW PAYOFF**

# How virtually designing infrastructure jobs with building information modeling saves taxpayer dollars

No longer the infrastructure envy of the world, many of the United States' roads, bridges and tunnels are crumbling and in need of substantial maintenance or replacement. Compounding these challenges are the pressures of increased urbanization and population growth, which will place added stress on already strained systems.

So, while the Beltway banter continues about addressing infrastructure funding, we can no longer focus solely on the amount of spending, but rather the manner by which those dollars are spent. Secretary of Transportation Elaine Chao captured the point perfectly in her confirmation hearing last year when she said, "It's also important to recognize that the way we build and deliver projects is as important as how much we invest."

Using building information modeling – BIM – will allow the federal government to do far more with taxpayer dollars by virtually building first in order to validate the approach and costs.

But what is BIM? Simply stated, BIM allows project teams across all disciplines – designers, engineers, construction teams and project sponsors/owners – to build in the digital world before doing so in the physical world. The benefits? Reduced risk, waste and rework in construction, which typically lead to cost overruns.

Many governments around the world have or are in the process of creating requirements for spending funds more responsibly with an eye on long-term growth and modernization of government-funded infrastructure. China, Germany, Japan, the United Kingdom (U.K.), France and others are in the lead on developing BIM policies or standards and demonstrating real value on behalf of their constituencies.

Perhaps the U.S. Department of Transportation should take a page out of the U.K.'s playbook. That nation implemented a technology policy that all government-funded projects, including infrastructure, are required to use BIM. Using the BIM process, between 2009 and 2015, the policy saved U.K. taxpayers 15 to 20 percent in construction costs, roughly the equivalent of more than \$1 billion U.S. dollars.

Ben Franklin popularized the phrase, "a penny saved is a penny earned." When it comes to spending taxpayer dollars on infrastructure, the proverb has even greater meaning. Millions saved means we can put America's roads, railways, airports and bridges reliably back to work and help create many thousands of meaningful jobs.

Editor's note: This article is excerpted from one that was originally published in The Hill. To see the full article, please visit http://thehill.com/opinion/technology/363166-to-address-americas-crumbling-infrastructure-follow-britains-lead.



Jim Lynch, Vice President, Autodesk Construction Products Group

Jim Lynch is a 30-year veteran of the computer-aided drafting industry. He has served in a variety of senior management roles in the AEC (architecture, engineering and construction), manufacturing and electronic design automation industries.

Jim Lynch, Vice President of Autodesk Construction Products Group, says using building information modeling will allow the federal government to do far more with taxpayer dollars by virtually building first in order to validate the approach and costs.



# **FORECAST 2018**

# Industry experts predict further growth in most construction industry sectors

Ten years ago, the construction industry faced a major crisis. The nation's worst economic period since the Great Depression had pulled it down. New starts were relatively small, firms were closing at a rapid pace and many of those that were hanging on were forced to slash staff in an effort to stay afloat.

A decade later, the landscape looks quite different. The end of 2017 saw construction employment at its highest level since November 2008, totaling nearly 7 million jobs. The Associated General Contractors of America's Chief Economist Ken Simonson noted that the year-over-year growth rate in industry jobs of 2.7 percent from November 2016 to November 2017 was nearly twice the rise in total nonfarm payroll employment. He also pointed out that factors such as a lack of skilled workers and tight profit margins prevented an even higher number.

"Employment and pay in the construction industry have risen more rapidly throughout the past year than in the economy overall, as the supply of unemployed, experienced workers continues to shrink," said Simonson. "With low overall unemployment, contractors are likely to have increasing trouble filling many types of hourly craft and salaried openings."

While there is a lack of skilled workers, there are seemingly plenty of upcoming project opportunities in 2018. Construction finished 2017 on a positive note with nearly every sector showing strong growth. Industry groups and individuals largely see more of the same for 2018, especially if Congress passes proposed infrastructure legislation that has been under discussion for nearly two years.

There is apparent consensus that construction as a whole will increase this year. Simonson expects growth of 2 to 7 percent overall. ConstructConnect forecasts a 4.8 percent increase to \$773.1 billion. The American Institute of Architects (AIA) Consensus Construction Forecast panel predicts 3.5 to 4 percent growth, and Dodge Data & Analytics sees a 3 percent climb to \$765 billion.

"For 2018, there are several positive factors which suggest that the construction expansion has further room to proceed," said Robert Murray, Chief Economist for Dodge Data & Analytics. "The U.S. economy is anticipated to demonstrate moderate job growth. Long-term interest rates may see some upward movement but not substantially. Overall, the year is likely to show some construction sectors register gains, while other project types settle back."

