

# SCANIA



CONSTRUCTION: TECHNICAL SPECIFICATIONS AND OPTIONS

# TAILORED STRENGTH FOR HEAVY DUTY



# ANTICIPATING HIGHER STANDARDS



The construction industry faces increasing demands for sustainable and cost-effective production. With a powerful lineup ready for the toughest construction tasks, Scania is well prepared to meet the highly diverse transport assignments within the sector. We have the right products, the right services, and the right skills to help you specify your vehicle perfectly to your operation, securing your uptime and your ability to conquer the slim margins of the industry.





**XT execution**

Are you looking for that extra durability, tailored flexibility, and robust look? Then choose the XT execution, supplying a series of powerful features applicable on our entire cab range, chassis, and engine program. The XT execution enables us to meet individual needs of the most challenging applications of the industry.



# FOR THE ROUGH AND TOUGH

Our construction vehicles derive from our solid history of timeless engineering and extensive field testing in the roughest conditions. A perfectly suited background for an industry that seldom offers the luxury of a well-paved road. Take a look at the smart solutions that will help making your construction operations safer, as well as more efficient, comfortable, and profitable.

## **Robust XT steel bumper**

The one-piece sturdy steel bumper provides great protection for the front components of your vehicle, reducing unwanted downtime and costly repairs to cab and chassis. In addition, its large approach angle improves your mobility and flexibility at the construction site. The fold-out service step in the bumper, together with grab handles in the front, ensures safe, nonslip access to the windscreen, saving time on daily maintenance.

## **Extra inspection step**

The inspection step available on our day cabs provides easy access for checking the cargo or body without stepping down from the cab. Integrated in the cab side behind the door, combined with a handle on the roof and an optional extra handle inside the cab, it provides the best possible ergonomics and safety.

## **Sturdy towbar**

The XT range features the strongest towing capacity on the market – 40 tonnes. The easily accessible, heavy-duty tow pin in the front enables the vehicle to be quickly pulled out of trouble, even without unloading the cargo.

## **Heavy-duty powertrain**

With an extremely efficient cooling system, advanced combustion technology, and fuel injection, Scania engines provide exceptional performance with outstanding fuel efficiency, high torque, and low emissions. Together with our extensive range of gearboxes you will be perfectly suited to take on any task, of any operation.

The whole range of Scania heavy-duty gearboxes can be equipped with the Scania Retarder. Use it together with an exhaust brake, and experience greatly improved brake performance.

## **Safety**

- *Cab* – Swedish crash test standards are among the most stringent in the world, using the same cab for all tests. Our new generation has surpassed them with ease. The new high-tensile steel cab structure offers an outstanding crash performance.
- *Visibility* – By moving the driver's position forward and sideways, lowering the instrument panel and redesigning the A-pillars, we have improved the direct visibility in the new cab, making your driver feel in control.
- *Electronic Stability Programme (ESP)* reduces the risk of skidding and tipping over, as well as the effects of understeering and oversteering
- *Air bags* – Being the first in the industry, the side curtain airbag will protect the driver in case of a roll-over accident. Together with the steering wheel airbag, the overall driver safety is on point.
- *Handling and manoeuvrability.* Scania vehicles have an undisputable reputation for world-class handling and manoeuvrability. With our new range, this has been improved even further. The new steering design and robust heavy-duty cab suspension provide a smoother and more responsive handling and steering than ever.



### Scania Opticruise

Scania Opticruise, one of the first automated gear changing systems on the market, has been refined in many steps over the years, and is now one of the smoothest and smartest systems on the market. For operations requiring the driver to be in charge for specific manoeuvring, we introduce Clutch on Demand: a new performance step for Scania Opticruise. Clutch on Demand has an additional clutch pedal for convenient use in special conditions, otherwise the system works as an ordinary automatic clutch system.

#### *Smooth and fast gearing*

The new lay-shaft brake provides faster and smoother gear changes to maintain both engine torque and road speed.

#### *Scania Opticruise general features*

- Driver interface with all functions for gear changing and retarder control integrated in the right-hand steering wheel lever.
- Comprehensive electronic protection keeps clutch wear to a minimum.
- Several parameters can be adjusted by a Scania workshop to tailor the functionality to fit your specific needs.

