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Scania's new truck range provides more of everything

- A completely new cab range, inside and out, that is uniquely Scania
- The S and R models are being introduced first; the S cab has a flat floor for maximum comfort
- Stronger, safer and more aerodynamic
- Modular construction makes repairing Scania cabs easier in the event of an accident
- Repositioned front axle and lower centre of gravity for greater safety and driving comfort
- The world's first truck with rollover curtain side airbags

Scania is completely overhauling its entire cab range with the introduction of the new truck range. First out is the R series, as well as a completely new S series. With the S series, Scania is introducing a new top model among its sleeper cabs with a flat floor, for the most demanding customers. The cabs have been designed down to the very last detail to meet today's and tomorrow's demands from customers and legislators alike, and they bring a host of new options to Scania's range of products and services. The completely new, modular generation of cabs reflects Scania's unique identity and design, and they are manufactured in the newly built factory in Oskarshamn, Sweden.

Scania's new generation of cabs has been designed, developed and produced by Scania's own in-house designers. Their look makes them immediately recognisable as a Scania, with the difference that the look is even clearer, signalling both future and the authority and presence that only a true premium truck can express.



The design language of Scania's new truck generation signals the authority and premium feel that makes it possible to immediately identify the manufacturer.

The basic structure of the cabs was developed in close cooperation with Scania's sister company Porsche Engineering. The new cab range has absolutely no parts in common with Scania's existing cab range, but naturally all the positive cab features that are characteristic of Scania have been transferred and further developed.

Four focus areas

The new generation has been developed with a number of overall features in focus: driver environment, fuel economy, optimum use of interior space, safety and maximum reliability. These requirements have driven the development work on the cab side too and are reflected in the details as well as throughout the overall design.



When all the variants have been introduced, Scania's new truck generation will encompass no fewer than 24 different cab variants. The photograph shows a tractor with the new R cab in normal configuration.

Ultimately, within the framework for Scania's modular system, we are talking about no less than 24 different basic cab models in total, once all the variants are in place. This enables Scania to be able to customise the right customer solution for every type of application area, regardless of whether the focus lies on interior space, fuel economy, maximum comfort or greatest load capacity.

High-tensile steel has been used in the cab structures. The various structural elements have been shaped by either compressing or rolling before being joined together using various welding techniques, laser soldering or hi-tech adhesive techniques, creating a particularly robust monocoque structure.

"Developing new truck cabs within the heavy premium segment is a highly complex process," says Göran Hammarberg, Head of Cab Development at Scania. "Visibility, comfort, legal requirements, ergonomics, good reparability, low weight and high safety are just a few of the many feature areas that must be accommodated without creating obvious compromises, regardless of the area of application. We are incredibly pleased with what we have achieved and we are convinced that these trucks will set a new benchmark in the industry."

Form and function go hand in hand

"We have put an immense amount of work into identifying, expressing and design-wise enhancing those qualities that the Scania brand represents," says Kristofer Hansén, Scania's head designer and the person behind the visual design of the new truck range. "Our goal is to create a very attractive product that conveys a true Scania feel while also being carefully designed down to the last detail to do its job properly."

When it comes to the exterior, Scania has given top priority to aspects relating to aerodynamics and, consequently, fuel consumption. Every surface, at the front as well as along the sides and even below the vehicle, has been optimised for minimum drag. Even components like wipers, rear-view mirrors and all the various lights have been designed with this in mind. One concrete example is that the industry-standard sun visor does not come as standard. Even equipment like air deflectors and side skirts have been carefully integrated into the overall design, and were given just as much attention during the development phase.



Industry-leading aerodynamics was one of Scania's goals during the development process. Scania has built further on its excellent experiences from the Scania Streamline, and the result is a truck that is so slippery that a long-haul truck can now reduce its fuel consumption by two per cent thanks to lower air resistance.

"In our hunt for fuel thieves, aerodynamics in particular is an extremely important component," says Göran Hammarberg, Head of Cab Development at Scania. "Compared to our already industry-leading models from the current generation, we have further reduced drag. This delivers an immediate impact on fuel consumption, and gives a reduction in general of 2%. Seen over the course of a long-haul truck's lifespan, with the extremely high mileage this type of vehicle clocks up, this will have a major impact on both profitability and the environment."

"It's a question of seemingly small, but in the long term crucial, details and features," underlines Kristofer Hansén, Scania's Head Designer. "All clearances and tolerances have been minimised. Good aerodynamics also helps cut noise levels both inside and outside the vehicle, as does the generous use of noise and vibration absorbing measures, like carpets and expanding damping materials in various cavities."

An important aspect of truck design is demonstrating the vehicle's features, while clearly communicating that it is a professional work tool.

"Every line and shaped element has been designed to describe, and preferably also enhance, the vehicle's features, its durability and the proud heritage that a Scania always carries," highlights Kristofer Hansén. "We have systematically built up all the component parts into a whole that

communicates harmony and dynamism, despite it being a robust work tool in which all the elements are part of our advanced modular system."

