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KOMATSU

CITY OF CORPUS CHRISTI

Productive equipment helps expanding metro area run more smoothly

See article inside . . .

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Jim Davis, Director of Fleet Maintenance

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A MESSAGE FROM THE VICE PRESIDENT



Bruce Truesdale

Looking forward to 2014



Dear Valued Customer:

Like you, we're excited about what lies ahead next year. Economic indicators show a strengthening economy, and construction has been a major beneficiary. Spending hit a four-year high recently, led by a strong rebound in residential construction that includes significant gains in new housing starts. Non-residential construction also continues to do well, and many organizations expect the trend to continue into 2014 and beyond.

Another reason we're looking forward to next year is the upcoming CONEXPO. Held in Las Vegas on March 4-8, it showcases the latest in equipment and technology for the construction industry. As always, the manufacturers we represent, such as Komatsu, will have several innovative new products on display and will feature their world-class product support capabilities. We hope to see you there.

While new products are always exciting, sometimes purchasing a used piece makes perfect sense. In this issue of your WPI *Update* magazine, there's an informative article about Distributor-Certified used equipment available through Komatsu ReMarketing. These thoroughly-inspected machines offer a great alternative to new equipment.

Remember incentives are still available for purchasing equipment this year. Fifty-percent bonus depreciation on most property placed in service before 2014, and extended Sec. 179 expense levels of \$500,000 with a phase-out beginning at \$2 million is still in effect.

Used or new, we can service your equipment, and encourage you to contact us about special incentives that may apply to parts and repairs on your machinery during the coming months. In some instances, subsidized financing may be available. Contact us for further details.

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

Sincerely, WAUKESHA-PEARCE INDUSTRIES, INC.

Brun A Trucallo

Bruce Truesdale Vice President of CMD Operations

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A PUBLICATION FOR AND ABOUT OUR CUSTOMERS

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A SALUTE TO A 🌽 CUSTOMER

CITY OF CORPUS CHRISTI

Productive equipment helps expanding metro area run more smoothly



Jim Davis, Director of Fleet Maintenance

The population of the Corpus Christi metro area tops 275,000 and continues to grow. With the growth comes an increased need for city services, such as refuse removal and repair and maintenance of streets and other infrastructure systems.

The resources required to meet those needs are extensive, especially when it comes to the approximately 1,200 miles of streets that crisscross Corpus Christi. A few years ago, an assessment gave half the roadways a "poor" grade and rated the other half "fair to good."

Corpus Christi wants to improve all of them to a "good" grade, or preferably better, so it recently set into motion a multifaceted street-improvement plan designed to rehabilitate, repair and replace. Part of the effort involves determining which of the three approaches is necessary, and the city did that by scoring each street on a scale of zero to 100, using a Pavement Condition Index. Streets that scored higher than 55 were slated for maintenance, which involves asphalt overlaying and seal coating to extend the existing road's life by up to a decade.

Those that ranked in the zero-to-55 range are considered for major rehabilitation and reconstruction. One goal is a 30-year life cycle, and earlier this year the city council amended a code to require all new roads be built to that standard. Rehabilitation and reconstruction efforts are aimed at meeting that goal as well.

Achieving the latter usually involves removing existing pavement. Corpus Christi often does that with Gradall XL3100 excavators, which it also uses in several other applications.

"The XL3100s provide versatility and offer a great advantage with the extending boom," said Jim Davis, Director of Fleet Maintenance, who oversees the city's fleet of about 1,700 pieces of equipment and rolling stock, including Corpus Christi's police cars. "They have good power, so they give us the ability to quickly remove pavement and load it out, as well as perform other duties, such as cleaning ditches and under bridges. For that reason, we've had Gradalls in our fleet for several years."

Keeping stormwater flowing

Keeping ditches free of debris is essential to ensure stormwater keeps flowing in the 100-plus miles of major and 700-plus miles of minor drainage ditches that feed into pumping stations and storm-drain gates. Davis said it's also vital to keep brush and other types of plant growth under control.

Corpus Christi uses two Komatsu PC270LC-8 long-front excavators equipped with specialty mowing attachments. The city mows nearly 1,700 acres of drainage and right of ways.

"We're mowing practically every day, so those machines are heavily used," confirmed Davis. "Many of the ditches we clean, especially the major ones, are large and deep. With the long fronts, operators can sit on the bank and reach out as far as 32 feet. It's much more effective and safer than running a traditional mower in the ditch."

In addition to ditches, the city's responsibilities include keeping water flowing through more than 600 miles of underground storm piping. Crews from a work force of more than 60 are tasked with cleaning debris from the pipes, along with more than 18,000 storm-drain inlets and 6,000 manholes.

During the past year, Corpus Christi has taken delivery on three new Vacall AllJetVac P Series combination sewer cleaners. The units



For mowing ditches and right of ways, the City of Corpus Christi uses Komatsu PC270LC-8 long-front excavators equipped with specialty mowing attachments. "Many of the ditches we clean are large and deep," said Jim Davis, Director of Fleet Maintenance. "With the long fronts, operators can sit on the bank and reach out as far as 32 feet. It's much more effective and safer than running a traditional mower in the ditch."

feature a positive-displacement blower system and vacuum, which allow crews to suck out debris and store it on board, and jet water from the truck's storage tanks through the underground pipes.

"The Vacall sewer cleaners replaced some older trucks, so there was an obvious upgrade in productivity and efficiency," said Davis. "As we began looking for new trucks, a couple factors came to the fore. One, they had to have the capability to do the job, and, two, they had to be reliable enough to stay in service and stand up to the challenge that cleaning up debris from a storm-sewer system presents. We were confident the Vacall units would, and they've proven to be the right choice. The new trucks are well-designed and rugged, so they offer enhanced availability. Another advantage is they're simple to operate."