## Single-family housing leads the way

All economists and organizations point to single-family housing as a bright spot in

Construction industry organizations and individuals see single-family housing continuing to gain momentum. Dodge Data & Analytics says housing starts will rise 9 percent in dollars, corresponding to a 7 percent increase in units to 850,000.





Public works spending, including highways and bridges, is expected to increase after falling last year. The American Road & Transportation Builders Association believes air terminals; public transit; Class 1 railroads; and private driveway, street and parking lot construction associated with residential and commercial developments will also be up in 2018.

the construction industry. Dodge Data & Analytics says it will rise 9 percent in dollars, corresponding to a 7 percent increase in units to 850,000. Dodge cites continued employment growth for easing caution by potential homebuyers as well as older millennials in their 30s helping to lift demand.

That fits with ConstructConnect's analysis, which notes that residential construction should remain strong in 2018, but is partially contingent on whether millennials start making the move from living in downtown metropolitan areas to becoming homeowners.

"If millennials decide they want to have single-family housing like their parents and grandparents, it will help to drive residential starts," said ConstructConnect Chief Economist Alex Carrick. "We've had 10 years when housing starts were less than the 1.4 million benchmark that represents equilibrium. So, if housing really gets going, it's going to drive the economy for years to come."

Much of the commercial and industrial sectors were red hot last year, with most up 6 to 10 percent. That growth trend will continue, albeit at a slower pace.

Overall, those two categories accounted for 8.8 percent growth in 2017. AIA foresees a 4 percent uptick in 2018, with retail growth leading the way at 4.6 percent, followed by office space, hotels and industrial facilities. The latter category was down nearly 7 percent

last year, but AIA predicts a 1.1 percent rise this year.

#### **Public spending rebound**

Another area of agreement is public spending, including transportation, which fell 2.8 percent in 2017. Modest improvement is expected, although it will vary from state to state and region to region. That's due in part to several states passing referendums or legislation to increase their gas taxes to pay for infrastructure. The last surface transportation bill (FAST Act, 2015) also calls for rising federal funds for highways and bridges in 2018.

The American Road & Transportation Builders Association (ARTBA) believes air terminals; public transit; Class 1 railroads; and private driveway, street and parking lot construction associated with residential and commercial developments will be up this year.

"The fundamentals of this market are positive," said ARTBA Chief Economist Dr. Alison Premo Black in a Rock Products News article detailing the organization's outlook. "There are a lot of things going on that could support growth in the coming year, including the local and federal investment part of it. It really depends on where you are working. We are seeing much more variation in the regional, state and even local or urban level. There are states and areas that are showing very strong, significant growth and potential for growth throughout the next few years."

# **EXTRA BENEFITS**

# Tier 4 Final technology brings more than fuel efficiency to Komatsu excavators



Justin Lantin, Komatsu Product Manager, Excavators

Whether your business loads trucks, digs trenches, provides mass excavation or all of the above, Komatsu has a Tier 4 Final construction-size excavator equipped to get the job done. Komatsu designed the excavators to do more than meet the stringent emissions standards that come with Tier 4 Final regulations.

"They maintain, or improve, the production of their predecessors, while being more fuel-efficient," said Justin Lantin, Komatsu Product Manager, Excavators. "As an added bonus, with new Komatsu technology and innovation, in some cases you can do the same work with a Dash-11 excavator that's a size-class-smaller than the one you are replacing. For example, a customer who owns an older PC400, which we no longer manufacture, may be able to get as much or

The PC210LC-11 features additional horsepower and increased operating weight, compared to its predecessor.



more production with a new PC390LC-11. In that case, they wouldn't need to go to the next size class to replace it. We would work with them to find the right fit."

#### **Performance and production**

Production is the name of the game when it comes to excavators. Each Komatsu Tier 4 Final machine features a Closed-Center Load Sensing Hydraulic System that provides quick response and smooth operation to maximize productivity. An electronic-control system optimally controls the engine and hydraulic system according to the operating conditions.

Operators can match the machine to the work at hand by selecting the proper working mode, each of which matches the engine speed, pump delivery and system pressure to the application for maximum efficiency. Six modes are available, including Power, Economy, Lifting, Breaker, Attachment Power and Attachment Economy.

