

CAT MAGAZINE



The 45,000-year
old tooth

Power steering the new D6K

Hydraulic excavators -
past, present, future

Your Dealer Logo



Your Dealer Logo



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DEAR READER,
Many of us in mining and construction often talk about maximised productivity, cost-of-ownership, and ease of operation, etc. We are all familiar with these terms and we all know that they are critical to profitability.

That's why I'm pleased that the following pages re-visit these words. For example, page 6 reviews the new D6K and describes how the 'power turns' make positioning the dozer faster. Page 6 talks about how the SystemOne™ undercarriage reduces costs via virtually no sprocket wear. And page 16 describes how the new Cat® ejector truck includes an automatic hydraulic tailgate to make load ejection easier.

This is what we really mean when we're talking about productivity, cost and operation ease. And I, for one, am pleased that we say what we mean. I hope you too will be pleased.

Best regards,

Your Signature

Name of the person

And his/her function

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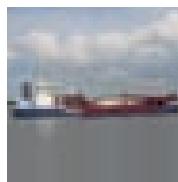
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'POWER TURNS' INCREASE PRODUCTIVITY

Introducing the new Caterpillar® D6K track-type tractor

35 YEARS OF CONTINUOUS IMPROVEMENT

Cat Hydraulic Excavators

THE 45,000-YEAR OLD TOOTH

Cat operator unearths 45,000-year old tooth

PERFECTION IN MINIATURE

How miniature Cat machine replicas look so authentic

DOZER UNDERCARRIAGE ON BOAT

New SystemOne proves so maintenance-free everyone wants it

CAT AROUND THE WORLD

Cat operators and their machines making progress possible

NEW EJECTOR SETS STANDARDS IN RELIABILITY

The new 730 Ejector articulated truck

HOW TO DOUBLE THE LIFE OF YOUR MACHINE

With the Cat Certified Rebuild programme

PEOPLE

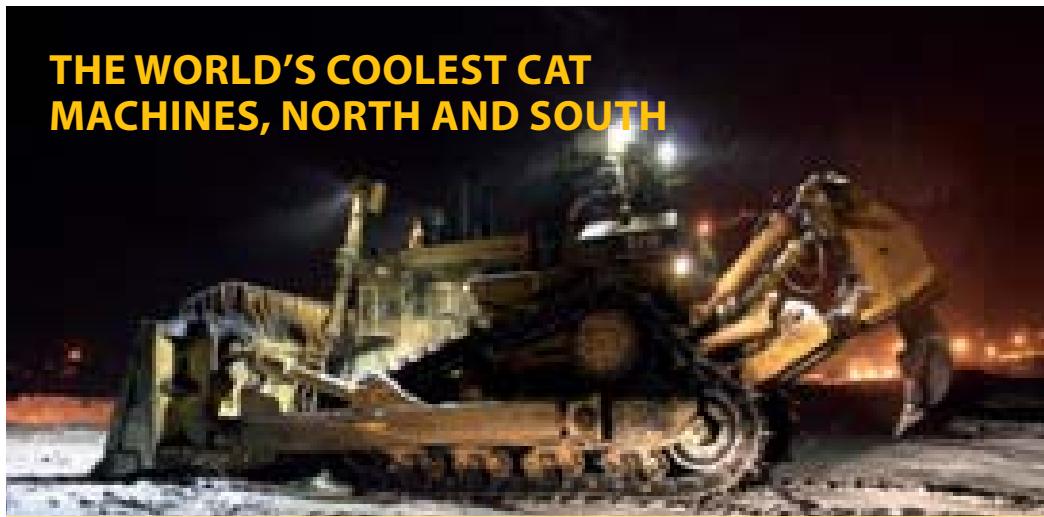
Making machines, with a gentle touch

Above is just a taste of what's in this issue of Cat Magazine – there's plenty more news and views. If you would like to see additional subjects in the next issue contact our publishers on CatMagazine@cat.com.

CAT in brief

CAT in brief

THE WORLD'S COOLEST CAT MACHINES, NORTH AND SOUTH



In the southern snows of Antarctica two new Cat machines bought by the British Antarctic Survey – a 247B multi-terrain loader and a D5 track-type tractor – are set to play vital roles during the building of a new research station on the Brunt Ice Shelf. The D5 will be used to cut roads and runways, and to pull buildings on sledges to new locations, while the 247B, equipped with pallet forks and a snow blower, will keep a ‘blue ice’ runway clear for food and supply flights.

Meanwhile, way above the Arctic Circle, on the island of Spitsbergen, the world’s most northerly Cat machine – a D11R track-type tractor owned by Norwegian construction company Leonhard Nilsen & Sønner AS – is hard at work at the port of Kapp Amsterdam, handling and loading coal mined from the nearby Svea mine. And it’s not alone; two of the company’s D8s are also in action, hauling sleighs across the Spitsbergen glaciers. In winter it’s the only way to get heavy equipment to the Svea mine.



