

SCANIA

A MAGAZINE FROM SCANIA ENGINES | NORTH AMERICAN EDITION

POWER



A FRUITFUL COOPERATION

Oxbo and Scania's shared values



... we offer engines with better product benefits than the previous generation while complying with new legislations.

WORKING AS PARTNERS IS KEY

It's been a busy fall at Scania Engines, with our volumes at a record level and new products and services being introduced to our customers. We are expanding our industrial segment in both North America and Asia, while our portfolio for marine applications has expanded with IMO Tier III, and we see new opportunities for our gas engine in power generation. Why are we so successful? We believe that knowing our customers' business and working together in partnership is one of the key reasons, and that goes for all of our dedicated Scania Engines people across the world. Oxbo International shares its partnership story on page 6.

We are living in a truly globalized world, sharing the same sky. Sustainability is a global concern, and we know we share this view with you, our customers. Our goal is to develop and offer engines with better product benefits than the previous generation while complying with new legislation. This is only possible with our strong R&D capability, our long experience in emission controls and our close cooperation with our customers. On pages 9 and 10, we share the latest examples from China.

This issue of Scania Power takes you around the globe in just 12 pages – in a truly sustainable way!

Sandra Arman

GLOBAL PRODUCT MANAGER INDUSTRIAL ENGINES

Scania Power

Scania Power is a customer magazine issued three times a year by Scania Engines. You are welcome to quote Scania Power.

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SCANIA

Scania is one of the world's leading manufacturers of trucks, buses and engines for heavy transport, as well as for industrial, marine and power generation applications.

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Cover photo

Oxbo

THE ENGINE

New water taxis in Washington D.C. are powered by Scania's 13-liter engines.

The engines' torque and low rpm are ideal for the multiple trips the taxis make daily.



CONTENTS

5 On the job

6 Oxbo: A partner in growth

ROLLING ON THE RIVER

WASHINGTON D.C., MARCH 2018



The Wharf in Washington D.C. is a new mile-long district along the Potomac River. A mix of restaurants, hotels, retailers, residences and businesses, the Wharf has transformed a previously neglected D.C. neighborhood into a tourism hub. The Potomac Riverboat Company, part of the Entertainment Cruises family, provides water taxis on the river, and its newest water taxi service is a route between the Wharf and the National Harbor. The 88-foot vessels, built by Louisiana-based Metal Shark, can carry 149 passengers. Their 13-liter Scania engines allow for high speeds and very low wake.

Potomac Riverboat Company and Entertainment Cruises run a combined fleet of 38 boats in a number of cities, including New York, Chicago and Boston, offering dining cruises, sightseeing tours, private charters and water taxi services. ●

9 *China's tighter standards*
10 *A mining giant*

11 *Caring for parts*
12 *Watch out for whales*



WANNA MEET?

HERE'S A SELECTION of the trade shows and exhibitions where Scania will showcase its solutions for power generation, marine and industrial applications in 2019.

- **March 5–7, 2019**
Middle East Electricity, Dubai, United Arab Emirates
- **April 8–14, 2019**
Bauma, Munich, Germany
- **April 21–23, 2019**
G-Power, Shanghai, China
- **June 10–13, 2019**
Seawork International, Southampton, U.K.
- **September 4–7, 2019**
BICES, Beijing, China
- **October 8–11, 2019**
Interairport, Munich, Germany
- **October 22–25, 2019**
Kormarine, Busan, South Korea
- **November 5–8, 2019**
Europort, Rotterdam, Netherlands
- **December 3–6, 2019**
Marintec, Shanghai, China.

STURDY WORKER

Belarusian Belaz, a manufacturer of mining dump trucks, is once again powered by Scania, this time with 16-liter engines for Stage IV.



PLEASURE SEGMENT EXPANDING

FRENCH COMPANY Nanni has signed an agreement with Scania for marine engines. With Nanni's global sales and service network, Scania will gain instant access to a major market for the large pleasure-boat segment.

Scania's focus on sustainable transportation solutions fits well with Nanni's product portfolio.

The first step of the new partnership will see Scania supply its common-rail 13-liter in-line six cylinder engine along with the 16-liter V8.

