

NOVEMBER 2009

# DOWN TO EARTH

ISSUE 52



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**KOMATSU**





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**KOMATSU**  
CORPORATE FINANCE



Bill Pike, President  
Komatsu Australia Pty Ltd

As the global market shows early signs of recovery there are key markets which continue to cause concerns for our industry. We have all seen and read a great deal about the resilience of the market in China, but the slow recovery in Japan, Europe and North America has had an impact on Komatsu's business results. However, the strength of our business has ensured strong results for the first half of our current budget year.

Australia has played an important role in delivering consistent results in both the mining and construction segments. As our market recovers there is room for optimism particularly in the mining sector. So far this year we have achieved good results in Queensland and New South Wales, but our results in WA have not been as strong.

The construction market is down significantly on last year as we all wait for the impact of the Federal Governments infrastructure stimulus package to kick-in. We are unlikely to see a dramatic increase in sales activity in construction and utility sales until sometime in 2010.

Despite the somewhat reserved Global outlook, Komatsu continues to invest in Dantotsu (unique and unrivalled) product developments enabling us to remain at the forefront of engineering excellence.

The Hybrid PC200 is now being produced and sold in commercial quantities providing significant fuel savings to our customers as well as having a very positive impact on environmental matters. The Dantotsu Autonomous Haulage System (AHS) Trucks now working in the Pilbara are a testament to the commitment made by Komatsu to both fuel efficiency and the environment.

In this edition of Down to Earth, I am confident you will gain a sense of Komatsu's intense desire to provide world's best technology and innovation. Our Komtrax system is a classic example of what can be achieved by a committed OEM, focussed on customer support and efficiency. The expansion of our SAP based CRM functionality has also been a significant investment which will allow us to enhance our customer support capability.

Our national customer support centre is now operational and utilises the many systems developed to ensure the Komatsu product is fully supported. As we continue to build and develop the functionality of the centre you can expect to receive 24/7 service and support across the country.

To many new customers to Komatsu and to the extensive number of long term customer's thank you for your support this year, we appreciate your business. To the hardworking staff of Komatsu Australia, thank you for your tireless efforts in supporting our customers. We are looking forward to a bigger and better year next year.

Sincerely,

Bill Pike, President

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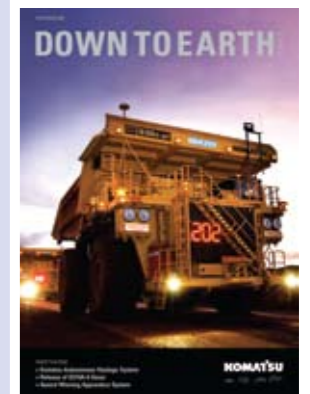
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Komatsu Autonomous Haulage System



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# AUTONOMOUS HAULAGE IN WA -THE FRONTRUNNER

In May this year, Komatsu's Autonomous Haulage System (AHS), FrontRunner went into full-time operation at Rio Tinto's West Angelas Mine's East Pilbara operation, in Western Australia. This is only the second deployment of the proprietary system following delivery of the first fleet to Codelco's copper mines in Chile.



The FrontRunner system operating at West Angelas consists of five Komatsu 930E autonomous dump trucks, along with several other non-autonomous Komatsu machines, these include a Komatsu PC5500 hydraulic excavator, D475A bulldozer, WD900 wheel dozer and GD825 motor grader. Komatsu's unique technology allows the 930E autonomous trucks to navigate safely in the complex mining environment, hauling payloads up to 290-tonne payload of overburden without the requirement for an operator.

At West Angelas the Frontrunner fleet is operated and controlled entirely using a computerised supervisory system at an operations centre. Future plans are for the trucks to be controlled from a remote operations centre located in Perth, more than 1000 km away from the mine site. All data from the trucks in use at the mine, including information on the location of the vehicles and their running status, can be verified via the supervisory systems. This is expected to contribute to a significant increase in productivity at the mine, which is in a region that has traditionally struggled to attract skilled operators.

Above: Rio's West Angelas site operating Komatsu's autonomous 930E trucks loaded by the PC5500 (below).



## WHAT IS THE AUTONOMOUS HAULAGE SYSTEM?

Komatsu's Frontrunner autonomous haulage system is a comprehensive fleet management system for mines.

Dump trucks are equipped with vehicle controllers, a high-precision GPS system, obstacle detection systems and a wireless network system, jointly developed by Komatsu Ltd, Komatsu America Corp and Modular Mining Systems, Inc (which is part of Komatsu Ltd).

The trucks are operated and controlled by a supervisory computer system, enabling them to be unmanned.

Information on target course and speed is sent from the supervisory system to the driverless trucks, while GPS is used to ascertain their position.

When loading, the trucks are automatically guided to the loading spot, based on the position of the bucket of the GPS-fitted excavator or wheel loader. The supervisory system then directs the trucks along the route to the dump location.

From a safety perspective, the fleet control system prevents collisions with other dump trucks, service vehicles or other equipment at the mining sites.

If the in built obstacle detection system detects another vehicle or person inside the haulage area during autonomous operation, the trucks will reduce speed or stop immediately, ensuring the system is extremely safe and reliable.

In addition, AHS enables continuous operation under difficult conditions such as at high altitudes or in sparsely populated, arid desert areas. At the same time, by optimising operational efficiency, the system contributes to reducing maintenance and consumables costs, conserving energy and limiting CO2 emissions.



## SCHEDULE FOR INTRODUCTION OF AHS TRUCKS:

- » First autonomous movement of overburden by truck on 18.12.08
- » Training in January and February
- » Daytime operations in March
- » Full time production in April
- » 15-month production trial

## TRUCKS USE PRE-DEFINED GPS COURSES TO AUTOMATICALLY:

- » Navigate haul roads and intersections
- » Move within the loading/dumping areas
- » Enter the tie-down area for refuelling

## OPERATIONS OVERVIEW:

- » The trucks interact with manned equipment including the excavator, grader, wheel dozer, bulldozer and light vehicles
- » Manned equipment is fitted with GPS and communications software
- » The operator interacts with the autonomous trucks via a screen
- » The truck messages to ask for permission to approach or pass
- » The excavator operator indicates where he wants to load the truck by raising his bucket and the truck moves to that point autonomously
- » A control system divides a manually defined dumping area into dumping nodes and tells the truck exactly where to dump each load. ■

## RIO'S WEST ANGELAS AHS TRUCK OPERATION AT A GLANCE:

- » Five 930E Komatsu AHS trucks
- » Top speed 50 km/hr
- » Each truck weighs 225 tonnes empty
- » Payload 290 tonnes
- » Fitted with radars, lasers, communication antennas and high-precision GPS
- » Moved 3.6 million tonnes of overburden by end of May
- » 3 km round trip from excavator to waste dump.

# NEW ALL-KOMATSU FLEET ACHIEVES RECORD PRODUCTION LEVELS AT MACARTHUR COAL'S MOORVALE MINE

A \$90 million fleet of Komatsu mining equipment, delivered to Macarthur Coal's Moorvale mine in central Queensland in late 2008, has helped the mine achieve record production levels as it bounces back from the effects of the Global Financial Crisis.



The fleet consists of two PC5500 excavators, ten 830E dump trucks and three D475A-5 dozers, along with ancillary equipment such as graders and water carts. The equipment is owned by the Coppabella Moorvale Joint Venture, in which Macarthur Coal owns 73.3%, and operated and maintained by Leighton Contractors.

Macarthur Coal Limited is the world's largest producer of low volatile pulverized injection coal (LV PCI) used for steel making, producing 30% of the world's LV PCI coal.

As a supplier to the world's leading steel producers, Macarthur Coal exports its entire product around the globe, with 40% of its output exported to Europe, 40% to Asia and 20% to South America.

The company has been in operation for 10 years, and its ROM coal output is around 8.5 million tonnes a year.

It currently operates two mines in Queensland's Bowen Basin, the Moorvale mine and another at Coppabella, and plans to double its production capacity in the next five years through the development of the Middlemount Mine project and another project.

Coppabella is a dragline/electric shovel operation, along with excavators and dump trucks, while Moorvale operates using an all-Komatsu fleet, according to Macarthur Coal's Chief Operating Officer, Peter Kane.

"There has always been a Komatsu presence at Moorvale," he said.

"The previous trucks here were Komatsu 630Es, and we've upgraded all of them to the new 830Es.

"The machines were delivered late in 2008, so we've had about a year's experience with this fleet.

"However, due to the GFC, which reduced demand for our products during late 2008 and early 2009, it's been difficult to fully evaluate performance over a full 12 months," Peter said.

"The equipment landed just as the GFC started, which forced us to change our mine plan and adjust our tonnages.

"Production levels certainly were down for the first half of this year, but now we're really hitting our straps.

"Over the past six months, we've been moving more product and regularly hitting record levels; you can't get those high throughput levels unless you are moving your overburden efficiently, and that's what the Komatsu gear does," he said.



Below: Komatsu PC5500 excavator and four of the 830E dump trucks.



"The trucks especially are well-known and proven performers, and the operators really like them.

"The diggers are now starting to get the productivity we really want from them as demand for our product goes up with the recovering world economy."

In the couple of years leading up to the purchasing decision for the new Moorvale fleet, Peter said Macarthur Coal carried out detailed analysis of what it required and what was available from suppliers.

"To be honest, the Komatsu equipment was available when we wanted it, at a time of world equipment shortages,

pre-GFC, plus it stacked up very well in comparison with other OEMs.

"In terms of support and service, we have a unique situation, where we own the equipment, our contractor operates and maintains it, and Komatsu supplies and services it, as well as covering warranty.

"Given this situation, where there is potential for disputes and buck-passing, everything is operating well, carried through by good will on the part of all parties concerned," said Peter. ■

**"The trucks especially are well-known and proven performers, and the operators really like them"**

*Peter Kane, Macarthur Coal*

# FLEET OPTIMISATION FOR ABIGROUP

*Below:* Sean Taylor - Komatsu General Manager Construction and David Jurd - Managing Director Abigroup.



On Wednesday 8th July at Ouyen Mine Site, which is approximately one hour South of Mildura in Victoria, Komatsu Australia carried out the formal handover of new Komatsu mining and construction equipment to Abigroup Mining Services.

The new Komatsu fleet includes: 3 x D375A-5E0 dozers, 5 x HD785-7 dump trucks, a PC2000-8 excavator, a WA500-6 wheel loader and a PC300-8 excavator.

The Komatsu fleet will be working on the Iluka Murray Basin Stage 2, which is designed to develop additional economic deposits in both Victoria and New South Wales, providing heavy mineral concentrate feed source to the existing mineral separation plant in Hamilton.

The project will involve the mining and concentrating operations surrounding Ouyen, Victoria and includes the development of the Kulwin deposit, followed by the Woomack, Rownack and Pirro group of deposits.

According to the National General Manager Abigroup Mining Services, the new equipment enhances Abigroup's ability to self-perform all components of a surface mining operation.

"We can offer our clients a total turnkey solution from design and construction through to extraction and processing."

Sean Taylor, GM Construction, who represented Komatsu Australia at the handover stated that Komatsu is committed to supporting Abigroup at Ouyen Mine.

"Komatsu's local service representatives will be on hand to ensure we provide Abigroup the support required in this remote mine site.

"We supplement Abigroup's onsite maintenance with labour, parts planning and product support in order to provide best optimisation of the new fleet.

"Ouyen is about five and half hours from Melbourne, Victoria and six and half hours from Adelaide, South Australia. This remoteness has its challenges but the Komatsu and Abigroup team's have worked to eliminate any roadblocks and are committed to building a strong partnership," Sean said. ■



# "SHRINKWRAP" LOADERS WORK ON AUSTRALIA'S BIGGEST RESOURCE PROJECT

WA-based crushing contractor Rapid Crushing and Screening Contractors Pty Ltd has recently placed three "shrink-wrapped" Komatsu WA600-6 wheel loaders on Barrow Island off the coast of north Western Australia, site for one of Australia's largest resource projects, and an extremely environmentally sensitive location.

