

MARCH 2020

ISSUE 74

# D2E

DOWN TO EARTH MAGAZINE

## KOMATSU Bushfire Heroes

- » KOMATSU START SAFE IS LAUNCHED
- » 41 x 930E-5 AHS FOR BHP
- » KOMATSU'S 2020 TRAINING CALENDAR RELEASED



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**KOMATSU**

*Driven by your success*



**LOOK OUT FOR  
YOURSELF**

**LOOK OUT FOR  
YOUR MATES**



**EVERYONE HAS THE AUTHORITY TO STOP WORK THAT IS UNSAFE**

**KOMATSU**  
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## COMMENTS

A big thank you to all of the volunteers and organisations that have supported and continue to support Australian communities impacted by the devastating bush fires this season.

I am in awe of Aussie volunteers who help people in need. In this edition I also want to call out and recognise some of our Komatsu volunteers who instead of taking well-earned breaks over summer, were fighting fires to protect life and property. You make us proud.

To all of our customers impacted by the fires or supporting clean-up efforts in the months ahead, please be assured Komatsu Australia will prioritise support to you so please let us know if there is anything we can do.

In this edition of D2E I would like to promote the Komatsu Training Academy to you. Komatsu Australia has world class training facilities, instructors and systems to support a wide range of technical and non-technical training.

We are a national RTO offering various Cert III courses and can support customers with single courses through to comprehensive trade apprenticeship training.

People are the most valuable resource in any business so investing time for training always provides a good return.

**Sean Taylor**

CEO & Managing Director

# CONTENT

## KOMATSU NEWS

Helping out with our horror bushfire season	4-6
Komatsu's rapid response to drought relief	7
Ensuring our technicians "START SAFE" every day	8-9
How we've committed to diversity and inclusion	10-11
Empowering female managers to develop leadership skills	14
Our People Powered Technology delivers autonomous truck success	15
Komatsu selected for global sustainability index	16
Komatsu continues support for Beacon and helping young people plan their futures	17
Komatsu Training Academy training calendar 2020	37

## LATEST KOMATSU PRODUCTS & SERVICES

Call in the SAS	18
Huge range of parts now available through myKomatsu website	20
Our new Rental website makes us even easier to deal with	21
Komatsu solves loader weigh scales challenge	22-23
A productivity boost for Komatsu wheel loaders	24
Building world's largest rope shovel dipper in Mackay	25
Hydrostatic Komatsu forklifts built for toughest jobs	38

## KOMATSU CUSTOMERS

Holcim delivery of dump truck	19
Komatsu dozers are absolutely OK for Peter and his team	26-27
Generation savvy drives business success	28-29
Why Auckland owner-operator Katie Wilson wanted a Komatsu dozer	30
Precision guides a delicate demolition	31
myKomatsu online parts portal proves a winner for Mansfield Crushing	32
Environmental compliance is critical for Civilex	33
Why Ravensthorpe Shire decided to standardise on Komatsu	34
Productivity Bolted home	35
Nola Featherston delivers successful training program for Benedict's	36

## KOMATSU PROFILE

Jan Foster-Hawkins – Operations & Fleet Support Manager	12
Rechelle Payne – Regional Service Manager - Central	13

## KOMATSU KIDS

Komatsu Kids Corner	39
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### FRONT COVER

Komatsu  
Bushfire  
Heroes

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# KOMATSU PEOPLE HELPING OUT WITH OUR HORROR BUSHFIRE SEASON

**T**hroughout the summer of 2019-2020, Australia's bushfires have been more intense and widespread than ever-before experienced.

As fires intensified, scenes have been described as "apocalyptic", turning daytime skies orange, red and black. Many people lost their lives, up to a billion native animals killed, hundred of homes, businesses and properties destroyed or badly damaged, and burnt out close to 200,000 square kilometres.

Over what is usually our peak holiday season, thousands of residents and tourists were forced to flee or take shelter as flames ravaged towns. With some people stranded for days, and with shortages of food and fuel, the military deployed ships and aircrafts to bring supplies and evacuate people from fire-devastated coastal towns.

Komatsu employees throughout Queensland, NSW, Victoria and South Australia volunteered their time during these tough days to support their local communities.

A number of them have told us their stories for this special report.



*Pictured: Warrick Benton*

## WARRICK BENTON Field Service Technician, Wodonga, Victoria

On December 1, 2019, our CFA (Country Fire Authority) brigade's fire season started. I was asked to send our tanker to the Braidwood fire in NSW. We crewed our truck for 10 days between Braidwood and Bateman's Bay.

CFA members from our neighbouring brigades then crewed our tanker up until Christmas Eve, when American fire fighters took over and were sent to the Macedon Ranges training camp.

The Wyoming Thunder Basin Grassland firefighters have also crewed our tanker up since then, working on the Gippsland fire in and around Omeo in Victoria.

With our tanker out of our region, we managed to get a loan tanker for our brigade.

We were involved in the Corryong and Abbeyard fires, which started from lighting on New Year's Eve.

From New Year's Day until early February, I have sent our members away to several strike teams on these fires, building containment lines, asset protection and backburning operations.

Komatsu has been supportive in allowing me to take leave and conduct this work for the communities affected by these fires.

Now back at work. I have been involved supporting earthmoving contractors working for Forest Fire Management Victoria removing dangerous trees, clearing roads and strengthening containment lines.



## MARK WALSH

**Sales Account Manager - Construction, Gippsland, Victoria**

I was part of one of the first strike teams from the Victorian CFA to head to the Blue Mountains fire west of Sydney. At the time we were deployed, the next day was expected to be a catastrophic fire day.

I drove Longwarry Tanker (from central Gippsland, Vic) to Goulburn NSW. We stayed at Goulburn Police Academy the night, then headed up to the Blue Mountains for the catastrophic day.

Once we got to Richmond Air Force base, we were deployed immediately to Colo Heights in the Hawkesbury region, on the Putty Road, which is on the way to Singleton.

The fire was at this stage 54,000 ha (when listed as "contained" in January, it was more than 512,000 ha). Our task was to build containment lines and backburn to protect the town of Colo Heights and surrounding towns. One of the main objectives, was to contain the fire from jumping Putty Road.

Unfortunately, due to conditions, we were unable to prevent this; however, we did save numerous homes and properties up the hill. The biggest challenge was terrain and inaccessibility, together with the ferocity of the main fire creating spot fires over our containment lines.

For example, our first day we spent over 14 hours building man-made containment lines with rake hoes and hand tools, only to come back the next day and find the fire had jumped.

It was interesting working with the aircraft and having the big air tanker dropping retardant just metres from our location.

Locally, we started 2020 with 10 fires (primary and support) in our area, in the first 10 days. This ranged from grass and bushfires, to house and hay shed fires.

The brigade I volunteer for is Trafalgar (my home town), located in Central Gippsland. We have had crews on rotation out to East Gippsland in the Omeo and Bendoc region, battling the big Victorian fires.

I spent one week on the northern edge of the East Gippsland fire, with the CFA; backburning and building containment lines alongside a contractor who is a Komatsu customer, D&L High Country.

Our task was to get on top of the fire before it reached Bonang, Bendoc and then cross the border to impact Delegate and Bombala.

## FRANK ALLAN

**Operator Trainer, Campbellfield, Victoria**

I have been a volunteer member of the Victorian CFA for 29 years; 14 years at Panton Hill and for the last 15 years at Kinglake West. Both are located in the hills north east of Melbourne. I am currently the Captain at Kinglake West.

The Kinglake West area was heavily impacted by the Black Saturday bushfires in February 2009.

While the name indicates a single day, the actual fires in this area went for over five weeks. Unfortunately, myself and my crew became trapped at a house and experienced the full impact of the Black Saturday fires. Fortunately, both the residents and crew survived. Not an experience I wish to repeat anytime soon.

Recently I have been involved with fighting the fires in northern NSW in November and on north east Victoria at Corryong.

Things I've learnt from my time in the CFA:

- » Constantly monitor your surroundings. If something isn't working, be prepared to change what you are doing.
- » The value of teamwork. That's probably what makes the volunteer firefighters so valuable. We all come from different walks of life, have a wide range of skills and experience.
- » The value of communication. During the Black Saturday fires our communications systems failed badly. Despite spending a lot of money, the new systems aren't a lot better; during the recent fires, we had to revert to UHF and mobile phones.



*Pictured: Mark Walsh*



*Pictured: Frank Allan*





*Pictured: Peter Beveridge at the  
frontline of firefighting*

## PETER BEVERIDGE

**National Quality Assurance Manager, Rutherford, NSW**

I am President of Millfield Rural Fire Service (RFS) in the NSW Hunter Valley. We spent from mid-November through to mid-January fighting large bushfires and protecting our local communities of Wollombi, Ellalong, Paxton, Millfield, North Rothbury and Greta.

Our longest consecutive stint was 18 days straight of 12-hour days.

We're proud to say we didn't lose any houses and don't have any out of control fires in our area as of early February.



*Pictured: Troy Bowen  
battling the blaze*

## TROY BOWEN

**Service Supervisor, Emerald, Central Queensland**

Myself and four other auxiliary fire fighters from the Emerald station, along with other crews from our neighbouring stations within our command area, were deployed to Yeppoon with several appliances to assist with the containment and structural protection of houses and equipment.

Firefighting efforts continued for several long days and nights straight. Due to the fire conditions at the time we got sent back to our areas.

A short time, later myself and a crew of three fire fighters from Emerald, along with one of our appliances, were deployed to the Lowmead fire at Bundaberg to assist with containment structural protection. This deployment was for five days.

Both fires were difficult to contain, due to the weather conditions and accessibility into these areas. Both fires were fuelled by strong winds and large fuel loads, making them difficult to contain. Structural protection in these conditions was very challenging and, in some case, very dangerous.



**"As fires intensified, scenes have  
been described as apocalyptic, turning  
daytime skies orange, red and black."**





*Pictured: The team at Komatsu Mudgee has formed a task force to assist the farmers affected by recent droughts.*

## KOMATSU'S IMMEDIATE DROUGHT RELIEF FARM AID IN CENTRAL WEST NSW

**A task force of 15 technicians and branch staff from Komatsu in Mudgee have donated four days of their time to help farmers in need.**

The task force is visiting farmers from Mudgee to Nyngan to service their farm machinery free of charge so the farmer's "can get on with the job of surviving."

The sweep through of the area starts on Thursday 28 November through Sunday 1 December.

All work, parts and materials will be donated by Komatsu, Fleetguard, Exide, Castrol and Pirtek Mudgee.

"The idea came up as a way we could contribute to those most in need," Codey Metcraft, in charge of Customer Support at Komatsu Mudgee said.

"We asked the locals for those who were in need and things just escalated – everyone is in need out there."

The team will visit at least 15 farms, brought to their attention by local authorities and businesses.

The Komatsu team is going to service all farm machinery, regardless of make, with oil changes, filter changes – all the tasks farmers have to undertake regularly to keep their tractors and equipment running.

"It's stuff they don't have time to do because they are too busy trying to save their livelihood," Codey said. "We wanted to relieve them of the burden of machine maintenance."

Earlier this year, Komatsu's Training Academy, based in Brisbane, undertook a similar project in the Western Downs region of Queensland, to support the Rural Aid initiative.

On that occasion it was a planned project as part of a support program called Live Your Dream in which Komatsu employees are given the opportunity to undertake community programs.

This time the response has been simply spontaneous, in response to a dire need.

"The drought is devastating for everybody," Codey said. "Further west from Mudgee – out around Wellington, Dubbo and Nyngan, it's just so dry and heartbreaking: no water, nothing."

"We live in a very small community and everyone just has to get behind everyone in need."

**"We asked the locals for those who were in need and things just escalated – everyone is in need out there."**





# EVERY TECHNICIAN "START SAFE" EVERY DAY

**A**ndy Wiggan, Komatsu's National Service Manager, outlines what's behind START SAFE – Which is a new process change designed to ensure Komatsu technicians start and complete every job safely with the goal of encouraging an active Safety conversation.

This supports our overarching Komatsu Safety Strategy – Safety by Design, Safety by Culture and Safety by Lifestyle! We also provide some comment and feedback on this new process from those who work with it every day, and the difference it's making to them.

## Safety BY DESIGN

1. Engineering
2. Digital
3. Safety systems, policy and procedures

## Safety BY CULTURE

1. Leadership
2. Stories
3. Look out for yourself
4. Look out for your mates

## Safety BY LIFESTYLE

1. Fitness
2. Mental health
3. Work life balance

At Komatsu, we have a vested interest in the safety of our people; our aim is **Zero Harm**, and we want each of our team members to go home in the same or better condition than they came to work. In order to achieve this, we have recently implemented a process we call Start Safe.

This will replace the old Take 5 which we have had for many years. START SAFE requires an employee to have a Safety Conversation, with another employee, before they start their job, to confirm that all risks associated with performing a task have been identified.

This conversation will also provide a means for the employee to confirm that these risks have been controlled as effectively as possible.

START SAFE will provide an opportunity for an employee, who is less experienced on a task, to learn from a more experienced employee, without feeling awkward about asking for help. It provides a means for more experienced employees to share their knowledge with other employees strengthening our Safety Culture.

It will provide our supervisors and managers a means of connecting with our technicians and showing their commitment to Safety. It is a real means of demonstrating that "Safety IS our First Priority".

START SAFE is built around our Golden Rules. It adds a control verification step, specific to our Golden Rules 1 (Isolate all energy sources), 2 (Use appropriate prevention or fall arrest devices) and 6 (Never work within the fall zone of a suspended load) as per illustration 1.

We believe it will significantly help us to remove or mitigate the risks covered in our Golden Rules, by setting up the job safely at the start using input and experience from others.



*Pictured: Andy Wiggan*

## David Butler, Komatsu's National Service Technology Manager, explains how Komatsu developed and implemented START SAFE

START SAFE was developed in the KOMSERV platform, Komatsu's service technician portal, an advanced platform to capture the end to end service process, such as – digital timesheets, condition reports, PM service and warranty reports directly through mobile devices.

KOMSERV itself was created internally by Komatsu with the aim to provide easy access for users through mobile phones, laptops, tablets and PCs. One of START SAFE's main objectives was to align Komatsu's safety processes with Komatsu's Golden Rules.

START SAFE was initially introduced as a pilot in September 2019 to branches in Perth, Wacol and Auckland, later followed by all our other branches.

An important element of START SAFE is a verification process, which means that any time someone is working with **stored energy, working at height with risk of fall or working with suspended loads**, they are required to have a conversation with a Peer or Supervisor about the task before starting.

Although this was a major change from the TAKE 5 process, it has been well received by Komatsu technicians, supervisors and managers.

