



T50

SCANIA HIGER

FOR TRAVEL OPERATIONS



SCANIA

An aerial photograph of a multi-lane highway stretching into the distance under a dramatic sunset sky. The sun is low on the horizon, creating a strong lens flare and casting a warm, golden glow over the scene. Several cars are visible on the road, and a dense line of trees marks the horizon. The overall mood is serene and expansive.

EFFICIENT, RELIABLE AND COMFORTABLE

Based on more than a century of engineering experience, the new generation of Scania Higer coaches has been developed to meet the demands of today's and tomorrow's travel operators. Energy-efficient and available in a wide range of powertrains, it offers the latest technology in everything from safety systems to reduced emissions and noise levels. And through excellent uptime and fuel economy, high levels of passenger comfort and generous luggage capacity, Scania Higer coaches allow sustainable mobility to go hand-in-hand with operating economy.

Sustainable efficiency

Having the right vehicle for the operation and using it efficiently is the best way to minimise environmental impact. Scania's offering includes conventionally powered coaches that run on all commercially viable renewable fuels – biodiesel/FAME, HVO and biogas – in order to meet the requirements of all travel operators. Through high quality vehicles with innovative technical solutions and outstanding fuel efficiency, top-quality repair and maintenance services, and a range of driver services, we address fuel consumption from several angles, helping operators to reduce emissions.

Energy efficiency that lowers operating cost

Travel operators know the importance of keeping costs to a minimum, and fuel consumption is one of the main contributors to operating cost. An energy efficient powertrain can therefore offer significant savings. Scania develops and offers highly energy efficient powertrains. Compared to previous models, the new generation of Scania Higer coaches can save up to 9% in fuel and emissions, without compromising on performance. This is achieved through a number of factors, with the most significant savings coming from enhanced engine efficiency and improved cruise control with active prediction. Beyond the powertrain, driving style is another major factor that affects fuel consumption. Our driver services typically reduce fuel consumption and emissions by as much as 10%, with the driveability of Scania Higer coaches and our advanced driver assistance systems as well as our top-quality maintenance services resulting in additional savings.

Powertrains

The high floor Scania K-chassis is available with a wide range of energy efficient and reliable powertrains optimised for longer distance traffic.

Combustion, Euro 5	Output	Torque	Emissions control	Fuel options
9-litre	280 hp (206 kW) at 1900 r/min	1400 Nm (1000-1400 r/min)	SCR	Biodiesel, HVO, diesel
9-litre	320 hp (235 kW) at 1900 r/min	1600 Nm (1050-1400 r/min)	SCR	Biodiesel, HVO, diesel
9-litre	360 hp (265 kW) at 1900 r/min	1700 Nm (1050-1475 r/min)	SCR	Biodiesel, HVO, diesel
13-litre	410 hp (302 kW) at 1900 r/min	2150 Nm (1000-1300 r/min)	SCR	Biodiesel, HVO, diesel
13-litre	450 hp (331 kW) at 1900 r/min	2350 Nm (1000-1300 r/min)	SCR	Biodiesel, HVO, diesel
Fuel capacity (usable volumes): 275–460 litres				

Combustion, Euro 6	Output	Torque	Emissions control	Fuel options
9-litre	280 hp (206 kW) at 1900 r/min	1350 Nm (1000-1400 r/min)	EGR	Biogas, natural gas
9-litre	340 hp (250 kW) at 1900 r/min	1600 Nm (1100-1400 r/min)	EGR	Biogas, natural gas
13-litre	410 hp (302 kW) at 1900 r/min	2000 Nm (1100-1400 r/min)	EGR	Biogas, natural gas
Fuel capacity: 1260–1875 litres (CBG/CNG) 560–1120 litres (LBG/LNG)				

Gearboxes

6-speed fully automatic gearbox (ZF EcoLife 2)
12-speed manual gearbox with Scania Opticruise and retarder

Axles, doors and lengths

The Scania Higer T50 are available in this variant, enable them to meet different operational requirements.

