THIRD ISSUE 2015

FOCUS

PRECISE WORK ON THE WATER

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- KING OF COMMINGLED – ATLANTIC COAST RECYCLING

Kawasaki
KCM

95Z7 XTREME

95Z7 XTreme

- 7.3 - 9.8 cu. yd. Bucket
- Short Boom Arm Configuration
- Front Chassis Enhanced and Reinforced
- Bucket Cylinder Increase
- Bucket Linkage Enhanced

Increased Breakout Force by over 26%!
Increased Tipping Load by over 10%!

115Z7 XTREME

The 115Z7 XTreme is ideal for two-pass load out operations, Coil Handling, Block Handling, Logging

- 8.3 - 9.15 cu. yd. Bucket
- Short Boom Arm Configuration
- Front Chassis Enhanced and Reinforced
- Bucket Cylinder Increase
- Bucket Linkage Enhanced

Increased Breakout Force by over 6%!
Increased Tipping Load by over 15%!

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Kawasaki KCM

A HERITAGE OF INNOVATION

KCMA is the most experienced manufacturer of articulated wheel loaders in the world. Since introducing our first models in 1962, we have maintained a leadership position in technology, service, and support. With a heritage grounded in innovation through Kawasaki Heavy Industries, KCMA Corporation's focus on wheel loaders translates into real benefits for you and your business.

Kawasaki-KCM articulated wheel loaders incorporate innovative design features coupled with extensive knowledge and experience gained from real-world applications. Since 1978 KCMA has been listening to, and learning from, customers and dealers in the North American market. As a result, Kawasaki-KCM wheel loaders continue to evolve with a constant focus on one thing — producing the most durable, most efficient, most dependable wheel loaders possible.

YOUR WHEEL LOADER SPECIALISTS

KCMA offers a full range of wheel loaders to handle virtually any task. Combined with a complete selection of attachments, or special options packages, your Kawasaki-KCM wheel loader can be equipped to tackle the most demanding applications or environments.

- **17 Models**
- **45 HP – 720 HP**
- **.78 cu. yd.– 13 cu. yd.**

Kawasaki KCM

Sam Shelton, Editor
(770) 499-7000 • SShelton@KCMCORP.com

Unparalleled smoothness and precise work control is now available with the new 67TM7 and 70TM7 models.

PARALLEL LINKAGE AND KCM VALUE

NOW YOU CAN HAVE THE RELIABILITY, FUEL EFFICIENCY, VISIBILITY AND SMOOTH HYDRAULIC POWER OF THE KAWASAKI-KCM Z7 SERIES LOADERS WITH A PARALLEL LINKAGE FOR LEVEL LIFTING.

The Kawasaki-KCM 67TM7 and 70TM7 continue in the long line of TaskMaster™ loaders from KCM. These state-of-the-art machines operate in the popular 2.5-3.5 cubic yard class. They bring many of the same features as their Z7 counterparts such as great visibility, great fuel economy, smooth transmissions, excellent power and response, and great looks, too.

INTRODUCING THE 67TM7 AND 70TM7 MODELS.

Both TaskMaster models have a proven, true parallel linkage for flat lifting throughout the lift cycle. This high visibility linkage complements the industry leading visibility of the Kawasaki-KCM loaders. Quick Couplers are standard on both machines, too, to provide great versatility in many applications. Third spool hydraulics can be added to operate grapples, brooms and other attachments.

The TaskMasters from KCM have great operating specifications including excellent tipping loads, breakout force and dump clearance. These machines are at home in a wide range of applications from handling

pipe on a pipeline job, logs or lumber in a sawmill, lifting cars in a scrap application or working in an agricultural application loading grain or fertilizer. With the standard coupler the TaskMasters can handle a range of attachments well. Both machines have standard telematic systems to provide machine data to remote personnel to help manage the operation more efficiently.