The number of START SAFE's has increased by 40% since its inception. Because of this step change in START SAFE for the validation of controls – Our service technicians on average take an extra 2.5 minutes setting up the tasks safely.

Additionally, there is also greater detail of the task, hazards and controls, including photos and comments which are added to START SAFE.

Thanks to feedback from START SAFE, we are now developing and integrating an augmented reality (AR) system, which we have called KOMAssist. This new system allows face-to-face video chat, including sharing of the verification requester's screen where they can add annotations to highlight hazards/controls. The verifier can add comments, and is required to sign off on the START SAFE, providing approval for the technician to proceed with the task.

KOMAssist is currently being piloted in Auckland, Perth and Wacol, with plans to roll these out nationally by the end of March 2020.



*Pictured: David Butler*





Pictured: Jesse Timms (left) and Mark Harris (right)

## Feedback on START SAFE: The Branch Manager

By Mark Harris, Komatsu's Perth Branch Manager

The introduction of START SAFE on the KOMSERV platform provides a number of mechanisms to verify the elimination of risk, and encourage conversation that ensures the perceived risk captures all associated hazards and controls within each task.

It requires verification of controls from peers, to leading hands, through to supervisors, escalating until everyone is satisfied hazards are appropriately controlled for tasks associated with stored energy, working at heights and working around suspended loads.

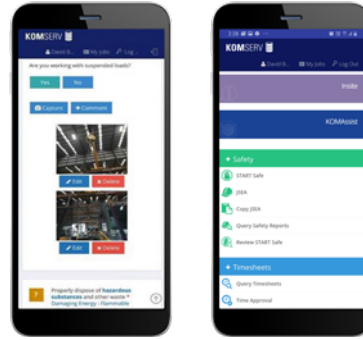
In addition, it fosters in our work teams a stronger culture for discussion regarding the task and method for conducting tasks.

A conversation at the location the work is being conducted draws on others' experiences and learnings, and who may have completed identical tasks in differing environments or using other resources.

This helps create and develop respect within our team, including sharing of opinions and prior learnings, and promoting respect for others' knowledge and their willingness to share.

The process in its design helps to create a culture where, we as a team respect the conversation, are willing to listen and take on board items discussed.

We also appreciate that we now have a process that is at the forefront of technology, and not only looking after ourselves, but also looking out for our workmates and their families.



## Feedback on START SAFE: The Apprentice

By Jesse Timms, Apprentice, Komatsu's Perth Branch

I'm fairly new to this industry and Komatsu, and have been employed as an upskill apprentice from light motor vehicle industry to a fitter. I've been fortunate enough to be included in this START SAFE program and I'm happy to provide some feedback.

As someone who's come from the light motor vehicle industry, where safety isn't a high focus, to an organisation that makes you carry out Take 5s for every job, I struggled. I never knew if I was completing my TAKE 5s correctly or if I was looking for the right issues. Now thanks to START SAFE, I have been shown how to do this all correctly.

The training was great and allowed me to better understand what was required, and thus making me feel like I was being as safe as possible, always.

The app on the phone is fantastic. It allows me to take photos and go and approach other fitters with pictures to ask when I have concerns.

Then, if they're concerned, they'll come and help me or can point out why it's OK.

I highly recommend this program; Take 5 used to be a quick "tick and flick", but this program has me checking things more thoroughly.

*"At Komatsu, we have a vested interest in the safety of our people; our aim is Zero Harm, and we want each of our team members to go home in the same or better condition than they came to work."*

## OUR GOLDEN RULES

HEALTH, SAFETY AND ENVIRONMENT

ALL EMPLOYEES, CONTRACTORS & SUB CONTRACTORS MUST:

- 1 ISOLATE ALL ENERGY SOURCES** when required and never remove (without authorisation), damage or misuse an isolation, lockout or tag-out device
- 2** Use appropriate prevention or fall arrest devices to **WORK AT HEIGHTS** or where there is a **RISK OF FALL**
- 3** Enter a **CONFINED SPACE** or exclusion zone by **AUTHORISATION** only
- 4 OPERATE EQUIPMENT** and vehicles in a safe manner and to conditions, with appropriate licenses and authorisation
- 5** Use **TOOLING** that is not prohibited, in good condition and **FIT FOR PURPOSE**
- 6** Never work within the **FALL ZONE** of a suspended load
- 7** Properly dispose of **HAZARDOUS SUBSTANCES** and other waste
- 8 BEHAVE APPROPRIATELY** at all times and stop inappropriate behaviour or non-compliance to the Golden Rules.

Everyone has the authority to stop work that is unsafe.

**KOMATSU**

Illustration 1: The Eight Golden Rules of Komatsu Australia



Pictured: Phil Morrell

## Feedback on START SAFE: NZ Service Manager

By Phil Morrell, Komatsu New Zealand's Service Manager

With the development of START SAFE we have seen a cultural shift away from the "tick and flick" approach, towards this new system as a tool to enable a conversation to take place with a colleague.

This change in culture now focuses our teams in thinking about their safety, the safety of their mates and the overall message that safety is, our Number One Priority.

Our teams now have the tools to highlight risk, understand the controls required to eliminate the risk, or reduce it as much as possible.

It also provides the ability to help support people in building confidence by verifying that controls put in place are adequate, in particular the risks associated with Komatsu's Golden Rules.

What is great for me to see is the teams having a conversation and thinking about how best to perform their tasks.

This may result in a recommendation to purchase new tooling or equipment, or just approaching the task in a different way by looking at safety as being part of their job.

As a result, we can see improvements in efficiencies on the job and confidence that the risks are either eliminated or reduced as low as possible.

We've also had excellent feedback on the recently introduced KOMAssist augmented reality (AR) system from our Auckland Leading hand, Willem Nel.

Willem stated that with KOMAssist, you are now able to have conversations through a live video chat, highlighting exactly what each person is looking at through the interactive AR function on screen, and then provide feedback on the spot to verify the controls are adequate and that everyone understands the task at hand.

# KOMATSU IS COMMITTED TO DIVERSITY AND INCLUSION

**A**t Komatsu, lead by CEO and Managing Director Sean Taylor, we have a strong commitment to promoting and fostering diversity and higher gender representation – both within the company, and across the wider industry sectors we serve. In this special article, Sean outlines Komatsu's diversity vision, why we have taken this approach – and how it ties in with our continuing development of new technology and innovation.

For Komatsu, diversity and inclusion, means that individual differences are recognised, respected and embraced as an opportunity to learn and enhance capability – and we are very proud of our efforts to foster collaboration and inclusion. Today, diversity is a critical issue for industrial companies globally, in particular gender balance.

It seems crazy to me that in Australia and New Zealand, where all companies have to battle for the available talent, that industrial companies are only drawing from 50% of our population. For us, the key is to make our businesses more welcoming and attractive to women.

This not only involves leadership to achieve cultural change, but also requires hard changes in human resources policy around recruitment, through to things like parental leave and flexible working hours.

I've been in the earthmoving and related industry sectors for more than 30 years, with around half of that at Komatsu. Over that period, I have to say we really haven't changed very much in this regard.

Yes, we are talking about it, and our industries pride themselves on continuous improvement and operational excellence. We see a problem, we gather the data and we fix it. But, we haven't done this in terms of gender balance. I feel that my generation has missed an opportunity and we are just going to pass the problem down to the next unless we get serious.

At Komatsu, our vision is one of "people-powered technology" and putting people at the heart of the business. To us, this is an acknowledgement that people are always at the heart of any business – and people love new technology too.

And one of the founding principles of Komatsu almost 100 years ago was around innovation and the adoption of new technology.

But despite our on-going love affair with new technology, what I have come to learn over the years is that actually people are always at the heart of the adoption and application of the latest innovations. This is particularly the case in the application of earthmoving machines, including, perhaps surprisingly, even autonomous machines.

The operational interface to machines, whether through an operator in the cab or a controller remotely, remains the key to getting machines to really sing. Indeed, that is one of the reasons Komatsu chose to purchase Immersive Technologies recently.

We are now looking to accelerate this thinking and uptake that we've achieved within the mining sector to also now include the construction and quarrying industries.

To do this I think there are probably two main obstacles around people – upskilling and changing diversity attitudes within our existing teams, and, as I mentioned, competing for the same talent as the broader economy.

For us at Komatsu, is commitment to strong diversity and inclusion within our companies are critical for overcoming both obstacles. And because business success and achievement are measured by numbers, we think it is important to have a target to work towards.



While we don't call it a quota, we recognise that if we don't start moving the needle, what's the point? In mid 2019 we were at 14% women in our business and we have an ambition to increase to 21 % by the end of 2021.

Obviously, our current level of 14% is simply not sustainable if we want to become a stronger business. Having said that, most industrial companies in Australia today seem to be around the 10-15% mark, so where we are right now is the status quo.

But like any change, getting the first bit of momentum is really the critical issue. I think once we get this rock moving to over 20%, let's say, it will be easier to get to 30% and even 50% in time.

Cultural or national diversity is more difficult to measure, as it relates to how people identify themselves, of course, which can be more subjective. However, it is an area we want to tackle in the future. On the whole, however, I think NESB (non-English-speaking background) diversity throughout Komatsu is very strong.

In terms of Indigenous inclusion, it is recognised across industry, and indeed nationally, that we must have a different conversation.

Komatsu is a strong supporter of both the Clontarf Foundation, a non-profit organisation that assists in the education and employment of young Aboriginal and Torres Strait Islander men, and the Beacon Foundation, a non-profit committed to assisting adolescents with making positive career choices.

Both are working very hard to change the status quo for younger Indigenous citizens.

**"At Komatsu, our vision is one of  
"people-powered technology"  
and putting people at the heart  
of the business."**



**"To young women and NESB/Indigenous people who are interested in pursuing a career with Komatsu or in the broader mining, construction and extractive industries, I would say it is a fabulous and rewarding career."**

We are now also considering how, as a company, we can initiate our own Reconciliation Action Plan, and what the first steps are to making and embedding real change. Consultation and reflection with people within our business, other companies and the communities within which we work are all really important.

Eventually, we need to make real change here. For example, I also lead our business in New Zealand. Of course, we all know the history is very different, but it is plain to see the strength of Indigenous inclusion in that country.

Our diversity policies are designed to see more women, and people of ethnic and Indigenous backgrounds, across all facets of Komatsu's business – from the workshop floor right through to the board room. To achieve this, entry level needs to be a key part of any strategy for industrial companies. Our apprentice and graduate programs in particular are critical here.

I believe our ambition here should be a lot higher than our company-wide objective, otherwise we simply cannot move the needle.

We are an engineering and technical company at heart, so STEM (science, technology, engineering and mathematics) qualifications are very important. This applies to our engineers and to our tradespeople. It applies to our experienced operators who can move into application engineering as well.

As the distributor in Australia and New Zealand, we are also the customer interface of Komatsu, so great and productive customer relationships built on trust and respect are very important. I'm delighted to say that we are starting to have some real successes across these areas.

More women are applying for and getting apprenticeships and graduate entry, and more women are moving into sales and sales management roles, and more women are becoming branch and service managers.

But critically, we still need to get more diversity in the most senior roles within our business to be able to claim we are going from the workshop floor all the way to the board room.

To young women and NESB/Indigenous people who are interested in pursuing a career with Komatsu or in the broader mining, construction and extractive industries, I would say it is a fabulous and rewarding career.

In Australia and New Zealand we have great global and local companies they can choose from. The breadth of experiences and knowledge they can gain is actually breathtaking and I would say broader than most other businesses in Australia.

So no matter a person's interest or qualifications there is almost certainly a role they could aspire to. Our industries are also at the heart of the economy. We are building our countries, we are creating – and we are at the front line in terms of protecting our environment, too.

Our entire business and prosperity relies on our ability to innovate and retain the trust of our communities. So, all in all, we are a pretty cool industry. Diversity and inclusion are also key to ensuring we gain the most from Komatsu's technological advance: SmartConstruction, Intelligent Machine Control, autonomous haulage systems and hybrid machines.

Clearly, it would be very difficult for us to adopt the kind of technological change we are currently experiencing without stronger diversity and inclusion. And importantly, these changes are different to past advances in our industry, in that they don't exclude or advantage one group over another. Remember also, connectivity is a strong area of innovation right now.

Whether it's connecting teams, connecting processes, connecting machines, they are all contributing to achieving step changes in productivity, across IoT (Internet of Things), Industry 4.0, big data, even smartphones.

When you think about it, diversity and inclusion across all our people and all our vast and geographically separated teams is pretty much on the critical path.



*Pictured above: The Komatsu staff is a multicultural team of diverse ethnicity and gender*

## Komatsu's Say Again Program

At Komatsu, change starts with **EveryONE** counts – our Inclusion and Diversity Strategy that aims to build a culture where we value every individual's contribution (Everyone) as well as the contribution of the collective (Everyone).

Inclusive culture is an essential element of the **EveryONE** counts strategy and it starts with our new campaign - Say Again? this is a way to call out inappropriate behaviour especially everyday sexism, without being confrontational. We ask, if you hear someone make a sexist or inappropriate comment, simply respond with "Say Again?". By doing so you give the person a chance to think about what they have *said and rephrase it*.

*Everyone has a right to call it out - and our Say Again Program gives Everyone the right to call out inappropriate comments and not just sexist comments, any comment!*

Leaders across our business have pledged their support to the campaign and this marks a milestone on our journey to improve inclusion and diversity.

Komatsu is serious about empowering its people, leading the way in the extractive industry as a respectful and inclusive organisation.

If you would like further information on 'Say Again', give us a call on **1300 566 287**.

**everyONE**  
counts



Pictured: Jan Foster-Hawkings



***“Certainly the policies Komatsu management has put in place has lifted the veil to look past not only gender, but also race, religion, background or partnership preferences.”***

## PROFILE:

# JAN FOSTER-HAWKINGS

### *Operations & Fleet Support Manager*

**J**an, who has been with Komatsu in Western Australia for 15 years, is the company's principal contact for Rio Tinto Iron Ore (RTIO) at an operational level, co-ordinating the provision of all Komatsu support services to its Pilbara sites and AMES (Asset Management & Engineering Services) teams.

This role has a team of three fleet managers to support Komatsu's onsite personal across Product Support Advisors, Technical Support Representatives and Tier 1 autonomous haulage system technicians along with an HME Admin Support and Warranty Specialist.

"All our teams are there to support RTIO's core truck/loader/dozer operations and the AHS system," says Jan.

The team is midway through transitioning the Tier 1 team into Operations and Fleet with an expected total of around 90 people on completion in the third quarter of this year."

Jan took on this position in November 2019, after five years in Komatsu's operations business in Western Australia, initially as Operations Manager East, then Operations Manager East & West combined.

She counts her time at Komatsu as her "third career"; Jan's working life started as a hairdresser for 18 years, including owning her own business for more than 10 years.