CAT number

1g.

Is the weight of the lightest Caterpillar spare part: an o-ring.

24,700,000g.

Is the weight of the heaviest Caterpillar spare part: a large excavator boom for a 5230 Front Shovel (Mining Excavator).



PEOPLE PULLING POWER

The ancient temples in Egypt’s Valley of the Kings have been pulling in tourists for decades. But recently, two modified Cat lift trucks have also been pulling people at these ancient sites – as the engines of guided tour trains. It’s a wonderful and creative way to use lift trucks.



CAT GOES RACING – WORLDWIDE

Right round the globe Cat sponsorship in different branches of motorsport is helping spread the word about Cat power and reliability. Here are a few examples:



Flying high: one of two Cat C18 powered Ginaf Rally Power trucks, sponsored by Dutch Cat dealer Pon Power BV, takes to the air during practise for the 2007 Dakar Rally.

On track: driven by Dave Blaney, this Bill Davis Racing Toyota has been campaigning in the Nextel Cup series in the USA. Caterpillar is a long-time team sponsor in NASCAR racing.

Desert winner: this Cat-sponsored Ford Performance Racing Team Ford Falcon from Australia took Bahrain by storm, winning the first V8 Supercar race to be held at the Bahrain International Circuit.

19,000 KW FOR RUSSIAN ROSES



Last year the massive Nedelnaya rose garden greenhouse in Russia extended its total growing area to nine hectares. And to ensure it continued the nice warm temperature for year-round growing, Zeppelin Russland (our dealer in Central Russia) delivered four Cat G3520C generators providing a total of 8,000 kW. With further capacity extensions planned, more generators are needed this year, giving a total power supply of 19,000 kW.

THE BEST PROTECTION AND A 12,000 HOUR LIFE

That's exactly what you'll get when you turn to Cat Extended Life Coolant™ (ELC). Cat ELC has been specially developed for Caterpillar diesel engine cooling systems and meets the Caterpillar specification EC-1, the commercial minimum specification for extended drain intervals. And it's the only EC-1 compliant coolant approved to be drained in Cat engines at 12,000 hours; that's twice the coolant draining interval of any competitor's "Extended Life" product.



'Power turns' increase productivity

The new Caterpillar D6K track-type tractor is now ready for shipment and according to product specialist Philippe Christen it is set to give operators a considerable advantage – from first cut to finished grade.

One of the biggest features of the new D6K is that it can perform "power turns": turns with power on both tracks and counter-rotate. "With clutch and brake powertrains you basically had to turn off the inner track and steer into position with the other one, says Philippe. "Using both tracks is easier, safer and increases accuracy. You can also do on-the-go direction changes."

"This makes it much easier to steer and manoeuvre very accurately, and makes the operator's life much easier!"

It's all down to the new hydrostatic powertrain, which can divert infinitely variable amounts of power to the individual tracks."

Matching machine travel automatically

The hydrostatic powertrain is electronically controlled. This means it can automatically match machine travel speed to the combined drive train and implement loads. This results in maximum travel speed up to the speed selected by the operator. "You no longer need to choose one of the preset speeds," says Philippe. "Which is great because sometimes, for example, first gear is too slow and second gear too fast. Now the operator chooses the best ground speed for the job conditions – anything from zero to ten kilometres per hour. This means faster cycle times and maximum productivity."

As simple as driving up and down

"Things get really easy when you plug in an AccuGrade® system. That's because the D6K's electro-hydraulic architecture is perfect for AccuGrade's electronic installation. All blade commands are instantaneously sent directly to the relevant valves. Making operation as easy as just driving up and down."

SystemOne as standard

The D6K comes with the SystemOne undercarriage as standard. Customer reactions to this revolutionary system prove that the cost savings due to extended wear life and the excellent reliability really make a difference. SystemOne has been proven to last 35 percent longer than conventional undercarriages. Tests show that it outperforms sealed and lubricated



heavy-duty track across a wide range of applications and operating conditions. That's because SystemOne components are designed to work together within as a system, ensuring balanced wear and longer life.

More power than anything else

For maximum productivity in tough applications, the D6K is equipped with the Cat C6.6 ACERT™ technology engine, providing 125 horsepower at 2100 RPM, which is the highest in the industry in its size class.

"Of course, there are plenty more improvements," says Philippe. "For example, there's the oscillating track roller frame, which reduces ground shock, increases machine stability and provides a smoother ride – reducing operator fatigue. There's also the electronically controlled fuel delivery, resulting in outstanding lugging performance and lower emissions. And the advanced operator comfort features such as electro-hydraulic controls mounted on the seat. The reduced noise levels, excellent blade visibility and new, spacious cab. It all adds up to a truly best-in-class machine. ■



D6K – new model	
Engine	Cat C6.6 ACERT
Fuel injection	Common rail
Net power	93.2 kW (125 hp)
Number of cylinders	6
Rated speed	2100 rpm
Operating weight	XL version – 12,886 kg LGP version – 13,467 kg

"It's definitely a smoother ride. And it's easier to operate."