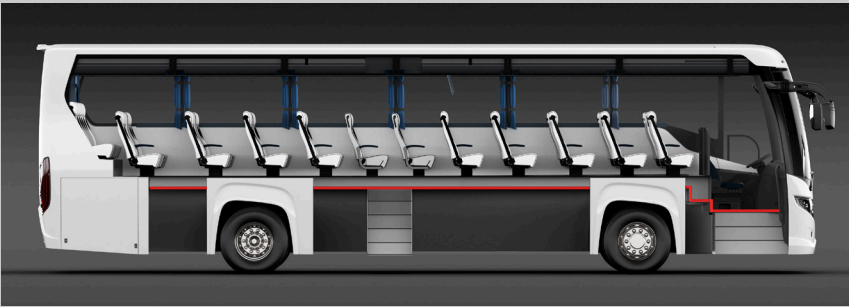
T50, 2-axles



12.0 m

Floor level

The K-chassis is suitable for a lot of different option of floor level. A common option is when the aisle in the coach is lowered, resulting in higher passenger comfort through fewer steps in the staircase, full standing height, and easier access to seats, without compromising on luggage volume.



PRODUCT DESIGN FEATURES

Our coaches are produced in a long-standing partnership between Scania and Higer. Everything from the chassis construction to the powertrain and the body has been developed and thoroughly tested with a focus on reliability and performance without compromising on energy efficiency.



Driver area

The driver area has a completely new design with improved ergonomics, safety, comfort, and the vehicles has excellent driveability.

- Excellent ergonomics and reachability – pedal placement, leg space, and flexible switch placement due to CAN functionality and more.
- Increased safety – advanced driver assistance systems, electropneumatic parking brake system.
- Excellent driveability – great turning radius, advanced driver assistance systems, and improved assisted handling, steering and braking.

Front suspension technology

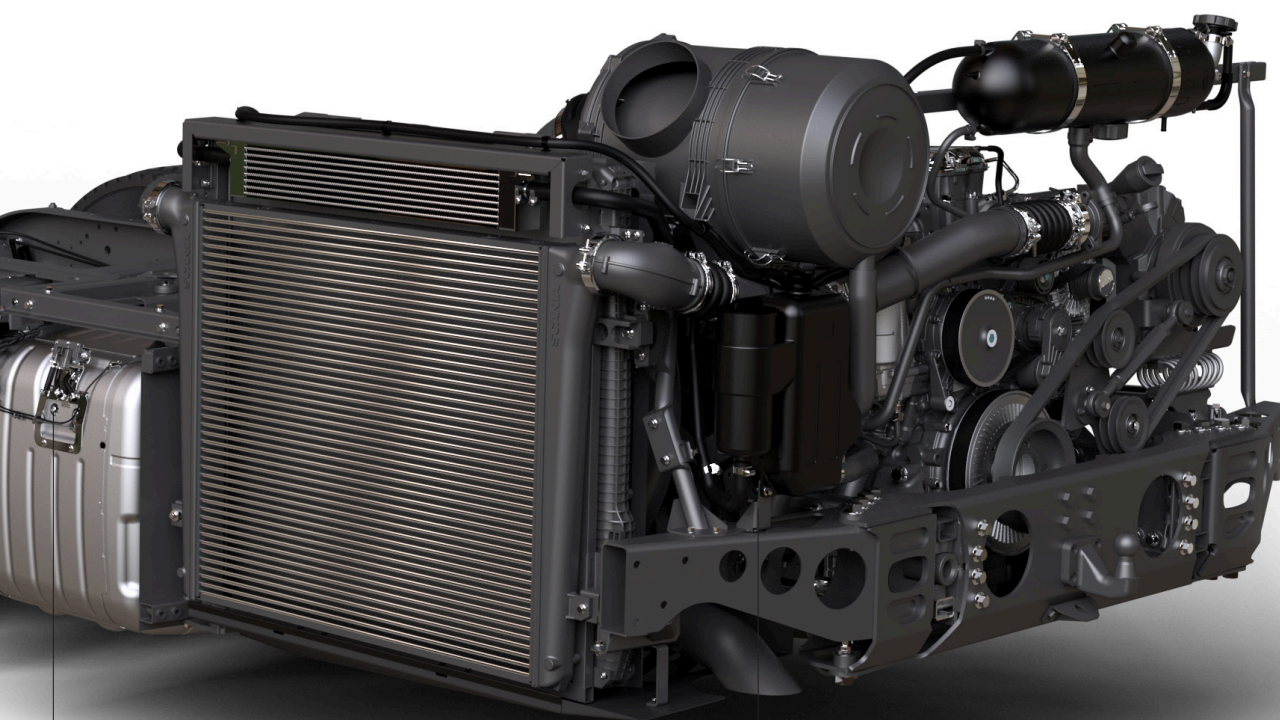
Without compromising on passenger capacity, the new independent front suspension offers excellent passenger comfort and increased load capacity.

