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GOOD VIBRATIONS
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THE WAY**
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Volvo Construction Equipment



Customer satisfaction is our motto

Volvo Construction Equipment's dealers are the mainstay of our business and an important bridge between the company and the customers who buy and operate our machines. No matter how big or how small, Volvo CE dealerships are there to provide our customers with advice and support throughout, from the process of choosing and purchasing the right machine for their needs to making sure it receives the service and care required for the duration of its working life.

Dealers working with family-run artisanal businesses, such as the Laplace marble quarries in France (p.24) and their two Volvo wheel loaders, are as invested in their customers as those supplying larger firms such as the US demolition contractors FERMA Corporation (p.10). Earlier in the year, FERMA took delivery of 20 Volvo EC350EL high-reach excavators specially adapted by Volvo CE to cater for the company's unique requirements. The entire fleet was also custom-painted by us in FERMA's green and white livery (see photo above).

If proof were needed about the thought that Volvo CE and its dealers puts into keeping our customers satisfied, then look no further than page 21 and our article about Volvo CE's mobile service stations in China. These are being based at job sites in remote areas, where timely access to parts and maintenance makes all the difference to maintaining productivity. And our machine performance and after-sales service keeps customers coming back to their dealers for more Volvo machines as their businesses grow – Poland's UNIKOST is a case in point (p.16), a family-run firm which has transformed into one of the nation's largest producers of mushrooms.

Supporting more than 200 Volvo CE dealerships across the world in our aim to increase customer satisfaction is Volvo CE's Elsie De Nys, Global and EMEA Director of Dealer Development, who is interviewed in our Inside Track featured on page 6. See the *Spirit* website and apps for the video of her interview and the other video reports complementing the print articles in this issue. 📺



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Volvo EC350EL owned and operated by US demolition company FERMA Corporation © Frank Rogozienski

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DEALER DEVELOPMENT

Elsie De Nys is a powerful force in Volvo CE's dealer development →

by Cathy Smith

Her friends joke that she runs on long-life batteries – a reference to her high level of energy and preference for multitasking. Elsie De Nys admits she does have a lot of energy, whether she is driving her tractor to maintain the land around her home in the Flemish countryside, carrying out renovations in her house, or hosting a global teleconference in her role as Global and EMEA Director of Dealer Development.

Relaxation comes in the form of tai chi and yoga courses organized by the company, traveling, cooking, enjoying nature or hard physical work at home – an antidote to her office job – with responsibility for two horses, a dog, two cats and chickens in the company of her five-year-old daughter: “An excellent companion and helper,” says De Nys.

Although she studied law, De Nys has always been attracted to the world of business. Her parents ran an electrical appliances company on the Belgian coast, so she says that growing up she had the commercial and customer-minded approach “spoon-fed” to her and the importance of customer centricity has never left her. She describes it as a *fil rouge* – common thread – which has run through her career since she joined the Volvo Group in 2002.

At Volvo Trucks in Sweden, De Nys worked on a project to develop a sales tool for dealers in Europe. She later developed websites for Volvo Trucks in the Benelux, while encouraging dealers to increase their own Internet presence to better inform customers. She went on to manage international trade shows for Renault Trucks in France.

TESTING TIMES

What she describes as a “once-in-a-lifetime experience” came in 2009 with a chance to lead 12 Renault trucks in a grueling four-and-a-half month road expedition crossing 21 countries from North Cape in Norway to the Cape of Good Hope in South Africa. Despite relishing the challenge, spending day after day on the road brought with it real highs and lows. Faced with extreme temperatures, halted by flat tires, tough border-crossings, stuck on flooded dirt roads and stranded during breakdowns, the team nevertheless reached their destination. As well as being an adventure, De Nys says it gave her something of an insight into the tough conditions many Volvo CE customers encounter on a daily basis.

PARTNERSHIP IS THE BACKBONE OF DEALER DEVELOPMENT

Before setting off, De Nys qualified for her own truck driver's license.

“Learning to drive a truck meant getting the feel of the product you are selling and understanding the needs of the customer and their conditions. It is not so easy to do that with Volvo CE products – I do not have one in my garden, although it is on my wish list,” she jokes.

So how to top an experience like that? Well, look for another challenge, of course. This time it meant a move from trucks, via Volvo Financial Services, to construction equipment. Quite simply because “the machines are awesome” laughs Elsie.

“Maybe it sounds a bit cheesy, but I've always seen the yellow machines as fantastic – powerful and impressive – and I hoped my career path would lead me to Volvo CE one day.”

And her positions within Volvo CE – initially, heading up brand management and marketing communications for Europe and now global and region EMEA dealer development – have kept her firmly in touch with her customer-centric principles. Working in brand management meant De Nys was kept on the move giving brand workshops to dealer management teams in the company's EMEA region. It was the discussions during those sessions that sparked her interest in dealer development.

Seeing the potential for giving greater support to dealers around the world since starting in her current position, De Nys has worked to develop the Partnership Development Program, which aims to bring manufacturer and dealer closer together. This also involved the creation of dealer operating standards, aimed at increasing customer satisfaction by helping dealers improve their customer approach and consistency of service delivery in the more than 200 Volvo CE dealerships across the globe.

“For the dealer it is clear we are there to support them and everything should lead back to increased customer satisfaction,” explains De Nys.

“It could simply be that a dealer is using outdated marketing materials – a small thing but one which has an impact on the customer,” she points out. “Or it could be a parts warehouse where we see issues in the way it is being run – it could be made to be more efficient. We provide more guidelines and help to make it better.” Partnership, she says, is the backbone of dealer development within the

EVERYTHING SHOULD LEAD BACK TO CUSTOMER SATISFACTION

company, so it is not only about helping dealers improve: Volvo CE also assesses its own performance and works at continuously improving it.

PROBLEM SOLVED

“Analyzing our participation in the marketplace helps us to understand where we as a major international company developing, manufacturing and marketing equipment for construction and related industries might be lagging behind. Maybe we have a product availability or product specification issue. The aim is to improve our offering to our customers.”

De Nys says dealers have welcomed this initiative – “they want to be part of the discussion” – and she says she gets plenty of positive feedback, particularly when everyone realizes that giving customers a better service is inevitably good for repeat business. “You do not set up a partnership from one day to another; it takes time before people see this as a mutual relationship with both sides needing to put energy and time into it. We want to grow together with our dealer-partners.”

These strategic quarterly face-to-face meetings are an additional opportunity for dealers to let the manufacturer

know where they need extra support. De Nys says both Volvo CE and the dealers are eager to prepare to cater for customers' changing support needs.

“Customers are demanding more advanced services from us so how are we going to prepare the dealers for that? Some dealers are already piloting these schemes, but others would appreciate more guidance and training as well as more information about what to expect in the future. We share the ambition of our dealers to become a true solution provider for our customers.”

Twice a year, De Nys hosts a dealer development council – a think-tank where eight dealers from different markets sit around the table and discuss the issues which are keeping them awake at night. She calls this a great opportunity to keep a step ahead of the competition. Volvo CE, she stresses, has to be fast and agile – not always as easy as it may sound for a big company.

De Nys describes herself and her dealer development team as being passionate, energetic and engaged in what they do. A high level of mutual trust and open dialogue combined with a sense of fun, she maintains, make for a productive mix. ☐

Visit the *Spirit* website or download the *Spirit* app to see the video interview



CLEARING THE WAY AHEAD

Volvo CE is making extensive modifications to a fleet of excavators for a California-based demolition company

by Julian Gonzalez

As the sun slowly rises to the east of Sunnyvale, California, the still, dry air ignites with an escalating heat that is matched only by the city's reputation for being a hotbed of high-tech giants such as Apple, Yahoo, Google and Microsoft. All are based, or have offices, in the Silicon Valley community.

Located 40 miles (64km) south of San Francisco, Sunnyvale's ambition to attract more high-tech businesses is unwavering. To make room for further growth, FERMA Corporation, a national leader in the demolition industry, is using its own technologically advanced machinery, including a fleet of Volvo EC350EL excavators, to help clear the way for the city's future.

In 1963, four brothers and a partner started FERMA as a site-clearing business. Over the years, it evolved into a pioneering engineering and demolition company that today knocks down everything from high-rise structures to small business buildings such as the one currently being demolished by two EC350EL machines on the future site of a Google parking lot. →

Photographs by Frank Rogozienski



FERMA's specialty is high-reach excavators



FERMA Corp president Marc Ferrari

“Our specialty is high-reach excavators – basically, the extremes of what a machine can reach in all directions,” says Marc Ferrari, president of FERMA Corp. “Right now, in North America, we have the highest-reaching demolition machine, just shy of 200 feet [60.96m],” he explains. “We currently have seven high-reach machines and some of those are modified for super depth. We also have a machine which currently extends to 110 feet [33.53m] below water with a variety of tools to handle a wide scope of underwater work.”

