

LINDER LINK

A publication for and about Linder Industrial Machinery customers • June 2016

LINDER | INDUSTRIAL
MACHINERY
COMPANY



Feature Stories:

Palmetto Corp pg. 4

Trailer Bridge, Inc. pg. 8

Civil War Cannons
Recovered pg. 13

New iMC D39i Dozer pg. 15

KOMATSU®

W WIRTGEN GROUP

MESSAGE FROM THE PRESIDENT



John Coughlin

**We share
your goals of
high production
and efficiency**

LINDER | INDUSTRIAL MACHINERY COMPANY

Dear Valued Customer:

High production and efficiency are your goals, and Komatsu shares those goals. That's why it continues to manufacture quality products that meet or exceed emissions standards while maintaining, or even boosting, your production and efficiency.

In this issue of your Linder Link magazine, you can read about innovative Komatsu products that raise the bar when it comes to increasing your uptime and material movement, while lowering your owning and operating costs. At its recent Demo Days, Komatsu introduced its new *intelligent* Machine Control (iMC) PC490LCi-11 excavator. It is the world's largest excavator with integrated control function and was modeled after Komatsu's iMC PC210LCi-10 excavator, which was the first of its kind. More about the PC490LCi-11 will be released soon.

Komatsu introduced the PC210LCi-10 early last year. It followed several models of iMC dozers that Komatsu began rolling out a few years ago, which feature factory-integrated GPS technology that gives operators automatic blade control from rough-cut to finish grade. You can read about the most recent iMC dozer, the D39i-24, in this issue, along with articles on the new PC30MR-5 and PC35MR-5 excavators and the 931 harvester, the flagship machine of Komatsu's new forestry family.

All Tier 4 Final construction-sized machines are backed by Komatsu CARE, which covers scheduled maintenance for the first three years or 2,000 hours. Our trained technicians perform the work at locations and times convenient for you. We track the machines through KOMTRAX and contact you when it's time to schedule service. Our aim is to minimize or avoid disruption to your production.

Whether it's Komatsu or another brand we carry, we have maintenance plans available to take care of all your machinery. We can also work on your competitive equipment. Talk to your product support representative or your branch service manager to see how we can help.

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

Sincerely,
Linder Industrial Machinery Company

John Coughlin
President

LINDER LINK

A publication for and about Linder Industrial Machinery customers • June 2016

IN THIS ISSUE

PALMETTO CORP pg. 4

See how a focus on efficiency fuels expansion for this Conway, South Carolina, business.

TRAILER BRIDGE, INC. pg. 8

Founded by an innovative entrepreneur, this Jacksonville, Florida, company continues to lead the way in marine-transportation. Learn more inside.

GIVING BACK pg. 13

Discover how three Civil War-era cannons were recovered from the Great Pee Dee River with the help of an excavator donated by Linder.

DEMO DAYS pg. 14

Ride along with Linder customers as they take a first-hand look at Komatsu equipment during Demo Days in Cartersville, Georgia.

PRODUCT IMPROVEMENT pg. 15

Learn how Komatsu's new D39i-24 *intelligent* Machine Control dozers increase production time and lower fuel consumption.

NEW PRODUCT pg. 17

Take a look at how Komatsu's new PC30MR-5 and PC35MR-5 hydraulic excavators pack serious production into a compact frame.

FORESTRY NEWS pg. 19

See why the Komatsu 931 harvester defines the next generation of forestry machinery with a host of productive features.

KOMATSU & YOU pg. 21

Meet General Manager of Ripley, Tennessee, Parts Operation Abe Riddle and see how his team makes sure customers get the parts they need.

SPECIAL RECOGNITION pg. 23

Komatsu CARE, the complimentary maintenance program, celebrated its 60,000th service interval in late March. Read about it inside.

INDUSTRY OUTLOOK pg. 24

The recent drinking-water crisis in Flint, Michigan, points to larger potential problems in the nation's underground infrastructure. Read why inside.

NEWS & NOTES pg. 27

The International Energy Agency issues its report on expected oil prices while pipeline groups support inspector certification. Get the details inside.

Published by Construction Publications, Inc. for

LINDER | INDUSTRIAL
MACHINERY
COMPANY

www.linderco.com

Printed in U.S.A. © 2016 Construction Publications, Inc.

**THE PRODUCTS PLUS
THE PEOPLE TO SERVE YOU!**

LINDER INDUSTRIAL MACHINERY COMPANY

North Florida

Jacksonville

110 Halsema Road South
Jacksonville, FL 32220
904-786-6710
Fax: 904-781-5732

Ocala

2441 SW 57th Avenue
Ocala, FL 34474
352-629-7585
Fax: 352-629-2810

South Florida

Pembroke Pines

20900 Taft Street
Pembroke Pines, FL 33029
954-433-2800
Fax: 954-433-2901

Ft. Myers

4656 Elevation Way
Fort Myers, FL, 33905
239-337-1313
Fax: 239-337-0134

Riviera Beach

7221 Haverhill Business
Parkway, Space #105
Riviera Beach, FL 33407
561-863-0570
Fax: 561-863-0575

West North Carolina

Asheville

1 Business Park Circle
Arden, NC 28704
828-681-5172
Fax: 828-684-5972

Concord

5128 Davidson Highway
Concord, NC 28027
980-255-8345
Fax: 980-777-8378

High Point

600 Pegg Road, Suite 101
Greensboro, NC 27409
336-665-0110
Fax: 336-665-0525

Central Florida

Orlando

23 Taft Vineland Road
Orlando, FL 32824
407-849-6560
Fax: 407-422-2342

Plant City

1601 South Frontage Road
Plant City, FL 33563-2014
813-754-2727
Fax: 813-754-0772

South Carolina

Columbia

3109 Charleston Highway
West Columbia, SC 29172
803-794-6150
Fax: 803-739-8889

Greer

525 Old Jones Road
Greer, SC 29651
864-877-8962
Fax: 864-877-8157

Ladson

9559 Hamburg Road
Ladson, SC 29458
843-486-8080
Fax: 843-486-8090

East North Carolina

Greenville

100 Staton Road
Greenville, NC 27834
252-695-6200
Fax: 252-695-6205

Raleigh

6515 Chapel Hill Road 54
Raleigh, NC 27607
919-851-2030
Fax: 919-859-3859

Wilmington

3252 U.S. Highway 421 N.
Wilmington, NC 28401
910-254-2031
Fax: 910-254-2035

KOMATSU®

PALMETTO CORP

Dedication to efficiency is key to expansion for this Conway, South Carolina, business



Shawn Godwin,
President/Owner

Shawn Godwin worked in his family's paving company, but for him it was just a summer job – he wanted a career in another field. He graduated from the University of South Carolina in 1993 with a degree in business management and was ready to take a position at a bank. That plan was short-lived.

"I had the idea that I would go to college, get some glamorous job, and I wouldn't have to do construction anymore," recalled Godwin. "Then after I graduated, my dad came to me with an offer that sounded pretty good. I never planned on coming back, but it just felt comfortable. It felt right."

Godwin's decision has been a successful one. His father, Marshall, started Palmetto Corp in 1987. When Godwin arrived in 1993, the company had 25 employees and performed small, residential paving projects. Today, Godwin is President and Owner, and the company employs nearly 330 people, has asphalt plants in Conway, Florence and Bishopville, South Carolina, and performs major roadwork jobs for the South Carolina DOT in northeast South Carolina. The company's list of services has grown as well. Palmetto Corp offers complete site-development packages on road

projects. Last year, the company totaled more than \$80 million in revenue.

"Especially in the last five years, we've seen a definite uptick in roadwork," Godwin explained. "Initially, we did paving but subbed out the earthwork and other services. Then, we decided to expand and perform those services ourselves. Today, we can handle a road project from beginning to end in-house. That's been a huge advantage for us."

While he never had a chance to put his degree to use as a banker, it has come in handy.

"I think my degree has been very helpful in this position," he said. "It trained me to look at the construction business from a different angle. We put a great amount of importance on looking at the future, being efficient and managing our bottom line. We try to be as metrics-based as we can in all areas."

"This really ended up being the perfect fit for me," Godwin continued. "I am able to look at the big picture and crunch numbers, which I like to do. Fortunately, we've been able to get to a place where we can put qualified people in specialized roles throughout the company."

Proud to serve

Godwin says he takes pride in Palmetto Corp's work because it makes people's lives easier and provides needed services to the area. When Florence and Horry counties voted to approve a penny tax for road improvements, both the community and Palmetto Corp benefitted.

"The people were tired of driving on poor roads, so they passed the tax," Godwin recalled. "That created nearly \$500 million worth of road projects. We were lucky enough to win bids to build some of those roads. That really helped both us and the area grow."

Another factor in the company's growth stemmed from the massive flooding in the area

Wirtgen Group products like this W 200i cold milling machine are the choice for Palmetto Corp on road projects because of their reliability.



in October of 2015. Heavy rains and flooding caused the closures of more than 500 roads. The South Carolina DOT called on local companies, including Palmetto Corp, to fix them as soon as possible.

