



ROAD TO SUCCESS

2013 No. 3 • August

KOMATSU

A PUBLICATION FOR AND ABOUT ROAD MACHINERY LLC CUSTOMERS



FHI PLANT SERVICES, INC.

Diversification helps company
move from single service
to multiple operations

See article inside . . .

Dave Johnson,
Director of Fossil Fuel
and Civil Operations



John Kafadar,
Vice President



R&B EQUIPMENT, INC.

Demolition contractor celebrates 20 years of helping
reshape the Bay Area landscape

See article inside . . .



Rick Jeffery,
Owner

A MESSAGE FROM THE PRESIDENT & COO



Dear Valued Customer:

This year marks the beginning of Tier 4 Final implementation with the introduction of smaller engine-horsepower machines, such as utility equipment. Larger equipment begins rolling out next year. It's taken a long time and a great deal of innovative engineering to get to this point, but the efforts have been well worth it, especially when it comes to Komatsu equipment.

Not only has Komatsu met the stringent emissions standards of each new tier level, it has engineered machinery that's more productive and efficient. It's added innovative technology such as KOMTRAX, which helps lower owning and operating costs by allowing you to monitor machinery and proactively schedule service or address productivity issues, including excessive idle time. Komatsu furthered its efforts to lower your costs by introducing Komatsu CARE, which provides complimentary scheduled service on Tier 4 Interim machines.

Now, the manufacturer has taken innovation a step further with the introduction of "intelligent" machines, the first of which you can read about in this issue of your *Road To Success* magazine. We're excited about the new D61i dozers that offer integrated 3D grade control without the blade-attached mast and cables you see in traditional machine-control grading systems. Tests show this revolutionary design can further reduce operating costs and increase even the most rookie operator's productivity. Details are in the article.

If you're interested in a D61i or any other machine, there is an advantage to purchasing this year. Enactment of the American Taxpayer Relief Act of 2012 extended the 50-percent bonus depreciation for most property placed in service before 2014. It also extended increased Sec. 179 expense levels of \$500,000 with a phase-out amount beginning at \$2 million. After this tax year, those numbers are scheduled to significantly drop. For additional information, talk with your sales representative, or call your nearest Road Machinery branch.

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

Sincerely,
ROAD MACHINERY LLC

Dan Roush
President & COO

**Taking
innovation
a step further**



ROAD To SUCCESS

IN THIS ISSUE

R&B EQUIPMENT, INC.

Find out more about this demolition contractor, who's celebrating 20 years of helping reshape the Bay Area landscape.

FHI PLANT SERVICES, INC.

See how diversification has helped this company move from a single service to multiple operations.

GUEST OPINION

Allen Schaeffer, Executive Director of the Diesel Technology Forum, explains how new technology has dramatically reduced diesel emissions.

DOLLARS & SENSE

Do you know what it really costs to operate your equipment? See how getting a true picture of your costs leads to more accurate bids and profitable projects.

INNOVATIVE PRODUCTS

Read all about Komatsu's revolutionary *intelligent Machine Control* dozers and how they can maximize production and lower costs.

HANDS-ON EXPERIENCE

Take a look at the recent *intelligent Machine Control* experience event where customers had the opportunity to operate Komatsu's new D61i dozers.

Published by Construction Publications, Inc. for



www.roadmachinery.com

Road Machinery LLC is an equal opportunity and Affirmative Action employer. We will not discriminate based on race, color, religion, sex, national origin, veteran status or disability.

RML is a government contractor and sub-contractor and is subject to federal provisions as required by the OFCCP.

CORPORATE OFFICE - PHOENIX, AZ

4710A E. Elwood St., Ste. 6
(602) 252-7121
FAX: (602) 253-9690

REMAN FACILITY - PHOENIX, AZ

716 S. 7th St.
(602) 252-7121
FAX: (602) 253-9690

PRESCOTT, AZ

1071 Commerce Dr.
(928) 778-5621
FAX: (928) 778-5640

GILBERT (PHOENIX), AZ

1339 W. San Pedro
(480) 545-2400
FAX: (480) 545-2457

TUCSON, AZ

3285 E. 44th St.
(520) 623-8681
FAX: (520) 798-1419

SUPERIOR, AZ

98 West High School Rd.
(520) 689-2405
FAX: (520) 689-2475

PERRIS, CA

475 W. Rider St.
(909) 355-3600
FAX: (951) 490-4378

BAKERSFIELD, CA

3501 Unicorn Rd.
(661) 695-4830
FAX: (661) 695-4878

REDDING, CA

1164 Prestige Way
(530) 229-3820
FAX: (530) 229-3878

SACRAMENTO, CA

3650 Seaport Blvd.
West Sacramento
(916) 375-3540
FAX: (916) 375-3598

FREMONT, CA

43801 Osgood Rd.
(510) 659-1903
FAX: (510) 659-1924

PICO RIVERA, CA

3539 San Gabriel River Parkway
(562) 699-6767

EL PASO, TX

1181 Burgundy Dr.
(915) 872-1001
FAX: (915) 872-9533

ALBUQUERQUE, NM

6101 Pan American West Frwy. N.E.
(505) 345-8383
FAX: (505) 345-2828

FARMINGTON, NM

901 Troy King Rd.
(505) 324-8601
FAX: (505) 345-2828

Rental Dept: (505) 342-5678

CANANEA, SONORA, MEXICO

Parque Industrial
Carretera Cananea-Imuris Km. 5
011-52-645-332-8300
FAX: 011-52-645-332-8302

HERMOSILLO, SONORA, MEXICO

Blvd. Solidaridad no. 335
Edificio A, Piso 4, Local 3
Centro de Negocios Las Palmas
011-52-662-236-2600

THE PRODUCTS PLUS THE PEOPLE TO SERVE YOU!

CORPORATE

Shinya Hisada
Chairman

Dan Roush
President & COO

Hank Shirai
VP Corporate Planning

Bill Hoke
Chief Financial Officer

David Kolesky
VP of Sales and Marketing

Chuck Paugh
Director of Product Support

Kevin Chauvin
Corporate Parts Manager

Mike Chase
Credit Manager

Jamie Carson
Corporate Asset Manager

Allen Stokke
Used Equipment Manager

ARIZONA

David Weston
Regional Sales Manager

Richard Maudsley
Regional Product Support Manager

Robert Leigh
Mining Regional Sales Manager

CALIFORNIA

Mark Caldwell
California Product Support Manager

Rick Dennis
Regional Sales Manager - Northern CA

Bill Schwenk
Regional Sales Manager - Southern CA

Steve Morico
Mining Regional Sales Manager

NEW MEXICO/TEXAS

Brian L. Adams
Regional Sales Manager

Richard Maudsley
Regional Product Support Manager

Dori Rivera
Product Support Manager - El Paso

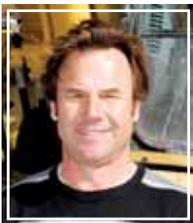
MEXICO

Gonzalo Barcelo
President - Mexican Operations



R&B EQUIPMENT, INC.

Demolition contractor celebrates 20 years of helping reshape the Bay Area landscape



Rick Jeffery,
Owner

Twenty years ago, Rick Jeffery and a partner teamed up to form R&B Equipment Rentals, but a year into the business they changed their focus from equipment rental to demolition. That decision made a major impact on the company and on the San Francisco Bay Area landscape.

Jeffery decided to leverage his previous demolition experience, using it as the new direction R&B Equipment took upon its first anniversary. It's been the company's driving force since, including razing residential, commercial and industrial properties throughout the Bay Area.

"Originally, R&B Equipment Rentals rented equipment bare and operated, and that worked OK, but I saw an opportunity for us to expand," said Jeffery. "My background included working for a company that had demolition on its resume. Unfortunately, it went out of business, but that gave me the opportunity to go out on my own. My business partner and I got a small-business loan, bought out the leases on that company's equipment and set up for a fast

start." Not long after that, they dropped rentals out of the name. In 1997, Jeffery bought the partner out and has since been sole owner of the Hayward, Calif., company.