Deciding that she'd taken her hairdressing career as far as she could, Jan studied and qualified as a paralegal before heading to Kalgoorlie with her husband-to-be Jeff Hawkings, who was a heavy diesel mechanic.

With no legal opportunities in Kalgoorlie, she applied for a job as a lab technician, processing assay samples from Goldfields exploration companies. She used this experience to apply for a role as a Process Technician, which turned into a four-year career (her second) with Cawse Nickel at its pilot laterite mining operation.

"I learnt maintenance processes on fixed plant plus a chemically complex refinery process – and loved every minute of it," says Jan.

She later became Cawse Nickel's safety and training officer, became a registered trainer through Edith Cowan University, and facilitated Certificate 3 in metalliferous mining for Cawse Nickel technicians.

"I worked at Cawse for over four years, and consider it one of the highlights of my working career. It taught me that anything is possible if you set your mind to it," says Jan.

Jeff and Jan then moved back to Perth, where she started work selling crusher parts to mining companies – something she had a good understanding of through her years at Cawse.

After about 18 months there, Jan got a call from a former manager who'd started working in Komatsu's parts department in Perth, and saw a niche for her skillset as a Parts Interpreter.

She started in this role with Komatsu in March 2005, moving from Parts Interpreter to Customer Support Representative, then Customer Support Supervisor, then Customer Support Centre Manager over the next five years.

Jan's next role saw her appointed as National HME Contract Manager for RTIO and RTCA, facilitating Rio's Global HME Contracts for Komatsu Australia. When this program ended, she became part of Komatsu's Operations Group, where she's remained since.

With Komatsu promoting increased levels of diversity across the company, Down 2 Earth asked Jan if that had been a beneficial impact on her career.

She points out that Komatsu, by default, is a highly diverse company already through its wide interactions with different cultures around the world.

"However, there remains a diversity gap if we look at it from the point of view of gender, but we also need to recognise that the mining and construction industries have traditionally been male-centric – not only in Komatsu, but culturally and globally.

"Certainly the policies Komatsu management has put in place has lifted the veil to look past not only gender, but also race, religion, background or partnership preferences," says Jan.

"But also, I would like to think the reason for my career progression with Komatsu has been based more on capabilities, enthusiasm and merit, as I started here long before diversity was a conversation piece.

"The role I am currently in wasn't handed to me: I applied along with internal/external applicants and went through the same process as all the others did – all of whom I believe were male," she says.

"If we were still stuck in the 'unconscious bias realm', I would not have been successful, so this example alone proves our ability to look past the 'norm' and be diverse in our decision-making."

Jan also finds Komatsu's diversity commitment is beneficial in dealing with customers.

"Absolutely it is; I think the customers we deal with engage very well with non-traditional people in different roles. Again, it allows another perspective on customer support, relationship building and reputation within our industry."

"There are so many layers to Komatsu," she says. "For me there are opportunities across all sections to make a difference, improve processes and more; this is the driver for me, along with the people you get to meet and interact with."





Pictured from left to right: Rechelle Payne with Aaron De Gois, Komatsu's PDI (Pre-Delivery Inspection) Technician and Craig Fitzsimmons, Fairfield Branch Manager

## PROFILE:

# RECHELLE PAYNE

### *Regional Service Manager – Central Region*

**R**echelle has been in her role as Komatsu's Regional Service Manager for its Central Region since March 2018, where she holds responsibility and accountability for Komatsu aftermarket, branches, technical support and project teams – and ensuring compliance with the company's Customer Support Charter.

"As Regional Service Manager, I work directly with customers to ensure that our aftermarket services and support continues to meet their evolving business needs," she says.

"It's important to ensure that as a leading OEM in the tunnelling, quarrying, construction and mining markets, our operational and support teams meet or exceed our Customer Support Charter, which is the foundation of how our Service team operates."

Before joining Komatsu, Rechelle was Operations Manager and Major Accounts Manager with another major mining and construction OEM, and before that was Business Development Manager with one of Australia's largest plant hirers.

A key motivator for her move to Komatsu was the opportunity to work with one of the leading heavy equipment manufacturers and suppliers in Australia.

"Taking on this Regional Service Manager role was an opportunity for me to broaden my operational skills across multiple industries. In my previous roles, I did have interactions with the quarry and construction industries – but only via business development roles," she says.

"Since joining Komatsu, I've found that the company provides endless opportunities for employees to grow and develop. And our continuous improvement 'Kaizen' approach brings opportunities for my team and me to challenge what we currently do and contribute to how we all progress into the future."

Rechelle also finds working for a company with a strong commitment to diversity and inclusion, from the executive team down, a very positive experience for her.

"This approach has provided me with the chance to work for and alongside peers who have widely different skills, experiences, perspectives and backgrounds, which has been highly beneficial when it comes to planning and executing business strategies."

And she believes it also pays off when dealing with customers.

"Having a diverse workforce does give you better insight into your customers; they're diverse too, after all.

"I think these insights are imperative in finding and executing support solutions that best meet our customers' needs."

Rechelle says the most satisfying aspects of her work at Komatsu are the cooperation, support and empowerment that she's given to fulfil her role and support the region she's responsible for.

"I thrive in work environments where teams are highly collaborative; working with our branches, as well as our technical and projects teams to provide solutions that support our customers can be both challenging and rewarding at the same time.

"And it's the daily diversity of this role that makes it a challenge, but it's also what I enjoy about it the most: The fact that every day can bring a new set of either internal or external issues that require solutions or support," says Rechelle.



Pictured: Rechelle Payne

**"Since joining Komatsu, I've found that the company provides endless opportunities for employees to grow and develop."**

# FITMIND PROGRAM HELPS DEVELOP KOMATSU FEMALE MANAGERS' LEADERSHIP SKILLS

**S**ince 2018, Komatsu women in various leadership and management roles have been participating in FitMind Coaching programs, designed to help them be more influential and effective in their roles, as well as assisting Komatsu in building more leadership capacity across the company.

Komatsu's involvement in the program has been managed by Mary Huxtable, the National People Development Manager, who along with Transition and Change Manager Francesca Vechi, participated in 2018 to ensure there was a good fit with Komatsu.

The program, which runs from May to November each year, provides up to 50 hours of face-to-face coaching and development over seven months.

It aims to develop a range of skills, strengths and behaviours to make women better and more effective leaders.

The Program was developed and is run by Sheena Polese, Development and Leadership Coach and Annie Crawford AM, Executive Coach.

"We've found FitMind to be an excellent program in helping our female managers and leaders to develop their leadership skills, and optimise their performances to meet personal and organisational goals," said Mary.

"The program works very well for the right people," she said.

"We also provide participants with an internal sponsor from Komatsu, usually a senior executive/manager to provide another sounding board and advocate to assist them during their FitMind journey."

According to Norma Hadid, Major Accounts Credit Manager, The FitMind coaching program gave her tools to help build her confidence with decision making, as well as showing her how to adapt processes like self-reflection in a structured way to allow better vision on how to better approach specific challenges.

"The one-on-one coaching allowed me to identify and utilise different mindsets to better construct processes in a clear pathway, to create the results or action to obtain the desired outcome," she said.

"The program also provided us with many valuable insights on how to become an effective leader.

"I have met and learnt so much from other amazing participants from various organisations." Norma said.



*FitMind's Sheena Polese (second from left) with Komatsu's Shelley Chan, Norma Hadid, Miriam Yang and Lisa Seng during the 2019 program*

Miriam Yang, SAP Solutions Manager, said that the FitMind coaching has brought many women together to share their leadership experiences and to inspire one another.

"The program has provided many valuable insights into how I can be a more effective leader and has also assisted me in approaching challenges at work and privately with a growth mindset.

"And the mentoring one on one sessions with Sheena have given me great deal of encouragement and clearer directions in achieving my goals," she said.

Lisa Seng, Customer Support Centre Supervisor, further states that the program has helped her identify her weaknesses and strengths, and she has learnt the important qualities that define effective leadership.

"It has shown me that not only am I capable of achieving more and leading better in the workplace as a female, I am just as confident and adept as anyone else who strives for more than what is in front of them," she said.

Komatsu women from Fairfield participated in the course in 2018 and 2019, with another four to start in May this year. Mary has been speaking with Sheena about the possibility of extending this program to Brisbane and Perth.

Past and upcoming participants are:

## 2018

**Francesca Vechi**  
Transition and Change Manager

**Mary Huxtable**  
National People Development Manager

**Claire Bianco**  
Integrated Planning Manager – Mining

**Melissa Wickham**  
National Inventory & Planning Manager

## 2019

**Shelley Chan**  
Management Accountant

**Lisa Seng**  
Customer Support Centre Supervisor

**Norma Hadid**  
Major Accounts Credit Manager

**Miriam Yang**  
SAP Solutions Manager

## 2020

**Kiralee Neiufi**  
National Purchasing Manager – OEM Spare Parts

**Kylie Parsons**  
National Credit Administration Manager

**Jade Chappell**  
Customer Support Sales Representative

**Jelena Nikolis**  
ICT Master Data & Systems Coordinator





Pictured: Two Komatsu 930E Dump Trucks at Pilbara, Western Australia

# KOMATSU'S PEOPLE POWERED TECHNOLOGY BEHIND WORLD CLASS MINE STANDARDS

**Komatsu announces the deployment of an unprecedented 41 new model Komatsu 930E-5 ultra-class haul trucks, made autonomous ready, at BHP's new South Flank iron ore mine in the Pilbara region of Western Australia, commencing in October 2019.**

According to Sean Taylor, Komatsu Australia's CEO and Managing Director, "People powered technology is our central philosophy at Komatsu, and it's this people first approach to technology that we feel we share with BHP".

"Komatsu focuses on autonomous technology driven job creation, with focus on safety, diversity, upskilling and an innovative flexible work force that marries our people's needs with business goals. This is our blueprint for the future," Sean said.

Not only does Komatsu Australia have a proven record in safety, productivity and lower haulage costs, but Komatsu prides itself on its ground-breaking contributions to autonomous technology solutions in the industry.

Leo Kaloglou, Komatsu Australia's Executive General Manager – Mining, said, "it was Komatsu Australia who 20 years ago spearheaded the world first automation of mining equipment, which is now known to the industry as Autonomous Haulage Systems (AHS). Komatsu's brand of AHS is FrontRunner, the name speaks for itself".

"Komatsu has 250 AHS trucks deployed and 180 operating now globally across 3 continents, across 9 mine sites, and recently became the first autonomous truck qualified to operate on private long-term evolution (LTE) mobile broadband technology in commercial operations.

The operation of FrontRunner AHS technology has been tested across 3 different commodities in 3 of the harshest and most extreme environments in the world; in ambient temperatures of minus 45 degrees, in temperatures higher than 40 degrees and finally at extreme altitude. With over 2 billion tonnes of material moved autonomously- more than all other commercial mining autonomous haulage systems- with zero resulting injuries," continued Leo.

"While the transport sector automates, including cars and trains, the sheer size and scale of our machinery and the harsh environments in which they operate, indicate the impressive capabilities of our engineers and technical teams who make these challenges surmountable," concluded Mr Kaloglou.

With the launch of Komatsu's new Centre of Excellence for Autonomous Haulage Systems in April 2019 in Tucson USA, Komatsu is committed to innovation, training and people power.

According to Colin Shaw, Komatsu Australia's Executive General Manager - People and Strategy, "We invest time and resources into ensuring forward thinking qualifications are available for our workforce of the future. Qualifications relating to; automation, technology, operations and leadership to name a few", said Colin.

Komatsu are also committed to employing local Western Australian workers to support the workforce needs of Komatsu's fleet for the BHP South Flank mine site. Technicians, apprentices, mechanics, electricians and boiler maker welders plus more roles will be recruited. This will add job opportunities for the local Western Australian workforce in both full time and part time capacities.

*"We invest time and resources into ensuring forward thinking qualifications are available for our workforce of the future."*





# KOMATSU SELECTED IN THE DOW JONES SUSTAINABILITY INDICES

**K**omatsu Ltd has been selected as a component of the Dow Jones Sustainability World Index (DJSI World) again this year. The DJSI tracks the stock performance of the world's leading companies in terms of economic, environmental and social criteria.

Komatsu is pleased to receive the recognition by this world's leading corporate social responsibility index developed jointly by S&P Dow Jones Indices of the United States and RobecoSAM, an investment specialist focused exclusively on Sustainability Investing in Switzerland.

For DJSI World selection, companies are analysed and evaluated along a diverse range of items in the three areas of economic performance, environmental conservation efforts and social activities. In 2019, they surveyed a total of approximately 2,500 major-scale companies around the world, from which 318 companies were selected.

We believe that our corporate value is the total sum of trust given to us by society and all stakeholders. To continue our sustainable growth, we are firmly determined to continue our efforts to remain as a company trusted by society while improving our business performance and our sound and transparent management.



# KOMATSU CONTINUES SUPPORT FOR BEACON AND HELPING YOUNG PEOPLE PLAN THEIR FUTURES

**K**omatsu has a strong community focus as part of its Corporate Social Responsibility (CSR) program. As part of this program Komatsu has been a long-term partner of the Beacon Foundation.

Since making an ongoing commitment to support the organisation in 2002 Komatsu and Beacon have worked together to prepare our future generations to enter the workforce with a head start. Through monetary support, employee volunteering, and providing mentoring and support activities they are giving young people the best preparation to find a job and achieve things in their lives they never thought possible.

During 2019, Komatsu volunteers in Queensland, NSW and South Australia worked with over 150 students on their transitions into employment and further study.

"This longstanding partnership between Beacon and Komatsu has delivered numerous programs across Australia and has had a great impact for students all over the country," says Scott Harris, Beacon's General Manager.

For over 30 years, Beacon has worked with Australian schools and businesses to divert young people away from welfare-based options and into meaningful work, training and educational opportunities.

"Since its involvement with Beacon, Komatsu has not only provided us with significant financial support to run our programs across Australia, but been very involved in talking to young people about the challenges and opportunities open to them," he says.

"Many Komatsu employees have taken the time to visit Beacon schools and share their stories, while also letting students come into the company's workshops on tours and for work experience.

"Komatsu's partnership with Beacon has allowed a number of face-to-face high impact work readiness programs to be run by us across a number of schools throughout Australia," says Scott.

"These programs provide valuable and practical skills and training to students from grades 7-12 to assist in the inspiration, preparation and transition to meaningful employment."

Colin Shaw, Komatsu's Executive General Manager – People & Strategy, said that Komatsu was proud to have been such a long-term supporter of Beacon.

"When we started our support for Beacon in 2002, we could see the great work they were doing in overcoming youth unemployment, and due to their ongoing efforts and successes, we will be continuing this support into 2020," he said. "We are committed to ensuring the communities in which we operate see Komatsu as a partner in developing and creating job opportunities locally.