The 67TM7 (2.8 cy/152 HP) has a four speed hydrostatic powertrain. This offers smooth power when you need it. It also has great responsiveness and a dynamic "natural" braking that keeps axles cool and long brake life. The inching feature of the hydrostatics provides precise speed control that operators like. The reliable diesel engine has great power and meets all Tier 4i emission standards.

The larger 70TM7 (3.4 cy/168 HP) has a five speed mechanical powertrain that is super smooth and efficient. The emission system of the 70TM7 is the simplest in the industry. No DPF (Diesel Particulate Filter) is required to remove Particulate Matter and no SCR (Selective Catalytic Reduction) is needed to reduce NOx. So that means no regeneration issues of any kind. Simple. The 70TM7 can be equipped with either 20.5x25 or 23.5x25 tires to fit the application requirements.

The TaskMasters retain many of the E.P.I.C. features of the Kawasaki-KCM Z7 series. These features provide benefits of Efficiency, Power, Intelligence and Comfort that owners appreciate. These machines are not only intelligent but they are designed for efficient use of the power available to provide low operating costs and great fuel economy. Features like IntelliTech allow the operator to adjust the machine characteristics to match the application. Comfortable controls and a quiet, roomy cab make the TaskMasters an operator's choice. Patented oil impregnated, HN bushings in all of the linkage pins, provide a lubrication reserve to insure that the pins won't run dry and will last longer.

Like all Kawasaki-KCM loaders from KCM, the TaskMasters are backed by an extensive dealer network throughout North America. This dedicated network of independent dealers offer outstanding support. These dealers are backed by industry leading support programs by KCM such as the Rebuild Exchange program for all major components, highest off shelf parts availability in the industry, and a state of the art oil sampling program that is provided with all extended coverage programs. And KCM is a wheel loader specialist so the support staff is the best in the business. With hands on experience that goes back to 1981 when these machines were introduced to North America, people are KCM's biggest asset. This expertise results in a company that is flexible and responsive to the needs of the market.

This is the view your operator will have when he's working. It's a wide, unobstructed view of the work place and the front boom assembly for smooth, safe and efficient production.

An industry-leading parallel linkage design provides a very good view of the forks for quick, smooth positioning for a quick pick.

The open-center hydraulic operating system allows power to flow to the most pressing need.

A TaskMaster is perfect for providing a smooth ride and balanced load over uneven ground.

The company's 67Z7 loader never leaves the 45' x 120' barge, during the four month project.

TRANQUILITY AT A PRICE

COSTON MARINE SERVICES HAS BUILT A DREDGING COMPANY IN PALM BEACH COUNTY FLORIDA.

The beautiful inland home sites with expensive boats bobbing up and down from the wake of boats entering and exiting the protected enclave are beautiful. And, the manmade canals provide a network of waterways to access those home sites and marinas.

But, unfortunately, the relentless tides from the Atlantic Ocean work non-stop, 24 hours a day, 7 days a week to fill in those canals and piers, wave by wave, with new sand and silt. It is a continuous cycle. There are a select group of contractors working along the Florida Coast to remove this incoming sand, Coston Marine Services, Inc. is one of those.

COSTON MARINE SERVICES, INC.

Dan Coston, President of Coston Marine Services, Inc. has been in the business of moving the tide's silt and sand for nearly 20 years by dredging the encroaching material from individual moorings and various waterways throughout the Southeast Coast of Florida.

"We started working with small dredging jobs for individual home owners and then added bigger commercial and bonded projects using clamshell cranes, excavators and barges," notes Coston. My dad, now retired, had his marine contractors license, I came onboard and we slowly added dredging to expand the scope of our capabilities and scope of projects."

"We have an excellent history with our customers and the county and feel honored to be a key contractor," says Coston, with more than a hint of pride. "Working on the water is a unique package of hard work, pleasing multiple groups of people, and dealing with new problems every day."

"Currently we have a very nice job where we are dredging 32,000 yards of material to expand the Palm Harbor Marina basin and build a county marine habitat site," notes Coston.

