

spirit

BEATING THE ODDS

Building a desert highway

**CHINA
IN THE
SPOTLIGHT**
+ BAUMA
CHINA 2014



LATIN LOADERS
Dockworker cooperative

PAVING UPHILL
Underground in the Arctic

PRODUCTIVE PAVING



The P8720B ABG paver from Volvo Construction Equipment brings productive, precise paving to the hard surface market. Producing an industry-leading 400mm mat thickness at widths up to 9m, this paver is equipped with a double tamper screed that provides unmatched pre-compaction. Designed for use on cement treated base, the P8720B delivers superior density and exceptional continuous paving.

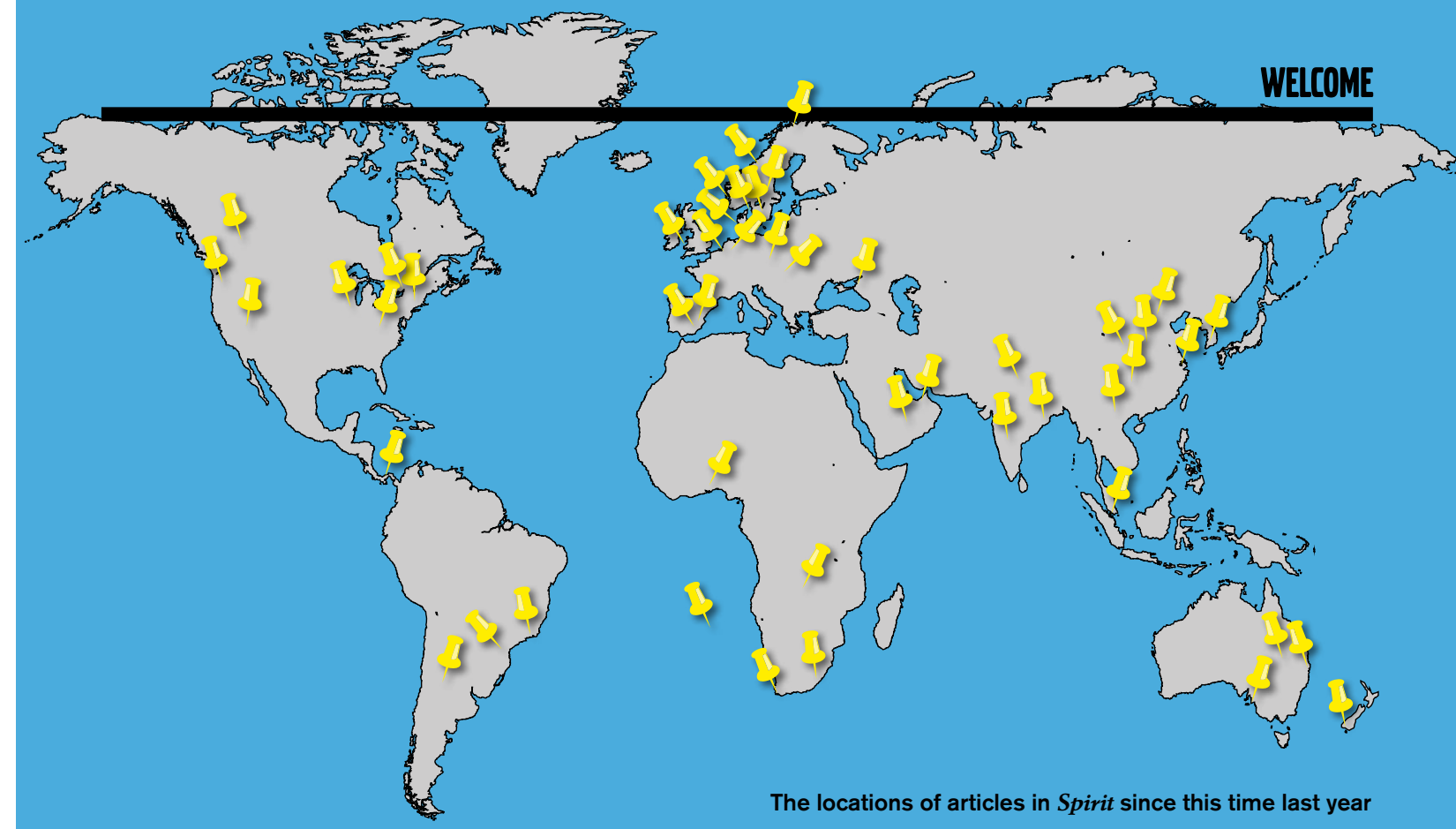
The Volvo P8720B ABG paver: consistently smooth results.

www.volvoce.com



VIDEO http://open.to/a/SP_PAV-B_B

Volvo Construction Equipment



The locations of articles in *Spirit* since this time last year



China's construction industry, the world's largest, is in the spotlight

With Bauma China now a brand in its own right, the 2014 event – the seventh such international trade fair – appeared destined to set new records for attendance. This year's show was a veritable 'Who's Who' of the construction industry's manufacturers from around the world.

Volvo CE has certainly made its presence felt among the 3,000 exhibitors from 40 countries showcasing their latest products to 200,000 visitors in an exhibition area equivalent to 42 football fields. Our company is already a market leader in China in wheel loaders and excavators and we have underlined our commitment with a series of new products designed with China in mind – see our six-page spread on Bauma China 2014 starting on page 10.

With this issue we launch a series of reports from China beginning with one from Xi'an in the northwest, home to the famous Terracotta Warriors, where Volvo pavers are used to build thousands of kilometers of new roads. We will be featuring job-site stories in future issues of *Spirit* from as far afield as Xinjiang province, which borders Central Asia in China's far northwest. In this issue, the Shanghai-based subject of our Inside Track feature is the president of Volvo CE's Sales Region China, Francis Sum – see page 6.

The map at the top of this page illustrates the many locations of stories from around the world about Volvo CE, its people, its customers and their machines and the operators featured in *Spirit* since this time last year – in print and on video, in the magazine, on our website and on the iPad app. If you would like to see your story featured in *Spirit* and your location on our map, please get in touch with us. ☎



THORSTEN POSZWA
Global Director
External Communications
Volvo Construction Equipment

spirit
ONLINE

www.volvospiritmagazine.com



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Volvo Spirit Magazine

Photograph of Thorsten Poszwa: © Natalie Hill VS53 EN

IN THIS ISSUE

3 WELCOME LETTER

The magazine reports about Volvo CE people, customers and machines from locations all over the world

6 INSIDE TRACK

An interview with Francis Sum, Volvo CE's top man in Sales Region China

10 BAUMA CHINA 2014

Volvo CE at the number one trade show in Asia

20 CHINA

Volvo pavers are used nationwide to help build thousands of kilometers of new roads

26 SWEDEN

Underground in the world's largest iron ore mine

30 ARGENTINA

Volvo machines are an integral part of a dockworker cooperative

34 UNITED STATES

A sawmill in Idaho is being transformed into one of the most modern and technologically advanced mills in North America

38 ENVIRONMENT

Construction Climate Challenge heats up

40 NEW TECHNOLOGY

Volvo CE uses app software to market used equipment in Europe, the Middle East and Africa

42 HISTORY LESSON

A look at Volvo CE acquisitions over the years

44 VOLVO OCEAN RACE

China's offshore sailing pioneers

49 OPERATOR CORNER

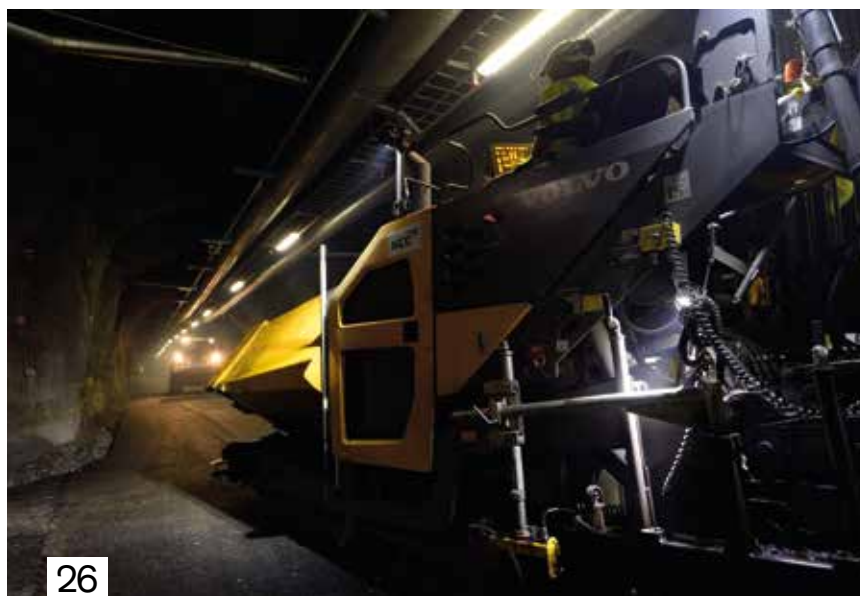
A Spanish operator in Valencia with a taste for classical music

ON THE COVER

Some of the 95 Volvo machines used in the construction of a new road in the world's largest sand desert in the Middle East © Peter Lyall

16 SAUDI ARABIA

A fleet of Volvo CE machines has been used to build the first-ever land link between the Kingdom of Saudi Arabia and the Sultanate of Oman



26



34



6



20

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 EDITORIAL PRODUCTION AND DESIGN: **CMDR sprl**
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CONTRIBUTORS: **John Bayliss; Julia Brandon; Julian Gonzalez; Nigel Griffiths; Tony Lawrence; Kristie Robinson; Nathalie Rothschild; Cathy Smith; Derek Workman**
 PHOTOGRAPHERS: **Algirdas Bakas; Vicent Bosch; Mark Button; Natalie Hill; Peter Lyall; Patricio Murphy; Jonathan Nackstrand; Mike Ridinger; Yann Riou; Ainhoa Sanchez; Zhang Yang; Henry Zhang**



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PASSIONATE, POSITIVE AND PATIENT

Volvo CE's top man in Sales Region China shares his guiding principles →

by Cathy Smith

Francis Sum prefers to stand, rather than sit, at his desk



I'D LIKE TO ENCOURAGE OUR CHINESE COLLEAGUES TO ALWAYS HAVE AN OPINION

At 5.30 in the morning, when many of Shanghai's 23 million residents are still asleep, Francis Sum is out on his daily run. The new president of Volvo Construction Equipment, Sales Region China says he covers up to 10 kilometers every day. "When you sweat you get vitalized. You get energized for the day. Running gives me time to think."

And just a few months into the job, no doubt this 44-year-old Singaporean has plenty to think about.

Sum is no stranger to Volvo or to China. He has been with the company for 13 years, eight of those in China – but based in Beijing – as the head of Volvo Financial Services (VFS) China. He was the first employee of VFS in Asia in 2001, right after the Asian financial crisis.