"Komatsu and Beacon working together is just one example of Komatsu commitment to CSR activities. It's important that our people have the opportunity to live their dreams at Komatsu and achieve things they never thought possible whether that's in their career or in service to the community.

"Komatsu is also actively involved in a TEC (Technical Education in Communities) partnership with Cummins in providing disadvantaged kids with Cert 2 training in Automotive in readiness for apprenticeships, the Clontarf Foundation helping Indigenous boys find employment and the Indigenous Women in Mining and Resources Association to support indigenous women." Colin said.



*Pictured: Colin Shaw, Executive General Manager – People & Strategy, Komatsu Australia*



*Pictured from left to right: Sean Taylor (CEO & Managing Director – Komatsu Australia), Deborah Lee (Director – Federal Group), Scott Harris (General Manager – Beacon Foundation), Shanne Taylor (Komatsu) at Beacon's 30 year Celebration in 2019.*

One school that has worked closely with Komatsu through the Beacon program in 2019 was Whitebridge High School, south of Newcastle.

Komatsu team members at its Newcastle branch were heavily involved in supporting a Beacon Foundation Work Readiness Program with Whitebridge. This support is critical in helping young people who are getting ready to kickstart their careers.

Here are a few comments from Whitebridge students who participated in Beacon programs during 2019.

*"I learned skills about the transition to work and how to apply for and do an interview."*

*"It helped me in my decision on what career path I want to pursue."*

*"The different career paths that go into one company were very insightful."*

And from one of Komatsu's volunteers: *"There were some valuable questions and responses from the students. I was pleased to assist in preparing these students for future interviews. Excellent day."*



*Pictured: One of the Komatsu Wheel Loaders adjusted with Severe Application Spec (SAS) to work under extreme heat conditions*

## CALL IN THE SAS

**A**n Australian innovation has made the country's growing feedlot industry substantially more efficient and has brought relief to machine operation in extreme heat conditions.

Komatsu's Australian engineers have devised a way to maintain radiator efficiency in conditions which would otherwise cause machines to shut down for lengthy time-consuming cleaning.

They've called the ingenious system, Severe Application Spec (SAS), which has brought relief to operators as well as engine and transmission components, contributing to reduction in fatigue on long shifts at the controls.

Local Komatsu engineers have spent several years examining and changing airflow patterns over the radiators of their machines, particularly in applications where high fibre debris has the potential to clog radiators.

**"The solution we devised exceeded that target, and later improvements by the Komatsu factory have provided even greater efficiency."**

New wider-core radiator vanes allow debris to find its way past and through the radiator without the same propensity to clog.

The system, the result of substantial trials, has given Komatsu a decided edge in the burgeoning feedlot industry which this year is expected to exceed \$4.6 Billion in contribution to the economy, and to service more than 1.5 million head of cattle.

More than 60 percent of Australia's 400 accredited feedlots are located in the comparatively high temperature regions of Queensland.

"Our brief from customers was to be able to provide them with a full shift of operation without having to stop to clean radiators and coolers of high-density fibres which gather on the ground in feedlots," Steve Hollins, Komatsu's National Technical Manager, Wheel Loaders, said.

"The solution we devised exceeded that target, and later improvements by the Komatsu factory have provided even greater efficiency.

"Our work was done on the PZ-6 series which is still in wide demand.

"It's pleasing that many of our modifications have been taken up as standard equipment on later models."

It was determined that the hydraulic fans which distribute air over the machine's radiator could be run in reverse to pick up clean air from behind the radiator and force it forward in the PZ-6 models.

The new-8 models from the factory have taken up the modification as standard.

The function operates every 20 minutes for three minutes under normal conditions but can be programmed to work for five minutes in every 12 in severe conditions.

The 'reverse cycle' for the PZ-6 models was assisted by the development of a special wide core radiator which opened blades from 2-3mm to 5-6mm allowing fibres a better opportunity to pass through without clogging. The feature is now standard on the new -8 models.

The same technique was applied to the engine and transmission oil cooler which sits alongside the radiator. One of the SAS team's modification provided an additional boost for operator comfort.

The relocation of the air conditioning condenser from nearby the radiator to the top of the cabin has had the dual advantage of clearing an additional airway for engine cooling and providing cooler, cleaner air to the operator.

The condenser, like the radiators, has an automatically activated self-cleaning function which further reduces the possibility of clogging.

It is provided as a retro-fit to the company's PZ-6 machines which are widely used in the feedlot industry and is an installation modification on Dash Seven and Dash Eight machines which have incorporated some of the innovation as original equipment.

"Operators in the feedlot industry are sometimes working in heat up to 50 degrees, and in conditions where a 'hay-buster' can split open a core of feed in a matter of seconds and create an almost impenetrable dust storm," Steve said.

"For years, the need to stop and clean radiators has been an annoying, and as it turns out unnecessary drain on productivity."

Operators who needed to stop three or four times a shift to clean radiators with compressed air are now reporting up to 100 hours between major cleans.





*Pictured: Komatsu delivering a HD405-8 Dump Truck to Holcim's Sunrock Quarry on the Sunshine Coast in September 2019  
From left to right: Andrew Murray, Darren Fraser, Phil Woodward, Martin Halliday, Alec Harries*

## HOLCIM DELIVERY OF DUMP TRUCK

**In early September 2019, Komatsu delivered a new HD405-8 dump truck to Holcim's Sunrock Quarry on the Sunshine Coast – almost exactly 25 years after Komatsu handed over what was then a new HD325-6A truck to the same site.**

And in a remarkable personal connection, two people at that original handover, one from Sunrock and from Komatsu, were also at the latest delivery.

Phil Woodward, Sunrock's Production Manager, along with Darren Fraser, Komatsu's Sunshine Coast Customer Support Sales Representative attended both deliveries, and were able to reflect on the original truck's performance, and the changes in the industry over the past 25 years.

Holcim's Sunrock quarry is a large hard rock operation that started in the early 1980s.

It supplies high volumes of roadbase products, aggregates and specialised rock to major civil construction projects, general construction projects, concrete asphalt plants throughout southeast Queensland, due to the high quality of its rock.

Sunrock Quarry Manager Martin Halliday said the HD325-6A truck been used for direct load out underneath product bins and moving stocks around the yard for 25 years.

Over that time, it's logged around 47,000 hours, and consistently recorded high hours each month.

"It will see out its days as a backup truck – perhaps another 25 years?" he said.

Quarry Production Manager Phil Woodward, who was at the original handover, said the HD325-6A was the first Komatsu to come to the quarry.

Over that time he's also seen a few changes.

"The technology in these trucks has changed quite a lot, as you can imagine.

"We've certainly had a long relationship with Komatsu over that period; I've dealt with Darren a lot over the years, along with Andrew Murray, who was the resident fitter here before he took over management of their Sunshine Coast branch at Nambour," said Phil.

Komatsu's Darren Fraser was the company's resident fitter on the Sunshine Coast when he was involved in the 1994 delivery; this was in the days before Komatsu had a branch in the region.

"At the time I worked from home, servicing machines in the region," he said.

In addition to the HD325-6A delivered in 1994, over the next few years Komatsu supplied Holcim Sunrock with a used HD325-5, a used HD405-6 and a new WA500-3, which arrived about 10 years ago.

"It's been very good relationship with Sunrock, and we've serviced their equipment all the way through."

Darren got off the tools in about 1998, when he went into a customer support role with Komatsu, but continued the close relationship with the quarry.

"It's been a very long standing relationship, and you don't often get something like where you get the same people at a delivery 25 years apart, so it's quite significant that it happened.

"Having said that, we've got a lot of other longstanding customers on the coast here that we have similar very close relationships with," Darren said.

Komatsu continued having a resident fitter covering the region from Caboolture to Rockhampton until it opened the Nambour and Rockhampton branches in 2007.



**Pictured left: Komatsu delivering a HD325-6A Dump Truck to Holcim's Sunrock Quarry - 25 years ago**

**From left to right (atop the dump truck):  
Peter Dickson, Ian McKay**

**From left to right (on ground): Phil Woodward,  
Pat Alexander, Rex Workman, Barry Arnold,  
Peter Adam, Darren Fraser, Warren Smith**





## KOMATSU SIGNIFICANTLY INCREASES RANGE OF PARTS AVAILABLE THROUGH MY.KOMATSU.COM.AU

**K**omatsu has greatly expanded the range of parts that can be ordered through myKomatsu ([my.komatsu.com.au](http://my.komatsu.com.au)), its online customer portal, to now include parts that are readily available – but may not be in stock in its local distribution centre facilities.

Previously, parts that were not stocked in local Komatsu distribution centres were listed as “out of stock”, and required customers to call the Komatsu Customer Support Centre (KCSC) to order and process them offline.

The company has now improved its offering by allowing customers to purchase the exact part they need, when they need it.

If stock is not available in one of its Australian distribution centres, Komatsu’s KCSC team will source parts from the nearest branch or supplier to ensure customers get their order as quickly as possible.

These can now be processed entirely online, with customers given the option to be contacted about express delivery if it’s required urgently.

By expanding the range of parts that can be ordered through myKomatsu, parts ordering has been further streamlined for customers, says Todd Connolly, Komatsu’s General Manager – Construction Solutions.

“This is another step forward in our drive to ensure that we are always easy to do business with, and helps us deliver a better online experience to our customers,” he says.

“Now, when a customer orders a part that’s not held in one of our local distribution facilities, the transaction is processed just like any other myKomatsu online parts order, and we will manage internally the process of getting those parts to customers as quickly and expeditiously as possible.

“That means significant efficiency gains for Komatsu, which in turn ensures we can further improve our levels of customer service,” says Connolly.

“It means that customers will immediately see far more parts available online, rather than getting the ‘out of stock’ message.”

Previously, “out of stock” orders had to be processed over the telephone, which required more time on the part of customers and Komatsu staff.

Now, by moving to online processing for these orders, customers don’t have to spend any time or effort in making a phone order, and Komatsu is able to significantly reduce the time it takes to process these orders.

“This will also have additional customer benefits by allowing Komatsu Customer Support Centre staff to focus on other areas of service and technical support,” Connolly says.

“An important element of myKomatsu, and one that is greatly appreciated by its users is the fact that we constantly update customers on the status and shipping time of their orders.

“This process will also apply to this expanded range of parts, so customers will always be fully informed as to when their parts will arrive,” he says.

Previously for Australian customers, stock availability through myKomatsu only reflected stock held in Komatsu’s distribution centres in Fairfield (NSW), Morningside (Queensland) and Welshpool (WA). If parts were not stocked in these centres, customers needed to call the KCSC and place an order via telephone.

**“By expanding the range of parts that can be ordered through myKomatsu, parts ordering has been further streamlined for customers.”**



# KOMATSU RENTAL



## KOMATSU RENTAL'S INNOVATIVE WEBSITE MAKES IT EASIER TO HIRE

**K**omatsu is continuing to expand its digital presence with the launch of purpose-built new websites for its Komatsu Rental operations in Australia and New Zealand, at [komatsu.com.au/rental](http://komatsu.com.au/rental) (Australia) and [komatsu.co.nz/rental](http://komatsu.co.nz/rental) (New Zealand).

Komatsu Rental's Australian and New Zealand websites allow customers to view the full range of rental solutions available, including excavators, wheel loaders, dump trucks, dozers, graders and more, as well as attachments.

The sites are fully cross-platform, optimised for use with computers, tablets and smartphones.

Geoff Pisani, Komatsu Rental's General Manager, said customers were increasingly looking to online resources when making rental and purchasing decisions.

"All rental machines available across our Australian and New Zealand offerings, including new models, can easily be viewed online," said Geoff.

Peter Groube, Komatsu New Zealand's Business Development Manager - Rental, said it was an exciting development to bring this customer-friendly, easy-to-use online offering to New Zealand contractors and other end users looking to rent modern and technologically advanced Komatsu machines.

"Customers in both markets can now rent ground-breaking Komatsu technology, including our iMC (Intelligent Machine Control) excavators and dozers, our highly fuel-efficient Hybrid excavators, and take advantage of our KOMTRAX remote monitoring capabilities to ensure they always get the best from their Komatsu Rental machines," said Peter.

"As well, there's a growing range of Komatsu attachments, including a full range of Komatsu breakers, matched to many of our machines."

Pisani said the new websites have also been designed to put customers quickly in touch with their local Komatsu Rental team member.

"When customers enable the site to use their location, it provides full contact details of their nearest Komatsu Rental Representative," he said.

"There's also a quick and easy online enquiry process, so customers can request a call from a Komatsu Rental representative. And an intuitive online map lets customers view the locations of all our rental branches at a glance," he said.

"Our new Komatsu Rental website is an important development in continuing our approach of being easy to do business with.

"Now our customers can view the full range of rental solutions, any time of the day or night," said Geoff.

**"Now our customers can view the full range of rental solutions, any time of the day or night."**

# HOW KOMATSU NZ ACHIEVED LOADER SCALE ACCURACY EXCELLENCE AND NOW LEADS THE INDUSTRY

**Over the past four years, Komatsu New Zealand's product support and technical teams have been working with customers and suppliers to ensure Komatsu wheel loaders achieve high accuracy and consistent results when fitted with third party load scales.**

As a result of an ongoing program of research, testing and many hours of trials, Komatsu wheel loaders fitted with these third party scales are now consistently achieving levels of accuracy that are significantly better than other brands of loader.

Following this program, Komatsu loaders are consistently achieving 0.5% accuracy or better.

Due to regulations covering on road trucks, sites that do not have a certified weighbridge, should have their wheel loaders equipped with "legal for trade" load scales, which require annual calibration to maintain their certification. Generally they are required to achieve load accuracies of 1% (or better in some cases).

The program was led by Brent Hepple, Komatsu NZ's Product Support Manager, who'd had several requests to ensure Komatsu loaders could achieve exceptionally accurate readings with load scales; the concern was the company could lose sales in significant numbers to quarries and mineral processing operations if this wasn't achievable.

"Inaccurate or inconsistent load scale results are particularly critical in operations where there is no weighbridge, so the weight of material in each bucketload must be spot on," says Brent.

"If your operation is relying on a loader fitted with scales to ensure your trucks are not overloaded, then each bucketload weight is critical.

"We have customers who want their trucks loaded to exactly 30 tonnes, to optimise their haulage operations. But if their trucks are even slightly overloaded, they'll get a ticket."

Another important customer sector reliant on highly accurate scale results is the lime industry.

"Lime blends have to have very precise mixes to meet their customer specifications. If there's too much of a lower quality mix, customers aren't getting what they've paid for; if there's too much of the premium product, the producers are losing money."