Long-term relationship with WPI

The City of Corpus Christi purchased its Vacall trucks, Komatsu PC270LC-8s and Gradall XL3100s, along with other equipment, including Bomag compactors, from WPI with the help of Sales Representative Jeff Harper. The city also recently added a Komatsu PC138USLC-10 tight-tail-swing excavator equipped with a Rotobec trash grapple for its transfer station.

"The transfer station is all about efficiency because it allows our refuse trucks to make shorter trips to unload; therefore, they're picking up trash and finishing routes sooner," explained Davis. "That also creates a large volume of material in one place that crews have



The City of Corpus Christi recently added three Vacall AllJetVac P Series combination sewer cleaners for cleaning out storm drains and pipes. "They're well-designed and rugged, so they offer enhanced availability," said Jim Davis, Director of Fleet Maintenance.

to handle and load on trailers to haul to its final destination. We want those trucks fully loaded, so we have to place the material in the trailer, then pack it down.

"The PC138 is a perfect fit as it allows us to accomplish both," he added. "It sits on a platform, which gives the operator visibility into the trailer. It has excellent power for pushing the material down, but its size is probably a bigger advantage. At times, space is limited, and because the PC138 doesn't have the large counterweight, we don't have to worry about it swinging into something. It adds greatly to our efficiency."



Scan this QR code using an app on your smart phone to watch video of Corpus Christi's machines at work.

Corpus Christi: setting an example for efficiency

... continued

The city's maintenance staff handles much of the service and repairs on Corpus Christi's equipment, turning to WPI for additional help and parts as needed.

"We've maintained an active relationship with WPI for as long as I've been here, and that's more than 20 years," noted Davis. "Of course, when the city buys equipment, it lets out bids, and dealers have to meet the specifications. WPI does, but what's equally important is what comes after the sale. If there's a warranty issue, WPI takes care of that promptly, and helps with other items, such as technical repairs. They have the know-how and skill to diagnose and address those issues quickly. Jeff and WPI are terrific to work with, and we're proud of our ongoing relationship with them."

(L-R) City of Corpus Christi Vehicle and Equipment Specialist Chris McKee and Director of Fleet Maintenance Jim Davis work closely with WPI Sales Representative Jeff Harper. "We've maintained an active relationship with WPI for as long as I've been here, and that's more than 20 years," said Davis. "Jeff and WPI are terrific to work with, and we're proud of our ongoing relationship with them."



A City of Corpus Christi operator uses a Komatsu PC138LC-10 equipped with a Rotobec trash grapple to load and push down material that's hauled from the city's transfer station to its final destination. "It has excellent power for pushing the material down, but its size is probably a bigger advantage," said Jim Davis, Director of Fleet Maintenance. "The PC138 has increased our efficiency."



A municipal model

The city has a comprehensive management system that addresses all aspects of maintenance, both scheduled and unscheduled. "Ensuring the fleet's availability is critical, and there are varying degrees of urgency," Davis pointed out. "Failure is not an option, especially when it comes to public safety and sanitation, so police cars and refuse trucks get high priority. But, really, everything is important, so we take it all very seriously. That's especially true when it comes to preventive and scheduled maintenance, which we're adamant about keeping up with."

The city is also adamant about equipment efficiency, so residents get the best value for their tax dollars. Corpus Christi underwent a study to determine the "right size" of the city's fleet and ended up cutting out 144 vehicles and other pieces of equipment that weren't being utilized effectively.

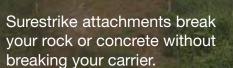
"As the city expanded, its fleet naturally grew," he said. "Much of what we cut was older equipment that we sold at auction. Reducing our fleet lowered costs too, because as those units aged, they required more maintenance."

Davis said further study set the City of Corpus Christi on a clearer path to turning over its fleet. "Timely replacement is key, so we've set about to determine a piece's service life, whether it's hours or miles, then we budget to replace it at, or as close to, the end as possible. That's optimal, but when it's not an option, we have a refurbishment plan we use to replace critical systems and components, which extends the life for a few years."

Those plans, along with a keen ability to take care of infrastructure needs, have made the City of Corpus Christi a model of what city service can be.

"We underwent a competitive assessment a couple of years ago to show whether it would be better for us to continue doing what we do ourselves or privatize our services," Davis said. "The independent contractor recommended strongly that we not privatize, as we're extremely cost-effective and efficient. That's obviously something we're very proud of."

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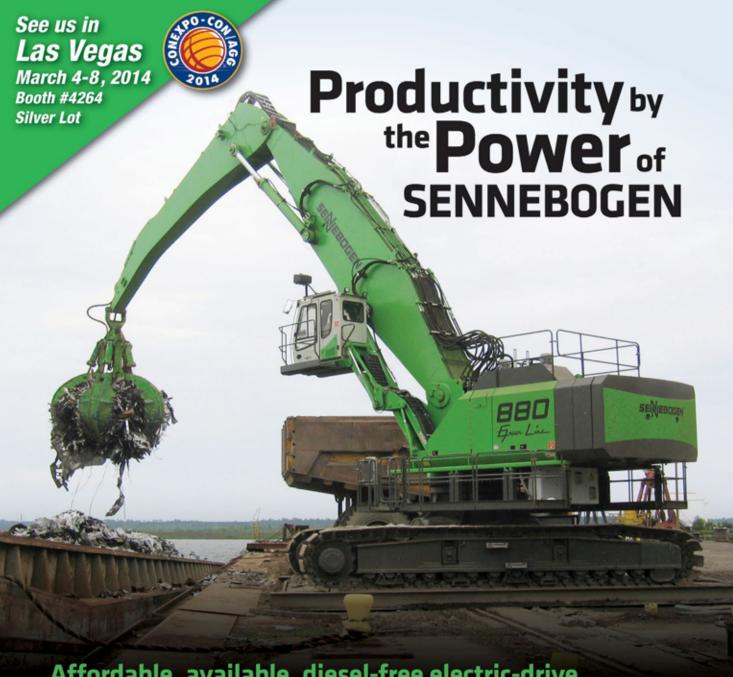
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GUEST OPINION

HOW MUCH GAS TAX DO YOU PAY?