“The DOT did a great job of using its own resources and handling the situation before it became a free-for-all,” said Godwin. “The DOT had a list of companies it knew would come in and get things done, and it reached out to those companies. Fortunately, we were one of them. There were a large number of those flood-related projects that were finished well ahead of schedule.”

Palmetto Corp continues to work with the DOT. This spring, it began a project on a 14-mile stretch of Highway 51 north of Pamplico, expanding it from two lanes to five. For this three-year, \$48 million job, Palmetto Corp will perform erosion control, clear right-of-way, move and grade all of the dirt, dig ditches on both sides, install 50,000 feet of pipe, build the road and pave it with asphalt.

Palmetto also started work on a \$32 million, mill-and-fill project on Interstate 20. It will remove two inches of asphalt from the existing roadway, replace it with 200,000 tons of new asphalt and perform cross-slope correction to this section of the interstate to help with drainage. In addition to the roadwork, it will remove trees from the medians, re-grade the internal slope of the medians and replace bridge decks.

“I think these are two examples of why we are successful,” Godwin explained. “We can handle every aspect on our own. It helps us control all facets of the job, which allows us to be more efficient.”

Doing what makes sense

Palmetto Corp’s dedication to meticulous planning and number crunching is most evident when it comes to maintaining its fleet. With more than 400 pieces of equipment, Palmetto takes great strides to ensure that it is growing its fleet and deploying machines in the most cost-effective ways possible.

“We have a lot of data on our machines that we use to make decisions, but I also visit jobsites three days a week,” revealed Godwin. “I am



▶ VIDEO

This Komatsu PC360LC is the newest addition to Palmetto Corp’s fleet. “It’s a strong machine,” said VP of Equipment Services/Purchasing Charlie Goll. “Our operators love running it.”



A Palmetto Corp employee operates a D61PX dozer during a recent project.



able to see the sites and make a decision about our fleet in real-time. If I have a crew that needs a dozer on a site, I can take that information; look at our other crews and see what they have coming up; and decide if we need to buy, rent or move one.”

When it comes to making those decisions, Godwin says it goes beyond the price of a machine.

“Above anything else, we want a quality machine. We look at everything associated with the cost – maintenance, reliability, usage rate and resale,” he said. “We may spend a little more on a machine and buy it, if we know it’s reliable because we are going

Palmetto Corp is based out of Conway, South Carolina, and has asphalt plants in Conway, Florence and Bishopville, South Carolina.



Discover more at
TheLinderLink.com

Continued . . .

Palmetto Corp is investing in its own future

... continued

to save money on maintenance in the long run. But, we have to know we're going to use it; it costs us money when it's just sitting around.

"If it's a high-production machine, we may lease it for 12 months," he added. "We do that to guarantee uptime. We don't own it, but we are writing the same check each month, and the dealer will always have a machine for us."

Linder Industrial Machinery Company and Sales Rep Charles Richardson have been valuable assets when it comes to Palmetto Corp's equipment decisions.

"Linder and Charles have been great to work with," Godwin shared. "They work with us when we are looking for machines or financing. They aren't trying to push what's best for them, and they think outside of the box. I respect that."

Palmetto turns to Linder for a variety of machines. It has four Komatsu dozers (three D61s and a D39) and seven excavators (one PC360, two PC300s, three PC228s and a PC78).

"We love the Komatsu dozers and excavators," said Vice President of Equipment Services/Purchasing Charlie Goll. "They are smooth and really simple for the operators to run. Our PC228

excavators are the most popular among our crews. We can use them in so many applications because they are small and easy to maneuver, but powerful enough to handle bigger jobs. We also have a D61PX-23 dozer that is great. The visibility on it is the best I've ever experienced.

"We have Komatsu CARE on our newest PC360," Goll added. "It's been great to have Linder service techs handle the maintenance for the first 2,000 hours or three years. They know the machine better than we do, and it's nice knowing that it's being maintained properly."

Wirtgen Group paving products are Palmetto's other front-line machinery. It has four Wirtgen milling machines (three W 150is and a W 200i), three Vögele 5100-2 pavers and a Wirtgen WR 250 reclaimer. Palmetto relies on Linder for service and support on these pieces.

"We have a long history with Wirtgen products, Godwin reported. "They have always been reliable for us, and Linder does great with support on them. The reclaimer is probably our most important machine. We've never had one this big. It's great, and it runs every day for us."

Ensuring the future

Godwin always has the future of Palmetto Corp in his plans. One of the things the company is doing to ensure success is investing in training for its employees.

"We always need qualified workers, but experienced operators usually have good jobs already – you can't just sit around and wait for one to fall in your lap," Godwin noted. "We added a training facilitator this year to help us hire good people and retain them. This way, we are able to give our employees what they need to move up from a flagger or laborer to an operator, foreman or into management. Turnover is very inefficient, and the training facilitator has helped limit that."

With a strong staff and more roadwork on the horizon, Godwin is confident about the future of Palmetto Corp.

"I like the trend we are on, but I can't expect expansion to continue forever," Godwin remarked. "I think we could be around 400 employees and \$100 million annually, but we have to continue to do quality work and grow when it makes sense. If we are able to do that, I think we'll continue to be successful." ■

VP of Equipment Services/Purchasing Charlie Goll (left) relies on Linder Sales Rep Charles Richardson for machines and service needs.



With more than 400 pieces of equipment, Palmetto Corp builds its fleet in the most efficient ways possible. "We have a lot of data on our machines that we use to make decisions," said President/Owner Shawn Godwin. "Above anything else, we want a quality machine."

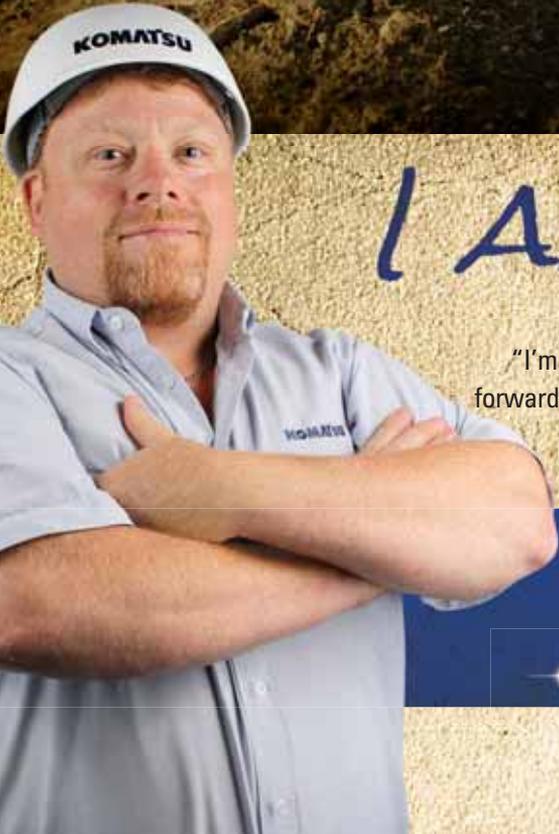


D61PXi-23



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



I AM KOMATSU

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."

MADE WITH PASSION AND PRIDE

KOMATSU[®]

komatsuamerica.com



Copyright ©2015 Komatsu America Corp. All Rights Reserved

009

TRAILER BRIDGE, INC.

Jacksonville marine-freight transportation company focuses on employees as well as customers



Nathan Coverdale,
Vice President
of Finance

Shipping containers don't seem particularly groundbreaking. They sit idly at a port until they are loaded with goods and sent across the globe, but that wasn't always the case. Prior to the 1950s, and even through much of the 1960s, products were simply loaded on ships as loose cargo. That was until Malcolm P. McLean came up with the revolutionary idea of using containers and a floor plan for stacking them on a ship. Containerization enabled more freight to be moved more quickly and at a lower per-unit cost, compared to when longshoremen handled individual pieces of cargo.

In 1991, at the age of 78 and already widely honored for his accomplishments, McLean founded Trailer Bridge, a marine-freight transportation company that uses barges to ship goods between Jacksonville and San Juan, Puerto Rico. The company also serves the Dominican Republic and provides asset-based inland-transportation and logistical services across the U.S. to bring containers full of goods to Jacksonville's JAXPORT for shipping.

Trailer Bridge barges carry cargo to Puerto Rico twice weekly and to the Dominican Republic once a week. A round-trip takes about

two weeks counting maintenance time back at the company's home base in Jacksonville. The company owns more 3,000 containers and seven barges. It charters the tugs that pull the barges. "We've looked into owning tugs, but the lease rate is very competitive," said Vice President of Finance Nathan Coverdale. "We believe that partnering with a tug company gives us our best return."

Trailer Bridge attributes the company's success to two interrelated factors.

"We focus on our customers, and we focus on our employees," said Coverdale. "The first part is obvious; you need to keep your customers happy with your service and your price. As for focusing on our employees, if we have a team where everybody is happy and committed to the same goal – that positive, helpful, do-what-it-takes attitude is going to also extend to our customers. That's what we try to create here."

"We went through some economic difficulties, but we've come back very strong from those tough times," said Director of Terminal Operations Kerry Shugart. "In the last 18 months, thanks in large part to our President, Mitch Luciano, there's been a renewed commitment to our culture – the type of company we want to be and the type of people we want working here. Those two things go hand-in-hand. Good people with a good attitude make a good workplace, which translates into top-notch customer service, and our customers notice. We've had amazing feedback from them about the changes here."