Brent, along with Ron Chilton, Komatsu NZ's technical support representative for the South Island, spent a lot of time working with customers to try to solve these issues, and also to figure out why they seemed to be unique to Komatsu loaders, and didn't as a rule happen with other brands.

Brent and Ron – who Brent credits as having done the bulk of the work with customers and suppliers – also worked closely with the two leading load scale suppliers in NZ, Loadrite and RDS.

As it turned out, there were two areas to focus on, and each interacted with each other to prevent Komatsu achieving the highly accurate and consistent results required.

"Fairly early on, we identified that friction in the loader bucket bushing was part of the issue," says Brent.

"Over a number of years, we tried a number of different low-friction bushings. They gave us some encouraging results, but they still weren't giving us the accuracy we needed.

"Then we stumbled on something in a Komatsu excavator parts book that referred to a BMRC bush, which is a special sintered aluminium/copper bush fitted to some models of Komatsu excavators so they could raise greasing intervals to more than 500 hours.

"We tried some of these, and found the accuracy was significantly improved.

"Loader scales work on hydraulic pressure to calculate load weights, and the slightest increase in friction in the bushings meant more pressure in the hydraulic system, which in turn meant the scales gave an incorrect reading."

Brent and his team brought in some sets of BMRC bushes from Komatsu Japan, and trialled them on some loaders in a couple of operations.

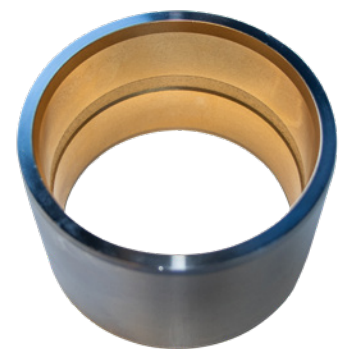
While these addressed some of the issues, the consistency required still wasn't there, so Brent and the team did some more research.

"We started looking at the Closed-Centre Load Sensing System or CLSS hydraulic system that's been used on just about all Komatsu construction machines since the late 1990s."

It's pretty much unique to Komatsu, and something no other manufacturers use, certainly not on loaders; most hydraulics on other earthmoving brands are open-centre systems.

"Our CLSS gives us significant advantages in precision and control, it's faster, and more reliable and robust, plus it also contributes to Komatsu machines' reputation for excellent fuel efficiency," says Brent.

"So we started adjusting the loader hydraulic circuits on these loaders that we'd fitted with the new bushes, using data logging to measure and calibrate the hydraulic systems' wave pattern.



*Pictured above: Komatsu BMRC Copper / Aluminium composition Bushing*

**"If your operation is relying on a loader fitted with scales to ensure your trucks are not overloaded, then each bucketload weight is critical!"**







"These wave patterns are used by the load scales to calculate bucketload weights.

"We found we were able to adjust our Komatsu CLSS hydraulic systems to get the wave patterns in precisely the right spot.

"By doing this, we were able to get to accuracies of 0.5% consistently with Komatsu loaders – which is even better than the scale manufacturers can guarantee," he says.

"So the solution turned out to be the combination of these ultra-low-friction bushes and the calibration of our hydraulic systems.

"As with all loaders fitted with load scales that are used for sales and truck loading work, our hydraulic systems do need regular calibration and checking to maintain accuracy," says Brent.

"But we are now finding as a result of our research that Komatsu machines as they get older actually get even more accurate in measuring bucketload weights, as things wear a bit and there's a touch less friction," he says.

As a result of this program, all Komatsu loaders in the WA380 to WA480 size range sold in New Zealand and Australia are now fitted with BMRC ultra-low-friction bushes as a standard fitment.

"We also think that Komatsu will be very well positioned into the future, as after market load scales are getting more and more accurate, with increased levels of sensitivity," says Brent.

"Now that we know exactly how to set up and calibrate our loaders to get the best possible results, we believe we have a significant advantage over other suppliers."

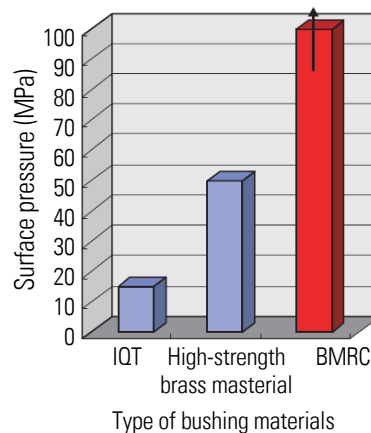
Brent also asked *Down 2 Earth* to acknowledge the assistance provided by load scale suppliers Loadrite, which started in NZ and still carries out the bulk of its research and manufacturing in the country, and RDS.

"Loadrite has the larger market share in NZ, while I believe RDS is more prevalent in Australia," Brent says. "We were having these issues with both brands, and both were very helpful in assisting us to resolve them.

"Thanks to our Komatsu NZ team, along with engineering support from Komatsu Australia and Japan, plus the input from load scale suppliers and customers, we have solved this issue," says Brent.

"We've had this solution since the start of 2019, and it's proven itself in that time. We're now highly confident in our ability to supply loaders that consistently deliver load scale accuracies that significantly exceed industry requirements."

**"We've had this solution since the start of 2019, and it's proven itself in that time. We're now highly confident in our ability to supply loaders that consistently deliver load scale accuracies that significantly exceed industry requirements."**



Komatsu BMRC bushes are now being sold as standard on WA380 through to WA480 sized wheel loaders. The graph above shows seizure resistance of various bush materials. IQT (induction hardened and tempered steel) bushes are the industry standard bushes.







Pictured: The Argus Wheel Loader system in action.

## A PRODUCTIVITY BOOST FOR KOMATSU WHEEL LOADERS

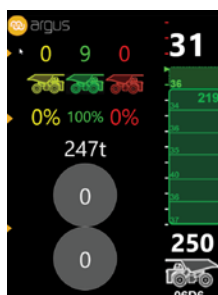
**K**omatsu technology group company, MineWare, has announced the launch of its Argus Wheel Loader (WL) system—a wheel loader monitoring system that lifts productivity and reduces cost per tonne in real time.

Argus WL delivers real-time feedback to the machine operator via an intuitive touchscreen to make material handling and loading jobs safer, faster and more accurate.

MineWare Vice President of Marketing and Sales Roy Pater said Argus WL will help Komatsu customers to improve efficiency, effectiveness and payload accuracy across their large wheel loader fleets.

“Argus WL does this by weighing each bucket in real time, without the need to stop and calculate payload before dumping the load. This we understand from our customers is an unacceptable practice required from other similar systems today, losing valuable production time to repeat this with every bucket load.”

The multi-purpose system offers advanced functionality in truck detection, structural monitoring, as well as payload optimisation in real-time.



Pictured above: Screenshot from the Argus WL system

**“Argus WL takes productivity monitoring for wheel loaders to a new level, by working smarter, not harder, to get the job completed successfully.”**

“The real-time nature of Argus WL really stands this system apart as it gives operators direct feedback for them to make smarter loading decisions to optimise truck loading and payload management,” Roy said.

“Argus WL guides operators to move the right amount of material with every load, helping mines to reduce payload variability, meet production targets and predict the operations forecasts more reliably, when analysing machine productivity by shift and operator.

“Talking to customers, we knew that the best way to improve their wheel loader productivity was to empower their operators with better access to real-time, actionable information and give them a single platform that integrates with their existing software.

“Argus WL takes productivity monitoring for wheel loaders to a new level, by working smarter, not harder, to get the job completed successfully.”

Developed on an open IoT platform, Argus WL is an interoperable system that works on all OEM machines and integrates with third party production software. The launch follows 18 months of successful field trials conducted across three Western Australian mine sites.

More information about the system and its benefits can be found on the MineWare website.





*Pictured: Komatsu Mackay team completed world's biggest P&H rope shovel bucket rebuild*

# KOMATSU TEAM BUILDS ONE OF WORLD'S LARGEST ROPE SHOVEL DIPPERS IN CENTRAL QUEENSLAND FACILITY

**O**ne of the world's largest mining rope shovel dippers – and the first of an innovative new trapezoidal design – has recently been built at Komatsu's large mining equipment fabrication facility in Mackay, using a local team of tradespeople and technicians..

The 86 cubic yard dipper – mining terminology for a bucket on rope shovels – is for a new P&H 4100XPC AC-drive electric rope shovel for a major coal mine in the Bowen Basin.

According to Ricky Barnes, Workshop Supervisor at Komatsu's Mackay large mining equipment manufacturing facility, the dipper – which weighs 87 tonnes – is a new-generation trapezoidal style design for the P&H 4100XPC shovel.

"It's the first of its kind to be manufactured in Australia, and was designed for this new shovel. It's also the biggest dipper for any P&H machine that's ever been built," he said.

The dipper has been fabricated at Komatsu's facility by two teams of three, each working two 12-hour shifts a day.

"The whole thing has been built in-house," said Ricky. "Our only outside contractors have been for line-boring and some non-destructive testing."

In addition, Hensley ground engaging tools (GET), which include teeth and other wear parts, are being fitted as standard to the dipper, continuing a trend in the mining industry for Hensley as a preferred GET supplier, due to its proven quality and reliability. Hensley is another Komatsu owned company.

Komatsu's large mining equipment fabrication facility in the Mackay industrial suburb of Paget has been the major fabrication and mechanical repair facility for P&H shovels in Queensland for many years.

It is one of two Komatsu mining equipment fabrication, maintenance and service facilities in Mackay, along with a warehouse operation.

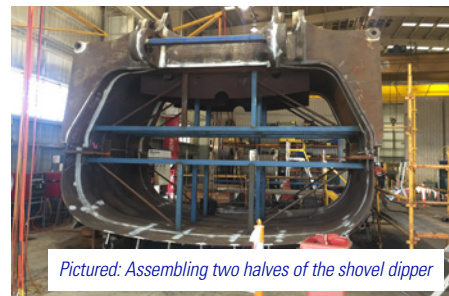
"We've been manufacturing dippers for the Australian market here since 2007, and this facility has specialised in heavy fabrication work for large mining shovels and draglines since the mid 1990s," Ricky said.

"In the past, we've built 56, 69 and 82 cubic yard dippers here, and we also service, repair and rebuild electric drive power modules, transmissions, gearboxes and brakes for P&H machines.

"In addition, we repair and rebuild dippers and shovel handles for P&H machines used in the Bowen Basin, along with rebuilding of P&H Wheel loader buckets, as well as manufacturing and refurbishing of mining conveyor systems."



*Pictured: Early stage of the rope shovel rebuild*



*Pictured: Assembling two halves of the shovel dipper*



*Pictured: Shovel dipper completed*





*Pictured: The D65EX-15 dozer that was destroyed by the late 2019 bushfires*

## OK EARTHMOVING FOR KOMATSU

**A**s everyone in Australia – as well as most of the rest of the world – would know, Australia is experiencing a horror bushfire season during the summer of 2019/20, with lives lost, hundreds of houses and other property destroyed, and millions of square kilometres of bush and farmland burnt out.

New England-based contractor OK Earthmoving has been involved in fire-fighting activities around this region of NSW since August last year – with owner Peter O’Keefe saying that until mid-January 2020, his equipment and people had been fighting fires every day for 159 days.

“At one point, we had our water trucks out fighting fires for 24 hours a day,” said Peter.

And as outlined in the accompanying piece, written by Peter, one of his D65EX-15 dozers – one of six Komatsu D65s he owns – was totally destroyed by a bushfire in early November last year. Fortunately he was able to source a used D65EX-16 to replace it fairly quickly.

Peter has worked across the New England region since the mid-1990s, when he bought a used 1974 model Komatsu D60A-6 dozer from a neighbour to carry out clean up work around the small farm that he and his wife Suzanne had bought.

“When we started with the farm, it was in the middle of a drought and it wasn’t paying us much, so we began doing a bit of work for our neighbouring farms,” he said.

“It wasn’t long before we needed another dozer to cope with the workload, then another and another. These have always been mostly Komatsu machines.

“Then around 2000, we could see the need for excavators, and started buying them. We’ve only ever had Komatsu excavators,” said Peter.

Today the company employs about 12 people and around 30 machines, including two D65EX-12s, and now three D65EX-15s, plus the replacement D65EX-16 for the burnt out machine. Its excavator fleet consists of four PC200-8s.

Peter says the company prefers working locally within the New England region, though it has worked as far afield as the Pacific Highway upgraded on the NSW North Coast, and the mines at Boggabri.

“We’ve pretty much always been able to source work locally,” he said.

OK Earthmoving’s work includes a lot of land development projects, including large dams for local councils, plenty of farming and rural work, plus fire trail management for National Parks NSW and harvest road work around pine plantations for the NSW Forestry Corporation.

Peter and his family also run what he describes as a “pretty substantial” farming/grazing enterprise.

“At the moment, our dozers, excavators and trucks are giving us the secure off-farm income that we need in what’s been one of the worst years imaginable, what with the drought and the bushfires. We wouldn’t be making it through these tough times without that,” he said.

Peter said he’s always had a preference for Komatsu machines for a number of reasons.

“With our excavators, it’s because of their fuel economy and reliability; with our dozers, it’s component life.

“Over the years, we’ve had 24 or 25 different Komatsu dozers, and to date we’ve never had to pull a transmission out of any of them. And some of them have had up to 20,000 hours; they are just very, very well engineered,” he said.

“A while ago, we had to pull a final drive off a dozer that had 20,000 hours on it, because it got contaminated with some wire. We just let the oil out, put the seals back on, and sent it back to work.

**“Over the years, we’ve had 24 or 25 different Komatsu dozers, and to date we’ve never had to pull a transmission out of any of them. And some of them have had up to 20,000 hours; they are just very, very well engineered.”**





*Pictured: The cabin of the burnt D65EX-15 dozer*

"The longevity of these Komatsu dozers is that far in front of anyone else, it's not funny," said Peter.

Now that (as of early February 2020) the fires in the region appear to be under control, Peter said there is now a lot more positivity around in the community.

"We had our worst Christmas ever, constantly dealing with fires, and the threat and worry of them until we got some rain in mid January, and things finally calmed down."

Now the rebuilding and rehabilitation process is starting.

"We've already started on reopening all the fire trails in the region, and my son Will is working closely with National Parks and the Forestry Corporation on these.

"Pretty much every bit of timbered land between Gloucester and Grafton has been burnt out, there's a lot of roads that are impassable because of fallen trees, and there'll be several months of work to open them again," he said.

"I sincerely hope there will be lessons learnt from this. There needs to be a lot more trail management and hazard reduction to prevent a repeat of this in the future. And I hope to be involved in the consultative process for this quite heavily," said Peter.