VISION

Similar to its hi-tech neighbors, FERMA is focused on staying ahead of the competition with a vision that makes it difficult for the rest of the industry to keep pace. Its mantra to create unparalleled value by using the latest in technology and machinery is the reason why Ferrari recently switched FERMA's patronage to Volvo CE. Its EC350EL carries a D13 Tier 4 Final engine, a new electrohydraulic control system and Volvo CE's unique ECO mode that can deliver up to 9% greater fuel efficiency, something that Ferrari says was hard to believe at first.

“We had heard outlandish claims from other brands, but this was actually true. They're running on about eight US gallons [30.3l] per hour and because we run mostly tools, we have them running at higher RPMs for longer than most other applications. We're always at the high end, or maxed, based on the type of work we do and the tools we use,” he explains. “Because we're doing demolition, there's always activity, so we achieve more than 90% working utilization while the engine is running versus the industry standard of around 60-75%. These machines, when they're on, they're working.”

FERMA PUSHES THE LIMITS WITH ITS NOVEL IDEAS

The first of 20 Volvo EC350ELs arrived in August 2015 to join the EC480E high-reach excavator Ferrari already runs for FERMA. Volvo CE dealer Dan McCausland admits it was not easy persuading the demolition innovator that FERMA's future was with Volvo CE.

“In the United States, Volvo CE has only been marketing excavators since around 2000,” says McCausland. “The machines have come a long way over the last few years with Tier 4 Final engine technology and their ability to run multiple attachments, such as a concrete processor, a shear, a hydraulic breaker and a bucket and thumb. Now, the operator can program all of the attachment hydraulic pressures and different flow settings from the monitor in the cab.”

Once convinced, Ferrari worked closely with local dealer VCES to instruct FERMA operators who were not familiar with the brand. “We've had a great deal of help from Volvo CE and VCES getting our operators comfortable with the Volvos, and dialing in the controls so they were similar to what they have been used to,” he says.

McCausland adds that Volvo CE is a big advocate of the demolition industry both in its support of the National Demolition Association (NDA) and in supplying machines specific to the demolition industry.

As the third-generation family member to lead the company, Ferrari's innovative ideas, such as the heavy-duty bucket-and-thumb attachment he designed that can grasp objects as small as a one-inch (25.4mm) pipe, have helped FERMA's annual gross revenue skyrocket from \$40 million (c. €35 million) in 2012 to \$70 million (c. €62 million) in 2014.

Just as impressive, Ferrari has used his innovations and his Volvo EC350EL fleet to recycle an average of 98.5% of the →



Making way for a parking lot



FERMA's fleet of Volvo EC350EL excavators have been specially modified

material demolished by FERMA at every site, a statistic that is practically unheard of in the demolition industry.

"We're pushing the limits. We started on-site recycling back in 1983. We have played a big role in crusher technology and how we use it in the demolition sector. We also run mobile shredders, wood chippers and material sorters. With all of those technologies, we've basically pushed the limits in mechanical recycling to benefit the environment and our company goals. Our equipment might look like ordinary machines but they have special tweaks and modifications made for our needs."

WE'VE HAD A LOT OF HELP FROM VOLVO CE

ALL CHANGE

And just as FERMA pushes the limits with its novel ideas, Volvo CE has shown it can do the same by making things easier and more efficient for the Bay Area company.

"The EC350EL has two cameras and heavy-duty side bumpers. Volvo CE is quite supportive when a customer has unique needs to be able to work in a safe and protected environment. It says a lot about Volvo CE, how they tried to make me happy," says Ferrari. "We also asked VCES to customize the controls. We now have digital-frequency wired-in radios in the machines. We took out the factory stereos, put in the radios, ran them through the factory speakers and wired in toggle controls for the microphones

and the push-to-talk, so now the operator never has to take his hands off the excavator controls to talk to the personnel around him. It's a very nice safety feature."

Not as accommodating, however, are California's strict restrictions on weight, which forced FERMA to make slight modifications to the EC350EL before it could be put to work in the Golden State.

"The threshold for us is 92,400lbs [41,912kg] so anything under that is legal," says Ferrari. "When we tried out the Volvo EC380E, without all of our customizations, it was at 92,000 lbs. (41,730kg)," he explains, turning to the two EC350ELs working on the future Google parking site. "With all of our modifications, such as the added protections, the heavier bucket and thumb, its larger cylinder and the Volvo S

series quick coupler, these machines currently spec out at just over 90,000lbs [40,832kg]."

To the untrained eye, the mechanical changes might be difficult to distinguish. However, Ferrari's most obvious modification request can be spotted from several blocks away. Volvo CE gladly custom-painted the entire excavator fleet with FERMA's unique green and white colors.

"They really did an amazing job. People can easily identify our company by the FERMA-colored machines." ▮

Visit the *Spirit* website or download the *Spirit* app for the video report



Operator Jaime Lopez

GROWTH INDUSTRY

An entrepreneur in Poland has transformed a family business into one of the country's largest producers of both premium-quality mushrooms and the compost used to grow them →

by Nigel Griffiths

THE WORKING ENVIRONMENT IS A CHALLENGE FOR ANY MACHINE



This Volvo wheel loader is still in good working order after more than 50,000 hours of continuous service



The machines shift tonnes of compost



Urszula Sztandera-Kardaszynski

The small Polish village of Skórzec, some 90km east of Warsaw, is home to the country's leading producer of closed cup mushrooms as well as the compost substrate used to grow them. The mushrooms are exported across Europe to shops in France, Germany, Italy and the UK.

UNIKOST is a family-run group of businesses managing various stages of the mushroom cycle from the production of a high-nutrition compost base, to nurturing the delicate harvest under controlled temperatures and humidity.

In 2014, UNIKOST celebrated its 20th anniversary and, with business booming, one of its first undertakings was to grow its fleet of Volvo wheel loaders, which has been at the heart of its efficient production process for more than 15 years.

The company invested in the latest Volvo L120H wheel loaders and is now the proud owner of the first of that generation supplied to Poland. In 12 months, the new machine clocked up more than 4,000 hours without experiencing any technical issues. In June 2015, UNIKOST

took delivery of a second L120H, and a further two L180H wheel loaders are likely to complete the Volvo fleet.

AWARD WINNERS

In March 2015, UNIKOST was given the prestigious *Gazeta Biznesu* award (Business Gazelle) by Poland's top financial daily newspaper *Puls Biznesu* in recognition of the firm's outstanding growth.

A tribute to many years of hard work, it has not been an easy ride for the female entrepreneur who has driven the business since 1994.

"If I had known then the problems I would face, I would probably never have started," jokes entrepreneur Urszula Sztandera-Kardaszynski. "With my limited experience, the first three years proved a steep learning curve."

Sztandera-Kardaszynski traveled widely throughout Europe and the United States to learn the tricks of the mushroom trade from the top producers at that time.

She introduced the latest composting technology from the Netherlands to manage the basic fermentation of straw and chicken waste from the region's poultry farms.

GROWING PAINS

After a challenging start-up period, the business started to grow and the company decided to upgrade its handling equipment. In 2000, Sztandera-Kardaszynski bought her first two Volvo L120D wheel loaders. This was both a major investment and a difficult decision for UNIKOST. She remembers weighing up the complex options and, at the end of the day, "having a feeling" about the Volvo machines, believing that intuition helped her make what turned out to be a very sound investment.

"For sure it was a good decision," she says. "At first I thought it was too big an investment, but afterwards I was happy because these machines brought more efficiency to production, and fewer technical issues and breakdowns." →



Compost is tested in the laboratory



Leszek Kardaszynski with one of the company's latest acquisitions from Volvo CE

Composting is a complex biochemical process which is not easy to control. UNIKOST has its own laboratory where technicians test the compost daily to ensure the correct consistency. The process has a certain smell attached to it – not to everyone's taste – but Sztandera-Kardaszynski says she has grown used to it over the years, referring to it as “the sweet smell of work”.

The challenge for the Volvo wheel loaders has been to operate successfully in a hostile and corrosive working environment. Every day the machines shift tonnes of fermenting compost – a toxic mix of ammonia and humidity.