His new position with Volvo CE means he is looking at construction sites with a fresh eye: "I do find myself being very conscious of what construction equipment is being used on a job site. It gives me a sense of pride when I identify a Volvo-branded machine and I tell my daughter: "That belongs to Volvo. That's what Daddy is doing right now."

COMBINED EFFORT

He seems genuinely enthusiastic as he grabs a scale model of an excavator from the table and examines it: "I never knew that construction equipment could be so beautiful until I took this job. It's amazing looking at this piece of equipment – it is actually the foundation of all the tall buildings, all the roads we build."

Clearly, China is an important market for the whole Volvo Group, not just for Volvo CE, but the fact that Sum has moved into the job just as the Chinese economy has started to slow down does not seem to disturb him unduly.

"Economic cycles go up and down. Personally, I think it's during a down market that we have more opportunities," he points out. "A down cycle gives an opportunity to re-position, re-focus and re-look at all our strategies and be better prepared for when the business cycle upturns."

In other words, it requires patience. And that is where Sum's 'guiding principle' of "the three Ps" comes in. "We have to work with passion, stay positive and we have to be patient for results – that is what I want to share with my team," he says.

"In terms of my management style, I'm a very hands-on person and am not a believer in a boss and subordinate relationship. I believe in teamwork. We all have a role to play and, as a team, we can all produce more than one individual can."

ENERGY FLOWS

There is certainly nothing showy or presidential about Sum's glass-partitioned office where he prefers to stand, rather than sit, at a raised desk. Just as his morning run helps him to think, he says being on his feet keeps the energy flowing while answering emails or conducting a conference call.

As he gets to grips with the construction equipment market in China, which he sees not as one country but more of a continent with diverse languages and different economic cycles, he has the international trade fair Bauma 2014 taking place on his doorstep in Shanghai.

"This event is particularly important for Volvo China. It is an opportunity for Volvo CE to demonstrate to the world that we are committed to the Chinese market – especially in today's challenging environment – and that we are continuing to invest in this market and bringing in many new products."

FAMILY VALUES

While thinking about how to grow the business, Sum is also busy growing his family. As his wife and five-year-old daughter are still living in Singapore, he travels back there every three weeks or so and a new baby is due in October. "My second will be a girl as well so I will have two princesses

– three princesses – at home," he corrects himself. "The family will come over to settle here in Shanghai in 2015."

Sum is a big fan of Shanghai, which he describes as one of the most beautiful cities in the world. His grandfather came from Guangzhou so China is in his blood and although he has been exposed to cosmopolitan culture from an early age he says his family observes traditional Chinese values at home. What interests

him, though, are cultural traits which cut across geography and nationality. What he likes in Volvo's Swedish roots, for example, is the importance of respect for the individual.

"Every culture has its strengths but the strength of the Swedish culture is the importance of a good work-life balance and belief in an individual's contribution. I'd like to encourage our Chinese colleagues to always express their opinion, always speak their minds. I think more and more staff will get comfortable with this kind of environment and more of them will take more ownership of the projects they work on." ㊄

CHINA IS AN IMPORTANT MARKET FOR THE WHOLE VOLVO GROUP

Visit the *Spirit* website or download the free *Spirit* iPad app to see the video interview with Francis Sum

VOLVO CE SHOWS IT CARES

Volvo Construction Equipment makes its presence felt at Shanghai's Bauma China exhibition, the number one trade show in Asia

Volvo's 1,804m² exhibition area displayed the company's long-term commitment to the China market, with 'Caring Drives Innovation' as the overall theme. Volvo CE grasped the opportunity to showcase products specifically adapted and designed for China, alongside other key international players keen to present their wares at the Shanghai New International Expo Center. Company President Martin Weissburg made it clear that China, where Volvo CE is already a market leader in excavators and wheel loaders, is fundamental to the company's future plans.

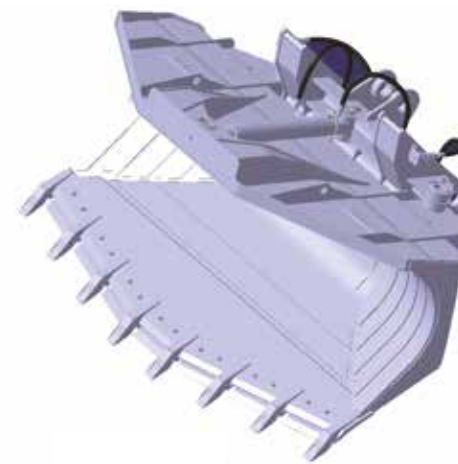
Visitors were given an insight into the advantages and benefits of being a Volvo CE customer, thanks to a comprehensive package of finance, fleet management, parts and service support options. On display were exhibits from Volvo CE's design arts campaign Trash to Treasure, transforming scrap metal from Volvo machines into art. Also featured, Volvo CE's nationwide eco-operator contest Operator Idol, the first contest of its kind in China, and the largest fuel-efficiency training event in the world targeting more than one million excavator operators in China.



bauma
China 2014

ATTACHED TO CHINA

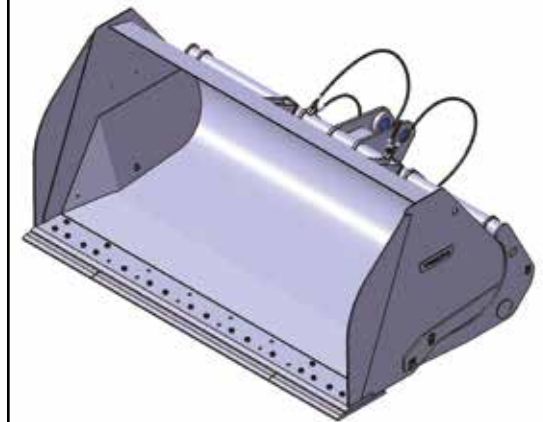
Volvo CE has developed a number of attachments for its iconic L105 wheel loader to cater for the needs of customers in China, turning this highly adaptable machine into a multiple tool carrier



Research into the engineering and operation of a large number of tunnels and underground mines in China has led to the development of a side dumping bucket for the L105 wheel loader to cope with limited working space. This custom bucket, combined with the lifting device and hydraulic system of the L105, substantially improves the safety and convenience of underground and tunnel operations.



Based on centuries of experience and knowledge in Sweden of wood loading and transport, Volvo CE has developed an advanced log grapple for the L105 wheel loader. This multi-functional attachment is designed for use in wood gathering and processing industries, making loading and transporting safer and more efficient.



A high tipping bucket has also been introduced by Volvo CE to cater for the tall trucks operating in the Chinese market with higher dumping points. The bucket is ideal for light materials such as snow, wood chip, fertilizer and coal, with its built-in hydraulic system giving a taller tilt height than standard. Truck loading and high lifting is not only made easy, but loading times are reduced and safety is enhanced. →



ADAPTED FOR THE CHINA MARKET

Star products at Bauma included Volvo CE's new P6820C (featured) and P8720B pavers offering quality paving and fuel efficiency

The new mid-sized Volvo P6820C tracked paver is an all-rounder equipped for high performance – ideal for medium-sized jobs with some flexibility for larger scale projects.

The emission-compliant engine is considerably more powerful than the model it replaces, while using less fuel and making less noise. Fuel consumption is further reduced when the operator uses smart power mode to lower engine RPM to match power and demand, resulting in fuel savings of up to 30%.

The Volvo Variomatic screed offers a high degree of flexibility when frequently changing paving widths, up to twice the basic screed width – from 2.5 to five meters. Added extensions means it can pave up to widths of nine meters. With a Volvo fixed screed, the P6820C is proven to be effective when paving up to 700 tonnes per hour at 10 meters wide. This machine is versatile enough for a range of applications, including municipal and main roads, highways and waste-storage areas. It can also handle a range of materials, from wearing course and binder course to base course and frost protection layers.

For the China market, the P6820C has been equipped with a flat fuel tank, an extended hopper and a newly designed oscillating beam with push rollers adapted for the higher dumping clearance in standard China dump trucks.

Maintenance of the P6820C track paver has been simplified, with improved service access from the operator platform to service points, via large opening compartments. Volvo CE has also delivered a segregation method for material conveyance and distribution specifically designed for the asphalt mix used on roads in China. →



SHOW-STOPPER

The new EC170D crawler excavator (pictured) displayed at Bauma has not been seen in China before

To meet growing demand for machines in China's growing civil engineering sector, Volvo Construction Equipment is preparing to introduce excavator models EC130D, EC140D, EC170D and EC220DL to the market. The EC170D crawler excavator is a totally new tonnage model which falls between those of 20 and 14 tonnes currently sold in China, providing better productivity than a 14-tonne model yet working out more economical than one of 20 tonnes. The EC170D is the epitome of Volvo CE's modern D-series style, equipped with an engine that conforms to Chinese emission regulations while offering improved fuel efficiency with ECO mode and optimum operator controllability. 



SHIFTING SANDS

A new road in the world's largest sand desert is the first-ever land link between Saudi Arabia and Oman

by John Bayliss

At nearly 600,000km², the sandy wilderness of Rub' al Khali – or Empty Quarter – covers a huge tract of the Arabian Peninsula that is comparable in size to the whole of France. The terrain is covered with active sand dunes that can rise to 250m as well as areas along the eastern edge which are marked by salt flats. This is one of the world's hottest, driest and most unforgiving environments.

The Saudi company Al-Rosan Contracting was contracted to construct a 256km-long highway linking the Kingdom of Saudi Arabia and the Sultanate of Oman. The greater part of its length comprises a single-lane carriageway in each direction, although in sections where there are steep inclines there is a secondary lane for trucks and slower-moving traffic. The last 30km stretch of road at the Omani end is now lit.

According to Fahad Hazza Aba Alros, General Manager of Al-Rosan Contracting, the project presented unique obstacles. "I would say the entire project was a challenge from day one, whether it was the climatic conditions, topography of the area, the distance from the nearest inhabited city, or the availability of spare parts and services. None of the usual factors that are associated with success were present in this project."

HIDDEN OBSTACLES

The highway starts at a site near the Shaybah oil well, owned by Aramco of Saudi Arabia, and runs up to the border of the Sultanate of Oman. One of the many challenges facing the Rub' al Khali project is that the road passes through the Chiba petroleum field, requiring special care in dealing with existing services there. Within the field there are pipes and power cabling, telephone lines and electrical towers. All the road construction has had to be planned to avoid causing any disruption to the Chiba operations.

Summer daytime temperatures in the desert can rise to as high as 50°C and then drop to below 1°C at night. →

With such extreme conditions to overcome, Volvo CE was singled out as the construction equipment supplier because of its reliability and dependability. The plant machinery was sourced through FAMCO (Al-Futtaim Auto & Machinery Co. LLC) which has provided full support.