THE PROCESS

"It requires us to dredge to a target depth of –12' MLW with the American 9260, a 110 ton crane with a 4 cubic yard clamshell bucket capable of dredging the sand while sitting on its own barge held in position by steel spuds," continues Coston.

"We have one wheel loader, the Kawasaki-KCM 67Z7 on the barge and its job is to strategically move the wet sand from the pile made by the crane to areas around the barge so that we end up with a balanced load of around 400 cubic yards of material, ready to be tugged to our off-load site," says Coston.

It's easier said than done. Working only on the single, 45 foot wide by 120 foot long barge, the loader operator must constantly make sharp, three point turns, even with its bucket filled to capacity hovering over the 4 foot high barge wall. There's an integral curb built into the barge edge and a four foot high wooden wall to help maximize the barge's carrying capacity. But, the loader operator must still contend with the tightness and unsteady floor of the rocking barge and the ever-reduced space as the material is piled higher and higher—plus the real fear of possibly driving right off the barge.

"I broke in the new Kawasaki-KCM 67Z7" says Steve Dollivar, Crew Chief. "And I really like the visibility that this machine offers. The hydrostatic transmission is new to us as well. I like the way it gives the operator more control as far as stopping and starting. There's no fear of the loader getting away from you in this confined space." By being hydrostatic, the transmission automatically retards or slows the loader the second pressure is taken off the accelerator pedal. "And, I like the size. The 3.1 cu. yard general purpose bucket is a good fit for our purposes," says Dollivar.

"Loading the barge is a skill that takes practice," notes Dollivar, "to do a good job of filling the barge so that it stays level. When it's fully loaded, we usually have about 18 inches of freeboard. But, the actual operation of the loader; well, I've been training one of our deckhands how to run the loader, and the 67Z7 is making him look like a pro. It is sort of intuitive and helps the operator do a good job."

Once the barge is loaded, which typically takes 2½ hours, the barge is moved by tug to the off-load destination. There it takes about 2½ hours for the same Kawasaki-KCM 67Z7 loader to unload the barge by loading and then dumping the material over the front of the barge onto a spoil island "For this job, we're moving the material to a lagoon provided by the county."

WORKING ON THE WATER

"Marine projects bring their own set of problems and concerns," notes Coston. "And I guess they can be summarized as an unpredictable, remote and very harsh environment."

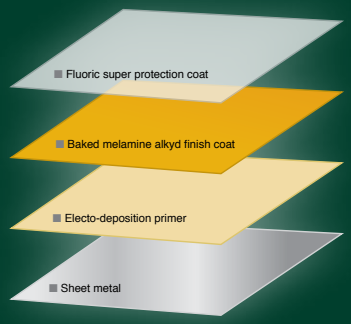
The unpredictability comes from the weather, tides and currents. The remoteness comes from possibly being 300 feet from a city street but hours away from getting fuel, repairs or supplies transported by boat.

"I was impressed with the manufactured soundness of the new 67Z7 says Coston. the cab is well suited for operator comfort, has great visibility and very importantly the immersion paint process will resist corrosion, reduce maintenance and retain value in a very harsh environment."

In reality, ALL Kawasaki-KCM Z7 models now receive an exceptional, industry-leading coating process that provides a much longer, corrosion free life as is illustrated.

Coston Marine Services, Inc. is serviced by GS Equipment, Pompano Beach, Florida.

MULTI-COAT PAINTING PROCESS



The advanced multi-coat painting process, consists of electro-deposition (ED) primer, baked melamine alkyd finish coat and fluoric super protection coat achieving a durable finish with high resistance to corrosion and damage.

The loader is charged with moving the sand already loaded onto the barge by crane first to balance the barge load, and second to the spoil island.

REDUCING COSTS BY INVESTING IN A SAFETY TECHNOLOGY SYSTEM

When considering the costs associated with running a worksite, companies are constantly trying to figure out efficiencies that lead to increased productivity and reduction of costs. When every dollar counts it is imperative that these decisions are constantly evaluated to ensure the profitability of each individual project. The raw costs of goods and labor associated with the project, and managing an efficient supply chain are typically the highest priority when managing a cost effective project. What is sometime overlooked are the potential cost reductions associated with investing in safety technology.