"I view demolition as a means to a fresh start, a reshaping of the landscape that adds to a property's value," said Jeffery. "Nearly 100 percent of our work is in the demolition sector, and that includes everything from private single-story houses and multistory apartments to commercial complexes and large industrial buildings. Almost all our jobs are private, bid work, with very little public work mixed in. We prefer that, and have developed a solid client base through the years, so, much of our work is for repeat customers."

Added recycling

R&B Equipment performs nearly 100 percent of the work it does, including land clearing, tear down, haul away and removal. It subs out some hazardous-material abatement, such as asbestos, but does handle contaminated soil removal and disposal. Recently, the company added a crushing plant to recycle concrete on site for reuse, when customers request it.

"Recycling has become a big part of the demolition industry during the time R&B has been in business, and it made sense for us to add that onto our list of services," said Jeffery. "We've always been mindful of salvaging as much material as we can and diverting it away from the landfill, whether it's brick, copper or other metals. Recycling concrete makes perfect sense as it creates another useable material.

"We also perform other services, such as filling a hole or grading, that are usually associated with a demolition project," he added. "On occasion, we've done some other types of work, including building pads and mass

Komatsu excavators are R&B Equipment's main production machines, including this PC750LC, used to load trucks on a jobsite in the Bay Area.

▶ VIDEO





▶ VIDEO

An R&B Equipment operator uses a Komatsu PC450LC-8 excavator to pulverize concrete. "I've found Komatsu to have several advantages, including durability in tough conditions," said Owner Rick Jeffery. "It has excellent hydraulic power to run not only buckets, but other attachments, such as hammers and pulverizers."

excavation. But demolition has always been our bread and butter."

Komatsu tops equipment list

Jeffery said R&B Equipment generally has about a half-dozen projects going at any one time, with annual volume in the \$10 million to \$12 million range. Its largest project was a \$1.5 million contract to tear out an office building and underground parking garage, and remove contaminated soil.

As with all projects, he relies on a dedicated staff of about 25 employees and approximately 20 pieces of equipment, mainly construction-size Komatsu hydraulic excavators, such as the PC450LC-8 recently purchased from Road Machinery, LLC.

"We've had Komatsu excavators almost from the start," noted Jeffery, who also runs an older WA450 wheel loader and PC750 excavator. "Through the years, I just kept replacing the original excavators we had with Komatsu, and as it came time to trade the Komatsus, I replaced them with more Komatsu. For instance, I traded in an 11,000-hour PC400 for the new PC450. I've found Komatsu to have several advantages, including durability in tough conditions. It has excellent hydraulic power to run not only buckets, but other attachments, such as hammers and pulverizers."

Jeffery works with Road Machinery Account Manager Brett Weatherby and Product Support Representative Steve Asmann for sales and service. "Road Machinery is another reason we stay with Komatsu," acknowledged Jeffery. "We handle the basic maintenance on



R&B Equipment Owner Rick Jeffery (right) works with Road Machinery Product Support Representative Steve Asmann to schedule service on R&B's Komatsu equipment. "Road Machinery sends a technician out to our location to do the work on site at a convenient time, which is a major advantage that minimizes our downtime," said Jeffery.

our equipment, but for larger repairs, we call on Road Machinery's expertise. They send a technician out to our location and do the work on site at a convenient time, which is a major advantage that minimizes our downtime."

No growth for growth's sake

Jeffery said focusing on doing one thing well and working in multiple sectors has helped R&B Equipment maintain success during the past two decades. He doesn't see a need to change that.

"We're set up so that if one market is down, we can move to another and vice versa," said Jeffery. "That's helped us weather some tough times, so it's proven to work. Why change that?"

"Another thing we won't change is our commitment to customers," he added. "Through the years, I've had opportunities to grow considerably, and I've always resisted it because bigger isn't always better. We pride ourselves on providing our clients an exceptional service, and I won't jeopardize that." ■



Go online or scan this QR code using an app on your smart phone to watch video of R&B Equipment's machines at work.

FHI PLANT SERVICES, INC.

Diversification helps company move from single service to multiple operations

Inside the Four Corners Power Plant near Farmington, N.M., FHI Plant Services works around the clock moving materials, including fly and bottom ashes, by-products of the coal-powered generating station. Under a contract with the plant's parent company, FHI disposes of about 100,000 tons of ash per month, putting it in on-site cells then covering it with earth.

Director of Fossil Fuel and Civil Operations Dave Johnson (left) and Vice President John Kafadar oversee FHI Plant Services' operations at the Four Corners Power Plant near Farmington, N.M. The company's main work involves hauling fly ash from the plant, putting it in cells and covering it.



FHI Plant Services uses a Komatsu D155AX-7 dozer to cover fly ash.

▶ VIDEO



"FHI started here three years ago by simply hauling fly ash, and we've continued to build up to the point where we have 70 people working in two shifts a day," said Vice President John Kafadar. "It's a familiar story to what we've done in many similar circumstances. Once the company we're working for sees our commitment to providing quality service that often goes above and beyond our contract, they want us to do more. It's much like a traditional earthmoving company that's built its reputation and success through word-of-mouth referral."

During the past four-plus decades, FHI has continued to add to its list of services, and today offers mechanical work, construction, mining, excavation, flood control, high-pressure welding, warehousing and a myriad of other offerings. Ash hauling remains a core component, as it was when President Bill Strunk founded FHI (Fly Ash Haulers Inc.) in 1970 with a single truck at the Mojave Generating Station in Laughlin, Nev.

"We're working in about 20 plants, but our contracts vary with each one," explained Dave Johnson, Director of Fossil Fuel and Civil Operations. "It all depends on what the customer wants. For instance, we have one plant where we simply handle warehousing. Other plants may use us for mechanical needs or hauling or a combination of services. We're willing to work with customers to meet their needs in any way we can."

Large portion of work in energy sector

Based in Las Vegas, FHI Plant Services now works extensively throughout the Southwest, including Arizona, Nevada, California, Utah and New Mexico. The company employs more than



▶ VIDEO

FHI Plant Services rents several pieces of Komatsu equipment in its cover operations, including a PC360LC-10 excavator used to load HM300 and HM400 articulated haul trucks. "Because we run our machines 24/7, downtime can have a significant impact," said Dave Johnson, Director of Fossil Fuel and Civil Operations. "That's not a problem with our Komatsu machinery."

300, including key personnel such as Kafadar, Johnson and Secretary/Treasurer Jody Kirby.

"Diversification plays a key role in our success, and our customers appreciate that," noted Johnson. "Because we can handle so many services, customers often look to us for projects beyond the scope of our original contract with them. When they ask if we can do something, the answer is almost 100-percent 'yes.'"

In plants, that involves services and work on boilers, including erection, repair and replacement, as well as partnering with the plant to manage planned and emergency outages. FHI offers welding on all types of metal, HDPE and PVC piping, and holds an "R" Stamp from the National Board of Boiler and Pressure Vessel Inspectors so it can work on high-pressure steam boilers.

Work outside of power plants includes building, maintaining and decommissioning retention ponds. At its original location at the Mojave Generating Station, FHI Plant Services decommissioned nine ponds, moving in excess of 2 million yards of sludge over more than 300 acres.

In addition to coal and other power plants, FHI also works in other energy sectors. It is currently working on seven solar contracts near



▶ VIDEO

An FHI Plant Services operator loads trucks with a Komatsu WA500-6 wheel loader as part of cover operations.

Gila Bend, Ariz., including one of the nation's largest solar farms, a three-square-mile site where 200 workers are performing mechanical work, such as process piping, high-pressure welding and putting together stainless-steel tubes. FHI has a similar project in California.

Impressed with Komatsu, Road Machinery, LLC

Because hauling ash and moving earth is an around-the-clock operation at the Four Corners Power Plant, FHI Plant Services has invested

Continued . . .



Go online or scan this QR code using an app on your smart phone to watch video of FHI Plant Services machines at work.

Quality service that goes above and beyond

... continued

heavily in equipment. The company moves ash with three Komatsu haul trucks it owns — two HD465s and an HD605. It also has more than a dozen rented machines, including a Tier 4 Interim PC360LC-10 excavator, two D155AX-7 dozers and a total of six HM400-3 and HM300-3 articulated trucks. FHI works with Road Machinery, LLC Account Manager Eric Hirengen to acquire equipment as needed.

