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Scania's centuries-old construction heritage:

Building on trust around the world

Scania's experience in the construction sector is more than a century old. In the early days, Scania had round-the-clock access to an excellent test track just outside the factory gate, since all Swedish roads were unsurfaced and in poor condition at the time. Just over a century ago, Scania had an annual production of around 200 vehicles, and everything was built to meet the individual needs of customers. Today, manufacturing takes place on a completely different scale but tailor-made solutions and the preference for robust, technically-advanced yet simple solutions are still uppermost in Scania's company culture.

Few operations are more diverse and at the same time more specialised than those found in the construction segment. For Scania this involves understanding both different segments and the challenges the application concerned has to contend with. Being able to meet the unique needs of all types of customers is deeply rooted in the Scania culture. Today, when the production volumes are 500 times greater than in the 1910s, foresight is required in development work along with a world-leading modular system to cope with the task.

Test tracks outside the factory gates

Most of the Swedish road network remained unsurfaced until the middle of the 1950s. It is therefore not surprising that all of the Scania-Vabis sold in the early days were equipped to handle the challenging, sometimes off-road type of conditions that prevailed on Swedish roads at the time. With a distance of 1,600 kilometres from north to south and with countless gravel roads criss-crossing the country, it is hardly surprising that Sweden was something of a paradise for hauliers involved in road maintenance. Many public highways were impassable in the spring when the thaw took place. When it rained they were muddy and slippery, and when they were dry the road dust was a nuisance for both vehicles and passengers. And countless stretches of road needed to be snowploughed in the winter.

Homes for millions

From the 1910s to the 1960s Sweden developed from a poor agricultural nation to a modern, industrialised welfare state. About 60 years ago the whole nation forged ahead at full speed with massive investment in homes and infrastructure. Scania trucks made an important contribution by transporting gravel, soil, sand, concrete and all kinds of supplies to and from thousands of construction sites.



Construction vehicles from Scania-Vabis – like this iconic DLT75 6x4 from 1958 – made a vital contribution when modern Sweden emerged during its record-breaking years in the 1960s.

Up until the late 1960s the total length and weight of vehicles was ‘free’ in Sweden. The only real regulation was that the axle weight should not exceed eight tonnes. As a result, Swedish drivers of the time sometimes had to put up with road trains comprising several trailers that had an adverse effect on other traffic. In the end, however, all the hardships paid off for the Swedes, when no fewer than one million new homes were completed between 1965 and 1975.

Modularisation

Scania grew and developed in parallel with Sweden. Scania had already gained a solid reputation as a manufacturer of rugged and durable vehicles in the 1920s and 1930s. Scania also established long-term relationships with government agencies and public institutions such as the national railway company, the post office, the regional road administration offices and Swedish National Road Administration, as well as public transport operators. With these it jointly developed solutions for various challenges facing road transport and transport services.

One example of this is the many road construction and maintenance trucks with three-way tippers and spreader units, which were developed together with the national road administration of the time, Vägstyrelsen. In the end, Scania-Vabis more or less had a monopoly on road maintenance trucks in Swedish road districts.



A Scania truck involved in a heavy-haulage assignment in England in the 1970s. The margins were slim already then, but the driver did at least have enough engine power for the task at hand.

Tailor-made solutions became something of a hallmark for Scania, as did the ability to combine existing components in a smart way to solve various customer requirements. This capability was developed step by step from the late 1930s



onwards to Scania's modular system of today. The first modular engines were introduced back in 1939, and the first fully modularised truck series debuted in 1980.

Exceptional toughness

All the experience Scania-Vabis gained out of roads and construction sites was of great benefit when the company moved into export markets in the late 1940s. The vehicles had an advantage over competitors from countries with weight and length restrictions and did well in South America, where export sales began around 1950.

The good reputation that Scania built up was a great asset, and the company also gained commercial traction in the form of very strict cab testing rules that the Swedish authorities introduced in the 1960s. The result of the tough tests was that manufacturers in Sweden brought out strong cabs, made completely of steel, earlier than other manufacturers. A similar common regulatory framework was not introduced in the European markets until the 1990s.



Tough testing, where an individual cab has to undergo a whole series of tests involving different procedures, is still an important part of Scania's DNA when new cabs are developed. The above photo is from a test in 1968.

Iconic trucks

Apart from converting a large part of its production for the benefit of Swedish defence during World War II, Scania also reviewed its entire operations and product range under new management. As a result it entered the post-war period with a modern product range and upgraded production units in place. The acclaimed designs of the Drabant and Regent, the leading truck models in the 1950s, signalled both strength and endurance.



The Scania-Vabis Drabant L51 pictured here is a typical representative of Scania trucks of the 1950s. We are not entirely sure whether the load in the photo is legal or not...