Sztandera-Kardaszynski makes sure the machines are thoroughly cleaned each day, and the plant has its own well-equipped workshops for day-to-day maintenance. Fifteen years on, the first two machines are still in good working order after more than 50,000 hours of arduous service.

NON-STOP

Fermentation and composting are part of a continuous process requiring the fleet of Volvo machines to operate seven days a week on two- or three-shift rotas. Today, the compost facility employs some 80 staff to meet this demanding schedule, delivering 1,200 tonnes of compost per week.

“Having a large fleet of Volvo wheel loaders has made production more comfortable and helps deliver a quality product with no breakdowns,” says Sztandera-Kardaszynski.

Her husband Leszek Kardaszynski joined the business nearly three years ago as director of logistics and investment. A former senior police officer, he has introduced plenty of discipline into the production processes while helping to direct the acquisition of equipment and the development of the state-of-the-art mushroom growing facility located 10km from the UNIKOST compost facility. Kardaszynski keeps a close eye on the performance of the handling



Jakub Sztandera in one of the cultivation halls

equipment, explaining that the decision to invest in more Volvo wheel loaders was based on UNIKOST's long and successful experience with the machinery and long-standing cooperation with representatives of Volvo CE.

“The machines are productive and very durable, especially when working non-stop in our climate which is very tough in winter. They have the power to lift and shift the compost seven days a week without any technical issues. Also, the working environment is highly corrosive and filled with ammonia and humidity which is a challenge for any machine.”

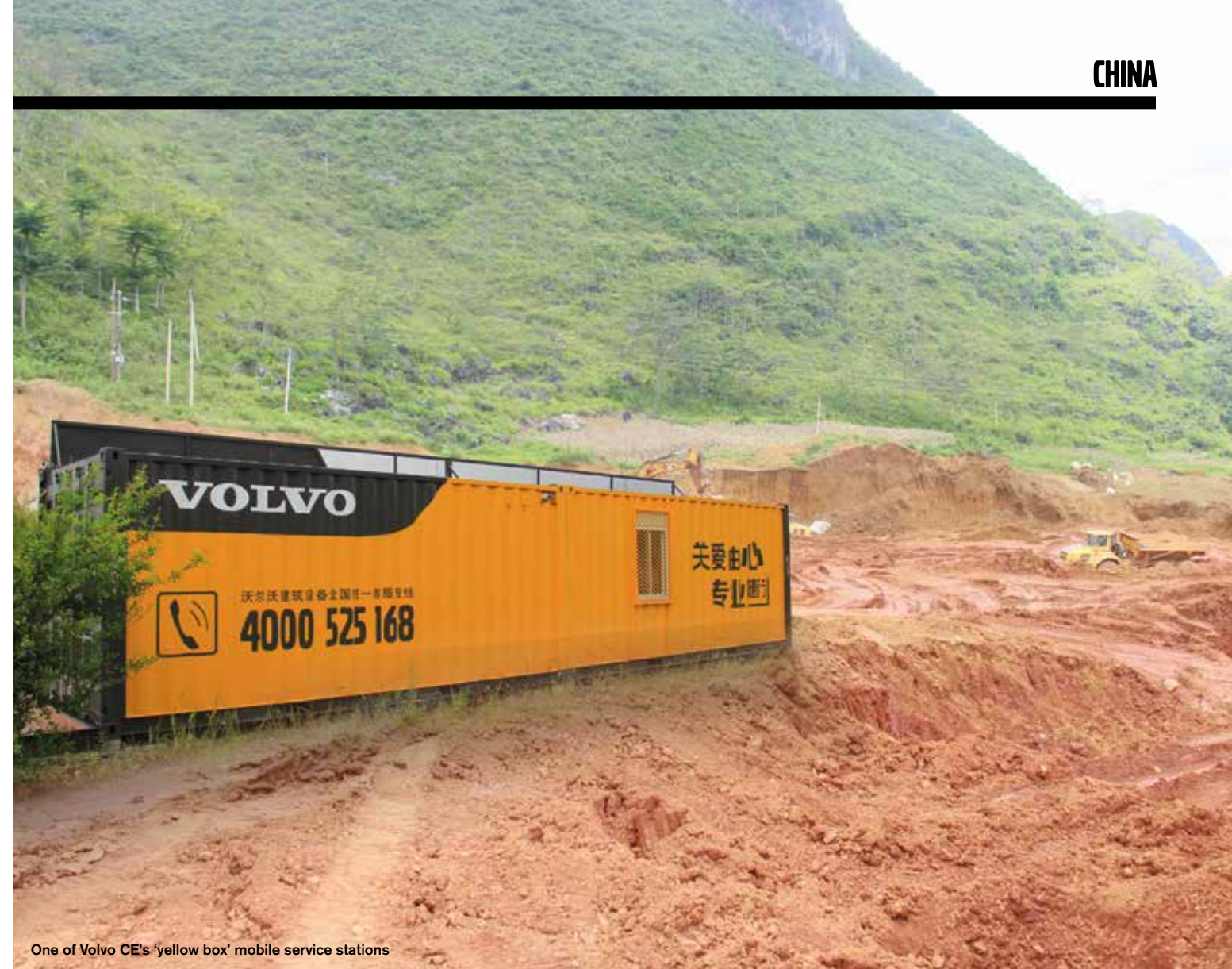
FAMILY AFFAIR

The mushroom factory itself – R & J Sztandera established by Urszula Sztandera-Kardaszynski's sons Robert and Jakub – comprises more than 30 long cultivation halls, providing 30,000m² of mushroom-growing space. The plant produces approximately 650 tonnes of mushrooms each month and is now one of the largest in Poland.

The third generation of mushroom growers in this family, Robert is the director, based at UNIKOST headquarters, while his younger brother Jakub is president of the mushroom facility, managing its 200 employees. They are continuing a family tradition dating back nearly 40 years to when mushroom production was started by their grandmother, Danuta – still an ever-present adviser to the business.

In controlled conditions of temperature and humidity, the mushroom spores impregnated into the high-quality compost base take around two weeks to transform into perfect white mushrooms, which are then handpicked and sorted ready for shipping to market and ultimately kitchens across Europe. 🍄

Visit the *Spirit* website or download the *Spirit* app for the video report



One of Volvo CE's 'yellow box' mobile service stations

THINKING OUTSIDE THE BOX

Volvo CE has developed mobile service stations for its customers in far-flung places

In a country the size of China, it is not always easy for customers in remote areas to get instant access to machine service and spare parts. An appeal to Volvo CE from the general manager of the Volvo dealer in Guangxi Province to help a major client with a rapidly growing fleet of Volvo machines led to the development of mobile service stations in modified sea-freight containers.

The 'yellow box' service station was the brainchild of Volvo CE vice president Wang Yefeng, responsible for

after-market and customer solutions, who came up with the idea in May 2015. With no time to waste, the project was launched in July.

ALL WEATHER

The container was first shipped to Guangxi Province, a region in South China bordering Vietnam where the rainy season can last for four to five months. It was put →



VOLVO CE CAN PROVIDE A 24-HOUR ON-SITE SERVICE



General manager Mo Chunyun, Guangxi Zhongnan Huaxing Machinery, with a team of Volvo CE after-sales personnel



Inside the container

GPAC deputy manager Zhou Zhiqiang

through its paces at the Guangxi Pingguo Aluminum Company, a major aluminum-ore mining company with the largest aluminum oxide production in the region, producing up to 400,000 tonnes annually.

Having first bought eight Volvo articulated haulers in 2002, Volvo CE quickly became the construction equipment supplier of choice for GPAC.

“The Volvo haulers can work around the clock in all weathers and deliver outstanding performance in terms of efficiency and fuel consumption,” says GPAC deputy manager Zhou Zhiqiang.

Currently operating 64 Volvo articulated haulers, eight crawler excavators and eight wheel loaders, GPAC is faced with fleet maintenance and assuring machine availability in harsh conditions on a daily basis, without losing productivity.

THE INITIATIVE IS ENVIRONMENTALLY FRIENDLY

PROBLEM SOLVED

Zhou approached dealer Guangxi Zhongnan Huaxing Machinery Co Ltd for a solution to reduce machine downtime.

“After several visits to GPAC, we got to know the problem,” says Mo Chunyun, general manager of Zhongnan Huaxing. The result is the mobile service station, which is

also a warehouse so that spare parts and lubricants can be stored on-site.

“In the past, we had to wait for the parts which were delivered from the Shanghai warehouse to Nanning City [Guangxi Province capital] and then to our workshop, which took about one week,” explains Zhou.