The three loaders are being used in the construction of a workers' village for the Chevron joint venture's \$45 billion Gorgon natural gas project.

Rapid Crushing's contract involves crushing and screening of road base materials for the preparation of a 500 m by 500 m site for the construction village for the project, which will house up to 3000 construction workers during the implementation phase of the project.

The project itself will be about 4 km away from the construction village.

It includes levelling the area, and crushing excavated material for use as roadbase and aggregate.

Under the contract, it will carry out the crushing and screening program simultaneously with other contractors performing the drilling, blasting and earthworks to construct the pad for the construction of the Village, with the three Komatsu loaders playing a key role in this.

A major challenge for the company is that strict environmental controls have been put in place with the construction operation to have no adverse impact on the environment, including dust and noise, outside of the 500m x 500m perimeter of the construction village.

Because Barrow Island is an "A class" nature reserve with very high conservation values, no contaminants are allowed on the island, said John George, Rapid Crushing and Screening's General Manager.

"It is a unique environment that has been separated from mainland Australia for thousands of years, and hosts native wildlife found nowhere else in the world," said John.

These include unique turtle populations, and perenties, gigantic lace lizards or giant monitors that grow up to 2.5 m long.

"Nothing from the mainland: no seed, vermin or any other material can go on the island.

"This means we had to meticulously clean and then "shrink-wrap" all our machines in plastic for transportation to the island; then once the equipment was wrapped, we placed a fumigating canister inside the sealed plastic to kill vermin, seeds and anything else that could damage the environment.

"Everyone working on the island has responsibility for looking after the environment and ensuring the natural fauna and flora is not compromised," he said.



*Above:* Komatsu WA600-6 shrink wrapped ready to be transported to Barrow Island.

Rapid Crushing opted for three Komatsu WA600-6s for its crushing operations on the island for a variety of reasons.

One of the key factors was reliability.

"We recently traded one of our WA600-6s that had done 20,000 trouble-free hours and, based on its performance, purchased a brand new one which went to Barrow Island in September," said John.

Another was ease of maintenance and parts supply.

"Obviously with three of the same machines on the island, we have a very high degree of parts commonality, so we don't have to hold so many parts on site, repairs will be quicker, and downtime will be further minimised," he said.

"Komatsu quality, reliability and having a common fleet makes management at a remote site like this so much easier.

"We've always found the service levels from Komatsu to be very good. Currently, we own 24 Komatsu loaders, ranging from WA470 to WA600."

Rapid Crushing and Screening has been in business for more than 30 years, building up its reputation for reliable service in mining and resources projects throughout Western Australia.

"It's quite an advantage for us being a privately owned company. It means we can remain very flexible: decisions are made very quickly, and we can act and react quickly, something which is important for a contracting company in today's very competitive market," John said. ■

**"We've always found the service levels from Komatsu to be very good. Currently, we own 24 Komatsu loaders, ranging from WA470 to WA600"**

*John George, Rapid Crushing*





Below: PC220LC-8 Excavator has proved productive for Jaydo.

# JAYDO FINDS SWITCH TO KOMATSU PAYS OFF IN SAFETY, PERFORMANCE AND KOMTRAX

Leading Victorian pipeline contractor Jaydo Constructions Pty Ltd made the switch to Komatsu excavators about five years ago, and ever since has never regretted the change.

Managing director Dirk de Haan, who has also held senior elected positions with the Civil Contractors Federation, including a three-year stint as branch president, said the company and its operators had been very pleased with its Komatsu excavators since its first purchase.

"It actually took Komatsu a long time to get a machine in with us," said Dirk.

"We'd been running other brands for many years, but eventually they got their first one in four or five years ago, when they sold us a PC220-7.

"We subsequently bought a PC300-7, then just recently purchased four machines: two PC300-8s, a PC220LC-8 and a PC228USLC-3EO.

"Over the years, they got more competitive, then once we opened the door for them when we decided to look at other brands, Komatsu really stepped up," he said.

"We're very pleased with the product: the productivity, the operating stability and the operator comfort levels, as well as with their after-sales service and product support."

**"We're very pleased with the product: the productivity, the operating stability and the operator comfort levels, as well as with their after-sales service and product support"**

*Dirk de Haan, Jaydo Constructions*

Dirk said the Komatsu excavators had really proved themselves in production trenching, which for a specialist pipeline contractor is essential.

"They are highly suitable for this application, in terms of their strength, their stability and certainly their speed; they are a lot quicker than other machines, and in trenching work, that's very important."

The other key issue for Jaydo is safety, which Dirk said was a critical factor for the company when choosing and operating equipment.

"The fact that all Komatsu excavators come with hose-burst protection, reversing cameras, emergency stop buttons as standard is very important for us.

We will pay extra for safety, so having it as standard is a great benefit.

"We will spare no expense on safety, so it's hugely attractive to us that all these safety benefits are built in," he said.

"The other great thing about the latest Komatsu machines is the KOMTRAX system," said Dirk.

"We get automatic readouts on a whole range of machine operating conditions, such as fuel use, hours each machine spends travelling, the time spent in different modes and so on. That sort of information is fantastic."

"For example, being able to view the operating mode data allows us the opportunity to retrain our operators if we see they are operating continuously in the wrong mode; it saves us fuel and helps us ensure the machines are operating to optimum productivity," he said.

"After sales service from Komatsu Australia has also been very good, although in fact we've had less use for it with our new excavators than with our previous machines." ■



## About Jaydo Constructions

The company specialises in major pipeline constructions throughout Victoria, and will also go interstate for the right contract. It carries out all types of major pipeline works: water supply, drainage and stormwater, and sewerage.

Dirk and Peter de Haan took over management of the business from their father Jan de Haan 21 years ago this November, and he had been running the business for 20 years before that. It has been trading as Jaydo Constructions Pty Ltd for nearly 25 years.

Over the past 40 years, it has grown and developed from a small drainage subcontractor/

owner-operator to the point where today it is involved in large pipeline contracts, major alliance projects and land subdivision developments.

Jaydo is a participant in the Melbourne Water Pipeline Alliance, a five-year alliance between Melbourne Water, Fulton Hogan, GHD and Jaydo, which started 18 months ago in early 2008.

"This alliance involves providing Melbourne Water's infrastructure design and construction needs for stormwater and sewerage, both new and replacement networks, and from our point of view, is being run on a 'stand alone' basis within the company, almost as a separate operation," said Dirk.

Jaydo is also involved in concrete pipe manufacturing through Reinforced Concrete Pipes Australia, the only national supplier of steel reinforced concrete pipe that is wholly Australian owned.

It also remains strongly involved with the Civil Contractors Federation, with director and shareholder John Lander on the board of the Victorian branch.

The company has come a very long way over the years, but still remains largely a family-owned company, 90% owned by the de Haan family.



## MACA BUILDS A STRONG PRESENCE IN WA WITH LARGE KOMATSU FLEET

WA-based mining contractor Mining & Civil Australia (MACA) was formed in 2002, and has built its success in the resources sector around a large and reliable fleet of Komatsu equipment.

Its equipment fleet includes 33 Komatsu HD785-7s and HD785-5s, 26 wheel loaders from WA250 to WA600s, including seven WA600-6s, two WA600-3s and seven PC1250s with the latest delivered in September. The company also has more of the above equipment on order.

The privately owned company has five shareholders, all with many years' experience in the construction and mining contracting sectors.

Initially the company primarily carried out drill-and-blast and load-and-haul operations, along with mining infrastructure works, but more recently has moved into crushing and screening works, according to Chris Tuckwell, Chief Executive Officer.

"Our move into crushing and screening, which is highly capital intensive, is one of the many steps the company has taken since its formation," said Chris.

Its most recent crushing and screening contract is a four-year contract from Atlas Iron Ltd to crush and screen iron ore at its Pardoo Project, north of Port Hedland.

Other current projects include open cut mining, screening and associated

infrastructure work for Western Areas NL at the Spotted Quoll nickel mining project 450 km west of Perth, drill-and-blast/load-and-haul for Regis Resources' Duketon gold mining project north of Laverton, and a five year contract at Crosslands Ltd's Jack Hills iron ore mine, where it is carrying out load-and-haul/drill-and-blast, crusher feed, and crushing and screening.

"We are relatively a new company and from the beginning our policy has been to get maximum utilisation from our equipment.

"We expect performance, productivity, good presentation and safety from our equipment - and we look after it to ensure this happens.

"That's why we opted for Komatsu equipment and 80% of our equipment is now Komatsu," he said.

The company also pays a lot of attention to OH&S issues, including taking special steps to recognise individual employees' contributions to safety-related issues. In April this year, it achieved full certification for both its Safety Management System (AS/NZS4801:2001) and its Environmental Management System (ISO14001:2004).

**"That's why we opted for Komatsu equipment and 80% of our equipment is now Komatsu,"**

*Chris Tuckwell, MACA*



According to Mitch Wallace, Plant Manager MACA, our approach is try to be smarter and more efficient than our competitors; and being a private company we can give responses quicker.

"We pride ourselves on our successful on-going client relationships and in helping our clients reach their objectives."

MACA also has a philosophy of contributing to the communities in which it operates, and has made substantial contributions to Perth's Princess Margaret Hospital For Children, including purchasing and providing ongoing sponsorship of a patient transfer bus for the hospital. It also provides significant support to the Royal Flying Doctor Service and the Red Cross. ■

## OUTSTANDING FUEL CONSUMPTION, PRODUCTIVITY FROM NEW HY-TEC MACHINES

Two recent Komatsu machines purchased by Hy-Tec Quarries, a fully owned subsidiary of Adelaide Brighton Cement Ltd, have been delivering outstanding fuel economy, productivity and operator comfort since being delivered.

The two machines are an HM400-2 articulated dump truck working at Hy-Tec's Yarrabee Road Quarry north of Port Macquarie, on the NSW North Coast, and a WA430-6 operating at its Dunbogan sand quarry, to the south of Port Macquarie.

Hy-Tec is a fully owned subsidiary of Adelaide Brighton Cement Ltd, operating quarries and concrete plants in Victoria and NSW, which supply products to customers throughout Australia's east coast, from Victoria to Queensland.

According to David Bolton, general manager of Hy-Tec Quarries, the ADT is used for short-distance load and haul operations from the quarry face to the crushing plant, while the loader is primarily used in a sales application, being fitted with a Loadrite weigh scale system.

The HM400-2 is loaded by a 40 tonne excavator, then hauls less than 1 km to the crushing plant.

"I've been really impressed with the fuel economy of this truck, it's significantly better than what we were achieving with our previous machine," said David.

"An ADT is ideal for this application, rather than a rigid truck, as it's far more fuel-efficient on a short-haul setup with a couple of bends, so we can't run it at very high speeds.

"The fuel economy we can achieve with an ADT is a no-brainer compared with a rigid truck."

David said the truck was also very operator friendly, including a set up that made it very easy to train operators.

"The ride is fantastic. There's also plenty of cab room, along with a second seat, which makes the truck ideal for training purposes."

"From a safety point of view, one of the key things is the excellent visibility this truck offers, both from the cab, and to the rear with the inbuilt reversing camera.

"Overall performance of this machine has been excellent," he said.

The WA430-6 loader based at Dunbogan has also impressed its operators, according to David.

"We've found the WA430-6 has been a very quick loader, and is very comfortable for the operators," he said.

"What has really impressed the guys is how it works in the very fine sands we have at that quarry. It has very good traction in these fine sands, which means it has the ability to load very efficiently and very quickly," said David.

In addition to these two machines, Hy-Tec Quarries also purchased two low-hour WA500-6s in August/September 2008. ■

**"What has really impressed the guys is how it works in the very fine sands we have at that quarry. It has very good traction in these fine sands, which means it has the ability to load very efficiently and very quickly,"**

*David Bolton, Hy-Tec Quarries*

Below: WA500-6 wheel loader loading the HM400-2 articulated dump truck.