EMERGENCY ROOM

A SMALL PUMP STATION, decorated with graffiti, serves as an emergency power station for a sewage treatment plant outside Frankfurt. The heart of the little emergency station consists of a 13-liter industrial engine. Gensets builder Stiegele switched its supplier to Scania, and from there the partnership is growing. The engine complies with emission legislation Stage IIIA and can run for hours off the electrical grid.



3 QUESTIONS

Michael Nagy
*Engines Sales Manager,
Scania Middle East*

What are the challenges Scania Engines faces in the Middle East region?

Middle East is a region where all major engine manufacturers are

present, and that makes the market highly competitive. Many of the brands have established a customer base.

How did you come to work for Scania in Dubai?

I worked for Scania's engine dealer in Egypt as a sales operation engineer. During that period, I managed to build a strong awareness of Scania engines, as well as the Scania business model. When Scania Middle East showed interest in having me on board it was a great pleasure for me to become part of the Scania team.

What is the prognosis for future engine sales in the Middle East?

The demand is quite high for engines

in all the different segments, but especially in the power generation segment. There is a great potential for Scania Engines to grow in the Gulf region but also in the Levant area. Customers are asking for efficient electrical power sources, and we have the right engine to capture that demand. The growth we are seeing in the marine engines application is notable, since new vessels are being built, and Scania marine engines will be one of the main players in that segment. Fuel efficiency, Scania's modular philosophy and our engines' reliability and sustainability, as well as a competent service network, will all play a significant role in meeting our goal of strengthening our presence in the region.

MULTITASKING ROLE MODEL

To anyone who says you can't juggle different tasks at once, Suna Türk Tuzcuoğlu will make you reconsider.

text PETRA LODÉN

Some say there is no such thing as multitasking. But talking to Suna Türk Tuzcuoğlu, Sales Manager at Scania's distributor Dogus in Turkey, one might reconsider. She likes to be involved in the whole process, from the first meeting with a client to the visit to the end user. Many of her days are spent traveling to visit customers.

"Seeing the end products is the most exciting part of my job," says Tuzcuoğlu. "It's a challenge to travel as much as I do, but I enjoy meeting people and following a project from start to finish. It also gives me a lot of energy."

The Turkish engines market is healthy. Tuzcuoğlu is specifically proud of a new project – a customer who manufactures a special category of firefighting vehicles used at airports.

Power generation is the biggest engine segment in Turkey, with more than 25,000 units. A large proportion of those units are exported, mainly to the Middle East and Africa.

"Turkey is a hub for power generation," says Tuzcuoğlu. "But there is tough competition, with over 15 manufacturers. Marine engines are a rising trend, and this segment has significantly improved in 2018, when mainly auxiliary engines have been in demand. The market outlook is the same for 2019."

Tuzcuoğlu has been working for Scania for 15 years, starting on the truck side of the business with a focus on logistics. She moved on to become a marketing manager and since 2013 has been the brand manager for sales and aftersales. She holds an MBA in mechanical engineering.

"The Scania brand is very strong in Turkey," says Tuzcuoğlu. "I feel very comfortable talking about the products with customers."

The Scania brand is probably one of reasons Tuzcuoğlu says she is always treated with respect. She is happy to be thought of as a role model for young women who might hesitate to become an engineer or enter an industry that is dominated by men. Role model – it's just another aspect of this impressive, multitasking professional. ●



SUNA TÜRK TUZCUOĞLU

Sales Manager Turkey

Age: 39

Lives: Istanbul

Family: married

Hobbies: bicycling,
traveling, gastronomy

REAPING THE REWARDS OF SHARED VALUES

Specialized agricultural OEM company Oxbo International is reaping the rewards of a beneficial engine cooperation based on shared values.

text ANDREW MONTGOMERY *photos* OXBO

In the fiercely competitive U.S. agricultural equipment industry, Oxbo International stands out, due to its customer relationships, reliability and attention to detail. Oxbo's wide range of harvesters are used by growers, harvest contractors and processors all over the United States.


For Oxbo, customers include some of the world's largest food processing companies, seed corn producers, food and vegetable growers, wine grape growers and coffee companies.

The roots of Oxbo's business sprung from specialty crop growers who started making their own machines to meet their needs. Nowadays Oxbo is intertwined with Dutch Ploeger, British PMC and French manufacturer Bourgoin. Mike Miller, Oxbo's Vice President, Marketing, says that this background of mergers helped lead Oxbo to Scania about four years ago when looking for a new engine solution.