“Al-Rosan is one of our important contractors and a loyal customer of Volvo CE,” explains FAMCO Saudi Managing Director Amal Almizyen. “When they were awarded this contract, we were left with the challenge of supporting them logistically as the closest city was nine hours away by road. More challenging than that was the reliability of the machines. With temperatures ranging from 50°C in the day to -1°C at night, and sand blowing continuously, it was very difficult for both operators and the machines. However, from the very beginning Al-Rosan said on-site support was crucial and so we had to gear our services up to that challenge.”

SUPPLY BRIDGE

From its Riyadh branch, FAMCO established a logistics ‘bridge’ to supply Volvo equipment to a remote and isolated area in one of the most barren deserts in the world. “With a distance of 1,000km from the nearest inhabited city, we were determined to rise to the occasion and prove that we are worthy of our reputation,” says Almizyen.

“The road through Rub’ al Khali is a fine example of how service, product support, customer engagement and on-site maintenance all came together for the contractor,” says Paul Floyd, FAMCO Group Senior Managing Director. “This is a project that is extremely important to Saudi Arabia’s infrastructure development and we are extremely proud of being part of this iconic but ambitious project, and rising to the challenge.”

In all, some 95 pieces of Volvo CE equipment have been used on this venture – a range of articulated haulers, excavators and motor graders. In spite of the extreme desert conditions, no modifications were needed to the equipment, with FAMCO expressing complete satisfaction with their operation.

“With 95 machines on site, a demanding round-the-clock construction schedule, 1,000 feet [305m] high dunes and unimaginable terrain, this was not a simple task,” says Ahmad Halwani, FAMCO General Manager, Construction Equipment Division. “Without mentioning names, we had a few competitors whose machines stopped functioning after some time as they couldn’t keep up with the uptime, or their nearest support was hours away. The star feature was the maintenance support we could provide, although most evident was real durability in one of the most barren places on Earth.”

With no local settlements or safe drinking water, desalination plants have had to be set up and temporary accommodation constructed for the nearly 600 drivers, excavator operators, technicians and auxiliary staff needed for the three-year project. Special units are required for the maintenance of equipment, too, as the nearest facilities are 40km from the construction site. Fuel and spare parts,



FAMCO's Amal Almizyen



Volvo machines transported 130 million cubic meters of sand



FAMCO'S Paul Floyd



THIS IS ONE OF THE WORLD'S HOTTEST, DRIEST AND MOST UNFORGIVING ENVIRONMENTS



95 Volvo machines were used on the project



The highway is 256km long

along with food and water for the workers, have all had to be shipped in.

“It is no secret the project had its own unique challenges, especially when it came to the after sales support and maintenance,” comments Mark Johnson, FAMCO General Manager, Aftersales Division. “Never before has the region witnessed such a remote construction site, so we at FAMCO had to build our own modular maintenance facility to support the contractor. Taking into consideration the remote project location, difficult area topography and extreme environment as well as no phone coverage, FAMCO’s aftermarket support division played a major role in the success of this contract. We established 24/7 on-site workshops operated by experienced technicians to ensure smooth and reliable service and maintenance of the Volvo machines.”

DIRECT IMPACT

The region’s strong winds shift sand from one area to another, creating a frequently changing landscape. In addition, marshes created by ground water on the surface are common and necessitate specialist construction, including the creation of a fabric mesh shield to protect the road from rising water levels.

Every day, sand was excavated and then compacted using the naturally salty ground water to construct sand bridges across the salt flats and between the high-rise dunes. The volumes of sand are enormous, says Faye M. Subbaheen, Project Manager at Al-Rosan Contracting. “The amount of sand transported in this project to construct the bridge of the road was 130 million cubic meters. At the same time, another 12 million cubic meters of selected material has been used to protect the sand embankments from erosion by wind or water.” To give some idea of the volumes involved, 130 million cubic meters are equivalent to 26 of Egypt’s giant pyramids.

The new road is set to have a huge impact on transport between Saudi Arabia and Oman. Until now, goods shipped by land between the two countries have had to make a circuitous journey via the United Arab Emirates on the existing road network. The direct route across the Rub’ al Khali will reduce the journey times dramatically.

For such an important project, Essam Al-Malik, FAMCO Saudi Regional Manager (Central Province) has no doubt why his company was chosen for the work. “Al-Rosan selected FAMCO because of its reputation, the quality of its products and the continuous technical and logistical support which we provide for our clients,” he says.

FAMCO’S Ahmad Halwani pays tribute to Volvo CE: “We are proud that Volvo CE has played a part in making one of the most iconic, possibly the longest road in the Middle East,” he says, while FAMCO’S Paul Floyd adds: “The strategic importance of this project represents a key addition to both FAMCO’s and Volvo’s record of achievements.”

Visit the Spirit website or iPad app to watch a video of the road being built

AMBITIOUS GOAL

Volvo pavers are used nationwide to help build thousands of kilometers of new roads →

by Cathy Smith





The famous Terracotta Warriors of Xi'an



Zhao Wei, Equipment Manager, Shaanxi Road and Bridge Group



CHINA

VOLVO CE IS A MARKET LEADER IN TRACKED PAVERS IN CHINA



ABG8820 pavers are active 14 hours a day

Xi'an in the northwest of China, home to the famous Terracotta Warriors, was once the country's imperial capital where, more than 2,000 years ago, Emperor Qin Shi Huang had a passion for building. He began work on the Great Wall, he built the warriors to protect him after his death and he constructed the country's first road network.

Today, China's road building program is rather more ambitious than it was in the Qin Dynasty with up to 10,000 kilometers of new highway being completed every year.

To the north of Xi'an, four Volvo ABG8820 tracked pavers are active 14 hours a day paving the final layer of asphalt on a new 96-km highway scheduled to open for traffic in Shaanxi Province in November 2014.

The rural roads around the construction site give a clue as to why the new highway is needed, with the carriageways frequently blocked by three-wheeled trucks precariously stacked with mountains of newly harvested corn. At a crossroads, as a stark reminder of the dangers of excess speed, the crumpled wreck of a car caught up in a fatal

traffic accident is put on display.

The Xian-Xun Highway will relieve a lot of the pressure on local roads, and the Shaanxi Road and Bridge Group, which won the ¥5.7 billion (€716 million/US\$928 million) contract to build the new toll road, believes the inclusion of Volvo Construction Equipment in their bid played a part in being awarded the tender.

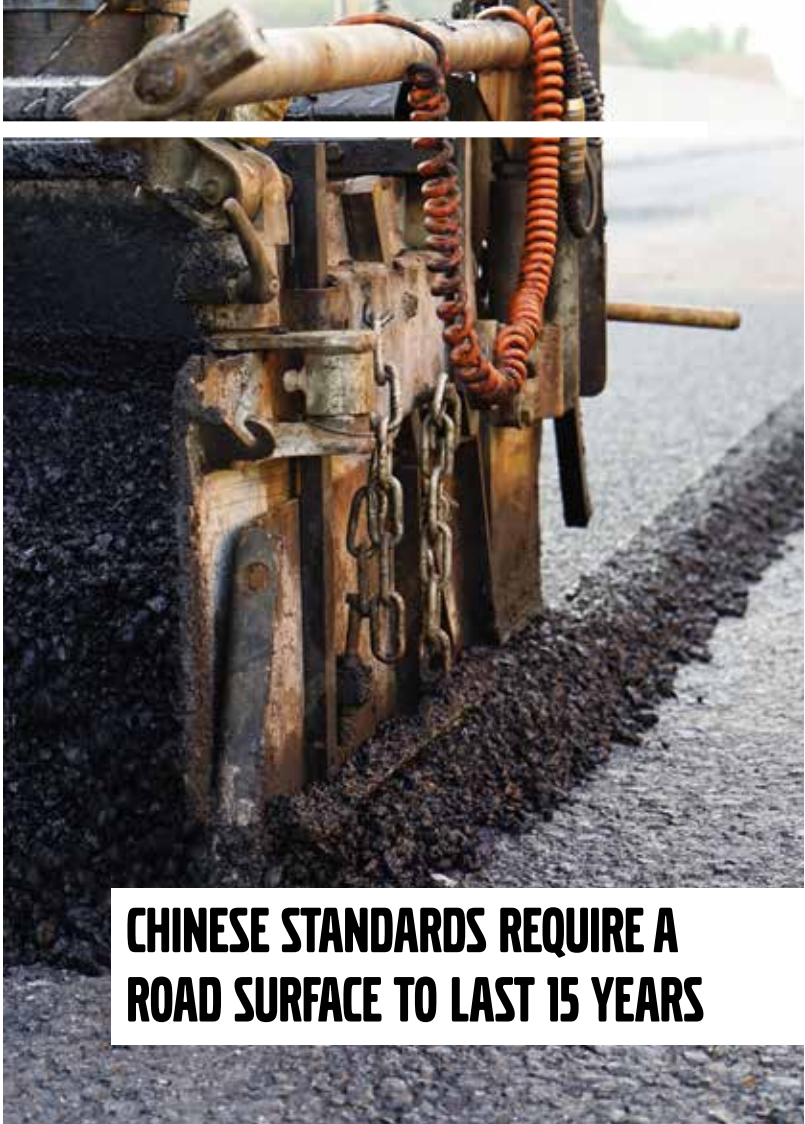
RAISING STANDARDS

New Chinese road-building standards require a surface to last 15 years, although few roads actually meet those requirements. But the company's equipment manager Zhao Wei says, from what they have seen elsewhere in China, Volvo tracked pavers, with their ABG double-tamper technology, can certainly produce a more durable road surface.

"When we are paving the road using a Volvo 8820 paver it can help us reach the national standard and the →



Duan Yanfei, General Manager,
Tongguan Construction Machinery Co



CHINESE STANDARDS REQUIRE A ROAD SURFACE TO LAST 15 YEARS

operations are easier," says Zhao.

It is hot, sweaty work spreading the boiling screed on the four-lane highway as the summer sun beats down, but operator Xin Ming says he is in the most comfortable place – in the cabin. "It is well designed with a person in mind," he says. "I like the canopy above for hot weather – some other pavers don't have that. And when you're working and there's a problem, the message on the control panel comes up in Chinese and that's helpful."

TIME FOR CHANGE

The expressway is part of a new six-highway network designed to boost urbanization in this region and to capitalize on the millions of tourists who come to Xi'an to visit the Terracotta Warriors. It is vital infrastructure for the fast-developing Guanzhong-Tianshui Economic Zone intended to stimulate the inland economy that has lagged behind China's booming coastal areas.

Project Manager Guo Yong says, crucially, the new road will more than halve the travel time for shipments from the coal mines in Xunyi County at the northern end of the highway to the industries they supply around Xi'an. "The expressway will make the journey just over one hour, whereas it is two-and-a-half hours now, and that will make a huge difference."