Others are noticing, too. The Jacksonville Business Journal recently named Trailer Bridge, with about 120 employees, one of the best places to work among large companies in Jacksonville.

"This company gives you the opportunity to grow, and I'm a good example," said Director

Trailer Bridge, Inc. uses specially designed barges like this one to ship goods between Jacksonville, Florida, and San Juan, Puerto Rico. It also serves the Dominican Republic.





▶ VIDEO

Instead of using gantry cranes to load and unload its barges, Trailer Bridge uses a patented system involving a fleet of Konecranes SMV 4535 TC5 reach stackers and custom-built ramps. “For us, it’s a much more effective method of loading and unloading our barges,” said Vice President of Finance Nathan Coverdale.

of Maintenance and Equipment Control Jose Mendez. “I started as a Maintenance Supervisor in Puerto Rico. I was promoted to Assistant Port Engineer, then they brought me here to oversee maintenance. Good people get recognized and rewarded at Trailer Bridge.”

Barges rather than ships

True to McLean’s entrepreneurial spirit, Trailer Bridge found an innovative way to provide marine transportation. For example, it uses barges rather than ships. The company owns seven barges; five are flat-deck, lift-on/lift-off (LO-LO) barges, while two are tri-level, roll-on/roll-off (RO-RO) barges, specially made for Trailer Bridge and the largest in the world.

The LO-LO barges, also known as Triplestack Box Carriers (TBC), are specifically designed by Trailer Bridge to handle the industry’s standard container size – 53-foot long, 102-inches wide and 9-foot high. TBCs are 400-foot long and 100-foot wide. Because of the improved stackability that allows containers to be stacked five-high, the TBCs can carry 285 of the 53-foot containers.

To maximize productivity and operate more cost effectively, Trailer Bridge also developed its own unique loading style for the LO-LO barges.

“Our loading style is a patented system involving reach-stacker machines and a specially designed ramp that allows the machines to go onto the vessel to load and unload boxes,”

said Coverdale. “We’re not aware of it being used anywhere else in the world.”

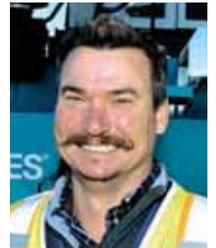
“The normal industry practice is to rent an overhead gantry crane from the port facility to load and unload,” explained Shugart. “That’s what most of our competitors do. We saw reach stackers working in a terminal-ground application, stacking and unstacking containers. We felt the same thing could be done on a barge, so we developed a ramp system to get the reach stackers onboard. For us, it’s a much more effective method of loading and unloading our barges, which results in cost savings that we’re able to share with our customers.”

Konecranes reach stackers

Recently, Trailer Bridge switched to the Konecranes reach stacker from another brand it had been using. The company purchased three Konecranes SMV 4535 TC5 reach stackers from Linder Industrial Machinery and Sales Rep Justin Barlanti. Each of the reach stackers works at Trailer Bridge’s JAXPORT facility.

“Justin reached out to us at exactly the right time,” said Shugart. “Frankly, we didn’t know Konecranes had a product like this. We gave him the opportunity to show it to us, and we liked it a lot.

“One big advantage of the Konecranes reach stacker is its excellent ground clearance,” he noted. “That’s important to us because we have to deal with tides. At high tide, we have greater ramp-incline, so the extra ground clearance is a good feature for us. The Konecranes are very stable



Kerry Shugart,
Director of Terminal
Operations



Jose Mendez,
Director of
Maintenance and
Equipment Control



Discover more at
TheLinderLink.com

Continued . . .

Innovation remains hallmark of Trailer Bridge

...continued

machines, especially in the back end, so there's less bounce. Operators really appreciate that. It also has more boom length than our previous machine had, resulting in more clearance when stacking five-high, and that's a big help for operators."

A maxed-out container will weigh about 34 tons. A Konecranes reach stacker has 45 tons of capacity, so it can easily handle the 53-foot boxes. It's also expanding Trailer Bridge's options for handling intermodal boxes, known as wide-top containers, that come in by rail.

"We're just branching into handling those intermodal boxes, which are different dimensions and have different lift points than our standard containers," said Mendez. "With our old machines, we would have needed to add a special attachment every time we wanted to handle a wide-top. But the Konecranes reach stackers hydraulically adjust to the different lift points so we don't lose any time hooking up an attachment. We've also found that an attachment reduces overall reach just enough that a competitive machine can't stack five-high. So, the Konecranes reach stackers are a win-win for us."

(L-R) Trailer Bridge's Nathan Coverdale, Kerry Shugart and Jose Mendez rely on Linder Sales Rep Justin Barlanti for their Konecranes reach stackers.



The new Konecranes SMV 4535 TC5 reach stackers allow Trailer Bridge to stack shipping containers five-high without using a special attachment.



In addition to the Konecranes reach stackers' features, Trailer Bridge officials say they're equally pleased with the support they've received from Linder and Konecranes.

"Justin assured us that Linder would be there for us with service every step of the way, and that's certainly been the case," said Shugart. "I'm extremely happy with the support we've received from Linder. It's above and beyond what we received from our previous vendor. What we often need from them is parts, and they've been willing to stock a specific parts list just for us."

"They also did some customization – tweaking the machines to make sure they would work well on barges rather than on land," said Coverdale. "Both Linder and Konecranes have really delivered for us. We've been very pleased."

Optimistic about what's ahead

While Puerto Rico remains Trailer Bridge's largest trade partner, the company believes it's well-positioned to work with countries throughout the Caribbean.

"Looking to the future, we think our ability to load and unload barges without the use of overhead cranes could be significant where ports are less developed," said Shugart. "We can go into a port that has little infrastructure and go to work with our reach stackers, whereas most of our competitors will need a port with a large crane. Also, our barges operate with a relatively shallow draft compared to ships that require deeper ports, so we're hopeful about the possibilities."

It's a view of the future that Trailer Bridge's founder would likely share. McLean, the father of containerization, died in 2001 at the age of 88. He was obviously a visionary, but also an astute businessman.

"We like to think he would be proud of this company, if he were around to see it today," said Coverdale. "With a new attitude and a renewed commitment to employees and customers, we've come a long way in the last year and a half. We've reduced costs, yet improved service, and that's pretty remarkable. As long as we retain a positive outlook and continue to take steps that benefit us and our customers, we're optimistic about what lies ahead for Trailer Bridge." ■

THE SCRAP-EATING FUEL-SAVING, MONEY-MAKING XT SHEAR



AVAILABLE WITH
JAW ARMOR



Scan
to watch
video



GENESISATTACHMENTS.COM



Optimize productivity. Reduce costs. On any size excavator.

The revolutionary XT SHEAR series delivers fuel savings and superior cutting performance usually found in larger shears requiring larger carriers. With 22 models to fit 15,000–625,000 pound excavators, there's an XT Shear model designed to slash your carrier acquisition and annual operating fuel costs.

Go smaller. Work bigger.

Contact us for a free evaluation of your current ownership cost and what you can save.

LOCATIONS:

Florida

Ft. Myers - 239-337-1313
Jacksonville - 904-786-6710
Ocala - 352-629-7585
Orlando - 407-849-6560
Pembroke Pines - 954-433-2800
Plant City - 813-754-2727
Riviera Beach - 561-863-0570

North Carolina

Asheville - 828-681-5172
Concord - 980-255-8345
Greenville - 252-695-6200
High Point - 336-665-0110
Raleigh - 919-851-2030
Wilmington - 910-254-2031

South Carolina

Columbia - 803-794-6150
Greer - 864-877-8962
Ladson - 843-486-8080



LINDER | INDUSTRIAL
MACHINERY
COMPANY



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."

MADE WITH PASSION AND PRIDE

KOMATSU[®]

komatsuamerica.com

*Compared to previous Komatsu model.

Copyright ©2015 Komatsu America Corp. All Rights Reserved



CIVIL WAR CANNONS RECOVERED

Linder donates a Komatsu excavator to pull guns from the Great Pee Dee River

The Confederate States' ship *CSS Pee Dee* entered into service on January 15, 1865, less than four months before Lee surrendered to Grant at Appomattox Courthouse, Virginia, essentially ending the Civil War. The gunboat, built at the Confederate Navy Yard near Florence, South Carolina, saw little action during the war, but has drawn a lot of interest since.

With the end of the war near, and after its one sortie to Cheraw, South Carolina, was abruptly abandoned when invading Union troops overran the town, the *CSS Pee Dee* was returning to the Navy Yard when it was grounded by low water. To get free, the crew threw the ship's guns and ammunition overboard. Eventually, the ship was burned to prevent it from falling into Union hands. Historians and Civil War buffs have sought the three cast-iron cannons ever since.

Last fall, 150 years after being discarded, the guns were retrieved from the bottom of the Great Pee Dee River. Many people and institutions were involved in the effort including East Carolina University, Francis Marion University, South Carolina's State Archeologist as well as Glenn Dutton and Rufus Perdue, owners of the property that is the site of the former shipyard.

