COMMENTARY

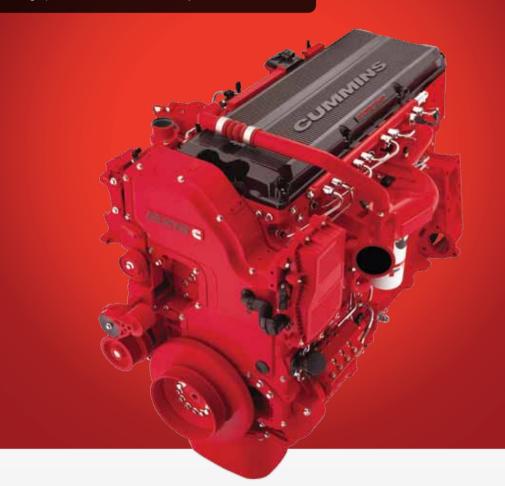
WHAT THE ZEUS!

Three 600 hp Cummins engines power latest Rivieras

Cummins introduces
Gen II EGR engines

Top of the class: New apprentice scheme at Cummins

MORE INSIDE >>



AUSTRALIA BECOMES GLOBA

field test site for Cummins

Australia is now an official centre for the global field testing of Cummins truck engines.

This is confirmed by the current testing in Australia of a brand new 13-litre engine for global markets, and an enhanced ISX for North American release in 2013.

"Australian operating conditions challenge product reliability and durability like no other markets," says Sean McLean, general manager - automotive products for Cummins South Pacific.

"The combination of high gross weights, high average speeds, frequent engine brake use and extreme climatic conditions is the ideal formula for accelerated reliability and

The 2013 ISX currently being tested in Australia is based on the existing 15-litre engine sold in North America which uses a combination of EGR and SCR to meet US EPA 2010 emissions regulations.

Unlike the dual overhead cam ISX engine currently sold in Australia, the North American version has a single overhead camshaft as well as a common rail fuel system known as XPI that delivers extremely high injection pressures.

"The ISX engine using a combination of EGR and SCR is a potential solution for the next round of emissions regulations in Australia – ADR80-04 – which are likely to come into effect in 2016/2017," says Sean McLean.

"Depending on test results, this engine could well be released in Australia before the introduction of ADR80-04."

The 13-litre engine is a completely new design using SCR for emissions reduction. A 50/50 joint venture between Cummins and China's Dongfeng, it will be built in China.

Two 13-litres are currently being tested in Australia in B-double application rated at 525 hp with peak torque of 1850 lb ft.

"The global testing being carried in Australia is recognition of Cummins South Pacific's engineering capability," says Sean McLean.

"The technology available today for data monitoring also means it is easier for global testing to be carried out effectively in a remote location such as Australia."

Talkin' about my generation

Cummins has announced the release of the ISX and Signature Gen II EGR engines following a program of continuous product improvement.

The Gen II EGR release is in recognition of a number of reliability and durability improvements that have been implemented over the life of the EGR engines.

The 15-litre ISX and Signature use cooled exhaust gas recirculation (EGR) for

The Gen II improvements apply to new ADR80-02 and ADR80-03 EGR engines.

"The release of the Gen II EGR engines is proof of Cummins' commitment to continuous product improvement," says Sean McLean, general manager of automotive products for Cummins South Pacific.

The reliability/durability upgrades include the variable geometry (VG) turbocharger and EGR cooler, while the piston has a reduced top land diameter for improved oil control.

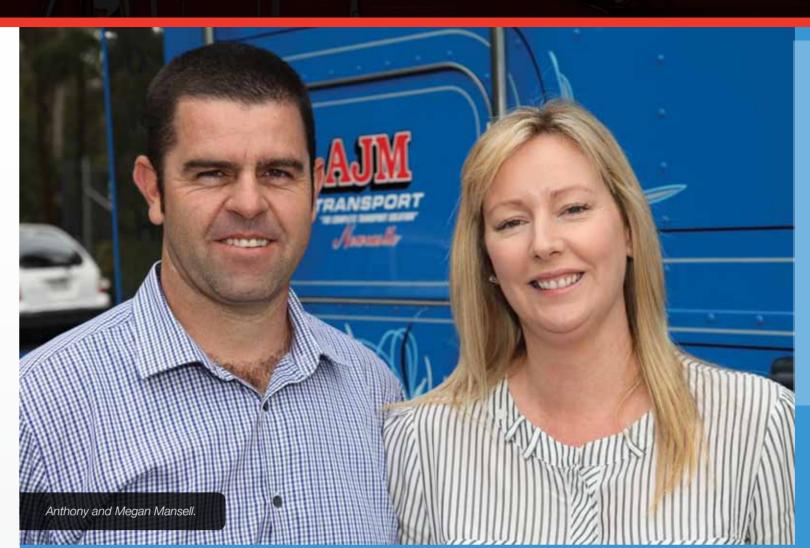
The Gen II improvements have been validated through extensive testing by Cummins both in the US and Australia.

"Calibration developments are also seeing improved fuel economy with the latest generation EGR engines, while driveability and engine brake performance continue to be best in class," says Sean McLean.

The Gen II EGR ISX and Signature are now in production and will be available during the second quarter of 2012.

ISX ratings span 450 hp/1650 lb ft to 600 hp/1850 lb ft, while the top-output Signature is





Anthony and Megan Mansell -**AJM Transport** - switched to **Cummins power** in 2008. They have no regrets.

AJM Transport is an immaculately presented and maintained fleet based in Newcastle, NSW.

Husband and wife Anthony and Megan Mansell started their business with one tipper - a truck-and-dog - in 2004 and used Caterpillar power exclusively until 2008.

"I didn't like the complexity of Acert as an emissions technology so we decided to give Cummins a try," Anthony recalls.

The Mansells haven't been disappointed.

"We buy Cummins now because we're looked after," he says.

"If there's an issue we know it'll be fixed...we have peace of mind with Cummins and that's a massive thing.'

The Cummins engines in the Mansell fleet range from a Gen II Signature 620 to the latest Signature 600 EGR equipped with a diesel particulate filter to meet ADR80-03 emissions.

The two latest Signature engines are in K200 and T609 Kenworths. "The ADR80-03 Signature has a definite performance edge over the previous EGR Signature," Anthony notes.

Anthony and Megan Mansell are a genuine and unassuming couple. They are proud of the business they've built and enjoy working together on a daily basis.

"Just the fact we're successful gives us huge satisfaction," says Anthony.

"We've built this business from nothing and we've won work because of the appearance of our equipment and how it is maintained.

"I get really chuffed with high utilisation of equipment, when we can get that extra enth of a degree out of our gear."

The Mansells operate 12 trucks, seven of which are dedicated to Mainfreight.

"We started as line haul providers for Mainfreight in late 2005, operating one truck between Melbourne and Newcastle, and the relationship has grown from there," says Anthony.

The Mansells operate a Brisbane-Melbourne shuttle for Mainfreight every night. The shuttle comprises three legs, between Brisbane and Coffs Harbour, Coffs Harbour and Gundagai, and Melbourne and Gundagai.