“Komatsu continues to outperform other brands of equipment that we run and have

run,” said Johnson. “Because we run our machines 24/7, downtime can have a significant impact. That’s not a problem with our Komatsu machinery. We bought the HD trucks about four years ago, and have continued to rent the other machines without major issues. Komatsu equipment is reliable, productive and more fuel-efficient than other brands.”

Road Machinery helps maintain those features under a service contract with FHI Plant Services that keeps two dedicated service trucks on site. In addition to the Komatsu pieces, Road Machinery services FHI’s competitive equipment.

“One of the reasons we choose to do that is Road Machinery’s expertise,” said Kafadar. “Another is its dedication to service, which we had problems with when it came to other dealers. As an example, we have a competitive truck that just never ran right, and that company could never figure out the issue. When we moved it to Farmington, Road Machinery took a look at it, and within short order had it fixed.”

“Road Machinery is the only reliable equipment distributor we’ve found in this area, and that extends beyond Farmington,” Johnson added. “We’ve developed a good relationship with Road Machinery, and the advantage is that if we move equipment to other locations, they will service those machines out of the nearest branch. Eric did a great job of finding us equipment, and Road Machinery backs it up with quality service. They’ve met and exceeded our expectations.”



(L-R) Road Machinery, LLC Account Manager Eric Hirengen works with FHI Plant Service’s Dave Johnson and John Kafadar at the Four Corners Power Plant near Farmington to rent and service equipment. “Eric did a great job of finding us equipment, and Road Machinery backs it up with quality service,” Johnson said. “Road Machinery has met and exceeded our expectations.”

FHI Plant Services uses Komatsu rigid-frame haul trucks to move fly ash from the electric plant to cells, where it’s placed and readied for cover. Among its fleet are HD465s (shown here) and an HD605.

▶ VIDEO



Welcomes new avenues

Even with more than 40 years of success under its belt, FHI Plant Services isn’t resting on its laurels. The company continues to seek ways to help customers with their needs.

“Our willingness to look at opportunities that customers bring to us has resulted in tremendous growth, especially during the past few years,” observed Kafadar. “Much of our diversification has come as a result of customers asking us to do something we weren’t doing, and taking the necessary steps to handle it. We expect that to continue, and we welcome it.” ■

NPK

ATTACHMENTS

...designed, built and backed by NPK.



NPK manufactures an extensive line of the most productive attachments, offering you a wide variety of solutions to most of your construction, demolition, recycling, mining and quarrying needs! The NPK trademark has become a symbol for quality products worldwide, including the greatest selection of hydraulic hammers, compactor/drivers, material processors, primary/secondary crushers, and pedestal boom systems.

An experienced engineering and service team is ready to help you with special applications and installation kits.

NPK

NPK CONSTRUCTION EQUIPMENT, INC.
7550 Independence Drive
Walton Hills, Ohio 44146-5541
Phone: 440-232-7900 or 800-225-4379
Fax: 440-232-4382
Internet: www.npkce.com



CORPORATE OFFICE
PHOENIX, AZ
(602) 252-7121
FAX: (602) 253-9690

GILBERT (PHOENIX), AZ
(480) 545-2400
FAX: (480) 545-2457

TUCSON, AZ
(520) 623-8681
FAX: (520) 798-1419

SUPERIOR, AZ
(520) 689-2405
FAX: (520) 689-2475

PRESCOTT, AZ
(928) 778-5621
FAX: (928) 778-5640

FARMINGTON, NM
(505) 324-8601
FAX: (505) 345-2828

ALBUQUERQUE, NM
(505) 345-8383
FAX: (505) 345-2828
Rental Dept: (505) 342-5678

EL PASO, TX
(915) 872-1001
FAX: (915) 872-9533

PERRIS, CA
(909) 355-3600
FAX: (951) 490-4378

REDDING, CA
(530) 229-3820
FAX: (530) 229-3878

SACRAMENTO, CA
(916) 375-3540
FAX: (916) 375-3598

BAKERSFIELD, CA
(661) 695-4830
FAX: (661) 695-4878

FREMONT, CA
(510) 659-1903
FAX: (510) 659-1924

PICO RIVERA, CA
(562) 699-6767

GUEST OPINION

CLEAN DIESEL DELIVERS

New technology helps dramatically reduce emissions during the past decade



Allen Schaeffer,
Executive Director
of the Diesel
Technology
Forum

New engine technology in equipment, such as Tier 4 Interim machinery, helped reduce emissions of particulate matter to near zero during the past decade, a 98-percent reduction since 1988, according to Diesel Technology Forum Executive Director Allen Schaeffer.

For the last decade, diesel technology has undergone a fundamental transformation to near-zero emissions, based on ultra-low-sulfur diesel fuel, advanced clean-burning engines and new emissions-control technology. These advancements have occurred across the board — from the smallest industrial engine to the increasingly popular clean-diesel cars, commercial trucks, off-road machines and equipment, maritime vessels and locomotives.

The results of these efforts are clear because, according to the EPA, diesel engines account for only a small portion of the national particulate matter (PM) emissions inventory — less than 6 percent.

These last 10 years were truly the decade of clean diesel and the results are visible today. New highway diesel truck engines have near-zero emissions of particulate matter and oxides of nitrogen (NOx) — a remarkable 98 percent less than 1988 models. It is also noteworthy that truck and engine manufacturers are not only producing near-zero level emissions, but these vehicles are also consuming on average 5-percent less fuel.

Just how significant is this accomplishment? Consider that it now takes 60 of today's clean-diesel, heavy-duty trucks to equal the particulate emissions of one 1988 truck — a 60-1 ratio.

Similar reductions in emissions of particulates and NOx are well underway and will be completed by 2014 for the wide range of off-road engines found in everything from small construction equipment and farm machinery to freight locomotives, marine vessels, work boats and very large off-road machines and mining equipment.

The new generation of clean-diesel technology is not only meeting its emissions-reduction targets but is also exceeding them. Further contributions will come as more new-technology engines and equipment are put into service in the years ahead.

Just as the EPA's March 2012 Black Carbon Report to Congress stated that new diesel technology will play a role in helping reducing black-carbon emissions by 2030, new diesel technology will play a major role in helping meet the Clean Air Act standards for soot. ■



DOLLARS & SENSE

DETERMINING OPERATING COSTS

How to get a better picture of your total costs for more accurate bids and profitable projects

Industry estimates put owning costs at 25 percent to 30 percent of the total machine owning and operating picture. These costs, which include finance, interest, depreciation and tax, tend to be fairly straightforward. The remaining balance – 70 percent to 75 percent – includes labor, fuel, parts, repairs, operator expenses and other related items that make up the operating component, which is more variable and more comprehensive.

Figuring operating costs is the more difficult of the two because so many factors go into them. For example, an excavator may be used in several applications, each of which probably causes costs to fluctuate. The same machine may be used in performing demolition and running attachments, such as hammers, shears and thumbs. It may not take any more power or fuel than digging, but the conditions put more stress on a machine and may require added maintenance and repair.

Even digging isn't so straightforward. Ground conditions can vary greatly within one particular geographic area, and even on a jobsite itself. A trench could have different types of soils, as layers of topsoil, clay and rock could be encountered at varying depths.

Finally, where a machine is in its life cycle makes a difference. A new machine is going to cost little in repairs, therefore, more of its production time is going to profit. An older unit that's paid for may seem like it's more profitable. However, it could be more prone to breakdown and run less efficiently. There's a chance it's making money, but not as much as the owner thinks, if it needs frequent repair.

Factor in the operator

The person running the machine has to be figured into the operating costs as well. A more

experienced operator will obviously be more productive than a rookie, but will also likely cost more per hour in wages.

Another item to consider with operators is how they operate and take care of a machine. While many of today's machines have several working modes designed to match applications for maximum efficiency, longtime operators may be accustomed to always running at full power and idling during nonproductive times. That adds to maintenance and repair outlays.

Continued . . .

Labor, fuel, parts, repairs, operator expenses and other related items make up operating costs, which are considered the largest part of owning and operating a machine. It's essential to know these costs to create accurate bids.