Electric system

The new power supply architecture comes with improved electronic control units (ECUs) and functions that improve performance and facilitate diagnostics for repair and maintenance. It also enables new functionality within ADAS and autonomous transport systems.

Fuel tanks

For coaches with independent front suspension, new tank options are available in 275 or 460 litres (usable volumes). For coaches with rigid front axle, the fuel tanks are available in 275 or 410 litres (usable volumes).



Chassis frame construction

The strengthened front axle means that load capacity is increased from 7.5 to 8.0 tonnes. It also enables optimised weight distribution between the front and rear axles.

Powertrain technology

The highly dependable, durable, and robust powertrains enable fuel savings of up to 9%, while the addition of cruise control with active prediction and pulse and glide function contributes further savings.

Safety features

A range of functions support the driver whether they are on the open highway or in busy city environments;

- Adaptive cruise control with active prediction – assists the driver in keeping the distance to vehicles in front of the coach.
- Lane departure warning - detects lane markings and alerts the driver if the vehicle crosses the lane markings.
- Blind spot warning – detects other vehicles located in the driver's blind spot area.
- Electropneumatic parking brake control – locks the brakes until acceleration is activated, thereby preventing unintentional vehicle motion.
- Vulnerable road user collision warning – detects cyclist and pedestrians close to the vehicle.
- Underrun protection – rigid beams in the rear protect other road users and sensitive components on the chassis.

General

Door configurations: 1-1-0, 1-0-0

Dimensions

Lenght: 12.0 m

Width: 2.50 m, 2.55 m

Height: 3.6 m

Passenger area

Seating: Vega 440, manual or automatic wheelchair lift with separate door before the middle door, four priority seats with folding armrests, location for wheelchair or pram, folding seats, reading lamp and air nozzles

Equipment: Luggage rack, camera surveillance, infotainment system (Wi-Fi), interior LED or fluorescent lighting

Roof hatches: Electric or fixed

Driver area

Seating: ISRI driver seat

Instrument panel: Fixed

Equipment: Audio system, announcement system

Climate systems

Heating and cooling: Convector circuit in passenger area, auxiliary heater (diesel), defroster, combined air conditioning for the driver, temperature-controlled ventilation and AC for passengers

Powertrains - Combustion, Euro 5

Biodiesel, HVO, diesel:

9-litre 280 hp (206 kW) 1400 Nm

9-litre 320 hp (235 kW) 1600 Nm

9-litre 360 hp (265 kW) 1700 Nm

13-litre 410 hp (302 kW) 2150 Nm

13-litre 450 hp (331 kW) 2350 Nm

Fuel capacity (usable volumes): 275 - 460 litres

Powertrains - Combustion, Euro 6

Biogas, natural gas:

9-litre 280 hp (206 kW) 1350 Nm

9-litre 340 hp (250 kW) 1600 Nm

13-litre 410 hp (302 kW) 2000 Nm

Fuel capacity: 1260 - 1875 litres (CBG/CNG)
560 - 1120 litres (LBG/LNG)

Gearbox:

12-speed gearbox with Scania Opticruise

6-speed fully automatic gearbox (ZF EcoLife 2)

Axles and suspensions

Configurations: 2-axle, 3-axle with tag axle (steered or non-steered)

Front axle:

Independent wheel suspension or rigid axle

Max. load capacity:

Independent wheel suspension 8.0 tonnes

Rigid axle 7.5 tonnes

Rear axle:

Rigid axle, driven

Max. load capacity 13 tonnes

Tag axle:

Rigid axle, non-steered or steered.

Electrohydraulic tag axle steering

Max. load capacity bogie 19 tonnes (11.5 + 7.5 tonnes)

Full air suspension with electronic level control system (ELC)

Total raising or lowering of chassis height.