Delays resulted in financial loss for the company. But with parts stored in the container near the job site, the mobile service station means Volvo CE can provide a 24-hour on-site service and parts supply.

“Equipment is checked over in a timely manner and equipment failure can be nipped in the bud, avoiding the prospect of escalation,” says a delighted Zhou. “This is of great significance for our sustainable development because this station has dramatically increased the availability of Volvo equipment and reduced our parts inventory and management pressure.”

In addition to cutting ownership costs, the initiative is environmentally friendly and is easily installed at the start of a project then removed upon completion. Proving popular with customers, the innovative yellow box is being rolled out across the country, in demand at remote mines and work sites to provide customers with full service and parts in the shortest possible time. ☑

A BUSINESS CARVED FROM MARBLE

Volvo wheel loaders are trusted with the delicate task of transporting huge blocks of marble →

by Patricia Kelly

During a recent trip to London, Joseph Laplace was able to identify the marble decorating the facades of boutiques in Piccadilly as coming from the Arudy quarries in the French Pyrenees, where his family has mined for generations.

The Tokyo showroom of fashion colossus Hermes boasts marble from Arudy, as do the Dutch Council of State building in The Hague and the entrance hall to the Mandarin Hotel in Paris. It adorns the columns of the Place de la Concorde, the French capital's largest public square. Closer to home, Arudy marble also graces altars at the shrine of Lourdes, a major Catholic pilgrimage site since the mid-19th century visited by millions of people every year.

These are just a few of the many destinations for marble originating from Arudy, its quality having long boosted the reputation of both the region and of France across the world.

EVERLASTING

An exceedingly dense and shatterproof material, marble resists frost and can last for thousands of years.

"Each deposit has its own identity and nuances, rather like a signature," says Laplace, whose grandfather started mining marble deep in the forests of the Pyrenees in 1929. Experts like him are able to recognize the origins of a specific marble

at a glance, each one characterized by its individual color, swirls and veins. "It is a noble substance," he declares.

The three Laplace quarries – Sainte-Anne, Henri IV and Paloma – are renowned for their grey marble, currently in both fashion and demand. The color and patterns of the marble cut from each quarry are distinctive, of different shades to each other and with distinguishing markings.

BUILT ON STONE

Nestled against the Pyrenees, the marble quarries of Arudy were created in the 1800s and once provided employment for hundreds of people. In the 1950s, there were still 20 active quarries, but the industry has slowly declined over the years. Laplace, along with his son Pierre and a workforce of nine, each with their own specialty, is one of the few still excavating these deposits of natural stone.

Pierre Laplace, 27, the fourth generation of his family to go into the business, handed down from father to son, explains that choosing the raw material is an artisanal skill and needs a good eye, which comes from experience.

The stone is extracted from the quarry in three stages – first cut horizontally with a diamond wire saw making the most of any natural fault lines, so that as little as possible of

the material is lost. The second stage involves cutting the marble vertically, leaving a giant cube of stone. This slab is washed and smaller blocks of different shapes and sizes are cut according to color and direction of the grain.

The Laplace family bought their first wheel loader, a Volvo L220D, in 1999. Michel Hawryliszyn of the local Volvo dealership Van de Velde says that their aftersales service and advice on how to get the best out of the machine led to the family's decision to invest in a second Volvo wheel loader, an L220H, which arrived in 2014.

"The type of work they do is very demanding," says Hawryliszyn.

The wheel loaders transport huge blocks of marble from the quarries to a storage area; from here the blocks are loaded on lorries to be taken to their next destination. The wheel loaders are also used to tidy the quarries and keep them clear of debris.

Pierre Laplace says they opted for Volvo again because the machines suit the specialist aspect of their work. Thanks to the machine's high lifting capacity and parallel lift arm, the blocks are always positioned horizontally, which significantly increases safety during transport. The machine's compact proportions work to advantage in the confines of the quarries. Low fuel consumption was also taken into consideration.

"It is vital that the blocks of marble don't get damaged during transport, and the Volvo machines are very well adapted to this kind of work," he says. "It is important to be able to see clearly what we are doing from the cabin.

We need to be able to see the end of the fork at all times and have continuous good visibility."

A machine operator himself, he adds that the new machine is comfortable and feels secure. "It is also very quiet," he says. "The minute the operator is in the cabin he can hardly hear the motor and can really concentrate on his work."

NATURAL BEAUTY

The quarries are quiet and peaceful, situated as they are within a protected area of outstanding natural beauty and subject to stiff environmental regulations to do with noise and pollution – an element that makes it increasingly difficult, but not impossible, to compete with marble produced in less regulated parts of the world.

Most of the marble mined by the Laplace family is transported for export worldwide, much of it via Carrara in Italy.

The United States is a voracious market, and Arudy marble is also popular in Italy, Japan and China, although the end-users for the Laplace product tend to opt for quality over quantity. Put into service both inside and out, it is destined for the facades of buildings, for kitchens and bathrooms, crafted into floors and staircases, chimney-pieces and tombstones, statues and monuments – its uses are endless and its longevity assured. ▯

CHOOSING THE RAW MATERIAL IS AN ARTISANAL SKILL

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REWRITING THE RULEBOOK

A remote-controlled excavator takes versatility to a new level

by Tony Lawrence

The 30-tonne excavator suddenly appeared, powering up to the edge of the quarry face, its boom extended and brandishing a state-of-the-art drill attachment. The crowd of onlookers did a double take: there was no one in the cabin.

The machine came to a halt, its cabin swinging around through 90 degrees, as it got to work, drilling expertly into a rock shelf.

It was only then that the audience in the grandstand at the 2015 Volvo Days' extravaganza in Eskilstuna in Sweden spotted the operator. He was standing about 20 meters away, armed with a handset and running the machine via remote control.

The EC300E crawler excavator on display at the machine show is the direct result of a close collaboration between Volvo CE's Special Application Solutions, Norwegian drilling specialists AMV and Volvo CE's Norwegian dealer. And, explains Volvo CE's Per Johan Rosdahl, it is already causing quite a stir within the industry.

"Drilling contractors traditionally use specially designed drilling rigs to work in quarries and on infrastructure projects," explains Rosdahl, the global commercial project manager with Special Application Solutions. "They, too, use remote control. But our excavators, fitted with AMV drills, are much more versatile.

TWO IN ONE

"The drills are very sophisticated but can be easily removed so that the machine can be quickly changed back into a standard excavator for other lifting or breaking jobs – so, effectively, you have two machines in one.

That's a huge advantage, especially for small and medium-sized contractors."

Indeed, there could be three or even four machines in one. Volvo CE and AMV's full range of drilling excavators, ranging from eight to 40 tonnes, are surprising even their own designers with what they can do.

AMV, based in south-west Norway, specializes in production equipment for mining, tunneling and the offshore oil and gas industry. AMV and Volvo CE's Norwegian dealership signed up as strategic partners 18 months ago before formalizing the relationship through the Special Application Solutions team.

"It's all about good communication from the very start," says Peder Andersen, CEO of AMV Group. "Our first drilling excavator was a Volvo, which we produced on our own and which we soon found was something our customers wanted. Now we get direct technical assistance from Volvo CE – that has helped us improve the various hydraulic and electrical interfaces and quick-release couplings between the machine and the drill.

"Everyone wins, as well as our clients who know they are getting a Volvo product, with all the guarantees, backing and warranties which that entails."

THE EC300E IS ALREADY CAUSING QUITE A STIR IN THE INDUSTRY

PINPOINT ACCURACY

AMV are established experts in the use of remote control, which is also used on standard drilling rigs. The system is easy to use: the AMV system offers a unique monitoring screen within its handset as well as a GPS link providing drilling accuracy to within 20mm – the width of about two human fingernails. →

Photographs by Gustav Mårtensson



THE EC300E IS CAUSING A STIR



Martijn Donkersloot, Product Manager, Special Application Solutions



Left to right: Anders Östberg, CEO AMV Sweden, Per Johan Rosdahl, Volvo CE, Kjell Vidar Hamre, AMV Senior Service Engineer and Peder Andersen, CEO, AMV Group

The system also enhances safety, allowing operators to stand clear of high-risk work rather than stay in the cabin – such as during the use of explosives in quarries – as well as permitting them to walk around the drill and inspect its operation from any angle while continuing to work.

There are also other, unexpected advantages. “When we started this project, we thought the machine would carry out ordinary drilling as well as having the capacity to be used as a standard excavator,” says Anders Östberg, CEO of AMV Sweden. “But because of the boom, you can get higher than a standard rig.

