

January 2017



focusing on

Solutions



A publication for and about Brandeis Machinery & Supply Company customers • www.BrandeisSolutions.com

L&L EXCAVATING/ US CONTRACTING

Two companies provide
a variety of services in eastern
Kentucky and surrounding states



KOMATSU®

Keith Jenkins

Kenny Lovely

Brad Lyon

A MESSAGE FROM THE PRESIDENT



Gene Snowden, Jr.

**It's
showtime**



Dear Valued Customer:

We look forward to the upcoming CONEXPO-CON/AGG, the world's premier construction exposition. As always, the triennial event is expected to be bigger and better than ever as manufacturers unveil the latest and greatest in equipment and technology.

Once again Komatsu will showcase the innovative products and support capabilities that make it the world-class leader in construction equipment. This issue of your Brandeis Focusing on Solutions magazine features a preview of the show with information about Komatsu's display areas. We hope to see you March 7-11 in Las Vegas.

Of course, our other manufacturing lines will prominently display products at CONEXPO-CON/AGG as well. If you attend the show, we highly encourage you to stop by their booths, too. We know you will enjoy visiting with them and seeing what they have to offer.

Komatsu continues to introduce new Tier 4 Final machines that increase your production and efficiency, and you can read about several of them inside as this issue highlights the broad range of equipment our leading manufacturer produces. There are articles on a new dozer, wheel loader, truck, excavator and more.

Thoughts of CONEXPO-CON/AGG have us looking forward to what we hope is a great 2017 construction season for you. If you are interested in any of the machines featured here, or ones you see in Vegas, let us know.

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

Sincerely,
BRANDEIS MACHINERY & SUPPLY COMPANY

A handwritten signature in black ink that reads 'Gene Snowden, Jr.' in a cursive script.

Gene Snowden, Jr.
President and Chief Operating Officer



IN THIS ISSUE

L&L EXCAVATING/US CONTRACTING

Learn about the variety of services these two companies provide throughout eastern Kentucky and surrounding states.

TIMBER TALK

Go into the woods and see the Komatsu D39EX-23 dozer prototype that Brandeis recently debuted.

GUEST OPINION

Discover the reasons why one information technology professional believes that funding for digital infrastructure projects is lacking in the United States.

INDUSTRY EXTRAVAGANZA

Preview CONEXPO-CON/AGG 2017, which is set to showcase innovative products that will shape the future of the construction industry.

PRODUCT NEWS

Check out how the PC138USLC-11 excavator supplies a productive punch on today's jobsites.

NEW PRODUCT

Take a closer look at the all-around functionality of the WA270-8 wheel loader as it powers through wide-ranging applications.

PRODUCT INNOVATION

Komatsu's D155AXi-8 RC dozer offers high productivity through a combination of radio operations and *intelligent* Machine Control. Find the details inside.

PRODUCT SPOTLIGHT

Learn how Komatsu's largest truck, the electric-drive 980E-4, stands up to rugged mining conditions.



Published by Construction Publications, Inc. for Brandeis Machinery
www.brandeismachinery.com

LOUISVILLE, KY

1801 Watterson Trail
 Louisville, KY 40299-2454
 (502) 491-4000
 FAX (502) 499-3195

STANVILLE, KY

130 Mare Creek Road
 Stanville, KY 41659-7003
 (606) 478-9201
 FAX (606) 478-9208

LEXINGTON, KY

1389 Cahill Drive
 Lexington, KY 40504-1167
 (859) 259-3456
 FAX (859) 254-0783

PADUCAH, KY

160 County Park Rd.
 Paducah, KY 42001
 (270) 444-8390
 FAX (270) 575-4907

CORBIN, KY

1484 American Greeting Card Road
 Corbin, KY 40701-4813
 (606) 528-3700
 FAX (606) 528-9014

EVANSVILLE, IN

17000 Highway 41 North
 Evansville, IN 47711
 (812) 425-4491
 FAX (812) 425-1171

FORT WAYNE, IN

7310 Venture Lane
 Fort Wayne, IN 46818-1256
 (260) 489-4551
 FAX (260) 489-1620

INDIANAPOLIS, IN

8410 Zionsville Road
 Indianapolis, IN 46268-1524
 (317) 872-8410
 FAX (317) 872-8417

THE PRODUCTS PLUS THE PEOPLE TO SERVE YOU!

Gene Snowden Jr., President & Chief Operating Officer
 Tony Estes, Senior Vice President/Sales & Rentals
 Gary Hirsch, General Manager Crane & Material Handling
 Cory Edwards, Used Equipment Manager
 Chuck Mueller, Vice President/Coal Services Manager
 David Coultas, Vice President/Regional Sales Manager
 Spencer DePoy, Vice President/Regional Sales Manager
 Lee Heffley, Vice President/Regional Sales Manager
 Keith Harlan, Vice President/Product Support Services
 Todd Coffey, Corporate Service Manager
 Dan Brandon, Manager of Sales & Rental Services
 Craig Leis, Corporate Rental Manager
 Garrett Dykes, Director Rebuild Center

NORTHERN REGION

John Newman,
 Northern Region
 Operations Manager

INDIANAPOLIS

Jeff Woods,
 Service Manager
 Bruce Monroe,
 Parts Manager
 Andy Lock,
 Aggregate
 Specialist
 Brian Cook,
 Machine Sales Rep.
 Ken Peterson,
 Machine Sales Rep.
 John Mills,
 Machine Sales Rep.
 Donald Baumgardner,
 Scrap and Recycling
 Specialist
 Mike Lovell,
 Product Support Rep.
 Dave Potts,
 Rental Rep.

FORT WAYNE

Keith Freeland,
 Service Manager
 John Smith,
 Parts Manager
 Tim Kreider,
 Machine Sales Rep.
 Doug Fox,
 Machine Sales Rep.
 Tom Patrick,
 Product Support/
 Rental Rep.

EASTERN REGION

Barry Justice,
 Eastern Region
 Operations Manager

STANVILLE

Harold Vittoe,
 Service Manager
 Shawn Spears,
 Parts Manager
 Jason Douglas,
 Machine Sales Rep.
 Alex Rains,
 Machine Sales Rep.
 Rick Johnson,
 Product Support Rep.

CORBIN

Harold Vittoe,
 Service Manager
 Shawn Spears,
 Parts Manager
 Jason Douglas,
 Machine Sales Rep.
 Nick Baird,
 Product Support Rep.

WESTERN REGION

Bob Morris,
 Western Region
 Operations Manager

EVANSVILLE

Phil Daily,
 Service Manager
 Mike Reese,
 Parts Manager
 Terry Abell,
 Mining Sales Rep.
 Dustin Olander,
 Machine Sales Rep.
 Brandon Russell,
 Machine Sales Rep.
 Rob Lampton,
 Product Support Rep.
 J.D. Smith,
 Product Support Rep.
 Rodney Spaw, Rental Rep.

PADUCAH

Gary Harris,
 Service Manager
 Chuck Fowler,
 Parts Manager
 Ron Griffin,
 Product Support Rep.
 Chad Porter,
 Machine Sales Rep.

CENTRAL REGION

Steve Seelbach,
 Central Region
 Operations Manager

LOUISVILLE

Mike Krow,
 Service Manager
 Bob Bisig,
 Parts Manager
 Gene Snowden III,
 Machine Sales Rep.
 Barry Bubnar,
 Machine Sales Rep.
 Greg Zoeller,
 Machine Sales Rep.
 Tommy Johnson,
 Product Support Rep.
 Josh Weber,
 Product Support Rep.
 Dave McCauley, Rental Rep.

LEXINGTON

Bill Powell,
 Parts Manager
 Kenneth Smallwood,
 Service Manager
 Jason Douglas,
 Machine Sales Rep.
 Ken Tate,
 Machine Sales Rep.
 Andy Carpenter,
 Product Support Rep.
 Lisle Dalton, Rental Rep.

KOMATSU®



L&L EXCAVATING/US CONTRACTING

Two companies provide a variety of services in eastern Kentucky and surrounding states

Brad Lyon grew up working for his father's business, which supported the coal mining industry. A few years ago, he recognized a need for excavation companies to provide reclamation services to those mines. He talked to longtime friend Kenny Lovely, a business owner, about an idea to start something new to meet those needs. They teamed up to form L&L Excavating in 2013.

"At first, our focus was mine reclamation, but we quickly transitioned into general earthwork and land improvement for residential and commercial clients," recalled Lyon. "Reclamation is still on our service list, but today we're geared more toward mass excavation and grading that involves building ponds, house pads and roads."

Early on, their company provided most services, with the exception of utility

installations. That segment was added a couple of years ago when they talked with Keith Jenkins, who owned an underground-utility-installation business. The three teamed up to create US Contracting, which installs water, sewer and storm lines as well as pump stations and other structures.

"I started my own business after working for other utility contractors for most of my career," said Jenkins. "Brad and I worked together in the past, and all three of us knew each other because we grew up in the same area. Brad and Kenny called me about a job they were bidding that included utilities, and the three of us clicked. We decided to start a second company, and that's how US Contracting was formed."