Americans need to be educated on infrastructure and its funding

Americans are largely clueless about how much they pay in gas taxes, according to a new poll released by the American Road & Transportation Builders Association.

When asked how much the average household pays in state and federal fuel taxes, 63 percent of respondents said they either don't know or estimated the total amount at more than \$100 per month. According to Federal Highway Administration data, however, the average U.S. household pays \$46 per month based on the current gas tax of 18.4 cents per gallon.

While 9 percent of those polled responded in the correct range (\$40 to \$59), infrastructure advocates are troubled by the public's unfamiliarity with the critical element of the infrastructure funding debate. Before expiration of the current highway bill (MAP-21) on Sept. 30, 2014, Congress must find new revenue streams, either through a politically difficult gas tax increase or another financing mechanism, to maintain the solvency of the Highway Trust Fund (HTF).

Fortunately, the poll also revealed most Americans believe the federal government should play an integral role in infrastructure investment; 74 percent of respondents supported this philosophy, while 20 percent disagreed.

Raising public awareness

Pro-infrastructure lawmakers and transportation industry organizations are working to raise public awareness of the federal government's vital role in infrastructure investment and why Congress and the administration must work together to find a long-term solution to maintain the solvency of the HTF for decades to come. A recent AED-funded report by researchers at William & Mary University projected a \$365 billion shortfall for the HTF over the next two decades (assuming spending levels and revenue streams stay the same). That same study found that restoring the gas tax's purchasing power to what it was in 1993 (the last time it was increased) by raising it to 25 cents per gallon and indexing it for inflation going forward would eliminate that deficit and generate an additional \$167 billion for roads, bridges and transit.



Christian Klein, AED Vice President of Government Affairs

A recent poll by the American Road & Transportation Builders Association revealed that few Americans know how much they actually pay in gas tax. A large percentage believe the federal government should play an integral role in infrastructure investment, which is largely funded by the current 18.4-cents-per-gallon federal tax.



FIND & RETAIN GOOD EMPLOYEES

Growth in construction highlights the shortage; here are suggestions to help solve the problem

Recent reports show that growth in the construction industry continues to outpace the overall economy. In fact, construction spending hit a four-year high in July, according to a U.S. Census Bureau analysis.

From July 2012 to July 2013, nearly \$1 trillion was spent on construction. Private residential work led the way with a 17-percent increase compared to the previous 12-month period. Within that market, single family construction was up 29 percent and multifamily was up 39 percent.

Economist Ken Simsonson, with The Associated General Contractors of America (AGC), expects the residential trend to continue for the foreseeable future, but he's not so bullish on other sectors. "Private nonresidential spending will be very uneven,

On-site help such as carpenters, equipment operators and laborers are the hardest jobs to fill, according to an AGC report that highlights the shortage of workers in the construction industry. The report also shows that 86 percent of respondents expect finding qualified craft workers will remain difficult or get harder.



and public construction spending remains threatened," he predicted.

Private nonresidential construction did show some growth during the same time as housing, with an overall 2-percent gain. Within this sector, lodging saw a 33-percent boost, warehouses 11 percent and power 5 percent. Public construction is up somewhat as well, in part due to funding from the last highway bill. However, that legislation runs out in September 2014.

This upward trend in activity is having some positive effect on construction employment. From August 2012 to August 2013, 35 states added jobs, one state remained unchanged, and 14 others lost jobs.

"While we would like to see even more robust growth, it is encouraging that most states have a larger construction work force today than they did a year ago," said Stephen Sandherr, Chief Executive Officer for AGC. "It will take a lot more growth, however, before construction employment levels return to their pre-recession levels in most places."

Even with robust growth, employment levels may never reach where they were before the financial downturn a few years ago. Because of the recession, several thousand workers left the field, and many laid-off workers either retired or left construction altogether to find other employment. However, prior to the recession, the construction industry was still struggling to find workers. Statistics showed that the market needed 180,000 new workers just to keep pace with production levels at the time. Today, the market would need to replace almost 100,000 jobs a year to rebuild the work force.



Construction spending hit a four-year high in July, according to a U.S. Census Bureau analysis. From July 2012 to July 2013, nearly \$1 trillion was spent on construction, but with the growth comes a shortage of workers such as equipment operators.

A recent AGC report highlights the problem, showing about 75 percent of construction companies can't find the help they need. Nearly 700 businesses participated in the survey, which AGC conducted during the summer of 2013. Another report from the Construction Industry Roundtable estimates a shortage of approximately 2 million workers by 2017. This report also estimates that 17 percent of craft workers will retire during the next few years.

Taking steps to combat stereotypes

According to the AGC report, on-site help such as carpenters, equipment operators and laborers are the hardest jobs to fill. Nearly half of the companies surveyed said trouble finding supervisors, estimators and engineers was a concern, and 86 percent of respondents expect finding qualified craft workers will remain difficult or get harder. The survey also showed that 72 percent of these companies predicted filling professional positions will continue to be a challenge.

"Many construction firms are already having a hard time finding qualified workers and expect construction labor shortages will only continue to get worse," said Sandherr. "We need to take short- and long-term steps to ensure enough workers are available to meet future demand and avoid the costly construction delays that come with labor shortages."

Organizations and construction companies alike are taking steps to help solve the labor shortage. For instance, 48 percent of businesses are mentoring future workers, 38 percent are participating in career fairs and one-third are supporting high school construction skills academies. Additionally, almost half are offering internships for professionals.

The AGC report also notes that Sandherr urged elected and appointed officials, including Congressional members, to do more to provide opportunities for public school students to participate in programs that teach construction skills. He said skills-based programs offer students a more hands-on way to learn 21st century skills such as math and science, and these types of programs have reduced dropout rates.

Companies challenged to find qualified workers

.. continued

One primary goal is to change negative perceptions of the construction industry. Past surveys have shown the industry ranked as low as 249 out of 250 in terms of possible occupations high school students would choose. Low wages represent a common misconception.