“So they have also been using it for rock bolting [to strengthen quarry faces and thus improve safety]. We can then change the drill and replace it with a personnel basket, to lift people up to examine the work more closely. One machine can do all of this.”

AMV’s senior service engineer Kjell Vidar Hamre adds:

“This machine has massive reach. It can be stationed five meters lower than where the drilling or bolting is being carried out.

“Standard machines are very powerful, with great traction, but still need an access ramp to reach the drilling spot in such situations, and they cannot swing their superstructure around like the excavator, or drill or bolt in virtually any direction. All of this means much greater productivity from our machine.”

CUTTING-EDGE

Volvo CE created its Special Application Solutions team around four years ago to help promote such cutting-edge projects with suitable partners. Excavators are the biggest machine segment being adapted in this way to carry out highly specialized tasks, followed by articulated haulers and

then wheel loaders. Martijn Donkersloot, Special Application Solutions product manager, says the Volvo Days event proved a perfect showcase.

“We had a lot of visitors seeing the excavator and saying it was just what they required. We had many customers from all over the world tell us: ‘This is fantastic – and perfect for our quarries.’ You can imagine an owner with a drilling rig on one side of his worksite and an excavator on the other – two machines mean more operators, more sets of spare parts and definitely more technicians who must be trained on both.”

Donkersloot and Rosdahl both think they have the best job in the world.

“We are a small unit but are represented right across the world, and it’s great to see projects like this coming together,” says Rosdahl.

“I have been in the construction industry since 1998, and this job has so much variety – there are new challenges and

ideas cropping up every day, it’s a real learning experience,” says Donkersloot, who works in Volvo CE’s European, Middle East and African region.

“With the help of our partners we can modify our standard machines to the specific needs of the customer, helping them become more effective. Some of the specialist information gets fed back into our research and development, adding to our knowledge and experience. Take this excavator – we were having an issue with the drilling unit a few weeks ago so I called AMV. They told me to take my mobile phone into the cab and connect to the diagnostics of the drilling unit. From that, they were able to diagnose that the air pressure was too low, and to fix it there and then – while stationed hundreds of kilometers away.

“You can run this machine by remote control, and you can fix issues remotely as well. That’s hugely impressive,” he concludes. ☒

TURNING UP THE GAS

Volvo pipelayers were used on both sides of the border to allow gas to flow from France to Belgium for the first time →

by Derrick Butterfield



As well as responding to increasing demand for gas in Belgium's West Flanders region, the new pipeline will also feed gas to north-west Europe. Located between Alveringem, near the French border and port of Dunkirk, and Maldegem, east of Bruges in East Flanders, the existing infrastructure could no longer cope with growing demand from new housing and small and medium-sized enterprises starting up in the area.

On the French side of the border, responsibility for connecting Belgium to the French network fell to the French grid operator GRTgaz where a Volvo PL4809D rotating pipelayer was used on the project by French pipeline specialist SPAC, a subsidiary of the Colas Group.

SPECIALISTS

The Belgian side is the responsibility of Fluxys Belgium NV, the independent operator of Belgium's natural gas transmission grid and storage infrastructure, which transmits natural gas across Belgium to distribution system operators, power stations and major industrial customers. The 36-inch diameter pipe runs for 74km and this joint operation enables the transmission of 8 billion cubic meters of natural gas between the two countries for the first time.

Pipeline contractor A. Hak Leidingbouw, specialists in large diameter pipelines, worked on a 20km section using two Volvo PL4608 rotating pipelayers. Each 18m section of pipe weighs around six tonnes, but is not a problem for the PL4608s with their 80-tonne tipping capacity. The aim was to complete around 1,000m – or 50 welds – every day alongside Dutch sub-contractor, specialists Visser & Smit Hanab NV.

No stranger to Volvo pipelayers, A. Hak was the first pipeline contractor in the world to purchase them – six machines – back in 2009. Loe Steenbergen, in charge of equipment purchase and rental for the group, has worked on pipelines across Europe for 11 years.

He says he opted for the Volvo because he likes “the concept of the upper structure rotation, and the machine's good lifting table”, adding: “They perform like machines with a 90-tonne tipping capacity, even if it says 80 tonnes on paper.” He also rates the heavy-duty, hydromechanical, extendable undercarriage.

EASY RIDERS

There are various crossings to contend with en route. Roads are often crossed by laying down special surface-protection mats, but other methods are required for rail or water.

Here, the PL4608 offers a distinct advantage as it can be loaded on to a transporter and moved without the need for disassembly. Once a tie-in is complete, the machine can be quickly transported to the next one, saving time and money. “Tie-ins cost around €10,000 [\$11,200] each,” says Steenbergen. “Savings on transportation costs alone are significant.”

Operators, too, have warmed to the Volvo pipelayers – these units currently have around 6,000 hours on the clock compared with less than 2,000 for the company's sidebooms, purchased at the same time.

“We use excavator operators as they adapt quickly to the pipelayer,” says Steenbergen of the PL4608s, used for tie-ins and during the welding and bending processes. When feeding the bending machine, the upper structure rotation enables the machine to swing the pipes into position with no disruption to conditions underfoot, which is not possible with a conventional sideboom pipelayer.


Operator Marcel Wiehink has seven years' experience with pipelayers and is also licensed to operate sidebooms and crawler cranes.

“I like the flexibility of the swing,” he says. “When there are over-crossed pipes I can easily lift and reposition them on the other side.” He also appreciates the single straight travel pedal, which leaves his hands free to control the boom and winch.

The abrasive, sandy conditions in the Netherlands, where these machines do most of their work, are renowned for damage to wear parts. On this site, which is also very sandy, hundreds of tonnes of wood chips have been used along the right of way to facilitate machine movement and to support local farmers. The biodegradable chips help limit the amount of sand mixed in the soil once the land is reclaimed for agricultural use.

HIDDEN SURPRISE

As with any pipeline, archeologists were given access to the site before work began to establish what treasures might be unearthed. However, given the geographic location and the region's history, both historical records and on-site detection methods determined the need for specialist demining operations. Archeological studies were also conducted to ensure that any buried, unexploded munitions – mainly remnants of World War I – were safely recovered.

The sustainable approach used by Fluxys in the preparation and construction of pipelines covers safety issues as well as environmental and ecological factors. It ensures that once the project ends, the land can be reinstated for farming, which fits perfectly with Volvo's core values of safety and environmental care. 



Operator Marcel Wiehink (in cab) with Loe Steenbergen of specialists A. Hak Leidingbouw



This picture and below: Volvo PL4608 pipelayer on site



Tie-in crew Cor van der Laan (left) and Pablo Velasquez



Pipefitter Turgut Yildiz with the Volvo PL4608



KEEPING COOL

Volvo CE has a specially developed range of coolants to match its high-performance, low-emission engines →

by Nigel Griffiths

Photographs by Juha Roininen



Six-litre engine cylinders using Volvo Coolant VCS (right) compared to inappropriate product (left)



Metals immersed in liquid shown after a few hours: bottom row – with Volvo Coolant VCS – top row: without Volvo Coolant VCS, corrosion appears



Anne-Marie Rydström demonstrates how an incompatible coolant can shorten the life of hoses and seals



THE COOLANTS MATCH VOLVO'S HIGH PERFORMANCE DEMANDS

With up to 20% of engine failures attributed to cooling system problems, it makes sense that Volvo CE would develop its own coolant formula.

“As Volvo construction machines work in many demanding environments and climates, it is extremely important to choose the right coolant,” advises Anne-Marie Rydström of Volvo’s Advanced Technology and Research Department.

To meet the demands of Volvo’s advanced high-performance engines, a specially formulated coolant – Volvo Coolant VCS – has been developed, recommended for most Volvo engines worldwide.

“Owners of Volvo CE machines have to realize that using the wrong coolant or mixing coolants can damage the engine, leading to costly and unnecessary repairs,” Rydström explains. “It can lead to corrosion, pitting, leakages and deposits – all of which reduce the life of an engine and increase maintenance requirements,” she says, adding: “There are good reasons why we recommend Volvo Coolant VCS.”

The main purpose of an engine coolant is to remove excess heat from the engine. Only one-third of the energy derived through the combustion of fuel is converted into usable energy that moves the vehicle. The other two-thirds

are converted into heat, a third of which goes out via the exhaust. The remaining heat needs to be absorbed by the coolant and directed away from the engine. By removing this heat, the coolant allows the engine to operate efficiently.