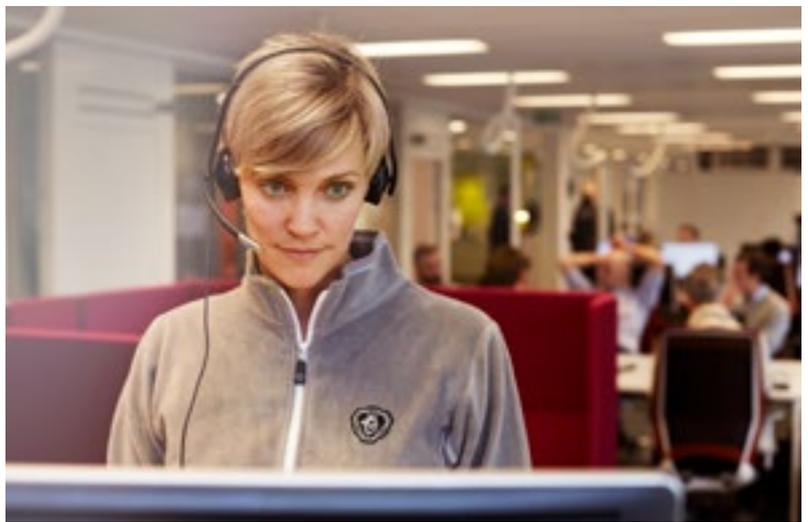
### Performance modes

The performance modes are part of Scania Opticruise. They allow you to adapt the vehicle's performance to match certain operational demands. Switching mode is easily done while driving and the chosen mode is visible on the central display. If required, all settings can be altered or fine-tuned by a Scania service workshop. There are totally four performance modes:

- *Standard mode.* Provides optimal balance between fuel economy and hill performance.
- *Economy mode.* Tuned to minimise fuel consumption and thus contribute to lower fuel costs.
- *Power mode.* Prioritises engine response and uphill performance in order to optimise transport time.
- *Off-road mode.* Enables better traction control when driving in rough terrain and on surfaces with high rolling resistance.

### Scania Retarder

The Scania Retarder interacts with the cruise control, exhaust brake and wheel brakes to provide total downhill speed control. In addition, the retarder is available in 2 performance steps for different driving conditions. The more powerful R4100 is also available in a version with a clutch that disengages the retarder from the gearbox when it is not in use. This minimises the retarder's drag losses and saves fuel.



### **Axles**

To meet any demands, Scania has a wide range of steered and fixed axles, of which driven axles are available with and without hub reduction in a wide range of axle gear ratios.

#### *Front axles*

For on-road applications the front axle can carry a load of up to 10 tonnes for a single axle, and for in-site operations as much as 12 tonnes. With double front axles, the load capacity is up to 2x10 tonnes for on-road operation and 2x12 tonnes for in-site operation. The transfer gearbox used for driven front axles has 2 gears and is available in 2 executions; with or without disconnectable front axle drive. Drive on the first axle gives excellent mobility and traction in soft surface conditions (e.g. mud, sand, and snow).

#### *Rear axles*

Scania has a wide range of rear drive axles with and without hub reduction. Bogie axles with hub reduction can carry up to 32 tonnes for on-road applications and up to 42 tonnes in site operation.

#### *Tag axles*

Non-steered tag axles have a capacity of 10 tonnes whereas steered tag axles can carry up to 9 tonnes. The electro-hydraulic rear-steered axle helps to increase load capacity and reduce fuel consumption.

### **AWD**

Standard configurations for all-wheel drive are 4x4 or 6x6, but other complex driven axle combinations are also available.

### **Scania Driver Support**

Scania Driver Support is a system that continuously gives the driver individual hints and feedback on the driving with safety and fuel economy as key parameters. It works in real time during driving and delivers a summary after a completed assignment. The system is designed to work in line with the Scania Driver Training programme in order to reduce wear and maintain a consistently fuel-efficient driving style.

### **Scania Driver Training and coaching**

Gives the driver the opportunity to maintain top performance. A skilled driver contributes to increased road safety and better fuel economy while lowering the environmental footprint. Our unique one-to-one application-based driver coaching paves the way to excellent driving habits with reduced wear and tear, stress, and fuel consumption, while increasing comfort and road safety.

# MAKE YOUR CHOICE

## CABS

	Sleeper cabs		Day cabs	
<b>S</b>	 High	 Normal		
<b>R</b>	 High	 Normal	 Low	
<b>G</b>	 High	 Normal	 Low	
<b>P</b>	 High	 Normal	 Low	
<b>L</b>				 High

Short cabs

			<p><b>Scania S-series</b> Unique spaciousness, flat floor and extended storage. The obvious choice for the longest transports.</p> <p><b>Engines</b> 370 to 730 hp</p>
 <p>Normal</p>	 <p>Low</p>		<p><b>Scania R-series</b> Pure premium in every detail. Comfort and prestige for demanding routes.</p> <p><b>Engines</b> 280 to 730 hp</p>
 <p>Normal</p>	 <p>Low</p>	 <p>Low</p>	<p><b>Scania G-series</b> Robust and well-equipped. Mid-size cab suitable for a wide range of applications.</p> <p><b>Engines</b> 280 to 500 hp</p>
 <p>Normal</p>	 <p>Low</p>	 <p>Low</p>	<p><b>Scania P-series</b> Lightweight, economic and comfortable. Compact dimensions paired with full size quality and performance.</p> <p><b>Engines</b> 220 to 500 hp</p>
 <p>Normal</p>	 <p>Low</p>		<p><b>Scania L-series</b> Tailored for city operations. Low boarding step, great visibility, safe and easy access.</p> <p><b>Engines</b> 280 to 360 hp</p>