"The construction industry is going to have to get the word out," said Gregory P. Smith, President of Chart Your Course International in a previous article. "Businesses need to actively recruit. They can't just put an ad in the paper anymore and expect to get good results. The military has recruiters that go into every high school in the country to show the benefits it has to offer. The construction industry needs to do the same thing – show students they can make a decent living without going to college."

Positive work environment

As the pool of workers continues to decrease, it's essential for businesses to do everything possible to retain current employees. Keeping those employees not

As the pool of workers continues to decrease, it's essential for businesses to do everything possible to retain current employees. Experts say a positive work environment and recognition are among key reasons why employees continue to stay with a company.



only builds an experienced staff, but it also cuts down on the expense of hiring new employees.

Smith lists key elements to employee retention, which include creating a positive work environment, rewards, recognition, reinforcement, skill development and evaluation.

"Money is an important factor for choosing a place to work, but studies show that most people are willing to accept less pay if they have a workplace where they feel they have input and their ideas are listened to," said Smith. "People will, in most cases, stay with a company longer if the quality of their work meets their needs, even though they could make more money elsewhere. If a company can only compete on money, it will never get ahead because people want more than money."

A recent webinar on the AGC website, presented by Dennis Engelbrecht of the Family Business Institute and in conjunction with Performance Roundtable, featured items businesses can employ to "Attract and Retain Top Construction Talent." The presentation listed best practices and steps companies can take such as providing the right amount of compensation and benefits, which include health insurance and retirement, if possible.

Further practices and steps include incentive systems and bonuses such as profit sharing. An attractive culture and work environment with teamwork and collaboration, career growth, leadership development and opportunity for ownership were also cited as ways to better retain employees.

"You have to keep in mind as an employer that your good employees always have options," said Smith. "But by treating them right and demonstrating that you value them, you stand an excellent chance of being able to hire and keep the best people. And the word gets around – those workers will tell others, and suddenly you have a large number of people knocking on your door wanting to work for you."

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NEW PRODUCT

UP TO THE CHALLENGE

Rugged design of new PC360LC-10 Waste Handler provides maximum uptime in tough applications



Kurt Moncini, Product Manager, Excavators

Waste handling can be an extremely tough application for equipment. Not only is waste material highly varied and difficult to handle, it produces a lot of airborne debris that can wreak havoc on engines and other critical systems. Komatsu designed its new PC360LC-10 Waste Handler to stand up to both types of challenges.

"Anyone who works in transfer stations, demolition, scrap handling and recycling centers knows how severe these applications can be," said Kurt Moncini, Product Manager, Excavators. "Komatsu built the PC360LC-10 Waste Handler with these conditions in mind and came up with a package that helps minimize the impact of these unique environments. We reduced associated downtime and kept the focus where it should be: the work at hand."

Brie	Brief Specs on the Komatsu PC360LC-10		
Model	Net Hp	Operating Weight	
PC360LC-10	257 hp	78,255-79,930 lbs.	

Komatsu designed the PC360LC-10 Waste Handler for maximum uptime in severe-duty applications such as transfer stations and recycling.



Komatsu engineered the PC360LC-10 Waste Handler with a severe-duty revolving frame undercover that has thicker steel for greater protection of internal components. Operators are also well protected from falling debris with standard cab-top guarding. Additional falling-object protection and front window guards are also available.

The heavy-duty boom and arm are made with high-tensile strength steel and have large cross-sectional areas and one-piece castings in the boom foot and boom and arm tips. The design provides excellent strength and durability.

Debris accumulation reduced

Several features reduce debris accumulation and improve airflow, allowing the operator to focus on the job instead of the temperature gauge. Improvements include a high-capacity Sy-Klone® engine precleaner, remote-mounted A/C condenser, engine door and hood corrugated screening package, auto reversing fan and radiator clean-out covers to keep air flowing through the coolers and make cleaning easier. Engine and hydraulic-compartment gap seals prevent debris from entering the radiator-cooling air stream. A wide core cooling package with wide fin spacing keeps air flowing through the radiator, hydraulic oil and charge air coolers. The standard auto reversing fan changes air flow direction to clean screens and coolers on a regular interval.

"Operators can adjust the interval to match conditions, and they can manually reverse the fan at any time with the flip of a conveniently-located switch on the right-hand console," said Moncini. "Six working modes allow operators to match machine performance to the application, which offers high production in tougher tasks and greater fuel efficiency in less strenuous situations, so users get dual benefits."

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A CLOSER LOOK

TRIED AND TRUE HAULER

Komatsu's 930E mining truck boasts industry-leading availability and longevity

There's a reason you see so many Komatsu 930E haul trucks in mines, not just throughout the U.S., but worldwide. Actually, there are two reasons. First of all, nearly 1,700 930Es have been sold since the model was first introduced in 1996. Second, they last a long time, so once a mine has one, it's not unusual that it's still running 10, 12 or 14 years later.

"It's one thing to have a truck that old with 100,000 or more hours on it; it's another for it to still be producing at a high level," said Tom Stedman, Komatsu Product Marketing Manager, Electric Drive Trucks. "But we have many 930Es out there with double-digit years and six-figure hours delivering exceptionally high availability. Historically, we have had the highest mechanical availability of any of the large-haul trucks, and we're very proud of that."

One of the primary reasons for the success of the 930E is the electrical retarder system.

"We believe dynamic electrical retarding is far superior to the mechanical braking system of our primary competitor," said Stedman. "It virtually eliminates brake wear and requires far less maintenance, which improves operating costs and contributes to our high mechanical availability. The other big advantage is speed on grade. Trucks equipped with an electric dynamic retarder can navigate downhill loaded grades as much as 40-percent faster than an equivalent size mechanical-drive truck."

At 320 tons, the 930E is a perfect four-pass match for a shovel with a common 80 ton bucket.