ORGANIC ADDITIVES

A Volvo coolant has four main objectives: heat exchange, freeze protection, boiling protection, corrosion protection and needs to be compatible with all non-metallic components. The key protective components in Volvo Coolant VCS are organic, as opposed to mineral. Organic inhibitors target the critical areas needing protection, whereas conventional mineral-based products coat the metal with a uniform layer, require more additives and reduce longevity. Organic inhibitors do not deplete as quickly.

“There are so many different metals and alloys used in the construction of high-performance engines that it represents a challenge to develop a coolant with optimum properties for all metals,” explains Rydström, a trained chemical engineer responsible for supervising development of the coolant.

Custom-designed to prevent corrosion on all metal surfaces, the Volvo product prevents rubber from swelling and cracking, and plastic from ageing and decomposing. Importantly, it leaves no deposits in the cooling system and ensures a high level of heat transfer to protect an engine from overheating.

HOT AND COLD

Developed to flow easily at temperatures far below freezing point, the coolant is even recommended for use in hot climates where high-performance antifreeze protection might seem strange.

“In reality, the coolant we offer is like a bundle of components which are able to cope with all the potential temperature variations in an engine while providing many other performance benefits,” Rydström explains.

The formula has been on the market since 2006 and its performance is constantly being tested against new metal formulas and combinations under development for Volvo engines. Laboratory tests show how it performs during heating, with a very high boiling point and smaller bubbles

to enable the product to stay in better contact with surfaces for prime protection in all conditions.

Volvo offers two different coolant formulations: Volvo Coolant VCS, yellow in color and typically used in most machines built since 2006, is an organic additive technology-based coolant, containing additives that are not easily depleted. The standard green Volvo coolant, for pre-2006 machines, is a hybrid, incorporating traditional inorganic and organic additives.

Volvo coolants have been tested extensively in Volvo machines, thereby guaranteeing compatibility with all materials in the cooling system. They also contain special additives to protect the machine from wear and are specifically approved by Volvo for use in its engines. Compatible with all materials used in Volvo engines, they ensure protection of the complete cooling system thus preventing leakage. These factors contribute to extended engine life, as well as lower operating and ownership costs during a machine’s entire service life. ☐

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Photographs by Darrin Henry



The Beechcraft King Air 200 comes in to land



Hundreds of islanders made their way to the new airport to watch the landing

SAINTS GO MARCHING ON

The first plane has already landed at the new airport built on the remote island of St Helena with the help of Volvo machines

The moment many islanders, known as 'Saints', thought would never come was the day the first airplane landed on St Helena, one of the most remote inhabited islands in the world. Ten years after the airport was announced, touchdown for this historic flight was exactly 13:44:25 on Tuesday, 15 September 2015.

"Runway's good, conditions are good, you have lovely facilities here," declared Captain Grant Brighton, pilot of the Beechcraft King Air 200, having flown from Johannesburg, South Africa, refueling in Angola for the four-and-a-half hour flight across the Atlantic.

St Helena photographer Darrin Henry, who contributed to this article, says: "This may not sound a big deal to some readers but in St Helenian terms it is akin to landing on the moon."

Discovered by the Portuguese in 1502, the island is where French Emperor Napoleon Bonaparte was exiled by the British in 1815 following his defeat at the Battle of Waterloo. Today, it is the second oldest British overseas territory after Bermuda.

The test flight ends 500 years of isolation for St Helena, set in the middle of the South Atlantic Ocean and until now only accessible by sea. Its only lifeline to the outside world

were the monthly visits of *RMS St Helena*, a British Royal Mail ship, soon to be decommissioned, which sails up from South Africa.

Built by South African construction giant Basil Read, the airport on St Helena will open to commercial flights in February 2016. The company had to bring in all of the construction equipment by sea and the first machine to



Basil Read Island Director, Deon De Jager and his wife Chrezelda



Left to right: Captain Grant Brighton, first officer Dillan Van Niekerk, chief flight inspector Nick Whitehouse, chief pilot Stuart Rawlinson and chief aircraft engineer Jeffrey McKenzie

drive on to the island was a Volvo G940B motor grader. It was later followed by another 65 Volvo units, including EC700C crawler excavators, A40F-FS and A30E articulated haulers, EW140C wheeled excavators, DD24 and SD200DX compactors, EC380 and EC480 crawler excavators, and an MC115C skid steer loader, as well as more motor graders (see *Spirit* Issue 52).

Volvo CE customer support manager Leif Waad said: "It was clear that the equipment had to be of high quality, capable of operating safely in tough conditions while showing respect for the environment. This project was the perfect match for Volvo Construction Equipment."

Basil Read's Island Director Deon De Jager and his wife Chrezelda were among those welcoming the test flight, witnessed by hundreds of islanders who had gathered to watch the landing.

According to the plane's first officer, Dillan Van Niekerk: "The key part for me was seeing the island, seeing everyone on the mountain watching us." 🇮🇸



On the tarmac

ELECTRIFYING RESEARCH

A major research project led by Volvo CE aimed at the electrification of construction machinery could lead to massive energy savings

The demonstration project led by Volvo CE to power construction machines in a quarry using electricity instead of diesel has been launched in partnership with the Swedish Energy Agency (SEA), construction giant Skanska Sweden and researchers at Sweden's Linköping and Mälardalen universities.

The nearly €22 million project, due to be completed in 2018, is the first step towards showing how a quarry of the future could be operated. It aims to deliver significant reductions in fuel consumption, emissions and total cost of ownership while also improving productivity.

"This is a new step for the construction industry. We see great potential and are proud to be part of this unique project," says SEA director general Erik Brandsma.

A government agency for national energy policy issues, the SEA works towards the use of renewable energy, improved technologies, a smarter end-use of energy and the mitigation of climate change.

It is believed that conversion to electric power is likely to reduce the amount of energy used by 71% and cut CO₂ emissions in the targeted quarry site from the current 0.7kg/tonne of material produced to 0.3kg/tonne.

"Collaboration is a key factor to achieving our environmental target," says Martin Weissburg, president of Volvo CE.

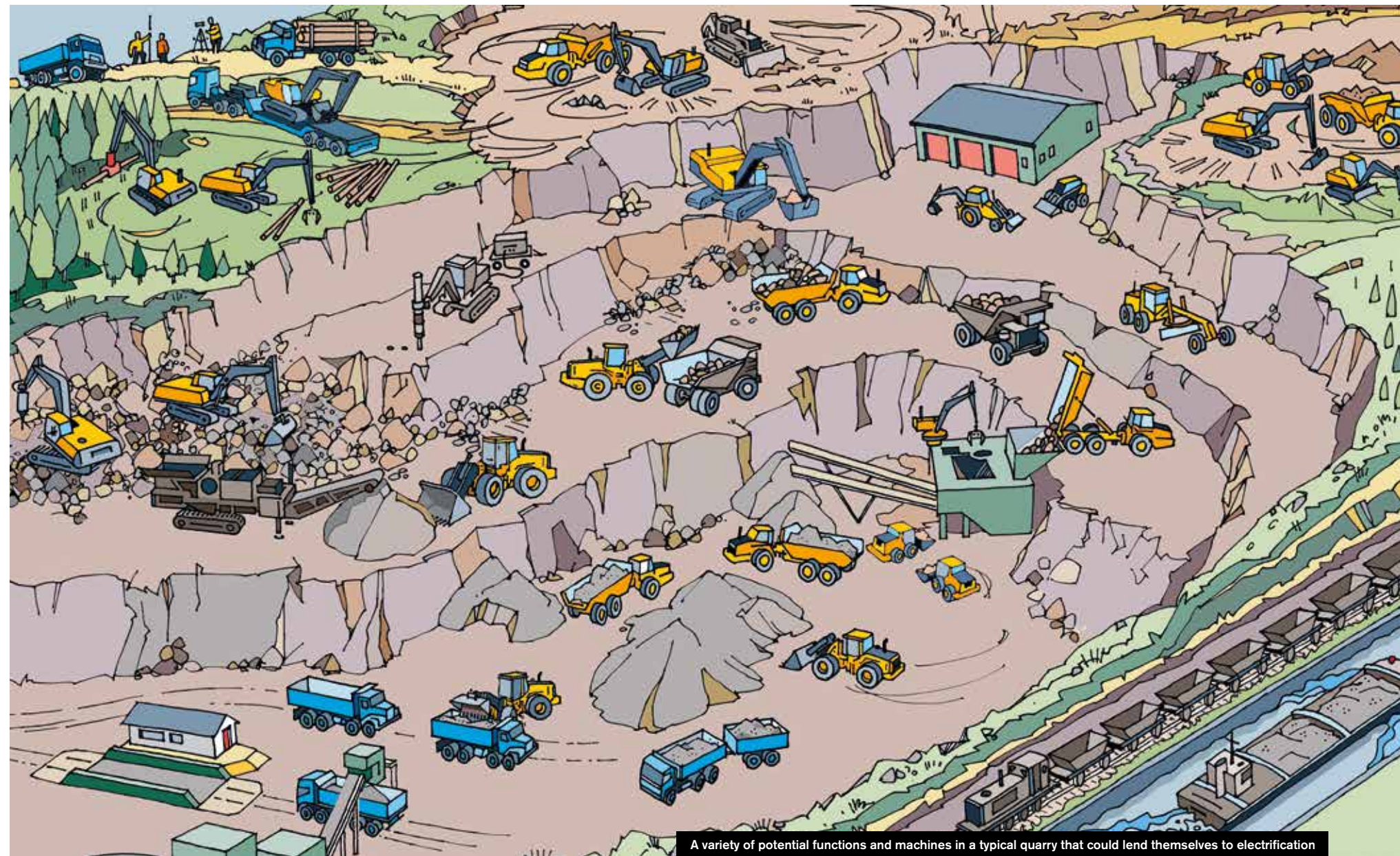
Based on 2010 figures, the SEA estimates the energy consumption of construction equipment in Sweden at