*Pictured from left to right: Will O'Keefe, Mick Morris, Peter O'Keefe*

**P**eter O'Keefe, from OK Earthmoving, shares the story of how his Komatsu D65EX-15 was destroyed in a bushfire in early November – and how operator Mick Morris's quick thinking saved lives.

We had been working for some local land owners to clear fencelines and access roads around 20-odd small rural holdings along Blomfield Road, Yarrawitch. We knew there was a bushfire approaching – though it was still predicted to be several days or maybe even weeks away.

On Thursday November 7, the RFS had issued warnings of impending extreme fire weather, which meant high winds, high temperatures, low humidity and basically uncontrollable and unpredictable fire behaviour.

Mick had basically finished his tasks clearing breaks around the properties, when he noticed a huge plume of black rolling smoke to the west.

On further investigation, he could actually see flames which appeared to be only a few of kilometres away, so he immediately walked the dozer back to the recognised safe area – a gravel turnaround bay on the end of a council road.

This was a 40 m by 60 m completely bare gravel pad, where Mick believed the bulldozer would be perfectly safe from any threat of fire.

While clearing the breaks, Mick had been in and out of all the driveways along Blomfield Road, so he knew that most of them were unoccupied; however, he also knew that there were residents at home in several properties who would be completely unaware of the approaching fire.

So in his typical unselfish manner he decided that, rather than flee to safety in his ute, he should warn these people.

As a result, he was able to convince seven people who were intending to stay and defend their properties to leave immediately as the danger was just too great.

I believe that seven lives were saved as a direct result of Mick's actions. There was sadly one person who Mick was unable to convince to leave, and as a result he suffered severe burns and later died in hospital.

Following this, Mick telephoned me to tell me what had happened and that he believed the bulldozer was perfectly safe, and he would go back in once the fire front had passed just to be sure.

It was several hours after the fire had passed before it was safe for him to go and check on the bulldozer. Mick was absolutely devastated to find that the machine had been completely destroyed.

I believe the dozer had been subject to some of the most intense ember attacks imaginable; basically, the wind would have just stacked burning material against the side of the machine and created its own fire.

I later learned from people working in the incident management team in Glenn Innes that the fire had breached containment lines approximately 8 km west of where the dozer was parked and had burned uncontrollably towards Blomfield Road.

It is believed that at times the fire could have been travelling at up to 80 km/h, and it basically destroyed every dwelling in the entire area.

When I drove home that night through the still-burning logs and falling trees, it was like driving through the set of a horror movie.

The upside of the story was that lives were saved, and the downside was that we were down one perfectly good Komatsu D65 bulldozer.





*Pictured: PC210LCi-10 Excavator at work  
One of the many iMC (Intelligent Machine Control)  
equipments that's making a huge difference for  
Norris Construction Group*

**intelligent  
MACHINE CONTROL**

## GENERATION SAVVY DRIVES BUSINESS SUCCESS

**A new generation of heavy plant operators are using Intelligent Machine Control to drive a 20-30 percent increase in productivity for one of the country's most progressive civil construction companies.**

A group of young operators – the youngest is just 20 – have taken the opportunity on Komatsu's in-cabin IT processes as a means of streamlining jobs and substantially increasing efficiency.

Norris Construction Group, operating out of Geelong, has eight IMC machines – ranging from dozers to excavators – at the core of its 36 strong Komatsu fleet.

Tim Norris, 48, the second-generation owner of the fast-growing business, credits the advent of IMC as the most startling innovation of the decade and the root cause of his expansion.

"You just don't make mistakes – the job is there on the screen in front of the operator when he climbs on board," Tim said.

"Where a foreman might forget to give an instruction, the entire sequence of activity in an IMC machine is outlined and continually updated for the operator.

"It enables us to work when inclement weather prevails because it eliminates the need for a person on the ground."

Tim, who joined the family firm when he was 25 and fresh out of university with a degree in Commerce, hesitates to compare "old ways" to those that are available now, but he does acknowledge that it takes young people to get the best out of the intelligent machinery.

"The younger generation has a strong grasp of technology," he said.

"Aided by IMC they can think three or four days ahead on any job – plotting the best way for a work program to proceed.

"It's not just a case of following the orders on the screen.

Access to the project design and scope via the screen is priceless – each operator can use the IMC system to better plan a work path.

"There are a number of different applications, some of which help to increase productivity between 20-30 percent.

"A picture (on the IMC screen) is truly worth a thousand words."

Tim's dad, Keith, was old school. He came to the business more than 50 years ago looking for a seachange, and it came on a car production line in Geelong where he decided, literally overnight, that there had to be more to life.

"He started buying old machinery and applying it to drainage projects in the Geelong area," Tim said, "and he'd soon built up a good business."

But the pyramid building societies of the 1980s and the rogue operators they spawned, left Norris Construction Group in dire financial trouble carrying heaps of other people's debt.

That's when Tim stepped in. "I thought I was destined to apply my Commerce degree in the city – instead I found myself graduating and immediately joining the family business at its lowest ebb," he said.

**"There are a number of different applications, some of which help to increase productivity between 20-30 percent."**



*Pictured: PC490LCi-10  
The largest Construction Class iMC Excavator*





*Pictured: Two Komatsu machines working in cooperation:  
PC490LC-11 Excavator and HM300-5 Articulated Dump Truck*

"You always hope you're going to follow in your father's footsteps, and I'd been hanging around the yard since my early teens."

The father and son team dug deep – Tim applying modern principles of consolidating his dad's old stock and borrowing to lease or buy newer and less troublesome plant.

He negotiated with the taxation department to achieve an arrangement to pay back taxes and he bought his first excavator, a second-hand Komatsu PC120-6 with 900 hours use. It had 16,000 hours when he sold it.

"It's the way they treat you," Tim said, referring to his now quarter century association with the Japanese earth moving giant.

The partnership he has with Komatsu goes beyond machinery purchase to direct involvement in information gathering seminars at the highest level, service advice on tap and finance packages designed around special offer promotions.

Norris Construction Group has other brands on fleet, but they are the short-term result of a deliberate program of growth through acquisition of other businesses.

Norris has so far absorbed three other businesses which along with its own organic growth has set it on a path of annual expansion approaching 20 percent a year.

Trained and committed personnel are a crucial part of Norris' strategy.

The company employs 185 people, making it one of the larger employees in the Geelong region, and Norris is committed to offering full service to its core group of large clients.

"As long as we plan well, we are much better off having all our services in house so we can deploy them to the areas of most need rather than relying on outside suppliers," Tim said.

Norris' young operators meet once a day to share the results of their day's work on the Komatsu IMC machines and to jointly plan upcoming activity.

"A hundred percent - the IMC machines are at the core of our business," Tim said.

"The older non-IMC machines are generally used to work on projects like recycling and crushing where there's not the same need for sophisticated planning.

"Anyone can pull the levers, but these days the secret to business success is how well you can work with the on-board technology to plan a better result," Tim said.

Tim's eye is to the future repeating itself.

His 17-year-old son James, in his final year of school, has just announced he'd like to go to Uni and study Commerce. In the future, he'd like to work for the company.



*Pictured: D61EXi-24 Intelligent Dozer doing it's job*

**"Anyone can pull the levers, but these days the secret to business success is how well you can work with the on-board technology to plan a better result."**

**intelligent  
MACHINE CONTROL**





*Pictured: Katie Wilson, acquiring her newest asset - a Komatsu D65PX-17 Dozer, at the young age of 19.*



*Pictured: Newest member of Cameron Civil's fleet of machines - Katie Wilson's D65PX-17*

# WHY AUCKLAND OWNER-OPERATOR KATIE WILSON WENT FOR A KOMATSU DOZER

**J**ust on a year ago, in October 2018, operator Katie Wilson – then 19 – took delivery of her very own machine: a used 2015 model Komatsu D65PX-17 swamp dozer.

Her dad, Tony Wilson, who with Katie's mum Lynley, owns Auckland-based contractor Cameron Civil, convinced Katie that investing in a recent-model, quality piece of earthmoving equipment would be a great way to secure her future.

"I knew I didn't want to go to uni after finishing high school, and I'd done a fair bit of equipment operating; I seem to have a natural skill with it, and I really like doing earthworks, working around the big machines, and seeing it everything come together quite fast," said Katie.

Having operated Komatsu machines since she was 15 with her parents' business, Katie was determined her first machine would be a Komatsu, and it would be a dozer.

"I really like operating dozers, particularly this size machine. I think you can do more with these smaller machines, so it's a bit more exciting and interesting than one of the bigger ones, where you're just pushing dirt back and forth," she said.

"When I first started working for mum and dad in my school holidays, I started at the bottom, just labouring, then worked my way up onto rollers and dump trucks. My first digger was a Komatsu PC200 that I drove at 15, and I've also driven a Komatsu WA100 loader. "These days, I can pretty much drive any machine, even a scraper – though I've not had a go on a grader yet," said Katie.

She's driven a number of different Komatsu dozers through Cameron Civil, including a D51, a Cameron's owned D65, and also its D61EXi-23 "intelligent" dozer with integrated 3D GPS. "I've also operated other makes of dozer, but I just find the Komatsu machines easier to operate, they have more power, and they're not gas-guzzlers." So, when I decided to take dad's advice and save up for a deposit on a machine, Komatsu was the best option for me."

Sometimes when Katie turns up on a site with her dozer for the first time, she'll get some initial doubt from others.

"People don't always believe I'm an experienced operator, until they see me operate. But I like to prove my ability, not just talk about it.

"Though, I am still learning all the tricks to operating dozers, and how to get the best out of them," she said. When Katie bought her machine, it had around 2600 hours on the clock; as of October 2019, it had notched up 3500 hours.

Fitted with "swampy" low ground pressure grousers, her machine tends to be used more in wetter and dirtier conditions. Initially she started off working at Cameron Civil's tip operation, but has since moved across to general civil contracting works across the company's project sites.

These include residential and industrial subdivisions, roadworks, services installation and more, primarily in West Auckland, though the company has operated out as far as the city's southern and northern suburbs. "Generally we tend to operate within 30 minutes of our yard," said Katie.

**"I've also operated other makes of dozer, but I just find the Komatsu machines easier to operate, they have more power, and they're not gas-guzzlers."**

When working on civil projects, Katie's D65 is often fitted with one of Cameron Civil's "bolt on" Topcon 3D machine control system for slot dozing, batters and shaping work. She's been very impressed with her D65PX-17's power, ease of control and fuel efficiency.

"It's got very good fuel consumption, I like the power it has, and it's comfortable to operate," she said.

"Pretty much all the time, I can operate it in economy mode, and it pushes fine, even in slot dozing or at the tip. I've rarely had to run it in power mode, so that really helps keep the fuel consumption down.

"And compared to some other makes of dozer I've driven, it's really good. Like the computer on it is really fast and responsive, and because it's a smaller dozer, it's quite a bit more versatile.

"For example, the tilt on it can go quite far compared to some others, so you can angle batters better." More recently, Katie has been investigating the capabilities of the KOMTRAX remote monitoring system that comes with each Komatsu machine.

"Really, I've just started using KOMTRAX, so I can keep an eye on things. The KOMTRAX app on my phone shows me error codes indicating things that I don't always see in the machine, so I can really see all sorts of things, like fuel usage, productivity, and so on." And does she have ambitions to build an earthmoving business? "Actually, I never thought I did want my own business," said Katie.

"But I'm starting small, and I'll see how I go. Certainly, I'm not looking at having employees, I think I might just stick to machines if I buy any more, and dry hire them out others."

For now, Katie is delighted with her machine: "Actually, of all the dozers I've driven – Komatsu and others – my favourite would be the D65; it's just the right size and power, so you can do everything you need to with it," she said.



# PRECISION GUIDES DELICATE DEMOLITION

**A prominent New Zealand demolition company has celebrated its 25th anniversary by successfully completing a particularly complex and culturally sensitive assignment.**

The achievement in the latter part of 2019 has been highly acclaimed by local authorities.

Wellington based Quality Demolitions and Contracting Ltd used a purpose-built Komatsu excavator to bring down an earthquake affected building next to the gravesite of one of the country's founding fathers.

The company removed the eight story Wellington Electricity building with millimeter precision within touching distance of the grave of Chief Honiana Te Puni-Kokupa, who took part in New Zealand's 1840 Treaty of Waitangi- the basis of the country's constitution.

It is the latest in a long series of specialist jobs undertaken by a company formed quarter of a century ago by father and son team Gavin and Shane Gray.

Shane is now the sole proprietor of the business following his father's untimely death just two years ago.

Precision and passion are the two cornerstones of the company's success, a regime shared by its specialist employees.

The company has equipment on jobs across the country, including 14 large Komatsu machines.

It also has a strong policy of training and retaining skilled employees – the longest serving has been with the Gray's company coming up to 20 years.

Quality Demolition and Contracting's partnership with its principal equipment supplier **Komatsu** extends beyond **20 years** and the Gray's association with the machinery giant pre-dates the formation of their company.

Young Shane began driving machinery, a Komatsu PC300 earthmover, at just fifteen. He and his father joined an existing company and worked as a team before they took over the business while in decline, rebuilding it to become Quality Demolition and Contracting Ltd.

The growth in their business has coincided with a corresponding increase in commitment from their machinery supplier.

"Service is hugely important and since Komatsu moved to place dedicated mechanical assistance in Wellington through Machinery Specialist, we have had even greater confidence," Shane said.

Quality Demolition and Contracting has outsourced some of its machinery monitoring directly to Machinery Specialist, relying on it for reports from its KOMTRAX on-board systems to help optimise machine use.

One of the company's main machines, a **Komatsu PC400LC-8R** excavator, specially equipped with a high reach demolition boom, was at the heart of the assignment to remove the Wellington Electricity building's superstructure without once having material fall on the neighboring Te Puni Urupa graveyard.

The PC400 has an arm length of 27 metres, and is fitted with a Genesis multi-jaw pulveriser.

The operator used the Komatsu to delicately pick at the building's superstructure and to clamp it securely.

"There was a purpose designed demolition plan to it, and it worked perfectly," Shane said.

In truth, a lot of the success of the Wellington Electricity job, because of its precarious location, was the result of operator skill, experience, and the right tools for the job.

"There's still not a lot of 3D mapping available in New Zealand, but it's coming," Shane said.

Site development continues to go from strength to strength. "Progressively, as we move into the future, we're going to be able to use more of the Intelligent Machine Control (IMC) technology built into Komatsu machines."

Trust between the two companies continues to grow.

At the end of 2019, Quality Demolitions and Contracting took delivery of three Komatsu excavators, a PC130-8, a PC300LC-8 and a PC35MR-5 building a strong base for consolidating the association between the two companies above and below 10-tonne fleet.

