## EQUIPMENT AT WORK

## Northern Quarries' Terex ticks all the boxes



For any quarry business, buying a new haul truck warrants significant evaluation.

**O WHEN** Melbourne based independent hard rock quarry Northern Quarries, began sourcing a new 60t haul truck, they started a process in which they undertook many months of detailed evaluation before choosing a Terex TR60, one of the first introduced to Australia.

Northern Quarries' Pat Kerr said, "There are so many things we analyse before we narrow the choices. To begin our process, we'll start looking at everything from lowhour used equipment, to new.

"A major part of the research at this stage is ensuring availability," he said, adding: "It doesn't then take a genius to figure out that we should be leaning toward a new machine, if the financial impost is manageable, so we can access the warranty and other benefits and look to reduce our costs over the truck's life."

Northern Quarries also readily acknowledge referencing a *Sand & Stone* magazine article (Construction Material Processors Association), which explained capital acquisition as a partnership between the purchaser and supplier.

### Methodology

"There's a methodology in everything we purchase. We used that in conjunction with the CMPA article, as well as things like the supplier's risk assessments, health and safety impacts and even issues like machine handover, maintenance training and driver induction and training," Kerr said. "It is a time consuming and complex procedure and it can take months – everyone who has supplied us with equipment knows that it takes time and knows that we ask for a lot of detail, but that is a reflection of where we want to be as a company – we need to make sure every 'i' is dotted and 't' crossed."

Within Northern's thoroughness there remains a simple business proposition: they're after the best machine at the lowest financial impact and one which will give the longest return on investment.

Supplied by Victorian/Tasmanian distributor Victorian Construction Equipment Pty Ltd, the Terex TR60 fitted the bill. In particular it featured familiar componentry to this third generation quarrying company, a Cummins QSK19-C700 522kW (500kW) Tier 3 emission engine coupled to an Allison M6610AR automatic transmission. As well it delivered outstanding gradeability.

"We certainly wanted something reliable and while this is one of the first Terex TR60s around, we were comfortable with the drive line, particularly the Cummins engine and the Allison transmission, which we are basically running in our existing trucks," quarry manager Wayne Deken said.

### Training seat

"We were also impressed with the operator's cabin. It is spacious and includes a full size additional seat for training, has plenty of room to fit a reversing camera and radio unit, while the operator's seat also has a four point harness seatbelt."

Northern Quarries' commitment to achieving the right specification, included a range of modifications. One was an Australian Standards approved ROPS to further heighten safety performance. Then the tyre specification was changed to a brand and pattern of Northern Quarries' selection – a proven hard wearing pattern – and extra lining plates added to the body in preparation for the hard rock haulage task.

Working in conjunction with Victorian Construction Equipment, modifications were made to access steps and handrails to fit NQ's rigorous safety criteria. "We also modified access to the fuel tank by fitting hand rails and a fold out step so refuelling is easier for operators," Deken said.

The engine was further guarded to reduce nip points, while a range of lights, warning alarms, isolation switches, cameras and

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### **EQUIPMENT AT WORK**

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decals detailing oil and fluid grades, were added.

"Terex also provided 'hand-over induction training' for all our operators over a two day period," Deken said. "We had the opportunity too, to make a short video of the program with Terex's trainer, which we can use for future reference."

### Matching drivetrain

While it is early days in what is expected to be a long life span, the TR60's performance is making its mark at the outer Melbourne quarry. Working daily 10-hour shifts and matched well to the company's 15.54t bucket capacity Komatsu WA600-6 wheel loader, the TR60's body has a unique horizontal floor for improved fill and discharge performance and features a large target area for ease of loading.

The TR60's low loading height offers Northern increased flexibility as it allows the option of loading with a sales loader as well as the face loader.

The one-piece longitudinal 'V' floor, offers improved rigidity but also a low



centre of gravity, for better stability and ride comfort. Featuring a uniform depth from front to rear the TR60 body provides a better match for wider bucket wheel loaders than typical wedge shaped bodies.