# WESTERN SYDNEY COUNCIL GOES FOR KOMATSU EXCAVATOR ON OPERATOR PREFERENCE

Penrith City Council, based in the outer western suburbs of Sydney, has recently purchased a new Komatsu PC55MR-3 excavator, largely based on operator preference following an evaluation of eight similar machines.

According to Ken Myhill, Penrith City Council's Fleet Co-ordinator, the new machine is being used for general excavations and maintenance work throughout the council's area, including excavating concrete guttering and footpath excavations, cleaning up roadside table drains, culverts and related works.

Purchased in June 2009, the PC55MR-3 replaces a backhoe, a move which the council's works team opted for.

"Despite having to be trucked around, they find the excavator more versatile and compact, especially when working under shop awnings on footpath work," said Ken.

He said the council evaluated eight machines of around the same size from different manufacturers.

"You could throw a blanket over them in terms of price; they were all very competitive and three of our operators tried them all out to see which they preferred.

"The Komatsu PC55MR-3 won on things such as good ergonomics, a clean and simple control layout and design, and good access to major components with the tilt cab.

"In the end, the decision came down primarily to operator preference," said Ken.

"We also considered the backup available from Komatsu Australia, and the fact that Komatsu machines have a good reputation in the marketplace."

Other key factors were the fact that KOMTRAX remote monitoring is included as standard.

"With KOMTRAX, I get reports sent to me, or I can look them up whenever I want to on the internet, and it means I can log in at any time and see where the machine is working," he said. ■

**"The Komatsu PC55MR-3 won on things such as good ergonomics, a clean and simple control layout and design, and good access to major components with the tilt cab"**

*Ken Myhill, Penrith City Council's Fleet Co-ordinator*



# OPERATOR, MANAGEMENT PREFERENCES DRIVE COUNCIL'S KOMATSU BACKHOE PURCHASE



Safety features, operator comfort and working efficiency, combined with the KOMTRAX remote monitoring system as a management tool were behind Sydney-based Ku-ring-Gai Council's decision to purchase a Komatsu WB97R-5EO backhoe/loader.

Based in the northern suburbs of Sydney, the Ku-ring-gai local government area covers approximately 84 square kilometres and features a wide variation in landscape and wildlife, with significant areas of urban bushland identified as having high conservation status.

Of the residential area, 95% is occupied by low-density housing, bounded by Garigal National Park in the east, Lane Cove River Park in the west and Ku-ring-gai Chase National Park in the north.

According to Ian Taylor, Ku-ring-gai Council's Manager, Engineering Services the new Komatsu backhoe, which replaces another make, is mostly being used for smaller civil works around the council's area: road shoulders, footpaths, light construction and maintenance works.

In deciding on which make of backhoe to purchase, the council evaluated three leading brands of backhoe, said Ian.

"This one came out on top. It's a good cross-over between an excavator and a backhoe, and it was certainly the preferred machine from the operator's point of view," he said.

"And from a management point of view, the KOMTRAX system made it very attractive, as we can track its use and utilisation, see where it's been going, and monitor machine condition.

"Other factors included value for money, and our familiarity with the Komatsu name.

"Our operators enjoy the machine; it's a very modern machine, with very good safety systems, such as the hose-burst protection system.

"It's also very comfortable, plus it's faster travelling from site to site, which makes it more productive, and again makes the operators happier."

The council did have some initial issues with the KOMTRAX system, but which actually served to increase its confidence in the effectiveness of it, said Ian.

"We had a few teething problems with the GPS, and it turned out it was



preventing the machine from being used. However, since then, it's giving us very detailed and reliable data.

"We've never had anything like this before, and it's proving to be very successful for us," he said.

"In fact, that initial issue is giving us confidence in how the technology works, because we know if it ever gets stolen, we'll quickly know where it is, and it won't be able to be used by unauthorised people. It's been very well received by everyone at the council. We're very happy with the purchase," Ian said. ■

**"That initial issue is giving us confidence in how the technology works, because we know if it ever gets stolen, we'll quickly know where it is, and it won't be able to be used by unauthorised people,"**

*Ian Taylor, Ku-ring-gai Council*

# FROM OUT OF THE SWAMP.. COMES A LONG-TERM RELATIONSHIP

Gisborne region contractor Kerry Fogarty, of Kerry Fogarty Excavators, has been buying Komatsu excavators since 1985, when the then-Komatsu sales rep bashed his way through the scrub and a swamp to sell a machine.

Fogarty was so impressed with his commitment and perseverance, and the excellent trade-in deal he got when buying his first Komatsu excavator, a PC120-3 that he's stuck with the company.

He works a 50 km radius north of Gisborne, around Matawai and Motu, primarily doing farm jobs such as bulk earthworks, drainage, tracking and support units, often in difficult terrain.

"I find there's enough work around to keep me busy," he said.

Since buying his first Komatsu, Fogarty has had another five Komatsu excavators, culminating in his most recent purchase, a PC130-8 delivered earlier this year.

"I've had excellent performance from all my Komatsu excavators, along with very good support," he said.

"My first machine, the original PC120-3, did 14,000 hours before I traded up to a new machine."

He then bought a PC120-5, followed a few years later by a PC120-6, both of which he sold at about 5800 hours, then another PC120-6, which he traded at 11,000 hours on a PC130-7. This machine was traded earlier this year at 9000 hours for his latest PC130-8.

"Komatsu with its local service agent Heavy Equipment has looked after me very well over the years, which is why I keep buying them," Kerry said.

"Komatsu sales reps have been good to deal with, and I'm very happy with the current salesman I deal with, Les Reid."

His machines are set up as "just basic machines, I'm old school" with only standard buckets.

"I do a lot of bulk earthworks, and I don't feel the need for tilt buckets or other attachments; I'm just as productive with the standard bucket," he said.

Fogarty's major concession to modern technology is using Komatsu's KOMTRAX remote monitoring system.

"I get reports back from Komatsu on everything that's happening with the machine; it monitors everything," he said. "It's a marvellous technology and it's going very well." ■



**"I get reports back from Komatsu on everything that's happening with the machine; it monitors everything. It's a marvellous technology and going very well."**

*Kerry Fogarty, Kerry Fogarty Excavators*

# TREESCAPE REMAINS A COMMITTED CUSTOMER OF KOMATSU MACHINES

Treescape, New Zealand's leading arboriculture company, and which has recently expanded its operations into Australia, has remained a committed customer of Komatsu since purchasing its first machines over 15 years ago.

The company, which has been in operation since 1981, carries out all types of treework, including land clearing, large tree transplanting, landscaping, grounds maintenance, utility line clearing, and bulk production of landscape mulch.

Its customers include government agencies and local authorities, civil engineering contractors, developers, utility companies and private individuals.

Today it has more than 300, including arborists, horticulturalist and machine operators. They are nationally and internationally trained to the highest standards using the latest techniques and equipment available.

Treescape specialises in undertaking difficult projects, such as removing dangerous trees in confined spaces and awkward locations, using specialised roping techniques, cranes and heavy lift helicopters.

Large tree landscape planting schemes are another part of Treescape's services; projects have included planting trees from 4 kg to 150 tonnes in weight and from one tree within a back yard to thousands along the side of a motorway or several large mature trees within a subdivision.

Another specialist service is land clearing, using such equipment as dozers, log skidders, excavators, logging trucks, excavator mounted stump grinders, groomers, mulching heads and high-capacity 480 hp whole tree chippers.

One of its most recent contracts is the vegetation contract for OnTrack's rail network throughout New Zealand. For this Treescape has recently converted a PC78UU-6 to Hi-Rail configuration, and is in the process of converting a PC138-2 to Hi-Rail as well.

Its most recent Komatsu excavators are three PC130-8 13 tonne machines, fitted with a full range of attachments, including hydraulic log grapples, mulching heads, stump grinders, vertical tree grabs, tilt buckets and stick rakes.

"These are our medium-sized commercial weaponry," said Brandon Whiddett, Treescape's co-founder and chief operating officer.

"We use them for a range of mid-sized projects, including land clearing, site preparation and roadside clearing."

The company has a policy of turning over all its equipment fairly quickly, so as to ensure it continues to use the latest technology. Thus all the Komatsu machines it owned when it was last profiled in Deals on Wheels has now been replaced.

"Our smaller machines are replaced every three years, while our larger excavators are turned over at around five years," Whiddett said.

Today its fleet ranges from PC18MR-2 mini excavators, up to a PC228USLC-3 short-tailswing 22 tonne machine.

Treescape's Australian fleet includes two PC50MR-3s, a PC120-7 and PC130-8.

"We stick with Komatsu equipment because it's so productive and reliable," said Whiddett.

"We're also very pleased to see that John Quayle, who sold us our first Komatsu excavator 15 years ago, is back with the company.

"We have a very good relationship with John; he knows the product well, and he looks after us. We were disappointed when he left Komatsu to work elsewhere, and we are delighted to see that he's back."

Whiddett said that support from Komatsu has been good, and is improving all the time.

"Because we operate throughout New Zealand, backup support is very important to us.

"It's been getting better and better all the time, and we've noticed that since Brent Hepple's appointment as Komatsu NZ's operations manager, there have been further improvements," he said.

"Our relationship with Komatsu NZ is vital to our success, both here and in Australia. We have an on-going machine upgrade process with them, and we are currently spending around \$1 million a year on new Komatsu kit." ■



# KOMTRAX FINDS STOLEN KOMATSU EXCAVATOR - *WITHIN MINUTES*



Sydney plumber Joe Hanna is very glad that the Komatsu PC18MR-3 mini excavator he purchased in September last year came with the KOMTRAX remote monitoring and location system as standard; when the machine was stolen in June, he knew exactly where it was within ten minutes of realising it was gone.

Joe, who owns Gold Plumbing Services, based at Strathfield and operating throughout the Sydney metropolitan region, had the machine parked outside his brother Besan Hanna's place nearby.

"The Komatsu was on a trailer, and it was secured - quite well, I thought, with a double locking device," he said.

"The thieves managed to cut through that without disturbing anyone, and when my brother looked out the window just before 8 am, it was gone.

"I got straight on the phone to the 24 hour mobile KOMTRAX service number, and spoke to Karl Pettengell, National Komtrax Administrator. Straight away he was able to show me that it had moved about 5.40 am, plus he remotely disabled the machine then and there so that no one would be able to operate it.

"Five minutes later, he called me back and told me they located the machine," Joe said.

"We called the police, who were very pleased to have the exact location of the machine. They were at the scene within the hour, and spent the day observing it to see if anyone would come back for it.

"As it turned out, it had been towed away by a stolen vehicle. At 4.30 that day, we were told we could come and collect it," he said.

Apart from the quick recovery of his machine because it was fitted with KOMTRAX, Hanna has been delighted with system for a number of reasons.

"Because these sized machines are being stolen so frequently, insurance companies are quite strict in their requirements about where they are kept, insisting they be off the street and in locked premises.

"Because it was in the street, even with the trailer security system, our insurer may not have paid up if it hadn't been recovered.

"As well, there is so much demand for these mini machines, that we would have had trouble getting a machine and an operator in for all the work we have on," he said.

Apart from KOMTRAX's security side of things, Hanna has found it ideal for monitoring machine condition, hours of work, where it works, and so on.

"Every day I can check where the machine has been working that day, how many hours it has done, and so on. In addition, I get a reminder from Komatsu when a service is coming up," he said.

"As well as that, we've now set it up so the machine is automatically disabled at the end of the day and can't be operated again until next morning."

The PC18MR-3 was Gold Plumbing's first piece of earthmoving equipment; previously hiring in earthmoving equipment as it was needed.

"Since we've bought it, we've realised what a very good machine that Komatsu is," said Joe.

"And when I was researching what machine to buy, after looking at a few different makes, I've come to understand that Komatsu machines really are among the BMW or Mercedes of the market.