Volvo CE is well established in Shaanxi province: as well

as the main dealership in Xi'an, each of the province's 10 secondary cities has a Volvo-approved service workshop so customers know they will get help promptly when they need it.

DRIVING FORCE

Volvo CE is already a market leader in tracked pavers in China even though they cost twice as much as some local Chinese brands. And Duan Yanfei, who runs the Xi'an Volvo dealership, Tongguan Construction Machinery Co, is convinced that the higher road construction standards will work in Volvo's favor in the future.

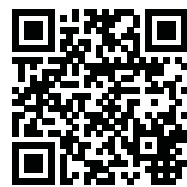
"In China, the competition is becoming fierce. We think some low-quality brands will leave the market. We're confident that with our good service and good-quality machines we are going to occupy more of the Chinese market."

And it is an active market. The number of cars on China's roads has increased from 23 million in 2003 to 140 million today – and that is not counting commercial vehicles. By 2015, the Chinese government's goal is to complete 120,000 kilometers of highway nationwide – a figure Emperor Qin could only have dreamt of. 万

Visit the *Spirit* website or the iPad app to watch a video report of this article



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



Volvo Construction Equipment





Photographs by Jonathan Nackstrand

PAVING THE WAY FORWARD

A Volvo paver was adapted to suit conditions nearly two kilometers below ground in the world's largest iron ore mine

by Nathalie Rothschild

The discovery of a massive iron ore deposit led to the birth of the Arctic town of Kiruna. Located 300km north of the Arctic Circle in Swedish Lapland, Kiruna sits atop a giant slab of pure magnetite that plunges 4km into the ground, is 2km deep and has an average width of 80m.

Mining began in 1898, first via open pits. In the early days, miners transported the ore in horse-drawn carts. It was not until the 1960s that Sweden's state-owned mining company Luossavaara-Kiirunavaara Aktiebolag (LKAB) switched to underground mining.

Today, Kiruna is home to the largest and most modern underground iron ore mine in the world. A railway and road network snake their way to a depth of 1,542m below ground and Kiruna is literally a town on the move:

over the next two decades, part of the town's population will be relocated to new homes, built around a new town center, to allow the mine to expand.

DIGGING DEEP

Far below, foreman Mathias Enlund leads a team of seven asphalt-paving professionals who are laying the mine's 400km underground network of roads. The asphalt is mixed at a site located 17km away from the mine before being transported underground to the paving team. According to Enlund, their task was made easier with the arrival of a Volvo P7820C tracked paver.

"We used to work with a wheel-equipped paver. Now, we never get stuck because this machine is track-equipped and I have to say it is very reliable. The work doesn't get held up," Enlund says of the Volvo paver, adding: "It's reassuring that

it is equipped with a clean combustion engine with its low noise and fuel consumption."

Enlund lives with his partner and two toddlers in the far northern town of Jokkmokk, to where he returns at weekends. This is "where the world begins", he says. Like the rest of his team, he works four days a week for the entire summer season, from May through to October. Asphalt is laid between June and September.

It was early this year when the team switched machines. Almost all the paving is uphill and the new paver from Volvo is powerful enough to push 55-tonne mine trucks delivering asphalt to the tunnel up slopes with a gradient of 7%.

WE NEVER GET STUCK BECAUSE THIS MACHINE IS TRACK-EQUIPPED

QUICK REACTION

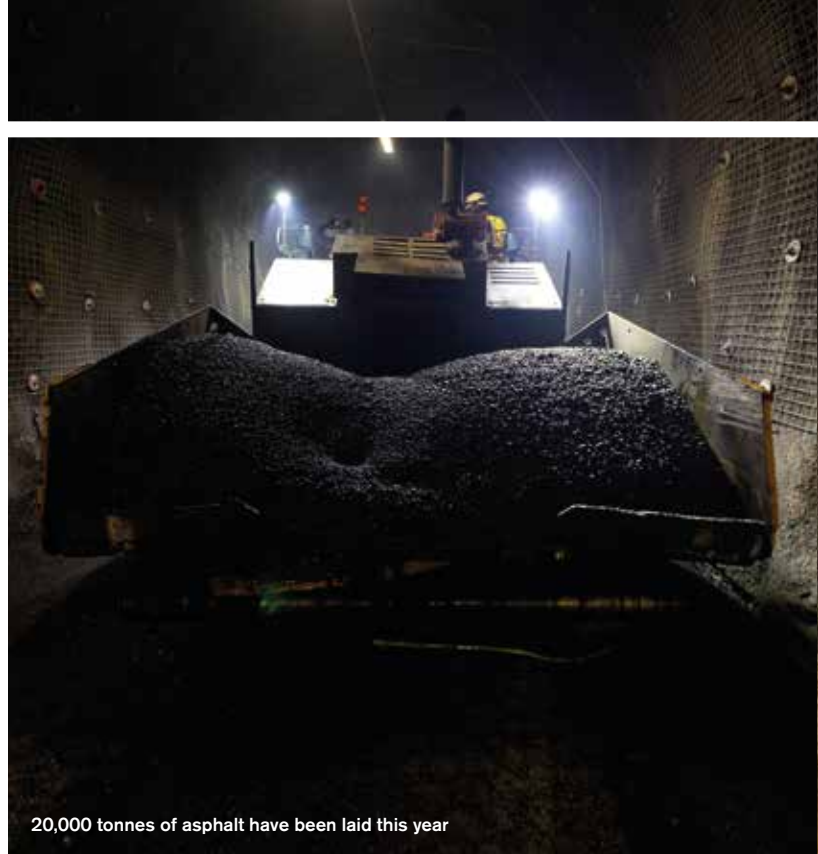
When LKAB contracted NCC Roads – one of the leading construction and property development companies in the Nordic region – to carry out underground paving and road repairs in the Kiruna mine, the company contacted authorized Volvo CE dealer Swecon to check if they could offer suitable equipment.

Volvo CE immediately provided the P7820C, which was then modified and taken nearly 1.5km below ground – a journey that took several hours since the paver runs at a maximum speed of 4km per hour. The whole process – from the first phone call to the first asphaltting – took just 10 days, which included the time to modify the paver.

"The P7820C had to be adapted to suit the very particular conditions that exist down the mine," explains Svante Bodare, a product specialist for road machinery at Swecon. "The underground tunnels are dark, the ceilings are low →



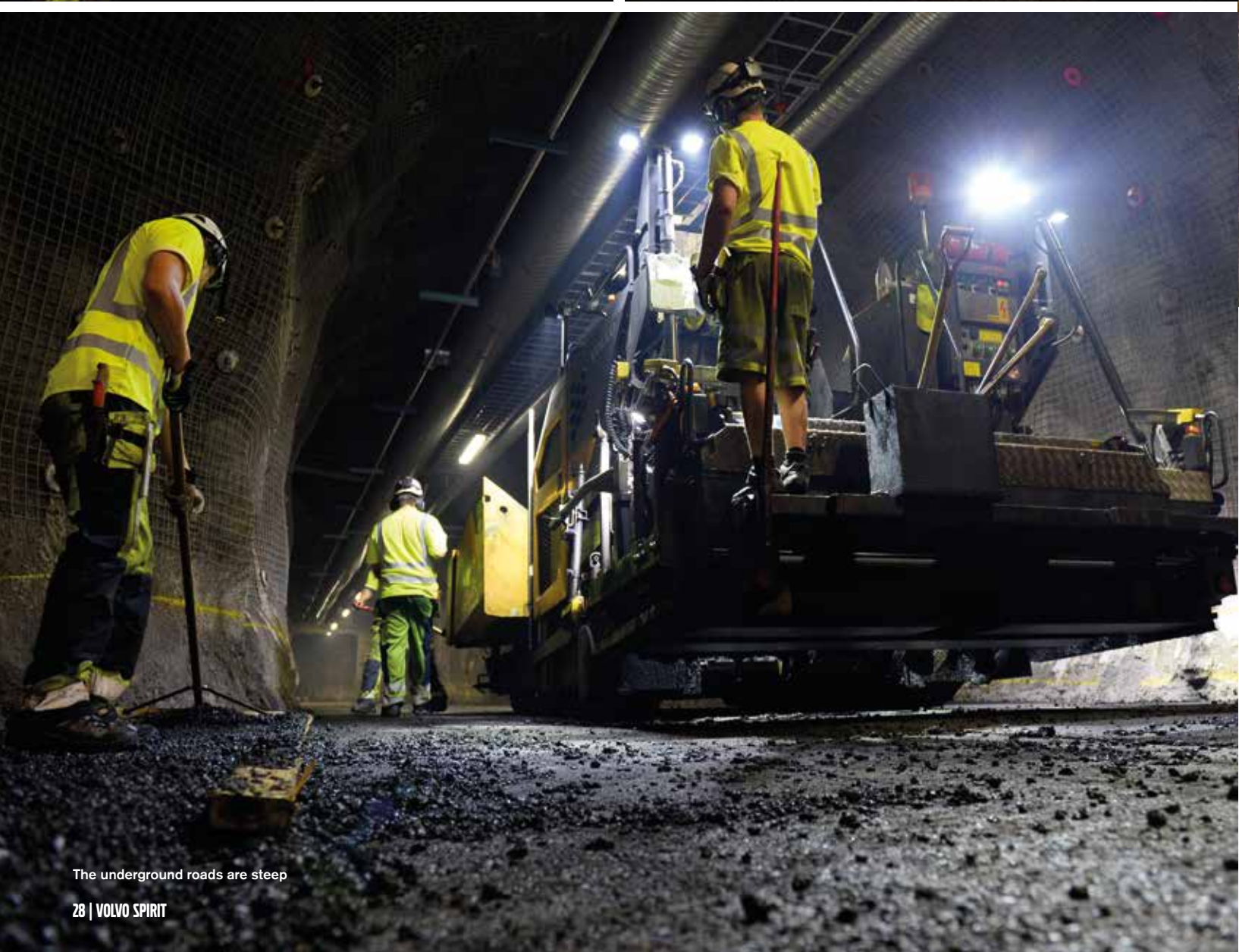
Operating the paver's control panel



20,000 tonnes of asphalt have been laid this year



The Volvo P7820C tracked paver was adapted to suit the conditions



The underground roads are steep

and the roads have a near constant gradient of 7%. So, we removed the roof of the paver, the exhaust pipe was shortened and extra lights were mounted on the machine.”

This has been a unique solution for Sweden. “In this country, 98% of paving is done above ground and with wheel-equipped machines. We also tend to transport those machines between construction places with the help of trucks, but in the mine they drive the P7820C between the paving sites,” says Bodare.

NCC Roads site manager Johan Pettersson claims the paver made all the difference to his team’s work.

“When the equipment is unreliable, that really raises everyone’s pulse. This paver provides a whole different sense of confidence that we can carry out the work efficiently and without disruption.”