Many factors included in equipment operating costs

... continued

Applying history, modern technology for savings

Experience plays a valuable role in getting to true operating costs. Factoring in historical trends and data from past projects is a good starting point for determining how to approach the next estimate and final bid. Accurate records of conditions and information on how operators and machines have worked and been used under similar circumstances provide a solid reference point.

Relying strictly on past project costs has shortcomings, however. For example, if personnel don't provide information, such as fuel usage, hours of production versus idle time and maintenance records, it's difficult to get a true cost picture. It's not always feasible for an owner to visit a jobsite, especially if multiple projects are spread out over a large area. Fortunately, during the past few years, improved technology, such as Komatsu's KOMTRAX system, allows owners and their personnel to monitor information remotely, including the mode a machine worked in, how often a machine idled, fuel usage, production factors and other critical information. Reports from these systems, along with other records, can be very useful for future reference.

Having this information allows contractors to address cost-saving practices such as shutting a machine down during

nonproduction times or training operators to use a more efficient working mode. Over time, operating costs may be lowered, profit increased and more competitive estimates produced.

Technology, in the form of bidding and estimating software, can help produce accurate bids. Programs designed to work with jobsite plans allow users to trace existing and proposed elevations, then the programs will calculate the amount of earth to move by cut, fill or both. Users should take into account that calculations can be off by a few percentage points and programs don't always factor in types of soil, obstructions or other items that may affect production. A site visit should be made to evaluate those factors.

On a visit, users can set up a GPS system to create a picture of the existing site. That information then goes into a design file of the proposed project to create a model used to estimate how much earth to move. That file can also be used with a 3D machine-control system, which provides accurate grading and reduces costs associated with material overages, staking and surveying.

Calculating true operating costs that accurately reflect what to charge for individual machines on each job takes practice, but it's a business component that every contractor needs to master in order to produce accurate bids that result in profitable projects. ■

Figuring operating costs can be challenging because a particular machine may perform multiple tasks, such as an excavator that's used to dig and set pipe. Contractors must consider how each application affects production and fuel usage, and use other critical information to better calculate accurate operating costs.



LOADERS

From Komatsu - The Loader Experts



The WA380-7 Tier 4 Interim Wheel Loader is a class leading performer with improvements in production, fuel efficiency, operator comfort and serviceability.

- Komatsu Smart Loader Logic reduces fuel consumption while maintaining production.
- Large capacity torque converter with lock-up provides 10% fuel savings.
- New 7" LCD multi-function monitor panel provides easy access machine diagnostics.
- Komatsu CARE provides complimentary Tier 4 maintenance, including Komatsu Diesel Particulate Filter exchange. Contact your Komatsu distributor for details.

KOMATSU®



www.komatsuamerica.com

INNOVATIVE PRODUCTS

D61i-23: A REVOLUTION IN DOZING

New *intelligent Machine Control* dozers maximize production, lower costs with fully automated blade control



Jason Anetsberger,
Product Manager,
Intelligent Machine
Control

Komatsu's exclusive intelligent Machine Control (iMC) is a fully integrated, factory-installed, 3D machine control system. It provides automatic grading from start to finish and is designed to increase productivity while reducing material costs.

When contractors started using 3D machine control, they quickly realized the efficiency and productivity advantages the systems provided, including reduced operating and material costs. Komatsu takes the technology to the next level with the introduction of its first *intelligent Machine Control* dozers, the D61EXi-23 and D61PXi-23.

"Dozers equipped with conventional aftermarket 3D machine control are easy to spot on the jobsite, because they're the ones with a mast or masts attached to the blade and cables running from a mast to the cab," explained Jason Anetsberger, Product Manager, Intelligent Machine Control. "Komatsu eliminated those by integrating the 3D machine control technology into the machine, with sensors located in the cylinders and a cab-top antenna. Unlike traditional machine control systems, Komatsu's *intelligent*

Machine Control is fully integrated and factory-installed."

Components of the integrated *intelligent Machine Control* system include robust stroke-sensing hydraulic cylinders and a chassis-mounted enhanced inertial measuring unit, as well as the cab-mounted antenna and in-cab control box. Designing the GPS components into the machine improves durability, and the cab-top antenna provides accurate surface data by measuring actual elevations as the dozer continuously tracks during operation. The system measures progress in real time.

Seamless mode switches

The *intelligent Machine Control* D61i-23 dozers provide automatic blade control from rough cut to final grading. Inside the cab, an easy-to-use operator interface uses design files and interacts with the dozer's machine-system controls, including blade control – the D61i comes standard with a power-angle-tilt blade – and tractive-effort management. As the dozer approaches final grade, it automatically and seamlessly switches from rough dozing to finish grading.

"Typically, users rough cut to within a few inches of final grade before turning on the automatics of their machine control system to get to final grade," said Anetsberger. "That's because if the operator uses traditional machine control in automatic during rough cut, the machine tries to push or cut too much material, and, inevitably, the tracks slip. That can reduce productivity, cause unnecessary wear on the tracks, increase fuel usage and increase overall owning and operating costs.

"We're reducing or eliminating those issues with the D61i," he added. "During rough cut, if



The integrated *intelligent Machine Control* system features stroke-sensing cylinders and a cab-top antenna that eliminate the traditional mast(s) and cables associated with 3D machine control. Operators can also select modes to match material conditions.



▶ VIDEO

Brief Specs on intelligent Machine Control Dozers

Komatsu's new D61i-23 dozers provide grade control from rough dozing to finish grading. The integrated 3D machine control system automatically raises and lowers the blade to provide maximum production with reduced track slip and better fuel efficiency.

Models	Net Hp	Operating Weight	Blade Capacity
D61EXi-23 D61PXi-23	168 hp	39,441-41,381 lbs.	4.5-5.1 cu. yds.

the system senses the blade has excess load, it automatically raises to minimize track slip and maintain forward momentum. The blade also automatically lowers to push as much material as possible, so it's designed to maximize production under all situations."

The advantages of the new Komatsu *intelligent Machine Control* dozers are significant, with field tests showing efficiency improvements of up to 13 percent compared to conventional aftermarket machine control systems, depending on factors such as operation and conditions.

"Machine owners can realize those benefits even with less-experienced operators," said Anetsberger. "Operators can make changes through a simple touch-screen control box. To ensure maximum productivity and efficiency, they can adjust machine control settings from presets to allow for material conditions. Four dozing modes – cut and carry, cutting, spreading and simple grading – are available, along with light, normal and heavy load modes."

Anetsberger noted that the new technology has similarities to traditional aftermarket machine control systems. "Customers' base stations and project design files are still necessary to operate the new D61i dozers. In addition to the unique

benefits of the D61i-23, all of the key benefits of conventional machine control remain, such as less staking and lower surveying costs."

100-percent Komatsu supported

Not only does the customer benefit from the improved efficiency and durability of the D61i-23's integrated machine control system, but also from the service and support aspect. Komatsu and the local Komatsu distributors fully support the factory-installed *intelligent Machine Control* system. The customer can rest assured that Komatsu is 100-percent behind both the base machine and the on-machine *intelligent Machine Control* technology.

"As with other Tier 4 Interim machines, the D61i-23 dozers are backed by Komatsu CARE, which provides complimentary scheduled maintenance and complimentary KDPF exchanges. In addition, each Komatsu distributor will have a dedicated Technology Solutions Expert (see related story) whose responsibilities include initial calibration of the machine and ongoing support. Our extensive field testing shows these intelligent dozers can make any user productive and efficient, and we encourage anyone looking for that to demonstrate one." ■



Go online or scan this QR code using an app on your smart phone to watch the D61PXi-23 dozer in action.

Komatsu distributors' staff support new technology

... continued

Technology Solutions Experts ready to help you deploy 3D machine control systems

When buying a new machine, confidence comes in knowing that the distributor and manufacturer will stand behind it with strong support. That's always the aim of Komatsu, and it's taken additional measures with the introduction of its new *intelligent Machine Control* D61i-23 dozers.

"The D61i dozers feature fully integrated, 3D machine control components that Komatsu factory installs," said Ron Schweiters, Product Marketing Manager of Komatsu's recently formed Intelligent Machine Control Division. "Our iMC Division goals include making equipment owners and operators aware of technology, such as 3D machine control systems, that is proven to lower owning and operating expenses by increasing productivity and reducing material costs."

