



3RD ISSUE 2008

FROM TRASH TO TREASURE

KAWASAKI HELPS COMPANIES PROFIT

FRANKLIN IRON AND METAL • KOCHERGEN FARMS COMPOSTING • FOCUS ON SOUTH AFRICA

KAWASAKI KEEPS IT SIMPLE.



Since 1962, Kawasaki has been listening to and learning from customers and dealers in the field. As a result, Kawasaki wheel loaders continue to evolve, with a constant focus on one thing — producing the most durable, most efficient, most dependable machines possible.

EASY TO OPERATE.

In a world of increasing demands, tighter deadlines, shrinking budgets and complicated contracts, better efficiency and greater productivity are a must. Innovative high-tech features on all Kawasaki wheel loaders allow the operator to adapt to the environment and the application right from the cab.

EASY TO MAINTAIN.

Diagnostic and operational modules monitor fluids and filters, and constantly provide information on everything from engine and transmission codes to location, hours, alarm sensors and machine performance data.

EASY TO DO BUSINESS WITH.

No run-arounds. No layers and layers of management. No distractions from competing product lines. Wheel loaders are our only business. Got a question? We'll get you an answer. Need a part? It's on its way. Quickly. Kawasaki offers flexible warranty programs, a state-of-the-art parts distribution system, an in-house rebuild center, and an experienced, knowledgeable support staff, focused on serving you.

The independent dealers that represent and support Kawasaki loaders are experts in their markets and are dedicated to providing you with the best service available.

Together, we are committed to making your investment in a Kawasaki loader a sound business decision that will pay dividends for years to come.

KAWASAKI. ONE FOCUS. COMPLETE SOLUTIONS.



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WITH KAWASAK

here was a time in America when socks were darned, clothing patched, and shoes resoled. Broken appliances were repaired and cars nursed until they literally fell apart. Those days are long, long gone.

Today's exhausting 24/7 pace leaves little time or profit margins for repair. Our disposable society produces cheaper and fancier goods, but also generates more trash than ever. So with the growing emphasis on green, it's not surprising that metal recycling, once the norm during World War II, is experiencing a resurgence. Especially since the ravenous overseas appetite for metals has skyrocketed prices and gobbled up supplies. As a result, recycling of steel, copper, and aluminum, especially for stateside use, makes good economic and ecological sense.

IN THE ZONE

Franklin Iron and Metal Corporation in Dayton, Ohio, has been in business since 1962. The company goes out and collects items like scrap metal, iron, steel, appliances, lockers, doors, furnaces, and autos from industrial clients as well as accepts drive-up loads from the general public, contractors, and others. As the scrap recycling industry has matured, Franklin has upgraded their facilities to keep pace, at the insistence of their president, Jack Edelman. Concrete and asphalt paving replaces mud.



Shears cut metal down to size.

X-ray machines check all scrap for radiation. Waste oil is treated and broken down. A new multi-million dollar shredder is being installed. With four locations in the metro, and a fleet of 36 trucks, 300+ trailers, over 3,000 roll-offs, and their own rail spur and rail scale, Franklin is serious about scrap.

Larry Gupton is the equipment manager. He points with pride at their two Kawasaki loaders - a 90ZV and a 95ZV-2. "They are awesome loaders, they really are. We used to have a Cat[®] 988. When it wore out, we talked about replacing it with another one, but were persuaded by our local Kawasaki dealer to check them out. So I looked at some. The warranty stood out as well as the service. That's what sold us on our 90ZV Kawasaki initially. Since it's been here, the loader has sold itself. We went up to the 95 to use in the new shredder yard. It has the quick coupler attachment so we can use it with forks or a bucket. We also got ride control. In anticipation of the shredder coming, we've been using it to move rock and dirt."

"The 95 is really going to help us handle the cars brought in," explains Jerry Gupton, Operations Manager and Larry's brother. "It is going to be a tremendous savings to us. A crane can only offload a car or two at a time. The loader can handle more. I anticipate our loader will be able to do in a half hour what



Magnets are indispensible in moving and separating materials.

a crane does in eight. Definitely much faster, safer, and more efficient. The 95 will offload flat beds, feed the shredder, load rail cars, and push a lot of metal around." When the new 3,000 hp shredder comes on board, the plant will be able to move even more material, and do so more quickly. Shredding and the use of magnets allows nonferrous metals such as stainless steel, copper, and aluminum to be more easily separated, resulting in better quality control and higher profits. "We try to turn everything around and get it in and out as fast as possible to get the metal to the steel mills," says Jerry.