GOING DOWN IN HISTORY

Whilst the operators are pleased with the paver, the biggest challenge, says Pettersson, is moving it at the end of a work shift because that is a slow process. And since the paver

is being used in unusual and tough conditions, proper maintenance is imperative.

“We’re currently leasing the machine from Swecon and since they have a workshop here in Kiruna, the service is excellent. They can send out specialist service personnel fairly quickly which makes a huge difference – in the past,

we used older machines and the nearest service staff were located in Umeå, seven hours away.”

Apart from laying a massive road network, the Volvo paver is also being used in the construction of new underground offices, service stations

and garages. Iron-ore extraction is currently taking place at around 900m, but the P7820C has been down to 1,480m, where it has literally been paving the way for future operations.

“Around 20,000 tonnes of asphalt have been laid underground this year which is probably the largest amount ever in the history of the Kiruna mine,” says Pettersson.

He would like to keep using the Volvo paver as it will be useful for road maintenance, which is continual. “There is a constant market underground,” he says. ▣

THIS HAS BEEN A UNIQUE SOLUTION FOR SWEDEN

Photographs by Patricio Murphy



ALL HANDS ON DECK

A dockworker cooperative is happy to share the load
in one of Argentina's busiest ports →

by Kristie Robinson

A wheel loader fitted with extension designed to improve worker safety

“It could be worse. You could be loading bags on to ships in the port,” is the oft-heard reply when somebody complains about their job in Argentina. But in one cooperative, the dockworkers stand proud when talking about their profession, many having followed in their father’s footsteps to work the docks. And thanks to mechanization, the back-breaking work of loading bags is a distant memory.

Lying on the banks of the Paraná River, 550km upstream from the Atlantic Ocean is Rosario, Argentina’s second city and home to San Lorenzo, one of the country’s biggest and busiest ports. Some 85% of the country’s crops, oil and by-products pass through San Lorenzo and the ports of Greater Rosario. Argentina was once referred to as “the breadbasket of the world”, and with agricultural exports booming, this is no small business.

With the series of port terminals stretching more than 50km, and working 24 hours a day, 365 days a year, the shipping companies need quick and efficient partners to dispatch their cargo.

That role is fulfilled by the 1,000 workers of the General San Martín Port Workers’ Cooperative. Herme Juárez, president of the cooperative since 1969, is a man with an unmatched understanding of the docks business, and the important role the port of San Lorenzo plays in the local community. “The town moves at the rhythm that the port dictates,” he explains.

HISTORY OF COOPERATION

Juárez started out more than 50 years ago, working as a stevedore, loading and unloading the boats as they docked. He is a man with the vision of an entrepreneur, but with the heart of a unionist. After experiencing the marginalized and exploited reality of the dockworker, and seeing how his and his fellow workers’ efforts often went unrewarded, he started organizing the cooperative and its 45 members.

“You are born in this life to do things. And so we started to,” he explains.

His aim was to give the dockworkers – then regarded as “third- or fourth-class citizens” – a better way of life, as well as providing an efficient service to the companies that use the port. The workers toiled hard, winning over more clients, and the cooperative soon started growing.

In 1996, Juárez realized that if they were to incorporate machines, they could load boats a lot more quickly, and so the cooperative secured a credit to invest in 10 L70C wheel loaders. The decision would mark a milestone in the cooperative’s history, allowing it to grow exponentially.

“Due to the speed at which we can now load the boats, we are saving our clients hours of navigation. Even three or four hours faster, is three or four hours more time to navigate,” Juárez explains.

TIME IS MONEY

However, the time saved would not be measured in hours, but in days. Before mechanization, it would have taken 20 days to load a 56,000-tonne boat in miserable conditions;



Ambulance boats are part of the emergency rescue center developed by the cooperative



At the foot of a mountain of soy flour

using the wheel loaders cut the time to 72 hours. And at today’s rhythm, with the recent incorporation of 10 more L90F wheel loaders with 7m³ buckets – bringing the total to 79 Volvo machines, mainly wheel loaders – the same vessel can be loaded in little more than a day, with each machine moving around 800 tonnes an hour.

Last year, the cooperative loaded a record 6.3 million tonnes of goods on to boats in San Lorenzo and Greater Rosario. The dockers take pride in providing an unmatched service to the port. And such is their satisfaction with the wheel loaders, at their end-of-year parties and other celebrations, there is always an L90 present – its bucket filled with ice and champagne.

Juárez sees their Volvo machines as an integral part of the cooperative family. “We have achieved everything we have with Volvo – but obviously the Volvos don’t drive themselves, they are operated by people.” And people always come first. There are many occupational hazards in dock work, but “people over profit” is the rule by which any decisions are made, particularly with regard to worker safety.

Gustavo Casas, manager of key accounts in Argentina and Uruguay for Volvo CE, says it is a privilege to work with the

Herme Juárez, President of the General San Martín Port Workers’ Cooperative since 1969

VOLVO WILL BE AN INTEGRAL PART OF THE COOPERATIVE’S FUTURE

cooperative: “With its vision and prioritization of its workers, the cooperative is an ideal partner for Volvo CE – they are an example of what Volvo CE looks for in clients.”

SAFETY BELT

One particular example of the job the workers undertake is the loading of agricultural products on to conveyer belts that carry the products on to the ship. One warehouse, where four wheel loaders work, houses 180,000 tonnes of soy flour, piled 40 meters high.

Operator Pedro Fydrizwski explains: “We use the machines to push the flour through a grill in the floor on to a conveyer belt which takes it to the boat.” The job used to be particularly dangerous, as the towering mountains of tightly packed flour, which could have been sitting there for as long as a month, are prone to loosen unexpectedly, causing an avalanche of flour on to the machines and workers. While the incorporation of wheel loaders had reduced accidents by 95%, the workers wanted to go further.

So the team of mechanics at the cooperative came up with a solution: for the past three years, operators have been

using a crane extension on the front of the wheel loader to help loosen the products they are moving. This was entirely designed and constructed by the cooperative’s workers, and has further helped improve worker safety, as the machines no longer have to work so close to the edge of the flour ‘cliff’.

Better safety means improved efficiency and more profits for the cooperative, which have been channeled into both social and community outreach projects, as well as further safety improvements, the most recent of which is a new emergency rescue center. Complete with helicopters, ambulance boats, and land ambulances, the center is the first of its kind in Latin America, and was developed specifically to deal with the occupational hazards of dangerous port work.

Juárez, who could have retired long ago, is a visionary who has an insatiable desire for better results, believing they can continue to improve workers’ lives. And he is certain that Volvo will be an integral part of the cooperative’s future, saying the next move may be to add some L120s with 12m³ buckets to his fleet. “But only if the belts can keep up.”

Visit the *Spirit* website or the iPad app to watch a video report of this article

GRASPING THE FUTURE

One of the largest lumber producers in the US is using Volvo machines to move one of its mills into the future →

by Julian Gonzalez



THE COMPANY DECIDED TO TRUST THE IDEALLY BALANCED VOLVO MACHINE WITH ITS AMBITIOUS PLANS



Jim Smith (left) and Dana Schmitz of the Idaho Forest Group

In what appears to be a combination of the movies, *Jurassic Park* and *Transformers*, three Volvo L180GHL high-lift wheel loaders have made their way to the United States thanks in large part to a visionary, family-owned company which is determined to blaze a new trail in the US lumber industry.

Headquartered in the thick, green forests of northern Idaho, the Idaho Forest Group has added the Volvo log loaders to its Lewiston sawmill which is currently being transformed into one of the most modern and technologically advanced mills in North America.

“Our theory is to be as efficient as we can and to keep up with the technology so we can have the lowest cost. That gives us a margin that we can pay the most for logs, pay the most to the landowners so that we can continue to run and we can compete for logs. It also gives us room to reinvest in the mill and we need to reinvest,” says Dana Schmitz, Business Planning/Analyst at Idaho Forest Group.

The company first encountered the L180GHL during a visit to a mill in Austria, but it was not until they visited a facility in Michigan, which at the time owned the only L180GHL in the country, that the company decided to trust the ideally balanced Volvo machine with its ambitious plans.

“Being a purpose built machine, they’re not as big as some of the other ones we looked at, but I think they pack the

load much better and distribute the weight between the two axels better,” says Schmitz. “They looked like they carried the loads a lot better than their competitors – that was one of the main selling points to us.”

NEW HEIGHTS

The company operates five mills throughout Idaho, which makes it one of the largest lumber producers in the US, with capacity for nearly one billion board feet per year and markets around the globe. The Lewiston mill alone produces one million board feet per day, 200-300 million board feet, annually.

With those numbers projected to rise significantly, optimizing yard space will be vital when the facility upgrades are completed later this year, which is the main reason why the high-lift capabilities of the L180G ended up in north Idaho.

John Cushman is the branch manager for Volvo CE dealer, Clyde/West Inc. “At this operation with the L180GHLs, they are stacking logs at an average height of 18 feet (5.5m), whereas with the conventional methods we typically use in the US we have an average unassisted stacking height of 11 feet (3.35m). They’re gaining seven feet (2.13m) of log storage in this area which is huge,” says Cushman, adding:

“If you consider the cost of the storage area, then increase its capacity by 30%, then factor in the decreased travel distance for the machines this all adds up to shorter machine cycles, less wear, less fuel consumed and the opportunity to handle more logs per hour. This makes our machines a very good log handling solution offering the best utilization of the storage area at the lowest cost.”

FUEL FOR THOUGHT

The 13-liter, 6-cylinder straight turbocharged diesel engine provides high torque at low speeds with Volvo’s Combustion Technology, V-ACT. Low emission levels meet Tier 4 Interim/ Stage IIIB engine requirements for ultimate efficiency and environmental care and the eco pedal encourages the operator to engage throttle with the appropriate amount of mechanical counter pressure (push-back).

The three Volvo L180G loaders zip across the Lewiston mill yard carrying short logs with a hydraulic-powered grapple that rotates 360 degrees. The list of positives delivered by the Volvo machine is lengthy, but for the Idaho Forest Group, fuel savings was at the top by a wide margin.

“That fuel is just so key. You look at some of the older equipment we’ve got and they’re gobbling up 12-13 gallons (45-49 liters) per hour packing logs, while these guys, the last time I looked, are using 4.5 gallons (17 liters) per hour. Mind you, they’re not as busy as they will be in the future, but that’s just amazing,” Schmitz says.

The company estimates that during the lifetime of the three Volvo machines, which they hope will be 10-15 years, their fuel savings will be US\$2.5 million (€1.8 million).

Mill operators are equally enthusiastic about working in a cabin quiet enough to produce only 40-45 decibels of sound, while driving in an in-cab

climate control system, with ergonomic controls and all-around visibility windows.

“It is inconceivable thinking about what the old systems were like,” says Jim Smith, lead mechanic at Lewiston Mill. “Someone was really thinking out of the box when they came out with these.”