From a small drain to half a mountain

Now, all three men have ownership in both L&L Excavating and US Contracting. The two Salyersville, Kentucky-based companies occasionally join forces, but for the most part, they work separately.

"Having two companies gives us the flexibility to perform a wide range of projects," explained Lovely. "We've done everything from fixing a small drain to moving half a mountain. If we do a land-development job with utilities, we team up, but we don't actively seek full site packages."

"Our aim is to provide the best service in the business, no matter the project or the customer," added Lyon. "Early on, we advertised L&L on a billboard, and that brought us a few clients. Once we gained their trust, they became repeat customers, and that's

Owners of L&L Excavating and US Contracting include (L-R) Keith Jenkins, Kenny Lovely and Brad Lyon. L&L Excavating provides general earthwork services, and US Contracting concentrates on underground-utility installations.

▶ VIDEO





L&L Excavating and US Contracting use a wide range of Komatsu excavators as their main production machines, including PC138USLC tight-tail-swing models. “Komatsu excavators are smooth, fast, productive and dependable,” said Owner Keith Jenkins. “Our favorites are the two PC138s. They allow us to get into tight spaces or near roadways, without worrying that a counterweight will hit an obstruction or hang out in a lane of traffic. For their size, they are extremely productive.”

where many of our jobs have come from in the past couple of years.”

The companies also complete numerous projects for developers with whom the three partners have built relationships throughout the years.

“These customers know they can trust us to meet their schedules and budgets,” stated Jenkins. “We’re based in eastern Kentucky, but we don’t have a defined territory. Our projects take us to Tennessee, the Virginias and Ohio.”

Employees play key roles

Combined, the two companies have nearly 40 employees. US Contracting runs five water and sewer crews, and L&L has three earthwork crews. Several of Jenkins’ former employees joined him in the new venture. Lyon and Lovely also hired several former co-workers. Key personnel of the two businesses include Doug Wireman, Kristy Cole and Demmie Marshall.



In addition to Komatsu equipment, the companies run Takeuchi track loaders, including this TL 10 used to move dirt on a project in Ashland, Kentucky.

“All of our employees are integral parts of the success of the two businesses,” said Lyon. “They are dedicated, hard-working

Continued . . .

Komatsu excavators are 'extremely productive'

... continued



Doug Wireman,
Estimator



Kristy Cole,
HR/Office Manager

and genuinely care about providing quality results. They deserve a great deal of credit for the growth of both businesses."

These employees have helped L&L Excavating and US Contracting complete numerous projects, including two, eight-mile water line installations and large abandoned mine reclamations.

"We don't shy away from large and/or complex assignments," reported Jenkins. "Whatever is called for we handle, including the varying terrain and depths required to put pipe in the ground in this area. We have rock trenchers and other specialty equipment to ensure that we can get the job done."

Wide range of Komatsu excavator sizes

The equipment fleet L&L Excavating and US Contracting own is largely comprised of Komatsu machines purchased from Brandeis Machinery's Stanville branch with the help of Sales Rep Alex Rains. Komatsu excavators, ranging in size from the compact PC50MR to a PC138, are their main production machines.

(L-R) Brandeis Machinery Sales Rep Alex Rains meets with L&L Excavating and US Contracting Owners Brad Lyon, Kenny Lovely and Keith Jenkins on a jobsite in Ashland, Kentucky. "Among all the equipment dealers we have worked with, Alex and Brandeis certainly stand out. They are the most supportive and helpful, by far," said Lyon.



"Komatsu excavators are smooth, fast, productive and dependable," said Jenkins. "Our favorites are the two PC138s. They allow us to get into tight spaces or near roadways, without worrying that a counterweight will hit an obstruction or hang out in a lane of traffic. For their size, they are extremely productive."

The companies also use a Komatsu D31EX dozer and Takeuchi machinery, including skid steers. "That dozer is just the right size for building house pads and backfilling," noted Lovely. "We also backfill with the skid steers as well as clean up and move pipe with forks."

L&L Excavating and US Contracting take care of most services, with occasional help from Brandeis.

"Brandeis is great about having parts on hand when we need them, and if something is not in stock, we can get it the next day," said Lyon. "We like that Brandeis completes services on our Tier 4 machines for the first 2,000 hours or three years through Komatsu CARE. That's a good value. Among all the equipment dealers we have worked with, Alex and Brandeis certainly stand out. They are the most supportive and helpful, by far."

Interested in all types of projects

The owners of L&L Excavating and US Contracting are committed to growth. Currently, they are working to pre-qualify the companies to perform highway jobs.

"That's the next step in our evolution," noted Jenkins. "We are moving through the process to become a general contractor, but we are willing to do highway work as a sub or a general. Either way, we believe that we have the skills, knowledge and experience to get those larger projects done."

That belief doesn't mean L&L Excavating and US Contracting will give up on performing smaller jobs.

"We're adaptable and willing to serve anyone who has an excavation or utility need," said Lovely. "Whatever the size, we're interested." ■



Booth C30030

Tougher Than Everything

Montabert breakers sense the hardness of material, adapting their power and strike frequency to deliver just the right amount of energy. You get the best possible performance every time, without all the wear and tear.

More breakups.
Fewer breakdowns.
That's Montabert.

See our attachments in action!
montabertusa.com



Follow us on social media for regular updates from **Montabert!**

2905 Shawnee Industrial Way
Suwanee, GA 30024
ussales@montabertusa.com
866-588-8690

MONTABERT®



Engineering Innovation since 1921

Montabert and the Montabert logo are registered trademarks of Montabert S.A.S. in the United States and various countries around the world.

Available through Brandeis Machinery and Supply Company



Discover more at
BrandeisSolutions.com

INTO THE WOODS

Brandeis debuts Komatsu D39EX-23 dozer prototype suited for forestry application



Alex Rains,
Sales Rep

Brandeis Machinery & Supply Company unveiled its newest offering for forestry customers when it demo'd a customized Komatsu D39EX-23 dozer last fall. The machine features several modifications that make it ideal for companies working in the forest.

"This sector is growing, especially in our region, and we want to make sure that we are providing customers with the best equipment possible," said Brandeis Sales Rep Alex Rains. "The modifications to the D39EX-23 help make it the best-suited machine for the forestry industry."

Brandeis customized a standard Komatsu D39EX-23 dozer with several forestry-specific enhancements. Material movement was improved by fitting the six-way blade with a spill-guard attachment on the front and an Allied H4A hydraulic-driven winch with customized speed-gear ratio and a three-quarter-inch swage cable added to the back.

"The winch is one of the top additions to the dozer," stated Rains. "It's a valuable tool for customers, especially in this region. Because of the hills and valleys, they constantly have to winch logs up and down the terrain. We worked with Allied to design a gear ratio that would enable customers to pull large trees up a slope as

quickly as possible. The hydraulic drive gives the operator finite control with a smooth and powerful takeoff."

Machine and operator safety were also priorities. The cab was fitted with limb risers, side and back screens and an AC cover on the top. The back screens were fabricated to avoid interference with the dozer's rearview camera.

The D39EX-23 was selected for the modifications because of its similarity to other popular dozers in the industry. The 20,749-pound crawler dozer offers a 107-horsepower engine in a compact size.

"The D39EX offers more horsepower and operating weight with a smaller machine footprint than comparable machines," explained Rains. "That's important for customers because they are typically working in heavily wooded areas with elevation changes. Having more weight and power in a smaller size increases their maneuverability."

"The design of the dozer is another advantage," he continued. "The slant nose and rearview camera offer excellent visibility from the cab, and the radiator and fan are still easily accessible even with the winch attached to the rear of the dozer."

Early customer reviews are positive. Terry Logging Inc. President Chris Terry was the first customer to test the dozer.

"It's clear that Komatsu and Brandeis designed this dozer for our industry," proclaimed Terry. "The visibility is amazing. The machine has great horsepower, and it is small enough to get around in the woods without sacrificing any power."

"The best addition, though, is the winch," he noted. "The line drags fast, which helps us increase our production. They've done a great job tailoring the D39EX for this industry." ■

This Komatsu D39EX-23 dozer features several forestry upgrades, including a spill-guard attachment on the blade, additional safety screens on the cab and an Allied H4A hydraulic-driven winch.





► VIDEO

The Terry Logging Inc. crew bundles trees before winching them up a hill with its D39EX-23 dozer. The Allied H4A winch was one of several logging-specific modifications that Brandeis made to the dozer. "The line drags fast, which helps us increase our production," said Terry Logging Inc. President Chris Terry. "They've done a great job in tailoring the D39EX for this industry."

TERRY LOGGING INC.

Komatsu equipment helps this company increase efficiency

You could say that Terry Logging Inc. President Chris Terry is living out his childhood dream. Either that, or he is clairvoyant.

"When I was in high school, we had to give a quote for the yearbook about what we would be doing in the future," Terry recalled. "I said I was going to be the president of a logging company – I don't even remember why I said that. However, I was able to start a small company. We incorporated in 2002, and I officially became the president of a logging business, so I guess I kept to my word."

Terry Logging operates within a 100-mile radius of Morehead, Kentucky, with a three-person crew.