"The levels of service and support you get from Komatsu, compared with other suppliers, are just so much better," he said.

"They may be a bit more expensive up front, but the savings you make over the whole life because of the extra service and support add up to a lot more.

"When buying the machine, we went through Warrick Lawrence at the Fairfield branch of Komatsu, and he was great to deal with.



Above: Besan and Joseph Hanna onsite with their rescued PC18MR-3 mini excavator.

"He also locked in a deal for us just before we went overseas for a few weeks with the kids in the September, 2008 school holidays, which meant we were able to take advantage of the better price before the Aussie dollar collapsed, and that saved us a lot of money," said Hanna.

"In addition, Warrick told me that because we have this security system on the machine, we could qualify for a reduced premium from the insurance company," he said. ■

# KOMATSU CREDITS OFFER GREAT VALUE FOR NEW EXCAVATOR BUYERS

Komatsu Australia has announced a Komatsu Credits package up to \$10,000 and special Komatsu finance rate of 6.95% on its excavators applicable to models PC88MR-8 to PC450LC-8. This package is available for a limited time only, concluding December 31, 2009 and coincides with the Government's 50% small business tax break.

"This special offer provides substantial value when choosing to buy a new Komatsu excavator. It offers new buyers a unique opportunity to significantly lower their owning and operating costs," said Chris Moroz, Komatsu Australia's national business manager, construction.

"Komatsu excavators have consistently offered owners the world's best combination of reliability, performance, technology, whole-of-life cost and resale value, giving our customers confidence they've made a sound business decision," he said.



According to Moroz, no other supplier can offer owners the value built into Komatsu excavators, including:

- » Market-leading Dash 8 technology, incorporating low-fuel consumption ECOT3 engines and the unique HydraulMind hydraulic system
- » KOMTRAX, Komatsu's remote monitoring system, which continuously monitors machine performance to ensure it keeps

operating at optimum levels, plus it also includes in-built theft protection

- » Komatsu Genuine Attachments (KGA), covering buckets, quick hitches and other attachments purpose-designed and manufactured in Australia for local conditions to ensure optimum performance
- » The industry's largest single nationwide customer support and sales network.



Right: Chris Moroz, Business Manager Construction.

"In difficult times, machine reliability, performance and reducing risk are the most important factors to consider when buying a new excavator," said Moroz. ■

Full details of the Komatsu Credits support package are available from your local Komatsu representative, by calling 1300 KOMATSU, or by visiting [www.komatsu.com.au](http://www.komatsu.com.au).

## "STOP PRESS"

The first 960E in the Australian market rolled out of the Mackay production facility in early November 2009.

The 960E is the latest electric drive truck to be developed by Komatsu and offers our customers yet another Ultra Class electric drive truck.

In early November we held an open day to view the 960E with customers travelling from all over the country to come and view the latest Ultra Class truck.

The first truck was commissioned in November with a further seven to be delivered over the next two months. ■



**Brief specs of the new 960E truck:**  
 Load capacity = 327mt  
 truck weight = 250mt  
 horse power = 3500hp  
 Max speed 64kph.



## NEW D375A-6 DOZER DELIVERS IMPROVED COST-PER-TONNE PERFORMANCE

Komatsu Australia has released the D375A-6 dozer, designed for mining, quarry and heavy construction applications, incorporating a number of technological advances which deliver lower costs per hour and higher productivity levels.

The new D375A-6, is powered by Komatsu's Tier 3-compliant turbocharged and aftercooled SAA6D170E-5 engine rated at 455 kW (Net), a 64 kW or 16.37% increase in engine power compared with the previous Komatsu D375A-5 dozer making the -6 the most powerful machine in its class.

The fuel-efficient engine ensures superior performance in both ripping and dozing work, according to Michael Hall, Komatsu Australia's National Product Manager Mining.

"Increased engine power and reduced fuel consumption is just one feature that is unique to Komatsu and when coupled with Komatsu's automatic gearshift transmission and lockup torque converter the results are groundbreaking," he said.

"Komatsu's automatic transmission selects the optimal gear range depending on the working conditions and load on the machine, ensuring the machine is always operating at maximum efficiency.

"These performance, productivity and efficiency benefits are achieved through Komatsu's philosophy of integrated design, which ensures that all components, powertrain, frame, hydraulics, electronics are designed to work together," said Michael.

Ripping performance is further enhanced through Komatsu's electronic powertrain control system, which results in a highly efficient drawbar pull, putting more power to the ground where it counts.

In dozing operations, the new Fully Universal (Full-U), and Semi Universal (Semi-U) blades allow for increased production without increasing blade width or reducing digging force. The newly designed sectional shape increases load hauling capacity during dozing operation.

"Overall dozing capability has significantly increased compared with the previous model, without compromising machine balance or operating cost," Michael said.

"The increased engine output, higher operating weight and Komatsu's new optimised blade profile delivers outstanding production and performance.

"Komatsu production figures indicate that overall productivity of the D375A-6 is up 9% compared with the previous model, while fuel consumption, despite having a higher-horsepower engine, has reduced by more than 3%.

"That translates into more cubic metres of material moved or ripped per litre of fuel, a significant saving for mine operators, contractors and quarries alike," said Michael.

Also new on the D375A-6 is a package of "standard mine" specification options, ensuring the dozer can be delivered directly from factory to minesite in a "mine-ready" configuration.

### These include:

- » Right- and left-hand access platforms with handrails, toerails, access lights and work lights, giving safe, secure access for operators and maintenance crews to the side and rear of the machine, including checking and refilling fuel and hydraulic tanks, cleaning of cab windows, and checking cab mounted lights
- » High mounted HID (high-intensity discharge) headlights for safer working at night
- » A battery and starter isolator box
- » Centralised grease points
- » Manual engine stop switches
- » Engine bay maintenance light
- » And many more extras ex factory.

"This option saves considerable time and expense, and ensures that mine specification requirements are manufactured and installed to Komatsu's exacting production standards prior to being shipped to Australia, and comply to ISO engineering standards".

"These initiatives eliminate the need to undergo significant modification and fabrication, to meet the high standard mine-specifications required in the Australian market, when a machine is delivered to Australia," he said.

"Again, this is aimed at ensuring we develop and deliver machines to our customers that best meet their production, performance and safety requirements in a cost-effective manner."

"The bottom line for owners and operators of this new dozer is a significantly improved cost-per-tonne performance" he said.

### Features such as:

- » Increased engine power
- » Field proven lockup torque converter and automatic transmission, state-of-the-art electronic control technology
- » New blade design, increased capacity
- » Easy to read multi monitor
- » Improved operator control, Komatsu hydraulic control system (CLSS)

combine to make the D375A-6 the best bulldozer in its class. ■

### Brief specs of the D375A-6 are:

Operating weight, 71.64 tonnes; powered by Komatsu SAA6D170E-5 engine rated at 455 kW (Net); blade capacity, 18.5 cu m (semi-U), 22 cu m (full-U).



## LATEST 254 TONNE CAPACITY 860E-1K TRUCK INCLUDES TROLLEY-ASSIST OPTION



"These braking elements, coupled with Komatsu's traction control technology, provide excellent braking force even in difficult road conditions," he said.

With the new truck, Komatsu has also paid attention to increasing operator comfort and making driving easier and less tiring.

"The 860E-1K cab features a deluxe, five-position adjustable air ride seat as well as a full-size heavy duty passenger seat for operator training and other applications," said Kris.

"An integrated electronic dash display provides a standard suite of instrument gauges as well as payload data.

"To further enhance productivity and comfort during long shifts, the 860E's steering column tilts and telescopes to customise the operator's driving

cycle times, and be quickly alerted of any potential faults," Kris said.

The 860E-1K is now in limited release, followed by full-scale production in 2010.

### How the 860E-1K fits Komatsu's mining truck line-up

Komatsu's latest mining truck, the 860E-1K fills a gap in Komatsu's mining truck line-up, giving it a full range of trucks from 100 US tons to 360 US tons.

### Here's the new line-up:

- » HD785-7, 100 US tons
- » HD1500-7, 150-164 US tons
- » 730E-7, 195-205 US tons
- » 830E-1AC, 240-255 US tons
- » 860E-1, 280 US tons
- » 930E-4, 320-330 US tons
- » 960E-1, 360 US tons

"Adding the 860E-1K to our mining truck range, allows Komatsu to offer the best match of hauling solutions to loading tools," said Kris Burford, Komatsu Australia's National Product Manager, Mining.

"This enables mines to select the optimum combination of machines to achieve their cost-per-tonne and productivity requirements.

"Combining this full-line truck offering with Komatsu's unique technology advances, including Autonomous Truck options and Trolley Assist, provides further opportunities for our customers to reduce haulage costs and increase production rates.

"Komatsu's investment on Research and Development in mining and construction equipment, today leads the industry in technological developments," said Kris.

"Our aim is to increase productivity, reduce the cost of machine ownership, lower the cost per tonne or cubic metre, cut fuel and consumables costs, while all the time ensuring safety is at the forefront of everything we do." ■

### Brief specs of the new truck are:

Payload capacity, 254 tonnes; gross vehicle weight, 454,363 kg; engine, Komatsu SSDA16V160, rated at 2015 kW; maximum speed, 64.5 km/h.

Komatsu has recently released the new 860E-1K electric drive rigid frame dump truck, featuring a payload capacity of 254 tonnes (280 US tons) and the option of a factory-installed trolley-assist feature to save fuel, reduce emissions and extend engine life.

It is designed to be matched to Komatsu PC5500-6 and PC8000-6 -sized shovels and excavators, WA1200-3 sized wheel loaders, and large rope shovels.

Powered by a Komatsu SSDA16V160, a 2015 kW, 16-cylinder, two-stage turbocharged Tier 2 certified diesel coupled with the Komatsu, Siemens control system ensures the new 860E is capable of enduring the rigorous demands expect from mining Trucks.

According to Kris Burford, Komatsu Australia's National Product Manager, Mining, Komatsu's trolley-assist system can be used with either 1600 or 1800 volt lines, allowing the 860E to travel uphill faster while engine RPM reduces to idle speed, saving fuel and extending the life of the engine.

"Trolley-assist has the potential to reduce fuel consumption by up to 30%, and is proven technology that has been extensively used in some mining markets," he said.



"Trolley-assist is also available as an option on our existing 730E-7 dump trucks, on consultation with Komatsu."

The 860E-1K Komatsu-designed drive system produces a maximum speed of 64.5 km/h through a 35.52:1 final gear ratio powered by the latest Komatsu-Siemens control package.

This unique, liquid-cooled IGBT AC-drive system provides advanced features and a smooth application of torque and traction, said Kris.

"Another key feature of the 860E is its outstanding braking power, through an ultra-quiet dynamic retarding system, capable of generating 3470 kW of braking power is assisted by four-wheel wet-disc brakes.

position, while automatic speed control for uphill or downhill hauling makes it easier for the operator to maintain a desired speed.

"New standard features and access systems ensure safety, comfort and longevity."

As with all Komatsu large mining equipment, the new truck features Komatsu's Vehicle Health Monitoring System (VHMS).

"Using a satellite communications system and optional wireless download, VHMS allows both Komatsu and minesite technicians to use a simple internet interface to easily check key operating and trend data, monitor production data such as payload and

# THE SCIENCE BEHIND KOMATSU'S HYBRID EXCAVATOR TECHNOLOGY

In May 2008, Komatsu announced the world's first commercially available hybrid construction machine: the PC200-8 Hybrid hydraulic excavator.

In this special report, compiled by our colleagues at Komatsu Ltd's global publication Views, we spoke with Hikosaburo Hiraki, who was centrally involved from the outset with the development of the Komatsu Hybrid System, which has been achieving significant reductions in CO2 emissions and fuel consumption.