Deken said, "We haven't analysed its fuel economy yet, but it is running the same capacity 19L engine as is in our 40t truck and we expect it to offer a per tonne fuel saving compared to that older style truck."

#### Dual mode retardation

The TR60's dual mode retardation system, that allows retardation from either the transmission or rear wheel multiple oil-cooled disc brakes, has also made its mark in the short time in service. "It is certainly a feature we have been impressed with," Deken said. "It is used for maintaining ground speed so you don't overspeed the engine when it is loaded on downhill grades – you've got the option to select either retarder according to the driving conditions."

For operators, the ride comfort is paramount. Shifts are made all the more manageable as a result of an operator's environment described by Northern Quarries as "impressive". Ensuring excellent driveability, is the independent front wheel suspension, independent steering unit delivering uniform touch regardless of speed, combining to offer a 9.5m turning radius.

"The operators are also very happy with it – it's got a very good ride and is certainly a lot smoother than our older vehicles," Deken said. "We're highly satisfied at the moment."□

More information: Victorian Construction Equipment P/L, 03 8339 4705.

## Multi-tasking loader maintains historic village

The NSW National Parks and Wildlife Service has bought a Terex 880 Elite backhoe to maintain the historic village of Hill End, 200km north west of Sydney.

**T HE HILL END HISTORIC SITE**, established in 1967, is one of the first cultural heritage sites to be reserved in Australia. The town is visited by 60,000 and 70,000 visitors a year.

Matt Burns, NPWS' senior field supervisor said they selected the 880 after looking at many types of gear. "What impressed us was the robust and well designed engineering of the transmission and engine. In addition, the machine was competitively priced and within our budget.

"The machine is worked several times a week on a range of tasks that include pushing heavy timber, craning and more. The major appeal of the Terex is its versatility. We use it for everything from boring post holes to forks; as a crane, a dozer – virtually every moving, digging, lifting and loading task imaginable.

"It's got a lot more pushing power than most similar equipment. The dual hydraulics are very helpful, particularly when operating around telecommunications cables. Its ability to switch off one pump increases control through more fluid fine movement of the arm and bucket.

"The improved control and feel from switching off unnecessary flow means we can complete precise digging and craning tasks more safely. Being able to adjust the power for fine movement is a great benefit.

"Our area of responsibility includes 40km of water lines, so it's used often for repairing leaks and installing new lines. We have [clocked up] around 100 hours to date and the machine has performed faultlessly."

"Our management area is similar to that of a council, in that we are responsible for works within the town of Hill End which is a designated Historic Site. There are between 30 and 40 buildings, 40km of sewer lines and 40km of water service. We also manage road works, parks maintenance and reserves", Burn said.

www.earthmover.com.au

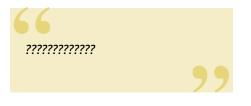
The Terex 880 (Photo courtesy NPWS)

## Sakai appoints Clark Equipment its Australian distributor

AKAI HEAVY INDUSTRIES LTD has appointed Clark Equipment as distributor for its full line of compaction equipment in Australia.

Sakai believes Clark Equipment will leverage its local presence to increase exposure of its products. CE is a BRW Top 500 Australian private company, with annual sales in excess of \$200m and more than 430 employees and 20 branches.

An 80 year history as a road construction equipment maker, has positioned Sakai as a well respected global brand.



A significant commitment to R&D has enabled it to maintain its reputation as a provider of reliable and innovative compaction equipment.

Sakai pioneered the vibratory pneumatic tyre roller, which boasts light weight and superior productivity. Clark Equipment believes that Sakai's continued pursuit of world leadership in compaction technology, will continue to add value to its product offering.