"We're small, but we pride ourselves in high production numbers. Our goal is typically three truckloads per day," said Terry. "We do whatever the customer wants – clear-cut or select-cut. Our size allows us to perform various applications for land owners."

To maintain high production numbers, Terry turns to Brandeis Machinery & Supply Company and Sales Rep Alex Rains. In addition to demoing the Komatsu D39EX-23 prototype dozer, Terry owns a Komatsu XT445L feller buncher with a Quadco 22B cutting head.

"The XT445L is extremely user-friendly," raved Terry. "It has great power and control. When the boom is extended all the way out with a tree in the grapple, it still operates very well. The feller buncher allows us to efficiently cut trees and organize them in piles."

The Komatsu machine has been a welcome improvement for Terry compared to manual logging.

"It's a huge upgrade over cutting them by hand with a chain saw and winching them into a pile," he said. "It's obviously faster, but it is also much safer. As an operator inside the cab, I have more control of how the tree falls, and my risk of injury is far less." ■



Chris Terry,
President



Terry Logging Inc. President Chris Terry uses a Komatsu XT445L feller buncher with a Quadco 22B cutting head to cut and stack trees in eastern Kentucky.

CLOSE TO OUR CUSTOMERS



Visit the
Wirtgen Group
at booth C31239



WIRTGEN GROUP

**CLOSE
TO
OUR
CUSTOMERS**

► Find out more: www.wirtgen-group.com/america



WIRTGEN

/

VÖGELE

/

HAMM

/

KLEEMANN



Louisville, KY • (502) 491-4000

Stanville, KY • (606) 478-9201

Paducah, KY • (270) 444-8390

Lexington, KY • (859) 259-3456

Corbin, KY • (606) 528-3700

Indianapolis, IN • (317) 872-8410

Evansville, IN • (812) 425-4491

Fort Wayne, IN • (260) 489-4551

LET'S INVEST IN 'SMART CITIES'

How the Smart City Challenge helps meet the need for more infrastructure investment

The United States has woefully underinvested in smart city efforts compared to other leading countries. To address this shortfall, federal, state and local governments should come together to create a new funding stream to help U.S. cities increase investment in the digital infrastructure needed to ensure that our cities are modern, sustainable and competitive. The U.S. government has committed approximately \$160 million in the next five years to support smart city initiatives. This is a pittance compared to some of the investments other countries are making to develop smart cities.

One of the single largest U.S. investments in smart cities occurred in June 2016, when U.S. Department of Transportation (USDOT) Secretary Anthony Foxx announced that Columbus, Ohio, had won the Smart City Challenge – a \$50 million federal prize awarded to one city to address important issues such as safety, mobility and climate change through better use of data and technology. This is a significant milestone because most smart city initiatives in the United States have been small-scale projects focused on a particular application or problem, rather than the broad integration of sensors, data and analytics across virtually all public services.

The most impressive aspect of the Smart City Challenge was that so many cities responded to the call. From Anchorage to Atlanta and Albuquerque to Albany, the USDOT received 78 applications representing 85 cities in 36 states. Many of these cities identified important challenges facing municipalities and proposed novel solutions that leveraged technology to improve the community.

Unfortunately, the Smart City Challenge only funded one city's proposal, even though many more were also deserving. This is an inadequate

approach for funding critical digital infrastructure. Just as it would be unwise to only fund bridges and highways in one U.S. city, it makes no sense to limit investment in the sensors, systems and networks needed to build smart cities to a single location. Instead, policymakers at the city, state and federal levels should work together to fund promising proposals and develop strong partnerships with the private sector. This could take the form of new grants or repurposing existing funding for physical infrastructure to include digital initiatives.

While there is enormous potential to leverage data-driven innovation to improve the quality of life in urban environments, the United States will need to take action soon if it does not want to fall behind in the race to build smart cities. ■

The U.S. government has committed approximately \$160 million in the next five years to support smart city initiatives. Calling that a pittance, Daniel Castro says the United States needs to address this funding shortfall.



Daniel Castro

Daniel Castro is the Vice President of the Information Technology and Innovation Foundation and Director of the Center for Data Innovation. This article is excerpted from an opinion piece Castro wrote for and was originally published by Government Technology. To see the full version, visit www.govtech.com/opinion.



IMAGINE WHAT'S NEXT

CONEXPO 2017 showcases innovative new products that will shape the future of construction



Visit Komatsu at:
North Hall, Booth N10902
Gold Lot, Booth G4183

It's often said that demolition is the first step to new construction. In May 2015, crews razed Las Vegas' famed Riviera Hotel and Casino, paving the way for an expanded CONEXPO-CON/AGG. Held every three years at the Las Vegas Convention Center – right next door to where the Riviera stood – the event is scheduled for March 7-11, 2017.

CONEXPO-CON/AGG will be the first trade show to use the new space, building on what is already the largest international gathering in the Western Hemisphere for the construction-related industries. It also earned the top spot on Trade Show Executive's prestigious Gold 100 trade-show rankings. The largest show in the U.S. of any industry in 2014 – the last time the event was held – it featured more than 2.35 million net square feet of exhibit space, 2,100-plus exhibitors and approximately 130,000 attendees.

Nearly every time the triennial show is held it's bigger than the previous one. That's expected to continue with CONEXPO-CON/AGG 2017. All major areas of the construction industry will be represented in the more than 2.5 million square feet of exhibit space that will house 2,500-plus exhibitors. Almost 700 of the exhibitors are new in 2017. Event organizers expect increased attendance as well.

Technology and more technology

Those visiting will notice a heavy emphasis on cutting-edge innovation. CONEXPO-CON/AGG continues to provide attendees with access to the newest products from every key construction-related sector, including asphalt, aggregates, concrete, earthmoving, lifting and utilities.

To showcase the focus on technology, the theme for the 2017 exhibition is "Imagine What's Next." This theme reflects the vision for the show as it fully embraces applied technologies that help construction companies reduce downtime, maximize efficiency at jobsites and minimize waste, while increasing bottom-line profits and enhancing safety.

"Technology is critical to the future of the construction industry and CONEXPO-CON/AGG has always been a show that helps industry executives keep pace with the latest in new equipment and product innovations," said Rich Goldsbury, CONEXPO-CON/AGG 2017 show Chairman. "But, as the industry is being transformed by technology, our attendees understand the importance it has on the bottom line. It is our responsibility and privilege to connect them with the most cutting-edge innovations in safety, equipment and operations that are reshaping the future."

Record attendance is possible at CONEXPO-CON/AGG, scheduled for March 7-11, 2017, at the Las Vegas Convention Center.





Komatsu will prominently display its *intelligent* Machine Control dozers and excavators, including the PC490LCi-11, in the outdoor Gold Lot (Booth G4183). There, it will also highlight its SMARTCONSTRUCTION program, which goes beyond *intelligent* Machine Control equipment with comprehensive jobsite solutions.

CONEXPO-CON/AGG brings the Imagine What's Next theme and technology focus to life with a new 75,000-square-foot Tech Experience pavilion dedicated entirely to presenting emerging construction innovations that are driving change and process improvements across the industry. Located in Silver Lot 3, it will feature items such as wearables for health, safety and productivity; the latest skills for careers; and new materials to enhance the nation's infrastructure, according to the Associated Equipment Manufacturers (AEM), the lead sponsor of the show.

"With the Tech Experience, CONEXPO-CON/AGG is advancing to a new level of thought leadership in our industry," said Sara Truesdale Mooney, Show Director and Vice President, Exhibitions and Business Development for AEM. "Attendees will explore three key zones: the worksite of the future, jobs of the future and the infrastructure of the future."

CONEXPO-CON/AGG is co-located with the International Fluid Power Expo (IFPE),

and the two shows are teaming up to unveil the world's first, fully functional 3-D printed excavator and the first large-scale use of steel in 3-D printing, known as additive manufacturing. In addition, attendees can watch as a second excavator is printed live on the show floor.

"We know our members look forward to seeing the industry's most innovative technologies at CONEXPO-CON/AGG and IFPE each show year, and 2017 will not disappoint," said John Rozum, IFPE Show Director. "We're thrilled to bring such a significant technological and first-of-its-kind achievement like the 3-D printed excavator to the show. It will serve as a platform to demonstrate how the latest innovations and applied technologies are changing the future of the construction industry."

Komatsu spotlights SMARTCONSTRUCTION

Komatsu introduced a significant leap in machine technology three years ago

Continued . . .

Learning sessions to focus on technology trends

... continued

with its *intelligent* Machine Control dozers. The Komatsu lineup now includes eight models, including a radio-controlled version of its D155AXi-8, as well as three excavators (PC210LCi-11, PC360LCi-11 and PC490LCi-11). Komatsu will display most of its *intelligent* Machine Control equipment at the company's outdoor exhibit space in the Gold Lot (Booth G4183), as well as a new machine featuring hybrid technology.

The outdoor area will also feature Komatsu's SMARTCONSTRUCTION program, which goes beyond *intelligent* Machine Control equipment with comprehensive jobsite solutions provided by Komatsu. In addition to training and support, offerings include surveying/inspection, 3-D modeling, jobsite-data solutions and setup, as well as optimized operation consultation.