## Can hybrid systems be effective in hydraulic excavators?

**Hikosaburo Hiraki:** Actually, hybrid systems are more effective in hydraulic excavators than passenger cars. When a car travels on an ordinary road, the driver will typically apply the brakes (decelerate) about once every five to 10 minutes.

In contrast, the upper structure of a hydraulic excavator turns at the rate of once every seven seconds when loading, generating energy each time it slows down. Since the structure turns and reduces speed at a high frequency by efficiently storing energy, it makes the hybrid system a perfect fit.

## How is the hybrid system of a passenger car different to that of Komatsu's PC200-8 Hybrid?

**Hikosaburo Hiraki:** It may seem surprising, but the kinetic energy of a PC200-8 hydraulic excavator is about the same as that of a standard passenger car. Kinetic energy is proportional to the multiplication of the mass and the square of the velocity.

As such, there is little difference in the kinetic energy of the passenger car, which is light and moves quickly, and that of the PC200-8, which is heavy and moves slowly – but where the upperstructure slews quickly.

We therefore believed it was possible to take certain aspects of the hybrid system of a passenger car and apply them to the PC200-8 Hybrid system.

With this in mind, we pursued further research into the hybrid system of the passenger car, confident that we could adopt it in construction equipment.

However, because the upperstructure of hybrid excavators are required to slew frequently, we had to identify how to efficiently store in a small device the instantaneous energy generated while slewing in order to make hybrid construction equipment a reality.

Our solution was to develop a capacitor that could store and discharge electrical energy instantaneously.

In our PC200-8 Hybrid system, the electricity discharged from the capacitor is used to assist the engine when it is accelerating, which is the major difference from the hybrid system of the passenger car.

## How Komatsu's Hybrid System works

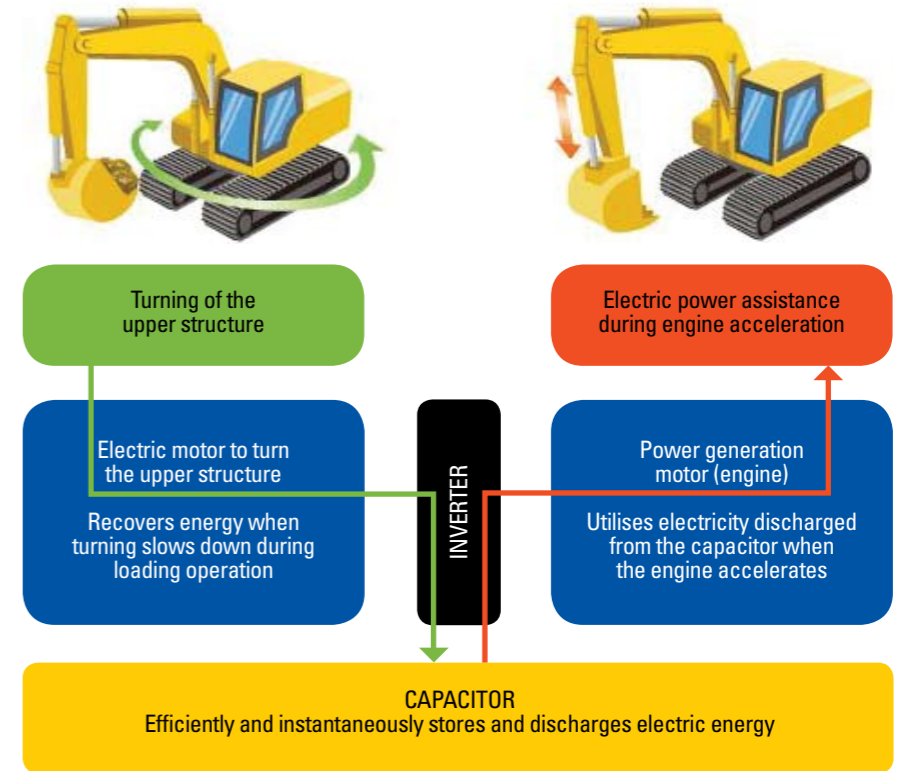
Komatsu's proprietary Hybrid System converts the energy generated when the upperstructure of an excavator slows while slewing into electricity, storing that energy in the capacitor and using it to boost engine power via a power generation motor when the engine accelerates.

While standard equipment normally uses a hydraulic motor to turn the upper structure, Komatsu has developed an electric motor exclusively for its Hybrid System.

Through the use of this unique electric motor, which recovers energy generated when the upperstructure's slewing slows down, Komatsu has achieved the world's first production hybrid hydraulic excavator.

Compared with a standard PC200-8, Komatsu engineers have recorded average reductions in fuel consumption of 25% through test results.

However, in field tests with customers since the Hybrid has gone into service, Komatsu has recorded a maximum reduction in fuel consumption of 41% at a jobsite where the PC200-8 Hybrid's upperstructure was turning more frequently than in most applications.



## It seems that some of the people who viewed the PC200-8 Hybrid for the first time were disappointed that it looked almost the same as a conventional excavator. Is there a reason the exteriors look the same?

**Hikosaburo Hiraki:** We commenced development based on the idea is that as long as conventional and hybrid systems existed together, the appearance should be similar.

The reason for this was to make it possible to mass-produce this machine using standard factory production lines, rather than equipment solely for research purposes.

Originally, however, the shape and size were such that it never looked anything like conventional construction equipment! In the end, I am proud we found a way to make it look the same, which is what we do at Komatsu.

Our basic policy is to make all core components in-house. Of course, we have always manufactured engines and hydraulic devices internally, but electric motors were a whole different realm.

However, at Komatsu we always seeks to challenge ourselves in unfamiliar territory. It is our policy and part of our corporate philosophy.

Through in-house production, we can make refinements according to our needs and provide outstanding products to customers.

## What other areas were particularly difficult during development?

**Hikosaburo Hiraki:** Since the voltage used by hybrid systems is higher than conventional construction equipment, we have to be vigilant in ensuring a safe design.

Simply switching off the power doesn't necessarily make construction equipment safe, and we needed to consider every possible scenario for how the machine would be used. This meant we had to think of each and every possible safety issue.

We visited the factory on numerous occasions to seek advice and considered various scenarios before deciding on the safest possible design.

In addition to guaranteeing human safety, we also enhanced monitoring to ensure the proper operating conditions of the construction equipment itself, or in other words, improved fault diagnostics.

We extensively conducted logic checks as well as preliminary tests using actual equipment.

For example, it took a long time to resolve unexpected variations in voltage that occurred when the environmental temperature was -30° C.

## What has been the result out in the field, out at customers' sites?

**Hikosaburo Hiraki:** Some customers have achieved 30% or 40% reductions in fuel consumption, surpassing the 25% reduction in our test results showed. ■

# DOZER OPERATING TIPS TO SAVE FUEL AND MAXIMISE PRODUCTION



The basic job of a dozer is to rip and push (doze) earth and other materials.

Productivity and fuel consumption are highly dependent on factors such as site geography, including level or sloping ground, as well as material composition. In addition, since a dozer predominantly operates at full power using its own weight, it is difficult to save on fuel consumption while working; however, there are a number of simple tricks you can use to optimise your production, while minimising fuel consumption.

In this article, we've used actual operational data from Komatsu D155-6 dozer to illustrate our points, but please note the fuel efficiency data shown here may vary depending on the actual work site, machine condition and operator skill.

## 1. Avoid high idling and/or turn off the engine

When waiting for a truck at the dump, for example, reduce fuel consumption by avoiding high idling whenever possible. If there's a long wait between dozing work, turn off the engine altogether.

Use either your low idle option or depress the decelerator pedal to slow down the engine speed.

### Komatsu's test results (Fig 1) from adopting these practices show that:

- » Switching from high idle to low idle for 30 minutes a day saves 1710 litres of fuel a year.
- » Turning the engine off rather than using idle for a total of one hour a day saves 2430 litres a year.

## 2. Start working from the front of your dozing zone

The most effective way to doze on level ground is to shorten the distance you are pushing a full load by dozing "front-to-back" (in Figure 2, from point A to point B to point C).

Using this technique, start from point A, which is 3 to 5 m back from point X at the forefront of the dozing area.

After finishing dozing from point A, move further back in increments of 3 to 5 m each time to start a blade load.

This method increases the full load in the blade each time because you are establishing a downward gradient, plus it enhances productivity by keeping the digging ground even.

In contrast, repeated dozing from "back-to-front" lengthens the pushing distance and requires additional blade control (up/down operation) to prevent shoe slippage.

Consequently, the dozed ground easily becomes uneven, making it more difficult to keep a full load in the blade.

Compared with the "back-to-front" method, the "front-to-back" method can improve fuel efficiency (productivity per litre) by 11%, according to Komatsu figures (Fig 2A).

## 3. Doze on a downhill slope

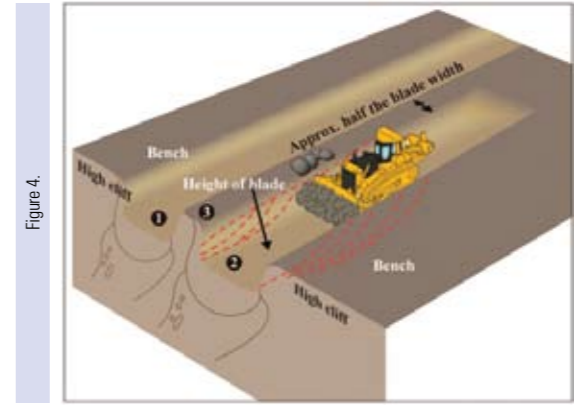
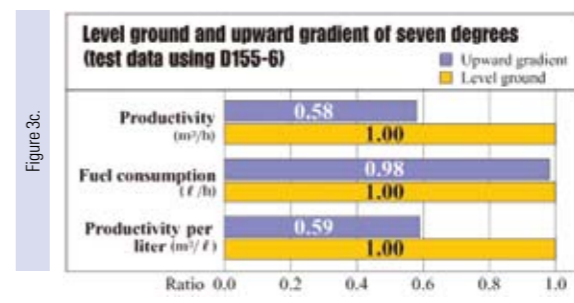
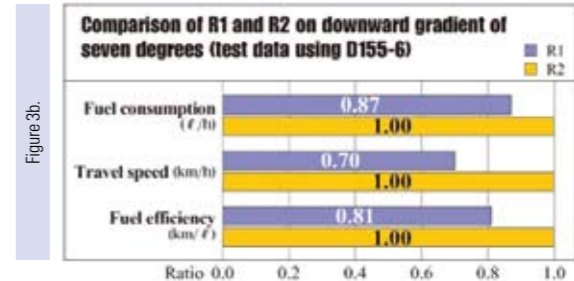
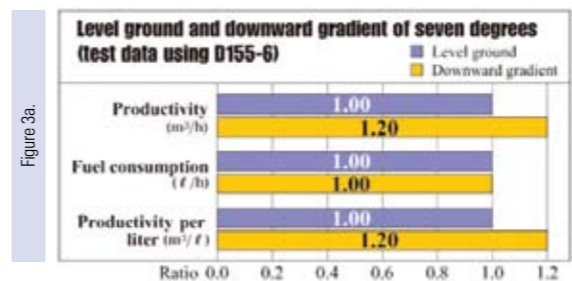
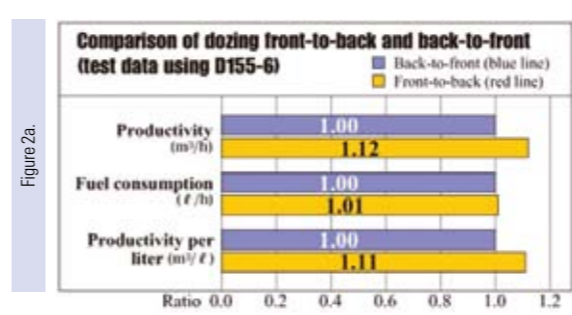
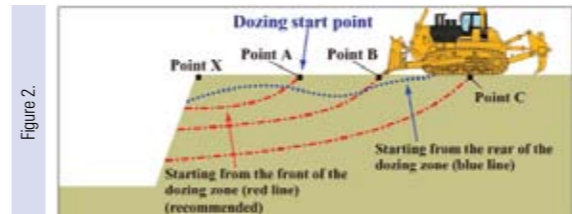
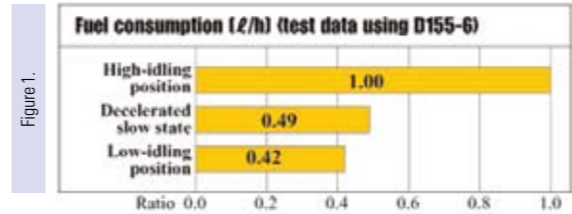
Wherever possible, you can significantly improve productivity and enhance fuel efficiency (productivity per litre) by dozing on a downhill slope, using gravity to assist your dozing.