Says Thierry Augé, operator for the French Earthworks company Carron

"I feel much safer on slopes. I used to work with another dozer and I literally had to cling to my seat. The D6K's seat and its integrated controls is much more comfortable."

Thierry, has been working with a D6K now for almost 12 months and he reports that the power turns really help position the machine so much more quickly.

"It also has better visibility at the front too. And better control - the serrated roller for the speed and the seat-mounted controls are great."

What did he think of the variable speed control?

"When there's a specific job to be done, forward and reverse speeds can be set separately. Adjustments can even be made during the operation. This functionality is very useful – and it certainly helps increase productivity."



Seat-mounted controls and the variable speed control makes the D6K easier to use, and ultimately much more productive.

35 YEARS OF CONTINUOUS INNOVATION



CAT HYDRAULIC EXCAVATORS

1972

1986

1992

The first ever Cat hydraulic excavator

After five years of intensive research and several thousand hours of field-testing, the first ever Cat hydraulic excavator was launched from the Aurora plant in the United States. Two years later the first machine came off the Gosselies, Belgium assembly line. The Cat 225 was so well designed it immediately became the industry standard in the 25-tonne class, and remained in Caterpillar's product line for an incredible 20 years.

- 125bhp (breakhorsepower)
- 3165cc diesel engine (5.2 litres)
- Digging to 21ft (6.4m) with an 8ft (2.44m) stick and 3ft (0.9m) heaped capacity bucket
- Hydraulic pressure system at 3600psi (248 bar)

A new era of going global

In 1986 Caterpillar and Mitsubishi Heavy Industries agreed to expand their joint venture to include excavators with a new design centre located in Japan.

The next great breakthrough:

the 300-family

Redefining reliability and productivity standards, the 300 family was the result of a truly global marketing and technical research programme. One that included idea exchange meetings involving customers and dealers from all over the world. The 300-family was based on a modular design for easier manufacturing and assembly. But it also incorporated a new concept of different machine configurations for different applications. Several different booms, sticks, and hydraulic circuits were part of the 300-family so it could do more than just dig with a bucket. Versatility was the key to this winning product.

THE PAST

Back in the 1960s, before hydraulic technology, excavators used cables to swing the housing, raise/lower the boom, and curl/uncurl the bucket. All this was done in open-air, from a pedestal seat with no protection to the loud noise or bad weather. In addition, the mechanical gauges were limited to oil pressure, temperature, and electrical power.



JOUS IMPROVEMENT



1995

1st wheeled excavator

In 1992 the Cat European Excavator Design Centre was established via a strategic alliance among three German specialists and Caterpillar. The aim was to create Cat's first wheeled excavator: the M300. Following its 1995 introduction, press and customers noted the M300's exceptional VA-Boom kinematics, the flexible undercarriage concept and the closed Centre Load-Sensing Hydraulic. Within 11 years 15,000 Cat M300s were sold worldwide, and the European Excavator Design Centre is today a full member of the Cat family.

1998

The emergence of the minis

Caterpillar introduced its first mini excavator in the late 90s in answer to the explosive growth in roadside cable laying. Since then the range has grown to 10 models covering a weight range from 1.5 to 9 tonnes. Continual improvements have included the Compact Radius styling on models from 3 tonnes and above, and the high durability frame and superior rear door serviceability of the 301.6 and 302.5 models.

2006

The D-series

Fourteen years after the introduction of the first 300-series machine, the fourth generation of the 300-family excavators were introduced in 2006: the D-series. One of the main drivers of the new design was of course to meet the regulations for emission and sound, which were met with the introduction of the ACERT Technology in the Caterpillar C7 and C9 engines. The D-series also came with Power Management to allow customers to set the machine for different applications, from light duty to high production, optimizing either productivity or fuel efficiency. A new operator station was also introduced, and today all Caterpillar excavators from 315D through 385D have the same cab, so that operators can easily change from one machine to another.

THE PRESENT

Today, the operator rides on a comfortable air suspension seat in a controlled HVAC environment. Hydraulic and electronic pilot controls and electronic instrument clusters make the man and machine more productive with variable hydraulics, integrated power controls, and optional modes of operation matching power supply to demand. Reduced weight structures and improved kinematics help improve fuel economy, while extended service intervals and easier daily maintenance further reduce costs of ownership.



THE FUTURE?

Caterpillar is committed to continually improve machine performance and productivity – giving Cat owners a real advantage. Some of the next generation machines may include:

- Sophisticated climate-control systems for even better temperature, humidity, and air-quality.
- "Smart" glass that, in addition to being self-tinting, could offer improved water-repellency.
- 360° visibility, with assisted and unassisted solutions.
- Active noise and vibration suppression.
- Zero-exhaust emissions may also, one day, become reality.