Much like an insurance policy, it takes something negative to happen before cost reductions can be measured; the potential cost savings that can be attributed to an investment in safety technology are only measurable when assessing the negative impact that a worksite accident might have on productivity and a company's bottom line—vehicle downtime, potential site shutdown, legal ramifications, etc.

When making an investment in a piece of machinery, insuring the equipment for damage or loss is not an option, but a requirement. However, in most cases the addition of safety technologies is viewed as an option—despite the inevitability of an accident in the lifecycle of the vehicle.

WHAT ARE YOUR OPTIONS?

As safety technology becomes more readily available you will find you have a variety of options. We are seeing the use of camera/monitors becoming more and more prevalent—in some cases standard—in many heavy duty industries. While this is a step in the right direction, a camera/monitor system is only part of the safety equation.

A camera/monitor system requires the operator to be looking at the monitor to identify a potential hazard. And as we know, when working in a busy worksite, it is not a realistic expectation that the operator be focused on their in-cab monitor at all times. Another limitation of camera/monitor systems is that in many, if not most cases, worksites are dirty places. It only takes a small amount of dirt, mud or dust to render the visual capabilities of the system useless. If the camera/monitor system is not supported by an active safety system, accidents will continue to occur and worksite costs will continue to rise.

WHAT MAKES A SAFETY SYSTEM ACTIVE?

An active safety system will alert the operator of an obstruction regardless of where there attention is directed. There are a number of technologies available that can detect obstructions including laser, ultrasonic radar, Doppler radar and pulsed radar.

For the purpose of automotive uses, both laser and ultrasonic radar has become commonplace. These are effective in passenger vehicles, but have serious limitations in heavy duty vehicle industries. Environmental factors such as dirt, mud, dust, rain, snow or ice can all render the effectiveness of the systems useless.

Relatively unchanged over the past 75 years Doppler radar has practical uses in a number of applications, however has a couple of major drawbacks for heavy duty vehicle industries. Independent testing has found that with current available products, the defined detection zone can be inconsistent, which means that the radar is only picking up objects accurately part of the time, negating the radar's effectiveness. Additionally, Doppler radar only picks up objects when movement is involved—a major flaw considering that if there is a stationary object or person behind a vehicle, it will only pick up that object or person after the vehicle is moving—unfortunately, by the time the object is detected, a collision may have already occurred.

Pulsed radar, which has been developed and refined over the past 15-20 years, overcomes all of the above issues. Pulsed radar technology has the ability to pick up both moving and stationary objects, which overcomes the potential danger associated with not seeing stationary objects or people; the detection range can be manipulated so only objects in the operator's blind zone are being detected; and there are products available that are impervious to environmental factors (dirt, mud, rain, snow etc…) and are hardened for the specific purpose of working on heavy duty equipment. For use in heavy duty equipment industries, pulsed radar technology is the best available option for worksite object detection.