A Mack Super-Liner powered by a Cummins ISX 550 is operating between Coffs Harbour and Gundagai and is clocking up around 12,500 km a week – utilisation that brings a smile

Anthony Mansell served his apprenticeship as a diesel mechanic in Mackay, Queensland, working for a local bus company.

In his spare time he worked for family company Jordon Transport, servicing and driving trucks.

"John Jordan gave me a chance back then when the accepted minimum age for getting a driving job was 25...I was 20," says Anthony.

He also remembers Jordan buying Cummins because of the back-up service.

Anthony worked fulltime for Jordan Transport for five years before moving to Newcastle to take on a management role with another transport company.

Then in 2004 he and Megan – whom he'd met some years earlier – decided to break out on their own, buying a T401 Kenworth for truck-and-dog tipper work from Sneddon Bulk Haulage.

Megan credits Anthony with the passion that underpins their business.

"Anthony's got a passion for trucks. When he left the comfort of a well paid job to buy our first truck I was a little bit scared but I knew he'd make it work," she says.

"I knew we had to be in it totally...we couldn't be half in it.

"There are some days when you want to rip your hair out, but we've been successful because Anthony loves what he does.

"He knows how to maintain a truck, he knows how to drive a truck, he knows how to allocate a truck and he knows how to chase freight.

"Trucking is a time-consuming business and you never get to switch off... it would be easy to neglect the family," says Megan

"We have two beautiful young boys - Josh and Christian - and we make sure we spend as much time with them as possible.

"We are blessed to have a good team behind the scenes in the office as well as the drivers on the road," Anthony adds. ■





Both the 53 Flybridge and 5800 Sport Yacht are now genuine 30-knot plus boats thanks to the triple 600 hp Cummins QSC engines coupled to Zeus pod drives.

During sea trials, the 5800 Sport Yacht showed it was capable of speeds of up to 35 knots while the heavier 53 Flybridge achieved an average top speed of 32.5 knots.

The electronic 8.3-litre Cummins QSC rated at 600 hp provides the highest power density in this engine class. Riviera's sea trials showed the triple QSC installation to be quiet and incredibly clean throughout the rev range.

Both the 53 Flybridge and 5800 Sport Yacht were originally launched with a competitor pod drive system, but the need to widen the appeal of both boats and provide a genuine 30-knot top speed has driven the 1800 hp triple-Zeus installation.

The first Riviera to be offered with Zeus was the \$1 million-plus 5000 Sport Yacht in 2009. This 1200 hp boat has a twin drive pod set-up coupled to Cummins QSC 600 engines.

The first production-built boat in Australia to be engineered with Zeus, the 5000SY has won wide acclaim for its exceptional performance and handling.

At the beginning of 2012, sales of the 5000SY had reached close to 50. "Everyone who has bought Zeus loves it," says Peter Welch, Riviera's distribution manager for Australia and New Zealand.

Welch can barely contain his enthusiasm for the 1800 hp triple-Zeus arrangement which he says will open up markets to the 53 Flybridge and 5800 Sport Yacht in the US and Europe

"Zeus makes for a perfectly balanced boat, with excellent top-end speed and manoeuvrability," he savs.

Riviera's director of brand and sales Stephen Milne says the triple-Zeus offering "opens up the attractiveness" of both the 53 Flybridge and 5800 Sport Yacht.

"A lot of our customers prefer the Zeus system of aft-facing propellers and the bullet-proof Cummins QSC engines," he says.

The Zeus system features steerable pod drive units mounted under the hull with propellers that are aft-facing, behind the drive leg for protection.



Zeus users around the world report exceptional manoeuvrability as well as improved fuel economy and faster cruise and top speeds over conventional drive systems.

Zeus alleviates the fear that many people have about handling a boat with a joystick making berthing as logical and intuitive as using a DVD remote control.

Integrated features include automatic trim tabs that can be programmed to be on hard as the boat accelerates and reduce as the boat gets on a plane.

Another standard feature is the Skyhook function that allows the skipper to push a button and the drives will hold the boat position regardless of wind or tide conditions. This is a great benefit when waiting at a busy fuel dock, preparing lines and fenders for berthing or fishing over a reef.

The 53 Flybridge starts at \$1.75 million and is dubbed the 'spaceship' because of her enormous internal volume, unprecedented living spaces, elegant amenities, unrivalled performance and a raft of space age technology.

The 5800 Sport Yacht starts at \$1.8 million and is described by Riviera as a luxury boat "beyond anything previously developed" by the company.



Both boats will be displayed at The Riviera Festival which will be held at Riviera's Gold Coast headquarters at Coomera to coincide with the Sanctuary Cove Boat Show in May.

Almost 5000 Riviera owners from around the world have been invited to attend the inaugural four-day festival which will include educational seminars and hands-on workshops along with social activities.

For those new to boating or wishing to brush up on

their skills and practical knowledge, Riviera will offer separate women's and men's skipper training programs that will include mooring, fenders, lines and anchoring techniques.

Other hands-on courses will include electronic navigation, engine, generator set and sanitation system in-field trouble shooting, fishing clinics, offshore seamanship, exterior maintenance 'tricks of the trade' and a full sea trial program.



Riviera CEO Wes Moxey (centre) with director of brand and sales Stephen Milne (left) and new Riviera owner Rodney Longhurst.

Riviera set to make waves 383in

Riviera, Australia's largest luxury boat builder, has exited receivership following its sale to Longhurst Marine Holdings, a Queensland based investment company.

Free of receivership constraints, Riviera will now move through a restructure and recapitalisation process to prepare the company for future growth opportunities.

Wes Moxey, the former CEO of Riviera and a veteran of 26 years with the company, has returned as CEO under the new owner.

After resigning from Riviera in 2008 and taking a 12-month sabbatical from the boating industry, Moxey started development of a new line of limited edition motoryachts called Belize (see Cummins Commentary Issue 35, December 2011).

The Belize motoryacht line will be offered through the Riviera global dealer network of 46 dealers spanning 66 countries.

Rodney Longhurst, managing director of Longhurst Marine Holdings, is well known in Queensland business circles having developed an investment portfolio in tourism and property.

The son of Dreamworld creator John Longhurst and brother of V8 champion Tony Longhurst, he already has a significant investment in the boating industry in the marine service facility The Boat Works within the Gold Coast Marine Precinct.

"I have watched how the Riviera luxury boat brand has so emphatically endured the last four years of turbulent economic conditions," Longhurst said.

"The Riviera brand has retained its integrity and has defied industry trends, achieving significant results with new model releases and sales.

"The very strong loyalty that Riviera owners feel toward their boat and the company is truly to be admired."

Stephen Milne, Riviera's director of brand and communications for nine years, has been appointed director of brand and sales under the new owner.

"Riviera free of receivership, free of ownership rumour and speculation, fully recapitalised, restructured, independent and firmly focused on the future, will create a boat company of unrivalled passion," he said. ■



Red Bus Services operates over 90 vehicles on route service, school and day charter work on the NSW Central Coast.

Owned by the Shore family, the company's buses link The Entrance, Gosford and Wyong areas. Around 8000 school children are moved daily by Red Bus.

Over the last two years or so, the Red Bus fleet has expanded from 65 to 93 vehicles, requiring over 120 drivers and a maintenance staff of 12.