Perdue, the former equipment manager at RH Moore Company of Murrells Inlet, South Carolina, contacted Linder Industrial Machinery, to see if it would help the effort by donating an excavator for the retrieval. The Linder Columbia branch did just that.

All three cannons, two of which weighed about 10,000-pounds each and the other about 15,000-pounds, were still loaded with ammunition when brought to the surface. Despite a century and a half under water and being buried in muck, the cannons were in nearly perfect condition. They are currently being

cleaned and restored for conservation. Eventually the guns will be on display at the Department of Veterans Affairs building in Florence. ■



A Komatsu PC360 excavator, loaned by Linder Industrial Machinery's Columbia, South Carolina, branch, recovers one of three Civil War-era guns.

(L-R) Property owner Glenn Dutton; his son, Tanner Dutton; Earl Person of Linder Industrial Machinery; and property owner Rufus Perdue inspect one of the recovered cast-irons guns.



TAKING A RIDE INTO THE FUTURE

Customers test Komatsu equipment, including the new PC490LCi-11 excavator, at spring Demo Days



Bob Post,
Komatsu Director
of Marketing
Communications

Nearly 230 current and prospective customers attended Komatsu’s spring Demo Days at its Training and Demonstration Center in Cartersville, Georgia, in February. The three-day event opened with a single-day record number of attendees. Those in attendance got an early look at the latest additions to the Komatsu *intelligent* Machine

Control (iMC) line – the PC490LCi-11 excavator and the D155AXi-8 remote-control dozer.

“Demo Days is a great opportunity for customers to come and operate our machines and get a first-hand feel for them,” said Komatsu Director of Marketing Communications Bob Post. “While the event served as a debut for the PC490LCi and the D155AXi with remote control, our other Tier 4 machines that were featured were also a big hit.”

Leo Cryder (left) of Sandhill Recycling meets with John Miller of Linder. “This is my first time at Demo Days, and it’s been great,” said Cryder. “It’s more hands-on than other events I’ve been to for other manufacturers.”



Komatsu had 31 machines available for operation at Demo Days. In addition to the highly anticipated PC490LCi-11 – the world’s largest excavator with integrated GPS technology – several iMC products were also on display, including three PC210LCi-10 excavators and D51PXi-23, D61PXi-23 and D65PXi-18 dozers.

The line up also featured six wheel loaders (sizes WA200-7 to WA600-8), four dozers (sizes D39PX-24 to D85EX-18), multiple excavators (sizes PC88MR-10 to PC490LC-11), an HM400-5 articulated truck, an HD605-7 mechanical truck and a GD655-6 motor grader.

(L-R) Shane Keel of Tucker Paving, Linder Sales Rep Ray Phillips and Barrett Tucker of Tucker Paving visit at Demo Days. “Demo Days has been a blast,” said Tucker. “We had a great time and ran a lot of machines.”



Komatsu’s latest *intelligent* Machine Control excavator, the PC490LCi-11, was the main attraction at Demo Days. It is the world’s largest GPS-integrated excavator on the market.



During the event, attendees had the option of touring Komatsu’s Chattanooga Manufacturing Operations Center in Tennessee or attending morning information sessions at the Training and Demonstration Center in Cartersville. The sessions included “Bottom Line Tactics” and a tire-management class. Presentations covering Komatsu’s iMC products and Komatsu Financial followed a catered lunch. After a short safety video and product demonstration, guests had the opportunity to operate machines. ■

MORE INTELLIGENT DOZING

Komatsu’s new D39i-24 dozers lower fuel consumption and increase production time with no cables

Eliminating the need to install and remove blade-mounted sensors each day saves on machine and operator wear and tear, and it converts potential downtime into increased production. Komatsu’s second-generation D39PXi-24 and D39EXi-24 dozers offer that and more with a new Tier 4 Final engine that increases fuel efficiency compared to its predecessor.

“With factory integration and a host of intelligent capabilities, the more that owners run their D39i-24 dozers, the more they save,” said Jason Anetsberger, Komatsu Senior Product Manager. “The monthly production gains from starting sooner, finishing faster, using less fuel and saving on materials can add up quickly. Skipping the cables, climbing and connections of traditional aftermarket systems saves operators up to 30 minutes a day and is more convenient.”

Rough-cut to final grade, the *intelligent* Machine Control (iMC) dozers extend production gains. Once engaged, the system automatically starts the cut and lowers the blade 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.

New features

Customer feedback led Komatsu to introduce a standard, operator-selectable, automatic Reverse Grading Mode, which enables automatic blade control while reversing, to grade the target surface. Other new features include a Triple Labyrinth final-drive design that provides additional protection for the final drive floating seals.

The more-efficient engine uses a Selective Catalytic Reduction System and Diesel Exhaust Fluid, as well as a new, water-cooled, Variable Flow Turbocharger that improves durability and engine response. The Diesel Oxidation Catalyst provides 100-percent passive regeneration that does not interfere with operation. Auto-idle shutdown helps reduce idle time and saves fuel.

“These dozers are great for everything from stripping to finish grading on a variety of small-to-medium-sized jobsites, such as commercial buildings and residential lots,” said Anetsberger. “As with all Tier 4 construction machines, they are covered under the Komatsu CARE program.” ■



Jason Anetsberger, Komatsu Senior Product Manager

Quick Specs on Komatsu’s D39PXi-24 and D39EXi-24 Dozers

Model	Net Horsepower	Operating Weight	Blade Capacity
D39EXi-24	105 hp	21,848 lbs	2.89 cu yd
D39PXi-24	105 hp	22,774 lbs	3.14 cu yd

Komatsu’s new D39EXi-24 and D39PXi-24 dozers lower fuel consumption with a Tier 4 Final engine. They also increase production with integrated machine control that eliminates the time needed to install and remove cables.



We've become **ATTACHED** to your machines



Attachments can make your machine more valuable. Allied offers a wide assortment of attachments to fit all of your makes and models of excavator, loader/backhoe, mini-excavator, skid-steer or compact track loader machines. Allied has become attached to your machines. Allied's construction and demolition attachments are productive and dependable. State-of-the-art technology. Full product line. Competitive price and performance.

Allied offers innovative, problem-solving capabilities. Commitment to product availability. Superior product support. Strong Distributor network. Most of all Allied meets and exceeds customer performance expectations. To put a high performance Allied attachment on your machine, call us at 1-800-321-1046 or visit a Linder Industrial Machinery Company location nearest you. We've become attached to your machines.



© 2015 Allied Construction Products, LLC

LINDER | INDUSTRIAL
MACHINERY
COMPANY

Florida, North Carolina and South Carolina
www.linderco.com www.facebook.com/linderindustrialmachinery

ALLIED
Construction Products, LLC

3900 Kelley Avenue, Cleveland, Ohio 44114
Tel: 216-431-2600 Fax: 216-431-2601
e-mail: Sales@AlliedCP.com
website: <http://www.AlliedCP.com>

SMALL PACKAGE, BIG RESULTS

Komatsu's new PC30MR-5 and PC35MR-5 hydraulic excavators pack serious production into compact frame

Contractors looking for a versatile excavator with a smaller footprint are in luck. Komatsu's new PC30MR-5 and PC35MR-5 utility-sized excavators are a perfect fit for tight worksites.

The new models have a swing-boom design that enables them to easily complete jobs in confined spaces. The excavators are each equipped with a standard dozer blade to help with backfilling and enhanced work modes to help operators match engine speed and pump delivery to the application.

"The swing-boom design allows the machines to dig close to foundations or alongside buildings," said Komatsu Product Marketing Manager Des Jarvis. "The PC30 and PC35's standard dozer blade makes backfilling a breeze and eliminates the need for a second machine."

The excavators come with a Tier 4 Final, 24-horsepower engine and an Exhaust Gas Recirculation Valve to meet emissions standards. They feature a new auto decelerator, auto-idle-shutdown and economy modes to help reduce idle time and save fuel. Additionally, a dial-type knob offers finer throttle control. The excavators are available in three track options – rubber, steel or roadliner – to further their worksite versatility.