"Sakai brings another big brand to Clark Equipment, which is backed by dependable and innovative technology. We are pleased to offer it to our customers, and look forward to continued support from Sakai in Japan," said Clark Equipment product manager Kenny Gong. □

More information: 1800 045 446, compaction@clarkequipment.com, www.clarkequipment.com

## Quick-release dust cup gasket upgraded

Donaldson Australasia has made available a new proprietary gasket for quick-release dust cups, that does not suffer the common wear and tear problems with which industry has put up for so long.

HE NEW P618619 technology underwent extensive in-situ testing on a drill rig at an open cut coal mine. After about 1500 hours of service and countless openings and closings of the trapdoor, the Donaldson gasket proved it had stood the test.

The benefit of using this upgrade gasket is that it is an easy snap-fit on the body of the cup and replaces the standard sponge gasket that quickly deteriorates and becomes dislodged. There was absolutely no shrinkage, the durometer (hardness) of the gasket remained consistent with a new one throughout the test and it was still firmly in position when removed.

The use of this gasket ensures there is no backflow of air between the trapdoor and cup, which under normal circumstances will see a large decrease in pre-cleaning efficiency via the Donaclone, or cyclone tubes, resulting in extremely short primary (outer) air filter service life.

P618619 also allows users to retain their quick release style dust cups, which make

the monitoring of both the condition of the Donaclone tubes as well as contaminant levels in the bottom of the housing, much easier because of the larger viewing area.

In many cases, sites were replacing them with cone shaped cups that had to be removed from the housing each time a tube/body inspection was required, a time consuming exercise.

More information: Donaldson 02 4350 2034, marketing.australia@donaldson.com

### BP oil spill garners 30% increased interest in renewables

The BP oil spill in the Gulf of Mexico has garnered increasing interest in renewable energy, specifically solar energy, according to David Donnelly, GM of Applied Solar Energy Solutions, a Fullerton, California company.

**CCORDING TO DONNELLY**, calls from residential and commercial property owners inquiring about converting to solar energy, have increased by more than 30% since the spill on April 20.

After many failed attempts to contain the leak, politicians and the general public are looking for ways to ensure such catastrophic environmental damage, never happens again. Many are looking to solar energy as the answer because the sun produces enough energy every 4 minutes to meet the needs of the current world population.

In addition to significant electricity

cost savings, Applied's clients rank the importance of helping the environment high on their reasons for going solar.

Besides saving a client more than \$100,000 in electrical costs over the life of the system, a typical home solar power system will save the environment 125t of CO<sub>2</sub>, the leading greenhouse gas.

Also it will save 400kg of NOx which creates smog, 370kg of SO<sub>2</sub> which causes acid rain, 27kg of particulates that cause asthma and the equivalent of 725,000km driven in an average car. Installing a home solar power system is equivalent to taking

1.5 cars off the road for 25 years or planting 1ha of trees.

Applied says solar energy systems are more affordable than ever with US state and federal incentives paying up to 50% of the cost. All Applied modules come with a 25 year warranty and a 10 year warranty on inverters and installation.

According to David Donnelly, over the past year, module prices have come down considerably and while prices seem to have stabilized, they remain at an all time low.

More information: +1714 871-1047.

## Quarry trial settles on Cat, Doosan wheel loaders

After hiring various brands of big wheel loaders from across northern NSW and South East Queensland, the Tweed Shire Council has settled on Caterpillar's 8.45t operating capacity 972H and Doosan's 8.25t DL400 as the most suitable for demanding quarry work in the region.

**HE SHIRE** covers 1303km<sup>2</sup> of the Northern Rivers district of NSW and adjoins the Queensland border. With a growing population, the shire must plan for the future provision of services, including waste disposal.

An established quarry at Eviron, about midway between Murwillumbah and the coast, was identified as a future landfill site, and the shire took over operation of the quarry for future conversion to operation as a landfill for Tweed Shire Waste Management. This area alone will be inadequate for future needs, and applications are currently being processed to allow extraction on three adjoining sites that will eventually become part of the landfill.