Cat operator unearths 45,000-year old tooth

"It was just before lunch. A day just like any other at the quarry. My Cat loader bucket was almost full, and as I went in one last time I suddenly saw something round and unusually white rising out of the grey sedimentary gravel. I don't know how but I realised that it was a mammoth tusk," says Edgar Wirz, the Swiss wheel loader operator describing his astonishing discovery.

The ivory tusk had remained preserved under the almost 15 metres of rock for 45,000 years. "If I had accelerated with the wheel loader to get one last fill, then the two-metre long tooth would have been lost forever," continued Edgar, who has been operating wheel loaders for more than 35 years. "An inexperienced operator may have missed this tusk." But thanks to Edgar's experienced eye and the Cat machine's optimised visibility this ancient relic is now safe and secure at a nearby archaeological centre.

Local celebrity

When the discovery became public, Edgar also became an overnight celebrity: "Local journalists interviewed me, my picture appeared in newspapers, and I was even on the television: which was a great source of amusement to my four-year old grand daughter." But Edgar wasn't

keen on all this attention and is glad that it will all soon be over. "In a year's time, I'm sure it will all be over. Until then I'll just stick to driving my Cat 980G, which I enjoy very much and see it as more of a hobby than work."

Edgar's Cat 980 is ten years old and has 13,000 hours on the clock, and moves about 150,000 cubic metres of gravel per year. The company he works for, Lütscher AG, recently bought a Cat 980H, after (of course) it had been test driven by Edgar. ■



At two metres in length and 20 kilograms in weight the tooth was a massive find.





Perfection in miniature

We've all admired them: miniature Cat machine replicas that fit into the palm of your hand. Most people can't resist rolling them along a desk, lifting the boom and changing the work tools. And everyone is amazed at how detailed and accurate they are. Cat Magazine spoke to Scott Stern, the man behind Norscot®, official scale model licensee for Caterpillar, and asked how he gets them to look so real.

"It's because we use the same design files that were used to make the real machine," says Scott. "As soon as Caterpillar has designed, tested and released a new machine and a scale model replica has been requested, they send us the original design files and we make the exact same thing – but at a fraction of the size."

In addition to the design files, Caterpillar also provides close-up photos of all the finished machine's details, inside and outside the cab. Nothing is left to chance – even the tyre manufacturer sends detailed prints of the tread pattern – so that the scale model is as authentic as possible.

Rigorous quality control

Once the design data is gathered, Norscot's design engineers create a 3D resin model, which is then inspected by Caterpillar engineers. Upon approval, die casts are made, which must also be approved by Caterpillar, and after that a fully painted and decorated prototype is assembled. Only after this has been thoroughly inspected and tested – by the same engineers that built the real machine – can production go ahead.

Why are people so fascinated?

"I think it's because most people often see these huge machines at work by the roadside, but never get close to them," says Scott. "The scale model is their chance to see what's so special. Everyone is then fascinated by all the different moving parts, articulation and details. It really becomes quite an interactive experience."

A wide variety of Caterpillar machines are available as Norscot scale models, which range in price from just two Euros to over a hundred. And all have moving parts. The D10 dozer, for example, features 80 separate metal track shoes and according to Scott: "When you roll it on the desk it sounds exactly like the real thing – only a bit quieter."

What's the most popular?

"It changes each year. Currently it's the Cat 994 wheel loader. I'm expecting our new range of pre-1960 models will become very popular," says Scott. "But really, it's not about popularity, because I believe that every model ever made is cherished by someone, somewhere."

You can see the full range of Caterpillar scale model replicas from Norscot at www.norscot.com ■





DOZER UNDERCARRIAGE ON BOAT!

Most readers know that Caterpillar's SystemOne undercarriage for D6 dozers lasts significantly longer than conventional undercarriages. Tests have shown that it can reduce undercarriage maintenance costs by 30 to 70 percent. But did you know that SystemOne was recently installed on a dredging boat in the Netherlands? Arie Westenbrink, from PON - our Dutch dealer - explains.

"The system lasts so much longer because sprocket wear is virtually eliminated."

"The boat in question is a 90-metre long dredger that scoops sand from the bottom of the North Sea – the sand is later sold to the construction industry," says Arie. "The SystemOne undercarriage is actually part of the high-speed unloading system that propels the sand onto the shore at 3,000 tonnes an hour." It's a unique application; this is the only dredger in the world that has such a high-speed, self-unloading system. It's also a particularly demanding application, since the ship is at work practically all the time, in all types of weather conditions.

Why was the SystemOne chosen?

"We used to use ordinary D4 rotating bushing chains," says Bert den Herder, owner of the dredger. "But I was disappointed with them – they didn't last as long as we expected. Then Arie showed me a model of the new SystemOne concept."