14 Terawatt-hours (TWh) compared to 19 TWh for trucks, 3.7 TWh for buses and 55 TWh for private cars. The significance of these figures prompted the agency to ask Volvo CE what might happen if electrical power was used instead of diesel in a typical quarry. The subsequent discussions led to the electric quarry demonstration project.

"We estimated that if we could electrify a number of the functions in the quarry, we could reduce energy use by 71% [in kWh]. The intensity of the energy is much higher with electricity, which is why the potential savings are higher," says Brandsma.

"In many applications, excavators are sufficiently stationary to be powered with electricity through cables. Crushers in our demonstration quarry could also get their power through cables. We could maybe develop plug-in hybrid solutions for haulers. In the future, machines could be fully electrified with batteries, leading to the possibility of fully autonomous, driverless machines guided by computer," Brandsma explains.

Volvo CE has been working on the technologies that will be applied to the project for some time. The company will continue to develop the concepts in-house before Skanska incorporates the machines into its operations



A variety of potential functions and machines in a typical quarry that could lend themselves to electrification

during the 2018 demonstration, proving the technology is viable for the industry.

"This project involves creating new concepts which are part of our long-term future vision," says Anders P. Larsson, executive vice president of Volvo CE's technology function. "The work that we'll do over the next few years has the potential to change the entire construction industry."

The decision to use a quarry as the testing ground is partly because it is a more static work environment and less dynamic than a construction site.

"We consider quarries to be a good place to start with electrification – many of them already have electricity installed and some electric equipment on site," says Jenny Elfsberg, Volvo CE's director of emerging technologies. "We have been working with general purpose

and production equipment in quarries for a long time, so we know them," she says. "We can analyze and find efficiency improvement and we can easily compare before and after performance."

The technology could eventually be applied to large construction projects. Electric-powered construction equipment will also have the benefit of significantly reduced noise emissions, of particular concern in the urban environment.

The electric machines offer new design potential to Volvo CE, which gives the company an opportunity to improve the overall performance of the entire worksite, according to Volvo CE director of design Sidney Levy.

"They create a great design opportunity by allowing us to remove conventional systems and components. This gives us the ability to explore different machine designs for better visibility and serviceability," he says. ▣

THIS IS A NEW STEP FOR THE CONSTRUCTION INDUSTRY

FLEX YOUR MUSCLES



VIDEO

Flexibility can mean more than one thing – and the Volvo EW160E has flexibility in two entirely different ways. Firstly, it's an extremely flexible wheeled excavator with a new operator interface that can be programmed to match the machine perfectly with up to 20 different Volvo attachments; and, with the trailer hitch that can be fitted from factory, it can take those attachments to the site. So it's flexible as in versatile. Secondly, the Volvo Boom Suspension System allows the operator to travel around the site faster and more comfortably, and Volvo Smart View makes it easier to position the machine accurately and safely. So it's flexible as in manoeuvrable too. Which, with its new environmentally-friendly Stage IV engine, makes it a useful machine to have on site. Talk to your Volvo dealer. Discover a new way.

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Volvo Construction Equipment



SPONSORSHIP

German rider Ludger Beerbaum on Chiara



HORSE POWER

Volvo has sponsored the world-renowned Gothenburg Horse Show for the past 40 years

by Julia Brandon

Officially the second-largest city in Sweden, and ranked by Forbes as the 12th most inventive in the world, Gothenburg has made a name for itself as a major centre for sports, such as association football, handball and ice hockey. For the past 40 years, Gothenburg has also become internationally famous for its acclaimed equestrian activities, namely the Gothenburg Horse Show.

"This show means a lot to me and my colleagues," says German rider Ludger Beerbaum, one of the world's leading international show jumpers. "The crowd is unbelievable, they are with every rider, it doesn't matter where you come from."

Hosting both show jumping and dressage events over the course of four days, the event invites 40 riders from all over the world, including Europe, Asia, Canada and the United States to compete at the highest level in equestrian sport.

"The Gothenburg Horse Show is very highly rated – we've been voted one of the top five shows in the world – so our starting field is always strong, but when we're hosting the

final we get the best riders in the world taking part," says Tomas Torgersen, show director.

It takes blood, sweat, tears and plenty of years to get the event ready for both rider and horse. With horses not even beginning their training until the age of three (for show jumpers), it can often take up to four or five years to reach competition standard.

TOP SPORT

"If you're very lucky and you're successful with training a horse, the earliest it would start at the Gothenburg Horse Show would be around eight or nine years of age," says Torgersen. "Of course, there are a lot of horses that just simply aren't talented enough or suited for that kind of work because it's a top sport."

Riders not only need to concentrate on their own abilities but on keeping the horse healthy and happy as well. →

Photographs: © Jorma Valkonen, © Claes Jakobsson



Dutch rider Jur Vrieling on Arezzo VDL

VOTED ONE OF THE TOP SHOWS IN THE WORLD



Show director Tomas Torgersen

Worth in the region of 1 to 2 million euros each, it is a lot easier on both mind and pocket to retain a horse than to train a new one, says Torgersen. If kept in good condition, it is not unusual for a horse to continue to compete well into its later years.

The oldest horse to have won a Grand Prix at the level of the Gothenburg Horse Show, although this is quite exceptional, was a horse called Welham ridden by British equestrian John Whitaker.

“Welham was a fantastic horse and actually didn’t start in Grand Prix until he was 16 years old,” says Torgersen. “He was a late bloomer.”

In 2016, Gothenburg plays host to a double World Cup, with both show jumping and dressage set to hold their World Cup finals in the Swedish city from 24-28 March. Typically, the World Cups are held every three to five years, and there is stiff competition from the other international venues to host them, so to land both in the same year is quite a coup.

“We’re a major event and part of a global happening in riding, all of which is helped by our developing young talent through our grass-roots projects,” says Torgersen.

Beerbaum adds: “The show is super organised – it’s a huge sport, big entertainment, and tickets are sold out on every day. Each year we look forward to returning to Gothenburg.”

Adding to the excitement this time is the show’s 40th anniversary, which will be celebrated with a large party on the evening of the last show day. “One of the most important elements of the Gothenburg Horse Show is the public,” Torgersen says. “For 40 years now we’ve had about 11,000 people in the stands for almost every performance so we feel it is important that we include them in our celebrations.”

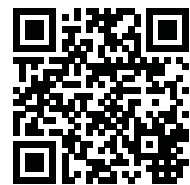
Volvo came in as a main sponsor in 1978. Sharing a home town has meant both brands resonate strongly with the local Swedish population and are part of the city’s heritage, although there is also a natural synergy. Many of Volvo’s key vehicles, such as its XC60 and XC90 four-wheel drive off-roaders are the perfect mode of transport for equestrians with horse trailers to pull and plenty of muddy fields to park in. When it comes to all-in-one horseboxes, Volvo’s coveted FH range of horse trucks are a veritable home-from-home for travelling equestrians and their trusty steeds, fitted with stalls and living/sleeping accommodation. The relationship has also been cemented over the years by Volvo’s 40-year sponsorship of the show, as well as its 20-year sponsorship of the equestrian world cup worldwide.