"I went to the Bus Expo in Melbourne in 2002 specifically to look for a chassis that we could standardise on in the years ahead," says John Shore Jnr, depot and fleet manager at Red Bus.

"We also wanted to rationalise our parts inventory because we had a number of different chassis brands at the time.

His final decision was the Iveco Metro LE chassis with Cummins power.

The Iveco initially came with the 8.3-litre ISC and is now powered by the 8.9-litre ISLe5 which uses selective catalytic reduction (SCR) technology, meaning the exhaust is dosed with a urea solution for emissions reduction.

Red Bus currently operates 16 ISC-powered lvecos rated at 265 hp, and 12 with the ISLe5 engine rated at 275 hp.

"Our decision to go with Iveco and Cummins was due largely to the technical and service support that was offered and we haven't been let down," says John Shore. "Having access to Cummins service software and tools has been a real benefit."

Red Bus has Cummins Insite, a service diagnostic program for troubleshooting electronic engines, and access to Cummins QuickServe Online for parts and service information. It also owns a QuickCheck hand-held tool for monitoring engine data.

"With the ISC, we haven't had a lot to do with Cummins because of the reliability of the engine," says John Shore.

"We had some teething problems with the ISLe5 but Cummins backed us all the way. We get excellent support from Cummins in Newcastle...in fact, the whole Cummins organisation has been very good."

He describes the fuel economy and performance of the ISLe5 as "exceptional".

The 275 hp ISLe5 engines are averaging (with urea usage included) just under 40 litres/100 km while the 265 hp ISCs are averaging 43 litres/100 km. Most of the ISCs have a diesel oxidation catalyst for emissions reduction.

The Ivecos, stirred by Allison six-speed autos, have Custom Coaches 12.5-metre bodies with seating for 51 and average around 160,000 km a year.

Red Bus Service's commitment to the NSW Central Coast is well entrenched, a commitment that is underpinned by the company's decision to have the Iveco Metro LE chassis at the core of its fleet to ensure the continuation of a reliable, environmentally-friendly service to its passengers.







The back-up power system at NEXTDC in Brisbane includes three Cummins C2250 generator sets powered

by 60-litre Cummins QSK60 engines, and three Cummins DMC1000 digital master control systems.

ON CLOUD NINE

Data centres are becoming big business as companies turn to outside specialists to provide managed data storage services.

NEXTDC was established in 2010 by Bevan Slattery, one of Australia's most successful IT and internet entrepreneurs.

NEXTDC says its national portfolio of independent data centres will "enable the cloud revolution" by providing the high availability, connectivity and security that organisations need to transition to cloud computing – the term for services delivered via the internet.

Indeed, cloud computing is predicted to be one of the biggest growth industries in the history of business.

NEXTDC's first data centre, in the Brisbane CBD, has been 'live' since September 2011 and is a high-quality Tier 3 facility guaranteeing 99.982% availability of data while also offering

Redundancy at the data centre is N+1 meaning all systems have at least one independent back-up so that there is system availability in the event of component failure.

A data centre's massed racks of servers draw significant power and put out a lot of heat, placing considerable demand on power supply and air conditioning systems.

Emergency back-up power generation is thus a critical requirement for a data centre to ensure integrity and functionality of the hosted computer environment.

The back-up system at NEXTDC includes three Cummins Power Generation C2250 generator sets powered by 60-litre Cummins QSK60 engines, and three Cummins DMC1000 digital master control systems.

The 2250 kVA gensets work in conjunction with a UPS (Uninterruptible Power Supply) system of batteries. In the event of a mains failure, the UPS system maintains power supply until the three gensets come on line and take over within 10 seconds.

The Cummins master control systems provide mains paralleling which allows seamless transfer of the data centre loads back to mains supply after a power outage.

This means there is no power interruption from generator supply to mains supply after an outage, so there is no impact on data centre services or computer systems.

The mains paralleling also benefits maintenance test runs in that the generators can be regularly exercised with true data centre loads without interrupting the building power supply.

David Levinge, who headed up the project for Cummins Brisbane, says the reputation of the Cummins Power Generation product and the ability to meet a short delivery time were key to the project success.

He points out that limited space and access were a real challenge for the project with the basement level the only option for the genset installation.

A number of meetings were held with the consulting engineers, ARUP, to bring all the concepts into a functional system.

This included the final operational philosophy of having three incoming mains supplies and each genset being able to synchronise with its respective feeder supply.

"Each generator needed to have its 'top' engine components, such as turbochargers, removed to reduce the height of the equipment for installation," Levinge points out.

"All components removed were reassembled on site by our power generation service team to a high standard to ensure integrity of the equipment."





TOPHECLASS

Cummins is now recruiting its apprentices directly rather than through external agencies to gain greater control over their technical training while also providing personal responsibility and awareness skills.

Cummins currently has 230 apprentices across Australia, New Zealand and Papua New Guinea. Over 200 are employed in Australia alone and are under the guidance of four apprentice masters.

This year, 88 new apprentices have been recruited by Cummins from over 600 applicants. Each mechanical and electrical apprentice receives a fully equipped toolbox valued at \$3000 to \$4000.

"Our strategy is to 'hire to develop'...develop our apprentices as part of the Cummins family," says Narelle Constable, general manager of apprentice strategy and development for Cummins South Pacific.

"Cummins will experience further significant business growth over the next five years, particularly in mining and power generation, which will increase the need for technicians."

Cummins South Pacific currently employs around 750 technicians at 66 branches and satellite service sites and will be hiring a further 300 to 400 over the next five years.

"At a time when there's a big skills shortage in Australia, developing our own talent is critical," says Narelle.

"Our aim is to hire around 120 apprentices and graduate 100 each year through a best-in-class apprenticeship program that develops the best-in-class talent.

"We're about developing the whole person, not just their technical skills."

Cummins has introduced an 'on-boarding' program for 1st year apprentices where they are brought into a central location during their first week at work and put through a four-day induction program.

This program includes both technical and core curriculum training.

Attracting a diverse mix of people is another important element of the new apprentice strategy. Cummins currently employs 17 mature-age apprentices and 15 female apprentices in the South Pacific and aims to build on these numbers.

"Mature-age apprentices bring both maturity and work experience to our workforce and so are important in our recruitment process," says Narelle Constable.

Cummins is building relationships with schools, community groups, TAFE colleges and government agencies to enlarge the pool from which it can attract apprentices.

Narelle Constable says the apprentices undergo a rigorous selection process of screening, selection testing and interviewing prior to final offers being made to those who are successful.



Narelle Constable, general manager of apprentice strategy and development for Cummins South Pacific.

"We had over 600 applicants for apprenticeships in 2012 from which 346 were put through psychometric selection testing before we arrived at our final apprentice intake of 88,"

Building strong relationships with TAFE colleges in Australia continues to be important, with Cummins having donated fully operational training engines to many of these colleges.

Cummins apprentices spend four weeks training at TAFE a year.

"TAFE colleges also have pre-apprenticeship programs which are important to Cummins as a source of new apprentices," says Narelle.

* * *

Cummins has joined forces with the University of Ballarat in Victoria to deliver a new parts apprenticeship program.