"Today's market requires excavators to be more than digging machines. For example, customers want hydraulic packages to run multiple attachments," said Lantin. "Our Dash-11 excavators have standard electrical connectors that allow users to easily add proportional joysticks, either at the factory or as a kit that doesn't require extensive wiring. Operators can control attachments with a thumb button on the joysticks."

The PC360LC-11 and PC390LC-11 feature an enhanced Power mode that provides improved performance in demanding applications. In standard Power mode, the new logic provides up to a 12 percent increase in production, compared to Dash-10 models.



"The enhanced Power mode combines flow from both pumps and provides greater available torque to the hydraulic pumps when digging," said Lantin. "That creates better cycle times and digging performance and lowers per-ton costs."

359 hp

105,670-110,220 lb

## Durability, stability

PC490LC-11

All Komatsu excavators are built to last. Komatsu uses one-piece steel castings in the booms and arms, providing increased durability to the front work equipment. The loads are spread out through the use of castings, minimizing high-stress areas. Larger machines used for heavier workloads have unique characteristics that further improve their durability and stability. The PC290LC-11 has a longer arm and boom for extended reach and a heavy-duty undercarriage for stability and long life.

"The PC240LC-11 is a great machine that fits a lot of contractors. The next-size-larger PC290 is a PC240 on steroids," said Lantin. "It has a larger counterweight, and a larger and longer boom, as well as bigger arm and bucket cylinders. The PC290 also has improved lifting and digging performance. The productivity is fantastic."

The PC360LC-11, PC390LC-11 and PC490LC-11 feature a heavy-duty design. For instance, the PC390LC-11 has a more robust undercarriage that uses larger-size-class

components. The bigger undercarriage has a 6 percent wider track gauge and offers up to 18 percent greater over-the-side lift capacity than the PC360LC-11.

1.47-4.15 cu yd

"The PC360LC-11 is a good fit, right in between a utility-size machine and bigger excavators," said Lantin. "It's great for pipeline and general construction, site development and trenching. When a company needs extra lift capacity, that's where the PC390LC-11 comes in, and the PC490LC-11 is great for moving mass quantities of material in short order."

#### New standards

Komatsu added standard features to the Dash-11 excavators to increase operator comfort, efficiency and monitoring. Enhanced work environments in the ROPS-certified cab meet Level 1 Operator Protective Guard requirements. Features include a high-back, heated, air-suspension seat with adjustable arm rests; a large, LCD color-monitor panel with a 7-inch, high-resolution screen; Eco-Guidance that offers tips for lowering fuel consumption; and enhanced attachment control. In addition, an Equipment Management Monitoring System continuously checks the machine operation and vital systems to identify issues and assist with troubleshooting.

Continued . . .

operating costs, compared to their predecessors.

# Dash-11 excavators armed with latest technology

continued

Komatsu carried over the standard rearview camera from its Dash-10 models and improved operator usage. The monitor now has a combination screen that shows a view from the camera, and it sits alongside all the main gauges.

"That gives operators greater situational awareness and helps improve productivity," according to Lantin. "They don't have to pause operation and push a button to get the camera view."

All Tier 4 Final excavators have Komatsu Auto Idle Shutdown that helps reduce unnecessary idle time and operating costs. They also include a standard Operator Identification System, which reports key machine information for multiple operators, applications and job locations.

"Operators are only limited by their imaginations when it comes to using the system," Lantin pointed out. "They can get data for a particular project, do bucketversus-hammer or other attachment analyses and a whole lot more. It allows them to set very specific benchmarks."

All Dash-11 excavators feature the latest version of KOMTRAX monitoring technology, which is available via the Internet or through a mobile app on a smart phone or tablet. Data now includes

diesel exhaust fluid (DEF) levels, ambient air temperatures and pressures, as well as standard items, such as locations, hours and codes.

"Every manufacturer is required to use DEF in Tier 4 Final equipment, but we stand out in a couple of ways," said Lantin. "I believe Komatsu is the only manufacturer that puts a site gauge on the tank, which allows users to quickly check the DEF level without getting in and turning on the machine to read the gauge. More significantly, we separated the DEF pump from the tank, placing the pump in a more accessible location. If the pump needs a new filter, it's done in minutes, whereas other manufacturers combine the pump and tank, requiring a lengthy process to simply change a pump filter.