While Komatsu is already at work on a Tier 4 model that will be required in 2018, Stedman

says the "bones" of the truck will remain the same. "It's still early in the redesign process, but the bulk of the changes will be related to the engine and emissions, including improved fuel economy. We will be building on the elements that have made this model so successful, while modernizing important areas, such as the cab, control system and electronics."

For more information on how the 930E-4 or the 3,500 hp 930E-4SE can improve performance on your mine site, call your local Komatsu Distributor. ■



Tom Stedman, Komatsu Product Marketing Manager, Electric Drive Trucks

Brief Specs on Komatsu 930E-4				
Model	Gross Vehicle Weight	Gross Output	Payload	
930E-4	1,106,670 lbs.	2,700 hp	320 tons	

The dynamic electrical retarding system is one reason Komatsu's 930E-4 haul truck provides maximum uptime. It also allows operators to increase hauling speed and improve productivity.



Customer Care From Komatsu - The Product Support Experts



You need your machines running to keep your business running. And you need complete confidence in your expert service team to keep them running at maximum productivity.

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At Komatsu, customer satisfaction is our number-one priority.





www.komatsuamerica.com

EXPANDED REMARKETING INVENTORY

Komatsu increases its offering of quality Distributor-Certified used equipment

In 1999 Komatsu formed its ReMarketing Division to offer quality Distributor-Certified used equipment. Since then, hundreds of contractors throughout North America have taken advantage of these lower-cost alternatives to new equipment.

"We continue to see contractors turning to the rental and used equipment market to augment their fleet so they're not tying up their capital in new machines," said Lee Haak, Director, ReMarketing, which is now a part of Komatsu's Rental and ReMarketing Division. "Komatsu's aim is to offer customers the highest-quality used machinery in the industry, and we've made a concerted effort to expand our organization to meet that goal. For instance, Komatsu employs ReMarketing regional managers (featured on next page) to work directly with Komatsu distributors. ReMarketing has also trained more than 1,000 Komatsu-certified evaluators at our distributors."

Those evaluators do more than just take a cursory glance at a piece of used equipment to determine its resale value. Each machine is put through a thorough, 200-step evaluation process that checks machines from stem to stern. This process includes measuring items such as the undercarriage on a bulldozer. Any item not meeting Komatsu standards is clearly identified.

"We strive for consistency in our evaluations no matter who does it or where it's done," said Haak. "That's important for two reasons. One, buyers know exactly what the condition of the machine is and what's been done to it, as opposed to buying a machine at auction or through another source. Two, if they buy from outside their geographic region, they can trust in the machine's condition without investing time and money to physically go look at it."

Web site available

Haak noted that ReMarketing customers have a large variety of needs. "Some buyers want a machine that's had everything replaced, and others want a fixer-upper that they can buy in the fall and have their mechanics work on during the winter. One contractor may want a used excavator to start a new business, while another is looking for a quality, older wheel loader to park at a gravel pile where they occasionally pull material. We can accommodate practically any need because we have a vast network of inventory available."

Those interested in used equipment will often find certified ReMarketing machines through their local distributor, according to Haak. "That should be the first place they check. Our Web site that's dedicated to ReMarketing machines is also available at www.komatsuused.com. The Web site allows customers to search by machine and category and has listings from across our distributor network. Information on the Web site includes condition, asking price, location and contact information for each machine."

Continued . . .



Lee Haak, Director, ReMarketing

To view available distributorcertified used pieces available through Komatsu ReMarketing, visit www.komatsuused.com.

Used equipment available through Komatsu's Rental and ReMarketing Division is Distributor-Certified, so buyers know the condition of the machine and what has been repaired. "Buying a ReMarketing machine can be a great low-cost alternative to a new purchase," said ReMarketing Director Lee Haak.



Komatsu offering a lower-cost alternative to buying new

the unit's condition and what's been repaired. It's a solid alternative."

.. continued

Many Komatsu ReMarketing machines also qualify for subsidized financing, and warranties are available for purchase. "No other manufacturer does it like we do," said Haak. "We're flexible when it comes to warranties. For example, someone may want a 90-day warranty. Komatsu will do that. If a customer wants a warranty, we'll work with them to purchase one for up to six years and 8,000 hours."

Meet Komatsu ReMarketing's Management Team



Lee Haak, Director, ReMarketing



Ken Van Zanten, Regional Manager – ReMarketing Division



Josh Alters, District Manager, ReMarketing



Mario Muxo, Regional Manager, Mexico and Latin America

Mario Muxo covers Mexico and Latin America and has been with Komatsu for 20 years. "I started handling ReMarketing exclusively about three years ago, and what I've found is that customers appreciate that we offer a solid alternative to new machines. Added value comes in knowing that we'll support it with OEM parts and well-trained distributor technicians."



Lauri McNulty, ReMarketing, Business Analyst

Lauri McNulty is ReMarketing's Business Analyst and handles data and marketing, including posting certified machines to the division's new komatsuused.com Web site. "ReMarketing has grown considerably during the 10 years that I've been with the division. We have more than 2,000 machines up on our site with pictures, condition and inspection reports upon request. Soon that will include a mobile app. It's a terrific resource for researching what ReMarketing has available."

Kent Van Zanten is ReMarketing's other United States Regional Manager, covering the Northeast and Midwest. Van Zanten has been with Komatsu for nearly 20 years, the last nine with the ReMarketing Division. "Komatsu is synonymous with quality and has a strong dealer network that's invested in customer success. ReMarketing adds to that by providing good-quality, used machines that can help users build their business in a cost-effective way. Customers can also buy with confidence knowing that they will be backed by Komatsu's world-class parts and service support."

Lee Haak has been with Komatsu for 33 years and Director of ReMarketing during the past seven years. He's overseen the ReMarketing division's expansion throughout North America and recently into Latin America. Haak is one of two management members who covers the United States as part of its regional management team. "Buying a new piece of equipment isn't always necessary or the best option. ReMarketing machines can offer a lower-cost alternative, and buyers know right up front

Josh Alters joined the ReMarketing team two years ago as a Regional Manager for Canada after 11 years with Komatsu Financial. "Customers have the assurance that machines certified through their Komatsu distributor have been thoroughly inspected and are ready to work. If they view a used unit through their distributor's Web site or our ReMarketing site, they can be confident it will be delivered as represented, with no surprises."