HEAVY METAL

Despite frequent watering, it is still a tough environment on equipment. Dust fills the air. Lots of heavy metal objects are pushed from spot to spot. Big parts are cut down to size by torches or shears, then ferried to different parts of the yard. Metals are stockpiled by kind. Prior to baling, everything is inspected to make sure all combustibles have been removed.

"We do our own maintenance here," says Larry. "On the Kawasakis, we blow out the

The warranty stood out as well as the service. That is what sold us. Since it's been here, the loader has sold itself.
- Larry Gupton, Equipment Manager, Franklin Iron and Metal



wide fin radiators daily and change the air filters about every two weeks. They are very maintenance-friendly, with everything easy to get to. The steps are done right too — belted so they don't tear off. With construction equipment today, you tend to see more fiberglass and plastic. But with Kawasaki, the fenders are metal. Same with the radiator grills and light housings. I much prefer metal, especially in our environment."

Turns out the operators much prefer their Kawasakis over the older Cats too. Larry has noticed the operators really appreciate the improved comfort offered by the air ride seat — no more aching backs when they go home. They also appreciate the machines' performance.

"I've been here four years," says Deon Norton, Operator. "I can tell you the Kawasaki 90 is a lot faster and responds a lot faster than the Cat 988. The cab has more room and you can see better. The bigger 95ZV-2 I like even more because the ride control makes it ride and handle a lot



Larry Gupton, Equipment Manager, with Mark Bardo, RECO Equipment.

smoother. It is easy to run and I can get in and out of anywhere I need to be."

"We've got a clean operation and good equipment," concludes Jerry. "You don't have to carry tools around in your pocket all the time to work on them. I am very satisfied with both of our Kawasakis. If we had to buy again, yes, we'd buy Kawasaki. I really like them. We've had no trouble with them. It is a very nice machine and is very competitive price-wise. The fuel efficiency is so much better than with our older loaders. And I know our guys like the preventive maintenance on them because they are easy to work with."

Franklin Iron and Metal is serviced by RECO Equipment, Monroe, Ohio.



Wells Fargo has been helping contractors finance Kawasaki machines for nearly two decades. With that kind of background, you learn a few things about what guys like you need. You need a finance professional who understands construction equipment. You need loan applications turned around quickly and serviced easily. You need someone you can trust to be there through all the cycles the US construction industry dishes out. You need Wells Fargo Construction.



For your next Kawasaki purchase, call Mark Forsyth at 603-559-1315. mark.k.forsyth@wellsfargo.com www.wellsfargo.com/construction Wells Fargo Construction

WELLS FARGO



ccording to the U.S. Environmental Protection Agency, yard trimmings and food residuals account for 24 percent of municipal solid wastes nationwide. As communities struggle with diminishing landfill space and farming operations seek lowercost alternatives to chemical applications, creative entrepreneurs are stepping up and turning suitable organic waste products into compost gold. Kochergen Farms Composting of Avenal, California, is one such company.

NOT JUST FOR GARDENERS

"Our operation is year-round, 24/7," explains Eric Espanola, General Manager. "We take in materials from landscapers, homeowners, and 16 different cities and municipalities. We make a variety of products and sell to the agricultural community, biomass fuel plants, nurseries, landscapers, homeowners, and even CalTrans.

"It's a rock-and-roll show here, just non-stop. We move about 800 tons of product a day. Compost alone we do about 40,000 tons a year."

Big trees, lawn clippings, brush, C&D, and pallets all make their way to Kochergen. Among the finished products that leave are biomass fuel (a special blend made from brush and grass), compost, and blond wood — a material derived from pallets which DOT uses to line freeways and suppress weeds.

ROUND THE CLOCK

Wrangling both the raw materials and finished products are Kawasaki loaders, model sizes 70 and 80 (ZIIIs and ZIVs). Five look like they are battlescarred with each having racked up at least 15,000 hard-earned hours. Kochergen's sixth is their newest recruit — an 80ZV-2 equipped with a 7.25-cubic-yard Tink roll-out bucket.