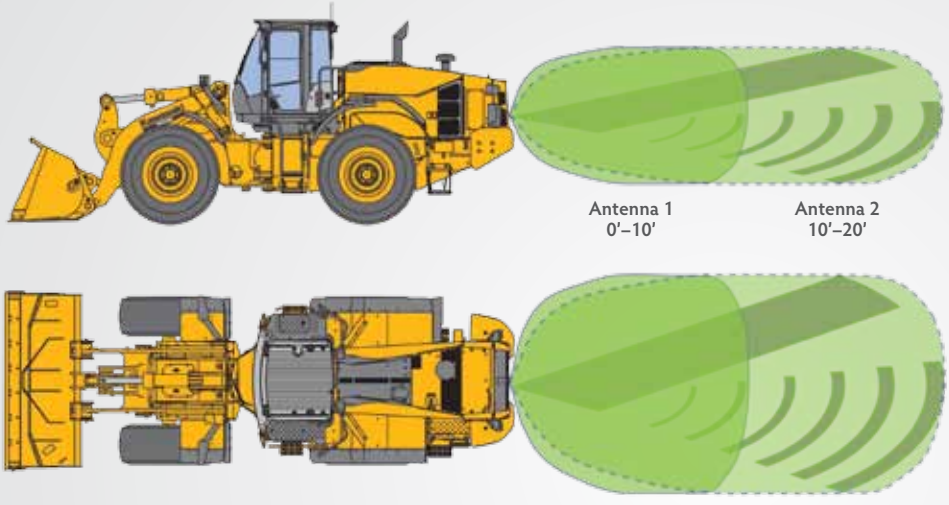
The adoption of the best possible active safety system will undoubtedly pay off over the lifecycle of the vehicle. A small investment considering the overall costs associated with purchasing a vehicle, and the avoidance of potential costs associated with vehicle accidents should make the decision to invest in a heavy duty safety system standard for your company. It is worth noting that no matter what system your company decides to invest in, no value can be placed on the importance of operator education. This is the key to ensuring the safest, most efficient and cost effective worksite possible.

PRECO Electronics

After assessing a number of technologies that would enhance the safety of their wheel loaders, KCMA Corporation has teamed up with PRECO Electronics, who designs, engineers and manufactures a line of safety radar products under the PreView Radar Systems brand for their Kawasaki-KCM wheel loader line. PRECO has developed a patented radar designed specifically for heavy duty vehicle industries, and is leading the industry in advances in object detection technology. The collaboration marks a dedication to increasing the safety standard for heavy duty vehicle industries.

PREVIEW RADAR DETECTION ZONE

The PreView sensor sends a constant pulse to "look" for objects in the detection zone. When an object is detected, a warning tone will sound in the cab along with visual indicators overlaid on the vehicle monitor to give the driver the notification they need to avoid an accident.



KING OF COMMINGLED

ATLANTIC COAST RECYCLING INCORPORATES THE LATEST IN RECYCLING TECHNOLOGY TO SORT COMMINGLED MATERIALS FROM ITS MUNICIPAL RECYCLING PROGRAMS IN NEW JERSEY AND THE NORTHEAST.

A new 70Z7 with hydraulic grapple bucket moves the commingled recyclables from where the municipal trucks dump into bins for later processing.

Over the past decade, municipalities have found it more advantageous to administer recycling programs where the residents 'commingle together' the recyclables rather than place them separated at curb. Unfortunately, that leaves the separation of the recyclables to the processor, who must now sort and grade all the recyclable materials for sale to markets that will use the separated recyclables to make new products.

Atlantic Coast Fibers, LLC, the parent company of Atlantic Coast Recycling, is one of the largest privately owned recycling companies in the United States. The Riviello, Zozzaro and Gaccione families have been processing recyclables in New Jersey and New York for several generations.

"There used to be a huge market for old newspapers," notes Larry Zozzaro, a partner in the company. "Today, it's the combination of many types of material that we receive and process that makes us money."

The company's largest facility is a 100,000 square foot processing plant in Passaic, NJ with cutting-edge equipment that separates the materials with air, overhead electromagnets, eddy current separator for aluminum cans, multiple optical sorters to separate PET (water and soft drink bottles), HDPE (milk and laundry bottles), Polypropylene (yogurt and margarine tubs), a glass breaker/separator and—humans watching and pulling objects that made it past the automated sorting equipment.

Working 20 hours a day, the company processes an amazing volume, with separated materials bailed and loaded into waiting semi-trailers and containers for transport to both domestic and foreign markets day and night.

LOADERS RECEIVE ALL PRODUCTS

Municipal garbage trucks bring the commingled material to multiple local sites operated by Atlantic Coast where they simply dump and leave. "We call it poop and scoop," laughs Harvey Straus, Manager of Trans-loading Operations. "Our trans-loading facilities receive all sorts of "Class A" traditional recyclables from both household and commercial accounts. All of these recyclables come in as a single stream, which saves trucking and collection costs for the municipality. But, you have to separate it."