Compared with dozing on level ground, downhill dozing allows you to dig and carry a significantly larger amount of material. Dozing time is also faster, leading to higher productivity.

While fuel consumption per hour is much the same, dozing a downhill slope of 7° increases blade capacity almost 20% compared with dozing on level ground and using the same engine power (Fig 3A).

Dozing downhill also harnesses the weight of the dozer, so you can expect greater efficiency, particularly from larger blades such as full-U blades. It may be less effective with smaller blades.

Further, reversing back up a 7° downhill slope in reverse second gear (R2) results in greater fuel efficiency than reverse first gear (R1). Although less fuel is



consumed in R1, since the speed is also much lower, the dozer can travel approximately 20% further in R2 using the same amount of fuel (Fig 3B).

As a general observation, productivity is always much lower when dozing uphill since you are working against gravitational force. However, fuel consumption may not necessarily increase, simply because it takes longer for each cycle of dozing earth uphill (Fig 3C).

## 4. Other important factors

### Avoid shoe slippage and stalling

Dozing or ripping while shoes are slipping or keeping the torque converter stalled will increase fuel consumption and cause irregular wear on your undercarriage.

### Doze again in material where getting a full load is difficult

At sites where it is difficult to fill the blade due to hard ground or rocky material, reverse after the first pass and doze in the opposite direction, which will allow you to fill the blade as much as possible before carrying the material.

### Minimise blade spillage

You can improve operating efficiency by minimising spillage from the blade while dozing. One method to achieve this is slot dozing.

This method is particularly useful at sites where material is prone to spill from the side of the blade due to large loads of relatively soft earth or movement down the hill, and at sites where the load must be carried a long way.

- » The digging procedure should be in the order 1-3 shown in Figure 4.
- » The depth of the trench should not exceed the height of the blade.
- » The space between trenches should be approximately half the width of the blade. ■



## Komatsu Study Tour BAUMA 2010



Bauma 2010 will again focus on both the construction and mining sectors and to ensure Komatsu customers have the opportunity to attend Komatsu is pleased to announce two exciting tours – one for each sector.

### The Komatsu Construction Tour itinerary:

17 April 2010, Arrive Bangkok Thailand  
2 nights five star accommodation  
Visit Komatsu Bangkok Factory  
Highlights of Bangkok Tour  
20 April 2010, Arrive Munich Germany  
4 nights four star accommodation  
Visit Bauma 2010 Trade Fair  
Experience the Hofbauhaus beer hall  
See Munich sites  
24 April 2010, Arrive Venice Italy  
3 nights four star accommodation  
Visit Komatsu Este Factory  
Enjoy a Gondola Serenade  
Lagoon Island Tour and much more  
27 April 2010, Depart Italy for Australia

### The Komatsu Mining Tour itinerary:

17 April 2010, Arrive Munich Germany  
4 nights four star accommodation  
Visit Bauma 2010 Trade Fair  
Experience the Hofbauhaus beer hall  
See Munich sites  
22 April 2010, Arrive Dusseldorf  
1 night four star accommodation  
Visit Komatsu German Mining Factory  
23 April 2010, Arrive Berlin  
2 nights four star accommodation  
Berlin sightseeing tour  
25 April 2010, Arrive London  
3 nights four star accommodation  
Experience London show and dinner  
London city sights are breathtaking.  
28 April 2010, Depart London for Australia



### Both tour costs start at \$7,700 ex Sydney

\*Costs are based per person twin share (plus single supplement) and subject to change and availability at the time of booking

Limited seats available. Book now to secure your Komatsu Bauma experience for 2010. To register your interest and receive a booking form email:

- » **Construction Bauma Tour:** [constructionbauma@komatsu.com.au](mailto:constructionbauma@komatsu.com.au)
- » **Mining Bauma Tour:** [miningbauma@komatsu.com.au](mailto:miningbauma@komatsu.com.au)

## MICHAEL HALL: NATIONAL PRODUCT MANAGER, MINING

Michael Hall has been appointed Komatsu Australia's National Product Manager, Mining, with responsibility for managing delivery of Komatsu mining equipment between factory and customer, as well as liaising directly with Komatsu Ltd engineers in regard to product development.

Michael, who began his working life in the manufacturing industry, has been working in the mining industry since 1995, including a nine year stint in the Pilbara region of Western Australia.

He also worked in Papua New Guinea, as maintenance supervisor for a plywood factory, which gave him a strong awareness of dealing with other cultures.

He then worked as national maintenance planner, Australian surface operations for a large Perth-based mining contractor.

"Working for a contractor made me aware of the need to focus on the costs of operation every single day in order to maintain viability," said Michael.

For the past 13 years, he has worked for a large mining organisation, giving him first-hand experience of the processes, policies, procedures and people in this major industry sector.

"I see my new role with Komatsu Australia as covering a wide number of different aspects, which no doubt will lead to some challenges," he said.

"Australia leads the world in mining, particularly in regard to our commitment to the highest safety and environment practices, so it is essential we as a

company understand our customers' requirements and work with our factories around the world to develop solutions for them.

"In the first instance, I will be responsible for managing products sourced from the Japan factory to customer, and ensuring that our customers' needs are met.

"My role is to also be aware of the technical aspects of our mining equipment, in order to support our sales and marketing team and to steer product development with the design and factory engineers," said Michael.

"And because many of our customers are global customers, we need to ensure we are aligned to our overseas counterparts within Komatsu, so we can leverage best practice and ultimately ensure the best solutions for our customers.

"Our aim is to be very pro-active in our dealings with customers, so that we can offer solutions to them in a speedy and cost-effective way," Michael said. ■



Above: Michael Hall, Komatsu Australia's new National Product Manager of Mining.

## BRENDAN HENNESSY: OUR HIGH-ACHIEVING NEW FITTER (AND FORMER APPRENTICE)

Congratulations to Wollongong branch diesel fitter Brendan Hennessy, who was recently announced as Illawarra Apprentice of the Year in the category of automotive (heavy vehicle, mechanical, industrial) by the region's vocational training board.

Brendan won his award in August, just as he was completing the fourth year of his apprenticeship; since then, as a fully qualified fitter, he has begun as a full-time employee at the Wollongong branch at the end of October.

"I spent all my time as an apprentice with Komatsu's Wollongong branch, primarily on field service, working on a full range of Komatsu equipment," said Brendan.

Shaun Watts, branch supervisor at Wollongong, paid tribute to Brendan's efforts and work ethic.

"He's done very well throughout his entire apprenticeship, pretty much scoring 100% in every subject," said Shaun.

"He's excelled at every part of his job, and he's got a good work ethic. Really, he never put a foot wrong during his apprenticeship, and we made sure we snapped him up as soon as he finished.

"Brendan's a real asset to the team," Shaun said.

This isn't the first time Brendan's had a mention in D2E magazine. Back in 2007, we reported that he'd been achieving some outstanding results during his training, topping his Wollongong TAFE plant mechanics course in 2006.

At the time, this included a near-perfect score of 99% across a mix of theoretical exams and practical tests. ■



Above: (from left) Chris Schofield-Manager of a local Group Training Company called Illawarra Group Training, Brendan Hennessy-Apprentice of the year, David Collins-General Manager of State Training Services Department of Education and Training.

# KOMATSU'S AWARD WINNING APPRENTICE SYSTEM

Komatsu's new apprenticeship training scheme devised and being tested in the Hunter Valley, in NSW, is set to become a benchmark after taking the runner up spot in the Federal Education Minister's Awards for Excellence program.

In August 2009 Gavin Manning, Komatsu's Newcastle Service Manager and Paul Richardson, Komatsu's HR - Organisational Development Manager, accepted the Award on behalf of Komatsu at an Awards presentation ceremony hosted by the Hon. Julia Gillard MP, Deputy Prime Minister and Federal Minister for Education Employment and Workplace Relations, in Canberra.

The new Apprentice Development System (ADS) for plant and heavy machinery apprentices started this year and is the brainchild of Gavin Manning, Cristian Duma, Reg Rogers and Robert Uhl, all NSW Hunter Valley managers at Komatsu's Newcastle and Mt. Thorley branches and the following is commentary by the key stakeholders on the success of Komatsu's ADS.

The application for the Award was sponsored by Komatsu's General Manager Used and Rental Equipment, Ian MacCowan. According to Ian, the effort our Hunter Valley team has applied and the drive and support from our Human Resources Division is commendable and will facilitate a great outcome for our future, the Minister's Award is greatly appreciated and an added bonus.

Gavin Manning said, "We are pleased with the recognition that this Award provides, a lot of people have dedicated a lot of work to getting this right and there is still a lot more to do – this Award and the improved results we are seeing from the new apprentice group, confirms the new Apprentice Development System as the standard for Komatsu's apprentice training."

An important feature of the new Apprentice Development System is the establishment of an Alliance with



Below: Paul Richardson and Gavin Manning accepting the Runner up Federal Education Minister's Award for Excellence Program.



Hunter Institute of TAFE, Kurri Kurri Campus, the main centre for the Heavy Vehicle Mobile Equipment Certificate III program in the Hunter Valley.

According to Paul Richardson, "The involvement and assistance provided by TAFE has been invaluable in establishing the system as a model for apprentice training and other employers are very interested in this partnering approach. I believe this approach, as well as the integrated system, designed to engage and support the apprentices at every level of their development, contributed to Komatsu receiving the Award."



**"Komatsu has always had a substantial commitment to the training of apprentices, with more than 120 apprentices in development across Australia and New Zealand"**

*Paul Richardson, Komatsu Australia*

"Along with their on-the-job training and attendance at TAFE, the apprentices also learn life skills including: Toastmasters, Road Safety Awareness, Drug, Alcohol and STD's Awareness," he said.

The new system is being piloted in 2009 and planning for another intake of apprentices in NSW in 2010 is already at an advanced stage.

Anthony Crowley, Komatsu's General Manager Human Resources commented that "The pilot sets new national standards for the way Komatsu trains its apprentices and has sparked a deal of interest from Komatsu managers in other states, who view the new system as the benchmark for apprentice training."

Tom Zube, Komatsu's Manager, Central Region and Brad Hackett, Komatsu's NSW Operations Manager, both agree that the Award is well deserved and further acknowledgement of the continuous improvement approach taken by the Hunter Valley managers Cristian, Reg, Rob and Gavin.

Gavin further states that "The new system is producing measurable results already and a higher standard of apprentice than was previously achieved. The rigorous recruitment method enabled better hiring decisions and group age and life experience diversity has enhanced this further."

Reg Rogers, Komatsu's Mt. Thorley Branch Manager acknowledges that learning outcomes are being met more competently, positively and substantially. Also, group motivation and skills development speed is noticeably accelerated. We see these improvements everyday in the workplace.

"Efficiencies have been achieved via the involvement of the Branches, HR, TAFE and the establishment of clear outcomes focused activities and processes that are continuously reviewed and quality checked. We are very pleased with the Award and the commitment shown by the apprentices and the people they work with and learn from on a daily basis," stated Cristian Duma, Komatsu's Newcastle Branch Manager.