"I started with Kawasaki in 1995 when I worked at Gallo Winery," says Espanola. "Several years ago, when I teamed up with Mike Kochergen, the owner, to start this composting business, I went back to our local Kawasaki dealer for more."

Because of the constant activity and the abrasive nature of much of the material fed into the grinders, the loaders take a lot of abuse. They are sitting ducks for anything the grinder decides to kick back out. They navigate over uneven and debris-filled terrain. And their drivers have a distressing but understandable tendency to use the buckets as dozer blades rather than to lift. But despite the abuse and constant patching, the loaders keep on rolling.

Espanola is an equipment guy. After driving the ZV-2, he noted the improved visibility on the new Dash-2 and the increased horsepower. And he feels the replaceable bushing on the transmission, first available on the ZV Dash-1s and continuing with the Dash-2s, is going to come in very handy. "Our trannies take a beating. If the bushing goes out, it hurts."

"Our deal is we do or die by the customer. They come first. If we commit, we need to perform." And he's got a veteran squad of Kawasaki loaders to make sure that happens.

Kochergen Farms Composting is serviced by Cen-Cal Machinery, Fresno, California



Compost is a 24/7 activity and a Kawasaki 80ZV-2 equipped with a 7.25-cubic-yard Tink roll-out bucket helps move the job along at a rapid pace.



Considering that compost can help regenerate poor soils, suppress plant diseases and crop pests, reduce the need for chemical fertilizers, and promote higher crop yields, it's a no-brainer that California's giant ag industry clamors for compost.





Above: Zingaro Trade 51 (Pty) Limited uses five Kawasaki loaders at the Black Wattle Colliery in Middelburg, Mpumalanga.

Right: Kawasaki Model 115ZV at work in the Northwest Province in a granite quarry dumping waste rock. The unit is fitted with an L-shape rock bucket. This particular machine has an additional rake boom which is used to drag the cut blocks of granite away from the quarry face, plus a set of granite forks. The wheel loader is fitted with a quick-hitch coupler system, enabling attachments to be changed quickly and easily.

hen you think of mining in South Africa, two commodities immediately spring to mind — diamonds and gold. But it turns out that's just the tip of the country's vast mineral wealth. South Africa is home to many other important minerals like titanium, manganese, and various grades of coal. In fact, South Africa, with its 28.6 billion tons of recoverable coal reserves, is the seventhlargest holder of coal reserves and the fifth largest coal exporter in the world.

COAL IS KING

With little oil or natural gas to call its own, coal has become the nation's predominant energy source. The vast majority of South Africa's coal is used for electricity generation of the national power grid (built and managed by Eskom) through coal-furnaced power stations. Several neighboring countries — Botswana, Lesotho, Mozambique, Namibia, Swaziland, and Zimbabwe — also benefit from the power generated in South Africa. Another sizeable chunk of the nation's coal is used by the petrochemical industry (see sidebar). South Africa also exports about a quarter of what it mines, primarily to Europe and the Far East.

The province of Mpumalanga is where most of the collieries (coal mines) are located. Situated in the eastern region of the country bordering Mozambique, coal mined in this area accounts for approximately 82 percent of the national coal production. Other mining activities in the region include asbestos, magnetite, altapulgite, and silica.

Coal production generally is concentrated in large mines owned by a handful of companies. About half of the coal mining is



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underground, the other half open pit, or open cast as the practice is called in South Africa.

THE KAWASAKI CHOICE

The South African distributor, ELB Equipment Limited, added Kawasaki wheel loaders to its portfolio in 2002. ELB is recognized as a distributor of worldrenowned earthmoving and mining process equipment in South Africa. Thanks to ELB's hard work and the excellent value and durability of the company's wheel loader line-up, Kawasaki wheel loaders equipped with 8.5-cubic-yard (6.5 m³) buckets are becoming the wheel loader of choice among mining contractors and operators in Mpumalanga.