It was clear that the straight links were going to enhance track guiding and the rotating bushings (which incorporate lifetime-sealed cartridge joints) would eliminate the need for bushing turns. With no movement between sprocket and bushing there is virtually no sprocket wear – and no replacement costs.

Is Bert happy with SystemOne?

"Absolutely," says the ship's owner. "We normally had to change the sprockets every 100 hours, but we've had SystemOne running for a lot longer than that, and there is no sign of any wear at all."

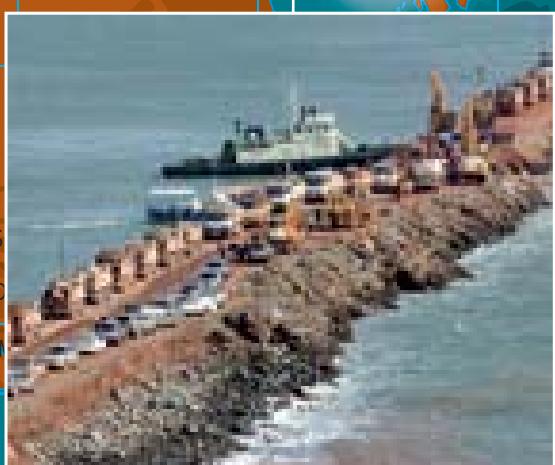
Caterpillar is not new to marine applications, its engines are used in boats all over the world. In fact, Bert's boat uses a total of seven Caterpillar engines – for propulsion, ship manoeuvring, dredging, unloading, and electrical power supply. ■



CAT AROUND THE WORLD

MONGOLIA

INA



N. KOREA
S. KOREA
YELLOW SEA

SEA OF JAPAN
JAPAN

SEA OF OKHOTSK

BERING SEA

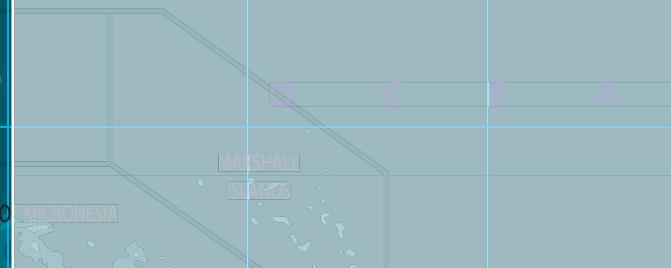


Gunsan, South Korea:

Cat machines help complete the world's longest earthen seawall

Thirty-four Cat machines were called on to help complete the 33-kilometre Saemangeum seawall, many of them working day and night for 45 days to finish the project. The fleet used to finish the job included off-highway trucks, hydraulic excavators, tractors, and soil compactors,

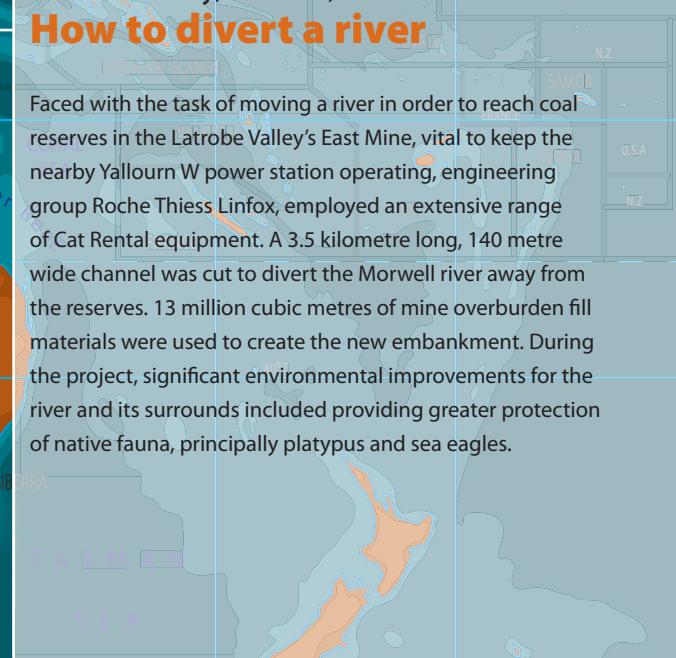
The project was launched to convert barren tidal flats along South Korea's west coast into new farmland and a freshwater reservoir.