Attendees flock to Komatsu's display at the 2014 CONEXPO. The company will have two exhibit areas at the 2017 show, with standard Tier 4 machines indoors in the North Hall (Booth N10902) and *intelligent* Machine Control equipment outdoors in the Gold Lot (Booth G4183).



Indoors in the North Hall (Booth N10902), Komatsu will prominently feature its standard Tier 4 machines. Among them will be excavators, ranging from utility to production-sized models; Dash-8 wheel loaders; multiple dozers and trucks; plus a motor grader. The 22,000-square-foot space will also have a presentation area; a company store with apparel, die-cast models and other logoed merchandise; as well as a photo opportunity spot.

Learning sessions

At this year's expo, educational opportunities abound with a record 143 sessions across 10 tracks. One specifically focuses on technology and will highlight industry innovations and future growth opportunities in the tech field – drones, autonomous machines, 3-D imaging, smart apps, gamification, big data and the Internet of Things (IoT).

Additional tracks will offer the latest trends and best practices for aggregates; asphalt; concrete; cranes; rigging and aerial lifts; earthmoving and site development; equipment management and maintenance; business practices; workforce skills; and safety.

"Education is a critical component of CONEXPO-CON/AGG, and we encourage attendees to take advantage of the convenience of so many learning opportunities available. They'll be able to work smarter because of the knowledge they gain," said Goldsbury.

Registration for sessions can be completed prior to the conference at the CONEXPO website (www.conexpoconagg.com). Single session, one-day passes and full-session passes are available.

"We're honored to be among the most trusted resources for industry professionals from around the world, and we feel tremendous pride as we take the exhibition to the next level of technological breakthroughs by delving into the future of the construction industry," said Truesdale Mooney. ■



66 CU. YARDS BEHIND A SINGLE POWER UNIT.



EXPLORE EARTHMOVING

Las Vegas, Nevada / March 7 - 11

Please visit us at CONEXPO® in booth G2816.



28 TO 66
CUBIC YARDS
BEHIND ONE POWER UNIT



12 TO 18
GPH



22+ MPH
TRAVEL SPEED



FACTORY
WARRANTY

K-Tec Earthmovers builds industry-leading scrapers and accessories for construction and mining sites around the world.

At K-Tec™ we ensure you get the best return for your investment. Use our cost-analysis tool to see for yourself at ktec.com.

Gain a **Massive Advantage** by incorporating K-Tec™ equipment on your jobsite.



Direct Mount Scrapers



Flex Land Levelers



Ox Block Pusher Accessory



Authorized K-Tec Dealership

PC490LCi-11

3D AUTOMATION INCREASES YOUR PRODUCTION

- Dig to grade accurately without slowing down
- No worry grading because there is no over digging
- The machine you have been waiting for:
Big, Fast, Accurate



I AM KOMATSU

MICHAEL BLANKENSHIP / TSE / MODERN MACHINERY CO. / SEATTLE, WA

"As a Komatsu Technology Solutions Expert at Modern Machinery, I train operators how to get the most out of their equipment. The all-new PC490LCi-11 is the world's first *intelligent* Machine Control excavator in its size class. It features Komatsu's fully factory integrated, revolutionary machine control and guidance system. It's ready to make you more efficient and more profitable. Leading-edge innovation is why I AM KOMATSU."

SUPPORTED WITH PRIDE

KOMATSU®

komatsuamerica.com



Copyright ©2016 Komatsu America Corp. All Rights Reserved

011



NEW COMPACT EXCAVATOR

Good lift capacity, tight-tail-swing radius are combined with advanced technology in the PC138USLC-11

Upgrades, updates and enhancements. Each new model that Komatsu produces has them, and the PC138USLC-11 Tier 4 Final excavator is no exception, with productive features that provide excellent lift capacity, stability and performance in a compact model design that fits a variety of applications.

"The PC138USLC-11 is the perfect machine for contractors on highway, bridge and other roadwork jobs," said Kurt Moncini, Komatsu Senior Product Manager. "It's easy to transport, versatile and the tight tail swing fits easily within one lane of traffic. Even though it's compact, the excavator has a robust counterweight and can be an effective tool on large, open jobsites, too."

The 7,630-pound counterweight provides excellent lift capacity, equal to or better than conventional models in the same size class. The contoured cab profile and sliding door allow the cab to swing within the same radius as the counterweight.

"If the tracks can fit through an area, then there is enough space for operators to swing without worrying about hitting an obstruction," said Moncini. "That gives them confidence to work in congested areas, close to power poles or transformers and up against, or even inside of a building."

Like other Tier 4 Komatsu machines, the PC138USLC-11 features Komatsu hydraulic technology that matches engine speed and hydraulic pump output for optimal performance. Operators can also match the machine to the materials and the job at hand with six working modes, including Power, Economy and Attachments. An enhanced attachment control stores up to 10 attachments in the monitor panel, with adjustable flow

control. Two-way attachments also run in Economy mode for greater efficiency.

Improved telematics

Komatsu upgraded its telematics technology to cellular, ensuring that when work is performed inside a building, KOMTRAX information remains available. Operators can view it through an updated monitor panel that also incorporates a standard, rearview-camera output that's always available on the screen.

"Ground-level access to service points are all located on one side, including fuel, engine oil and air filters," said Moncini. "That saves time, which can be better spent in production. It's a terrific all-around machine that's built for great production, even in less-than-ideal conditions. The PC138USLC-11 would be a valuable addition to any fleet." ■



Kurt Moncini,
Komatsu Senior
Product Manager

Quick Specs on Komatsu's PC138USLC-11 Excavator

Model	Net Horsepower	Operating Weight	Bucket Capacity
PC138USLC-11	97.2 hp	34,731-37,669 lb	0.34-1.00 cu yd

Komatsu's new Tier 4 Final PC138USLC-11 features excellent lift capacity, stability and performance in a compact model designed to fit a variety of applications. If the tracks can fit through an area, then there is enough space so that operators can swing without worrying about hitting an obstruction.

▶ VIDEO





“IT’S ABOUT RELATIONSHIPS”
MY CUSTOMERS LOVE KOMATSU!

I AM KOMATSU

GENE SNOWDEN III / MACHINE SALES REP / BRANDEIS MACHINERY / LOUISVILLE, KY

“I’m proud to sell Komatsu products. At Brandeis, we’ve handled quality Komatsu equipment for decades. Like all Komatsu loaders, the WA470 has an excellent balance between power and stability in the pile and speed and stability when moving with the load. And maintenance departments love the access to daily checks and service items. My customers are satisfied customers, and that’s why I AM KOMATSU.”



SUPPORTED WITH PRIDE

KOMATSU®

komatsuamerica.com



Copyright ©2016 Komatsu America Corp. All Rights Reserved

010

NEW PRODUCT



Discover more at
BrandeisSolutions.com

VERSATILE WHEEL LOADER

The new WA270-8 powers its way through a wide variety of applications

High production, greater fuel efficiency and improved operator comfort are all traits found in Komatsu's new WA270-8 wheel loader, which fits a wide range of construction, landscaping, agriculture and other applications. Its parallel-lift linkage, with auto tilt-in to simulate a Z-bar, can be used for virtually any job, from pallet handling to hard digging.

"Whether you're lifting, digging or changing attachments on the fly, the WA270-8 is compact enough to squeeze between farm buildings, yet has the power to tackle jobs often planned for bigger machines," said Frank Nyquist, Komatsu Product Specialist. "It's one of the most versatile machines Komatsu offers."

The WA270-8 features a proven, fourth-generation hydrostatic drive train with variable traction control. It has multiple working modes, including an S-mode that provides excellent traction control to reduce wheel slip. This setting is especially useful in snowy, icy or slippery conditions. Creep mode in first gear is easily controlled via a knob on the console, and allows the operator to dial in a travel speed from 1 to 8 miles per hour.

The WA270-8's new Tier 4 Final engine lowers fuel consumption by up to 3 percent in V-cycle loading and 2 percent in load-and-carry applications, compared to its Tier 4 Interim predecessor. The selective catalytic-reduction (SCR) system and other aftertreatment components help the engine with efficiency and longevity. More than 98 percent of the Komatsu Diesel Particulate Filter (KDPF) regeneration happens passively, with no action required of the operator and no interference with machine operation. The SCR system lowers nitrogen oxide emissions and is designed to last for the life of the machine.

From farms to construction sites

A more comfortable cab with a new, high-back, heated seat softens machine vibration for greater operator comfort. Operators can check vital machine metrics, including KDPF status, diesel exhaust fluid level, fuel consumption and performance information on the 7-inch LCD color monitor.

"Our advanced KOMTRAX system enables fleet managers to track highly detailed information, such as fuel burn in one type of material versus another, or to monitor fuel usage on a specific job or by operator," Nyquist noted. "It's a great tool that helps owners get the most out of the WA270-8." ■



Frank Nyquist,
Komatsu Product
Specialist

Quick Specs on Komatsu's WA270-8 Wheel Loader

Model	Net Horsepower	Operating Weight	Bucket Capacity
WA270-8	149 hp	28,208-29,079 lb	2.5-3.5 cu yd

Komatsu's new wheel loader fits a wide range of construction, landscaping, agriculture and other applications. Its parallel-lift linkage, with auto tilt-in to simulate a Z-bar, can be used for virtually any job, from pallet handling to hard digging.