While the Council is looking to purchase a larger loader to handle the increased volumes extracted from the quarry, to meet target dates for operation as a landfill (it currently owns a Doosan DL300), it is unwilling to purchase more capital equipment until the approvals are finalised.

As a result, it hired a range of wheel loaders to give it the benefit of an extended evaluation of the offerings of a number of manufacturers before committing to purchase.

### Shared operation

Operation of the loaders has been shared and input has been sought from those operators, with the Cat 972H and the Doosan DL400, clear front runners. Others have been marked down in areas such as ride quality, cabin comfort and reliability and productivity, while the front runners have been at or near the top of all major evaluation criteria.

The extracted rock predominantly meets the demand for decorative aggregate (sometimes known as Tweed cream) for the landscaping industry, but also has application for CBR80 and CBR45 roadbase materials and cracker dust. Aggregate is produced in a range of sizes from dust (-7mm) to 70mm+, and research is currently taking place with a view to blending the stone with recycled crushed concrete to produce a sub-base gravel.

With the need to have the landfill operating in the near future, the quarry is increasing its output and private sales often account for 50% or more of the output. Markets have been developed south to Ballina, north to Burpengary and west to Ipswich, with landscaping yards on the Gold Coast being big users. However the quarry production manager believes that there is still considerable potential for further growth and is keen to develop new business.

While the attractiveness of the rock puts it in high demand for decorative purposes, it is a demanding product from an extraction The Doosan DL400 has a number of attributes that suit this work. The comfort and ride quality allow the operator to have one hand on the steering wheel and the other on the joystick during operation. The ride quality is important when material is being shuttled from a stockpile to a crusher or screen, in allowing fast cycle times while minimising spillage. When building stockpiles, the Doosan has sufficient power and traction to allow the loader to climb the pile with a full bucket until the rear counterweight bottoms.

The Council's DL300 has proved reliable in long-term use and both machines have exhibited none of the problems that have affected some of the other brands trialled.



### ? caption ????????

point of view, with the high silica content causing high wear on cutting edges, screens and the like. Blasts are designed to achieve high rock fragmentation to reduce the crushing requirements and thus reduce crusher wear.

### Speedy stockpiling

A further issue for the quarry is the need to stockpile blast material quickly after a blast, as the clay content means that there is a high loss of material if there is heavy rain (a common occurrence in the Tweed Valley) while the shot material is still lying on the quarry floor. So a fast and reliable wheel loader is essential. Brake wear has been good, and Doosan paid considerable attention to the location of the disc brakes, automatic maintenance of disc clearance and ready monitoring of disc wear without the need to disassemble the hub when designing the DL series.

The DL400 has recently been superseded by the DL420 and is distributed in Australia by Clark Equipment. The DL420 is powered by a 209 kW Cummins QSM 11 low emission engine, that provides 6.6% better fuel efficiency. This drives through a fully automatic ZF electronic powershift transmission and limited slip diffs. The hydraulic system employs two load-sensing variable displacement axial piston pumps. □

### **EQUIPMENT AT WORK**

## GoGetta unearths small business rental potential

A new equipment funding model, which has delivered success in the hospitality industry, has been tailored to suit operators in the construction and earthmoving sectors.

AUNCHED IN 2008 by ASX listed Silver Chef Ltd, GoGetta gives construction and earthmoving operators the chance to purchase costly equipment while preserving working capital.

Through the goRent.goGrow.goOwn ™ funding model, operators can focus on meeting the challenges of securing work contracts, knowing they can secure the equipment they need when they need it, in an affordable and flexible way.

Hardy's Excavations owner Russell Hardy said renting earthmoving equipment was an ideal solution to the problem of riding the contract rollercoaster.

Hardy had purchased a new business and required an additional loader for his fleet. However he was unsure his new business had the demand for such a large purchase.