This program is customised specifically to meet Cummins' needs and is being rolled out across all sites where Cummins has parts apprentices. It is being delivered through a mix of face-to-face learning coupled with the latest on-line learning technologies.

David Steele (parts manager, Cummins Laverton), Steve Tatterson (parts learning manager) and Kate Evans (apprentice master) have been instrumental in assisting the university customise its content for Cummins.

This partnership also gives existing employees in the parts arena opportunities to gain a qualification in parts interpreting through recognition of prior learning. This qualification leads into the Certificate IV and Diploma in Automotive Management, opening career opportunities for parts employees.



training module to TAFE

Cummins has donated an \$80,000 ISX engine training module to Dubbo's TAFE Western campus in NSW.

"The ISX training module means we're teaching cutting edge diesel engine technology and you can't put a price on that," said Brian Musgrove, head teacher of the heavy vehicles, engineering, construction and transport faculty at TAFE Western.

"We rely on industry support for this latest technology, and the support we've received from Cummins has been phenomenal."

TAFE Western institute director Kate Baxter said the Dubbo college was a "centre of excellence" in heavy vehicle training, and that the ISX training module would help provide the best possible training for students and apprentices in western NSW.



Cummins South Pacific director of operations Col Russell (front left) with TAFE Western institute director Kate Baxter and head teacher Brian Musgrove.

Cummins Mt Gambier apprentices John Oberer (left) and Jordan Haggett with their new Cummins supplied toolboxes. In the centre are parts trainee Chloe McDiarmid and Cummins Mt Gambier service manager Travis Fatchen.



On top underground

ACM (Australian Contract Mining) has taken delivery of the 100th Atlas Copco MT6020 underground mine truck sold in Australia – a milestone reached in just three years.

A 60-tonne payload truck, the MT6020 is powered by the Cummins QSK19 engine rated at 760 hp.

ACM now has eight MT6020 trucks and a further five MT5010s in its fleet.

"We've expanded our fleet of MT6020s because it is the most productive underground truck by a fair margin, especially when you look at ramp speed, payload and availability," says ACM managing director Brian Rodan.

"The original Trident [gold mine in Western Australia] fleet has been generally running day in and day out, and we haven't really had to touch them until they hit the 15,000-hour mark."

Atlas Copco business line manager Matt Cobham says the oldest MT6020, at Stawell gold mine in Victoria, has done in excess of 22,000 hours and is still going strong. Stawell has six MT6020 trucks in its fleet.

Cobham says this year's introduction of the Cummins Tier 2 QSK19 engine in the truck will provide further benefits for customers.

Tier 2 levels are the lowest regulated emissions in the world for off-highway engines over 560kW (751ho).

The Cummins Tier 2 engine has a modular common rail fuel system, including a high-pressure fuel pump generating around 1600 bar, to enable cleaner, quieter and faster power delivery.

The system also prevents unbalanced fuelling between cylinders to significantly reduce engine vibration, noise and harshness, making the Tier 2 engine 80% quieter under load and at idle.

"We'll have a cleaner engine – a better engine," Cobham says.

"That's going to make a difference as these larger, decline-access underground mines in Australia in particular go deeper and grapple with ventilation efficiencies as power costs rise.

"There are plenty of underground mines that will continue to rely on truck haulage, and our aim is to remain the most cost effective option for this.

"We have continually improved our driveline components and we have a reliable truck that's fast on grade and is easier to maintain."

At a typical 11km/h on a 15% ramp gradient, the MT6020 is as fast as trucks with smaller payload ratings but is delivering 20% more tonnes out of the mine. ■



Cummins has introduced a new apprentice strategy aimed at giving recruits to the company not only key trade skills but also personal development.

Cummins has introduced an 'on-boarding' program for 1st year apprentices where they are brought into a central location during their first week at work and put through a four-day induction program.



Eight Cummins QSK50 engines - all powering Hitachi excavators - are clocking up impressive availability at XStrata Coal's Glendell mine in the NSW Hunter Valley.



SAFECOAL

Glendell is recognised as one of

the safest coal mines in Australia.

All eight QSK50 engines were changed out through 2011 and early 2012 with an average life-to-overhaul of 16,000 hours – the target set when the first machines went to work in 2008.

The QSK50s were replaced with certified rebuilt engines from Cummins' Master Rebuild Centre in Brisbane.

The Hitachi excavator fleet at Glendell includes three EX5500-6 and two EX2500-6 units. The EX5500s have an operating weight of 522,000 tonnes and get their digging force from dual Tier 2 QSK50 engines rated at 1,400 hp.

The two EX2500s are 250-tonne machines, each with a single 1,400 hp QSK50.

One of the EX5500s – its dual QSK50 engines were changed out at 16,857 hours – is rated as Xstrata Coal's most productive excavator in Australia based on efficiency per cubic metre of bucket capacity.

A teardown analysis of one of the 50-litre QSK50s from this excavator showed the 16,857-hour engine to be in good condition based on the hours achieved.

The Glendell open cut is part of Xstrata's Mt Owen complex which includes the Mt Owen and Ravensworth East mines.

Glendell has a run-of-mine (ROM) production target of around 7 million tonnes per annum. The first coal was extracted at Glendell in June 2008.

In 2011, the EX5500 fleet mined 27 million bank cubic metres (BCMs) of waste and coal and operated an average of 5,400 hours.

The EX2500 fleet mined 5.3 million BCMs of waste and 6.8 million tonnes of coal and operated an average of 5,500 hours in 2011.

In conjunction with Hitachi Muswellbrook, the Cummins Muswellbrook branch has established a good working relationship with the Glendell maintenance team through mine site respresentative Phil Uren and mine site technician Danial Bennett.

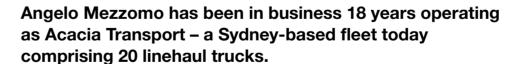
The Cummins Support Centre, through its 1300Cummins hotline, also plays an important role in providing quick response to any problems.

The Glendell mine is one of over 30 operating coal mines in Australia in which Xstrata, the world's largest exporter of thermal coal, has an interest. In 2011, the company achieved record thermal coal production of 49.8 million tonnes in Australia.









"We've built up our customer base mainly in regional NSW, carting fruit, vegetables, dairy products and fresh food," he says.

A fully qualified diesel mechanic, he worked with his father in his early years, repairing trucks, tractors and other machinery.

Deciding he wanted a new challenge, he bought his first truck in the mid-'90s, a Mitsubishi rigid that he used to cart nursery products. Hence the name of his transport business, derived from the acacia plant.

By the late '90s Angelo Mezzomo had given up the nursery work and bought his first prime mover – a Kenworth K100E powered by a 410 hp 'Red Head' Cummins which he sub-contracted to Linfox, carting groceries.

In 2000 the refrigerated side of Acacia Transport began to take shape when a contract with Franklins was secured.

Mezzomo's background as a mechanic is strongly reflected in the smart appearance of the fleet today and the no-compromise way it is maintained.

The latest trucks at Acacia are all Kenworths – three K200s, two T909s and a T609, all powered by ADR80-03 Cummins Signature 600 engines coupled to particulate filters.

"The latest Cummins engines are performing well and I can't fault Cummins' support," he says.