▶ VIDEO



MARRIAGE OF TECHNOLOGIES

New radio-control dozer combines remote operation and *intelligent Machine Control*



Sebastian Witkowski,
Komatsu Product
Marketing Manager

From time to time, earthwork companies take on projects in less-than-ideal conditions. Grading must be completed, but site hazards need to be addressed. Komatsu has a solution with its new D155AXi-8 Radio Control (RC) dozer with *intelligent Machine Control*.

“The D155AXi-8 RC dozer is ideal for applications where customers may want to remove the operator from the machine, yet maintain high levels of efficiency and productivity,” said Sebastian Witkowski, Komatsu Product Marketing Manager. “This dozer meets customer demands in those applications, while utilizing Komatsu’s proven, automated, rough-cut-to-finish-grade technology.”

Komatsu’s new D155AXi-8 RC dozer combines radio-control grading with *intelligent Machine Control*. Operators can run the D155AXi-8 RC dozer from within the cab or with a remote transmitter that has range of approximately 330 feet, and the status of the machine is always available by checking the cab-top lights.

Quick Specs on Komatsu’s D155AXi-8 RC Dozer			
Model	Horsepower	Operating Weight	Blade Capacity
D155AXi-8 RC	354 hp	102,060 lb	12.3 cu yd



Operators can control the D155AXi-8 RC dozer while inside the cab or with a remote transmitter that has a range of approximately 330 feet. Operators must maintain line of sight, and they can check the status of the machine through the cab-top lights.

Witkowski pointed out that for many operators, the ability to feel the machine’s response to blade load is an important factor in effective dozing. This is difficult for a radio-control application where the operator is separated from the machine, but the D155AXi-8 RC is unique among radio-control dozers thanks to the *intelligent Machine Control* that automates operation from heavy dozing to fine grading. This model has the ability to sense and control blade load, optimize the start of the cut and minimize track slip just like other Komatsu *intelligent Machine Control* dozers.

An automatic gearshift transmission and lock-up torque converter work together to select the optimal gear range, depending on jobsite conditions and load. These two features are designed to provide maximum operation efficiency. The electronically controlled transmission locks up the torque converter to transfer engine power directly to the transmission, eliminating horsepower loss and increasing fuel efficiency.

“The D155AXi-8 RC is extremely effective working in hazardous conditions or next to a high wall,” Witkowski explained. “Komatsu has a long history with radio-control equipment and now several years of solid experience with its *intelligent Machine Control* products. Both are proven to provide excellent production. The D155AXi-8 RC is a perfect marriage of these two advanced technologies.” ■

D61PXi-24



intelligent MACHINE CONTROL

- First to last pass grading technology
- Revolutionary track slip control
- External stroke sensing hydraulic cylinders
- New Tier 4 Final technology



I AM KOMATSU

ANDY CHAPMAN / SALES REP / LINDER INDUSTRIAL MACHINERY / GREER, SC

"From financing to product quality to support and training after the sale, Komatsu delivers everything my customers demand. I've been selling their full line, including the PXi and EXi series dozers, for years. Innovation and the exclusive *intelligent* Machine Control set them apart from the others. And that's why I AM KOMATSU."

SUPPORTED WITH PRIDE

KOMATSU®

komatsuamerica.com



Copyright ©2016 Komatsu America Corp. All Rights Reserved

014



Discover more

KOMATSU'S LARGEST TRUCK EVER

New electric-drive 3,500-hp mining truck with built-in management system delivers 400-ton payloads



Tom Stedman,
Komatsu Product
Manager

Mining customers asked for a bigger truck and Komatsu answered the call with its largest ever model, the new 980E-4. The 3,500-horsepower electric-drive 980E-4 brings to market a true 400-ton payload, increasing productivity and efficiency in a mining operation. The 980E-4 is an optimal match for today's large loading tools, typically loading in three to five passes (55 to 99 cubic yards). Paired with Komatsu's PC8000 mining shovel, the 980E-4 is a superb production machine.

"Building on the foundation of the 960E, Komatsu was able to expedite the development of this new truck, while maintaining our strict standards of design, testing and product quality," said Komatsu Product Manager Tom Stedman.

"We have every confidence this new model will reliably deliver high productivity."

A payload management system (PLM IV) allows mines to track payloads, cycle times, load counts, frame torque and much more. Businesses can store more than 20,000 downloadable records of data, while using PLM IV to monitor truck production and prevent overload conditions.

Komatsu designed the 980E-4 to improve truck performance and lower per-ton costs. Its features include a powerful 18-cylinder diesel engine that's comparable to other trucks in the 400-ton class for speed on grade, while maintaining a high stall torque capacity for mines with soft underfoot conditions. The AC electric-drive system enables efficient operations even in deep-pit applications.

Drivers will appreciate the excellent vehicle control and handling that comes from a high-capacity retarding package that provides longer life and improved horsepower for downhill descents. The electric, dynamic retardation force maintains constant downhill speed or decelerates without the frequent use of brakes.

Meeting rugged conditions head on

To combat rough conditions, the 980E-4 uses a continuous horse-collar and ladder-type frame that provides long life and long-term reliability. A new dump body incorporates high-tensile strength and abrasion-resistant steel, giving it a rugged-chassis construction that's able to withstand the rigors of off-road hauling.

"For several years, many of our customers have been asking Komatsu for a 400-ton electric-drive rear dump truck with the reliability of our flagship model, the 930E," said Stedman. "With the release of the 980E-4, we now have a product to meet this market demand." ■

Quick Specs on Komatsu's 980E-4 Mining Truck

Model	Horsepower	Operating Weight	Payload Capacity
980E-4	3,500 hp	1.3785 million lb	400 ton

Komatsu's new 980E-4 mining haul truck with a 400-ton payload capacity has features that improve performance, vehicle control and handling, as well as combat rugged and other less-than-ideal conditions.



HM300-5

THE MOST RUGGED TRUCKS

- Built-in payload meter and external display lamps
- Hydraulic wet multi-disc brakes with retarder
- Komatsu traction control system
- Selectable working modes



I AM KOMATSU

JASON ROGERS / PRODUCT SERVICE MANAGER / KIRBY-SMITH / TULSA, OK

"I've been around Komatsu products for decades. Working close with our customers and specing the right machinery for them is a key part of our success at Kirby-Smith. A full product line, including high-quality articulated trucks like the HM series, keeps my customers rolling. And that's why I AM KOMATSU."

SUPPORTED WITH PRIDE

KOMATSU®

komatsuamerica.com



Copyright ©2016 Komatsu America Corp. All Rights Reserved

015

REACH YOUR EXCAVATOR'S POTENTIAL

b **BRANDEIS** Proudly Sells



Mulchers & Attachments



WE HAVE A MULCHER FOR YOUR SIZE EXCAVATOR 7 - 40 TONS!
SEVERE DUTY or HEAVY DUTY MULCHERS



fecon.com

800.528.3113



Scan for
video



Discover more

NEW KOMATSU HARVESTER

Unique Comfort Bogie system provides maneuverability and superior handling in challenging terrain

Forestry work often involves navigating challenging terrain. Komatsu's 931XC (eXtreme Conditions) eight-wheel-drive (8WD) harvester stands up to the task with a unique double Komatsu Comfort Bogie system that provides maximum maneuverability and productivity on steep, rough or soft terrain.

The 931XC builds upon the proven 931 six-wheel-drive (6WD) platform with its innovative hydraulic pump system, best-in-class ergonomic cab, four-way cab/crane leveling and 360-degree cab/crane rotation. What sets it apart from other 8WD harvesters is the unique drive system that starts with Komatsu's proven articulated frame joint, rear-swing axle with +/- 16-degree left/right oscillation and the high-oscillation Comfort Bogie front axle. The trademark Komatsu Comfort Bogie is added to the rear-swing axle to provide excellent uphill/downhill and left/right oscillation.

"The Comfort Bogie drive system gives the 931XC superior handling characteristics as the harvester follows the terrain more closely than 8WD machines with a fixed rear-axle design," said Steve Yolitz, Manager, Marketing Forestry, Komatsu America. "This 8WD system dramatically reduces rear ground pressure, resulting in 54 percent lower psi with tracks and 23 percent lower psi with tires compared to the 6WD 931 model."

Lighter footprint with powerhouse abilities

Yolitz points out that the lighter tire footprint reduces the need for tracks and chains, potentially increasing fuel economy.

Additionally, the 931XC has 12 percent more tractive effort, 1.8 inches of additional ground clearance and 14 percent greater crane slewing torque.