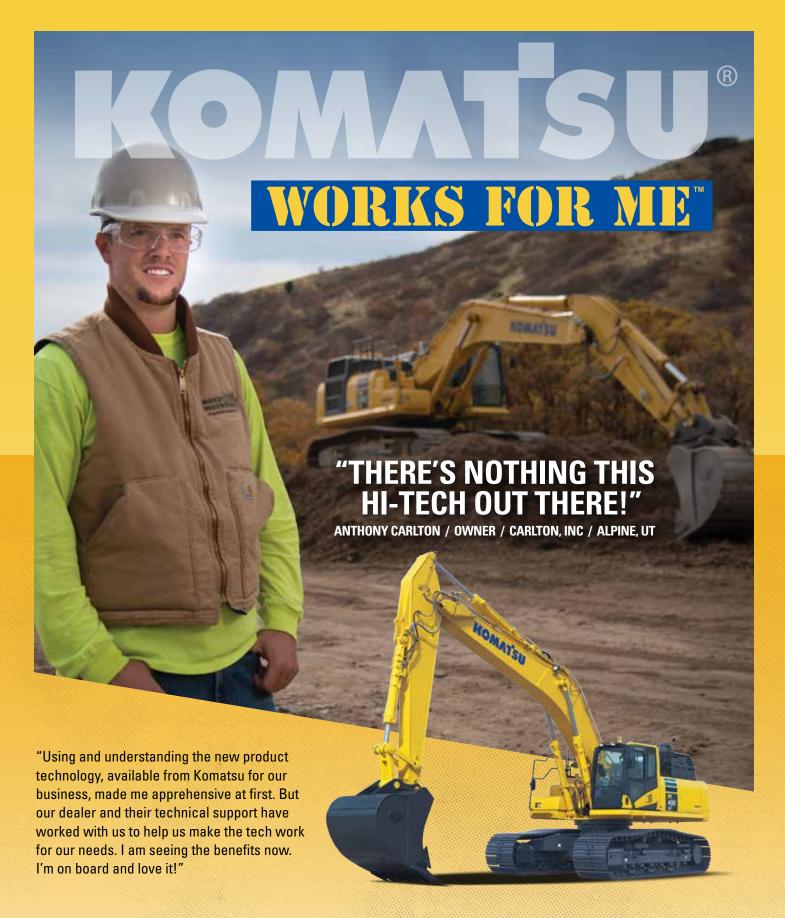
"Another standout feature is that Komatsu's design gives operators some peace of mind when it comes to DEF level and working on slope," he added. "Even if the gauge reads empty, there is actually enough reserve margin in the tank. The DEF pick-up will remain submerged up to the slope limit of 70 percent. Overall, we're seeing that DEF usage is running close to where we expected it to be – at about two gallons for every 100 gallons of fuel, if not a little lower. Komatsu has also designed DEF tank capacity to run through two full tanks of fuel before requiring DEF."

When Komatsu rolled out its Tier 4 Interim machines, it also introduced Komatsu CARE, which provides complimentary scheduled service for the first three years or 2,000 hours. Factory-trained technicians perform all work at a convenient time and location and conduct a 50-point inspection at the same time. Komatsu distributors track the machines through KOMTRAX, contact the owner when a service is due and schedule the work.

"Komatsu CARE also covers two Komatsu Diesel Particulate Filter (DPF) exchanges in the first five years," Lantin noted. "Most manufacturers charge for changing the DPF. That is complimentary with Komatsu and done with minimal downtime because the service tech puts in a fresh filter, versus waiting for the old filter to be cleaned and reinstalled. Komatsu CARE is a great program that provides world-class support to world-class machines." ■

The PC390LC-11 has a robust undercarriage that uses larger-size-class components. The bigger undercarriage has a 6 percent wider track gauge and offers up to 18 percent greater over-the-side lift capacity than the PC360LC-11. "When a company needs extra lift capacity, that's where the PC390LC-11 comes in," said Justin Lantin, Komatsu Product Manager, Excavators.





# **KOMATSU®**

THAT'S WHY I AM KOMATSU







Discover more

# **INTELLIGENT DOZING**

# Experienced earthmoving contractor boosts efficiency with Komatsu D51EXi dozer



Cody Weaver, Owner, CW Construction

Cody Weaver started moving dirt at the age of 12 and hasn't stopped. Throughout the years, the Owner of CW Construction learned how to do it as efficiently and competitively as possible by maximizing production time. Approximately a year ago, he upped the ante further with the addition of a Komatsu D51EXi intelligent Machine Control dozer.

Weaver uses it to prep subgrade for roadways, level pads, cut and move massive amounts of dirt, as well as place sub-base materials, among other tasks. The dozer features factory-integrated machine control that requires no masts or cables like traditional aftermarket GPS grading systems.