"I didn't have confirmation on some contracts and buying the new loader outright would have placed additional strain to the business if the work did not come through. Through GoGetta's Rental Solution, I could have the loader I needed, and chase more contracts without exposing myself to the



same risk that I faced within a traditional finance model."

Silver Chef Ltd COO Charles Gregory, said the GoGetta rental model had proven results through its sister company, hospitality equipment financier Silver Chef.

"Up to 90% of the businesses we support succeed because they are able to retain working capital and grow their business. GoGetta operates under the same premise and targets the broader commercial equipment market. We currently offer funding to a range of industries including construction, earthmoving and mining."

The 12 month GoGetta agreement offers operators the ability to:

- Purchase equipment at any time during the first 12 months and receive a 75% rental rebate;
- Return equipment at the end of the 12 month agreement if it is no longer required; or
- Continue to rent and simply continue to reduce the purchase price.

Hardy intends to purchase his loader outright. "Work is now pretty reliable and the loader is used most days; it evens out in the end."

More information: Mike De Gruyter, 0413 165 260, mdg@gogetta.com.au, www.GoGetta.com.au

## "Huge" Bauma success for MB S.p.A.



MB which makes crusher buckets in Italy, sold 65 units during Bauma at Munich in April.

**BOUT 60% SOLD LOCALLY** in Germany, 10% to Australia (through the local dealer Wagga Wagga based Land Operations.) 5% to France and the remaining 25% to the rest of the world.

Over the seven days thousands of visitors and customers visited three exhibition areas set up by the company: an indoor site where the original BF 90.3 model in a new version was on display with new restyling, a promotional point between two pavilions with all crusher bucket models on display and an outdoor demo area of 500m<sup>2</sup>.

At the outdoor sire two crusher buckets, the smallest of the range BF 60.1 and the largest BF 120.4 plus iron separator, crushed all types of material often following special requests to see them in action.

MB also took the opportunity to successfully introduce its latest product, a universal quick coupling.  $\Box$ 

More information: www.mbcrusher.com.au

## **NEW EQUIPMENT**

## Hammer attachment cuts trenching by one third

Melbourne earthmoving contractor Andrew Zaf, has invented a hammer attachment which enables operators trenching through rock, to cut trenching time by a minimum of one third although it is more likely to cut time in half.

ALLED the Clover Hammer Head it is a hitch head plate which allows an excavator to pick it up on 3 different sides: standard pick up, left and right. The essential advantage of this is the ability for the hammer chisel tip to be used at 90° to the normal across trench orientation.

It also allows the hammer to be slant 10° or so from the vertical, so that the chisel tip nearly always engages the rock face. This increases productivity and overcomes the problem of the chisel suddenly chipping away from the rock face. That in turn can cause the full weight of the hammer to release in free-fall and put greatly increased stress on boom and hydraulic rams

As Zaf explained it when *Earthmover* visited him on a stormwater trenching site in Tarneit, a new north western Melbourne suburb, proper chisel orientation allows stone to be cut accurately along its grain. This avoids large rock blowouts which may mean the trench ends up 40 or 50% bigger than it need be.

### Blowouts

Zaf said normal trenching was a little like a brickie attempting to halve a brick by hammering a bolster spanning the length of the brick the equivalent of the chisel tip being used at right angles to the direction of the trench. This often causes rock to fracture unnecessarily into blow outs towards the sides of the trench.

The prototype called for a  $7^{\circ}$  offset which Zaf was evaluating it on his 23,000 hour Cat 330B excavator at Tarneit. But in doing so he has discovered that increasing the offset to  $10^{\circ}$  with shims produced better results. Production units will come at this angle. However shims will be available for further slanting if required, he said.

One instance where even more angle might be useful, would be in demolition where vertical columns or piers needed to be demolished. Because reo runs vertically in columns, it would be advantageous to have the chisel tip oriented vertically, with a bit more angle for better engagement.