Robert Uhl, Komatsu's REMAN Newcastle Manager confirms that, "Work quality from the apprentices is noticeably higher compared to previous groups at the same time period. And we are seeing that a broader skills spread is producing a more rounded individual rather than a traditional 'techie'. The system is working and the results are more than pleasing."

Gavin added, "As a service manager, it is evident that the manual skills of the group are around 6 months in advance of their contemporaries. This is significant, because it means that the apprentices are able to work earlier on Komatsu's advanced technologies – which means they develop valuable skills like troubleshooting, which expands their overall diagnostics and repair capabilities, down the track this is good for customers and Komatsu."

"Komatsu has always had a substantial commitment to the training of apprentices, with more than 120 apprentices in development across Australia and New Zealand. It is strategic and a key to the sustainability of the business," Paul said.

Gavin further stated that in designing the new system extensive research was conducted to learn from our experiences over many years. The system was designed purely for Komatsu and its unique requirements and meant taking the old scheme apart and putting it back in a completely different way with many more enhancements.

According to Robert Uhl, "The new components, such as early technical skills development both on-the, job and

through dedicated Komatsu technical training, attention to life skills and non technical business skills development, have all added to the engagement of the apprentices and demonstrate the commitment on the part of the company and its people."

Cristian Duma said, "The online and face-to-face induction process at Komatsu and the 3 weeks Skills Acquisition and Application program conducted by TAFE, coupled with undertaking the competency based and assessed 'Komatsu Total Technical Picture' delivered by Komatsu technical trainers, has really given this new group a head start and built up their confidence."

"The apprentices' performance is reviewed at the end of each month. At the completion of each 4 month work based rotational assignment; each apprentice provides a presentation to fellow apprentices, managers, supervisors, trades people, HR and TAFE teachers." Reg Rogers says. Reg added, "We were all impressed by the quality and professionalism of the presentations, it is evident that their Learning and Experience Records which the apprentices' complete daily are proving to be a valuable device for learning and retention."

Gavin said, "The apprentices had attended a number of Toastmaster's events before their first presentations. These are great interactive sessions where every apprentice has to stand up and give a speech and be constructively and positive evaluated by the Toastmasters leader and their peers. I think this made a big difference to the standard of 'real' presentations we saw from the group."

The Apprentice Development System is part of Komatsu's focus on continuous improvement. Komatsu managers will keep monitoring and reviewing the success of the pilot, including making necessary adjustments.

"We anticipate that at the end of their apprenticeships the apprentices will be at least one year ahead of a comparable apprentice because of their intensive training in their first two years," said Paul.

"This is a good start and the early successes of the system strengthens our resolve to provide the best training for apprentices anywhere, the recognition we have received through the Minister's Award is a real boost to the company, the apprentices and all who are personally involved," stated Tom Zube. ■

## "STOP PRESS" Apprentice Excellence

In addition to the recent Ministers Award, Komatsu Australia's Bradden Grant - 3rd year boilermaker at Komatsu's Sherwood branch, received Apprentice of the Year at the Australian Government's Australian Technical College North Brisbane Awards night On Wednesday 11 November, 2009.

Congratulations Bradden and keep up the good work.



Below: Bradden Grant.

## AUSTRALIAN PRESIDENTIAL AWARDS RECOGNISING COMMITMENT & DEDICATION



**Above:** Bill Pike, Komatsu Australia's President accepting the Presidents Award from Masahiro Sakane, Komatsu Ltd's president and CEO in 2007.

Komatsu Australia held its first national Presidents Award in mid September. The awards were instigated to recognise the dedication and commitment of Komatsu Australia individuals and teams.

There is a long history of Presidential Awards made through our parent company, Komatsu Ltd and Komatsu Australia has enjoyed Presidential Awards over a number of years.

In recent times there have been two significant awards:

- » 2007 President's Award for Excellent Performance
- » May 2009 Komatsu Australia was a member of the Global Mining Business Award.

The inaugural Presidential Awards under the stewardship of Komatsu Australia President Bill Pike, acknowledges the significant contribution of many and seeks in this program to ensure that recognition is given to those who have achieved outstanding performance.

There are two categories for this President's Award Ceremony:

- » Project Award
- » Individual Award

### Project Award

This award seeks to recognise Outstanding Performance through cross functional team work or technical breakthrough.

Nominations called for innovation, high performance, excellent technology and/or diligent activities.

Taken into consideration was degree of achievement against the project target, degree of impact on ongoing performance and operation and degree of innovativeness.

Project Award winner for Excellence in Implementation of Feel Safety and 5S Programmes was Western Region (Welshpool) Service Assembly Feel Safety and Five 'S' Team:

- » Sean Ashby - Workshop Manager
- » Steve Lihou - Mining Assembly Foreman
- » Steve Hosking - Construction & Utility Assembly Foreman
- » Quentin Bailey - Electrician/safety Co-ordinator
- » Grant Swan - Crane Operator/ Yardman
- » John Scott - Fitter/Safety Co-ordinator
- » Kevin Wragg - New Equipment Inventory Co-ordinator.

### Individual Award

The Individual President's Award seeks to recognise employees with consistent and diligent efforts in a specific area supporting our business over a long period of time.

The 2009 Komatsu Australia Individual Presidential Award went to Colin Chamberlain, National Marketing Manager – Construction.

According to Bill the nominations called for employees who have accumulated 'kaizen' activities (continuous improvements) in a consistent and diligent manner.

"Colin joined Komatsu Australia 22 years ago. He is truly passionate about Komatsu and has been instrumental over the years in driving industry segment growth," he said. ■

**"Colin joined Komatsu Australia 22 years ago. He is truly passionate about Komatsu and has been instrumental over the years in driving industry segment growth,"**

*- Bill Pike, Komatsu Australia*



**Above:** Colin Chamberlain accepting the Individual President Award from Bill Pike.



**Above:** From Left Kevin Wragg, Steve Hosking, Bill Pike, Grant Swayne, Sean Ashby and Rob Rhodes at Welshpool branch during Bill Pike's special presentation to the winning project team.

## KOMATSU'S CUSTOMER SUPPORT CENTRE PROVIDING CUSTOMER BUSINESS SOLUTIONS



In issue 51 Down to Earth reported on the opening of the Komatsu Customer Support Centre (KCSC) and how this new centre will be pivotal to better servicing our customers into the future.

According to Scott Grant, Group General Manager Customer Support and Business Development, the centre has been a success since its opening in March.

Construction commenced in December 2008 and fifteen weeks later the KCSC was ready for operation. On Monday 30th March 2009 the KCSC handled its first call and twenty six weeks later over 30,000 calls have been handled by our people at KCSC.

"The KCSC provides industry leading business solutions in customer support, while developing initiatives to better support Komatsu's internal and external customers - this is part of Komatsu's customer support charter initiative," he said.



**Above:** Komatsu Customer Support Centre staff (from left) Max Hill, Chris Cadden, Kim Baumgartner, Nadine Shephard, Michael Cowell, Melvina Vega, Louise Tang and Michael Wotton.

### Vision statement:

"The KCSC's vision is to be the central point of customer support for Komatsu. Earning customer loyalty and dedication through innovation and continuous improvement driven by teamwork, integrity and professionalism".

With a state of the art telephony system, the KCSC is able to implement a continuous improvement programme in relation to customer interactions. As a result of these initiatives, new standards of professionalism and customer support have been obtained for these interactions.

The current growing team at the KCSC consists of a supervisor and 8 Customer support agents. The hours of operation are Monday to Friday 7AM to 6PM and 24 hour, 7 days a week national support will commence shortly.

To begin with, the KCSC supports all branches within the New South Wales region and selected branches from around the country.

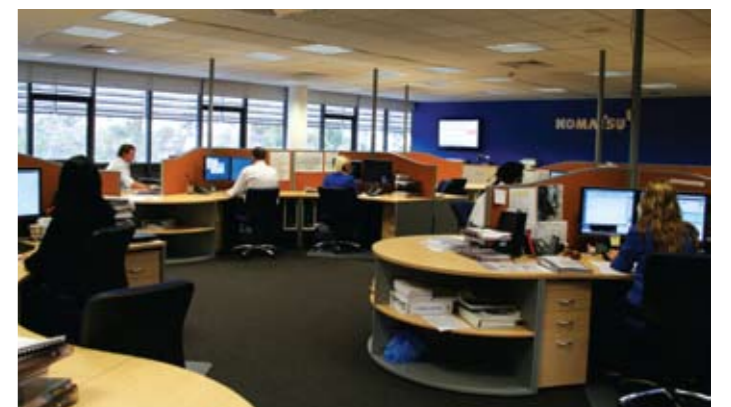
"We cater for parts sales, after-sales service, condition monitoring and a number of post-event customer support

services. Over the next 18 months KCSC support for all branches around the country will be implemented, including centralised technical support and further customer first initiatives," said Scott.

"In one sense, it's business as usual for Komatsu Customers! Our people are Komatsu trained employees who know the customer and their business.

"The KCSC integrates seamlessly into our existing network of parts and service professionals to provide a consistent and exceptional level of customer support.

"And in another sense, the KCSC initiative continues Komatsu's long tradition for innovation and for putting our customers first," he said. ■



# KOMATSU FORKLIFT AUSTRALIA NOW OPEN

Acquired by Komatsu Ltd on the 1st April, 2009, Komatsu Forklift Australia became the newest and first factory owned distributorship of the global Komatsu family.

With 11 branches across Australia, Komatsu maintains the complete sales, hire, service and parts advantage with a forklift product range from 1.8 tonne to 25 tonne capacity. In addition to their factory owned branches, Komatsu has authorised dealers in NSW, VIC and the most recently appointed Komatsu Australia TAS.

The Tasmanian sales and service distributorship is an untapped market for Komatsu forklifts with a number of major customers that require the quality Komatsu support.

Komatsu Forklift has begun working closely with us as we work towards unifying the services, support and innovations offered to the Australian market. Including Komtrax, Hybrid technology, financing and after sales support.



**Left:** Bill Pike Komatsu Australia and Gavin Pringle KFAP Head office at the official Komatsu Forklift launch. **Right:** Nick Fujishima Komatsu Australia, Ted Ishikawa KFAP Head Office, Takechiyo Tanaka Sumitomo Australia and Sasumu Isoda Komatsu Utility.



Komatsu Forklift unveiled the world's first Electric Hybrid Forklift in Australia this month. The forklift boasts 14 patent technologies that offer exciting new opportunities for improved energy efficiencies and a greener world.

The forklift draws its energy from two power sources with the ability to store and discharge energy. The regenerative braking system recovers wasted energy

when applying brakes or moving directional levers to maximise energy savings and a longer battery life. To top it off a one hour quick charge restores power to an amazing 80% capacity.

Demonstration models are currently available. ■

*More information about Komatsu Forklift Australia and its products can be found at [www.komatsuforklift.com.au](http://www.komatsuforklift.com.au)*



# A SHOCKING MELBOURNE CUP WINNER



**Above:** John Narder Komatsu Workshop Supervisor and Laurence Eales, EA Hire at the Komatsu Fairfield branch.

Tuesday 3rd November 2009 SHOCKING won the \$5.5 million Melbourne Cup at Flemington! It was victory for Mark Kavanagh his trainer, Corey Brown his jockey and Laurence Eales his owner.

The Melbourne Cup is renowned for "the race that stops the national" but on Wednesday 11 November staff at Komatsu Fairfield branch who were stopped in their tracks by an unexpected visit.

Laurence Eales proprietor of EA Hire Equipment, who has been a Komatsu customer for many years, turned up with the Melbourne Cup in the back seat of his ute!



**Above:** Matt Buttigieg, Komatsu Australia Service Manager enjoying the Melbourne Cup trophy.

And like any good Australian, Laurence was quite happy for the Komatsu staff to take turns at holding the legendary Melbourne Cup.

EA Hire Equipment has over 24 pieces of Komatsu machinery, ranging from 4 tonne up to 40 tonne: PC40MRX-2, PC78MR-6, PC128US-2, PC228US-3 and PC450-7.