BREAKING NEWS

NEW ATTACHMENTS

Increase productivity in rock excavation and demolition with Xcentric[™] Rippers

If your list of services includes rock excavation and/or demolition, you're always looking for increased performance and production output with lower maintenance costs and less downtime. You can get those benefits with Xcentric[™] Ripper attachments.

Nine models are available for seven- to 150-ton excavators, and all were developed with Xcentric's patented Impact Energy Accumulation Technology, which features amplified eccentric gears and enables efficient rock breaking and demolition. It provides high production in even the most severe conditions, and it can be an economical alternative to drilling and blasting in areas where that may not be possible or is limited.

"The unique design provides greater energy and force than traditional hydraulic breakers," said Rob Brittain, Product Manager, Specialty Attachments with Hensley Industries (a Komatsu company). "That patented technology increases the speed and the blows per minute. Depending on size, it could be up to 1,500 bpm."

Xcentric Ripper attachments have two- to five-times higher production rates in most applications and conditions, according to Brittain. "There are a wide range of uses, from trenching in rocky applications to demolition and underwater use, as well as quarries and tunnels. There is an Xcentric Ripper that will suit nearly every need."

Built for durability

Xcentric Rippers are made with wear-resistant steel for long life, and have a simple structure for ease of maintenance and durability. Adding to Xcentric Ripper's durability is a closed-energy chamber that keeps the attachment virtually free of dust, water and other potential contaminants, even in underwater applications. That helps ensure lower maintenance and repair costs normally associated with severe working conditions.

"Other key benefits include minimal wear-parts consumption and maintenance, with no daily lubrication required; long-life components; less fuel and emissions per ton; easy operation; and increased operator comfort with low-noise performance on par with that of using a bucket," said Brittain, noting the rippers work with competitive brands as well as Komatsu. "We encourage those who do these types of work to consider an Xcentric Ripper. I believe they'll see a noticeable difference in increased production and lower maintenance costs."



Go online or scan this QR code using an app on your smart phone to watch video.



Xcentric Rippers feature patented Impact Energy Accumulation Technology with amplified eccentric gears that enables efficient rock breaking and demolition. It provides high production in even the most severe conditions, and it can be an economical alternative to drilling and blasting in areas where that may not be possible or is limited.





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.





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BUILDING LASTING RELATIONSHIPS

Ed Powers says listening and the "gemba" philosophy lead to improved equipment performance and product support

QUESTION: The initial push for Tier 4 Final machines begins soon. Is Komatsu ready?

ANSWER: Most certainly. As government emissions regulations mandate, we will be introducing our Tier 4 Final products in 2014. As of now, we haven't announced which models are included, but when you visit our booth at ConExpo in March, you will see our introductory-line machines. Komatsu's introduction of Tier 4 Interim machines proved to be very successful, and we expect similar results with our Tier 4 Final machines.

QUESTION: Why were the Tier 4 Interim machines so successful?

ANSWER: Komatsu CARE was one of the major factors in the success of our Tier 4 Interim machines. Prior to their launch, we listened to our customers' concerns relating to this new technology. Their primary concerns were reliability and maintenance. Based on that, we created Komatsu CARE - a complimentary package for all our Tier 4 machines, which provides factory-scheduled maintenance for the first three years or 2,000 hours, whichever comes first, and includes up to two Komatsu Diesel Particulate Filter exchanges. In addition to addressing the required government mandates and supporting our customers' Tier 4 Interim concerns through Komatsu CARE, we also improved the overall efficiency of our products, especially when it came to fuel usage.

A good example of improved efficiencies is our D61i-23 dozer, the next generation of machine-control technology and the first *intelligent Machine Control* (iMC) model in the North American market. It provides automated blade control from rough-cut to finish grading, and it is setting a standard by changing the traditional mast- and cable-aftermarket systems. We plan to introduce more dozer-model sizes



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.

Ed Powers, Vice President and General Manager, Construction Equipment Division & General Manager, Northern Latin America Division.

This year marks Ed Powers' 25th anniversary with Komatsu. He has served as Vice President and General Manager, Construction Equipment Division for the past five years, and in January 2012, he increased his responsibilities to include General Manager, Northern Latin America Division. Prior to that, he served as Vice President of Construction Equipment Sales, West Region Construction Equipment Manager, Director of North America Sales Utility Division, Regional Manager of Rental Services, Deputy Regional Sales Manager (NJ) and Finance Field Representative.

"I have witnessed our business evolve during the past 25 years. The level of sophistication and how rapidly technology advances is mind-boggling. This is the advantage Komatsu has over the competition – we are recognized as an engineering leader. Most manufacturers have huge marketing campaign budgets, whereas Komatsu prioritizes its budget into research and development. This is how we can provide our customers with the most technologically advanced product in the market – the D61i-23 dozer," said Ed, who graduated from the State University of New York in 1988 and later earned his MBA at Keller Graduate School of Management in Chicago, Ill.

Most of all, Komatsu understands that manufacturing the most advanced products isn't the sole answer to satisfying customers' needs. In this market you must offer a premium product, but what sets Komatsu apart from its competitors, is providing superior product support and progressive telematics capabilities. It's all about preventive maintenance and being able to control your costs. Komatsu can provide all the necessary tools, no matter the objective. We listen, focus on gemba and deliver."

Ed and his wife, Berta, have been married for six years and have two children, three-year-old Joselyne and eight-month-old Liam.

Komatsu providing more options for its customers

.. continued

<u>Gemba</u>: a Japanese word meaning "where things are actually taking place." Komatsu regularly visits customers' jobsites (their gemba) to see first-hand how customers use their equipment. The gemba philosophy is one of the key principles Komatsu applies to demonstrate its commitment to quality and reliability.