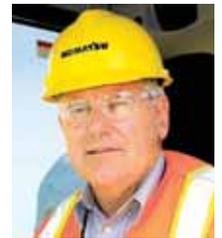
Upgraded comfort

Both the PC30 and PC35 feature an updated cab to provide a durable and secure work environment. The ROPS cab and two-post canopy come equipped with a 3.5-inch, high-resolution LCD screen and Ecology Guidance to help

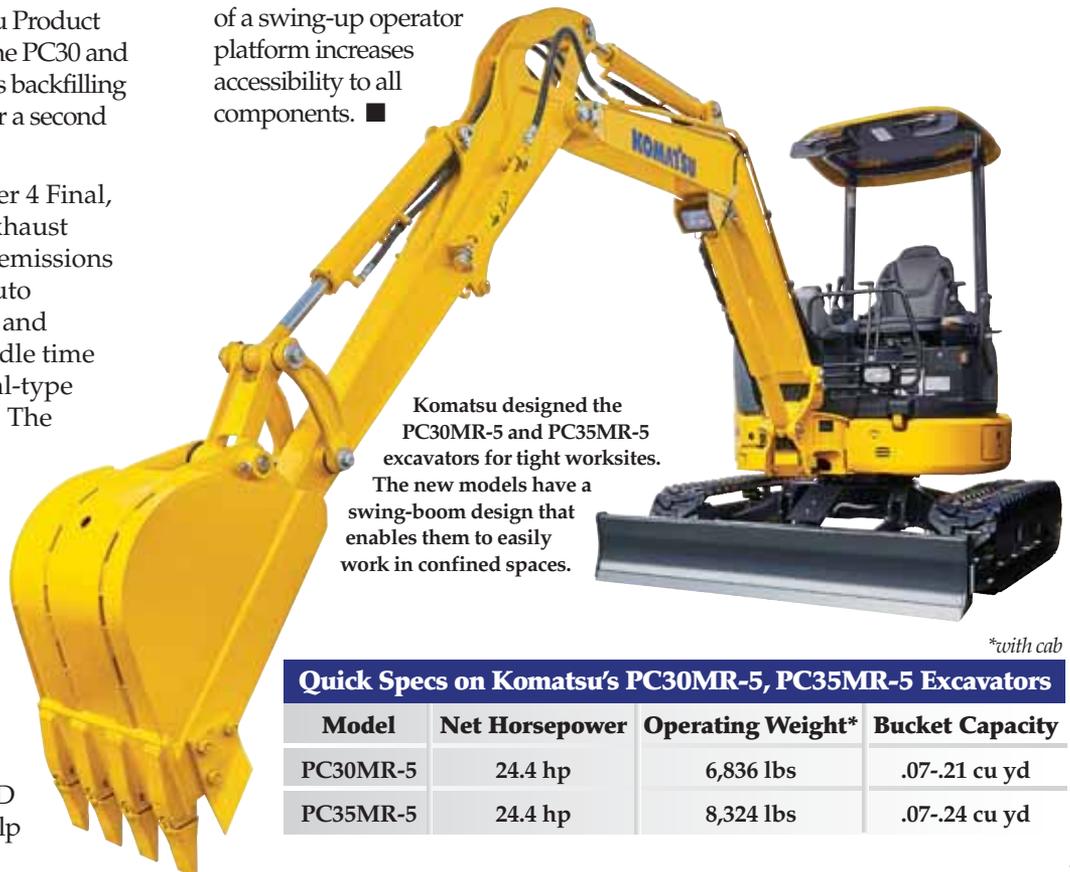
operators monitor machine-performance metrics and maximize fuel efficiency.

Komatsu improved visibility and functionality inside the cab through several enhancements, including a swing-open hinge door. The cab has a flat rear window to increase visibility and reduce replacement costs. The two-post ROPS canopy is designed with no front posts, which can distract the operator.

Daily maintenance and service is easier on the excavators, as both the PC30 and PC35 have wide service doors for access to ground-level maintenance. The addition of a swing-up operator platform increases accessibility to all components. ■



Des Jarvis,
Komatsu Product
Marketing Manager



Komatsu designed the PC30MR-5 and PC35MR-5 excavators for tight worksites. The new models have a swing-boom design that enables them to easily work in confined spaces.

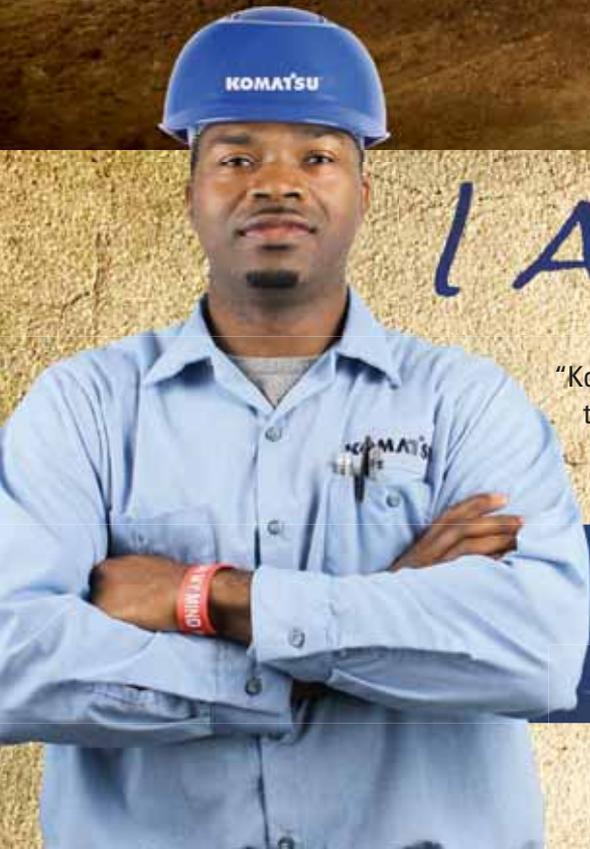
*with cab

Quick Specs on Komatsu's PC30MR-5, PC35MR-5 Excavators			
Model	Net Horsepower	Operating Weight*	Bucket Capacity
PC30MR-5	24.4 hp	6,836 lbs	.07-.21 cu yd
PC35MR-5	24.4 hp	8,324 lbs	.07-.24 cu yd

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



I AM KOMATSU

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."

MADE WITH PASSION AND PRIDE

KOMATSU[®]

komatsuamerica.com



Copyright ©2015 Komatsu America Corp. All Rights Reserved

006

A PROVEN WINNER

Komatsu's new 931 harvester defines next generation with a host of productive new features

Demanding logging applications require machines that can withstand the rigors of daily use and consistently deliver high productivity. Komatsu's totally new, four-model harvester family – led by its flagship 931 harvester – is doing just that.

“Our new harvester family was designed from the ground up to set the industry benchmark for productivity, operator comfort and eco-friendliness,” said Steve Yolitz, Manager, Marketing Forestry, Komatsu America. “The 931 harvester is our high-volume flagship model in the family.”

Komatsu designed the 931 harvester for serious productivity by including the new 3-Pump Hydraulic System (3PS), featuring dual circuits with separate pressure levels. The system is power-regulated against the engine and offers a class-leading working hydraulic flow of 139 gallons per minute (528 liters per minute), which is 68-percent-greater than the prior 931.1 model.

Unique pressure and flow optimization enables operators to work considerably faster without losing hydraulic power. Operators can use multiple functions simultaneously with maximum hydraulic power, such as slewing the crane, feeding a log and maneuvering the machine – all with optimally low fuel consumption.

Performance and productivity are further enhanced with the new H-series parallel crane that has greater lift capacity, 360-degree cab/crane rotation and automatic four-way cab/crane leveling, which keeps the operator on a consistent plane and ensures an unobstructed view of the tree at all times. While a variety of harvesting heads are offered to meet specific applications, the

C144 model is a strong overall performer and serves the broadest market segment. It has a maximum cutting diameter of 28 inches, and the powerful four-wheel-drive feed system generates 6,650 pounds of feed force.

The larger, modern cab increases the front line-of-site visibility by 62-percent upward and 17-percent downward. Operator comfort was enhanced with an automotive-grade fit and finish interior, first-class ergonomics and adjustable hand controls.

The 931 harvester has a new 251-horsepower Tier 4 Final engine that is both powerful and more fuel efficient than prior models. A cold-weather starting system, which heats the batteries, engine coolant, diesel exhaust fluid and hydraulic oil, come standard on the harvester.

“Since the first next-gen harvesters began working in the woods last fall, every indication is that we have achieved our productivity, operator comfort and eco-friendliness goals,” stated Yolitz. “The 931 harvester is proving to be an outright winner.” ■