Maximised space in the S cab

All the cabs are designed with the driver in focus. Regardless of which cab the customers choose, they will be getting even more generous interior space than before. It is partly about more efficient packaging and the fact that internally the cab has grown 2" in length, but also about a general roof height increase in the new generation.

"Our new standard roof is 10 cm higher than the current standard one," says Kristofer Hansén, Scania's Head Designer. "And even the higher roof models are slightly roomier than before, we are talking about a height difference of 16 cm which will, of course, be particularly appreciated by those who both work and live in their vehicle."

At the top of the range is, of course, the new S cab that, with its completely flat floor and maximum interior space, is the obvious choice for customers with the highest demands on living comfort, prestige and usability.



The new S cab offers an entirely flat floor and magnificent interior space. Scania is convinced that all drivers who have the opportunity to enter the S cab via the intelligently designed entry with four steps will love the cab and all the potential it offers.

"We see how perspectives are constantly shifting and how customers' demands are increasing," says Göran Hammarberg, Head of Cab

Development at Scania. "There is no denying that our new S cab outshines everything we have done before in terms of factors like comfort, storage, spaciousness, ergonomics and visibility. A user-friendly and ergonomically designed entry with four steps leads up to a workplace that we believe will be loved by all drivers who get the chance to test it."

Crucial visibility improvements

In all the new cabs, the driver's basic position has been moved 65 mm closer to the windscreen and 20 mm out towards the side, compared to the current cab generation. There are several reasons, but the most important ones relate to improvements to the driver's position as regards safety, visibility and interior spaces (particularly for beds and seat adjustment range).

The new cabs offer vastly improved visibility thanks to a larger glass surface area, a lower instrument panel, slimmer door panels and optimised A-pillars. Naturally, the rear-view mirrors play a crucial role in this respect and the standard design is a completely new model with the focus on aerodynamics and optimum visibility (in the mirrors as well as past them, an equally important aspect). The mirrors on the R and S cabs have a wide-angle function, are electrically adjustable as well as heated, and have effective vibration damping.



In Scania's new cabs, the driver's seating position has been moved both ahead and out to the side compared with the current range. In addition to greater adjustment scope for the seat, for instance, this also gives the driver an even more commanding overview of the truck's immediate surroundings.

Even the front and near-view mirrors have a new design and shape, for a wider field of vision and improved aerodynamics. Electric adjustment is also available as an option for these mirrors and all mirror housings can be painted. The cabs are ready for the installation of cameras as an optional extra or in place of some of the mirrors.

"Good visibility is crucial to the driving experience and for safety, and there are a lot of different parameters that interact to create that feeling," emphasises Kristofer Hansén, Scania's Head Designer. "All our combined expertise in areas like ergonomics, design and the interface between people and vehicles has been deeply involved. Some of the results are highly noticeable, others are not as visually obvious. One good example of the latter is the new wiper system, which has a wider arc and is better at handling snow and ice, and the windscreen washer is now 20% more effective."

Focus on the driving experience

Scania has always placed a lot of focus on the driving experience, and the new truck series is naturally no exception.

"As a driver, the lower centre of gravity is apparent," relates Göran Hammarberg, Head of Cab Development at Scania. "This brings benefits like greater stability when cornering and under heavy braking, without in any way affecting comfort. But regardless of cab or application, I can guarantee that Scania now offers drivers an even more dynamic and at the same time very secure and predictable driving experience."



Thanks to a further developed braking system, a front axle that has been located further forward, and a lowered centre of gravity, a typical tractor rig from Scania with a GTW of about 40 tonnes can stop from cruising speed (80 km/h) in a 5 percent shorter distance under normal conditions.

As an example of what the improved braking capacity means, a typical 40 tonne 4x2 articulated truck should, in normal circumstances, be able to come to a complete standstill from full speed in a 5 percent shorter distance. Also contributing to the improved braking performance is the front axle's new position. Apart from it being moved forwards 50 mm, the new axle generally also offers better ground clearance than before.

Constant improvements

Scania would, of course, not be Scania if a lot of different areas in the vehicles had not been redesigned during the development work, in line with the company's approach to constant improvement. One such typical change is that Scania's steered tag axles are now electro-hydraulically operated. This provides a number of benefits, such as increasing the steering angle from 14 to 19 degrees, 30 kg lower weight, the axle is now classed for as much as 9 tonnes, and the installation is such that it has minimal negative impact on a bodybuilder's options (for example the cable harness does not go above chassis height).

Global premiere for rollover side curtain airbags

Scania's new generation of cabs can be fitted with rollover side curtain airbags, which are integrated into the cab roof, a technique that has never been used before in trucks. Together with seat belt use, rollover side curtain airbags are a crucial safety feature in preventing one of the most common types of accident with serious consequences involving trucks: the driver is being hit inside the cab by interior parts or being trapped beneath the cab if the truck overturns, for instance following evasive action that forces the truck off the road.

"The truck range we are now presenting is the result of the work of thousands of people and huge investments over a number of years," says Göran Hammarberg. "We are very proud of the results and now we really want to tell prospective customers about all the new solutions and services."

More information about active and passive safety in Scania's new truck range will be presented in a separate press release.

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