Its successor was the iconic L75 model, introduced in 1958. With its clean, sweeping lines, created by the industrial designer, draughtsman and journalist Björn Karlström, its arrival in various guises (L/LS/LT75/LT76/110/111) finally put Scania-Vabis on the truck world map. But it was not just its appearance that charmed the world. Drivers appreciated the smooth and precise power steering, the good visibility and the raised position with a view over the 'alligator-type' bonnet.

Global construction solutions

Impressive volumes were also exported to remote locations such as Africa, the Middle East and South-East Asia, which can be explained both by an assembly plant for buses and trucks in Iraq and by a series of aid projects focused on China. The L model also formed the basis for the first complete Scania-Vabis vehicles in the post-war period, a 4x2 DL75 and a DLT75 that were supplied complete with a tipper body from the West German company Meiller. Complete vehicles were also included in a number of deals with China in the late 1960s with Swedish tipper or timber bodies. Today it is becoming more common for customers to ask for complete solutions from Scania, including everything from bodies to services such as servicing and financing.



Harvesting sugarcane in the endless fields of Brazil is a tough challenge, even for a Scania T122ET like the one in the photo, plated in the early 1980s. These types of rugged trucks often have to drive long distances, mainly on demanding, poorly-maintained gravel roads and mud tracks.

From 1968 Scania could also offer a range of forward-control trucks, which shared mechanical components with their bonneted siblings. They were sold primarily on markets where the length regulations required this solution and to customers who preferred a cab in which the driver sat over the engine. From 1980 they were completely replaced by the entirely modular GPRT range (2-series) and the global successes continued. The then fully-developed modular system and the introduction of a chassis in three different classes ensured that it was possible to specify the right design for more and more applications. Each truck could now be tailored for the challenges it had to deal with.

Beloved forces

Ever since the first engines with a high power output saw the light of day in the 1920s, Scania(-Vabis) powertrains have gained appreciation and respect from both drivers and hauliers. The first diesel engine came out in 1936 and was followed by a series of modular engines with four, six or eight cylinders in diesel or petrol versions. The legendary 10/11-litre engines introduced with the L75 series in 1958 continued to be Scania's high-performance workhorses until the end of the century. From 1969 they were cast into the shadows in terms of performance after Scania introduced the



14-litre, 350 horsepower, V8 engine, which immediately took the world by storm. It became a benchmark in the industry in terms of both power and efficiency until its 16-litre successor ascended to the throne in 2000.

Between 1965 and 1975 Scania also developed a range of advanced off-road vehicles in connection with a large defence order. Scania took forward development in the field when developing technologies in areas such as chassis and suspension components, as well as all-wheel drive, hub reduction gears and automatic gearboxes – lessons that stood them in good stead for several decades. Some 3,400 vehicles for the armed forces were built with a 4x4 or 6x6 configuration.



Two SBAT 111 6x6 in military livery advance under tough conditions somewhere deep in a Swedish forest in the 1980s.

But just 'special' is not always special enough for some customers. If there are requirements that cannot be satisfied with the millions of possible combinations in Scania's modular system, Laxå Special Vehicles, Scania's own special-purpose vehicle manufacturer, can help out. Laxå has developed and built unique vehicles based on the Scania chassis since the 1970s. The company undertakes all sorts of tasks, such as creating unique bodywork and building serious heavy-haulage tractors through to carrying out all sorts of chassis modifications. These include building concrete pumps with multi-axle configurations or heavy tipper trucks for mining operations.



Anders Lampinen, Product Director, Construction, Scania Trucks, looks forward to the introduction of Scania's new truck generation for construction applications. He believes that Scania's long experience will continue to be of benefit to construction customers.



Carrying on the heritage

It is clear that Scania has a long, deep – and very much ongoing – love affair with all kinds of construction vehicles, regardless of application or market. What does Anders Lampinen, Product Director, Construction, Scania Trucks, think about Scania's proud heritage in this area? Is this a heritage it can build on?

"Certainly, Scania's new range is something quite exceptional in terms of robustness and flexibility," he says. "Added to which we have access to operating data from 260,000 connected vehicles and services such as remote diagnostics and Scania Maintenance with Flexible plans. So it's obvious why I'm so convinced that we can help our construction customers to shift the margins in their favour."

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Scania is a world-leading provider of transport solutions. Together with our partners and customers we are driving the shift towards a sustainable transport system. In 2016, we delivered 73,100 trucks, 8,300 buses as well as 7,800 industrial and marine engines to our customers. Net sales totalled nearly SEK 104 billion, of which about 20 percent were services-related. Founded in 1891, Scania now operates in more than 100 countries and employs some 46,000 people. Research and development are concentrated in Sweden, with branches in Brazil and India. Production takes place in Europe, Latin America and Asia, with regional production centres in Africa, Asia and Eurasia. Scania is part of Volkswagen Truck & Bus GmbH. For more information visit www.scania.com.