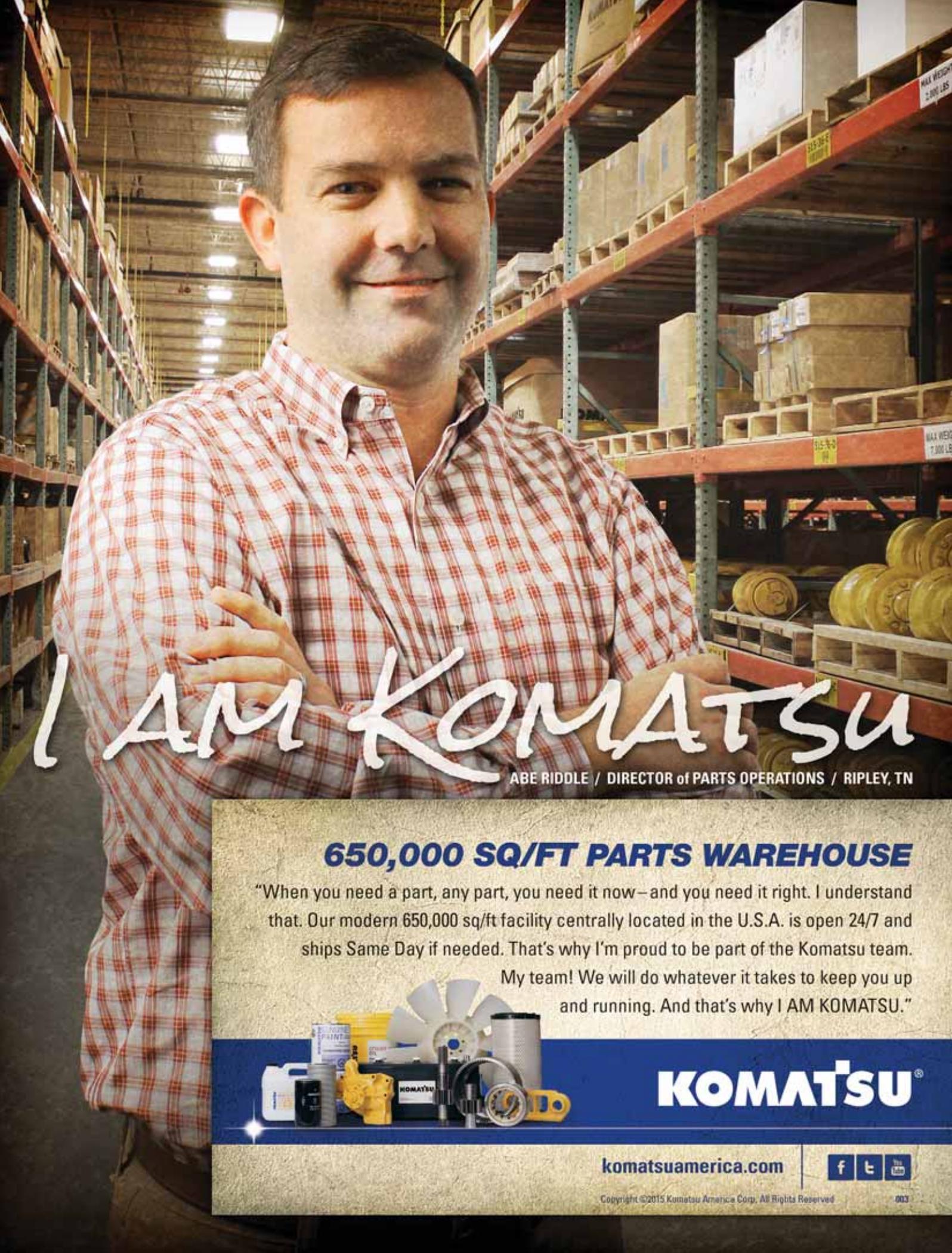
Steve Yolitz,
Manager,
Marketing Forestry,
Komatsu America



Discover more

The 931 harvester features a new cab, crane, hydraulic system and a new Tier 4 Final engine, which is more fuel efficient than the prior model.





I AM KOMATSU

ABE RIDDLE / DIRECTOR of PARTS OPERATIONS / RIPLEY, TN

650,000 SQ/FT PARTS WAREHOUSE

"When you need a part, any part, you need it now – and you need it right. I understand that. Our modern 650,000 sq/ft facility centrally located in the U.S.A. is open 24/7 and ships Same Day if needed. That's why I'm proud to be part of the Komatsu team.

My team! We will do whatever it takes to keep you up and running. And that's why I AM KOMATSU."



KOMATSU®

komatsuamerica.com



Copyright ©2015 Komatsu America Corp. All Rights Reserved

003

ENSURING YOUR UPTIME

Abe Riddle says the aim of Komatsu's Ripley Parts Operation is timely delivery from its vast inventory

QUESTION: What is the role of Komatsu's Ripley Parts Operation in Tennessee?

ANSWER: It is the central parts warehouse for North America and Latin America, with an emphasis on parts for Komatsu construction, forestry, forklift and industrial press products. We also carry parts for what we call "mining support," which is inventory related to non-electric-drive trucks.

Everything – O-rings, engines, transmissions and some boom-assembly parts – comes through here and is shipped to our distributors or one of our eight regional parts distribution hubs located in the United States and Canada. We serve Komatsu affiliates globally, too, but our primary customer base is in North American and Latin American countries.

Our most important role is ensuring those parts arrive in a timely manner. The Parts Operation Department runs two shifts per day, but we're really a 24/7/365 operation. We have a hotline number (731-635-6120) and staff on-call, so even if customers call during holidays or off hours, we can still process their orders and get them shipped. It's our goal to have most parts orders in customers' hands the same day or the next day.

QUESTION: Why is that important?

ANSWER: When machines are down, customers are losing money. We understand that, so our response is critical. The faster they get the parts, the faster they can be back up and running. Many customers tell me that service after the sale is a huge factor in what brand of equipment they choose, so we obviously place a heavy emphasis on timely parts support.

Continued ...



**Abe Riddle, General Manager,
Ripley Parts Operation**

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.

Abe Riddle joined Komatsu's Ripley Parts Operation (RPO) in Ripley, Tennessee, 10 years ago in an inventory-planning position. He moved into a continuous-improvement role, then into inventory management. Later, he managed the warehouse.

"Through my progression, I think I have touched every area at some point," said Riddle. "It was good preparation for my current position."

Today, Riddle oversees the Master Parts Distribution Center, helping ensure that inventory levels are appropriate and "that the right part gets to the right place at the right time," according to Riddle.

"Our availability is outstanding at more than 96 percent," said Riddle. "I believe Komatsu has built a strong parts-support network, and I'm proud to be a part of a forward-thinking company that emphasizes continuous improvement to better serve customers."

Riddle started in the manufacturing industry at 18, and earned his undergraduate degree in business from Union University in Jackson, Tennessee, by attending classes at night. After joining Komatsu, he completed an MBA through Union while working at the Master Parts Distribution Center.

Abe and his wife, Stephanie, have three children and enjoy spending time together as a family. He also likes to duck hunt.

Location is key for Ripley Parts Operation in Tennessee

...continued

QUESTION: Why is Ripley, Tennessee, a good location?

ANSWER: We are strategically located close to a major freight hub in Memphis. That allows us to take orders late in the day and still be able to get parts where they need to be early the next day, in most cases. For example, if someone in Washington state places an order at 6 p.m., they will have it around 10 a.m., depending on what they ordered.

QUESTION: How likely is it that you will have the parts on hand that customers need?

ANSWER: Highly likely as we carry about \$560 million in inventory. Our target is 95-percent availability, meaning that when an order is placed, we have what's needed on the shelf and ready to go. Currently we are at 96.4 percent.

QUESTION: How do you know what inventory to have on hand?

ANSWER: There are several factors we take into account. We consider historical demand, and we collaborate with distributors to understand their operations and machine populations. We also use KOMTRAX to monitor data that helps us anticipate future parts needs. In addition, our manufacturing plants give us recommended lists of parts for new machines. All of that information helps us get a strong hold on what we need to build inventory and keep parts stocked at appropriate levels.

QUESTION: What about older machines?

ANSWER: We maintain a good deal of inventory for machines dating back a decade or more, so we likely have the needed parts on hand. If we don't, we can source parts from trusted suppliers. We will do everything we can to make sure customers get what they need. ■



General Manager, Ripley Parts Operation (RPO), Abe Riddle says the RPO's most important role is ensuring that parts arrive in a timely manner. With nearly 97-percent availability, most orders are filled within 24 hours.



Komatsu's Ripley Parts Operation (RPO) is the central parts warehouse for North America and Latin America. Its inventory includes items for construction, forestry, industrial press and mining support. It also includes parts for Komatsu forklifts, like the one pictured here, which RPO personnel use at the warehouse.

TURNING 60,000

Komatsu CARE program celebrates milestone service interval

Komatsu launched Komatsu CARE in 2011 with one goal in mind: demonstrate the company's commitment to delivering quality parts and reliable service in a manner that ensures a customer's machine performance is never compromised. That goal has been accomplished – 60,000 times. Columbus Equipment Company (CEC), the Komatsu distributor in Ohio, performed the 60,000th Komatsu CARE service interval on a D61EXi-23 dozer for Eramo & Sons in late March.

"We're very honored to participate in Komatsu CARE and to have completed the 60,000th service," said CEC President Josh Stivison. "We're also proud to conduct the service for Eramo & Sons, a company we have a rich history with."

CEC completed the milestone service interval during a ceremony at its Columbus, Ohio, facility and presented Eramo & Sons with a certificate to celebrate the event.

"Through Komatsu CARE, we can make sure our customers' Tier 4 machines are maintained properly," said Komatsu Director of Distributor Development Mike Hayes. "Komatsu CARE secures uptime, increases productivity and protects residual values for the machines. It also keeps service technicians familiar with the customer's equipment, which is great for future maintenance. The service is complimentary, and we contact customers to schedule the maintenance at a convenient time and jobsite location. This way, the customers save time and money and can schedule their maintenance downtime."

The Komatsu CARE complimentary maintenance program provides service on Tier 4, construction-sized machines – whether rented, leased or purchased – for the first three years or 2,000 hours of operation. The program includes scheduled factory maintenance, a 50-point inspection at each service interval and two Komatsu

Diesel Particulate Filter exchanges within the first five years. Komatsu distributors monitor the machines and contact owners when a service is due. Then, a Komatsu CARE-certified service technician performs the maintenance.

Today, Komatsu CARE programs are standard on all Tier 4 and Tier 4 Final machines in the United States and Canada. The program has been a huge success with customers, including Eramo & Sons.