"I love that it provides automatic dozing from rough cut to finish grade, and that the system is integrated into the machine," said Weaver. "The accuracy is impressive. It eliminates overcutting and the need to replace materials with expensive fill."

Once engaged, Komatsu's *intelligent* Machine Control system automatically starts the cut and

lowers to grade in a typical dozing pass. If the load increases to maximum capacity, the blade automatically raises to minimize track slip, ensuring productive dozing. This allows the dozer to achieve up to 8 percent greater efficiency in moving materials, based on start-to-finish grade testing against typical aftermarket machine-control systems.

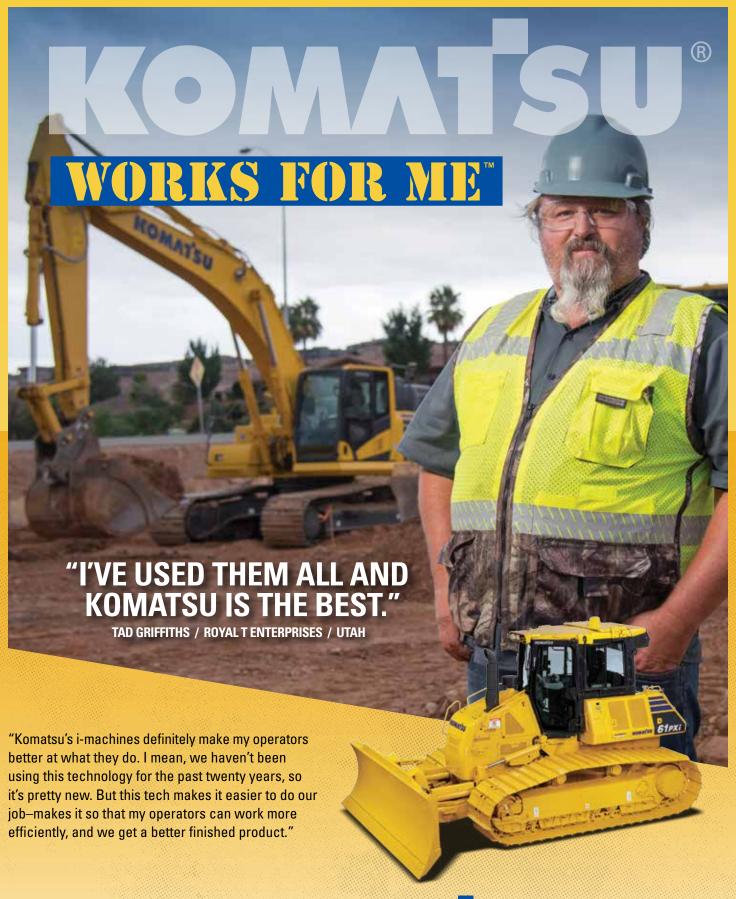
#### **Four modes**

Operators can select from four distinct operating modes (Cut and Cutting, Spreading and Simple Grading) to optimize performance to the application. They can also tailor blade loads to material conditions by choosing from light, normal or heavy blade-load settings.

"It virtually eliminates the need for staking and grade checkers," Weaver stated. "You can just plug in the plans, set the machine and it does the work, making even the newest operators look like they have been running a dozer for years. Our time, material and labor savings are remarkable."

CW Construction's intelligent
Machine Control D51EXi
dozer cuts, grades and
pushes material. "I love that
it provides automatic dozing
from rough cut to finish
grade, and that the system is
integrated into the machine,
so there are no masts or
cables to install or remove,"
said Owner Cody Weaver.
"The accuracy is impressive.
Our time, material and labor
savings are remarkable."





**KOMATSU**®

THAT'S WHY I AM KOMATSU







# **ALL ABOUT QUALITY**

# General Manager Walt Nichols says Komatsu's CMO builds products to stringent standards

QUESTION: What products are produced at the Chattanooga Manufacturing Operation (CMO)?

ANSWER: From a construction standpoint, our focus is standard hydraulic excavators from the 21-ton PC210LC-11 to the 49-ton PC490LC-11, as well as *intelligent* Machine Control PC360LCi-11 and PC490LCi-11 models. We mainly supply the North American market. In addition, CMO produces forestry excavators, tracked harvesters and tracked feller bunchers. This is the only Komatsu plant in the world that builds those forestry-tracked machines. Nearly everything we manufacture is Tier 4 Final. CMO is the only plant in North America that cleans diesel particulate filters from Tier 4 Final machines.