Approximately 130 Kawasaki loaders operate on open-cast coal mines, working in extremely dusty and abrasive conditions where the temperatures range from sub-zero levels in winter up to more than 113° F (45°C) in summer. They have established





COAL: MORE THAN ELECTRICITY

Did you know that synthetic fuel can be made from coal? And that "petrochemicals" can be coal-based and not just made from oil or natural gas? Petrochemicals dramatically impact our food, clothing, shelter, and leisure. They are used in plastic adhesives, paper and textile sizing, solvents, cosmetics, pharmaceuticals, plastics, urethane foam, and tires — just to name a few.

Since the 1920s, scientists have known how to convert coal into a liquid that could be refined into gasoline or diesel fuel. But everyone thought it was too expensive to be practical, especially with crude oil being so cheap. Then along came Sasol.

Sasol, the South African petrochemicals group, was born in 1950. Utilizing the abundant but relatively poor grade of coal, they set up shop and haven't looked back. Today the company is the world leader in and the world's largest producer of liquid fuel from coal. Their CTL (coal to liquid) plant in Mpumalanga produces around 150,000 barrels of synthetic fuel a day. To date, only South Africa uses this technology, but talks are underway to bring it to China, and possibly to India and three western states in the United States. Soaring crude oil prices and the great abundance of coal reserves worldwide have made CTL technology very attractive.

Besides synthetic fuel, other products can be made from the CTL process. These include cleaners and degreasers, automotive lubricants, greases, fuel oils, and industrial lubricants. Petrochemicals that can be made include olefins and surfactants, polymers, solvents, wax, and nitro.

About 24 percent of the coal mined in South Africa is used for the production of petrochemicals. Sasol also has technology to turn natural gas into liquid fuel.



Mr. Craig Smith, Commercial Director, ELB Equipment, Ms. Nancey Peters, Sales Administrator, ELB Equipment, Mr. Peter Blunden, Managing Director, ELB Equipment, and Mr. Satoru Takagi of Kawasaki, Japan.

an enviable reputation for their reliability and ruggedness. Kawasakis with 20,000 hours without any major repairs are not uncommon. The 95ZV in particular is becoming the machine of choice to load coal trains.

BLACK WATTLE COLLIERY AND ZINGARO TRADE

Supplying Eskom with coal to light up the national grid takes two forms: coal that is freshly mined and coal from low-grade coal dumps that have been reclaimed. Four major companies in the Mpumalanga area reclaim roughly 500,000-600,000 long tons of lower grade coal every month from discarded coal dumps. Black Wattle Colliery in Middelburg, operated by Zingaro Trade 51 (Pty) Limited, is one such operation.

Zingaro Trade was established two years ago. Because of the good reputation of the 14 Kawasakis (mainly 85s and 90s) in use by its sister companies, managing director Mike Bate opted for five for Black Wattle — two 90ZIV-2s and three 85ZIV-2s. "In the dump we screen out a -1.57-inch (-40 mm) product with Powerscreen mobile screens," says Bate. "The oversize is then transported to the washing plant where it is crushed and processed through a cyclone coal washing plant where another 50 percent of material is reclaimed. This material is then blended with the -1.57-inch (-40 mm) product to achieve a grade acceptable to Eskom. We produce approximately 3,000 final-product long tons a day which equates to 75,000 tons a month."

Since the wheel loaders came on board, they've handled well over 6.4 million long tons of material.

HARD WORKERS

Most South African wheel loaders are used 24 hours a day, seven days a week. Operating hours add up fast and end-users can ill afford any down time. Basic maintenance is generally handled by the customer while major services and repairs are done by ELB — either on site or in the workshop.

While many of the Kawasaki loaders have achieved up to 18-20,000 operating hours trouble-free, some of the older Kawasaki machines have in excess of 24,000 operating hours without the need for any major overhauls. In this respect Kawasaki distinguishes itself among well-known brands such as Komatsu, Caterpillar, Volvo, etc.

THE DEALER-FACTORY CONNECTION

ELB Equipment's engineering and sales departments have a close relationship with their counterparts at Kawasaki Heavy Industries, Japan. This partnership has been a major reason why the acceptance of Kawasaki wheel loaders in South Africa has been so successful. It ensures the heavy demands of the South African market are catered to by both the equipment supplier and the manufacturer. Also, Kawasaki fleet owners are taken to visit the Banshu factory in Kobe, Japan, where their wheel loaders are made. A visit to the Kawasaki Museum in Kobe also introduces them to the many high-tech products the many divisions of Kawasaki manufactures. End users find the tours intriguing and reassuring.