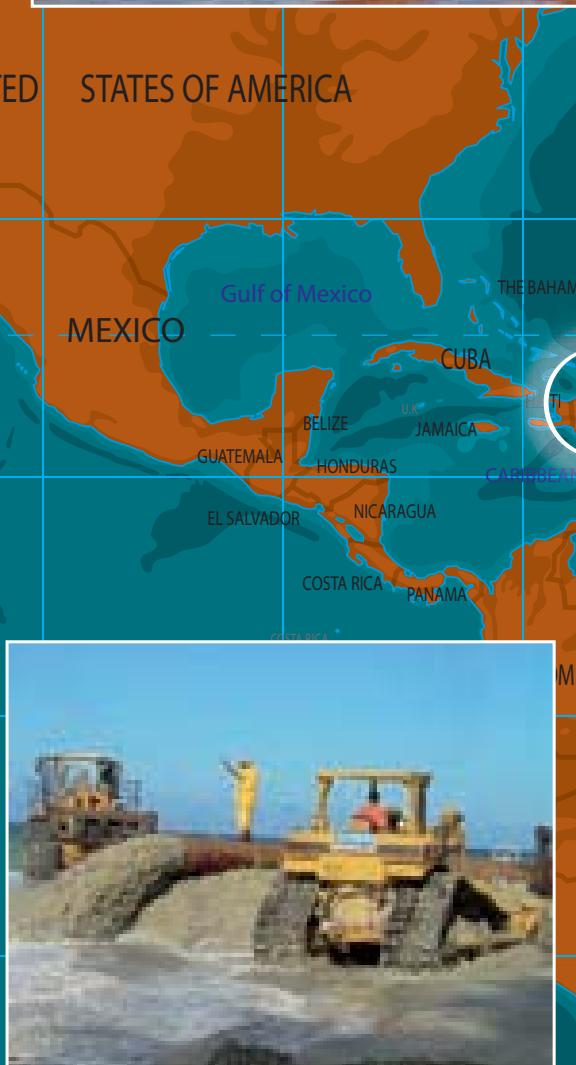


Latrobe Valley, Victoria, Australia:

How to divert a river

Faced with the task of moving a river in order to reach coal reserves in the Latrobe Valley's East Mine, vital to keep the nearby Yallourn W power station operating, engineering group Roche Thiess Linfox, employed an extensive range of Cat Rental equipment. A 3.5 kilometre long, 140 metre wide channel was cut to divert the Morwell river away from the reserves. 13 million cubic metres of mine overburden fill materials were used to create the new embankment. During the project, significant environmental improvements for the river and its surrounds included providing greater protection of native fauna, principally platypus and sea eagles.





NEW EJECTOR SETS STANDARDS IN RELIABILITY

Recently, Caterpillar introduced its new 730 Ejector articulated truck, which includes innovative load-ejection design, a Cat engine with ACERT Technology and all the proven features of the 700-family. Cat Magazine spoke with some of the people behind this latest offering and asked what this release means to customers.

Where should ejector trucks be used?

"In lots of places - certainly in tunnels, for obvious reasons. But also anywhere near bridges or power lines or any other overhead obstructions," says Anthony Pollock, product specialist. "Ejectors are also perfect for soft underfoot conditions and can even be used on side slopes: raising a tipper in these places could be an issue. In fact you can benefit from an ejector almost anywhere, because it can spread loads 'on the move'. Depending on the truck's speed you can vary the depth of spread, and in some cases this releases a dozer for other work elsewhere on the site. One customer uses ejectors to push chalk into a hopper in controlled amounts, this eliminates hopper jamming – something that often happened with a tipper machine."

How does the 730 set new standards?

"Because the body is not simply an add-on. The truck and the body have been 100% designed by Caterpillar. Unlike other systems (which take a standard tipper machine and add on a third-party ejector body) our ejector trucks are integrated in terms of structures, hydraulics and machine performance," says Anthony. "For example, we have incorporated an automatic hydraulic tail gate, as standard, to help manage load ejection."

Why has it taken so long?

"Well this isn't our first ejector truck," says Bill Pack, engineering supervisor. "We pioneered the ejector concept in 1999 on the D400E Series II. This was well-received by customers so we carried the concept forward and released the 740 Ejector in 2002. Since then, we have taken that time to learn as much as possible from field experience. That's why the 730 has taken until now to be released – we wanted to be certain that it would perform as reliably as our tippers."

Will ejectors eventually replace tippers?

"I don't think so," says Bob Todd, project specialist. "Tipper machines are still well suited for many general operations,

and are recommended for large rocks. However, with increasing site restrictions, some forward thinking customers are commenting that ejectors may in future be requested for certain job contracts – especially as the number of machines increases in the marketplace." ■

Engine	Cat C11 ACERT
Net power	237 kW (317 hp)
Transmission	6F/1R, electronic autoshift
Rated payload	28.1 tonnes
Body capacity (heaped SAE 2:1)	16.9 m ³
Operating weight (empty)	25,550 kg
Top travel speed	55.3 km/h



Ideal for spreading material 'on the go'; and because the body is not raised it is also perfect for soft underfoot conditions and can even be used on side slopes.



How to double the lifetime of your machine

Most readers have heard of the Cat Certified Rebuild (CCR) programme: an increasingly popular service, in which Cat dealers completely recondition Cat machines. The machines are returned to owners with the hour meter on zero, a new full warranty, and a new, second life expectancy that's equal to the first! But did you know that all that is possible for as little as half the price of an equivalent new machine? Take a look at what's involved.