## QUESTION: Why is it a good choice to buy a machine built at CMO?

ANSWER: It's all about quality. Komatsu has stringent standards, from the fabrication and welding of frames to genuine Komatsu parts and components. Outside vendors who supply certain items have to meet Komatsu's engineering standards, or we don't use them.

Our team of more than 400 people takes great pride in assembling what we all believe are the best machines in the construction and forestry industries. Many staff members have been here 20 years or more. Each is dedicated to ensuring that every piece of equipment is built correctly, tested and ready to move dirt or timber productively and efficiently.

## QUESTION: How do you determine how many machines to build?

**ANSWER:** There are several factors that come into play. Markets are one of them. We also

CONTROL

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.

Walt Nichols, General Manager, Chattanooga Manufacturing Operation

Approximately 12 years ago, Walt Nichols and his wife, Kelly, were looking to make a change. The couple was living in the Atlanta area with their young daughter. However, both were natives of Chattanooga, Tenn., and still had family there, so they wanted to move back.

They relocated to Chattanooga, and Nichols landed a job with Komatsu in the Supply Chain Division. "Growing up, I actually lived close to Komatsu's Chattanooga Manufacturing Operation. I drove past it nearly every day.

"My background was in operations and management with one of the major delivery companies. I didn't know much about manufacturing, but I learned quickly and was hooked," he said.

Within a year he was managing the Import Department, procuring machines from all over the world. A move into the role of Production, Planning and Control Manager for the plant followed.

From there, he became Director of Manufacturing Administration, a position he held for the past seven years before becoming General Manager in October 2017. Nichols is now responsible for overseeing every department within the plant, including quality, safety, production, material management and more. "Each successive role was good preparation for this position," said Nichols. "I really enjoy it here. We have a dedicated staff with many years of experience who take great pride in building Komatsu equipment."

# Long-tenured staff takes pride in craftsmanship

... continued



The 21-ton PC210LC-11 is the smallest excavator that Komatsu's Chattanooga Manufacturing Operation produces. The largest is the 49-ton PC490LC-11.



Four sizes of forestry-tracked harvesters and tracked feller bunchers are built at the Chattanooga Manufacturing Operation, including the XT460L-3.

work closely with distributors and customers to ensure we are meeting their needs. There are other Komatsu factories around the world that build the same machines, and we coordinate with them. For instance, if they can't meet their current demand for some reason, CMO may ramp up to help and vice versa. As an example, when a tsunami hit Japan a few years ago, it devastated many areas of the country. Our Japanese excavator plant was occupied building machines to assist with the cleanup. That caused a spike in our production because, for a time, we had to build all the machines to supply North America.

## QUESTION: Do you manufacture custom-order machines?

ANSWER: From a planning standpoint we keep ourselves flexible enough to be able to accommodate those requests. Our commitment on an order is eight days from when it's submitted to the time we have it on a truck ready to ship. In most instances, we beat that. Some super-specialty items might take a little longer.

# QUESTION: Speaking of customers, do you encourage them to visit CMO?

**ANSWER:** Absolutely, and the public as well! We have a lot of visitors come through every year. We want them to see how Komatsu machines are manufactured and the quality that's built in. ■





# Solesbee's





Excavator Demolition Grapples



Excavator Wood Shears







Loader Rakes Top Clamp



**Bucket Grapples** 



Loader **Forks** 





Skid Steer **Brush Cutters** 



All attachments available for on time delivery!

770-949-9231

9-8090 800-4

ww.solesbees.com

# SCREEN MAGHINE SINCE 1966



4043TR Recirculating Impact Crusher

The industry leader and your best choice for crushing and screening equipment:

- Seven U.S. patents provide unmatched innovation, durability and productivity
- Built with U.S.-made, Grade 80 steel — the strongest available!
- · Manufactured in the USA for over 50 years
- Same day shipping on in-house parts
- · See Diesel Machinery Inc. for full details



514TS3 Triple Screen Spyder



4043T Impact Crusher



CXT Cone Crusher



514TS Spyder



5256T Impact Crusher



JHT Jaw Crusher



516T Spyder



Stacking Conveyors For All Needs



JXT Jaw Crusher



622TH Triple Screen Spyder



Discover more

# **ALL-AROUND SERVICE**

# Komatsu Service Institute provides valuable education for distributor personnel

More than 130 employees from 26 Komatsu North American distributors attended the Komatsu Service Institute (KSI) at the Cartersville Customer Center in Georgia last fall. The week-long conference, which Komatsu has hosted annually for the last four years, enabled attendees to gain valuable leadership, organizational and interpersonal skills in addition to information on Komatsu equipment and technology.