THE LIST OF POSITIVES DELIVERED BY THE VOLVO MACHINE IS LENGTHY

Visit the *Spirit* website or iPad app to watch a video report of this article



SPOTTED IN SWEDEN

This season's animal prints not only feature on the fashion catwalks of Paris, London and New York, but also on a Volvo machine designed for a catwalk of a different kind...

Having undergone a makeover at the paint shop, a Volvo L90F wheel loader featuring striking cheetah-print paintwork has found a new home in the cheetah area of Parken Zoo in Eskilstuna, Sweden.

The exotic contribution from Volvo CE symbolizes the cooperation between the two organizations, representing Volvo CE's commitment to caring for the environment and its support for the zoo's efforts to preserve biodiversity and save our endangered species.

Environmental care is one of the company's three core values, along with quality and safety, and Volvo CE is widely acknowledged for its environmental stance. For example, less than a year ago, at the end of 2013, the company achieved carbon neutrality at its 45,000m² articulated hauler facility at Braås in southern Sweden which relies entirely

on renewable energy sources including wind, biomass and hydropower. It is the first facility of its kind in the industry.

More than any other manufacturer, Volvo has built its reputation on the foundation of environmental care and sustainability. A leading advocate for sustainability, the company has made pioneering inroads into fuel efficiency, including operator training schemes to encourage fuel efficient driving.

CLIMATE CHALLENGE HEATS UP

Volvo CE estimates that 90% of its climate impact is indirect, resulting from the use of its machines in nearly all stages of the construction industry cycle. The company's worldwide network is an ideal route to major stakeholders

VOLVO CE IS WIDELY ACKNOWLEDGED FOR ITS ENVIRONMENTAL STANCE

throughout the construction industry and Volvo is convinced that working with partners is the most effective way to reduce its own climate impact.

"We've been working on reducing emissions through our own internal initiatives for many years, and with considerable success," says Volvo CE President Martin Weissburg, adding: "However, we cannot address climate issues by ourselves."

In the belief that the industry as a whole, not just construction equipment, can achieve more by working together, Volvo CE is promoting the Construction Climate Challenge (CCC). This new global initiative drives forward the entire construction industry's responsibility to counteract any negative impact it makes on the environment.

To this end, Volvo CE has convened an industry summit in Gothenburg, Sweden, for 24 June 2015 with the goal of influencing the construction supply chain, from the extraction of materials from quarries through to the construction of buildings and laying of roads. It will be the climax to a series of global events and conferences designed for maximum exposure. The aim of the CCC over a period of three years is not only to encourage awareness, but also to stimulate dialogue among industry representatives, academics and politicians. It is providing funds for new research from around the world and is already creating a forum to share existing knowledge and resources to help the industry make a difference. Academic research is at the heart of the CCC and it is hoped that the forum will act as a bridge between the construction industry and sustainability research and well as promoting collaboration between academics and the industry. By evaluating results and improvements, the CCC will establish focus areas for a further three-year cycle, as well as creating awareness and encouraging engagement.

COMMITTED PARTNER

The CCC is part of Volvo CE's commitment to the World Wide Fund for Nature's (WWF) Climate Savers program to be a 'climate leader'. Volvo CE was the first company in the construction industry to partner with the program, an initiative that requires participating corporations to commit to cutting carbon dioxide (CO₂) emissions in their operations. The program aims to inspire companies to change their thinking about solutions to respond to climate change and Volvo CE has pledged to cooperate with WWF as a CCC core partner and advisor.

The original agreement with WWF Climate Savers had Volvo CE, along with the other companies within the Volvo Group, committed to reducing CO₂ emissions from



Volvo CE's 45,000m² carbon neutral facility at Braås, Sweden

production plants by 2014 by 12% from 2008 levels without resorting to carbon offsets to achieve the objectives. Volvo CE is committed to following through by developing new technology leading to even better fuel efficiency and lower emissions. The company is also committed to improving site efficiency for customers in a further bid to reduce CO₂ emissions. Volvo CE also plans to develop current operator training and site simulation to promote fuel efficiency improvements.

CHINA FIRST

As part of the agreement with WWF Climate Savers, SDLG, Volvo CE's other brand and joint-venture partner in China, became the first Chinese company to commit to the program. The Volvo Group has been a member of the Climate Savers initiative since 2010 – it was the first heavy-duty truck manufacturer to sign up to the agreement, and Volvo Buses is also on-board.

Since the program started in 1999, Climate Savers member companies have cut their CO₂ emissions by more than 100 million tonnes – about twice the current yearly CO₂ emissions of Switzerland – while creating competitive advantage and increasing shareholder value. ☒

Visit the *Spirit* website and iPad app to see a video of Volvo CE President Martin Weissburg talking about the aims of the Construction Climate Challenge



Volvo CE's Nick Rose (right) with customer Gareth Rees

SMART APPROACH TO BIG BUSINESS

Volvo CE uses app software to market used equipment in Europe, the Middle East and Africa

by Tony Lawrence

Not so long ago, apps seemed to be aimed mainly at people downloading music or games. Now they cater for all needs and all markets, as Volvo CE's new 'Used Equipment' app clearly demonstrates. Launched at the end of July and available in 25 languages, this latest app from Volvo CE gives customers instant and easy access via smart phones or tablets to all Volvo used equipment in the sales region for Europe, the Middle East and Africa (EMEA).

"This is just another way for us to focus on our customers and open a new communication channel with them," explains Nick Rose, Volvo CE's Director for Rental and Remarketing for EMEA.

"We know that more and more customers are searching for used equipment with mobile devices – up to 40% of searches are made in this way. And we also know that our customers are busy, hard-working people, often on the move, away from their offices and travelling between job sites."

INSTANT HIT

"This gives them the opportunity to look for used equipment instantly, wherever they are. The app is easy to use and can

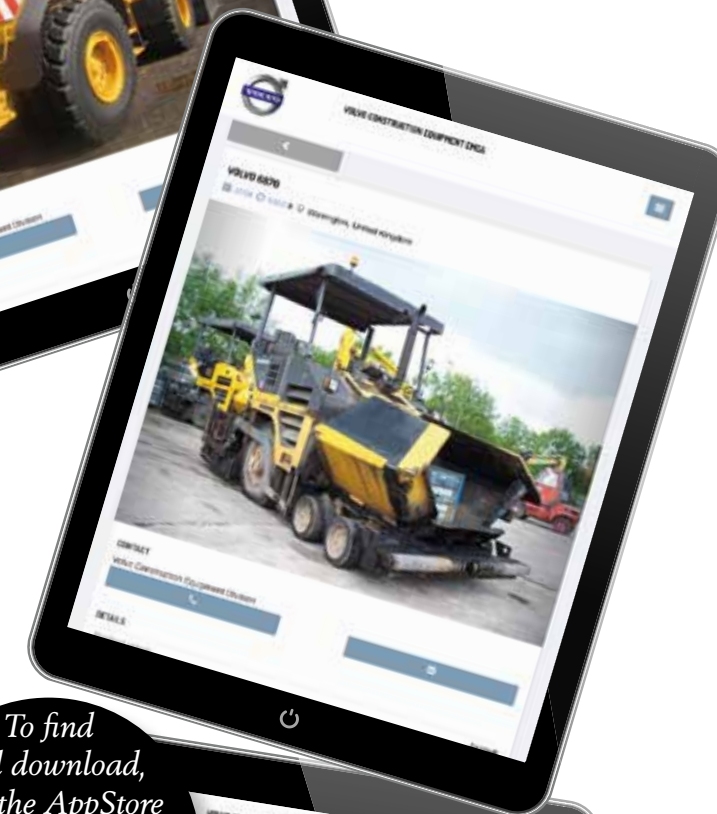
provide a solution to a particular problem they may face. Developing this application represented a new and exciting way for us to help them," explains Rose.

Available for both Apple and Android smart phones and tablets, the app is free to download and gives details of used equipment as well as the dealer's email and telephone contact details.

"We're sure this will fundamentally change the way in which customers search for and purchase used equipment," says Rose, who has been working in the construction equipment industry all over the world for 40 years.

"You find the machine you are interested in then just hit a call button and straight away you're in direct contact with the dealer. It also means you have access to other offers, such as finance, customer support agreements, parts or even warranties, if required."

There is also a 'Volvo Approved Used' search function, for machines up to five years old or those that have been operated for up to 8,000 hours and been fully inspected and, where necessary, refurbished before being awarded a special warranty. The app has been given the thumbs-up by a number of customers, including UK contractor



To find and download, visit the AppStore or PlayStore and type in 'Volvo Construction Equipment'



THIS WILL FUNDAMENTALLY CHANGE THE WAY CUSTOMERS SEARCH FOR AND BUY USED EQUIPMENT

Gareth Rees of Gareth Rees Plant in Swansea, South Wales, who is constantly on the move between sites in South Wales and England.

"I buy a number of new and used Volvo machines for my contracting business," explains Rees. "I find the app particularly useful to search for used equipment whilst on the go – it is quick, simple and easy to find machines for my business."

ON THE BUTTON

The service was launched after close consultation with both dealers and customers who regularly use Volvo CE's public website to buy used machines to strengthen their businesses. The website (www.volvoce.com/used) is already providing Volvo CE with statistics on how many customers use it, how many machine details are viewed and how many purchases are made. According to Rose, the new app has already increased this traffic.

"The impact has been immediate," he says. "Our dealers have been hugely enthusiastic. As I speak to you, I can see from my phone that there are 1,741 used machines available in the region, ranging from compact machines to a 40-tonne articulated hauler. Business does not get much bigger than that."

"This service is customer-focused, it is user-friendly, it provides an immediate solution and we will continue to improve it as we get customer feedback and reviews." ▣

FROM HOME-GROWN TO GLOBAL

Smart acquisitions help Volvo CE grow into a world leader

by Nigel Griffiths

Earlier this year Volvo CE finalized the 2013 acquisition of the US hauler Terex Corporation, a manufacturer of off-highway rigid and articulated trucks. For Volvo CE President Martin Weissburg the transaction represented “an opportunity for Volvo CE to fill product gaps”, explaining that with sales in mining forecast to rise, now is a good time for the company to enter the market for rigid haulers. Described by the company as “a strategic acquisition that offers Volvo CE considerable scope for growth”, the acquisition is an example of a growth process which has helped Volvo CE expand from its modest beginnings nearly two centuries ago in a machine shop in Eskilstuna, Sweden, to become a global player, diversified across a swathe of leading business segments.

COMPLEMENTARY GROWTH

Over the years, many such strategic acquisitions have complemented the company’s in-house development and organic growth. Through this process, Volvo CE has evolved from a specialist engineering company into a total solution provider and one of the world’s largest manufacturers of construction equipment.