"Over the past five or six years, the teams have had to select a lot of different engines," Miller says. "As we moved to meet the Tier emissions regulations and as we pooled knowledge within the group, we were able to learn more from them about Scania and the product. That got us interested.

"Our sister company Ploeger had positive experience of Scania," he says. "The product line teams have a process for selecting their suppliers, and engines are a key piece of the design in each of our machines."

What's really driven things from there is the two companies' mutual priorities and values, Miller explains. Scania's culture of the distributors and the team lined up well with Oxbo's own philosophy: lots of product focus, reliability and customer and service focus. Scania's international presence also suited Oxbo's multinational reach. →



Oxbo has harvesters for all kinds of berries, coffee, commercial corn, fresh market vegetables and even olives and vineyards.

OXBO INTERNATIONAL



The company: Oxbo International develops, manufactures and supplies specialized agricultural equipment worldwide.





Oxbo is a company with a specialized and niche customer profile. While a smaller base in terms of sheer numbers, the needs of the company's customers are perhaps even more demanding than those of bigger original equipment manufacturers.

The cooperation began with work on Oxbo's new pea harvester powered by a Scania 13-liter engine and has since extended to Scania engines being fitted into several of Oxbo's range of harvesters.

"Our customers' expectations and their mechanical aptitudes are quite a bit higher than the average equipment buyer," explains Miller. "They have at least one and up to a fleet of machines. Sometimes their capability for mechanical maintenance and repair is as high as a dealership's or a

Oxbo's customers have high expectations about service, and Scania is helping to keep up Oxbo's record of meeting them.

"OUR CUSTOMERS' EXPECTATIONS AND THEIR MECHANICAL APTITUDES ARE QUITE A BIT HIGHER THAN THE AVERAGE EQUIPMENT BUYER."

MIKE MILLER, OXBO

manufacturer's, so when they call for maintenance and repair you really have to have prompt and professional response."

"I think that's where we can separate ourselves as suppliers, and there are not many out there that can serve those types of customers," he says. "And Scania is helping us to keep up our record of meeting the expectations of our producers and their value chain."

Dealing with the ever-tightening emissions legislations worldwide is also a challenge for a company such as Oxbo. An early readiness for the introduction of Tier 4F emissions in North America and Stage V was a standout at Scania, according to Miller, and so was the willingness to share key information, which facilitated Oxbo's analysis and decision.

From Scania's perspective, this is an exciting and rewarding cooperation. "We are honored to be partnered with such a well-known and market-leading manufacturer," says Sheldon Murdock, Scania USA's Senior Sales Manager with responsibility for the Oxbo account. "Oxbo shares many of our core values, which not only makes us a great team but also prepares us to provide outstanding profitability to the customers that utilize our products." ●

China is rapidly tightening emission regulations.



CHINA TIGHTENS EMISSION RULES

— AND SCANIA'S READY TO HELP

China's war on pollution means it is rapidly raising emissions standards, and Scania already has the right solutions available.

text BIRGITTE VAN DEN MUYZENBERG photos GETTY IMAGES

For decades, China prioritized economic growth, meaning less attention was paid to pollution, including engine emissions. Now, an intense emission control program has led to the launch of a whole series of standards for vehicles and engines.

All the industrial engines that Scania sells to the country's mining, construction and agriculture industries, as well as hospitals and remote

sites, will need to comply with China Phase IV. As a supplier to South Korean manufacturer Doosan, which has a significant presence in China, Scania already has solid business there. But beyond that, the market potential is huge.

"As an engine development engineer, I love new regulations because it makes our work more challenging," says Van Davenport, Expert Application Engineer at

Scania, who estimates that he has been to South Korea's capital 26 times in the course of his work.

Scania is one step ahead, already having the tried-and-tested solutions in place to accommodate for China Phase IV, US Tier 4 and Europe Stage V standards.

This means that Chinese companies have a unique opportunity to expand into the European market without having to redesign their applications to fit European emission standards.

"We've been fine-tuning the calibration of our Stage V engines to optimize them for China Phase IV," Davenport says. "Thanks to China's new standards, we are now essentially required to offer our most current and state-of-the-art product, and one of the best engines we have ever developed!"

BLUER SKIES AHEAD

Carbon emissions levels in China are higher than anywhere else in the world. But the government is getting to grips with the problem.