Zaf said the Tarneit job required 3.5m deep trenches with an extra 300mm each side for crushed rock. On top that the trench must be 100mm wider on each side to take trench shields. But thanks to the Clover, there have been no major blowouts despite maybe 25 to 30% basalt component in the trenches. So little extra crushed rock will be needed to fill unnecessary voids.

### Virtually indestructible

He is using a 2.25t DNB D110 hammer under the Clover. Spreading and absorbing much of its impact on the 500kg Clover and the excavator above it, is a 50mm thick steel plate at its base. As a result Zaf sees Clover Hammer Heads as being virtually indestructible.

Earthmover wondered if rotary tilt quick hitches might be a viable alternative to the Clover. But Zaf said a computer simulation he had commissioned, showed if one of the best the US had to offer, a \$23,000 unit was coupled to a hammer, its relatively sensitive hydraulics would last just 11 hours before a major overhaul became necessary.

One man who can hardly wait to begin using multiple units across his fleet of excavators is Noel Powers of Powers Excavations.

One of the first contractors in Victoria to reap Clover benefits he said, "After seeing the prototype in action, I have never been more enthusiastic about implementing a tool which promises such a vast potential for cost savings, through such a simple concept.

"I look forward to a productive capacity which not only pleases my customers, but





gives me a market edge in securing larger projects and contract works," he said.

### Website costing

Cost savings from using Clover are estimated to save a minimum of 30% on job costs for contracted excavation works. To support this estimate, the website www.cloverhammerhead.com has a dedicated cost estimating link, which allows potential buyers to begin assessing the viability of using the attachment. This was established by one of Victoria's leading civil construction quantity surveyors and cost estimators.

### Made in Melbourne

The Clover is being made by Henry Wolfkamp of MFT or Metal Forming Technology in Dandenong.

Zaf engaged him very successfully a few years ago, to develop and make another of his inventions, the successful Fuelguard anti siphon device for stopping thefts from fuel tanks.

"Henry is absolutely brilliant. This first Clover prototype works perfectly. Although it is over engineered, it will never break."

For a 30t excavator, production line Clover Hammer Heads will weigh about 450kg and will be widely available around Australia soon through Indeco.

Earlier this month a distributorship was set up in San Francisco as well. It will be instrumental in having the device displayed on top of Indeco's biggest hammer at Conexpo in Las Vegas next March.

www.earthmover.com.au

### **NEW EQUIPMENT**

## Unimog U400 fast tracked to Australia

Australia's first specialised Mercedes-Benz Unimog U400 has hit the country's roads and rail tracks.

**T HE ROAD/RAILER**, delivered by Unimog Sales Australia/New Zealand to Sydney-based freight operator Cavanagh Cranes & Transport, is a special member of the heavy-duty cross-country Unimog family. It has a unique ability to transform at the flick of a switch, from a conventional on- and off-road vehicle, to a railway-based maintenance unit.

It provides fast and independent access to work sites, in both comfort and full weather protection and improves work-place safety by reducing unnecessary handling of equipment. As well as offering plenty of tractive power, its function-specific design avoids railway track damage, a problem often associated with road-only vehicles.

Cavanagh's Unimog is fitted with an aerial work platform specifically designed for overhead rail line maintenance, a feature designed by LH Access. It has a hydrostatic drive which allows maintenance staff positioned in the aerial basket to move the vehicle forwards and backwards along railway lines. Other technical highlights include:

- A work platform with a working height of 10m and an outreach of 6.5m;
- A work platform that can rotate 360°;
- Cut-slots in the basket for cable inspection;
- Fixed mechanical slew-locking to allow adjacent operation to rail lines open to traffic; and
- A boom system that can work through its full range on rail without the use of stabilisers.







Putting the U400 to work in his business was an easy decision for Sam Cavanagh, owner of Cavanagh Cranes and Transport.