Kneeling instep, whole front or whole side.

Electrical systems

150, 180, 210 or 230 Ah or dual battery system, 24 V

Alternator 150, 180, 2x150 or 2x180 A

Brakes

Disc brakes, electronic brake system (EBS), anti-lock brakes (ABS), traction control (TC), bus stop brake, hill hold, pad wear indicator, pipes manufactured from either rust protected steel or high impact synthetics, separate air tanks for each circuit, exhaust brake with automatic control

Wheels

Tyre size (front): 295/80, 315/70, 315/80, 385/65

Tyre size (tag): 295/80, 315/70, 315/80, 385/65

Tyre size (rear): 295/80, 315/70, 315/80

Aluminum or steel rims

Scania driver support, lane departure warning, lane change collision prevention, adaptive cruise control with active prediction, attention support, advanced emergency braking, electropneumatic parking brake control, vulnerable road user collision warning, blind spot warning and Scania Fleet Management which collects, saves and sends information from the vehicle for analysis.



Ensuring availability through reliable solutions

Reducing vehicle downtime and increasing utilisation is essential for the profitability of travel operators. Our coaches are well designed and built on proven technology and components, resulting in chassis and powertrains that are dependable, durable, and robust. That reliability is key to minimising time in the workshop and maximising utilisation of the vehicle. That is why we have made sure that sensitive and expensive components are protected in the event of a collision. Limiting damage and avoiding deformation of components for minimising costs, as well as complex and time-consuming repairs. Additionally, Scania Higer coaches are designed to facilitate maintenance and to make it as efficient as possible. Here, Scania offers professional and proactive workshop services tailored to operational and individual vehicle needs, with excellent parts availability, to secure maximum uptime.

A first-class driver area

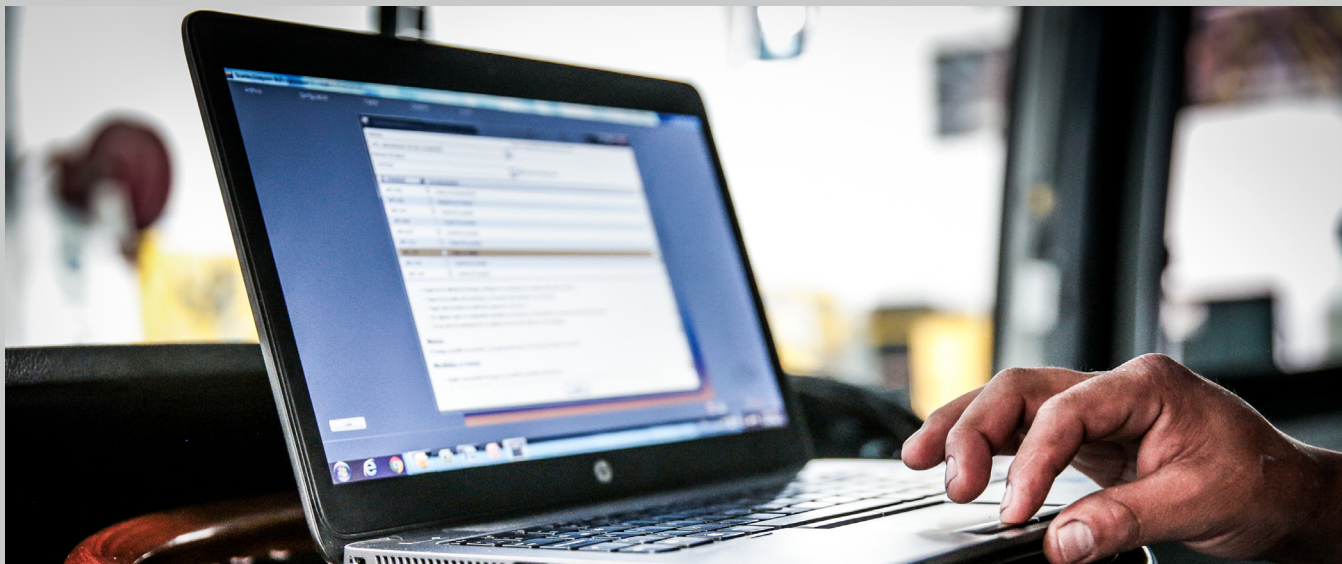
A quality driver environment can play a crucial role in reducing the risk of incidents by maintaining driver comfort and alertness, while also offering a great workplace.