"Combine those features with the 8WD double Comfort Bogie drive system, and the 931XC becomes a harvesting powerhouse able to take on nearly any terrain a forestry contractor may face," said Yolitz. "To further enhance its abilities to work in tough conditions, it features heated batteries, diesel exhaust fluid, engine coolant and hydraulic oil systems, which improve cold weather starting." ■



Steve Yolitz,
Manager,
Marketing Forestry,
Komatsu America

Komatsu's 931XC's unique double Comfort Bogie system provides maximum maneuverability and productivity on steep, rough or soft terrain. The new eight-wheel-drive system dramatically reduces ground pressure compared to the six-wheel-drive model: 54 percent lower psi with tracks and 23 percent lower psi with tires.





PC240LC-11

TIER 4 FINAL EXCAVATOR

- Improved engine efficiency with lower fuel consumption
- Large DEF tank capacity for operation on slopes
- Hydraulic closed-center load sensing system
- Spacious and quiet cab
- Auto idle shutdown



I AM KOMATSU

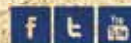
RYAN HAZELTON / SALES REP / ANDERSON EQUIPMENT / MANCHESTER, NH

"I sell a variety of quality Komatsu equipment. Take the PC240LC-11 excavator. It's got great features like a hydraulic closed-center load sensing system (CLSS) that provides quick response and smooth operation. Its large, quiet operator cab is more comfortable. Better engine efficiency improves response and helps get the most from every gallon of fuel. More innovation and more choices. That's why I AM KOMATSU."

SUPPORTED WITH PRIDE

KOMATSU®

komatsuamerica.com



Copyright ©2016 Komatsu America Corp. All Rights Reserved.

013

BUILT FOR THE LONG HAUL

Dan Funcannon says mining truck design and quality manufacturing ensure durability and dependability

QUESTION: As head of the Mining Division you oversee operations at the Peoria Manufacturing Operation (PMO). What products does that facility produce?

ANSWER: PMO produces one mechanical truck, the HD1500, for the North American market. We are also responsible for six electric-drive models globally, ranging from the 200-ton-capacity 730E-8 to the recently introduced 980E-4. At 400-ton-capacity, the latter is now our largest truck ever.

In some cases, we manufacture more than one version of a product. For example, our 830E and 930E trucks have both standard and autonomous (driverless) models, and our 860E and 960E products have trolley versions, which operate using overhead electrical lines.

In Komatsu terminology, PMO is a mother plant, which means it also houses the Research and Development Group for the products manufactured there. That group is responsible for developing Komatsu's electric dump trucks.

QUESTION: Why should a mine consider using Komatsu trucks?

ANSWER: Bottom line, we make high-quality and reliable trucks that are built to last and meet customers' total cost of ownership goals. We have numerous examples of trucks running 60,000, 75,000, 100,000 hours and beyond with outstanding availability. In fact, when customers talk to us about purchasing new units, we are frequently asked to guarantee that their availability will be at or above 90 percent throughout the life of the trucks. We're confident in providing that guarantee because of our robust designs, quality manufacturing process and world-class support through our distributor network.

Continued ...



Dan Funcannon, Vice President and General Manager of the Mining Division

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.

In his role as Vice President and General Manager of the Mining Division, Dan Funcannon is responsible for the sales and support of Komatsu mining products in North America, as well as its 200-ton and larger mining trucks globally. He moved into the position last fall. Funcannon joined Komatsu in 1994 as a design engineer and has held roles of increasing responsibility within research and development.

Most recently he was Director of Engineering, overseeing all engineering activities related to large mining trucks. Funcannon directed new product research and development projects, including AC-drive haul trucks; autonomous technology adoption into large mining trucks; and innovations to improve safety, quality, reliability and productivity.

"I started my career with a third-party company that Komatsu used for contract engineers," Funcannon recalled. "Then, I was hired directly by Komatsu and began working in the structural engineering group, which is responsible for all major structural components of our mining trucks – the frame, axle housing and bodies – referred to as the backbone. I was involved with design, testing and quality confirmation for the structural components."

Funcannon is a native of Peoria, Illinois, where Komatsu manufactures mining truck products and houses the Research and Development Group behind the design of electric dump trucks that are 200 tons and larger. He graduated from Bradley University in Peoria with a Bachelor of Science degree in mechanical engineering.

"In the past few years Komatsu has shifted its focus to a customer-centered approach instead of simply serving as an equipment manufacturer," said Funcannon. "That means we communicate more with customers at their sites, listen to their needs and input and then implement their recommendations into the design and manufacture of new products as well as strong support systems. It has strengthened relationships and helps us better meet customers' needs."

Goal is to keep customers' per-ton costs as low as possible

... continued



Dan Funcannon says Komatsu products are manufactured with superior quality and robust designs, "We have numerous examples of trucks running 60,000, 75,000, 100,000 hours and beyond with outstanding availability."

Komatsu's Peoria Manufacturing Operation designs and builds 100-ton to 400-ton trucks, including the popular 930E.



QUESTION: Where does each product fit?

ANSWER: That's dependent on customer need. Many of our Ultra-Class products, which are 300-ton-capacity or larger, are put to work in copper or coal mines. Smaller-sized trucks are heavily used in iron, but some of those mines may go to a larger size, depending on several factors.

QUESTION: How does Komatsu help determine what trucks a mine needs?

ANSWER: We have an Applications Engineering Group that works closely with customers to evaluate their mines and production requirements, and then makes recommendations. The group looks at loading areas and equipment, haul roads, distance to a crusher or stockpile, material and a whole host of other determining factors.

We go beyond simply recommending machinery. We also have a Mining Optimization Group that helps identify ways to maximize production and do it more efficiently and cost effectively. The ultimate goal is to help our mining customers keep their per-ton costs as low as possible.

QUESTION: The mining industry has experienced a downward trend in the past few years. What do present and future conditions look like?

ANSWER: There are some signs that the markets have bottomed out, and hopefully that is the case. Commodity prices have risen a little. I think there is cautious optimism that things might pick up in 2017 and that there will be incremental improvement. ■



Vice President and General Manager of Komatsu's Mining Division Dan Funcannon says, "We make high quality and reliable trucks that are built to last and meet customers' total cost of ownership goals."



HIGH MAINTENANCE IS SO NOT HIS TYPE.

IT'S NOT OURS EITHER.

GORMAN-RUPP CONSTRUCTION PUMPS
ARE BUILT TO OUTLAST AND OUTPERFORM
THE COMPETITION. *JUST LIKE HE IS.*

He accepts that some jobsite problems are out of his control. And he deals with those. But when he invests in equipment, he expects it to work—without constant maintenance or repairs. So he chooses Gorman-Rupp construction pumps. These tough pumps move water even in the harshest conditions. And they require only minimal, simple maintenance that can be completed in the field with common hand tools. Even when everything else at work is an issue, his pumps just keep getting their job done.



GR
GORMAN-RUPP
PUMPS



Louisville, KY • (502) 491-4000
Stanville, KY • (606) 478-9201
Paducah, KY • (270) 444-8390
Lexington, KY • (859) 259-3456

Corbin, KY • (606) 528-3700
Indianapolis, IN • (317) 872-8410
Evansville, IN • (812) 425-4491
Fort Wayne, IN • (260) 489-4551

HANDS-ON EXPERIENCE



Discover more at
BrandeisSolutions.com

DEMOS IN THE DESERT

Hundreds of customers test drive the latest machines at Komatsu's Las Vegas Demo Days



Bob Post,
Komatsu Director
of Marketing
Communications

Komatsu welcomed more than 350 people to its Las Vegas Demo Days in October 2016. The event featured six days of demonstrations and all of Komatsu's *intelligent* Machine Control excavators.

In total, Komatsu had 27 machines available for customers to operate: three *intelligent* Machine Control excavators (PC210LCi, PC360LCi and PC490LCi); eight additional excavators (PC55MR, PC88MR, PC138USLC, PC228USLC, PC210LC, PC270LC, PC360LC

and PC490LC); six wheel loaders (WA270, WA320, WA380, WA470, WA500 and WA600); four *intelligent* Machine Control dozers (D51PXi, D61PXi, D65PXi and D155AXi); three additional dozers (D39PX, D61PX and D65EX); two trucks (HM400 and HD605); and a GD655 motor grader.

"It's important for attendees to get the best feel possible for our machines at Demo Days," explained Komatsu Director of Marketing Communications Bob Post. "We put the equipment in real-life applications with rocky soils. For the *intelligent* Machine Control equipment, we uploaded plans so customers could get a chance to operate with full automation. We want everyone who comes to one of our Demo Days to see exactly what a machine can do and go home with all of their questions answered."

Komatsu traditionally hosts two Demo Days at its Customer Center in Cartersville, Georgia, each year. The Las Vegas event was planned to make it easier for customers in western states to attend. ■

Demo Days attendees operate an array of Komatsu wheel loaders. Six loaders, ranging in size from a WA270 to a WA600, were part of a 27-machine fleet available for demo at the Las Vegas event.



A Komatsu PC490LCi – the world's largest *intelligent* Machine Control excavator – loads an HM400 articulated haul truck at Komatsu's Demo Days in Las Vegas.

► VIDEO



Las Vegas Demo Days gave customers a chance to operate Komatsu's *intelligent* Machine Control dozers.



GENESIS
The Promise of Performance.