Mezzomo willingly embraces new technology, seeing clear benefits with the latest low emission Cummins engines.

"It's critical for us as carriers of fresh food and produce to have clean equipment and the latest technology engines have helped us in this regard," he says.

"Our customers love seeing clean gear, and the fact we don't have to worry about soot on our vans anymore is very important for our company presentation."

Mezzomo says he "puts a lot of money back into the business" to ensure the fleet appearance stays top-notch.

Prime movers are replaced every four years or 700,000 to 800,000 km while trailers are replaced every five years.

"We have no dramas selling our gear...we've just sold three of our Kenworth prime movers to an operator in Perth," he points out.

The latest Cummins Signature 600 engines are meeting expectations in terms of fuel economy.

"Straight out of the box the T609 was good on fuel, doing 2.1 km/litre on single trailer work, fully loaded on all legs from Sydney to Griffith to Wyong," he points out.

Two Cummins Fleet 450 engines powering Kenworth T402s are returning the best fuel economy in the fleet, averaging 2.5 km/litre on single trailer work to regional destinations such as Newcastle and Tamworth.

Kenworth's latest cab-over, the K200, also wins high praise from Mezzomo.

"It's a far better truck for the driver than previous Kenworth cab-overs…it's roomier, rides nicer and is quieter," he says. ■

CUMMINS COMMENTARY APRIL 2012 CUMMINS COMMENTARY APRIL 2012

> AMP's head office at Circular Quay was Sydney's first high-rise when it was opened in 1962 and held the

Key men in the project (from left): FDC Technologies' Gary Bernsdorff, Cummins project manager

David Van Brussel, FDC Technologies' Chris Coomas,

and AMP facility manager Peter Went.

title as Australia's tallest skyscraper until 1965.





Pumped on fuel economy

An ADR80-03 Cummins ISX 550 is leading the fuel efficiency race at NSW civil engineering and haulage company TRN.

The ISX 550, propelling a Kenworth T409 SAR coupled to a four-axle dog trailer, is pulling gross weights of 50.5 tonnes. At the beginning of 2012, it had clocked up over 100,000 km and 2000 hours.

"It's our best four-axle dog combination in terms of fuel efficiency, averaging 1.8 km/litre around town and 2 km/litre on highway work," says Trent Fordham, truck workshop manager for TRN, a company based at Narellan, south-west of Sydney.

A Western Star with a DD15 engine is back in the pack in terms of fuel economy. The TRN tipper fleet generally averages between 1.4 and 1.6 km/litre.

A further two T409 SAR Kenworths with ISX 550 engines are going into service with TRN early in 2012.

"We're very happy overall with the reliability and fuel efficiency of our latest (ADR80-03) Cummins engines," says Trent Fordham.

"Cummins has got the performance side sorted too... our drivers are really impressed.

on top of them."

The SuperLiner had clocked up just over 200,000 km and 5000 hours at the beginning

After a long absence from the TRN fleet, Cummins has been making its presence felt again in the tipper operation over the last couple of years.

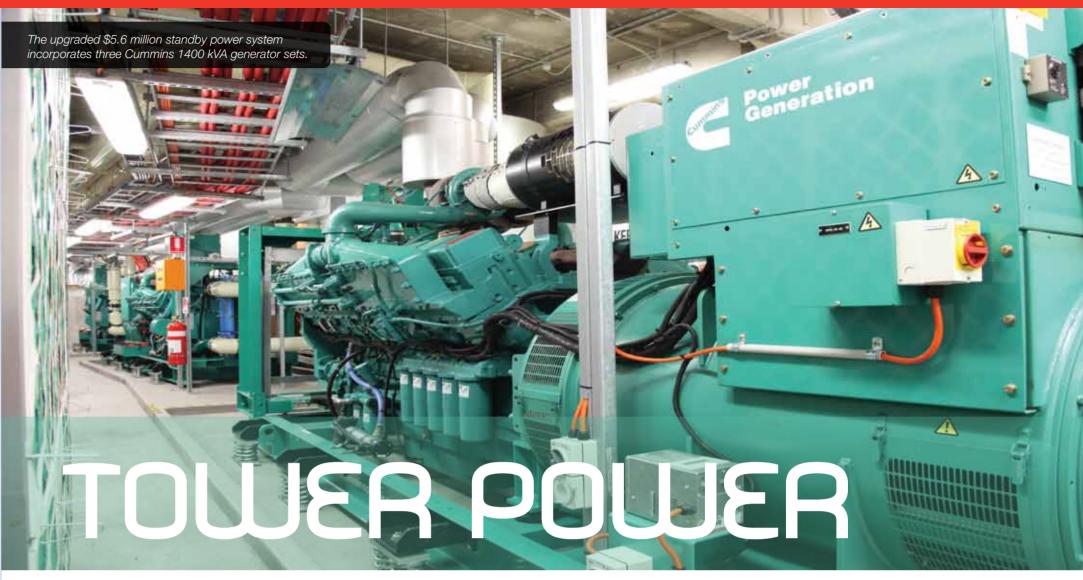
Service support is a key factor behind Cummins' comeback at TRN, as is the performance of the Cummins ADR80-03 ISX 550 engines.

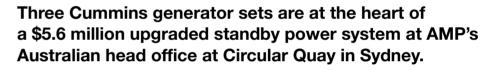
TRN, a company that had its origins in 1966, today has over 200 pieces of plant.

Civil contracting is the largest business segment of the company that is based at Narellan, south west of Sydney.

TRN is involved in a number of major construction projects in south west Sydney as well as other areas of NSW.

Its haulage fleet of 30 frontline tippers - mainly truck and dog combinations support its earthmoving and quarry operations as well as carting coal in the NSW Illawarra region. ■





The new gensets replace two Blackstone generators that were installed in the Alfred Street building in the late 1950s.

With 27 floors and a 106-metre height, the curved AMP building was Sydney's first high-rise when it was opened in 1962 and held the title as Australia's tallest skyscraper until 1965. It was heritage listed in 1996.

Since wealth manager and life insurer AMP operates a number of business critical services from the building, including a data centre, it is essential that a reliable standby power system is available.

FDC Technologies was chosen as principal contractor for the challenging upgrade project which included the installation of new generators, control systems and switchgear.

Cummins was selected to supply and install three 1400 kVA gensets as well as a new fuel supply system, two refurbished 8000-litre fuel tanks and a new 1000-litre day tank.

The C1400 gensets are powered by Cummins' venerable 50-litre K50 engine and have Cummins PowerCommand digital paralleling.

Restricted access to the AMP building's sub-basement (the floor beneath the main basement) threw up several challenges.

"The big challenge was having to dismantle the gensets and then lower them two levels underground through access holes to the sub-basement area," says David Van Brussel who headed up the project for Cummins.

"The gensets have 50-litre V16 Cummins engines so it was no small task."

Dismantling and removal of the old Blackstone generators was also a complex iob for Cummins and FDC Technologies, requiring care because certain components were contaminated with asbestos.

There was also little space to work in: When the Blackstones were installed in the late 1950s they were put in place at the time of sub-basement construction and then the rest of the building went up around them.

