

Scania offers the broadest choice of heavy-duty trucks in the market

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Thanks to Scania's modular product system, customers can choose from millions of specification options to create vehicles that are precisely tailored to their task. Fuel economy, uptime and robustness are top priorities for new designs and new systems and components are always in the pipeline. Driver appeal is another Scania strength that is further enhanced by automated gearchanging adapted to off-road conditions and easy-to-handle controls to secure traction.

Three cab ranges cater for all needs

The compact P-series provides extra space for bodywork combined with particularly easy entry and exit. Available with outputs up to 440 hp and 2,300 Nm. The bigger G-series is suitable for construction as well as other types of haulage. Available with outputs up to 480 hp and 2,500 Nm.

The R-series provides the ultimate in space and comfort. It also allows space for Scania's legendary V8 engines. Outputs up to 730 hp and 3,500 Nm.

Purpose-built off-road trucks

Scania's Off-road trucks in the P- and G-series are designed with robust features that ensure maximum mobility and uptime in tough off-road conditions.

The sturdy steel bumper has an attack angle of 25 degrees and protrudes 135 mm to protect the cab from minor bumps. It is separately mounted, without connections to other components that might be damaged in case of harsh shocks, which reduces the need to visit the workshop for repairs.

The heavy-duty tow pin has a capacity of 350 kN (35 tonnes), which means that the vehicle can be towed out of trouble without unloading the cargo. A protective shield runs backwards from the bumper to protect the lower part of the charge-cooler and radiator and the front end of the sump.

On top of the bumper is a wide, slip-proof service step, reached via a foldout access step below the tow pin. Two of the horizontal grille bars act as grab handles for the driver to hold on to e.g. while cleaning the windscreen.

Scania's truck range

Scania's Off-road truck range

Special cabs

In addition to the standard P-series cabs, in many markets Scania offers a choice of crew cabs in two lengths for example for fire and rescue applications. The Scania CrewCab is delivered complete ex-factory, ready for bodybuilding without delay.

Low-entry cabs with three roof height options cater for the needs of urban distribution, refuse collection, road sweeping and other municipal tasks.

High-performing modular engine range for all conditions

Scania develops engines for all types of operation in a common process using the same basic engines, the same architecture and a large number of shared components and auxiliary systems. In addition, Scania's strategy to develop all engine management systems in-house provides outstanding flexibility and opportunities to fine-tune performance to suit individual applications.

The engine range covers all emission levels from Euro 3 to Euro 6. Scania's Euro 6 technology allows all aftertreatment systems to be incorporated in a compact silencer unit with the same dimensions as that for other emission levels. This involves major benefits, since the silencer unit does not encroach on the space needed for bodywork.

Size-by-size, engine performance is outstanding, with exceptionally high torque delivered from around 1,000 r/min for maximum driveability. Fuel economy, durability and uptime are other Scania strengths.

In addition, Scania offers the most comprehensive range of engines for alternative fuels on the market, including up to 100% biodiesel and engines adapted for biogas and natural gas, as well as bioethanol.

Go-anywhere transmissions

Scania gearboxes are based on a modular design, where the sections can be combined in different ways to produce the most suitable transmission for any type of application. The modular design facilitates repairs and parts supply, making the gearboxes familiar to any Scania service technician.

The range comprises 8-, 8+1-, 12- and 12+2-speed gearboxes with the option of an integrated retarder and automated gearchanging. The 8+1- and 12+2 gearboxes are equipped with crawler ratios to maximise

mobility and low-speed tractive power. Overdrive can be specified on the 12+2 gearboxes to limit on-road cruising revs and thus save fuel. It is also used to cope with the high torque produced by Scania's most powerful V8 engines.

Automatic gearboxes are available on special request.

Automated gearchanging with Off-road mode

Scania Opticruise is available as an alternative to manual gearchanging on the standard range of Scania gearboxes. Customers have a choice of fully automatic operation or with a clutch pedal, depending on preference.

All driving modes are controlled by toggling the ring switch on the Opticruise lever and the mode engaged is indicated in the central instrument. Several Opticruise parameters can be adjusted by any Scania workshop to tailor the functionality to the conditions at hand. Power mode and kickdown can be disabled, for example. The choice of starting gear is automatic, but the default starting gear can be reprogrammed.

On construction trucks, Scania Opticruise has a special Off-road mode that is carefully adapted to driving in rough terrain and on soft or loose ground with high rolling resistance. Off-road mode, which complements Normal and Power modes, strives to keep the clutch engaged as much as possible to avoid interruptions in power delivery and, hence, in traction. The number of gearchanges is minimised by allowing the engine speed to vary over a wider rev band. Gearchanges are made faster without prioritising comfort.

Many useful functions stand out, for example the manoeuvring mode that provides high precision control of the vehicle at very low speeds. The rocking mode is enabled automatically if the system senses that only the drive wheels are spinning. The driver can trigger a special function for getting extra engine revs when starting at very high rolling resistance by quickly depressing the accelerator all the way. Preselecting D or R with the rotary switch while still moving slightly in the opposite direction provides immediate engagement when the vehicle stops.

Scania Retarder – benchmark downhill performance

For 20 years, the Scania Retarder has been the industry benchmark in auxiliary braking. The system reduces the use of the wheel brakes by 75 percent in highway driving and provides fast and safe travel in undulating terrain.

The system is integrated in the vehicle's braking system, featuring downhill speed control, exhaust brake integration and brake blending to bridge the loss of retardation during gearchanges. The retarder is controlled

manually using the RH steering wheel lever or automatically via the brake pedal. In combination with Scania Opticruise, automatic downchanging ensures optimum braking output.

Two versions are available: 3,500 or 4,100 Nm. The 3,500 version is suitable for motorway or main road driving, being tuned to maximise fuel economy. The 4,100 version, with up to 25% extra braking at some speeds, is adapted for example for construction and off-road applications.

Traction panel

The traction panel provides intuitive control of all functions related to grip and traction in one place on the dashboard, close to the gearchanging hand. The rotary switch, which is adapted to the wheel configuration of the vehicle, engages differential locks in the right sequence to provide increasing traction, while maintaining as much steerability as possible. Progress is indicated by pictograms in the central instrument. Adjacent to the rotary switch are controls for lifting the tag axle or transferring weight between bogie axles.

Power take-offs in various positions

Gearbox power take-offs are available in several positions and with different gear ratios, including side-mounted PTOs for tippers, high-ratio rear-mounted for timber applications and a combination of rear- and side-mounted PTOs, e.g. for large cranes with a need for dual hydraulic circuits. Other layouts are available on special request.

Engine-driven power take-offs – used with hooklifts and mixers, for example – are either engine-mounted or flywheel-mounted and function independently of the gearbox or clutch.

Axles, wheel configurations and bogies

In line with Scania's modular philosophy, the axle line-up provides an exceptionally wide choice of capacities and gear ratios that enable vehicles to be tailored to the demands on load-carrying capacity, traction and mobility and the type of driving. Front and tag axles range from 7 to 10 tonnes' capacity, 11.5 and 13-tonne single rear axles are available and 13 and 15-tonne hub reduction axles. Bogies range from 18-tonne tag axle bogies to 32-tonne tandem bogies. There is a choice of multi-leaf, parabolic or air springs for most combinations.

All-wheel-drive vehicles (4x4, 6x6, 8x8, as well as 8x6) have the option of constant or engageable front-wheel drive, the latter advantageous for saving fuel. Other configurations can be built to special order.

For other press material and pictures, please visit the “Bauma 2013 preview” pressroom at www.scania.com/media.

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