CHINA'S BREAKNECK progress since the 1980s has led to phenomenal growth, transforming the country into a great economic superpower. But while rapid industrialization has helped millions of people emerge from poverty, it has come at a price.

China is the biggest emitter of greenhouse gases in the world. The smog blanketing the vast cityscapes has led to serious public health issues, and neighboring countries are affected, too.

China's leader, President Xi Jinping, declared a war on pollution in 2014, describing it as "nature's red-light warning against the model of inefficient and blind development," and outlining a reform agenda to set the economy on a sustainable path.

The country is now making moves to protect the environment, replacing "dirty" technology with green solutions, slashing emissions and improving air quality. Steel production capacity is being drastically reduced, and many coal-fired power plants have been closed down.

China is one of the world's biggest investors in renewable power. With atmospheric pollution control policies having been enacted by the government, air quality is improving, but there is still far more to be done. ●

EMISSION REGULATIONS

OFF-ROAD MACHINERY

- China Phase I, II, III are equivalent to Euro Stage I, II, III and so on.
- Set to take effect in 2020, China Phase IV will be comparable to (though not quite as high as) European Stage V and US Tier 4 regulations.

MARINE ENGINES

- China stage I, equivalent to EPA Tier II, will take effect on 1 July 2019.
- China stage II, equivalent to EPA Tier III, will preliminarily take effect in 2021.

MINING A RICH SEAM

China's Jinchuan Group has steadily become one of the world's biggest metal mining groups, and Scania provides the engines for its equipment subsidiary.

text ANDREW MONTGOMERY & ANNA GULLERS
photos GETTY IMAGES

Over its 50 years of existence, China's state-owned Jinchuan Group has become one of the planet's biggest mining and metals groups. Based in Gansu Province in the country's northwest region, Jinchuan has the world's third-largest sulfide copper-nickel deposits, China's largest nickel and cobalt production base and the third-largest copper production enterprise. It also counts several African mines in its multinational portfolio.

With great foresight, Jinchuan Group set up its own subsidiary equipment company, which for the past 30 years has allowed it to develop and supply its own mines, the Chinese market and international customers with underground trackless machines, including underground loaders and dumper trucks.

The Jinchuan Machinery Trackless Equipment Manufacturing Company turned to Scania to provide the power for some of these specialized vehicles. The 13-liter 257kW engine being used in the underground wheel loader and the 13-liter 294kW being fitted in the underground dump truck.

Jia Wenhong, Jinchuan Equipment Company's Head of R&D for underground trackless equipment, tells us more about the company and its cooperation with Scania:

Where are the company's main markets?

"Our biggest market is China, and our foreign markets are mainly distributed in Africa, China's neighboring countries, plus Europe, especially Russia."

What are the challenges of operating in Africa?

"The African market is not much different from other markets. Our main foreign competitors there are equipment manufacturing companies in the same industry, but Jinchuan machinery costs less and has a competitive advantage, at the same technological level. We also have our own mines in Africa."

Why did Jinchuan decide to work with Scania?

"When developing new products, we learned about the Scania engine's power performance, emission index, usage and maintenance. In tests it met our application requirements."

How do Scania's engines integrate into Jinchuan's product range?



Chinese mining investments in Africa continue to grow. Jinchuan is one of the planet's biggest mining and metals groups.



"IN TESTS
THE SCANIA
ENGINE
MET OUR
APPLICATION
REQUIRE-
MENTS."

JIA WENHONG

With strong technical support from Scania's local dealer Shanghai KASH and Scania's own sales and support staff, we replaced the original engine used on our 14-ton scraper. It was the first-ever application of a Scania engine in trackless mining equipment.

What does Jinchuan hope to achieve from the collaboration?

"We expect to cooperate more closely with Scania and Shanghai KASH and get more support in terms of engine purchase price, delivery time, technical support and user service, to help us improve the equipment's market competitiveness for our users."

How can the cooperation develop further?

"We should promote and develop new products, make our products attractive to potential users, and eliminate concerns over the supply of spare parts and maintenance services." ●



With the Service Exchange system the customer gets an original unit with the same warranty as a new part or component but at a lower cost.