THE LIGHTER HEAVYWEIGHT THE NEW GDT **RAZER**

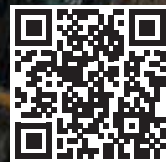


**HIGH-
REACH
APPLICATIONS**

**CUSTOMIZABLE
TEETH**

**FLAT TOP
MOUNTING
VERSATILITY**

**LOWER
COST
OF OWNERSHIP**



YouTube video

Innovative tools for modern demolition.

Contact your local Brandeis location for additional information.



Kentucky
Louisville
(502) 491-4000
Lexington
(859) 259-3456

Corbin
(606) 528-3700
Stanville
(606) 478-9201

Paducah
(270) 444-8390
Indiana
Evansville
(812) 425-4491

Ft. Wayne
(260) 489-4551
Indianapolis
(317) 872-8410

Division of
IES INTERNATIONAL
EQUIPMENT
SOLUTIONS

©2016 Genesis Attachments, LLC

DRILLING MASTERMIND

Rigs built to last. Solutions for your job sites.

Atlas Copco SmartROC D60 and Brandeis

Sustainable Productivity

Atlas Copco



Booth C31486



Louisville, KY • (502) 491-4000

Stanville, KY • (606) 478-9201

Paducah, KY • (270) 444-8390

Lexington, KY • (859) 259-3456

Corbin, KY • (606) 528-3700

Indianapolis, IN • (317) 872-8410

Evansville, IN • (812) 425-4491

Fort Wayne, IN • (260) 489-4551

REBUILT FOR EXCELLENCE

The Rebuild Center gives customers another option for fleet management

When a piece of heavy equipment nears the end of its life cycle, owners typically have two options – replace it with a new or used machine or rent a machine as needed. The Rebuild Center in Louisville provides customers with a third option – rebuild the machine.

“Through a rebuild, we can take a 20,000-hour machine and make it as good as new again, for a fraction of the cost,” explained Director Garrett Dykes. “We can strip a machine down and give it new or refurbished parts and components, making it comparable to a new or slightly used machine at about half of the price.”

The Rebuild Center focuses on projects consisting of four major component replacements or more for bigger construction equipment.

“The larger the machine, the more value a rebuild has for the customer,” said Dykes. “We meet with clients and recommend the most cost-effective strategy. If it is a large piece, usually a rebuild is the answer. On most of our jobs, the cost is about 50-60 percent of the price of a brand-new machine.

“In addition to cost, our customers have found several other benefits,” he added. “The main one is that they can stay in their Tier 3 machines. Another is scheduled downtime. If a customer has an older machine that needs a component replacement, it makes sense to do multiple replacements at the same time, instead of waiting to change a component after it fails. We also use quality, certified parts that match the machine’s manufacturer. For Komatsu machines, we use Komatsu Reman components that come with a four-year, 10,000-hour coverage plan.”

The Rebuild Center, which is a subsidiary of Bramco, began in 2010 when Dykes and a crew worked to rebuild machines for Brandeis and

Power Equipment customers. As demand for its services grew, the need for a separate shop did as well. In 2012, the company opened an 18,600-square-foot facility with five garage bays, two 10-ton overhead cranes and a paint facility.

“The Louisville location is great for moving machines in and out easily,” Dykes said. “As long as we can get the product information, we can rebuild any machine from any manufacturer.”

Rebuild jobs generally take three months, and the facility handled 14 projects last year. ■



Garrett Dykes,
Director

*The Rebuild Center
1801 Watterson Trail
Louisville, KY 40299
(502) 493-4281*



(Left) A Komatsu WA600-6 wheel loader is in the process of a complete tear down. (Below) A fully remanufactured WA600-6 wheel loader is ready to head back to work.





Discover more

TECHNOLOGY DRIVES SERVICE

With evolution of Tier 4 machines, Komatsu continues to expand service and support offerings



Doug Morris,
Komatsu Director of
Product Marketing

The evolution of technology has led to the creation of advanced machines with efficient engines and lower emissions.

"As technology continues to move forward, so do our service offerings," said Komatsu Director of Product Marketing Doug Morris. "Technology and emissions standards are frequently updated, and it can be challenging for customers to stay on top of it all. Our goal is to minimize the impact of those changes."

One way that Komatsu helps customers stay abreast of upgrades in technology and emissions standards is through the Komatsu CARE service program. Komatsu introduced this plan when it launched Tier 4 Interim machines in 2011.

The goal of Komatsu CARE is two-fold: deliver a value-added service and provide an opportunity for owners to become more familiar with the latest engine technology through regular interactions with factory-trained service technicians. Today, engines have advanced to Tier 4 Final technology, which includes a Selective Catalytic Reduction (SCR) system that uses Diesel Exhaust Fluid (DEF).

In response to these changes, Komatsu enhanced the Komatsu CARE program.

Now, in addition to three-year or 2,000-hour complimentary maintenance and two Komatsu Diesel Particulate Filter exchanges during the first five years, Komatsu CARE addresses the SCR/DEF system as well. This includes replacing the DEF tank breather element every 1,000 hours and changing DEF pump filters every 2,000 hours on select machines. The program also covers two factory-recommended services of the SCR/DEF system in the first five years, where technicians will flush the DEF tank and clean the strainer every 4,500 hours (for engines with a gross horsepower of 174 or higher).

"We recognized that along with the SCR, there were also maintenance points that needed to be included in the Komatsu CARE program," noted Morris. "When we introduced Komatsu CARE, our goal was to increase value to the end user. These enhancements to the program ensure that we will be able to do that."

Data sophistication

Komatsu's telematics system, KOMTRAX, was also upgraded with a cellular-based communication method, giving customers better coverage than with the satellite-based method the system previously employed.

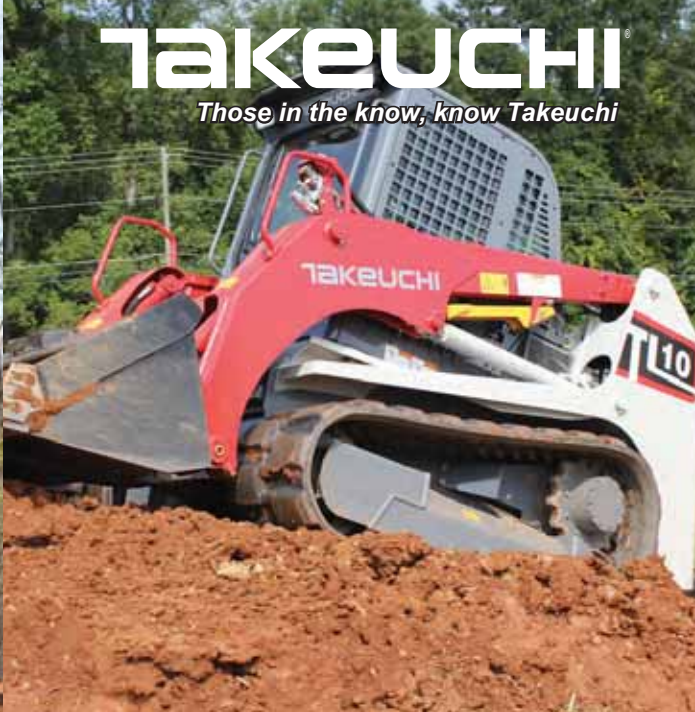
"With a cellular-based system, customers have the ability to communicate information faster than before and with more reliable coverage," explained Morris. "However, we still offer an ORBCOMM satellite communication kit for customers who work in areas with low cellular coverage."

"As customers and distributors become more sophisticated in how they use the data, we are continuously working to improve the system to make it more valuable for them," said Morris. "The more data we are able to offer our customers, the more efficient they can become, and that's our goal." ■

Komatsu enhanced its Komatsu CARE offerings to keep pace with Tier 4 technology advancements.



PROS KNOW!



Tough, Powerful, Dependable

Takeuchi offers a wide range of compact excavators, track loaders, skid steer loaders and wheel loaders to get your toughest jobs done. **PUT A TAKEUCHI TO WORK ON YOUR JOBSITE AND EXPERIENCE THE DIFFERENCE!**



Louisville, KY • (502) 491-4000
Stanville, KY • (606) 478-9201
Paducah, KY • (270) 444-8390
Lexington, KY • (859) 259-3456

Corbin, KY • (606) 528-3700
Indianapolis, IN • (317) 872-8410
Evansville, IN • (812) 425-4491
Fort Wayne, IN • (260) 489-4551

< Find out what others know, visit takeuchi-us.com for more info >

NEW FUEL RULES

EPA, DOT finalize tougher fuel efficiency, emissions standards for larger trucks

The Environmental Protection Agency (EPA) and the Department of Transportation (DOT) set stricter fuel-consumption and carbon-emissions standards for medium- and heavy-duty trucks. The 1,690-page rule is the second and final phase of regulations called for by President Obama's Climate Action Plan and is in response to the President's directive in early 2014 to develop new standards that continue into the next decade.

The program promotes a new generation of cleaner, more fuel-efficient trucks. It does so by encouraging the wider application of currently available technologies and development of new and advanced, cost-effective technologies through model year 2027, according to the DOT. It will be a three-step process with the first

coming in 2021, followed by further steps in 2024 and 2027 to provide lead-time compliance.