EA Hire has utilised the Komatsu Fairfield service department for inspections and reports.

According to Matt Buttigieg, Komatsu Service Manager Fairfield, "The Komatsu Fairfield service department has worked closely with EA Hire to service and support the company's extensive fleet of Komatsu machines."

"As the machines come off hire, EA Hire organises for them to come straight to the Fairfield Komatsu yard for inspections and reports. Once the inspections are finalised the machines are ready to go to the next job directly from Komatsu yard according to the customer specifications and criteria," he said.

From all the team at Komatsu, congratulations Laurence on an exciting victory and we look forward to more impromptu visits of famous silverware in the future. ■

# KOMATSU SIGNS UP TOLL FOR NATIONAL WAREHOUSING AND TRANSPORT CONTRACT

In June, Komatsu Australia and Toll Group signed a contract covering provision by Toll AutoLogistics Components of Komatsu's national warehousing and transport requirements.

The contract was signed by Bill Pike, President and CEO of Komatsu Australia and Paul Little, Managing Director of Toll Holdings.

Both spoke of the start of a long-term successful relationship and the joint commitment of achieving a market leading supply chain operation for Komatsu Australia.



**Below:** Bill Pike and Paul Little contract signing at Komatsu Fairfield branch. **Right:** Dignitaries at the Komatsu and Toll official contract signing.



Bill Pike stated that the three year contract with Toll Holdings is expected to deliver a higher level of service to Komatsu customers.

"Toll will not be just a service provider but will be an integrated part of Komatsu's parts business in order to achieve maximum value for our customers," he said.

According to Paul Little Toll's vertically integrated IT system, as well as its technology solution will be a critical part of Toll's capability to achieve excellence in Komatsu's logistics requirements.

Also in attendance were Nick Fujishima, Vice President Komatsu Australia, Scott Grant, Group General Manager of Customer Support and BD Komatsu Australia, Tom Zube, National Parts Supply Manager Komatsu Australia, Barry Clark, Director Toll Logistics Asia and Frank Scarano, General Manager Toll AutoLogistics Components, plus the

operational teams from Komatsu and Toll who will be responsible for the ongoing operations of the contract.

The national contract includes the provision of parts warehousing in Komatsu Australia's Perth, Sydney and new Brisbane distribution centres and the operation of Komatsu's Mackay branch (totalling more than 20,000 sq m nationally).

Transport services include airfreight (overnight express, same day, next flight), road express, road economy and rail.

As most of Komatsu's customers operate within the highly demanding mining and construction industries, time is of the essence in all operations and customer service is paramount. ■

## Morningside DC

This support was further emphasised on September 16 when the Toll Morningside DC was officially opened. The newly constructed facility is 10,700sqm with three sunken docks and is planned to be a 'multi-user facility' giving KAL the benefit of operating and management synergies whilst allowing future growth of our business.

Special guest appearances by rival teams Triple Eight racing and Toll HRT made the launch even more exciting. Craig Lowndes, Jamie Whincup and Will Davison put rivalry aside and happily signed posters for all guests.

**Below:** At the official morningside DC opening Craig Lowndes (far left), Chris Cassettari, Komatsu Australia Director of Operations, Barry Clark, Director Toll Logistics Asia and Will Davidson.



**"Toll will not be just a service provider but will be an integrated part of Komatsu's parts business in order to achieve maximum value for our customers,"**

*Bill Pike, Komatsu Australia*

# TEAMVODAFONE REGAIN MOMENTUM WITH ANOTHER VICTORY AT PHILLIP ISLAND

This article is based on Team Vodafone's press release dated 8 November 2009.



TeamVodafone's Jamie Whincup has extended his championship lead to 122 points after taking victory in Race 22 of the V8 Supercar Championship Series at Phillip Island International Raceway.

Whincup won yesterday's 100km race and backed it up this morning with pole position for today's 200km race.

The defending champion got his best start of the season and virtually controlled the race from start to finish, the only glitch a miscommunication with the safety car at the conclusion of his second pitstop.

"Obviously I am extremely happy with the weekend," Whincup said. "I came here with a massive job to do and feel like I executed it well.

"We had momentum against us coming into the round and needed to lift our game and we did just that. Our car speed, reliability and pitstops were top notch this weekend.

"While we have regained some points and momentum, there are still four races to go and 600points up for grabs," he continued.

Teammate Craig Lowndes qualified 12th for today's 44-lap race and bounced back from a bad start to finish the race seventh.

"I had a very rocky start," Lowndes explained. "I got way too much wheel spin and lost about nine positions.

"The car was much better than yesterday and our strategy and pitstop were fantastic. I managed to leap quite a few positions through the stops.

"It was a great finish to a tough weekend and I am really looking forward to going west," he added.

While Lowndes and Whincup head home to continue their preparation for the BigPond 300 at Perth's Barbagallo Raceway on 20 – 22 November the TeamVodafone crew will remain at Phillip Island to prepare the teams two V8 Supercars for their journey west. ■



### Top Ten V8 Supercar Race 22 Results

01. Jamie Whincup, 150pts
02. Rick Kelly, 138pts
03. Garth Tander, 129pts
04. James Courtney, 120pts
05. Jason Bright, 111pts
06. Shane Van Gisbergen, 102pts
07. Craig Lowndes, 96pts
08. Paul Dumbrell, 90pts
09. Fabian Coulthard, 86pts
10. Michael Caruso, 78pts

### Top Ten V8 Supercar Championship Standings

01. Jamie Whincup, 2905pts
02. Will Davison, 2783pts
03. Garth Tander, 2565pts
04. Craig Lowndes, 2292pts
05. Mark Winterbottom, 1964pts
06. Steven Johnson, 1961pts
07. Rick Kelly, 1925pts
08. Lee Holdsworth, 1817pts
09. James Courtney, 1790pts
10. Shane Van Gisbergen, 1679pts



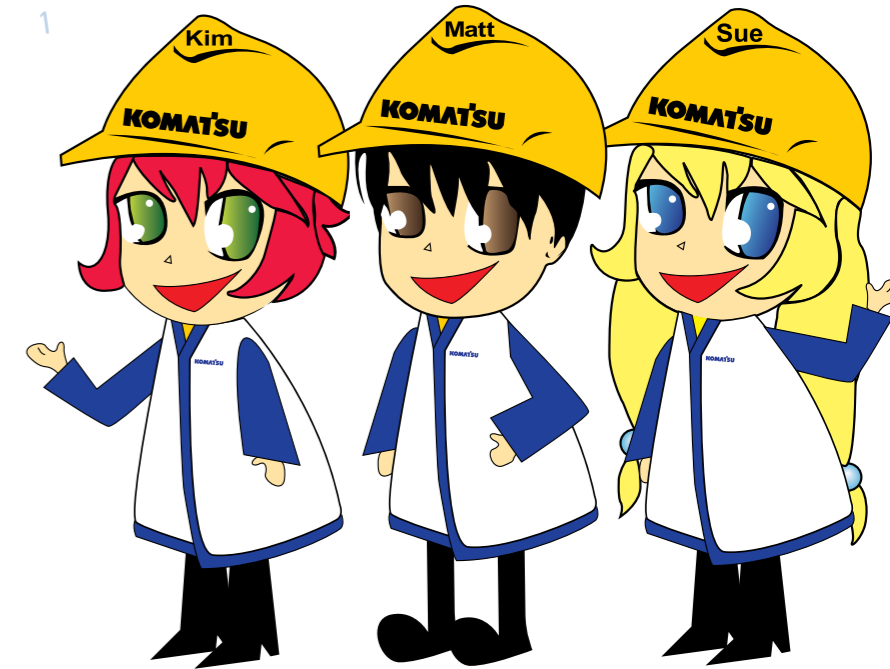
**"It was a great finish to a tough weekend and I am really looking forward to going west,"**

*Jamie Whincup*

# SUDOKU 4KIDS!

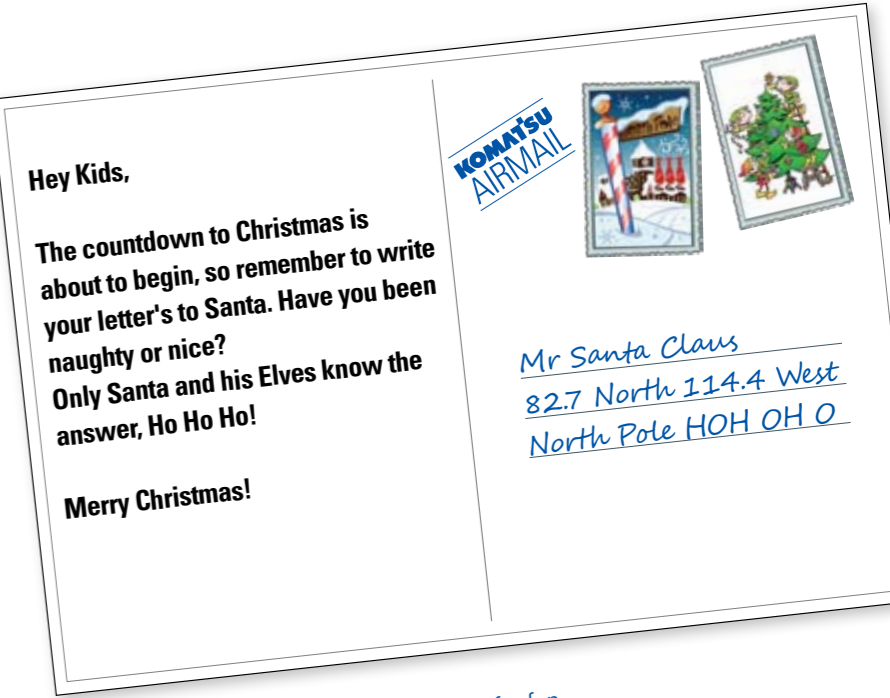
Sudoku is a popular Japanese number game. It is a mind game and puzzle that you solve with pure logic. The aim of the game is to fill each square with a number from 1 - 4. Each number can only appear once in the same row, column or 2 x 2 box.

**HINT:** There is no maths involved in finding a solution!



	2	3	4
3	4	1	
2	1	4	
	3	2	1

2	1	4	3
4			1
1			4
3	4	1	2



Hey Kids,

The countdown to Christmas is about to begin, so remember to write your letter's to Santa. Have you been naughty or nice?  
Only Santa and his Elves know the answer, Ho Ho Ho!

Merry Christmas!

Mr Santa Claus  
82.7 North 114.4 West  
North Pole HOH OH O

» Visit [www.komatsu.com.au/kids](http://www.komatsu.com.au/kids) for fun games, activities, jokes and more!

# FAMILY INVESTORS FUND LOSES \$300M

A small family investment fund stands to lose years of money saved away in a holding fund at the arrangement of their lawyers. Investors blamed the strong losses on the worsening financial situation, having most of their funds tied up in the Australian housing market has led to renewed speculations that this might be the first sign that small businesses are taking the hit from this global credit

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# SLIDE HITS FINANCIAL INSTITUTIONS

Renewed fears today of higher financial uncertainty with the Global Financial Crisis has taken its toll on the finance sector as figures released today by the Australian Prudential Supervision and Resolution Board was unwilling to comment on the downturn but has renewed calls for government support.

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\*Offer applies to models PC88MR-8 to PC450LC-8, conditions apply. †Normal credit conditions apply.

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# Australia Avoids Recession

The Prime Minister pointed to recent BBA...

Markets rose as renewed confidence in the ASX put on a level in four following a surge in commodities prices.

## Lowest interest rates in 40 years

The Reserve Bank has called for rates as Australian interest rates reach their lowest in almost half a century. Banks are expected to cut rates with the first bank cut.

## GLOBAL FINANCIAL CRISIS

Crisis on the horizon as the NASDAQ falls in a week which the...

Trade and gold stocks remain in a weak state with the...

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