Komatsu's new *intelligent Machine Control* dozers build on those attributes with an integrated system that eliminates the mast, or masts, and cables associated with conventional, aftermarket

3D machine control grading systems. The D61i-23 dozers instead have a cab-top antenna, stroke-sensing cylinders and a chassis-mounted, enhanced, inertial, measuring unit, among other items. All were designed to exacting standards with durability in mind.

"Whenever new technology is introduced, there's a bit of trepidation, and we want to take that away by letting customers know we're fully prepared to back those machines," said Mike Salyers, Product Marketing Manager, iMC. "One way we're doing that is through dedicated Technology Solutions Experts (TSE). The TSE plays a key role in helping customers understand the technology and how they can implement it into their fleets."

Part of the support they provide is the initial calibration of the new *intelligent Machine Control* machines. TSEs have spent numerous hours training to make this critical step go smoothly. Once calibrated, the machines are ready to work,

providing automated blade control from initial rough cut to final grade.

"From that point, the D61i dozers work much like traditional dozers, communicating with the user's own machine control base unit and design files," said Salyers. "The TSEs can help with these steps, too, by working with operators to dial-in the project, select proper modes based on site and material conditions and maximize productivity and fuel economy. They can also support traditional machine technology." ■



Komatsu distributors now have Technology Solutions Experts, whose role is to provide initial setup of the new D61i-23 dozers, along with ongoing support. They've spent many hours training to ensure customers' technology needs are met.

Innovative. Integrated. Intelligent.



D61i-23

Next Generation Machine Control

No Masts

No Cables

No Connections

Factory installed Intelligent Machine Control – standard on the new D61i-23. Automated dozing – 1st to last pass with finish grade performance. Intelligent blade assistance minimizes track slip and improves efficiency.

Komatsu – Customer driven solutions.



Scan here to see the video.



Conventional
Machine Control

KOMATSU®

www.komatsuamerica.com

KOMATSU FINANCIAL

Financing Your Success



The experienced professionals at Komatsu Financial provide financing solutions to help grow your business. Working with your Komatsu dealer, we can provide the following:

- ✓ New and Used Equipment Financing
- ✓ Leasing Programs
- ✓ Parts and Service Financing
- ✓ Equipment Credit Lines
- ✓ Flexible Terms and Payment Plans
- ✓ Industry Expertise
- ✓ Superior Customer Service

KOMATSU®

www.komatsuamerica.com



kfcustomerservice@komatsuna.com
888-500-6001

HANDS-ON EXPERIENCE

intelligent MACHINE CONTROL EXPERIENCE

New dozers take center stage at Komatsu event

Customers and Komatsu distributor personnel got an up-close look at the future of *intelligent Machine Control* technology during a recent iMC experience event focused on the new D61i-23 dozers (see related articles for more detailed information) at the Komatsu Training & Demonstration Center in Cartersville, Ga.

During the event, attendees had the opportunity to see the innovative technology that provides fully automated blade control from rough cut to finish grade, as well as operate the D61PXi-23 models. The new dozers feature factory-integrated 3D machine control that functions without the blade-mounted mast(s) and cables associated with conventional aftermarket systems.

Additionally, Komatsu highlighted the latest Topcon technology for productivity reporting and remote machine monitoring at the Training & Demonstration Center. In it, attendees could see software designed to work with GPS systems to track production in real time.

"In my many years with Komatsu, I've seen the development of numerous innovative machines

and new technology, but I believe this is the most exciting product I've ever been involved with," said Peter Robson, Director of Intelligent Machine Control. "The efficiency improvement, greater value and simplicity of operation of the D61i-23 exemplify the leading innovations that customers have come to expect from Komatsu. It was a pleasure to see so many interested in this new machine and the technology behind it. The feedback we received was very positive, and many who attended saw how the D61i-23 could be a valuable asset to their operations." ■



Peter Robson,
Director of Intelligent
Machine Control



Komatsu demonstrated the latest Topcon software designed to work with machine-control systems so users can track production data in real time.

Attendees had the opportunity to see and operate new D61PXi-23 dozers with integrated 3D machine control technology that requires no blade-mounted mast(s) or cables running from mast(s) to cab.



intelligent
MACHINE CONTROL

COMPLIMENTARY TIER 4 SERVICES



Komatsu CARE for Komatsu Tier 4 Interim models is a new, complimentary maintenance program designed to lower your cost of ownership and improve your bottom line. It provides factory-scheduled maintenance on the machines for the first three years or 2,000 hours, whichever comes first. This includes up to two exchange Komatsu Diesel Particulate Filters. Be sure to contact your Komatsu distributor for all the details.

Once again, Komatsu leads the industry.

It's what you've come to expect from the service experts at Komatsu.

KOMATSU®



www.komatsuamerica.com

NEW PRODUCTS

NEW MATERIAL HANDLERS

Robust design provides excellent lift capacity, maximum efficiency in heavy-duty applications

Just because you're working in tough applications, you shouldn't have to sacrifice fuel economy or productivity. You don't have to with Komatsu's new PC390LC-10 and PC490LC-10 material handlers that provide excellent lift capacity and efficiency for scrap yards, terminals and other bulk-material-handling applications.

"Komatsu material handlers are built using the best features of our PC390 and PC490 base excavators, which are proven performers," said Senior Marketing Engineer Sue Schinkel. "For example, the engine pumps, valves and cylinders work together for maximum efficiency and productivity. There's also a material-handling package built into the base machine for superior lift capacity, speed and balance."

Several features contribute to maximum lift capacity, including heavy counterweights; reinforced revolving and center frames; and larger boom and arm cylinders. Load-holding valves are also standard for added protection on the boom and arm cylinders. Two- or three-piece fronts are available, and both incorporate a reinforced box-section design that uses high-strength alloy steel.

"We beefed up the X-frame assemblies, making them very robust," said Schinkel. "The material handlers can pick up as much over the side as they can from the front, and carry that load a full 360 degrees. That's a distinct advantage in a scrap yard where the working area may be very tight. In applications not involving maximum lift, the operator can use a Smooth boom-mode setting for more precise positioning operations."

High-efficiency pumps

For greater efficiency, the PC390LC-10 and PC490LC-10 material handlers have large-displacement, high-efficiency pumps that

provide higher flow output at a lower engine speed. Optimized Hydraulic System valves adjust work equipment speed – boom raise, arm in and grapple/bucket open-close – for smooth, precise operation.

Controlling the work equipment is easy, using the multifunction buttons on the operator control levers for grapple open-close-rotate and magnet discharge-charge. Operators can improve visibility to the application with a 78-inch cab riser that has manual tilt for transportation.

"When Komatsu designed its Tier 4 Interim machines, it took the opportunity to look beyond meeting emissions requirements and build machines that offer a combination of greater horsepower and fuel economy," said Schinkel. "We've brought that same intent to these new material handlers, and the results and feedback have been very positive." ■



Sue Schinkel,
Senior Marketing
Engineer



Go online or scan this QR code using an app on your smart phone to watch the PC490LCMH in action.

www.RMLRoadToSuccess.com

Brief Specs on the Komatsu Material Handlers

Model	Net Hp	Operating Weight	Reach
PC390LC-10MH	257 hp	92,940-95,010 lbs.	46-48 ft.
PC490LC-10MH	359 hp	126,530-128,940 lbs.	54-55 ft.



▶ VIDEO

Beefed up X-frame assemblies, along with other robust features, allow Komatsu material handlers to pick up as much over the side as they can from the front, and carry that load a full 360 degrees. That's a distinct advantage in a scrap yard where the working area may be very tight.

AN INTEGRATED APPROACH

Komatsu Exec VP Manufacturing says customer input, strong engineering result in better machinery



Ken Furuse,
Executive Vice President,
Manufacturing

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.

Ken Furuse joined Komatsu 31 years ago and has worked extensively in production planning and plant management, spending much of his time in Japan and throughout Europe. He was named Executive Vice President, Manufacturing, Komatsu America Corp., in January 2013 and is responsible for overseeing manufacturing operations, including U.S. plants in Peoria, Ill., Chattanooga, Tenn. and Newberry, S.C.