Alongside the market-leading construction equipment, such as wheel loaders, compact equipment, wheel-mounted and crawler excavators, motor graders, articulated haulers

and road machinery, Volvo CE also offers a variety of services and after-market solutions – used equipment, rental business, parts, services, attachments and financial services. It now has production facilities in Sweden, France, Germany, China, Brazil, Mexico, South Korea, India, Poland, Russia and the United States.

In the early days, Volvo was a ‘home-grown’ engineering company built on the talents of the brilliant Swedish engineers Johan Theofron Munktel and Bolinder brothers Jean and Carl Gerhard. During the Second World War, Volvo AB – itself the product of two Swedish visionaries Assar Gabrielsson and Gustav Larson – began cooperating with Bolinder-Munktel (BM) in the production of farm tractors and other machines. In 1950, the company Bolinder-Munktel was acquired by AB Volvo, founded by Gabrielsson and Larson in 1927.

It was also during the flourishing 1950s and 1960s that pioneering construction equipment was developed – machines that, in time, came to dominate the company’s production. The first tractor with a diesel engine appeared in 1952 and, two years later, the first wheel loader forerunner of the articulated loader.

By combining the talents of the Swedish wagon-maker, Lucas Lihnell company, the world’s first serially-manufactured articulated hauler known as ‘Gravel Charlie’ was launched in 1966.

CHANGE OF FOCUS

In 1973, the company name changed to Volvo BM. In the following years, some of the best machines ever made by Volvo were put to work on construction sites worldwide.

The year 1977 saw Volvo BM concentrating solely on the development, marketing and production of construction equipment, particularly wheel loaders and articulated haulers. In 1979 it was decided to abandon the agricultural and forestry sectors, and concentrate on construction machinery.

Following a strategic refocusing by the company, the tractor manufacturing division was sold in 1985, and the acquisition trail accelerated during the 1980s and 1990s with the purchase of a number of American, European and Asian construction equipment manufacturers.

In 1985, Volvo BM made a move to open the American market allying itself with the US producer Clark Equipment through the merger of their construction-equipment subsidiaries. This brought together three brand names – Volvo BM, Michigan and hauler producer Euclid – as the VME Group.

Meanwhile, in Europe, VME set out to expand its product range and enter the market for compact loaders through the purchase, in 1991, of the majority share of the German market leader in this sector, Zettelmeyer Baumaschinen GmbH.

It also fully acquired the long-established Swedish excavator company, Åkermans Verkstad AB.

VOLVO CE EMERGES

In 1995, the Volvo Group bought Clark’s 50% ownership of VME and the name was changed to Volvo Construction Equipment. In the same year, compact excavators were added to the product range following the purchase of leading French manufacturer, Pel-Job.

Motor graders were brought into the Volvo CE product palette through the acquisition in 1997 of the Canadian motor grader giant, Champion. In 2001, the first Volvo motor graders were introduced – destined to become an industry standard.

Volvo became the first foreign company to invest in the



Korean industry when it bought the heavy construction equipment division of Samsung Industries in 1998, giving rise to Volvo Construction Equipment Korea Ltd.


The crawler excavator market had been a major target for Volvo CE and within a few years a range of new Volvo excavators emerged from the Changwon plant in South Korea.

US EXPANSION

Volvo CE made major inroads into the US road construction market through the purchase of the road division of Ingersoll Rand. The company also added a worldwide service and spare-part distribution operation in 2008 by forming ‘Volvo Construction Equipment & Services California’ and a further company ‘Mathews Machinery’ based in California and recently acquired.

This acquisition added manufacturing facilities in Pennsylvania, Germany, China and India, as well as 20 distribution and service facilities in the US and some 2,000 employees worldwide.

Volvo CE was now strongly positioned to operate in the US and other territories outside Europe selling, renting and supporting a range of products including road machinery, compact equipment, and material-handling products.

Today, Volvo CE owns and markets a tremendous range of equipment produced on four continents and distributed in more than 200 countries through dealerships and rental outlets – all built to the same high standards of quality, safety and environmental care. 



CHINA'S OFFSHORE SAILING PIONEERS

Racing for China in the Volvo Ocean Race, Dongfeng Race Team is on a long-term sporting mission

by Julia Brandon

The tide is turning dramatically on China's sailing history thanks to Dongfeng Race Team, a team fully backed by Chinese sponsors. It has the interests of the country's sailing at its core, with a significant number of Chinese in both its on-water and support teams – racing for China, and for the future of Chinese sailing.

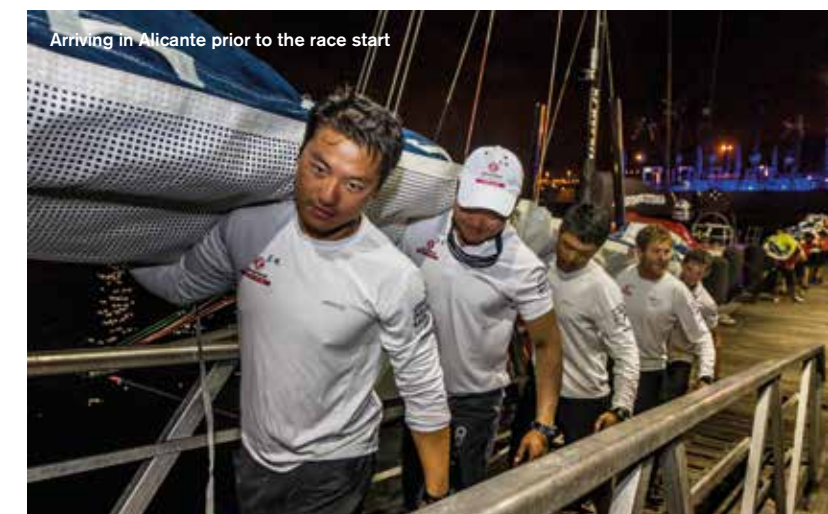
Managed by OC Sport, both the sailing and support members of the Dongfeng Race Team are on a long-term sporting mission, not only to deliver a competitive campaign for the 2014-15 event but also to create a legacy for offshore sailing in China by realizing the end goal of a 100% Chinese crew for the 2020-21 race. The team's achievements are a major boost to the development of professional sailing in China. Their achievements are even more incredible in that the team started from scratch.

"We've basically compressed what takes on average 10 to 20 years into a few months, so it's no easy challenge," says Mark Turner, executive chairman of OC Sport. "But it's the nature of this project – we're trying to build a base for the race after this in 2020 as well as beyond."

By mid-December, the seven teams in the race should have arrived in the United Arab Emirates capital of Abu Dhabi on the second leg of the race from Cape Town in South Africa, having set sail from the Spanish port of Alicante on October 11. Towards the end of January 2015, the boats are due to reach Sanya, in southern China, with six more legs ahead of them before the finish in Gothenburg, Sweden, in June.

RACING SKILL

As the nine-month race gets under way, the task can only get harder for the Chinese sailors aboard Dongfeng. While other teams are sailing with seasoned veterans endowed



Arriving in Alicante prior to the race start

THEIR ACHIEVEMENTS ARE EVEN MORE INCREDIBLE IN THAT THE TEAM STARTED FROM SCRATCH

with a mixed skill set, the Chinese crew started with very little knowledge of the Volvo Ocean 65 boats, and only a smattering of offshore sailing experience. Six professional non-Chinese sailors have been selected for their broader skill set to supplement the shortfall. As a result, there is a large proportion of Western professional

sailors in the team, thanks to their experience of single-handed sailing which, by its very nature, requires experience, dexterity and aptitude. Skipper Charles Caudrelier and Swedish sailor Martin Strömberg are the only two sailors aboard Dongfeng to have participated in the race before. There are also six Chinese sailors in Dongfeng Race Team's final race squad, who will rotate between two to three set positions on the boat and key positions in the shore team throughout the race.

As a nation, China has a rich maritime history, and – as of eight years ago – an Olympic sailing team, but neither compares with or can prepare for what is →



OFFSHORE AND ONSHORE, THE ENTHUSIASM AND BRAVERY ARE INSPIRING

involved in offshore sailing.

“Racing in the Olympics means sailing a small boat fast for an hour or two,” says Turner. “There’s no element of seamanship or understanding of the ocean, no living on the boat, or personal discomfort.”

Dongfeng Race Team was the first team to officially qualify for the 2014-15 Volvo Ocean Race, following a successful 18-day Pacific training voyage. Backed by Dongfeng Trucks – a leading manufacturer of medium- and heavy-duty trucks in China, and title sponsor of the Dongfeng Race Team – the campaign has a number of key objectives. The first is to put Chinese offshore sailing on the map. The second is to further Dongfeng’s 10-year mission to gain global recognition within new key target markets, such as South Africa, Brazil, the Middle East and Europe, for

which no other sporting event can offer a more sophisticated platform. Yet, much like offshore sailing, sponsorship and marketing on a global scale is a relatively new concept for China. So it is hoped that the amalgamation of two new initiatives will attract the world’s media, and garner support from the home crowd. It is fair to say then that for Dongfeng Race Team the pressure is on.

In the past, two partly sponsored Chinese teams have featured in the Volvo Ocean Race: Green Dragon 2008-09 and Team Sanya 2011-12. Both teams had only one Chinese team member aboard, yet in terms of a Chinese Volvo Ocean Race crew, they were first steps on the path Dongfeng Race Team is now taking.

This time, the recruitment process went a lot further. Starting with more than 200 applicants, the keen and

hopeful were narrowed down to 20, then to 12. The team’s skipper, Frenchman Charles Caudrelier, had the final say over the choice of crew. The intense selection process prioritized language skills, physical fitness and sailing expertise. Chinese sailors Chen Jin Hao, Yang Jiru, Cheng Ying Kit, Liu Ming, Kong Chencheng and Liu Xue were chosen by Caudrelier to become part of the race crew to represent China.

TOUGH CHALLENGE

“Basically, we didn’t let them sleep for 48 hours,” says Turner. “We threw loads of tasks at them on land and on water, from swimming and jumping in a life-raft to intelligence tests at 3am after no sleep, and teamwork tests. We were just trying to stretch them in every direction – mentally and physically

– to see who was still smiling and functioning at the end of it,” he explains.

The challenges during training were huge, from insurmountable seasickness to unfathomable discomfort, and total exhaustion to time restrictions – “ideally, we would have had an extra year and kept a squad of 20 together”, says Turner – but none so hard as the element of surprise when they finally stepped foot aboard. “They were absolutely shocked,” he says. “They had no idea what they were getting into and there’s no way of really explaining it other than getting people to experience the real thing.”

The training journey has taken the team from China to the United States, to France and the United Kingdom and 10,000 nautical miles across two oceans – the Pacific and the Atlantic.

PATRIOTIC AMBITION

Upon making the team, Yang Jiru, nicknamed Wolf, said: “This is my dream and is the proudest day of my life,” adding: “Before Dongfeng Race Team I didn’t feel like my life had direction, but now it does. I know who I am and where I’m going. I’m going to represent my country in the Volvo Ocean Race.”