"The name of our company is a bit misleading," Shane said. Quality Demolition and Contracting has a great dedicated team with a number of different niche skills. "About 40 percent of our work is specialised demolition and the rest comes equally from site works and building removals, so we need a broad spread of machinery."

Nonetheless, rectification and removal are still an on-going task characterised by New Zealand's reaction to two major earthquakes in the last decade.

According to Wellington City's Department of Resilience the area sits on 33 known fault lines.

The 7.8 magnitude 2016 Kaikoura earthquake which started on New Zealand's South Island and quickly spread to Wellington in the north, has resulted in \$1.8 Billion of insurance claims, many of which still require a resolution.

It's the demolitions that really ignite Shane and his team.

"If you want to know what happens if you get it wrong – just watch YouTube," he said.

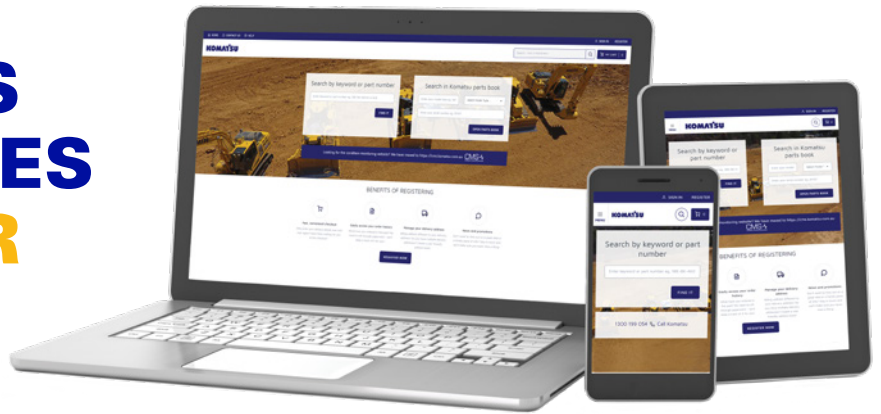


Pictured above: A PC400LC-8R working on removing the Wellington Electricity building's superstructure

**"Service is hugely important and since Komatsu moved to place dedicated mechanical assistance in Wellington through Machinery Specialist, we have had even greater confidence."**



# MYKOMATSU ONLINE PARTS PORTAL PROVES A WINNER FOR MANSFIELD CRUSHING



**V**ictorian-based Mansfield Crushing's Procurement Manager Dallas Skinner is an early adopter of the [my.komatsu.com.au](http://my.komatsu.com.au) online parts portal, which allows customers to quickly and easily source, order and pay for parts.

In the time he's been using it, since mid-June 2019, Dallas has found it streamlines and simplifies his ordering, allowing him to put more focus on other parts of his job.

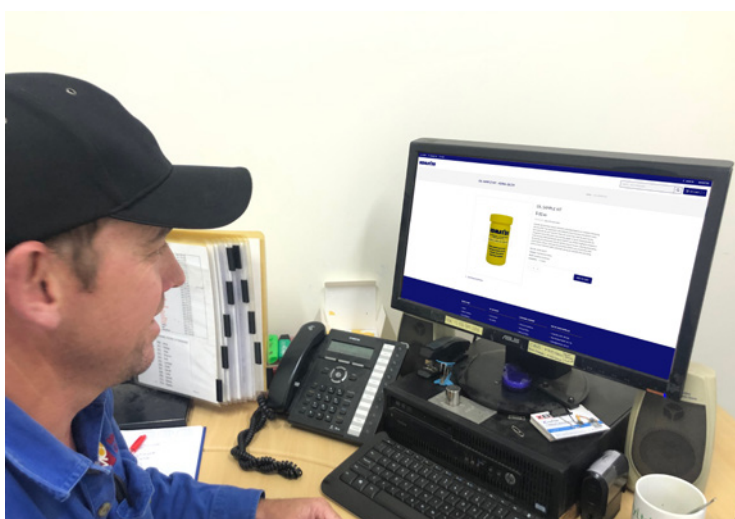
myKomatsu is Komatsu's industry leading website for ordering earthmoving equipment parts online, developed as part of the company's philosophy of being "easy to do business with".

"It's certainly made my life easier," Dallas says. "It's very straightforward to find the parts I need. The parts portal also helps me track my orders online, keeping me fully informed on the progress of each order so I know exactly when it's going to arrive."

"That lets me more effectively plan my work schedule. I can tell our fitters and service teams when they'll have the parts that they need for machine servicing and repairs."

Based in Mansfield, 180km northeast of Melbourne in the foothills of the Victorian Alps, Mansfield Crushing began operations in 1989 as Steve Bell Earthmoving. Since then, it has diversified into quarrying, contract quarrying and screening, as well as its earthmoving business, and has provided crushing and screening services for projects throughout Australia.

Mansfield Crushing's fleet includes eight WA500 loaders (one Dash 3H, six Dash 6s and one Dash 7), plus maintenance and servicing for a PC850-8EO excavator and an HD605-7 dump truck for another client.



*Pictured above: Mansfield Crushing's Procurement Manager Dallas Skinner using the online parts portal - myKomatsu.*

***"Komatsu's tracking system is well above any other supplier's online parts system by far, and it's one of the best features of myKomatsu, because it means I don't have to worry about where my order is, and I have a pretty good idea of when it will arrive."***

"Since I started using myKomatsu when it first launched earlier this year, I've used it pretty much every day," says Dallas.

"In particular, because we run so many WA500s, I'm always ordering parts and consumables for them."

"I've found I've also been able to use myKomatsu to source parts from Komatsu that we can use on some of our other non-Komatsu machines."

Dallas has been particularly impressed with the tracking system.

"It notifies you every step of the order," he says. "When you place an order, you get a confirmation, then it lets you know when it's been picked, when it's been dispatched and when it's delivered."

"Komatsu's tracking system is well above any other supplier's online parts system by far, and it's one of the best features of myKomatsu, because it means I don't have to worry about where my order is, and I have a pretty good idea of when it will arrive."

"It's just fantastic to be notified that an order is on its way; it means if one of the workshop crew asks me about how a part is coming along, I can let them know where it is, and give them a good indication of when it will arrive."

Dallas also finds navigating the site is very straightforward.

"I've been in this earthmoving equipment procurement game for about eight years, so I know my way around parts ordering sites fairly well," he says.

"myKomatsu is simply easy to use, and if something's a bit tricky to find, I can just use the search filters."

"It also makes it easy to confirm what parts are needed with our fitters. If they ask for something, I can just give them a picture from the section of the machine they are working on, then they can let me know what parts they need, and I can order them using the parts book feature."

"myKomatsu definitely makes my life easier and less stressful, because I know when I order a part, it's definitely on its way, and I don't need to keep checking up on it," says Dallas.





Pictured: PC128USi-10, one of the many intelligent Excavators compatible with SMARTCONSTRUCTION



Pictured: D61EXi-24, SMARTCONSTRUCTION enabled intelligent Bulldozer

***"Smart Construction, a feature of the IMC system, allows for live data transfer to the project team off-site, so the job becomes 100 percent accurate with minimal input from on ground personnel."***

## ENVIRONMENTAL COMPLIANCE SOON TO BE PARAMOUNT

**O**ne of Victoria's most progressive civil construction companies has embarked on a program of carbon emission containment in advance of what it believes is a great step in becoming a sustainable focused company.

Civilex, formed in 2006 as a challenger in the entrenched civil space, strongly believes that future competitive success will depend on a service provider's ability to demonstrate it has minimized its carbon footprint.

According to Civilex's Asset and Logistics Manager Kris Bogdanovski, the next two years will herald a change in tender requirements, placing far greater emphasis on ecological compliance.

The 500-person, fast growing Civilex conglomerate of three related companies, has begun a program of emissions improvement to seek real world gains.

Measures include the adoption of solar power on its sites and particularly a protocol of regular turnover of its on and off-road fleet to take advantage of the latest developments in emission control and machine efficiency.

The company will ensure its on-road vehicles are less than four years old, and that its heavy machinery fleet is capped at five years.

Its current fleet of 150 on-road utility vehicles are Euro V compliant, with an average fuel consumption, according to the Australian Government's Green Vehicle Guide of 7.7 litres/100km.

While there is no defined Australian standard for off-road machinery, Civilex is working towards adopting Tier 4 engines to achieve world's best practice in efficiency and emission control.

Tier4 engines, according to the US Environmental Protection Agency, reduce emissions of Oxide of Nitrogen and particulate matter by 90 percent over Tier 3 technology.

Civilex recently took delivery of a **Komatsu PC128i** excavator, a demo model to trial prior to the machine's public release.

The acquisition brings to seven the number of Komatsu excavators on Civilex's inventory and along with two D65i bulldozers, makes Komatsu the company's predominant brand of choice.

All have been acquired only in the last three years since Civilex began its quest to adopt a totally contemporary fleet and to forge a relationship with a like-minded technology partner.

According to Kris, Komatsu's Intelligent Machine Control (IMC) system substantially enhances the ability of a vehicle to build on the natural attributes of its Tier 4 credentials by providing even greater operating productivity.

"Intelligent Machine Control provides a new level of opportunity for an operator to set up a project and effectively eliminates the need for a surveyor on-site," Kris said.

"Smart Construction, a feature of the IMC system, allows for live data transfer to the project team off-site, so the job becomes 100 percent accurate with minimal input from on ground personnel.

"While its difficult to quantify productivity gains of at least 10 percent, are in order with fuel burn reduction of better than eight percent. "The two D61i bulldozers (featured on Civilex's social media and websites) provide similar benefits."

Civilex places great emphasis on a culture of pride in performance and of empowering employees. "People come to us and don't leave," Kris said, citing a "retention rate of better than 97 percent."

The company recently opened its state-of-the-art headquarters in Spotswood, Melbourne, providing an environment in which people "want to come to work" with office comfort, technology and sustainability key aspects of the space.

The same concept applies to operator comfort inside its heavy machinery.

"The ergonomics of the Komatsu cabins have been impressive," Kris said. "At the outset, Civilex places younger drivers alongside more experienced machine operators who act as mentors.

"It's a good mix – the younger guys are generally more computer savvy as befits the benefits of the new IMC machines, and the more experienced guys can learn from them while imparting their own skills."

Civilex has begun its national expansion strategy with first civil contract outside Victoria well under way.

Fittingly, given its view of future environmental requirement, it is helping to build the giant Collector Wind Farm project at Goulburn NSW. Fifty-four turbines will generate 535 Gwh of energy per annum - enough to power 80,000 homes.





*Pictured: Greg Plunkett  
Works Supervisor - Shire of Ravensthorpe*



*Pictured: Ravensthorpe Shire's fleet of  
Komatsu machines*

## WHY RAVENSTHORPE SHIRE DECIDED TO STANDARDISE ON KOMATSU

**W**estern Australia's Shire of Ravensthorpe has recently taken delivery of a Komatsu WA430-6 wheel loader – its seventh Komatsu machine, following a decision by the shire some years ago to standardise on a single brand as much as possible.

The new WA430-6 loader, delivered in early June, replaces a loader of another brand, and is the shire's primary production loader, loading road trains and tippers from its various gravel pits for road resheeting, as well as general construction and maintenance works.

The Shire of Ravensthorpe is located on the southern coast of WA in the Southern Goldfields/Esperance region, and about 530 km from Perth. Covering an area of 13,500 sq km, it services a population of just over 1700.

Its road network consists of around 1200 km of dirt roads, and 200 km of bitumen.

The Shire's Komatsu fleet, in addition to the newest machine, consists of a WA200PZ-6 and a WA320PZ-6 loader, two GD655-5 graders and a GD555-5 grader, and a WB97R-5EO backhoe/loader.

Works Supervisor Greg Plunkett said Ravensthorpe decided to standardise on Komatsu machines some years ago.

"We bought our first Komatsu machine, the GD555-5 grader, about five years ago, and it worked out well for us; the operators really liked it.

"We primarily went that way so that we could standardise as many of our parts and consumables as possible," he said.

"We've found that not having to deal with different filter makes and types, as well as other parts, makes it so much easier for us. Before that, it just got all too messy.

"For example, with the graders, they are very similar bits of gear, with the same set up," said Greg.

"We use the newer GD655-5 for our road rebuilding, resheeting and road reconstruction, doing more of the heavier work than the other two.

"The other two graders are primarily doing maintenance grading, and we try to keep them in their own work areas, so they can get over the roads as often as possible, so we can keep them in the best condition," he said.

Ravensthorpe's WA320PZ-6 loader is used in its rubbish tip, covering waste material to ensure it doesn't blow away.

The WA200PZ-6, which has bucket, rake and fork attachments, is used – along with the WB97R-5EO backhoe – for general utility works, cleaning road verges, and other small-scale projects.

According to Greg, the service and support the council receives from Komatsu is very good.

"We primarily deal with Curtis Bateman (Komatsu's Sales Account Manager for the South West of WA), and we have a very good rapport with him.

"Because we're in a fairly isolated area – we're 300 km from Albany, 200 km from Esperance and 500 km from Bunbury – we tend to do all our minor servicing ourselves, while Komatsu does all the major ones," he said.

"We and Komatsu use KOMTRAX to stay on top of our servicing needs; they'll ring us up when a service is due.

"We are reviewing the machines on KOMTRAX all the time, particularly with our three graders to keep an eye on their fuel consumption, and compare how they are going. Being able to do this is a lot better," Greg said.

**"We bought our first  
Komatsu machine, the  
GD555-5 grader, about  
five years ago, and  
it worked out well  
for us; the operators  
really liked it."**



*Pictured: Ravensthorpe Shire's fleet of  
Komatsu machines*



# PRODUCTIVITY BOLTED HOME

**K**omatsu is assisting a NSW Central Coast civil construction company to optimize its productivity in a housing and infrastructure growth market.

Bolte Civil Pty Ltd has experienced business expansion of better than 60 percent as demand for new homes in the coastal region just north of Sydney has surged in the last decade.

But rather than run with the near-boom conditions, Bolte Civil Managing Director Gavin Kimpton has moved to rein in costs to build a solid base, founded on maximizing use of the company's existing 40-strong machinery inventory.

His measures include operating his plant for 9-10 hours a day five to six days a week, depending on demand, and holding fortnightly forward planning sessions which reduce the possibility of any machine suffering downtime.

A fleet of Komatsu excavators, backhoe, and grader fitted with KOMTRAX, electronic on-board performance monitoring and ICT guidance systems are at the heart of Bolte's goal to achieve cost efficiency and deliver a quality result to local developers and infrastructure clients.

The company's reliance on on-board technology and monitoring is now so great that it also dictates which external operators it will allow on site in times of overload.

Bolte's preference is to use only those machines which can match its own in-house capability.

The NSW State Government regional development plan forecasts 41,500 new homes will be built in the Central Coast catchment alone in the next 20 years, attracting 75,000 additional residents and creating more than 24,000 jobs.