"By adding the U400 to our fleet, we are able to provide the perfect solution for our rail clients. The versatility of the vehicle, which works efficiently on road and rail, sets us apart from our competitors," he said.

Unimog Sales Australia MD Grant Andrews, said the sale was another opportunity to showcase Unimog's effectiveness in challenging local applications.

"It is streets ahead when it comes to working in tough terrain; it's widely regarded as the best solution when a tough and versatile vehicle is needed, especially when it has to operate both on- and off-road and, in this case, on railway tracks.

Andrews added: "Unimog sales are increasing as more clients demand greater versatility, efficiency and reliability from their vehicles, without increasing their whole-of-life costs. This is where the Unimog comes into its own: the model range offers customers unique technical solutions specific to their needs.

"By having standard-fitment features such as PTO systems and integrated vehicle hydraulics, customers avoid the need to



?? CAPTIONS FOR HERE ??? also do we need all those contact details at the end of the story??



retro-fit such features and therefore avoid the financial and reliability costs retro-fitment often brings."

For more information please contact:

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# The MHT780 expands Manitou's heavy load telehandler range

Its 2.7t capacity at a forward reach of 4m, means Manitou's MHT780 telehandler, is decidedly useful in say moving large blocks of stone, into positions that would otherwise be difficult to reach.

**N PREFABRICATED MATERIALS** made from concrete, wood or steel etc, operators will benefit from the exceptional load capability which allows 8t to be raised to a height of 7m in total safety. Manitou says it is ideal too to utilise specialised accessories such as tyre clamps and jibs.

Manitou will showcase the new machine at the crane industry's CICA Convention in Perth from September 1 to 3.

#### Robustness, manoeuvrability

The 106kW Perkins engine and hydrostatic transmission provide smooth operation and a high degree of precision.

With 4-wheel drive and 4-wheel steer, the user can operate on all terrain whatever the surface. The 3 steering modes (2-wheel, 4-wheel and crab) combined with a turning circle of less than 5m, provides excellent manoeuvrability for handling yard holds.



Manitou has opted for a front-axle locking system design for greater robustness, thereby ensuring long term reliability on rough terrain. To work in the harshest environments, in all climatic conditions, the vehicle is cooled by two separate radiators, one for the engine, and the other for hydraulic oil.

### **Evolution cab**

The ergonomic design of the new Evolution cab provides more intuitive access to all functions. Control dials, indicator lights and controls are all positioned to be visible and within easy reach. The dashboard is placed to the right and comprises rev-counter/speedometer and timer, fuel and water temperature gauge, clock, all of the indicator lights and a progressive load indicator. Not to mention the JSM\*, which is nothing less than an extended arm for the operator.

The Manitou range of heavy load machines now includes 8 models with 5, 6, 8, 9, 12, 14, 16 and 21t capacity.

More information: Stuart Walker, 02 9517 3174, s.walker@manitou.com

\* JSM: Joystick Switch & Move. It controls the raising and lowering of the boom, turnover/discharge, telescoping, the accessory line and functions. It also selects gears and controls forward and reverse movement.

## Transit mixer is designed for tunnel work

The first Fiori DB 560T transit mixers will be available for delivery ex works Italy in December.

**EVELOPED** for applications where a simple, reliable and efficient transit mixer is needed, to haul concrete and download it on jobsites such as for example in tunnels, the unit is equipped with a 180° rotating operator station. It means the operator is always facing the direction of travel.

An optional hydraulically-actuated rear shutter seals the drum to prevent loss or spillage of the mix on adverse gradients. This option is a real benefit for slurry and sloppy mortar mixes, that are required for some specialty applications, like shotcrete or revetment mattress pumping.

The unit's design is based on the well established DB460SL model, but with an extended wheel base. The DB 560T retains hydrostatic drive with four speed ranges, all wheel drive and three steering modes for extremely good maneuverability in confined jobsites. It is powered by a low emission Tier III Perkins diesel.