This rule is expected to lower CO₂ emissions by approximately 1.1 billion metric tons, save nearly \$170 billion in fuel costs and reduce oil consumption by up to 2 billion barrels during the lifetime of vehicles sold under the program. The DOT and EPA claim the new rule will provide \$230 billion in net benefits to society, including favorable payback periods for truck owners. Buyers of a new long-haul truck in 2027 would recoup the investment in fuel-efficient technology in less than two years through fuel savings, according to the DOT and EPA.

"This ambitious, but achievable announcement is a huge win for the American people, giving cleaner air, more money saved at the pump, and real benefits for consumers across the supply chain," said Transportation Secretary Anthony Foxx. "Today's action preserves flexibility for manufacturers to deliver on these objectives through a range of innovations and technology pathways."

The final rule builds on the fuel efficiency and greenhouse gas emissions standards already in place for model years 2014-18, which the agencies anticipate will result in CO₂ emissions reductions of 270 million metric tons and save more than \$50 billion in fuel costs.

Trucking industry groups are hopeful the new standards can be met.

"We are pleased that our concerns, such as adequate lead time for technology development, national harmonization of standards and flexibility for manufacturers, have been heard and included in the final rule," American Trucking Association President Glen Kedzie said in a statement. ■

The EPA and DOT finalized emissions and fuel-efficiency standards for medium- and heavy-duty trucks, which is the second-largest segment of U.S. transportation in terms of emissions and energy use, according to the agencies.



EXPANDING TO SERVE YOU

MINING THE FUTURE

Komatsu announces agreement to acquire mining equipment manufacturer Joy Global Inc.

Komatsu and Joy Global announced an agreement in which Komatsu will acquire Joy Global, Inc., a leading mining equipment manufacturer based in Milwaukee, Wisconsin. The companies are working to finalize the transaction by mid-2017.

"Our customers are sharing very positive feedback about the agreement," said Tetsuji (Ted) Ohashi, President and CEO of Komatsu Ltd. "We are working closely with Joy Global and relevant authorities to move the process forward."

Ted Doheny, President and CEO of Joy Global, Inc. agreed, noting industry recognition of the complementary nature of the two companies' product and service offerings.

"Many of our customers and other business partners see the benefit of combining companies: a broader offering of products, systems and solutions across a wider scope of mining and construction applications," Doheny said. "Both companies believe in having the best products, offering direct service, being operationally excellent, and having the best people in the world."

Joining Joy Global with the Komatsu Group will offer several benefits to customers, including:

- A broader line of industry-leading mining and construction equipment for drilling, earthmoving, loading and hauling systems, as well as solutions for both underground and surface mining. Joy Global's best-in-class rope shovels, for example, pair well with Komatsu's best-in-class large electric dump trucks.

- Enhanced global customer support through the companies' mutual commitment and expertise in direct sales and service directly connected via embedded personnel in the mines and electronically connected with world-class fleet management systems.

"The synergistic collaboration between the companies will drive our innovation and enhance our capacity to provide quality products and solutions that improve the safety and productivity of mining operations," Ohashi said. "We will, together, strive to become an even better, more invaluable partner for our customers."

"The combination of two world-class companies offers exciting opportunities to enhance and expand the solutions and services we provide customers," Doheny said. "With strengthened capabilities and a continued focus on solving our customers' toughest challenges, we look forward to working together to advance the mining industry." ■

President and CEO of Komatsu Ltd. Tetsuji (Ted) Ohashi (left) and President and CEO of Joy Global, Inc. Ted Doheny meet at MINExpo INTERNATIONAL® 2016 in Las Vegas. Joy Global is the largest independent manufacturer of underground-mining machines.



Brandeis appoints Edwards as Used Equipment Manager



Cory Edwards,
Used Equipment Manager

Cory Edwards was recently named Used Equipment Manager for Brandeis Machinery & Supply Company. He succeeds Ron Weir, who retired from the organization. Edwards comes to the position from the Paducah branch where he has served as a Sales Rep since 2005.

In his new role, Edwards will work from the Louisville corporate office and oversee used equipment for the eight Brandeis locations throughout Kentucky and Indiana. His responsibilities include managing inventory, marketing and strategic planning for the sale of all used equipment. ■

Americans rev up miles driven

The Federal Highway Administration (FHA) said Americans set a miles-driven record in 2016. They went 2.4 trillion miles from January through September. During a similar period in 2015, they traveled 2.35 trillion miles.

FHA attributed the increase to lower gas prices and an improving economy. Total miles for 2015 came in at about 3.1 trillion, and final numbers for 2016 are expected to exceed that. ■



PALADIN
POWERFUL ATTACHMENT TOOLS

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 CWS FFC HARLEY JEWELL J:B KODIAK McMILLEN SWEEPSTER



Division of
IES INTERNATIONAL
EQUIPMENT
SOLUTIONS

www.paladinattachments.com



Booth #
G4027

PURPOSE-BUILT FROM THE GROUND UP



GET THE DETAILS ON WHY YOUR NEXT MATERIAL HANDLER SHOULD BE A SENNEBOGEN »



What if your purpose for a purpose-built material handler isn't quite the same as the other guy's purpose?

Only SENNEBOGEN material handlers are purpose-built one machine at a time to meet your goals.

High Capacity • Fast Duty Cycles • Low Operating Cost

Think of the possibilities!

See how SENNEBOGEN can purpose-build the right machine for your operation at www.sennebogen-na.com/ports-waterways

www.sennebogen-na.com | +1-704-347-4910

- Diesel and electric-drive machines from 44,000 to 750,000 lbs.
- Full range of rubber tired, tracked and stationary models with customized boom & stick configurations.

SENNEBOGEN®

CERTIFIED RENTAL[®]

A Division of **b** **BRANDEIS**

Why **CERTIFIED RENTAL**[®]

Certified Rental, a division of Brandeis Machinery Company, is a provider of short- or long-term rent-to-rent construction equipment. Customers can depend on Certified Rental because we provide the following benefits:

COMMITMENT - We are committed to providing our customers with the best value for their money, outstanding customer service and reliable products.

EFFICIENCY - Our fleet includes only late-model equipment. Our customers are able to rent machines with the most efficient technology that enhances operation, gives them the competitive edge and reduces downtime.

RESOURCES - We are a 108-year-old family business that has the resources to provide equipment availability as well as the service required to support the equipment.

TRUE COST OF RENTING - We provide the most hassle-free, economical and safe alternative to owning and include Rental Optimization Initiative reports so customers can see the "TRUE COST" of renting.

IMAGE ENHANCEMENT - We take pride in the equipment we rent, offering only clean, well-maintained, low-hour machines.

FACTORY TRAINED TECHNICIANS - Our technicians receive the most up-to-date diagnostic skills to reduce the down-time of the equipment we rent.

INCREASED AVAILABILITY - With a rental fleet in excess of 500 machines, a rental machine investment of over \$80M, and a four-state branch network, our customers' diverse application needs can be met.

ECONOMICAL - Our Komatsu equipment has shown time and time again to be a productive and fuel efficient brand name.

DOWNTIME - Is kept to a minimum because it is monitored in real time using Komtrax telemetrics for usage, fuel consumption, idle time and malfunctions.

First time renter?

Call today to receive a
20% discount! *

(800) 997-7530

*Offer applies to one machine for up to a one-year term.



KOMATSU Excavators:
PC35 - PC1250

Select units available with Atlas Copco or Tramac hammers. Also select units available with thumbs

HAMM 3307 and 3410
Single Drum Vibratory Soil Compactors

Also available HAMM Double Drum Vibratory Asphalt Rollers



KOMATSU
HM300 and HM400
Articulated Trucks

KOMATSU
D37EX - D155AX w/Cab
Dozers

Ripper Units Available on D65EX and D155AX. GPS Available on Select Models



KOMATSU
WA200 - WA500
WHEEL LOADERS

Forks Available on WA200 thru WA320

OTHER UNITS IN OUR CERTIFIED RENTAL FLEET INCLUDE: BACKHOE LOADERS, SKIDSTEER LOADERS, TRACTOR/SCRAPERS, CRAWLER LOADERS AND MILLING MACHINES. PLEASE CONTACT YOUR LOCAL BRANDEIS MACHINERY LOCATION LISTED BELOW FOR MORE DETAILS.

CERTIFIED RENTAL[®]

A Division of Brandeis Machinery

www.certifiedrental.com



EVANSVILLE, IN
17000 Hwy 41N
(812) 425-4491

LOUISVILLE, KY
1801 Watterson Trail
(502) 491-4000

INDIANAPOLIS, IN
8410 Zionsville Rd.
(317) 872-8410

LEXINGTON, KY
1389 Cahill Drive
(859) 259-3456

CORBIN, KY
1484 American Greeting Card Rd.
(606) 528-3700

STANVILLE, KY
130 Mare Creek Rd.
(606) 478-9201

FORT WAYNE, IN
7310 Venture Lane
(260) 489-4551

PADUCAH, KY
160 County Park Rd.
(270) 444-8390

BOWLING GREEN, KY
84 Cedar Way
(800) 997-7530