“I grew up in Gothenburg and Volvo has always been one of the city’s main industries,” says Torgersen. “With the commitment Volvo has had via its sponsorship, its connection with the sport will always be strong.”

HONEY, I

SHRUNK THE LOADER

LEGO® Technic model shown is not suitable for outdoor play.



VIDEO

A new video from LEGO® Technic shows the lengths the world's largest toy maker's design team were prepared to go to in order to perfect their latest mini marvels. See how this happened at [youtube.com/GlobalVolvoCE](https://www.youtube.com/GlobalVolvoCE)



Volvo Construction Equipment



VOICE OF EXPERIENCE

Volvo excavators have what it takes ... and more →

by Sam Cowie

Photographs by Lianne Milton

On a chilly Thursday afternoon in the Southern Brazilian state of Rio Grande do Sul, a fleet of construction equipment is working a huge coal quarry. Eight excavators and as many as 20 trucks are currently active on the site operated by Brazil's Fagundes mining corporation 24 hours a day, six days a week, with Sunday a day of rest.

The yellow Volvo EC700 excavators tear giant lumps out of the terrain, depositing coal into trucks, which then transport their loads up the quarry's spiraling dirt roads before returning for a refill.

Veteran machine operator Carlos Evaldo Rodrigues stands at the edge of the quarry admiring the work of the Volvo machines. He says the EC700 is his preferred machine because it is a solid apparatus that gets results.

"At the same time as you have strength, you have great levels of productivity," he adds.

SELLING POINT

Rodrigues is employed by the Fagundes mining corporation, one of Brazil's leading mining contractors active in seven of its 27 states. The company is the world's leading purchaser of the Volvo EC700 excavator, having bought more than 60 of them since 2008.

Rodrigues has been working with the EC700 ever since Fagundes introduced them to the company and cites productivity, comfort, reliability, availability and safety as among the reasons why the machine is his first choice.

Today, Rodrigues is a supervisor at the Fagundes B3 mine where the company's Volvo excavators are involved in extracting around 2.5 million tonnes of coal each month.

This state, near the border with Argentina and Uruguay, is one of Brazil's most prosperous, being the fourth highest contributor to the country's GDP. Coal is the most consumed source of non-renewable energy in Brazil, and Rio Grande do Sul accounts for around half of the country's total coal output, making it Brazil's largest total supplier.

Rodrigues explains that an operation the size of mine B3 requires strong and reliable machines, with high levels of productivity. Operating an excavator is a tiring and demanding job that requires full concentration in order to work safely and guarantee maximum productivity. Rodrigues says that one of the EC700's most important features is its high level of comfort that allows operators to work to their maximum potential without distraction.

"As a machine operator, I can tell you that it's a comfortable machine," he confirms. "This is essential because comfort affects productivity."

When working long shifts on mining terrain, danger is always at the forefront of an operator's mind. Since this is yet another distraction that can affect

productivity, the operator must be able to trust his machine, says Rodrigues.

"You feel safe when operating the EC700 and that's important. If you're working in mining terrain you need to be able to trust the machine you are using."

FIRST CHOICE

Aside from safety, reliability and comfort issues, one of the EC700s greatest assets, according to Rodrigues, is that it is so popular and widely used that parts are readily available should the machine be in need of repairs.

"If you work with a machine of which there are few on the market then it is hard to replace parts when something goes wrong – this is not the case with Volvo machines," he explains.

Having been operating machines since 1998, Rodrigues has had the opportunity to work with most of the machines available in Brazil. Standing at the edge of the Fagundes quarry he affirms that Volvo will always be his preferred choice.

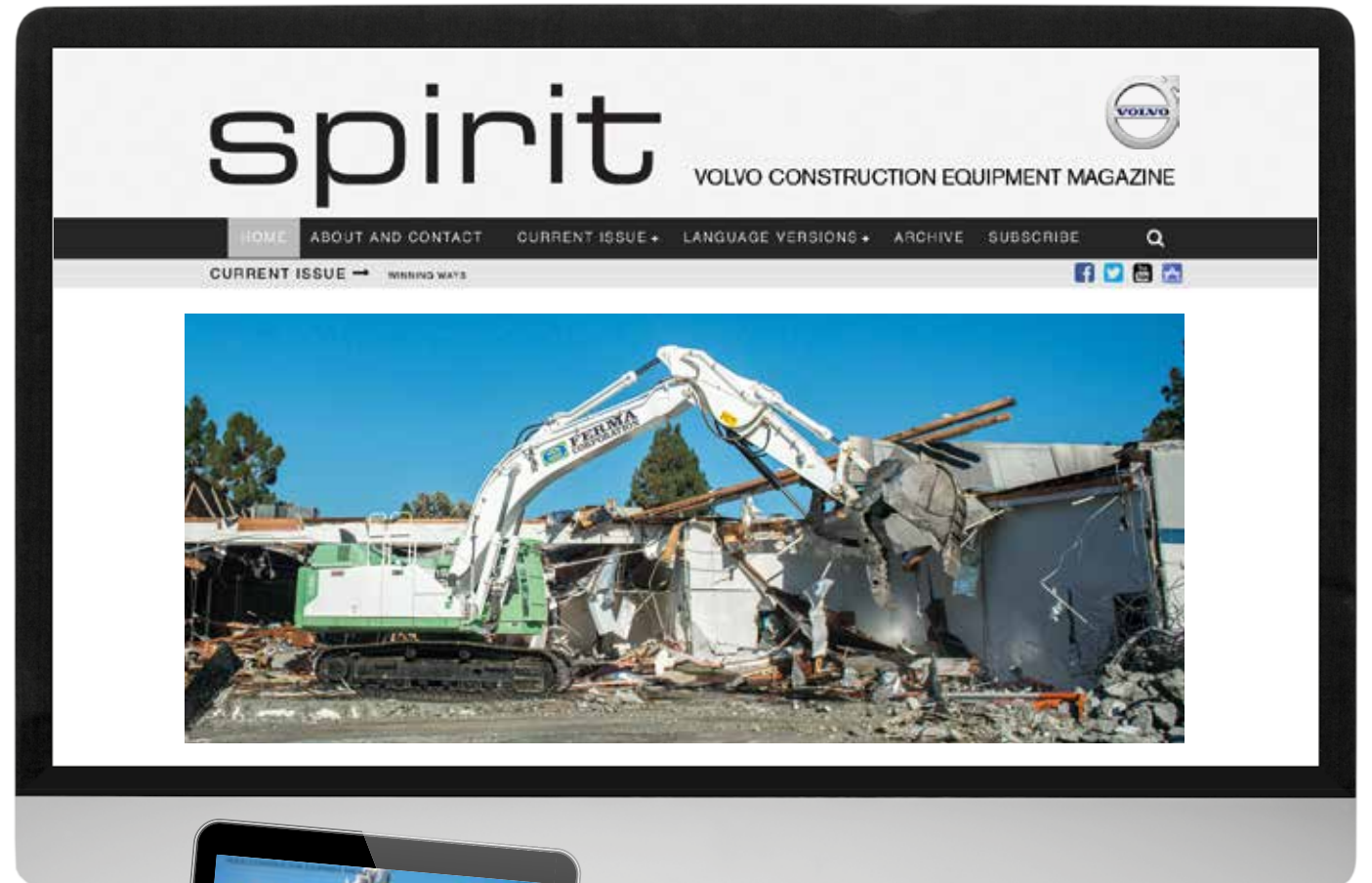
"I can say that I've worked with pretty much all of the machines in use in Brazil and in my opinion, Volvo is the best. There's no comparison."

THE WORK REQUIRES STRONG AND RELIABLE MACHINES, WITH HIGH LEVELS OF PRODUCTIVITY



Previous page: Carlos Evaldo Rodrigues, also seen here with Fernando Fagundes, commercial director of Fagundes mining corporation (right)

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The Construction Climate Challenge
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WELCOME TO THE CONSTRUCTION INDUSTRY CLIMATE INITIATIVE

The Construction Climate Challenge is hosted by Volvo CE to promote environmental awareness in the construction industry. We aim to create a dialogue between industry representatives, academics and politicians, as well as providing funding for new research and sharing existing knowledge and resources to help the industry make a difference for generations to come.

Volvo CE has long been committed to reducing harmful emissions from its products and facilities. But climate change is too big of an issue to be dealt with through the resources of one company alone. As acknowledged in 1972 by former Volvo Group President and CEO Pehr G. Gyllenhammar: "We are part of the problem – but we are also part of the solution."

Read more about the Construction Climate Challenge here: constructionclimatechallenge.com