"Komatsu CARE saves us a lot of labor," said Eramo & Sons Chief Mechanic Dave Penwell. "It also keeps me more involved with the service department at the distributorship. Overall, it makes my job easier. They take care of everything."

"We began using Komatsu equipment in the 1970s; it was a decision that has served us well," added Chairman Rocky Eramo. "Komatsu makes an excellent product, and our distributor has always been there to help us. Today, we have about 45 Komatsu machines in our fleet. It's been a great partnership." ■

Officials from Komatsu and Columbus Equipment Company (CEC) present Eramo & Sons' representatives with a certificate to celebrate the 60,000th Komatsu CARE service interval. CEC completed the milestone service on Eramo & Sons' D61EXi-23 dozer in late March.



Mike Hayes,
Komatsu Director
of Distributor
Development



WATER, WATER EVERYWHERE

Flint's crisis points to larger potential problems in the nation's underground infrastructure

The water crisis in Flint, Michigan, may only be the tip of the proverbial iceberg when it comes to failing systems that carry the nation's drinking water and other critical utilities. Several factors figured into the crisis, including the use of old lead pipes that brought water from the Flint River, through a water treatment plant and eventually into residences.

Failure to treat the water properly caused pipes to corrode and to leach lead and heavy metal. The harmful materials made their way into homes, causing health problems that could plague Flint for a very long time. Efforts are underway to assess and eventually fix Flint's issues, including switching the city back to its original water source, Lake Michigan, and replacing all lead service lines leading to homes. The first

lead-to-copper line replacement was recently completed, but replacing all lines could take years.

Although Flint's crisis is an isolated incident, a problem with the nation's drinking water and other utility lines isn't. Corrosion is a leading cause, but aging pipes and overtaxed systems may be to blame as well.

A break every two minutes

The American Society of Civil Engineers says that a water main breaks every two minutes in the United States. The same group has graded the country's infrastructure a D⁺. Estimates show that as much as 44 percent of the nation's water infrastructure is approaching or past its useful life, and that about 1.7 trillion gallons of water are wasted each year.

"We have a buried problem that no one sees," said Terry Leeds, Director of Kansas City Water Services and a board member of the National Association of Clean Water Agencies in a recent Kansas City Star article. "Infrastructure has a life span, and now we're seeing a lot of cities are facing the end of it."

That article, "Here's why Flint's water problem isn't likely to happen in Kansas City," highlights what the Missouri city is doing to combat an aging system that saw more than 1,850 water-main breaks in 2012. It began a program to replace 28 miles of pipe per year. Many of the old lines were made of cheap metal and installed during and after World War II. Other cities are facing the same scenario of outdated systems.

A hefty price tag

The PVC Pipe Association sponsors WaterMainBreakClock.com, a website that tracks the costs associated with aging pipes throughout the country. It shows that about 850 water-main

PVC Pipe Association's WaterMainBreakClock.com notes that corrosion of old lead and other metal pipes eventually contributes to failures. The association estimates that leaking pipes lose more than 2.6 trillion gallons of drinking water every year, or 17 percent of all water pumped in the United States.





PVC and concrete pipe is an alternative to lead and other metal service lines that are subject to corrosion. Kansas City created a program to replace 28 miles of pipe each year after suffering more than 1,850 water-main breaks in 2012. Most of Kansas City's existing infrastructure was made of cheap metal and installed during and after World War II.

breaks occur each day in the United States. Since 2000, there have been more than 5 million breaks. Corrosion costs more than \$50 billion annually; that's about \$652 billion over the past 15 years.

The website notes that corrosion of old lead and other metal pipes eventually contributes to failures, and the costs are not just associated with repairing and replacing those lines. Leaking pipes lose more than 2.6 trillion gallons of drinking water every year, or 17 percent of all water pumped in the United States. This represents \$4.1 billion in wasted electricity annually.

"Corrosion is a significant drag on the economy," the site claims. "Not only is this cost calculated in terms of water-main-break repair, but also in terms of lost water, replacement of corroded pipes and implementation of corrosion-mitigation measures, which are ineffective since they only delay an unavoidable outcome."

An Environmental Protection Agency (EPA) survey shows that \$271 billion is needed throughout the next five years to maintain and improve the nation's wastewater infrastructure. It

has also said it will cost \$385 billion in the next 15 to 20 years. Those figures include pipes that carry wastewater to treatment plants, the technology that treats water and methods of managing stormwater runoff. The EPA also calls for the investment of hundreds of millions of dollars in treatment plants, many of which are several decades old.

"The only way to have clean and reliable water is to have infrastructure that is up to the task," said Joel Beauvais, the EPA's Acting Deputy Assistant Administrator for Water, in a Construction Equipment article. "Our nation has made tremendous progress in modernizing our treatment plants and pipes in recent decades, but this survey tells us that a great deal of work remains."

Many believe the price tag could be much higher. The American Water Works Association, for example, claims that \$1 trillion is needed to replace outdated pipes and meet growth during the next 25 years.

"The future is looking a little dark for something as basic and fundamental as water,"

Continued . . .

Infrastructure solutions necessary, but costly

... continued

said Adam Krantz of the Water Infrastructure Network (WIN) in a San Angelo (Texas) Standard Times article. WIN is a broad-based coalition of local elected officials, drinking water and wastewater providers, state environmental and health administrators, engineers, and others dedicated to preserving and protecting the health, environmental and economic gains that America's drinking water and wastewater infrastructure provides, according to the organization.

Could your rates rise?

WIN and other groups are pushing Congress to invest more. Federal funding comes from the Drinking Water State Revolving Fund that offers loans to help cities and towns get needed dollars. Cities and towns also rely on taxes, but many fall short of raising enough money to pay for needed upgrades and repairs. More efficient faucets, shower heads and other plumbing systems have made revenue shortfalls worse. Population loss, which reduces taxes, also plays a role in municipalities. That's forcing some local governments to raise rates.

"That's the key that Americans have to understand: If they want this system, they are going to have to be willing to finance it," said

Greg DiLoreto, Past President of the American Society of Civil Engineers in the Times article.

Fitch Ratings, a nationally recognized statistical rating organization, said that in light of the Flint crisis, if the EPA strengthens its Lead and Copper Rule – which is used to regulate drinking-water exposure to lead – the removal of all lead service lines could be mandatory. That would be an expensive proposition.

"Reprioritizing and accelerating the lead pipe replacement would add significant capital needs to the sector and could compete with other critical infrastructure projects, including developing sufficient long-term water supplies and replacing aging infrastructure components other than lead lines," said Fitch in a March press release. "Some sources estimate more than 6 million lead service lines exist across the U.S. We believe the capital costs to replace these lines could exceed \$275 billion. The EPA's latest survey estimated the entire sector needs \$385 billion in water infrastructure improvements through 2030, and this estimate includes the costs to only partially replace lead pipes. Either level of capital cost would likely be manageable for the sector as a whole if it is spread throughout a time frame like the one in the EPA survey. However, implementation across a shorter time span may create stress for individual credits."

Representatives on both sides of the aisle in Congress have called for establishing a National Infrastructure Development Bank to help pay for the costs associated with projects such as roads, bridges and water systems that are critical to Americans, but no bill passed. A recent push came again in February from U.S. Rep. Rosa DeLauro (D-Conn.), who has introduced an act in every Congress since 1994 to create an infrastructure bank.

"Emergencies like the tragedy we are seeing in Flint are a stark reminder of what is at stake when it comes to investment in water projects," said DeLauro in a commentary on TheHill.com. "We cannot continue the pattern of turning attention to critical infrastructure only when disaster strikes – we must make long-term, pro-growth investments to prevent further tragedies from ever occurring." ■

The American Society of Civil Engineers says that a water main breaks every two minutes in the United States. The same group has graded the country's infrastructure a D+.



IEA expects oil prices to stay low throughout 2016

The International Energy Agency (IEA) expects oil prices to stay low throughout 2016 as oversupply continues. In its Medium-Term Oil Market Report, the IEA said supply will outpace demand by up to 1.1 million barrels per day.

“Only in 2017 will we finally see oil supply and demand align, but the enormous stocks being accumulated will act as a dampener on the pace of recovery in oil prices when the market, having balanced, starts to draw down those stocks,” according to the report. ■

Pipeline groups pursue inspector certification

Pipeline industry groups announced support for certification of all pipeline inspectors during the next two years. The groups note that standardized certification would improve the quality of new construction.

“Safe pipeline construction and quality materials help ensure safe operation,” said Donald Santa, President and CEO of the Interstate Natural Gas Association of America. “Having certified inspectors helps everyone raise the bar.” ■



The Power of Combined Excellence®



PALADIN OFFERS THE WIDEST BREADTH OF ATTACHMENT SOLUTIONS ACROSS ALL APPLICATIONS

- CONSTRUCTION
- MATERIAL HANDLING
- VEGETATION MANAGEMENT
- LAND CLEARING
- LANDSCAPING
- AGRICULTURE MATERIAL HANDLING
- SNOW REMOVAL
- ENERGY
- DEMOLITION

BRADCO CP CUSTOMWORKS CUIS FFC HARLEY JEWELL J:B KODIAK McMILLEN SWEEPSTER



www.paladinattachments.com

IN THE SPOTLIGHT

Komatsu displays WA500-7 Yard Loader arrangement at record-setting asphalt, aggregate events

The co-located 2016 World of Asphalt Show & Conference and AGG1 Academy & Expo set new attendance records with more than 9,000 people checking out the exhibits inside the Music City Center in Nashville. Komatsu was among the exhibitors, displaying a 353-horsepower WA500-7 Yard Loader arrangement that is designed to load 24-ton on-highway trucks in two passes.