“One of Komatsu’s greatest strengths is listening, especially to our customers who have guided many positive changes to our machinery throughout the years,” said Furuse. “Our world-class engineers incorporate customers’ input into building what I believe are the most efficient and productive machines in the construction and mining industries. It’s why Komatsu has become a top equipment manufacturer with an ever-growing presence. I’m very pleased with how far we’ve come, but I’m equally, if not more, excited about where we’re going.”

One aspect Ken is especially enthusiastic about is increased technology. “Komatsu remains keen on developing and integrating new technology into our equipment, such as our new *intelligent Machine Control* dozers and KOMTRAX monitoring system. Both are shown to directly improve production while reducing owning and operating costs, which, in turn, improves the user’s bottom line.”

Ken and his wife, Ikuko, celebrate 28 years of marriage this year, and they enjoy playing golf together and taking nature walks. Ken is also an avid mountain hiker and has scaled about 70 peaks in his native Japan.

QUESTION: During the past few years, several new machines have been introduced, and many more are coming soon. Where does the manufacturing of these machines begin?

ANSWER: It starts with ideas from our engineering teams as well as input from our customers. Building a new model begins with a goal in mind to improve upon the previous base machine’s already-proven performance and incorporate enhancements customers tell us they believe would make our equipment better. From that, we build a prototype and test it extensively, looking for further ways to provide more efficiency and productivity. By doing that, we ensure that when a machine goes into production, it will certainly meet and, we hope, exceed customer expectations.

As an example, our customers told us they would like machines that are plug-and-play ready to accept GPS machine-control systems. We have several models equipped with that as standard. We’re now taking it a step further with our new *intelligent Machine Control D61i-23* dozers, which feature integrated 3D control and a cab-top antenna that eliminates the masts on the blade and cables to the cab. Our thorough testing shows significant improvement in efficiency and productivity, even from operators with little or no experience.

QUESTION: It seems technology like this continues to play a greater role in machinery. Why is that?

ANSWER: It is, and we recently put together a new ICT (Intelligent Control Technology) Division designed to promote and help customers implement these types of technology into their fleets and practices because it’s proven to improve productivity and reduce owning and operating costs.



Strong engineering practices and customer input not only help Komatsu meet emissions standards, but they make machinery more efficient and productive in the process, according to Ken Furuse, Komatsu Executive Vice President, Manufacturing.

Komatsu continues to be very proactive when it comes to technology, and we're seeing benefits both for customers and for us as a manufacturer. KOMTRAX plays a major role, and we've continued to expand upon it from the perspective of customers, again, with their input. Now customers can use that information to track production, such as idle time and work load.

QUESTION: How else is Komatsu working for greater efficiency in the manufacturing process?

ANSWER: We've increasingly engineered genuine Komatsu OEM components and systems into our equipment. These systems work in harmony and increase efficiency. Even with that approach, we still partner with outside suppliers for a variety of items, and this is a good thing because they also bring us new ideas that lead to improvement. Our goal is to use the highest-quality local and regional suppliers as this reduces environmental impact and costs associated with transportation.

QUESTION: Where is Komatsu in terms of meeting Tier 4 Final emissions standards?

ANSWER: Our approach with each emission standard was not only to meet it, but design and manufacture machines that improve upon previous models. Because we're a strong engineering company, Komatsu has done that and our data proves it.

Initial Tier 4 Final machines begin rolling out this year with smaller engine-horsepower models, and larger machines are coming in subsequent years. As with past standards, we're on track to meet or exceed the deadlines of Tier 4 Final. ■



Ken Furuse said talking and listening to customers helps drive improvements in new Komatsu machinery.



Komatsu has manufacturing plants in Illinois, Tennessee and South Carolina that build construction and mining equipment for U.S. and world markets.

NO IDLING

SHIFT IN PRACTICE SAVES MONEY

Initiative changes contractor's view of idle time, its effect on bottom line



Wade Williams,
Owner, Wade Williams
Dozer Service

When Wade Williams bought his first piece of equipment eight years ago, he didn't put much thought into starting an excavation business. He just wanted to clean up around the farm.

"Neighbors saw I had an excavator and started coming to me asking if I'd do some work for them," said Williams, who is a one-man operation with Wade Williams Dozer Service. "The next thing I know, I'm cleaning up fence rows, clearing timber, ditching and building pads. I still do a lot of that private farm work, as well as working with farmers and the NRCS (Natural Resources Conservation Service) on soil-conservation projects that are put out for bid. Things really took off."

Wade Williams, Owner of Wade Williams Dozer Service, said participating in Komatsu's No Idle Initiative changed his practices when it comes to idling. "It opened my eyes to how much excessive idling was costing me ... now, idle time is always on my mind."

Williams quickly began adding equipment, including a Komatsu excavator. He currently owns a PC240LC-10 excavator and a D51 dozer. "I've run other brands, but what I've found is that Komatsu is hands-down the leader when it comes to both equipment and support. They've shown me ways to increase my bottom line, including bringing idle time to my attention. I really never gave it much thought before."

Komatsu and Williams' local distributor contacted him about participating in Komatsu's No Idle Initiative, which was designed to increase awareness of excessive idle time and easy ways to reduce it. Starting from a baseline idle time, Komatsu tracked participants over several months to chart and reward their progress. Williams earned a "Best of the Best" award, given to companies that reduced their overall idle time to 15 percent or less.

"My distributor sent me monthly reports showing a breakdown of idle time versus run time and documenting how much idling dropped," said Williams. "It makes so much sense, and I'm grateful they brought it to my attention. It opened my eyes to how much excessive idling was costing me in terms of wasted fuel, unproductive hours that contributed to more frequent service intervals, and unnecessary wear and tear.

"Participating in the initiative changed my way of thinking long term," he added. "As a one-man operation, I'm moving back and forth between machines, and I'd often leave one machine running while I worked in another. Instead, when significant nonproduction time is coming, I idle a machine for a few minutes to let it cool down, then shut it off, as opposed to just leaving it idle until I come back to it. Now, idle time is always on my mind." ■



APPLIED TECHNOLOGY

KOMTRAX GOES MOBILE

New Komatsu smart-device app revolutionizes fleet monitoring

During the past decade, technology in fleet management has gained prominence, and Komatsu has led the way with KOMTRAX. The remote machine-monitoring system allows users to log onto a secure Web site and track their equipment. Komatsu has now taken the next step with an app that lets users see critical machine information on their Apple or Android smart phones or tablet devices.

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

Mirza said Komatsu worked directly with KOMTRAX users to pinpoint information that would be most helpful to them through a mobile platform. Valuable data available through the KOMTRAX app includes machine usage, idle time, fuel consumption, cautions, locations and much more. “Most important, our customers will have the ability to directly contact their distributors,” Mirza explained. “The app features ‘hot keys’ for customers to contact their PSSR, sale rep, service manager, parts counter and local KOMTRAX coordinator.”

“Just like traditional KOMTRAX, our distributors and customers can see if a machine has any health issues or is idling too much,” Mirza noted. “They can then make a phone call to schedule the service, or talk to the operator about better operating practices, such as shutting off during nonproduction or using Economy mode instead of Power mode, if applicable. Wherever cell coverage or Internet access is available, users at one jobsite can see what’s happening with their machines at other jobsites via the KOMTRAX Mobile app.”

Getting the app is easy

Getting the app for an iPhone, iPad, Android phone or tablet is as simple as downloading it free from the app stores. Users can then request access by filling in basic information such as name, title, company name, email address and phone number. Komatsu then verifies and sets up an ID and password that let users enter the world of KOMTRAX Mobile.

“Smart devices became a necessary part of the construction industry because they made information more accessible and allowed better and faster business communication,” Mirza pointed out. “Smart phones have increasingly become popular because they allow easy access to valuable information through the Web or via apps, so users can get information about their business needs. Now, with our KOMTRAX app, business owners, or anyone they give their permission to, can track their equipment’s overall performance and health. We encourage all those who are interested to contact their local Komatsu distributor.” ■



Rizwan Mirza,
Manager, KOMTRAX



Komatsu’s new KOMTRAX app for smart phones and other mobile devices provides fleet management information, such as machine usage, idle time, fuel consumption, cautions, locations and much more.