Komatsu met emissions regulations with its Tier 4 Interim machines, as well as improved productivity and efficiency that resulted in lower owning and operating costs. Tier 4 Final standards begin in earnest next year.

in the months ahead, and we will have an impressive display of our excavator line at ConExpo.

QUESTION: What else is Komatsu doing to make the customer experience better?

ANSWER: Today's construction-equipment users are much more knowledgeable when it comes to owning and operating costs, and they are fully literate in the world of instant communication. Komatsu continues to elevate its telematics capabilities by incorporating new technology, such as KOMTRAX and our new mobile app, which allows users to view real-time critical machine information on their Apple or Android smart phones or via tablet device. Komatsu customers can also order parts online through eParts and communicate with us via text and email. The next generation of contract owners is here, and we are running right along with them.



Komatsu introduced its new D61i-23 *intelligent Machine Control* dozers with integrated grade-control technology that provides automated blade control from rough-cut to finish grading. According to Komatsu's Ed Powers, the machines have received rave reviews.



Komatsu strives to know its customers and their specific needs, so we've made a commitment to visit customers' work sites and witness first-hand their work flow. This gives us a true understanding of their needs and helps build long-lasting relationships. The Japanese refer to this visualization process as gemba, and during the past few years, Komatsu has aggressively employed the gemba philosophy. I firmly believe that this has contributed to our success today.

This customer-centric approach is very important to Komatsu. The Tier 4 technology is extremely complex and there is still a steep learning curve for some of our customers. Komatsu and its Distributors are working together to help customers tackle that learning curve more quickly, which is another advantage of Komatsu CARE. During the program's regularly scheduled maintenance visits to customers' jobsites, we have additional opportunities to share KOMTRAX data, visualize their applications and personally ensure that customers are entirely satisfied. Komatsu is committed to being more than just an equipment provider – we are a one-stop-shop solution provider.

QUESTION: What market opportunities exist?

The rental market has always been a good opportunity for growth. That's even more apparent now, as the Construction Equipment (CE) market recovers from one of the worst economic downturns since the Great Depression. Typically the rental market has represented approximately 20 percent of our entire CE demand, but it's currently at nearly 45 percent, and we expect it to remain a dominant segment of our business. Through our Rental and ReMarketing Division, Komatsu and our Distributors are ready to enhance and reinforce our rental presence in the growing market.

QUESTION: You mentioned the CE Market returning to pre-recession levels. How are markets looking today?

ANSWER: During the past several years, the CE market recovery has been fueled by the commercial, infrastructure and rental segments, with much of this growth resulting from increased energy demand. We are very optimistic that as the housing market continues to recover at a long-term sustainable rate, the CE demand will also remain solid, which will invigorate the overall economy.

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NEW PROGRAM REDUCES COSTS

Komatsu offers incentives and financing to help you make needed repairs now

For many construction companies, the winter months are a time to take stock of and make critical repairs to equipment in order to ensure it's ready for the next season. Among those critical repairs are major items such as hydraulic or drive train overhauls and engine rebuilds, which are designed to bring machines back to like-new performance.

Although repairs can be costly, delaying those repairs can lead to unexpected downtime and higher lost-time costs. Komatsu recognizes this, so it is participating in and supporting distributor incentives for major machine repairs using new and Komatsu Reman parts. Additionally, Komastu recognizes that it can be difficult to pay in-full for the needed repairs, so they are also providing attractive financing for qualified customers, including zero-percent financing for 12 months and no payments for 90 days through Komatsu Financial.

"We understand that there are a variety of reasons for putting off needed repairs, but doing so could put you at risk for significant downtime when a machine is most needed," said Glenn Schindelar, Senior Marketing Manager. "Komatsu is committed to finding solutions to help ensure those larger repairs get done now so that our customers' machines are running at peak performance when it's time to go to work. This is a way to do that at a reasonable cost that can either be paid for outright or financed over a period of months."

To take advantage of this program, repairs must be done by WPI's Komatsu-certified technicians either in the shop or on the field. All parts carry a one-year, unlimited hours warranty.

"Having the work done by Komatsu-certified technicians offers peace of mind that it's done right, and having a warranty provides added value," said Schindelar. "We encourage those considering repairs to check out their distributor incentive programs and financing to see if it's right for them. We find that customers who take advantage of specials like these tend to greatly benefit."

Schindelar cited examples, such as a sand and gravel company that was having a difficult time affording the upkeep of its machines during the economic downturn. The company fixed what it could, but a more comprehensive solution was required. Using the local distributor's incentive program, combined with zero-percent financing through Komatsu Financial, the company was able to put one machine back into proper working order. Because the program worked so well, the company decided to finance repairs on two additional machines. This one customer, and many others like him, was able to completely repair his machines and have them totally ready for full production without impacting his short-term cash flow.

"We have many similar stories where customers used an incentive program and financing to lower their cost and manage their payments, so they were able to repair their machines without a major impact to cash flow," said Schindelar. "It showed them that Komatsu and their distributor were committed to their success."



Glenn Schindelar, Senior Marketing Manager

Komatsu is participating in and supporting dealer incentive programs with discounts on new and Komatsu Reman parts used to make major repairs. Komatsu is also providing attractive financing options for qualified customers, including zero-percent financing for 12 months and no payments for 90 days through Komatsu Financial.



CLOSING IN ON TIER 4 FINAL

Last round of emissions regulations to go into effect in 2014

After almost 20 years of engine regulations, the beginning of the end is in sight with Tier 4 Final standards that begin implementation in earnest in 2014. The Final standards are designed to reduce engine emissions of oxides of nitrogen (NOx) and particulate matter from new machinery to near zero.