Strict criteria were set by Norman Disney & Young Consulting Engineers for the pre-commissioning and commissioning phases of the generator upgrade project.

Cummins had to individually load test each genset for four hours at full load at its Wetherill Park (Sydney) facility before dismantling the generators ready for installation.

Once installed but prior to commissioning, each genset was again individually load tested at full load for four hours. This required load banks to be set up outside the building with electrical leads running down to the sub-basement to connect to the generator switchboard.

During commissioning, a further four hours of testing was performed with all three gensets running in parallel at full load.

"Considering the challenges, the project was a great outcome for all involved," says Chris Coomas, manager of the projects group for FDC Technologies.



CUMMINS COMMENTARY APRIL 2012 CUMMINS COMMENTARY APRIL 2012



New managing director for **Cummins South Pacific**

Peter Jensen-Muir has been appointed managing director of Cummins South Pacific. He replaces Dennis Quinn who is joining an Australian-listed company in the industrial sector.

Jensen-Muir, who has had over 23 years with Cummins both in Australia and overseas, moved into his new role on March 1, having been Director of Business Operations for Asia Pacific Distribution.

He has an extensive background in commercial, sales and general management roles across a diverse range of regions and countries including Asia Pacific, North and South East Asia, Australia, China, Latin America, North America, Europe, Middle East and Africa.

His work assignments have been based in Australia (9 years), United States (7 years), Singapore (5 years) and the United Kingdom (2 years).

He brings to the managing director's role a strong blend of knowledge and experience that spans a wide range of market and industry segments, including power generation, recreational marine, commercial marine, mining, rail, trucking, construction and industrial.

Cummins South Pacific covers Australia, New Zealand, Papua New Guinea and the South Pacific islands and with 40 branches and over 1700 employees is the largest company-owned distribution network for Cummins Inc. outside the US.

Jensen-Muir holds a Bachelor of Engineering (Mechanical) from Monash University in Melbourne.

Cummins across the country





Loyal Cummins user, Brisbane-based SRV Road Freight Services, is touting the Cummins message on reliability, performance and the environment as one of its latest Kenworths travels the country's highways. The immaculate T909 is powered by an ADR80-03 ISX rated at 600 hp.

Cummins named Employer of Choice for Women

Cummins South Pacific has been recognised | "The EOWA accreditation has both assisted and for its commitment to gender equality in the workplace, receiving a 2012 Employer of Choice for Women citation.

The citation was made by the Australian Government's Equal Opportunity for Women in the Workplace Agency (EOWA).

Director of the EOWA Helen Conway said workplaces were taking real initiatives to ensure they were tapping into the whole talent pool – even in organisations not traditionally attractive to women.

"Australian business leaders are recognising they need to attract the best people in order to be competitive and to achieve this they nust develop strategies to target women," Ms Conway said.

Cummins South Pacific, one of 125 organisations to qualify for the 2012 citation is actively seeking to increase the number of women in its ranks, starting with apprentices.

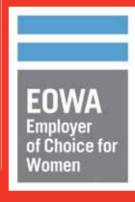
'As a service organisation I believe we need to employ and have access to the best people from the biggest pool of possible applicants, half of which are women," said Cummins nanaging director Peter Jensen-Muir.

attracted women into our organisation, which has been traditionally male-dominated. We then implement processes to 'grow our own' women throughout the organisation for promotion through the ranks."

Ms Conway said Australian business leaders understood the citation was a major drawcard in the war to attract and retain the best people.

"The leaders of the organisations on this list recognise there is a competitive advantage to be obtained by employing a diverse workforce," Ms

They are attracting women into non-traditional roles where there are skills shortages, reaping the rewards of increased retention rates, and realising the benefits of flexible work practices."



Brisbane technician wins international boxing title



World Boxing Foundation belt.

Cummins Brisbane technician Emmanuel Micallef has won the World Boxing Foundation's international super bantamweight title.

Recording an eighth-round knockout again Tommy Clarke in Townsville, Micallef hailed the win as the pinnacle of his 10-year boxing career.

Micallef, 28, dropped Clarke three times before forcing the referee to call a technical knockout in the eighth when Clarke was brought to his knees.

At Cummins Brisbane, Micallef works in the Master Rebuild Centre which rebuilds high horsepower engines from 19 to 78 litres.

The modest, quietly spoken Micallef served part of his apprenticeship with Cummins Brisbane before moving on to another company. He returned to Cummins early in 2011 and is passionate about his work at the Master Rebuild Centre.

In preparation for the WBF international title, he took five weeks' annual leave from Cummins to train three times a day, which included running 10km and fighting up to 30 rounds a day.

He turned professional in 2005 after winning one Australian title and four Queensland titles as an amateur.



As I enter the fourth week of my new role, I thought I would take the opportunity to reflect on the investments being made by Cummins in improving our customer support and the challenges and opportunities of the future.

Firstly, it's great to be back with the Cummins South Pacific team at a time when we are continuing to invest in the region. Our support network now covers more than 60 locations and we are further expanding our network, improving our facilities and building the capability of our team to sell and support Cummins products.

While we have a strong position today, we all recognise that we cannot afford to sit still. Helping our customers succeed in meeting the new challenges of our market means we need to continue to cost effectively build our capabilities to safely and responsively sell and service Cummins powered equipment. Our main focus is to be customer centric and further build our capability to deliver world-class customer service across the region whilst always ensuring we operate safely and with minimal impact on the environment.

We have made significant investments over the past several years, including:

- Expanded our Customer Support Centre (CSC) with parts and service expertise providing 24/7 breakdown and technical support
- Significantly expanded our technical training
- Added nearly 200 technicians and apprentices
- Expanded and built new branches, workshops, driver lounges and other facilities
- Increased our service advisors to improve communication with customers through the
- Expanded our Master Rebuild Centres in Perth and Brisbane to meet the increasing demand for quality high horsepower rebuilds.
- Expanded our understanding of the voice of our customer via our Net Promoter Score (NPS) initiative designed to measure our performance through the lens of our customers. The survey results are analysed to develop key action plans to further improve our performance.

We have started this journey but a lot remains to be done and we need to accelerate our efforts. Recently I had the opportunity to meet with over 150 of the Cummins team. One of the themes from the discussions was a general agreement that "apprentices are our future". Our apprentices' passion, innovation and commitment to serving our customers was truly inspiring. Hiring and developing our apprentices will continue to be a key area of investment by Cummins South Pacific as we increase the number of technicians within the business to serve our customers, and expand our investment in training, tooling and facilities.

We must be able to draw on the knowledge, skills, and capabilities of every part of our organisation in every part of the South Pacific to meet the needs of each customer. We want every customer, everywhere in the South Pacific to feel the full power of Cummins every time they interact with us.

Our plans for 2012 and beyond call for us to increase investments in our growth and customer support initiatives. I look forward to working with our employees, equipment manufacturing partners, dealers and customers to make it happen.

Branch manager appointments



Chris Bugeja has been appointed regional branch manager with overall responsibility for the Cummins Mackay branch while Swan Hill and Mildura. overseeing Cummins' operations in Townsville and Cloncurry.

Bugeja has been successful in a number of roles with Cummins over the years, developing a reputation for providing outstanding customer service and commercial success.