The driver area in Scania Higer coach is simply first-class and can even be said to be industry leading. A great turning radius, good visibility, and an overall well-balanced vehicle makes for excellent driveability, while advanced driver assistance systems give the driver good control of the vehicle through improved assisted handling, steering and braking. These systems include features such as attention support, lane departure warning, lane change collision prevention and adaptive cruise control with active prediction that help to prevent accidents or minimise potential damage.

Due to the demanding work environment, operators also face challenges when it comes to sick leave and employee retention; that is why we have designed the best possible work environment for drivers in terms of ergonomics, reachability, climate control, safety features and an overall quality feel.

A comfortable passenger experience

Scania Higer coaches have a forgiving suspension, smooth gearbox transition, powerful engines and well-balanced weight distribution that create a relaxing and comfortable passenger experience.



SERVICE OFFERING

Our offering consists of a number of services for minimising emissions, increasing safety, and improving operating economy, focusing on areas like fuel efficiency and uptime. These services allow us to provide solutions to each operator's individual challenges and needs.

Driver services

Enables drivers to drive safer and more efficiently, and can reduce the need for maintenance.

Scania Driver Training

Combines theory and practice, covering topics such as safe and efficient driving, not only to save energy but even regenerate energy. The training also handles other aspects of professional driving, always with a focus on profitability, fuel economy and reduced emissions.

Scania Driver Evaluation

An on-board device that assesses the driving style by comparing it to that of drivers operating in similar conditions. The result, which can be used to achieve long term improvements, is visible in the Scania Fleet Management Portal and Scania Fleet App.

Fleet management services

Through the Scania Fleet Management Portal and the Scania Fleet App, operators can gain access to valuable insights into the performance and status of their fleet. The data collected onboard the coach provides valuable insights into driving styles, productivity and economy. This level of tracking and diagnostics can bring significant benefits in terms of increased uptime, improved safety and reduced operating costs.

Scania Zone

A position-based system for real-time vehicle adjustments in pre-defined zones. It allows operators to ensure that each vehicle stays within the set speed limits, increasing safety and comfort as well as lowering fuel consumption. Scania Zone is an optional add-on in Scania's fleet management system

Repair and maintenance services

Having access to professional workshops and quality parts is key to keeping the vehicles in prime condition. Scania offers a range of repair and maintenance services.

Scania Flexible Maintenance

Uses real-time vehicle data to produce maintenance plans tailored to each vehicle's actual operation, meaning no underservicing or overservicing. This is done by continually monitoring and analysing operational data to ensure maximum uptime and scheduling maintenance customised to operational needs, thus increasing productivity and decreasing disruptions.

Scania Fleet Care

The fleet operator receives a dedicated Fleet Manager from Scania equipped with advanced tools and systems, to optimise maintenance and prevent breakdowns based on operational data and vehicle data analysis.

Customer workshop services

Tailored collaboration services designed to facilitate workshop services for the operator by streamlining and quality assuring the workshop and processes to meet Scania's high standards.

Scania Higer service team

In close cooperation, Scania and Higer offer comprehensive and high-quality services to keep the vehicles in peak condition, increase utilisation and improve operating economy. Well-established and trusted service networks offer technicians regular service training with training material developed in multiple languages, assuring professional technical support 24/7.

Scania and Higer are both suppliers operating on the global market, and provide spare parts through consignment stock, online ordering systems, and more.

Additionally, all bus bodies carry a 24 month or 150,000 mileage warranty.

Financial services

Flexible financing and insurance solutions that match operational needs, tailored to provide predictable costs and manageable risks – over the entire lifecycle of the vehicles.

Scania Financing

Tailored solutions for financing expansion or fleet renewal. Supported by professional knowledge of transport business financing and optimised for the local tax and legal environment.

Scania Insurance

Tailored solutions that, together with claims support service and Scania Assistance, will help get the vehicle back on the road quicker, safeguarding uptime – and peace of mind.

Scania's data API's comply with the rFSM standards 1.x and 2.x.