"Our goal is both professional and technical skills development," noted Manager of Business Development Brian Wysocki. "Originally, KSI was designed for our distributors' service managers, but it has grown to include branch managers, general managers, vice presidents and warranty administrators. It has become a valuable experience to attain specialized skills that they can take back with them to their branches, and it helps advance their careers."

The a la carte offerings range from technical classes focused on Tier 4 and *intelligent* Machine Control equipment, to leadership courses geared toward identifying personality styles and developing customer service skills.

"There is no defined course schedule, some people come for a day and some for the week, depending on their needs," said Wysocki. "We designed the classes to be a mix of lecture and hands-on training, especially with the Tier 4 and *intelligent* Machine Control topics.

"The leadership courses were developed because there was a demand for them among our distributors," he added. "Most of our service managers have advanced their careers through technician training and similar courses, but they have never had exposure to these interpersonal-type training sessions. These classes have been attendee favorites each year."

#### **Scenario-based course**

Another popular class is KSI's two-day War Games simulation focused on financial-skill development and operations management.

"It's a scenario-based game with teams of four people managing a distributor branch over a two-year simulation," stated Wysocki. "They work together to make financial decisions and navigate issues that a distributor might encounter, like economic trends and employee morale. It's very helpful for those employees who aspire to move into or advance in their managerial roles."

The event also provided attendees the opportunity to operate machinery and earn a certification as an Expert of Customer Support.

"Attendees look forward to KSI each year," shared Wysocki. "We ensure that the courses remain relevant to our industry, so that it's a valuable asset for our distributors."



Brian Wysocki, Manager of Business Development

Komatsu Instructor/ Developer Kevin Dunphy explains the finer details of the Komatsu *intelligent* Machine Control D155AXi dozer during a Komatsu Service Institute session at the Cartersville Customer Center in Cartersville, Ga.



# Seeing is believing...

Let Diesel Machinery show you the BOMAG advantages...





SIOUX FALLS 4301 North Cliff Ave. P.O. Box 85825 Sioux Falls, SD (605) 336-0411 (800) 456-4005

RAPID CITY I-90 & Deadwood P.O. Box 2473 Rapid City, SD (605) 348-7438 (800) 658-3047 ABERDEEN 39288 133rd Street (East Hwy. #12) Aberdeen, SD (605) 725-4364 (888) 762-6312



















# TAXES, TOLLS

# Most Americans want better roads, and they are willing to pay for them

Two recent surveys showed that a majority of Americans support higher taxes and/or increased tolling to fund transportation infrastructure. In one study from HNTB Corporation, more than 75 percent of respondents said they back paying more at the pump or the tollbooth, especially if the money is earmarked specifically for road projects.

Fifty-five percent supported a gas tax increase in a Bloomberg national poll. It noted that the idea has bipartisan support with 51 percent of Republicans saying yes as well as 64 percent of Democrats.

"People are fed up," stated former U.S. Transportation Secretary and gas tax supporter Ray LaHood, in a Bloomberg article. "They're ready for politicians to take action."

Several states have recently raised their gas taxes – many by public vote – but the federal levy has remained at 18.4 cents per gallon since 1993. The federal tax is the primary source of revenue for the Highway Trust Fund (HTF).

## Shoring up the shortfall

Factors such as inflation and more economical cars have led to a shortfall in funds needed to repair roads and bridges. Congress has transferred money from other areas of the federal budget to fill the gap. The Congressional Budget Office says the HTF will be insolvent by 2021 without additional funding.

Seventy-three percent of those surveyed are in favor of public-private partnerships,

according to HNTB's research, which also showed that 80 percent of respondents are behind increased tolling. Avoiding congestion and saving time were major reasons why, with respondents saying they would pay on average \$1.70 to use an express lane if that saved 15 to 30 minutes of travel time.

"People are willing to pay higher taxes and tolls, if they know that the money was going to pay for transportation," said Kevin Hoeflich, Chairman of Toll Services at HNTB in a recent Reuters article. "They've seen... funding get diverted to other areas and not where they expected."



Recent polls show most Americans are willing to pay more at the pump, or in tolling, if it means better roads and bridges. "People are fed up," stated former U.S. Transportation Secretary Ray LaHood in a Bloomberg article. "They're ready for politicians to take action."