Over the last three years Bugeja and his team have grown the Cummins Mackay operations to achieve outstanding results.

Tyson Coffey has been appointed branch manager for the Western Riverina region with responsibility for the Cummins branches in

Coffey started with Cummins Swan Hill as a 1st year apprentice in 1997 and after completing his apprenticeship progressed through the ranks to leading hand and then field service technician.

After leaving Cummins to work for the local Case IH dealer where he became service manager, Coffey returned to Cummins Swan Hill in 2007 as branch operations manager.



Steve Nickolai has been appointed regional branch manager, responsible for the Perth and Geraldton branches in WA.

He has joined Cummins from the Royal Automobile Club (RAC) where he worked in various roles for 16 years. Prior to joining Cummins he was general manager of RAC Auto Services.

He is a qualified mechanic and also has an Executive Master's Degree in Business Administration from the University of



Michelle Bourke has been appointed branch manager of Cummins Townsville.

She joined Cummins in 1999 as administration manager, leading the Townsville and Cloncurry administration businesses. In 2008 she was appointed regional administration manager which including the Cairns and Freeport (Indonesia) branches.

Michelle, who has been heavily involved in the training areas of Cummins, is currently completing her final year of a business degree with a double major in HR and managemen and entrepreneurship. She is also a 6 Sigma



Cummins Commentary is published by Cummins South Pacific

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Cummins engines power 22 new locos for WA grain haulage

CBH Group of Western Australia is taking delivery of 22 new Cummins-powered locomotives for

CBH (Co-operative Bulk Handling) is one of Australia's leading grain organisations, with operations from grain storage, handling and transport to marketing, shipping and processing.

Eleven of the 22 new locomotives are powered by 2700 hp QSK60 engines while the other 11 have 3300 hp QSK78 engines.

The locomotives are being built in the US by MotivePower, a subsidiary of Wabtec. "We can't wait to get our locomotives out onto the track," says CBH general manager of operations

"They have state-of-the-art technology and across the fleet we'll have more horsepower than currently. With more grunt behind our trains we can achieve faster journeys to port and faster turnaround times

"The locomotives have distributed power which means they can push and pull, allowing us to operate more efficiently and be far more productive. This coupled with our new aluminium wagons will revitalise rail in Western Australia.

New Cummins facility in Pakenham



Cummins has opened a new facility in Pakenham, 55 km south-east of Melbourne.

The facility's focus is on field service support and parts supply while supporting the strong Cummins dealer network in the region.

Three field service technicians work out of Pakenham, handling all Cummins engine applications.

The facility is led by operations manager Glen Jones who has a strong service and technical background. Parts contact is Michael Woodward.

The facility is at Building 1, 1225 Koo Wee Rup Road, and can be contacted on 03 5943 3700.

Glen Jones

Cummins unveils Euro 6 technology

Cummins has unveiled its technology path to move its ISBe engine to the Euro 6 emissions regulations in 2013.

The 4 and 6 cylinder ISBe engines for medium truck and bus applications will use a combination of cooled exhaust gas recirculation (EGR) and variable geometry turbocharging allied to an aftertreatment system incorporating particulate filtration with selective catalytic reduction (SCR). Cummins' technology choice is the result of one of the most comprehensive development projects undertaken at its European technical centre.

Versus Euro 5, Euro 6 sees oxides of nitrogen (NOx) reduced a further 77% with particulate levels reduced a further 50%.

The ISBe range extends up to 310 hp.



"We will go from strength to strength this year as each train is commissioned and growers see more tonnes moving to port more efficiently."

The tender process for the new locomotives was very competitive with six companies from around the world

New Cummins Onan residential genset

Cummins Onan has released a new residential standby generator that is powered by LPG or natural gas.

The RS14AF provides 56.5 amps (13.5 kW) of power and can easily run standard residential household appliances including air conditioning.

Its utility grade power quality ensures the safe operation of appliances and sensitive electronic equipment such as computers and stereo systems. The generator has a durable built-in polyethylene base that eliminates the need to pour a concrete slab.



An in-home display is standard equipment. Email notifications also inform the owner of maintenance, service and power outage alerts anywhere there is internet access.

Rocky's Own 100th Kenworth



Rocky's Own Transport has taken delivery From left to right: Arthur Fowle (dealer of its 100th Brown & Hurley Kenworth. The K200 is powered by a Cummins ISX. A special presentation was made to Rocky's Own at the Kenworth factory in Bayswater to mark the company becoming a member of the Brown & Hurley 100th Club.

principal Brown & Hurley Rockhampton), Rob Griffin (Kenworth Trucks), Jim Hurley (joint managing director Brown & Hurley), Rod Carige (Rocky's Own), Bryan Smith (Rocky's Own), Tony Hurley (dealer principal Brown & Hurley Toowoomba), Rob Brown (joint managing director Brown & Hurley), Andrew Hadjikakou (director of sales & marketing Kenworth Trucks).



Turbo boost for F1 students

A gold-plated Cummins turbocharger has been introduced to Australia's F1 in Schools program to be presented annually to the Grand Prix champion team.

Through the appeal of Formula 1, F1 in Schools teaches students skills in science, technology, engineering and mathematics.

Australia is one of 31 countries involved in F1 in Schools which was introduced here in 2004 by Michael Myers' Re-Engineering Australia Foundation (REA).

An engineer and businessman, Myers established REA in 1998 to encourage student interest in STEM (science, technology, engineering, mathematics) careers. He recently received an Order of Australia Medal (OAM) in recognition of his work raising a new generation of innovators and technicians.

Globally, F1 in Schools now involves around 17,000 high schools and nine million students.

The idea behind F1 in Schools is for students to build model race cars using the same design and simulation software that is employed by the Formula 1 teams.

The cars are machined from balsa blocks, are 220 mm long and powered by a CO² canister, and reach speeds of over 80 km/h.

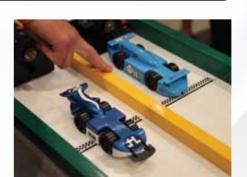
The cars are raced on a special electronically-timed track, and when they break the laser beam the timing is accurate to .0001 sec.

Students learn aerodynamics, computational fluid dynamics, and finite element analysis.

They must also learn to use industry-standard 3-axis CNC (computer numerical control) machining centres to make the cars and test them in miniature smoke and wind tunnels

The cars, machined from balsa blocks, are raced on a special electronically-timed track.







Students form a team as in Formula 1, with a team manager and design engineer, and they must engage in marketing and procurement (liaising with industry to get parts made).

The Australian F1 in Schools Grand Prix was held in Adelaide recently, coinciding with the Clipsal V8 Supercar event at which the winning teams met with Alan Jones, Australia's former Formula 1 world champion.

Twenty-six teams from across Australia entered, vying for the chance to compete at the world titles later this year.

Brighton Secondary School's Cold Fusion team from Adelaide won the national title in the professional class, claiming the gold-plated Cummins turbocharger.

"Supporting a program such as F1 in Schools is fantastic fit for Cummins," says Aaron McMurray, Cummins South Pacific director of business development, strategy, marketing and corporate social responsibility.