How a rebuild is made

- Machines are rebuilt to exacting Caterpillar standards using only genuine Caterpillar parts
- Engine and driveline, from the torque converter and transmission to the final drive and brakes, are completely rebuilt
- Additional parts replaced can include gaskets, seals, bearings and bushes; brake linings; hydraulic and radiator hoses; wiring assemblies; and cab instruments including gauges, seat and step treads
- Around 7,000 new and reconditioned parts will be used during a rebuild of a Cat 988F wheel loader, for example
- Critical engineering updates ensure that all components meet the latest specification.
- A new serial number and a "like-new" machine warranty is given with favourable "near new" finance terms through Cat Finance.

Just for big machines?

No - actually, there are three CCR services:

- Certified Power Train - Complete power train overhaul targeted at mid-size and large machines
- Full Certified Rebuild - as described in this article
- Certified Engine Rebuild - Complete overhaul of your commercial engine (this applies to 3500, 3600 engines, and select 3400 engines).

OWNER-OPERATORS LIKE THE IDEA WITH 568 CAT REBUILDS LAST YEAR - WORLDWIDE

"You know it's the same machine, but it doesn't feel like it. It's as good as new. Pon Equipment, the Dutch Caterpillar dealer, replaced everything that didn't work, and refurbished everything else... including all the buttons, switches and levers in the cab." *Tom Dijkstra of ENCI, a Dutch cement company*

"With the rebuild that Zeppelin did we practically got a new machine – and for a very good price. We also did our bit for the environment, not only by recycling but also because the engine is back to its original fuel efficiency and minimised emissions." *Jörg Schwinger, Schwinger Granit, in Germany*

"We knew our 375 machines inside-out and knew how to repair them ourselves. This is especially useful, for example, when you are on a pontoon in the middle of a lake. That was one of the reasons we went for a re-build rather than new." *Jan van Tunen, director of a major rental company*





Patricia Aquilano

Making machines with a gentle touch

Patricia Aquilano is one of just fifty women in the 3,200-strong workforce at Caterpillar's Gosselies factory in Belgium. With more than seven years experience in assembling the upper frames of excavators, Cat Magazine asked her what it is like to help make these massive yellow machines.

What is a typical day for you?

I clock-in at exactly 6.42 am. Every morning we start with a workload briefing meeting. This is where we find out what machines have been ordered by customers and therefore what machines we have to assemble that day. On Monday mornings we also have a safety meeting, where we remind ourselves of the safety regulations and of any new initiatives.

There are two of us working on the first stage of upper frame assembly. The frame is placed by crane in the work area and we install the electrical harnesses and mark

out the frame with reference numbers for people further down the production line.

The emphasis is on good quality assembly – rather than speed – we usually assemble three frames per shift.

What is the most difficult task?

Well, I've been doing the job for seven years so I don't find too many difficulties. But when I first started I found that the main electrical harness – a cable eight centimetres thick – was a bit too rigid and was difficult to position. So Caterpillar installed a specially designed

"Surprisingly, the main driving force is not to make lots of machines – but to make them to a good quality standard."

oven that heats the cables to 70 degrees centigrade. This makes them much more supple and easier to handle.

What do you enjoy most?

The freedom of organising my work. Everyone at the factory is encouraged to manage their own time and plan their work. Supervisors trust us to solve problems ourselves, although they are always available to give advice.

I also enjoy having most of my afternoons free. I work fixed morning shifts so I get to spend a lot of time with my five-year-old son 'Ilario'.

What do you feel when you see a Cat machine working?

I feel very proud. I help make machines that build roads, houses and other things that people need. Whenever we see one, my little boy shouts, "Mama, Mama is making those".