## **MORE INDUSTRY NEWS**

# Go Build campaign aims to change perceptions, gain new recruits

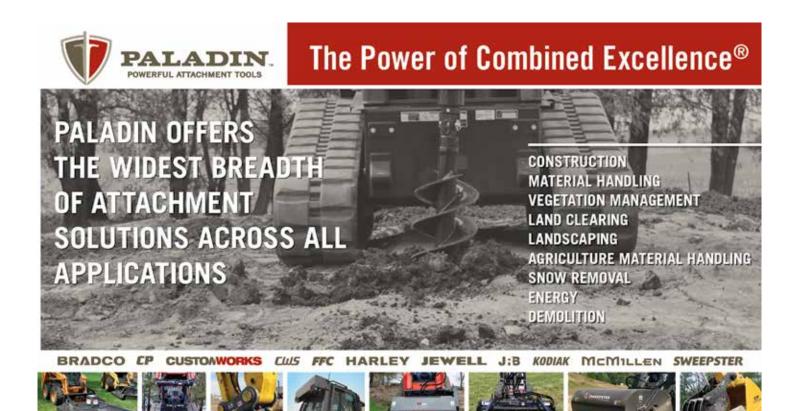
A new website was launched recently by Go Build and is aimed at changing perceptions of construction and gaining new recruits to an industry that continues to experience a worker shortage. According to the site, "Go Build is a comprehensive workforce development initiative that seeks to enhance the image of the construction industry and inform young people, parents and educators about opportunities in the skilled trades – because a four-year degree isn't the only way to make a living."

The website is only one component of the industry-driven, image-building Go Build program, which hopes to rebrand and

promote the entire construction industry via a multiplatform public relations campaign, according to an Engineering News Record article by Jim Parsons. He says it will maximize the use of video-enhanced social media, a lively and information-packed website, ads, grassroots outreach and other carefully crafted elements.

"We created our own playbook – an aggressive, comprehensive and sustained effort with a look and feel that engages young people and inspires them to explore careers in the construction trades," said Executive Director Ryan Dwyer in the article. ■

www.paladinattachments.com



115

## **SIDE TRACKS**



Scan to revea

# Can you spot what is different?

At first glance, it may seem like the photos are identical. In reality, there are 10 differences between these two pictures. How many can you find? Test your power of observation and then scan the QR code at the top to check your answers.









Superior Quality & Performance!

AVAILABLE THROUGH DIESEL MACHINERY, INC.



# FEATURED USED EQUIPMENT

Call for more information: (800) 456-4005 See more at: www.dieselmachinery.com

Year Mfgr./Model/Descr.

2004 KOMATSU WA380-5 SERIAL #A52184	\$83,500





Special low finance and lease rates on most used equipment! Equipment subject to prior sale or change without notice.

W	HEEL LOADERS			
2007	KOMATSU WA200-5	68496	WL1527	\$72,500
2006	KOMATSU WA200-5	67369	WL1528	\$81,250
2004	KOMATSU WA320-5L	60237	WL1322	\$87,400
2012	DOOSAN DL220	5054	WL1270	\$111,000
2002	DAEWOO MEG A 250 V	1020	WL986	\$80,000
2005	DEERE 624J	4598322	WL1694	\$78,100

S/N

Tag #

CRAWLER DOZERS						
2012	KOMATSU D61PX-15 E0	B47224	CD506	\$140,785		
2013	KOMATSU D39PX-23	<mark>90</mark> 104	CD623	\$97,225		
2008	DEERE 700JXLT	160336	LD644	\$78,000		

CR	<b>RAWLER EXCAVATORS</b>			
2012	KOMATSU PC27MR-3	21046	HE778	\$39,500
2012	KOMATSU PC130-8	83837	HE924	\$108,500
2012	KOMATSU PC138USLC-8	27284	HE933	\$95,425
2008	KOM <mark>at</mark> su PC220LC-8	A88553	HE1063	\$82,800
2006	KOMATSU PC300LC-7E0	A88062	HE896	\$130,500
2001	KOMATSU PC300LC-6	A84091	HE521	\$59,900
2014	DOOSAN DX225LC-3	1359	HE1016	\$135,000
2008	LINKBELT 240X2	ELJ8-3555	HE1102	\$70,000

SKID STEERS				
2017	JCB 280	2503198	WL1761	\$54,500
2016	JCB <mark>260 TRAC</mark> K	2428654	WL1653	\$54,200
2011	DEERE 323D TRACK 84HP	6420473	WL1460	\$46,500
2015	NEW HOLLAND L230	NFM406333	WL1781	\$32,000







**ODYNAPAC** 





GROVE



**BOMAG** 