The DB 560T also has a 300L onboard water reservoir and pressure operated cleaning hose system for the operator to adjust water content and for washing down. Carrying capacity is 5.5m<sup>3</sup>, increasing to 5.8m<sup>3</sup> when the optional hydraulic hatch is fitted. A ladder system similar to those used on road mixers is supplied to allow the operator to safely inspect the mix. □

More information: Satch Santilli, 02 9833 6000, 0419 468 580, ssantilli@semcogroup.com.au, www.semcogroup.com.au



## Jump start boosters tackle engines up to 2000kW

Mining strength jump start boosters are now available with the Australian release of US made SOS boosters.

**S** OS make a range of jump starters, but the two largest capacity units are dual 12/24 volts and develop 3200/1600 or 6400/3200 cold cranking amps or CAs. They have the power to deliver 15,550 peak amps.

SOS says they start where other jump start cable makers finish, by having the most powerful on the market. They are suitable for engines developing up to 2000kW.

Top-of-the-range models boast fuse protection, a warning buzzer for polarity inversions, a voltmeter and a voltage selector. Additionally, SOS units are equipped with the toughest clamps in the industry being made from colour coded, heavy-duty bronze and have special wide opening jaws with braided copper straps. Pro Quip which sells them here, is the only company to provide the unique male Caterpillar connectors to plug into the external sockets on many Cat machines.

Certified by NATO, the enhanced jump start cables have a global reputation for starting everything from trucks to battle tanks. The popular 12V model is most frequently used on equipment such as 360kW John Deere diesels which it can start without batteries. The bigger 24V unit is in regular use on everything from trucks to trains.

More information: Pro Quip, 14 London Drive, Bayswater 3153, 03 9761 1110, sales@proquip.com.au, www.proquip.com.au



## Allight launches Rotair compressors

Allight has added Italian-designed and made Rotair compressors to its power solutions range.

**HEY FEATURE** a patented air-oil filtration system, new rotary air screw technology and are designed for minimum noise and maximum air quality by a 40 year old pneumatic and hydraulic equipment maker.

Perkins engine powered, the range includes the MDVN series and the heavy-duty mine-specification MDVS series. Compressors in the MDVN series offer a free air delivery range of 2100 to 7100L/m, or 74 to 251cfm.

"On the MDVS series, a free air delivery range of 9500 to 12,000L/m, or 354 to 424cfm and maximum pressures between 7 and 12bars, result in impressive power," says Allight's director of sales and marketing Paul Sowerby.

All compressors are backed up by a two-year warranty, genuine parts, service and full warranty support.



The new air-oil filtering system patented by Rotair features air screw technology designed to maximise air quality. Allight also supplies its own range of mobile lighting towers, Perkins diesel engines, FG Wilson generators and Godwin pumps.  $\hfill\square$ 

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About the Mercedes-Benz Unimog

The Mercedes-Benz Unimog is a multi-purpose medium truck which features impressive off-road and vocational capabilities. The Australian model range comprises four models, specialising as implement carriers (U400 and U500) and heavy-duty off-road vehicles (U4000 and U5000). Unimogs are designed to perform in a variety of applications, including agriculture, construction, firefighting, railway maintenance, municipal work and military defence, where the Australian Defence Force employs some 2000 Unimogs in its vehicle fleet. Unimog Sales Australia is sole retailer of the Mercedes-Benz Unimog range to both the Australian and New Zealand civilian markets. The company also offers local parts and technical support.

About Cavanagh Cranes & Transport

Cavanagh Cranes & Transport (www.cavanaghcranesandtransport.com) is a Sydney-based company experienced in the crane-operated transport of general freight and plant equipment. Located in Camden, the company operates a fleet of fully equipped heavy vehicles which cater for a variety of requirements, with vehicle lifting capacities ranging from 11 tonnes to 2.5 tonnes at 12.6 metres. Services offered include crane-truck hire as well as container and site shed transport.