A Kawasaki-KCM 50ZV is used to push commingled recyclables into the processing plant for sorting.

"I think you get a real value with the Kawasaki-KCM loader." Harvey Straus, Trans-loading Manager.

"Our Kawasaki-KCM loaders roughly separate and push the recyclables into different bins so our Municipal customers never have a wait," notes Straus. "We then load our walking floor trailers with the recyclables for transport to our North Jersey processing plant in Passaic."

"We use wheel loaders with a grapple instead of excavators because it's almost impossible for an excavator to move quickly from bin to bin; and since excavators don't have blades, we wouldn't be able to scoop loose material into a pile. I think of a wheel loader like a universal wrench. it's good at a variety of things."

The company has found that they can trust their Kawasaki-KCM loaders to be so dependable that they do not budget redundancy. "We have one big loader at each facility," confirms Straus. "and a compact loader for clean-up. Reliability is built into these machines and the Cummins engines are easy to maintain."

The company's 80ZIV-2 loader was bought first in an attempt to improve productivity over what the company had been using. It was purchased standard with the exception of the 4 yd. bucket with hydraulic grapples.

Solid tires were added to protect against glass punctures. The success of that loader, still in use, led to the purchase of a 2nd loader, an 80ZV equipped the same. Recently, they selected a Kawasaki-KCM70Z7, similarly equipped for clean-up and other functions.

"It's amazing what our grapple buckets can pick up and the weight these loaders can handle," notes Straus. "I really like the new 70Z7. It's very compact, and the visibility is great. The bucket is a little smaller, at 3.5 cu. yds., but you hardly see any difference in what it moves. Since we use it primarily indoors, it needs to be very maneuverable—and it is! Our walking floor trailers have 14 foot sides, so we decided to go with the high-lift package and bigger tires just to make sure we had plenty of clearance. The loader does a very good job of clearing the side."

Being an old hand in the recycling business, Straus admits some partiality towards American engineered loaders. "I've been operating machinery since I was a young boy on my parent's farm. Since those early days, I have had several decades of experience operating equipment in this industry. When I was investigating loaders recently, Larry Zozzaro suggested I look at the Kawasaki-KCM. I did. To say I was impressed and surprised would be an understatement. We got one and I can truly say it opened the door for two more. ***I think you get a real value with the Kawasaki-KCM loader."***

"These loaders go to work, and stay at work. If you were here on any Wednesday, which is our peak day, you'd see Municipal trucks lined up like a parade waiting to dump. You'd also see the 70Z7 working hard, so trucks are in and out in a flash. The machine just flies"

KAWASAKI-KCM SUPPORT

"We've had very good luck with the Kawasaki-KCM loaders," notes Larry Zozzaro. "I actually recommend them to everyone, and, I really like working with our dealer, Harter Equipment."

"The people at Harter, have been great" says Straus, "They are not too large, which means I can always reach someone and they keep things simple. With some of the larger dealers, you have to go through a chain of people to get an answer to a question. Not so with Harter, decisions are made fast. I'm pleased however, that with the Kawasaki-KCM loaders, I really haven't had a problem."

Atlantic Coast Recycling is serviced by Harter Equipment, Inc., Millstone Township, New Jersey.

Kawasaki
KCM

Z7 AN E.P.I.C. GENERATION

INDUSTRY EXCLUSIVE INNOVATION

Kawasaki pioneered the Z-Link design to provide unmatched utility, high breakout force and efficiency in its loaders. The Z7 generation implements brand-new patented technology, industry exclusive innovation, and input from owners and operators all over the world. We've engineered the Z7 series from the ground up!

> 15 Models > .78–13.5 cu.yd. > 45 HP–720 HP

- EFFICIENT
- POWERFUL
- INTELLIGENT
- COMFORTABLE

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