INDUSTRY NEWS

SLIGHT IMPROVEMENT

ASCE raises infrastructure grade to D+, says increased investment is a critical need

America's infrastructure grade only marginally improved, according to the latest Report Card issued by the American Society of Civil Engineers (ASCE). Issued every four years, ASCE gave the nation a D+ this year compared to a D on its last report in 2009.

The ASCE Report Card is a comprehensive assessment of current infrastructure conditions and needs with assigned grades and recommendations for improvement. It's based on criteria such as capacity, condition, funding, future need, operation and maintenance, public safety, resilience and innovation.

The American Society of Civil Engineers' most recent Report Card graded the nation's infrastructure a D+, a slight improvement from the D it gave in its last report in 2009.

"A D+ is simply unacceptable for anyone serious about strengthening our nation's economy; however, the 2013 Report Card shows that this problem can be solved," said ASCE President Gregory E. DiLoreto, P.E. "If we want to create jobs, increase trade and assure the safety of our children, then infrastructure investment is the answer."

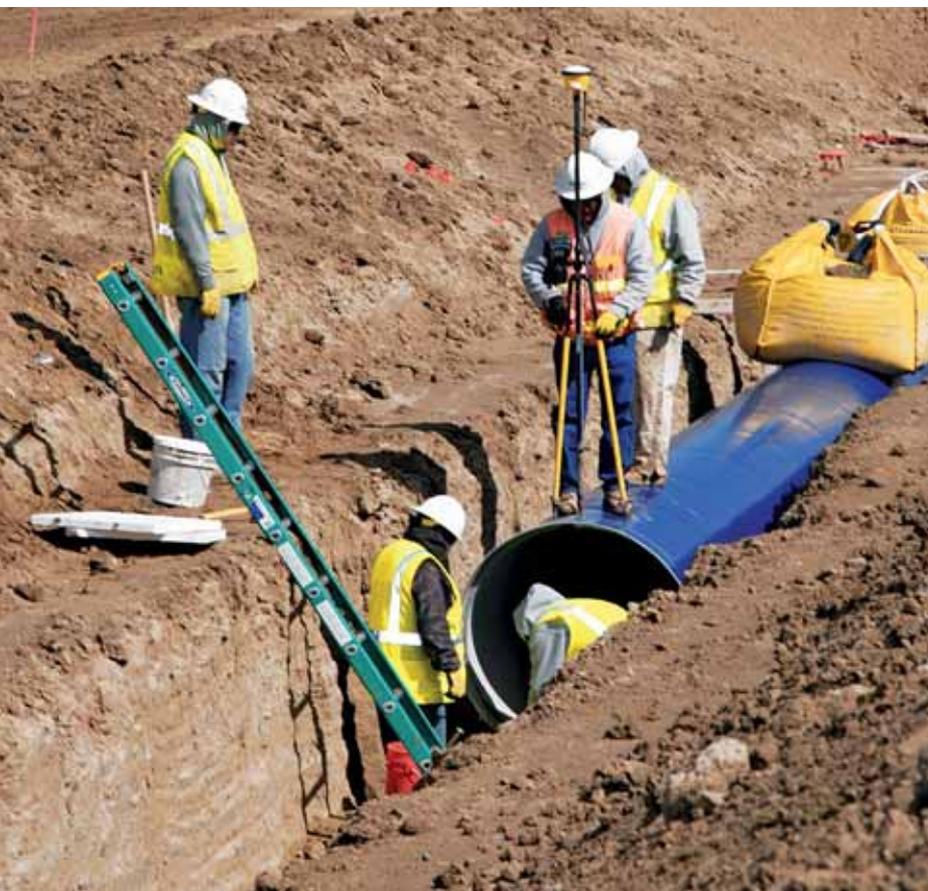
Six of 16 sectors measured saw some improvement: solid waste, drinking water, wastewater, roads, bridges and rail, with rail showing the biggest jump from a C- to a C+. Bridges also received a C+, which was the highest ranking for any sector except solid waste with a B-.

ASCE cited efforts by cities and states to address roads, bridges, drinking water and wastewater system upgrades, as well as private investment and short-term federal funding increases as reasons for improvements in some areas. It added that investment in funding infrastructure overall falls far short of what's needed.

According to the report, an estimated \$3.6 trillion investment by 2020 is necessary for significant improvement. Based on current funding levels, there would be a shortfall of \$1.6 trillion.

"We must commit today to investing in modern, efficient infrastructure systems to position the U.S. for economic prosperity," said DiLoreto. "Infrastructure can either be the engine for long-term economic growth and employment, or, it can jeopardize our nation's standing if poor roads, deficient bridges and failing waterways continue to hurt our economy."

The full report can be found online at www.infrastructurereportcard.org. ■



ALL FROM A SINGLE SOURCE:
THE WORLD'S #1 BRANDS FOR
ROAD BUILDING.



Close to
our customers



ROAD AND MINERAL TECHNOLOGIES

Rely on the Wirtgen Group's full range of products for new construction and rehabilitation of roads. Our sales and service experts, based close to your doorstep, offer the expertise and all-round support you need.

www.wirtgenamerica.com

GILBERT (PHOENIX), AZ

1339 W. San Pedro
(480) 545-2400
FAX: (480) 545-2457

PRESCOTT, AZ

1071 Commerce Dr.
(928) 778-5621
FAX: (928) 778-5640

SUPERIOR, AZ

98 West High School Rd.
(520) 689-2405
FAX: (520) 689-2475

**CORPORATE OFFICE
PHOENIX, AZ**

4710A E. Elwood St., Ste. 6
(602) 252-7121
FAX: (602) 253-9690

TUCSON, AZ

3285 E. 44th St.
(520) 623-8681
FAX: (520) 798-1419

ALBUQUERQUE, NM

6101 Pan American West Frwy. N.E.
(505) 345-8383
FAX: (505) 345-2828
Rental Dept: (505) 342-5678

FARMINGTON, NM

901 Troy King Rd.
(505) 324-8601
FAX: (505) 345-2828



MORE INDUSTRY NEWS

Infrastructure bank bill introduced with bipartisan support

Thanks to its innovative way of establishing funding, a new congressional bill to establish an infrastructure bank is in the works and has bipartisan support. If passed, the Partnership to Build America Act would create the American Infrastructure Fund with an initial \$50 billion investment from selling bonds. Issued bonds would have a 50-year term with a fixed interest rate of 1 percent, and bonds would not be guaranteed by the government.

Introduced by John K. Dalaney, D-Md., and cosponsored by 13 Republicans and 13 Democrats, the bill would provide an option for local governments that have been searching for long-term financing. They could apply for loans to fund transportation, energy, water and

other infrastructure projects, paying back the loans at market rate.

The bill is designed around a public-private partnership that would encourage corporations based in the U.S. to purchase bonds in exchange for tax-free repatriation of overseas earnings. At least a quarter of the projects funded must be of a public-private partnership, with at least 20 percent of funding from the private sector.

Sponsors and supporters see the bill as a way to address infrastructure funding shortfalls. A recent report by the American Society of Civil Engineers estimated that a \$3.6 trillion infrastructure investment is needed in the United States by the year 2020. ■