"It provides us with an opportunity to add a little bit to the engineering future of Australia, by assisting school-aged youth in our communities in this wonderful program.

"The vision for Cummins is not only to provide reward and recognition support but also to provide an opportunity for our own employees to become engaged with these talented kids, as roles models and mentors, as they undertake this journey."

The F1 in Schools Grand Prix featured impressive displays by the competing teams















KEEN ON GREEN

Cummins has opened a new \$5 million branch facility in Mt Gambier, South Australia, incorporating best practice 'green' technology.

In fact, the Mt Gambier development will be used as the environmental model for all new branch facilities planned by Cummins South Pacific in the future.

The new Mt Gambier branch also further reinforces Cummins' strong reputation in the region for service support.

Leigh Newton and his team at Mt Gambier run one of the top-ranked Cummins branches in the South Pacific, based on customer surveys to determine where the company is performing well and where it needs to improve.

The environmental credentials of the new branch include:

- Metered water usage is reduced by 80–100% by utilising rain water collection in two 135,000-litre tanks. Bore water supply is also available as a back-up.
- A 10 kW solar system provides up to 50% of site electricity consumption, reducing dependency on grid power which comes from a coal-fired plant.
- All waste water and sewage is treated in an on-site plant with the outflow used for irrigation of the landscaped gardens.
- Wash bay water is recycled through an oil water separator into a 25,000-litre holding tank.
- All storm water from the site is filtered through a solid pollutant filter/oil and grease arrestor.
- The main building has 'Hebel' block walls which (compared with precast concrete) provide improved thermal and noise insulation as well as excellent fire resistance.
- Workshop energy usage is reduced through use of high-output/low-energy lights, skylights, and white 'epoxy' floor covering to reflect natural light.
- Motion sensors and high efficiency lighting are used in offices.
- Interior of the building is painted using recycled waste paints.
- All oils and coolants are stored over a bunded area under the main roof.
- All underground sumps are stainless steel lined to prevent leakage into the groundwater.









The new facility, which incorporates nine truck service bays, a chassis dynamometer and many other state-of-the-art customer and staff amenities, is surrounded by a fully concreted yard to control storm water run-off.

Branch manager and team leader for the project Leigh Newton says there was widespread employee involvement in all aspects of the project from design and site layout through to environmental considerations, purchasing and then commissioning.

On the environmental features, he says: "It pays to be bold and trial ideas that seemed daring just a few years ago."





George MacDonald & Sons is a time-honoured company with origins dating back to the late 1800s in Sydney.

From the mid-1970s through to 2003 the company was at its biggest, operating up to 15 B-doubles and hauling mainly wine for Rosemount Estate in the Hunter Valley, NSW.

The company had earlier carted coffee beans for Bob Oatley (of Wild Oats XI yachting fame) who, after establishing Rosemount Estate Wines in the early 1970s, engaged the services of George MacDonald & Sons to haul his wine to the capital cities.

After Rosemount Estate was sold to Southcorp in 2001, distribution was moved to Mildura in NSW and George MacDonald lost the core of its business, with fleet size reducing to just five trucks.

In recent years, the company – based at Halloran, 40 km south if Newcastle – has rebuilt its business and today operates 14 trucks, mainly Kenworths pulling B-doubles.

The relationship with the Oatley family continues with George MacDonald & Sons hauling Wild Oats wines from Mudgee vineyards in NSW to Sydney and Brisbane.

Brothers Erron and Brent Jameson along with Blaine MacDonald are directors of the company today, having taken over the day-to-day running of the business in recent years from their fathers Alan Jameson and Ken MacDonald.

Cummins ISX and Signature engines are well entrenched in the fleet which hauls mainly beverages.

"We couldn't be happier with the back-up we get from Cummins," says Erron Jameson who has worked in the business since the early 1990s.

"In fact, the support we get from Cummins in Newcastle is excellent. Anytime we ring them they accommodate us."

The latest emission engines in the fleet – two ADR80-03 Signature 600s powering B-double Kenworth K200s, and an ISX 525 in a T909 doing mainly single trailer work – are impressing with their overall performance and reliability.

"The latest engines have stepped up in terms of performance compared with our earlier EGR Signatures," Erron Jameson points out.

This is confirmed by Mark Meredith who was driving a K108 and is now piloting one of the K200s: "It's very noticeable...half a gear to a gear better," he states.

"We keep our engine downtime low," says Erron Jameson, pointing to the fact that recommended service intervals are tightly adhered to. Oil sampling is carried out every 50,000 km and Cummins Premium Blue Xtreme oil is used throughout the fleet.

Today's fleet is a far cry from the transport used when the company had its origins during the horse and cart days in Sydney in the late 1800s.

Joseph MacDonald – great, great grandfather of current directors, Erron and Brent Jameson and Blaine MacDonald – started the business and was a foundation member of the NSW Master Carriers Association.

The Jameson family became involved in the business in the late 1960s when Alan Jameson – Erron and Brent's father – married into the MacDonald family.

Alan and brother-in-law Ken MacDonald ran the business for a number of years before handing over to their sons Erron, Brent and Blaine who obviously take great pride in the way the fleet is presented today.







The 1000th Cummins-powered Omega heavy lift truck has been built by Clark Equipment – a major milestone for the Australian company that began building the Omega brand in 1988.

Cummins South Pacific's director of industrial business Brian Smith presented Clark Equipment CEO Robert Hammond with a special plaque to mark the milestone.

The market-leading Omega lift trucks are designed by Clark Equipment while major components are both manufactured by Clark at its headquarters in the northern Sydney suburb of Hornsby and also sourced externally.

Clark Equipment is totally Australian owned and controlled. It was originally a subsidiary of the American Clark company, but a management buyout took place in 1988, putting it in the hands of Australians.

The Omega name for the company's heavy lift trucks was introduced at the time of the management buyout.

The Omega range is 100% Cummins powered.

"It's great to see an Australian company enthusiastically facing up to the challenges of manufacturing in Australia," says Brian Smith.

"Clark is committed to its employees and to ongoing product design and development, and its efforts to improve efficiencies and maintain product quality are evident throughout the factory.

"Clark has been a long term customer of Cummins and clearly sees us as an important partner in achieving its own business objectives.

"Our two organisations have many things in common. Clark's proud company history, innovative and well supported products, long serving employees, commitment to community service and creating a great place to work are all qualities that Cummins also values."



The first Cummins engines – 'triple nickel' V555s – were actually fitted in Clark lift trucks in Australia in the early 1970s, and Cummins power continued as the preferred choice when the Omega brand was launched in 1988.

Five years ago Clark began converting its Omega line-up from mechanical to electronic Cummins power, with the 4.5 and 6.7-litre QSB, 8.3-litre QSC and 11-litre QSM engines installed for greater performance and efficiency.

Today, the Omega brand dominates the markets in which it competes. One third of Omega production is exported to the Asia Pacific region.

The range includes heavy fork lift trucks, container handlers, and specialised machines for tasks such as tyre handling for the mining industry. Cummins engine outputs span 160 to 335 hp.

Apart from Omega, Clark Equipment markets a number of other leading brands in the earthmoving, construction, mining and agricultural sectors including Bobcat, Doosan, Ingersoll Rand, and Daken.



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