Engine horsepower determines when equipment manufacturers must meet Tier 4 Final regulations. Smaller, compact equipment must meet the requirements beginning this year, with a much larger wave of new machinery coming next year. Construction, mining and other types of machinery from 175 horsepower to 750 horsepower are to be introduced in 2014, and those with horsepower from 76 horsepower to 174 horsepower will need to meet the standards in 2015. Many new machines meeting Tier 4 Final standards will be on display at CONEXPO next March in Las Vegas.

The goal of reducing engine emissions of NOx and particulate matter began with the initial Tier 1 standards in 1996. Tier 2 started in 2001, with Tier 3 following five years later. NOx is a key ingredient in smog, while particulate matter is essentially soot. The government considers both to be significant health hazards.

In 2008, Tier 4 standards went into effect as part of a two-stage phase-in, beginning with Tier 4 Interim, which reduced NOx by 45 percent and cut the soot an engine could emit by 90 percent, compared to Tier 3 regulations. Tier 4 also required the use of low-sulfur diesel fuel containing less than 15 ppm sulfur, maintenance-emissions filters and Tier 4-specific engine oil.

Under Tier 4 Final, engine manufacturers will have to cut NOx by an additional 80 percent. The EPA estimates that when Tier 4 Final engines fully replace older engines, they will reduce emissions by about 738,000 tons of NOx and 129,000 tons of particulate matter annually. The EPA says that reduction would prevent an estimated 12,000 premature deaths each year by 2030.



Tier 4 Final regulations for machinery from 175 horsepower to 750 horsepower go into effect next year, marking the beginning of the end of the tier

SIDE TRACKS

On the light side



"Those were the good old days leading Santa's sleigh. Then along came GPS ..."



"Looks like Santa was replaced by a Santa app."

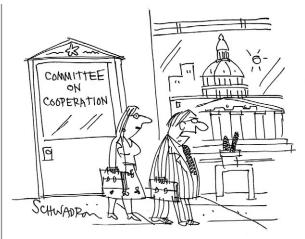
Brain Teasers

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

- 1. N C A R E _____ ____
- 2. DUBGILIN ____ D____

3. L E V D E O R E P _____ P ____ P ____

- 4. N E R E G _____ <u>E</u> ____
- 5. O B X O L T O ____ <u>L</u> ___



"I'll work with people from the other party, but don't expect me to "Friend" them on Facebook!"

Did you know...

- It took only 95 minutes to construct a Model T Ford in 1914.
- The first in-flight movie was shown on an internal U.S. flight in 1929.
- Motorized ambulances were first used in France.
- The average suit of armor weighed between 50-55 pounds.
- The first hurricane named after a man was Hurricane Bob in 1979.
- There are 119 grooves on the edge of a quarter.
- The phrase "The quick brown fox jumps over a lazy dog" contains every letter in the alphabet at least once.
- Alaska has over 5,000 earthquakes each year.
- Tug of War was an Olympic event between 1900 and 1920.
- The largest snowman ever built was made in Maine in 1999. He stood 113 feet tall.

MORE INDUSTRY NEWS

App allows users to alert Congress to infrastructure deficiencies

If you're stuck in traffic or see what you believe is a bridge defect and want to let someone know about it, there's now an app for that. Available free on mobile devices, the "I'm Stuck" app allows users to alert Congress to conditions such as traffic congestion, airport delays, off-schedule busses and more.

Developed by the organization Building America's Future (BAF), the app is designed so users can directly and immediately e-mail their congressional representatives. BAF is a bipartisan coalition of elected officials dedicated to new investment in infrastructure, which has consistently received low grades through the years from the American Society of Civil Engineers.

"All elected officials, including me when I was a mayor and governor, pay attention to what the public is saying," said former Pennsylvania governor and BAF Co-Chair Ed Rendell. "The public understands the infrastructure problem. The states have demonstrated a willingness to do their part. So, we're calling on Congress to pass a significant infrastructure investment plan."

EPA introduces National Stormwater Calculator to estimate rainwater and runoff

The Environmental Protection Agency recently introduced a National Stormwater Calculator that lets users estimate the annual amount of rainwater and frequency of runoff from a specific site anywhere in the United States. It's designed so site developers, landscape architects, urban planners and homeowners can reduce runoff. Estimates are based on local soil conditions, land cover and historic rainfall records. Users supply information about a site's land cover and select the types of low-impact controls they would like to use. The calculator then provides seven, green infrastructure practices they can use to reduce runoff. The calculator is available for download from the EPA's Web site at www.epa.gov. ■

Report estimates needs for drinking-water infrastructure funding

A new report says the nation needs to invest more than \$380 billion between now and 2030 for drinking-water systems to remain reliable. Released by the EPA, the report says current infrastructure averages about 700 water-main breaks a day. It also highlights the needs of more than 73,000 systems that could use expansion, replacement and/or rehabilitation.

The report follows others from the Congressional Budget Office and the Water Infrastructure Network, which estimate 20-year investment requirements of between \$331.2 billion and \$571 billion. ■

Texas construction industry expected to see double-digit growth

Economists are predicting that the construction industry will start seeing double-digit gains in Texas and across the country. Construction is also said to be one of the most powerful forces driving job growth as the industry continues to expand at a rapid pace.

IHS Global Insight reports that in the first quarter of 2013, Texas home prices were up 5 percent from their pre-recession peak, although CoreLogic Inc. stated that Texas home prices are still 2 percent below their pre-recession peak. Texas, along with eight other states, has also already reached pre-recession employment numbers. Nine additional states are expected to reach this number by the end of the year. This boost is primarily driven by the robust growth in the housing market. Colorado, North Dakota, Oklahoma, and South Dakota also exceeded their pre-recession home price peaks. Many believe Texas is doing so well because of its size and highly-diversified industries combined with the relatively low cost of land and low taxes.

According to recent data from the Associated General Contractors of America, Texas had a 4.1 percent increase in construction employment between August 2012 and August 2013. This ranks Texas as the second largest construction employer in the nation – only California had more construction growth during this time period.

As the housing market continues to rebound due to job growth and low interest rates, the Texas construction industry is expected to increase and see future gains.



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