PRODUCTIVITY PROTECTOR



PALADIN
POWERFUL ATTACHMENT TOOLS

The Power of Combined Excellence™

BRADCO CP CUSTOMWORKS FCC HARLEY WJ:B McMILLEN SWEEPSTER

Road Machinery, LLC

Paladin Attachments Authorized Dealer

Corporate - Phoenix, AZ West Sacramento, CA
(602) 252-7121 (916) 375-3540

Prescott, AZ Fremont, CA
(928) 778-5621 (510) 659-1903

Gilbert (Phoenix), AZ Pico Rivera, CA
(480) 545-2400 (562) 699-6767

Tucson, AZ El Paso, TX
(520) 623-8681 (915) 872-1001

Superior, AZ Albuquerque, NM
(520) 689-2405 (505) 345-8383

Perris, CA Farmington, NM
(909) 355-3600 (505) 324-8601

Bakersfield, CA Cananea, Sonora, Mexico
(661) 695-4830 011-52-645-332-8300

Redding, CA Hermosillo, Sonora, Mexico
(530) 229-3820 011-52-662-236-2600

Connect with Paladin:



www.paladinattachments.com

Division of
IES INTERNATIONAL
EQUIPMENT
SOLUTIONS



SIDE TRACKS

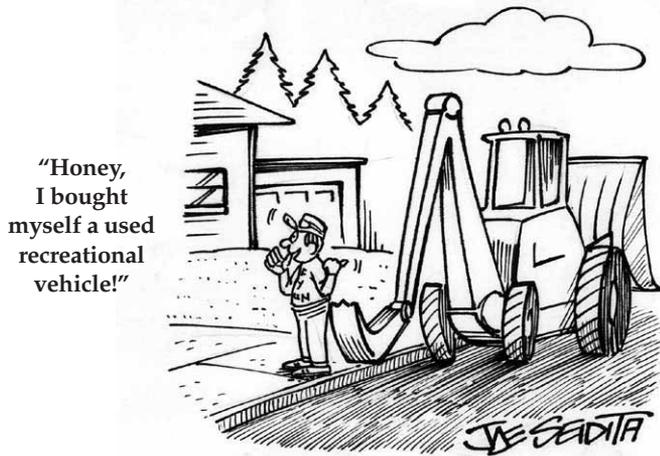
On the light side



"Can you put in an elevator?"



"How will all this 'fiscal cliff' and 'debt ceiling' stuff affect my allowance?"



"Honey, I bought myself a used recreational vehicle!"

Did you know...

- Men who kiss their wives in the morning live five years longer than those who don't.
- The Sahara Desert expands at about one kilometer per month.
- The state with the longest coastline in the continental U.S. is Michigan.
- In Japan, watermelons are grown into the shape of a square so they are easier to stack and transport.
- Oak trees do not have acorns until they are 50 years old or older.
- By weight, bone is five times stronger than steel.
- The word "news" is actually an acronym standing for the four cardinal compass points - North, East, West, and South.
- The distress code "Mayday" comes from the French word, M'aide, which means "help me."
- Coconuts kill more people in the world than sharks do. Approximately 150 people are killed each year by coconuts.
- Europe is the only continent without a desert.

Brain Teasers

Unscramble the letters to reveal some common construction-related words. Answers can be found in the online edition of the magazine at www.RMLRoadToSuccess.com

1. B J O _ _ _ _
2. H P S O _ _ _ P
3. R R E A B _ _ B _ _
4. L E R L O R _ _ _ L _ _
5. E M N O A R F F _ _ _ _ _ N

RENTAL REPORT

INCREASED RENTAL FLEET

Road Machinery expands its offerings to better meet your short- and long-term needs

Need a short-term rental? Need a long-term rental? Road Machinery, LLC has you covered, whether it's for a week, a month or longer with its Rental Division that offers a wide range of equipment.

"Road Machinery has always offered rental, but we're aggressively focusing on expanding our equipment list in an effort to offer more options to customers who want to start or augment a fleet," said new Rental Division Business Manager Jamie Carson. "Our rental equipment provides a competitive, low-risk alternative to purchasing a machine, which is something customers indicate is important to them."



Road Machinery, LLC Rental Division Business Manager Jamie Carson stands next to one of more than 200 machines in Road Machinery's rental fleet. All are available for short- and long-term rental.

Carson noted that Road Machinery's rental fleet has more than doubled during the past few months. It mainly consists of Komatsu machinery, ranging in size from small utility excavators and dozers to some larger equipment suitable for mining and quarry applications.

"The focus is mainly on mid-size to heavy construction machinery, which most traditional rental houses don't carry," said Carson, adding that Hamm compaction equipment is also available. "For example, a large share of our fleet consists of PC200 to PC400 excavators, as well as D61 to D155 dozers and WA200 to WA500 wheel loaders. Those tend to be the most popular sizes in terms of rental.

"Additionally, customers tell us they're looking for rental equipment that's late-model and well-maintained," Carson added. "We provide both, with quality-control measures, including thorough checks before and after rental that ensure when a unit goes out it's ready to perform the way a customer expects. And we keep an aggressive maintenance schedule to ensure reliable performance."

More than 200 units

Carson said Road Machinery's Rental Division consists of about 250 pieces. Each Road Machinery branch has a dedicated fleet, but rentals are available from any location if needed.

"Whether someone's in the market for one or multiple rentals, the process is easy. The customer can contact one of our branches, a territory manager or call the toll-free number (800-989-7121) that's on all our rental units," said Carson. "We'll do whatever we can to meet every individual's needs." ■



STOCK #EMD7624



STOCK #EMD247



STOCK #EMD109



STOCK #EMD8788



STOCK #EMD7946



STOCK #EMD293

Call or visit us online today!

1-800-989-7121

www.roadmachinery.com



Allen Stokke,
Used Equipment Manager
(866) 400-5220



USED EQUIPMENT FOR SALE

HYDRAULIC EXCAVATORS

YEAR	MAKE	MODEL	HRS	STK#	PRICE
2011	KOMATSU	PC290LC-10	786	EMD8116	Call for Price
2010	KOMATSU	PC200LC-8	1,225	EMD7124	\$135,000
2005	KOMATSU	PC400LC-7	6,283	EMD247	\$165,000
2004	KOMATSU	PC400LC-7	6,500	EMD249	\$135,000
2011	KOMATSU	PC308USLC-8	810	EMD8128	Call for Price
2007	KOMATSU	PC300LC-7EO	4,940	EMD252	\$175,000
2011	KOMATSU	PC138USLC-8	1,042	EMD7059	Call for Price
2011	KOMATSU	HB215LC-1	239	EMD7061	Call for Price

WHEEL LOADERS

2007	KOMATSU	WA500-6	7,122	EMD7624	\$239,000
2007	KOMATSU	WA500-6	8,387	EMD7623	\$239,000
2001	KOMATSU	WA320-3MC	6,098	EMD7052	\$69,500
2004	KOMATSU	WA320-5L	2,641	EMD7694	Call for Price

DOZERS

2008	KOMATSU	D65EX-15EO	3,955	EMD7946	Call for Price
2011	KOMATSU	D39EX-22	601	EMD6862	Call for Price
2007	KOMATSU	D51EX-22	2,996	EMD7022	\$119,000
2008	KOMATSU	D65EX-15EO	3,955	EMD7946	Call for Price
2007	KOMATSU	D155AX-6	6,596	EMD9045	Call for Price

Availability is constantly changing. Check with your Road Machinery salesman for your used equipment needs.

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

Change Service Requested

Presorted
Standard
US Postage Paid
C.P.I.

13n03

ROAD MACHINERY

The people. The products. The service.

★ REDDING
SACRAMENTO ★
★ FREMONT
BAKERSFIELD ★
Now Open!
★ PICO RIVERA
★ PERRIS
★ FARMINGTON
★ ALBUQUERQUE
★ EL PASO
★ CANANEA, MEXICO
★ HERMOSILLO, MEXICO

Locations marked on the map include: REDDING, SACRAMENTO, FREMONT, BAKERSFIELD, PICO RIVERA, PERRIS, FARMINGTON, ALBUQUERQUE, EL PASO, CANANEA, MEXICO, HERMOSILLO, MEXICO, PRESCOTT, GILBERT (PHOENIX), SUPERIOR, TUCSON.



CORPORATE OFFICE
PHOENIX, AZ
(602) 252-7121

REMANUFACTURING FACILITY
PHOENIX, AZ
(602) 252-7121

PRESCOTT, AZ
(928) 778-5621

TUCSON, AZ
(520) 623-8681

GILBERT (PHOENIX), AZ
(480) 545-2400

SUPERIOR, AZ
(520) 689-2405

PERRIS, CA
(909) 355-3600

REDDING, CA
(530) 229-3820

SACRAMENTO, CA
(916) 375-3540

BAKERSFIELD, CA
(661) 695-4830

FREMONT, CA
(510) 659-1903

PICO RIVERA, CA
(562) 699-6767

ALBUQUERQUE, NM
(505) 345-8383

FARMINGTON, NM
(505) 324-8601

EL PASO, TX
(915) 872-1001

CANANEA, SONORA, MEXICO
011-52-645-332-8300

HERMOSILLO, SONORA, MEXICO
011-52-662-236-2600