TIER-4 AND THE FUTURE

Tier 4 emissions standards are becoming a key focus of attention around the industry and we can expect operators to start asking questions about the regulations and what technology Kawasaki and Cummins will use to meet them.

Cummins is prepared for future emissions regulations with an integrated system approach — all designed and manufactured from within our own broad portfolio of key technologies that can meet the most demanding needs of the off-highway market and Kawasaki wheel loaders.

US off-highway emission levels are defined by the EPA as Tiers. Today's 75 to 751 horsepower engines are compliant to Tier 3 emission standards. Tier 4 starts at different times for certain horsepower bands and is a two-phase introduction consisting of Tier 4 Interim and then Tier 4 Final several years later. The EPA Tier 4 Interim regulations start on January 1st of 2011 for the 174 and over horsepower range, covering the 70Z to 135Z loaders. For the 75 to 173 horsepower range or 50Z to 65Z loaders, these emission changes start in 2012. Regulation changes and timings are similar for Japan and the European Union for these models and horsepower bands.

Particulate Matter (PM) emissions will need to reduce by 90 percent and Oxides of Nitrogen emissions by 45 percent to meet Tier 4 emissions in 2011 compared to current Tier 3. To meet these stringent emissions reduction levels the right technology matters

> in the industry to announce a Tier 4 Interim technology solution for our 174 to 751 horsepower range on November of 2007. Cummins focused on this powerband solution since it is the most

and Cummins was the first



stringent regulation and starts earlier than the other ranges. Cummins will use a cooled Exhaust Gas Recirculation (EGR) system to achieve NOx emission reductions and the Cummins Particulate Filter aftertreatment system for reducing PM emissions.

Look for more details on these Tier 4 technology solutions in future issues of FOCUS magazine. If you want more information before these issues, contact your local distributor or visit everytime.cummins.com under "2007 and Beyond" to find our Mobile Off-Highway Emissions Brochure.

This educational brochure is a useful tool to use with both current and prospective customers. This 32-page brochure details Cummins strategy, the evolution of off-highway standards, the next generation standards, and our "Every System Integrated" capability from air intake to exhaust aftertreatment, to meet the stringent Tier 4 emissions regulations taking effect in 2011 for the 174 to 751 horsepower (130–560 kW) power category.

Cummins will continue to develop new technologies to meet future emissions standards with today's levels of reliability, dependability, and performance that are the best choice for our customers. As the largest independent engine manufacturer, we are able to partner with Kawasaki and plan for these changes together.

KAWASAKI KEEPS IT SIMPLE.



In a world of increasing demands, tighter deadlines, shrinking budgets and complicated contracts, the choice in wheel loaders is simple: Kawasaki.

A FULL-LINE OF RUGGED, Reliable, efficient machines.

- 13 models
- 96 HP 720 HP
- 1.8 cu. yd. 13 cu. yd.

EASY TO OPERATE.

Increased efficiency and productivity come from innovative high-tech features that allow the operator to customize and adapt to the environment and the application...from the comfort of the redesigned cab.

- Adjustable Declutch
- ELS Efficient Loading System
- Idle Management System
- Variable Boom Kickout
- Power Mode Switch
- Ride Control

EASY TO MAINTAIN.

Even basic servicing is easier than ever, with extended greasing and oil change intervals. Not to mention:

- MODM (Machine Operation Diagnostic Module) provides essential operations and diagnostic information in an easy-to-read LED display.
- K-LINK II monitors and transmits digitally the location, hours, system alarm sensors, engine and machine performance data.
- KLEW provides fast and easy access to a total oil analysis and early warning program.

EASY TO DO BUSINESS WITH.

No run-arounds. No layers and layers of management. No distractions from competing product lines. Wheel loaders are our only business. Got a question? We'll get you an answer. Need a part? It's on its way. Quickly.

- Creative Solutions, Fast Response.
- Focused Resources, Experienced Specialists.
- Flexible Warranty Programs
- Rebuild Center

Kawasaki Construction

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