“Loading trucks in fewer passes increases production, and that’s just one advantage the WA500-7 Yard Loader arrangement presents,”

said Rob Warden, Komatsu National Account Manager. “It’s great for moving and stockpiling already-processed materials.”

The 79,000-pound-plus loader that Komatsu displayed features a 9.8-cubic-yard, flat-floor bucket, which increases capacity and productivity for applications involving re-handled or loose materials. Komatsu added a larger-diameter bucket cylinder to the WA500-7 Yard Loader arrangement for increased bucket forces and additional counterweight for better stability and tipping loads. The counterweight’s unique shape provides more ground clearance for stockpiling materials.

The machine has 29-inch rims and low-profile tires for increased stability; front and rear brake-cooling systems, which maximize brake life in extended-carry and high-speed applications; and full rear fenders for enhanced protection from debris and thrown material.

“The WA500-7 Yard Loader arrangement handles loose stone, sand, gravel and other materials very well downstream from a crusher,” said Joe Sollitt, Komatsu Product Marketing Manager. “It fits perfectly into the asphalt and aggregate industries.”

All 50 states represented

Attendees from every state, nine Canadian provinces and more than 60 other countries made their way to the events, which covered a record 157,000 net square feet of exhibit space. The shows featured more than 500 exhibitors, including 150 new ones.

World of Asphalt and AGG1 will be held again March 6-8, 2018, in Houston. The annual shows will skip next year due to CONEXPO-CON/AGG. ■

Attendees of the 2016 Asphalt Show & Conference and AGG1 Academy & Expo check out the Komatsu WA500-7 Yard Loader arrangement. The 79,000-pound-plus loader that Komatsu displayed features a 9.8-cubic-yard, flat-floor bucket, which increases capacity and productivity for applications involving re-handled or loose materials.



UNBEATABLE TEAM.



Close to
our customers



PASSION

The Wirtgen Group owes its strength to the excellence of its four product brands – Wirtgen, Vögele, Hamm and Kleemann – with their unique wealth of experience.

Put your trust in the Wirtgen Group team.



ROAD AND MINERAL TECHNOLOGIES

www.wirtgenamerica.com

LINDER | INDUSTRIAL
MACHINERY
COMPANY

www.LinderCo.com

Florida

Ft. Myers • 239-337-1313
Jacksonville • 904-786-6710
Ocala • 352-629-7585
Orlando • 407-849-6560
Pembroke Pines • 954-433-2800
Plant City • 813-754-2727
Riviera Beach • 561-863-0570

North Carolina

Asheville • 828-681-5172
Concord • 980-255-8345
Greenville • 252-695-6200
High Point • 336-665-0110
Raleigh • 919-851-2030
Wilmington • 910-254-2031

South Carolina

Columbia • 803-794-6150
Greer • 864-877-8962
Ladson • 843-486-8080

PLAYING IN THE SAND

Komatsu, Extreme Sandbox enter partnership aimed at increasing national exposure to construction industry



Rich Smith,
Vice President,
Product Services
Division for
Komatsu America

Komatsu has teamed up with Extreme Sandbox, LLC, a top-rated, heavy-equipment-adventure company, to become its exclusive equipment sponsor. The partnership enables both companies to expose more Americans to the experience of operating heavy equipment.

Extreme Sandbox provides guests with a truly unique opportunity to operate real construction equipment inside a 10-acre “sandbox.” Expert instructors help guests learn and operate the machines in a proper operating environment, while creating a fun and memorable experience.

Together, the two companies plan to expand the public’s exposure to heavy machinery. By combining Extreme Sandbox’s national expansion plans and proven track record of

creating memorable experiences, with Komatsu’s world-class machines, national reach and global resources, the partnership will introduce a new generation to heavy machinery and an under-explored area for rewarding careers.

“This alliance is an opportunity to transform these impressive marvels of engineering technology from a roadside and work-zone curiosity, to an informative, exciting, hands-on experience,” said Rich Smith, Vice President, Product Services Division for Komatsu America. “Long term, we hope climbing inside and feeling the comfort, speed and power of these machines inspires a new generation of men and women who are good with their hands to consider construction careers. The construction industry provides great employment opportunities for future operators, technicians and engineers. The degree to which cutting-edge technology will shape the jobsites and careers in the construction industry of the future is a well-kept secret. We want to change that.”

Extreme Sandbox currently has two locations: its Trip-Advisor-No. 1-rated suburban Minneapolis site and its new one about an hour north of Dallas. More sites are planned for several U.S. cities in the next few years. Permanent locations will offer the opportunity to schedule machine and operator training at the high school and community college levels, as well as demonstration and customer appreciation events for local Komatsu distributors.

It will also allow Extreme Sandbox to collaborate with local distributors and embark on periodic road tours that spread the message of a thrilling experience and rewarding careers to local communities across the country, via tailgating events, state fairs, festivals, parades and other avenues. ■

Komatsu teamed up with Extreme Sandbox to become its exclusive equipment sponsor. The partnership enables both companies to expose more Americans to the experience of operating heavy equipment. Extreme Sandbox provides guests with a truly unique opportunity to operate real construction equipment inside a 10-acre “sandbox.”





LINDER INDUSTRIAL MACHINERY COMPANY

USED EQUIPMENT SPECIALS

(813) 754-2000

Year/Make/Model	Stock No.	Serial No.	Hours	Price
WHEEL LOADERS				
2013 KOMATSU WA250PZ-6 	E00038623	76587	3,399	CALL

PAVING/COMPACTION				
2012 VÖGELE VISION 5203-2 ASPHALT PAVER	E00037301	07750119	2,679	\$165,000
2012 VÖGELE VISION 5203-2 ASPHALT PAVER	E00038347	07750116	3,984	CALL
2012 HAMM 3410 SINGLE DRUM SMOOTH ROLLER	E00038564	H1791779	1,178	CALL
2012 HAMM 3410 SINGLE DRUM SMOOTH ROLLER	E00038565	H1791766	897	CALL

EXCAVATORS				
2014 KOMATSU PC138USLC-10	E00037236	40504	819	\$135,000
2012 KOMATSU PC138USLC-8	E00037229	27454	4,870	\$95,000
2008 KOMATSU PC400LC-8	E00037320	A88125	6,717	\$109,000
2013 KOMATSU PC138USLC-10 	E00037812	40103	3,767	\$115,000
2010 KOMATSU PC27MR-2 	E00038166	20075	2,883	\$29,000
2013 KOMATSU PC360LC-10	E00038660	A32720	3,101	CALL
2005 KOMATSU PC750LC-7	E00037111	20067	10,334	\$165,000

 denotes Komatsu-certified machine



2012 HAMM 3410,
Stk #: E00038564, 1,178 hrs. – CALL



2012 VÖGELE VISION 5203-2,
Stk #: E00037301, 2,679 hrs. – \$165,000



2012 KOMATSU PC138USLC-8,
Stk #: E00037229, 4,870 hrs. – \$95,000

For additional information, please contact your local sales representative.

LINDER INDUSTRIAL
MACHINERY
COMPANY

www.LinderCo.com

Florida
Ft. Myers • 239-337-1313
Jacksonville • 904-786-6710
Ocala • 352-629-7585
Orlando • 407-849-6560
Pembroke Pines • 954-433-2800
Plant City • 813-754-2727
Riviera Beach • 561-863-0570

North Carolina
Asheville • 828-681-5172
Concord • 980-255-8345
Greenville • 252-695-6200
High Point • 336-665-0110
Raleigh • 919-851-2030
Wilmington • 910-254-2031

South Carolina
Columbia • 803-794-6150
Greer • 864-877-8962
Ladson • 843-486-8080

Availability is subject to prior sales.



C.P.I.
P.O. Box 1689
C.R., IA 52406-1689

Presorted Standard
US Postage Paid
C.P.I.

Change Service Requested

16no2

TOP QUALITY Manufacturers & Products

LINDER | INDUSTRIAL MACHINERY COMPANY

3 States 16 Locations
www.linderco.com

KOMATSU



W WIRTGEN

W HAMM

W VÖGELE

W KLEEMANN



Distribution partner of
KONECRANES



LINDER
Used Construction Parts



Florida

Ft. Myers: 239-337-1313
Jacksonville: 904-786-6710
Ocala: 352-629-7585
Orlando: 407-849-6560
Pembroke Pines: 954-433-2800
Plant City: 813-754-2727
Riviera Beach: 561-863-0570

North Carolina

Asheville: 828-681-5172
Concord: 980-255-8345
Greenville: 252-695-6200
High Point: 336-665-0110
Raleigh: 919-851-2030
Wilmington: 910-254-2031

South Carolina

Columbia: 803-794-6150
Greer: 864-877-8962
Ladson: 843-486-8080