# CHASSIS

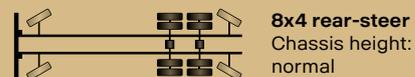
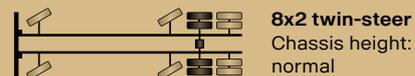
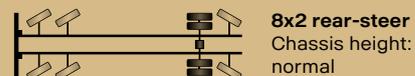
## Axle configuration

The new Scania tractors and rigids are available in a variety of axle configurations. Contact your Scania dealer to find the best solution for your needs.

### Tractors



### Rigids



## Body adaptations and preparations

You can get your Scania truck with a number of adaptations for box body, tipper body, mixer, etc. Bodywork Communication Interface (BCI) provides easy and adaptable functionality for the bodywork. By adding electrical cables and switches from Scania you will reduce lead time and improve quality.

# ENGINES AND TRANSMISSION

## Euro 6 engines

Swept volume	Maximum power	Maximum torque	Emission control
<b>Inline engines</b>			
7-litre <sup>1)</sup>	220 hp (164 kW) at 1,900 r/min	1,000 Nm (1,050–1,500 r/min)	SCR
7-litre <sup>1)</sup>	250 hp (184 kW) at 1,900 r/min	1,100 Nm (1,050–1,550 r/min)	SCR
7-litre <sup>1)</sup>	280 hp (206 kW) at 1,900 r/min	1,200 Nm (1,050–1,600 r/min)	SCR
9-litre <sup>1)</sup>	280 hp (206 kW) at 1,900 r/min	1,400 Nm (1,000–1,350 r/min)	SCR
9-litre gas	280 hp (206 kW) at 1,900 r/min	1,350 Nm (1,000–1,400 r/min)	EGR
9-litre <sup>1) 2)</sup>	320 hp (235 kW) at 1,900 r/min	1,600 Nm (1,050–1,350 r/min)	SCR
9-litre gas	340 hp (250 kW) at 1,900 r/min	1,600 Nm (1,100–1,400 r/min)	EGR
9-litre <sup>1) 2)</sup>	360 hp (265 kW) at 1,900 r/min	1,700 Nm (1,050–1,350 r/min)	SCR
13-litre <sup>1)</sup>	370 hp (272 kW) at 1,900 r/min	1,900 Nm (1,000–1,300 r/min)	SCR
13-litre <sup>1) 2)</sup>	410 hp (302 kW) at 1,900 r/min	2,150 Nm (1,000–1,300 r/min)	SCR
13-litre gas	410 hp (302 kW) at 1,900 r/min	2,000 Nm (1,100–1,400 r/min)	EGR
13-litre <sup>1) 2)</sup>	450 hp (331 kW) at 1,900 r/min	2,350 Nm (1,000–1,300 r/min)	SCR
13-litre <sup>1)</sup>	500 hp (368 kW) at 1,900 r/min	2,550 Nm (1,000–1,300 r/min)	SCR
<b>V8 engines</b>			
16-litre <sup>1)</sup>	520 hp (382 kW) at 1,900 r/min	2,700 Nm (1,000–1,300 r/min)	SCR
16-litre <sup>1) 2)</sup>	580 hp (427 kW) at 1,900 r/min	3,000 Nm (950–1,300 r/min)	SCR
16-litre <sup>1)</sup>	650 hp (479 kW) at 1,900 r/min	3,300 Nm (950–1,350 r/min)	SCR
16-litre <sup>1)</sup>	730 hp (537 kW) at 1,900 r/min	3,500 Nm (1,000–1,400 r/min)	SCR, EGR

<sup>1)</sup> Also available for HVO    <sup>2)</sup> Also available for biodiesel

## Gearboxes

Gears	Type	Engines	Options
<b>Range-change gearboxes</b>			
8 gears	Gearbox	Up to 2,100 Nm	Opticruise, Retarder
8+1 gears	Gearbox with crawler	Up to 2,400 Nm	Retarder
<b>Range-splitter gearboxes</b>			
12 gears	Gearbox	Up to 2,350 Nm	Opticruise, Retarder
12+2 gears	Gearbox with two crawlers	Up to 2,700 Nm	Opticruise, Retarder
12+2 gears	Overdrive gearbox with two crawlers	Up to 3,500 Nm	Opticruise, Retarder
<b>Automatic gearboxes</b>			
Automatic gearboxes are available together with most of the 5- and 6-cylinder engines			

## Power take-offs

There are many ways to tap into the power of your Scania. Our PTO options include gearbox-driven (clutch dependent), flywheel-driven (clutch independent) and engine-driven solutions.