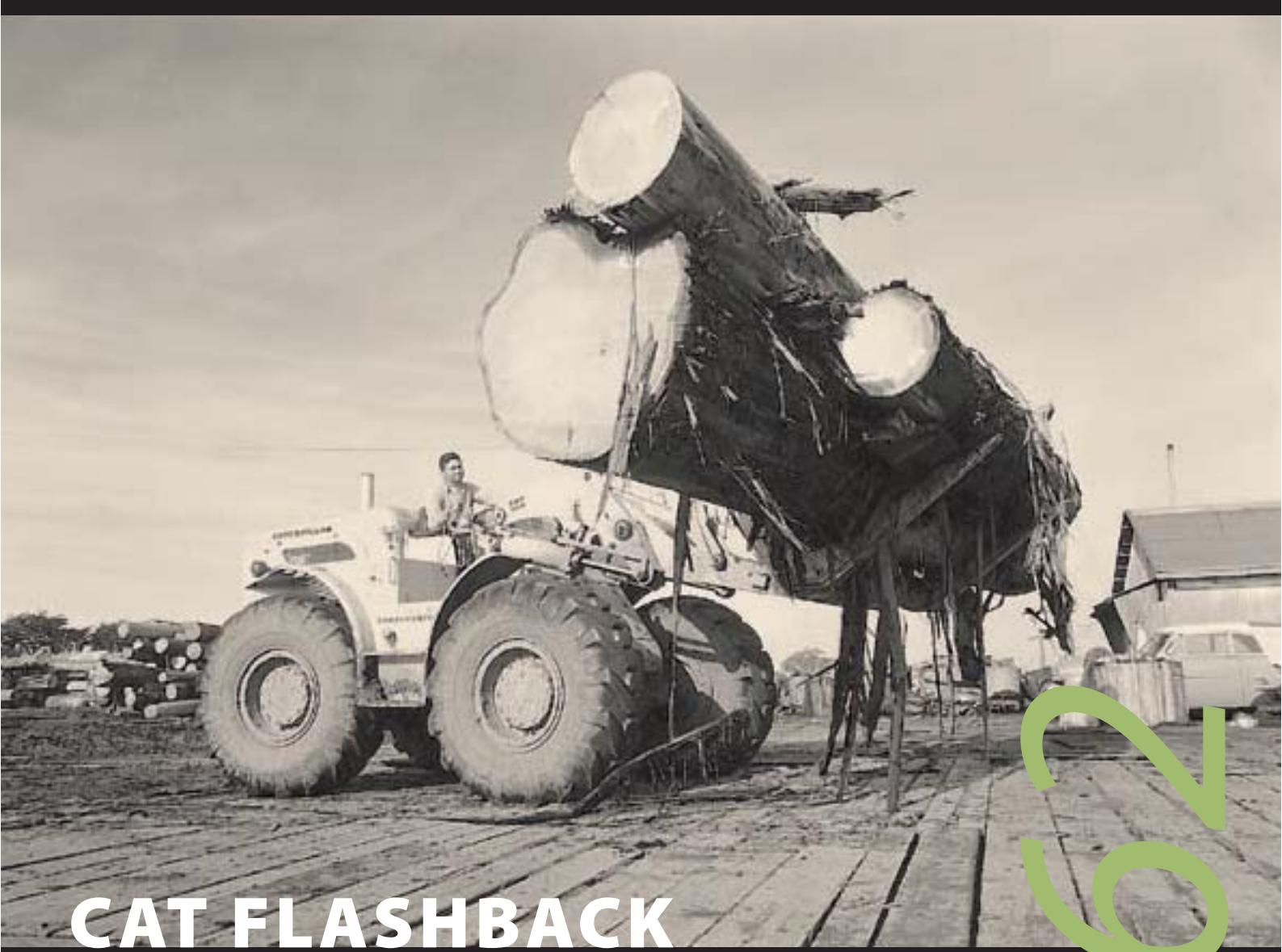
So he is a Cat fan too?

Yes, absolutely. I recently took home a company DVD that explains the Caterpillar commitment to quality and he preferred watching that over cartoons.

Finally, have you ever ridden in a Cat machine?

Yes, once. I usually only get near the upper frames, but last month the supervisor at the end of the production line invited me to sit in a finished machine. It was great – so big, and so powerful. ■





CAT FLASHBACK

One of the first ever Cat wheel loaders: the 966. Notice the name 'TRAXCAVATOR' on the machine, this was quickly changed to simply 'wheel loader', since some people thought 'traxcavator' suggested a track-type machine.

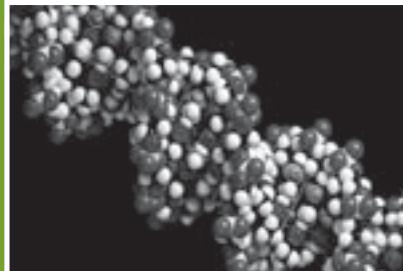
Photo courtesy of Caterpillar Inc. Corporate Archives.

Other notable events of 1962

Three men escape from the world's most feared prison – Alcatraz. Nobody had ever escaped from the island prison before, or afterwards.



The secret of DNA is unlocked - the "building block of all life" is identified as a double helix, and a new understanding of human, animal and plant life opens up.



The death of screen icon Marilyn Monroe was ruled as an overdose of sleeping pills. This actress sauntered through life as the most delectable sex symbol of the century.



1962



MOVE MORE MAKE MORE

Our **Cat® H-Series Wheel Loaders** give you a great return on your investment. The new load-sensing hydraulic system generates up to 20% increased lift force to move more material. When combined with the new Stage IIIA-compliant ACERT™ engine, this delivers faster cycle times and up to 5% more fuel efficiency than the previous model. The H-Series also benefits from easier and faster maintenance and outstanding service support.

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TODAY'S WORK. TOMORROW'S WORLD.™

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