TECHNOLOGY

AS GOOD AS NEW

Remanufacturing parts or entire engines to get them back to being as good as new can save energy, cut costs and help to protect the environment.

text ERIK ARONSSON photo SCANIA

Scania's vision of becoming the leading provider of sustainable transportation has been in sharp focus during the past few years. An important part of its sustainability efforts is Scania Service Exchange, which has been under development since 1964. Dealers are able to return worn-out components to Scania, where they are remanufactured until they are as good as new and ready to be sold at a lower cost than corresponding new parts or engines.

For Scania Engines, sustainability is a focus area that covers everything from engine emissions to not wasting working hours. An engine can either be remanufactured by Scania in an industrial process and sold as a complete short-block or long-block engine, or overhauled at one of the Scania repair workshops that are part of Scania's service network, using Scania original parts.

"We trust our workshops to analyze which units can be reused and/or reworked and which need to be replaced, either with new ones or with Service Exchange units," says Magnus Folin, Head of Service Market Development at Scania Engines. "The Service Exchange units are much appreciated both by customers and workshops. The

customer gets an original unit with the same warranty as a new part or component at a lower cost, and the workshop avoids the cost of scrapping worn-out components. And in the end, it means less downtime for the customer, keeping their business rolling."

Another potential option would be Service Life Extension. Here the engine would be swapped as a preventive measure according to a set schedule. This is to minimize the customer's downtime.

"Scania Engines has not yet introduced the Service Life Extension scheme, but I know there is a huge demand for this so I hope we will be able to offer it in the near future," says Folin.

Regardless of the Service Exchange system, Folin adds, there are always parts that cannot be reused and have to be scrapped due to heavy wear.

"In such cases, it is important for Scania to supply an environmental product declaration and material safety data sheets for the item in question," he explains, "so that we are able to provide relevant and clear information to the scrap company." ●



"THE SERVICE EXCHANGE UNITS ARE MUCH APPRECIATED."

MAGNUS FOLIN,
SCANIA ENGINES

A WHALE OF A TIME

Giving back to nature and minimizing environmental impact ... these are the key aims of Maori-owned Whale Watch, the New Zealand tour operator that takes visitors out to sea the sustainable way.

text ANNA GULLERS photos SCANIA



All four of Whale Watch's vessels are currently powered by 16-liter engines with 750 hp and were selected for their durability in a "start-stop" application.

Whale Watch has its marina in the New Zealand town of Kaikoura, where the Seaward Kaikoura Range meets the Pacific Ocean. From here, the company takes some 100,000 visitors a year out to sea to view - with 95 percent success rate - giant sperm whales in their natural habitat. The company's commitment to responsible tourism and the environment is key.

Kauahi Ngapora, General Manager of Whale Watch, says: "As a Maori-owned company, we cherish the twin values of hospitality to visitors and reverence for the natural world. We make a living from nature, so we need to do what we can to minimize our impact."

When the company was founded in 1987, a 6.7-meter (22-foot) inflatable vessel was used to carry eight passengers at a time. Today the Whale Watch fleet comprises four modern catamarans

specially designed for whale watching, each carrying up to 48 passengers. In order to minimize the company's carbon footprint, the vessels' engines have been made as fuel-efficient as possible.

Some years ago, Whale Watch undertook a significant project to review the types of engines it was using and standardized them all.

"Improved fuel economy, reliability, operational parameters providing us with the necessary performance, compatibility with our jet units and robust after-sales support were the criteria we reviewed, and both Scania and the team at South Pacific Diesel Systems [Scania's distributor] were our preferred options," says Ngapora.

And so, a propulsion system driven by 16-liter engines was developed in collaboration with Hamilton Jet and Q-West Boat Builders.



"WE MAKE A LIVING FROM NATURE, SO WE NEED TO DO WHAT WE CAN TO MINIMIZE OUR IMPACT."

KAUAAHI
NGAPORA,
WHALE WATCH

Ross Williamson, Managing Director of South Pacific Diesel Systems Limited, says, "That was not only kinder on the environment, but also offered other special benefits, including a significant reduction in fuel consumption and lower overall operating costs."

Each of Whale Watch's four catamarans is now powered by two new Scania engines.

"We are also very interested in developments around more environmentally sustainable engine options that still provide us with the performance we require," Ngapora says. "We look forward to exploring this further with Scania. Maori take an inter-generational view of things, and that is really about doing what we can to ensure that what we have today can be enjoyed by future generations." ●