Pictured: GD655-5 Motor Grader at work.

However, Bolte is currently working on one site alone, just south of Raymond Terrace, which is slated to provide more than 800 new homes in the next three years.

"When our founder Neil Bolte started the business 25 years ago, he foresaw us undertaking development support in regions across the state," said Mr. Kimpton, a Bachelor of Civil Engineering (Honours) and now an equal shareholder in the business said.

"But it has become increasingly obvious in the current climate that we should continue to focus the majority of our attention on our regional area where we can capitalise on our local knowledge including that of the requirements of councils and developer client needs."

Concentrating its efforts on a region regarded as one of Australia's five largest building hot-spots has paid dividends.

Bolte has given specific attention to the statutory requirements of the construction industry and is able to assist its clients – 80 percent private and 20 percent government – to achieve cost efficient project solutions.

"We've created a reputation for ourselves as problem solvers," Mr. Kimpton said.

The company has turned to its principal supplier, Komatsu, to provide solutions in critical areas like machinery productivity and operator training.

"We're increasingly looking to technology to improve operational efficiency," Mr. Kimpton said.

ICT guidance of its graders and KOMTRAX monitoring have become an integral part of the company's management and its forward planning.

"Every two weeks we have a meeting to determine the best use of our equipment, including scheduled maintenance, where-ever it is positioned in the area in which we are operating," Mr. Kimpton said.

The advantages of close monitoring and of restricting operations to a geographically containable area are immense.

"Sometimes there is more sense to move plant, a small distance from one site to another for a short-term job rather than have it suffer downtime for two or three days.

"Planning on-site service is a big part of improving productivity." Operator training is another.

Bolte has a policy of long-term employment and in 25 years it has even taken some of its loyal employees through to retirement.

**"A fleet of Komatsu excavators, backhoe, and grader fitted with KOMTRAX, electronic on-board performance monitoring and ICT guidance systems are at the heart of Bolte's goal to achieve cost efficiency and deliver a quality result to local developers and infrastructure clients."**

"As younger operators come on board, we need to provide the opportunity for them to make the best use of on-board equipment, and to ensure they are comfortable in the cabin," Mr. Kimpton said.

The company's recent purchase of a Komatsu GD655-5 grader was based, at least in part, on the preference of one of Bolte's senior operators for the machine's driver ergonomics.

Bolte is working with Komatsu to determine a future path for plant turnover taking into account the relatively high hours its machines are accumulating.

Ninety-five percent of its business is now in an area bounded by Gosford and the Hunter Valley.

"Whilst there have been opportunities to review moving into the Sydney market, there is often a danger in diversifying and growing too big too quick at the risk of quality over quantity to satisfy client and stakeholder needs." Mr. Kimpton said.

"Up here, we have a solid reputation and are able to control the quality of our work and maintain consistency across all our projects."



# NOLA FEATHERSTON DELIVERS TRAINING PROGRAM VALUE FOR BENEDICT'S

**N**ola Featherston, Komatsu's primary Operator Trainer & Assessor in Western Australia, was recently in NSW to upgrade her skills on underground mining equipment (see sidebar) as well as deliver training to Sydney-based quarrying and recycling specialist Benedict Industries.

Provided through Komatsu Training Academy, Nola provided training and assessment for operators of a Komatsu PC130 excavator (as well as another brand) and Komatsu WA430 and WA480 wheel loaders at Benedict's Chipping Norton Recycling operation.

The training delivered by Nola enabled Benedict's operators to attain their Verification of Competency (VOC) qualifications. This training included:

- » Full pre-start, including machine walkarounds
- » Operation of machines in work areas
- » Loading of trucks and hopper
- » Using the excavator with grab to separate materials into different piles
- » Heavy interaction of all machines in the yard, including the excavator, wheel loaders and trucks.
- » Use of two spotters on the ground directing all traffic/machines.

Following the training, Nola observed and assessed the operators across all these activities until their VOCs were signed off as competent.

Paul Markham, Benedict's Site Supervisor at Chipping Norton, said the company had requested the additional training from KTA to provide external assurance that it's operational and safety procedures were fully up to scratch.

He said that Nola worked very well with the operator team.

"She was very open to helping them out, giving them a bit of extra training, and familiarising further with the machines.

"Nola was able to show them a few more techniques that some of them didn't know, and having someone with such good knowledge of Komatsu machinery was extremely valuable," he said.

"She was very approachable, the guys felt very comfortable with her, and felt able to ask her any questions on anything they weren't sure about," said Paul.

According to Nola, the training at Benedicts went very well.

"They are managing their site procedures and operator qualifications to a very high standard; they essentially wanted an independent person to come in and check that it was all going as it should be," she said.

"It worked very well with the operators, all went very smoothly, and Paul was very helpful in getting me in there and up to speed with everything."

The training was so successful that Benedicts requested further Komatsu excavator and loader training at other company sites during February, which was also delivered by Nola.



*Pictured: Nola Featherston (right) goes through some of the finer points of a Komatsu PC130 excavator with a Benedicts operator.*

**"Nola was able to show them a few more techniques that some of them didn't know, and having someone with such good knowledge of Komatsu machinery was extremely valuable."**

## Nola's Story

Nola has been Komatsu's primary WA-based trainer since 2013; before that she'd worked in the mining and construction industry throughout the state as an operator, trainer and in supervisory roles.

Prior to joining Komatsu, she had worked for many major mining contractors across WA, including AWP, Roche, Henry Walker, BGC, (later HWE) and Macmahon.

"This year, I'll be notching up 34 years in the industry as an operator/trainer, as well as my supervisory roles over the years," she said.

She primarily provides training for Komatsu mining equipment, but also does some construction equipment training, alongside Komatsu's WA civil trainer, Kim Gilbert.

This includes handover training at the time of equipment deliveries, as well as structured training through KTA.

Nola came across to Newcastle in late 2019 to undergo training in Komatsu underground LHDs (load-haul-dumps) as part of her own upskilling on the company's significantly expanding mining range.

"I'm hoping that soon I'll be starting training on P&H equipment (rope shovels, draglines and electric-drive wheel loaders), then in a couple of months, I'm off to Germany for some factory training on our PC4000 excavators," she said.

Mark Ullman, Komatsu's mining Senior Equipment Operator Trainer in the Hunter Valley, has been full of praise for Nola's skills.

"Following her LHD upskilling, Nola is one of only two people that the hard rock group are confident can operate and deliver training on the machine for us here in Australia," he said.

"Nola has proven her ability and skills with the R&D work that we have carried out with our factory reps in the Hunter Valley recently."



*Pictured: Nola with Mark Ullman, Komatsu's Hunter Valley-based Senior Equipment Operator Trainer, in front of a Komatsu 22HD LHD (load-haul-dump).*





# KOMATSU TRAINING ACADEMY

## TRAINING CALENDAR 2020

Course Title	Course Duration	Delivery Mode	Course Times	Dates	Location
Lead Hydraulics	4 Days	Face to Face	8:00am to 4:00pm	31 MAR 2020 – 3 APR 2020	Sherwood (KTEC)
Electrical Diagnostic Fundamentals	4 Days	Face to Face	8:00am to 4:00pm	5 MAY 2020 – 8 MAY 2020	Sherwood (KTEC)
PC490LCi-11	4 Days	Face to Face	8:00am to 4:00pm	9 JUN 2020 – 12 JUN 2020	Welshpool
D155AXi-8	4 Days	Face to Face	8:00am to 4:00pm	30 JUN 2020 – 3 JUL 2020	Welshpool
PC600/850LC-8EO	4 Days	Face to Face	8:00am to 4:00pm	18 AUG 2020 – 21 AUG 2020	Sherwood (KTEC)
PC210/490LCi-11	4 Days	Face to Face	8:00am to 4:00pm	25 AUG 2020 – 28 AUG 2020	Sherwood (KTEC)
WA200/320-8	4 Days	Face to Face	8:00am to 4:00pm	18 AUG 2020 – 21 AUG 2020	Welshpool
PC78/88MR-10	4 Days	Face to Face	8:00am to 4:00pm	29 SEP 2020 – 2 OCT 2020	Sherwood (KTEC)
<b>HLTAID003</b> Provide First Aid <i>(Nationally Recognised)</i>	2 Days	Face to Face	8:00am to 4:00pm	25 AUG 2020 – 26 AUG 2020 27 OCT 2020 – 28 OCT 2020	Sherwood (KTEC)
<b>TLILIC0003</b> Licence to Operate a Forklift Truck <i>(Nationally Recognised)</i>	3 Days	Face to Face	8:00am to 4:00pm	7 JUL 2020 – 9 JUL 2020 22 SEP 2020 – 24 SEP 2020	Sherwood (KTEC)

For more information call the Komatsu Training Academy at **1300 390 377**  
or visit our website [www.komatsu.com.au](http://www.komatsu.com.au)  
and look under Support > Komatsu Training Academy > Training Calendar



# OUR NEW HYDROSTATIC FORKLIFTS CAN HANDLE THE TOUGHEST CONDITIONS



**Komatsu has released a new range of hydrostatic drive forklifts, with capacities of 7 and 8 tonnes, incorporating its industry-leading hydraulics and drivetrain technology that make them ideal for challenging and tough working conditions.**

The two new forklifts are the FH70-2 and FH80-2, and all are powered by a low-emission Tier 4 Final-compliant Komatsu SAA4D95LE-6 diesel engine rated at 48.6 kW.

According to Jack Socratous, Komatsu Forklifts Australia's National Product Support, Training & Marketing Manager, this new hydrostatic range features exactly the same components and technology as Komatsu construction equipment, making them far more robust and reliable than other hydrostatic drive forklifts on the market.

"Komatsu has had decades of experience in developing hydraulic and hydrostatic drivetrain systems for its construction equipment, including wheel loaders, excavators and dozers, which have to handle very tough conditions," said Jack.

"As a result, the hydrostatic drive on these new forklifts is more reliable, efficient and burns less fuel, than other makes.

"Komatsu's hydrostatic drive system pretty much eliminates all transmission heat losses, so it's more efficient and makes better use of power than conventional torque converter forklifts."

Advantages of hydrostatic transmission in forklift applications include:

- » Shock-free shifting, through a continuously variable-speed control for smoother acceleration and stepless speed changes
- » Smooth directional changes without having to release the accelerator pedal; the operator just needs to slow down and move between forward and reverse with the gearstick
- » Controlled travel down a ramp or slope through built-in self-braking so as soon as the operator releases the accelerator pedal, the machine slows down to a stop
- » Precise and secure slow-speed travel, simply by easing back on the accelerator pedal – without having to touch the brakes.

***"As a result, the hydrostatic drive on these new forklifts is more reliable, efficient and burns less fuel, than other makes."***

Jack said applications for the new hydrostatic range included handling timber and building materials, recycling applications, and other industries that needed machines able to stand up to harsh and challenging conditions, with constant cycling over many hours a week.

"Our conventional torque converter drive forklifts continue to play a role in many applications, but for customers with really high forklift usage, with very high duty cycles, long hours and lifting loads close to the machine's limits, these hydrostatic units will be ideal," he said.

"We're now going out looking for applications where customers are going to get benefits with forklifts working 40-50 hours a week, or where they are having ongoing transmission or reliability issues."

In addition, Jack said that Komatsu's new hydrostatic range offers lower fuel consumption than torque converter drive forklifts, reduced tyre wear, and more reliable technology.

"They're also a lot safer; hydrostatic drive by its nature has built-in braking, so as soon as an operator takes their foot off the accelerator, the machine will come to a gradual stop. Plus they will hold themselves on a ramp without the operator having to touch the brake pedal."

Komatsu has designed the controls on the new hydrostatic forklifts to ensure operation between these machines and conventional torque converter units is as seamless as possible.

"Other hydrostatic forklifts on the market have forward/reverse pedals, rather than a gearstick.

"In contrast our hydrostatic forklift range has been designed with very similar controls to a conventional forklift; they feel and drive just like any other forklift.

"That means any qualified forklift operator can jump in a machine in a mixed torque converter/Komatsu hydrostatic fleet and be equally at home in both machine types."

"Basically, they have the same feel as a conventional forklift, but with all the advantages of hydrostatic drive," Jack said.

As well as featuring Komatsu's hydrostatic drive system and low-emissions engine, the new forklift range has the same close-centre hydraulics system that's used on all its construction and earthmoving equipment, further contributing to easy and precise control, and lower fuel consumption.

The FH70 & FH80 forklift also include the following standard safety features:

- » Inbuilt speed limiting with three presets
- » Programmable idle shutdown timer
- » Wet disc brakes

Other features in common with Komatsu construction equipment include its KOMTRAX remote monitoring system for checking and reviewing operational parameters, and a large high-resolution LCD display in the cab that provides all information to the operator at a glance.

The Komatsu hydrostatic drive forklifts have been such a success that we are awaiting the next generation of hydrostatic forklifts in the 10-16 ton range which will be arriving in Australia this year. Watch this space!

Brief specs of the new hydrostatic drive forklifts are:

**FH70-2:** Lift capacity (600 mm load centres), 7000 kg; engine, Komatsu SAA4D95LE-6-C rated at 48.6 kW; maximum travel speed, loaded/unloaded, 22.5/23.5 km/h; maximum lift height, 3000 mm, operating weight (unloaded), 9710 kg.

**FH80-2:** Lift capacity (600 mm load centres), 8000 kg; engine, Komatsu SAA4D95LE-6-C rated at 48.6 kW; maximum travel speed, loaded/unloaded, 22.5/23.5 km/h; maximum lift height, 3000 mm, operating weight (unloaded), 11,280 kg.



## FIND A WORD

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A X T K N F I F H E F Y F M W R A O N I C N M Z G  
Y B O O M Y K E E K E F M Y V Y H K S V S S E F P  
R A R M D O R D R U S E D E Q U I P M E N T Q S A  
R F T T M M Q W W F U P C Z Y O F P P P U B H L D  
A H Q R S G X W E T O Z W T E P T N M A R G U S U  
U H W A G L Z Y C A C U I F C C R R U R F M S S W  
Q I G X A H G W X H M L R Z I B E D F T V Y T G N  
E E Z T D H O N V T I J V H T E B K I G Z O K S I  
L G N B V O H L I T J R X H N G A O M Z T U L C A  
F E F I M N Z N U N P V N G E M T R M N J G K J G  
R L V Y P A V E W L I J X N R W N V A K U N K G A  
Y L F O E R O H R T O M J P P K O D B Y I N S G Y  
Q R E Q H X O K I K P F O S P O M N O L Q P G M A  
Q J L L E S M E T R B Y O T A W J Y L P L B H G S  
F A P P E Z N C A A E S P L T A W X H B P M U Q O



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