Of his Chinese crew, Caudrelier says Cheng Ying Kit, known as Kit, is the most experienced and technically competent and he and Wolf are considered great team players: “That is another reason they’re in the final race squad,” says Caudrelier. At 22 years old, Chen Jin Hao is the youngest member of the crew but has been described by Charles as having ‘great potential’.

The Dongfeng Race Team is a Chinese campaign with Chinese funding at its heart – Aeolus Tyres and the automobile city of Shiyan are also sponsors. Despite their clear disadvantages, the all-round enthusiasm and bravery emanating from both the onshore and offshore teams is inspiring. What they lack in ability and experience, they make up for in guts, ambition and commitment.

“Hopefully, this is the campaign that will open the door and give credibility to sailing and sponsorship in China, and in itself be quite fulfilling,” says Turner. “And it’s not just about the Chinese sailors – it’s about teaching the Chinese shore team how to effectively manage a campaign of this magnitude from a commercial, logistical, technical and communications perspective, since a future Chinese campaign must have all these skills, not just the sailors.”

Says Wolf: “China has come back and we’re at the turn of a new era in sailing,” adding: “I have come here not just for the Volvo Ocean Race 2014-2015, but also for the sailing future of China. I can promise you that once sailing becomes popular in China the whole world will be shocked by the huge potential.”

Visit volvoceanrace.com for updates of each team’s progress in the race



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IN TUNE WITH HIS MACHINE

A Spanish operator has a passion for classical music

by Derek Workman

Photographs by Vicent Bosch

Fixed above the windscreen of the Volvo L110G wheel loader is a photo of a three-year-old boy wearing a blue sweater and a shy smile. His name is Aitor Molero, and he keeps his proud father, Eusebio, company during long hours behind the wheel. It is fairly normal for a proud father to have a photo of his son on display – but the others keeping him ‘company’ are little more unusual: Mozart, Beethoven and Shostakovich.

“Because I support Real Madrid, most people think I called my son after Aitor Karanka, who was the assistant manager and an ex-player with the club – but honestly, it wasn’t me who chose the name, it was my wife Ana.” However, Molero’s smile indicates he was not completely averse to the idea.

BANDING TOGETHER

Eusebio Molero has followed his team for most of his 37 years, but football comes second to his main passion, which goes some way towards explaining the classical company he keeps in his cab. In his free time Molero plays the saxophone alongside 15 other musicians in a local band, Agrupación musical l’atropello – the Outrageous Musical Group – as well as with a 110-strong local municipal band.

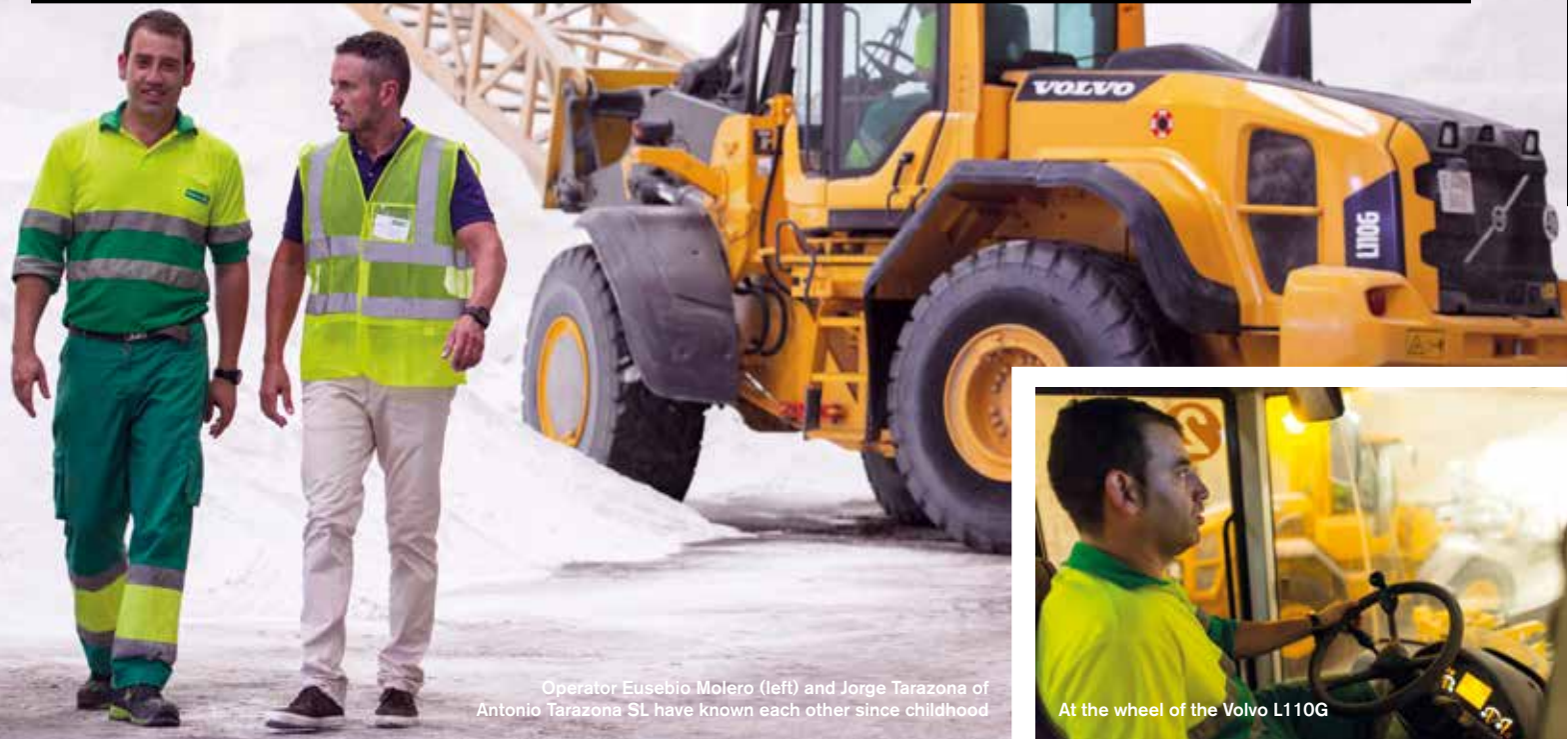
“I began studying music when I was seven but didn’t start playing in a band until I was 14,” he explains. He started

playing the alto and tenor sax, and is still playing them 23 years later. He practices from 2pm to 6pm after his morning shift at Valencia-based Antonio Tarazona SL, Spain’s third largest producer of fertilizers and industrial additives, where Molero has spent all his working life, just a 10-minute drive from his home in Paiporta.

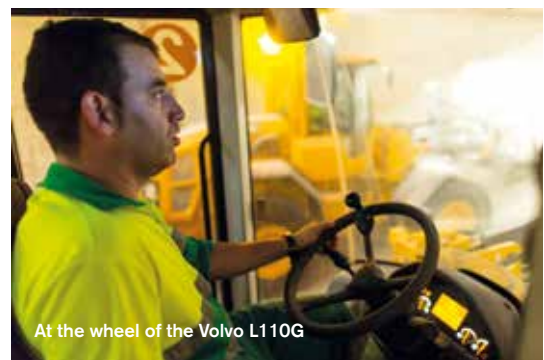
“We play at all sorts of festivals and fiestas, such as Las Fallas, Valencia’s largest party which takes place over four days in March, probably the biggest in Spain,” explains Molero. “What might surprise some people is that we also play classical music from the great composers, which we adapt for brass. The classics have always been my favorite, and when I’m in my cab I almost always have a classical CD playing. It relaxes me and helps me focus on what I’m doing, especially when we have to react very quickly, such as when we are moving the cargo on a bulk carrier that is delivered to the factory direct from the port in Valencia. We move around 3,000 tonnes in a single day, and playing classical music helps me enormously to concentrate on what I’m doing.”

GOOD OLD DAYS?

Molero is pleased with the machine he uses on a daily basis – one of four Volvo wheel loaders recently bought by the firm. They are a far cry from the heavy machine his father drove →



Operator Eusebio Molero (left) and Jorge Tarazona of Antonio Tarazona SL have known each other since childhood



At the wheel of the Volvo L110G

for Tarazona prior to the Volvo purchases, before retiring after 23 years with the company.

“From when I was a small boy my father (also called Eusebio) used to take me to work with him at weekends, so I practically grew up with loaders,” he explains. “In those days, they were very hard to work with. The earlier models were like driving a tank – they took so much effort to turn the steering wheel that at the end of the day you had muscles as if you had done a workout in the gym.”

The concept of actually working out in a gym, he says, did not cross the mind of most people 30 years ago – they kept fit by working hard.

“I remember my father coming home in the evenings and putting an electrically heated cushion across his lower back. In those days, a lot of operators had problems with their kidneys because of all the bumping when you raised and lowered the bucket.” Another common ailment was a painfully stiff left knee, because the left leg barely moved during the long working day because of lack of space. The concept of ‘ergonomics’ did not exist three decades ago.

MAGIC MACHINE


No surprise, then, that Molero is delighted with his new Volvo L110G. The boom suspension system absorbs shock and reduces bouncing and bucket spillage when moving fast, the electrically activated, wide-opening engine hood allows quick and easy access to the engine compartment, and engine shutdown takes place after a predetermined time (between two and 50 minutes).

“It steers with a finger, and you can set the height to how high or low you want the bucket to go in about two seconds,” says Molero. “It automatically stops at the exact point, so there is none of the bumping that used to happen, which protects both the bucket and the ground surface, as well as making it more comfortable for the operator. Everything is designed for greater productivity, with excellent fuel saving and a lot more power. It’s a magic machine to operate.”

Antonio Tarazona SL is still a family-owned business, and in some ways Molero can be seen as part of that family: he and Jorge Tarazona, the brother in charge of the technical/industrial division, have known each other since they were children.

“Tarazona has never been a company where a decision was made at management level and the workers just had to get on with it,” says Molero. “When the decision was made to change the wheel loaders we had been using for the last eight years, a group representing all areas in the company – management, administration, finance and operations – got together.

“When a representative of Maquinaria y Recambios de Levante SL, the Volvo CE-appointed local agents, brought a Volvo wheel loader to demonstrate, we were able to see it in action and were given every opportunity to ask the questions an operator would need to know. The financial elements are nothing to do with us, but we have to work in the cab day in, day out, and the operator has a better idea than most about how the machine will work and whether it will do the job it needs to do.”

With a five-year extended warranty, Molero and his fellow operators are confident the Volvo machines will keep them happy and comfortable for the foreseeable future. 

THE OPERATOR HAS A BETTER IDEA THAN MOST ABOUT HOW THE MACHINE WILL WORK

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