

SCANIA SUPER 13-LITRE ENGINE



REDEFINING ENGINE PERFORMANCE



LEGENDARY EFFICIENCY

The Scania Super 13-litre engine powertrain sets new standards for fuel efficient transport operations. Delivering unprecedented powertrain fuel savings of 8%, the new reduced-emission engine range is here to lead the transport industry through a decade of tough operational challenges.

With superior driveability, an extended power range up to 560 hp, and outstanding technical robustness, the Scania Super 13-litre engine is engineered to keep your business rolling beyond the transport challenges of tomorrow.

The future is closer than you think. The future is Super.





READY FOR THE ROAD AHEAD



Groundbreaking performance

The Scania Super delivers industry leading brake thermal efficiency levels of 50%, representing our ambition towards a zero-carbon transport system. Contributing to combined powertrain fuel savings of 8%, this new benchmark guarantees the superior fuel performance of the Scania Super powertrain – regardless of road or load, mile after mile.

World-leading emissions control

The industry-leading Scania Twin SCR system, which introduces dual injection of AdBlue in the exhaust aftertreatment process, contributes to the superior efficiency of the Super engine powertrain and secures its compliance with both existing and future expected vehicles emissions standards around the world.

More power than ever before

Complementing the powertrain's superior fuel performance, the Scania Super 13-litre engine delivers more power than ever on a Scania 6-cylinder inline platform. With increased power up to 560 hp and maximum torque up to 2800 Nm, the Scania Super 13-litre engine range is ready to meet your operational challenges of today and tomorrow.

Improved engine stamina

Producing full torque from 900 rpm and characterised by extreme stamina, the Scania Super represents the latest step in our low-rev philosophy. It integrates seamlessly across the powertrain to deliver maximum torque at a lower engine RPM, resulting in optimal fuel efficiency.



420 HP

Cylinders: 6 inline Swept volume: 12.74 litres Max. power: 420 hp (309 kW) at 1800 RPM Max. torque: 2300 Nm at 900-1280 RPM Emission control: Twin SCR

DC13 174 500 Euro 6

Nm hp 3 600 750 3 400 700 3 200 650 3 000 600 2 800 550 Torque Power 2 600 500 2 400 450 2 200 400 2 000 350 1 800 300 800 1000 1200 1400 1600 1800 2 0 0 0 r/min

500 HP

Cylinders: 6 inline Swept volume: 12.74 litres Max. power: 500 hp (368 kW) at 1800 RPM Max. torque: 2650 Nm at 900-1320 RPM Emission control: Twin SCR



460 HP

Cylinders: 6 inline Swept volume: 12.74 litres Max. power: 460 hp (338 kW) at 1800 RPM Max. torque: 2500 Nm at 900-1290 RPM Emission control: Twin SCR

DC13 173 560 Euro 6



560 HP

Cylinders: 6 inline Swept volume: 12.74 litres Max. power: 560 hp (412 kW) at 1800 RPM Max. torque: 2800 Nm at 900-1400 RPM Emission control: Twin SCR



Dual overhead camshafts

The Scania Super introduces a new cylinder head design, with dual overhead camshafts. The new design features meticulously tuned inlets and outlets to generate improved gas flow through a more robust and precise valvetrain, delivering the engine's superior performance.

Integrated auxiliary braking

The new engine-integrated compression release brake (CRB), weighing only 7 kg, provides fully integrated brake blending for smoother driving and a retardation effect up to 350 kW. For the most challenging transport operations which demand good capacity, the Scania Super's optional CRB system can be combined with the R4700D Scania retarder to enhance speedkeeping capabilities during downhill driving. This combination can also reduce parts maintenance and increase the vehicle's residual value.

Aftertreatment system

The engine's compact aftertreatment system offers a wide choice of outlets in different directions. The new design introduces larger exhaust outlet opening to lower the exhaust velocity.

Power take-off options

The Scania Super 13-litre engine range offers a new enginedriven power take-off (ED-PTO) solution capable of meeting even the most demanding applications. Delivering reduced drag losses and increased power up to 238 kW, the improved ED-PTO offers a wider choice of interface options, including hydraulic pump applications.

Integrated management system

Through high data processing capacity, the Scania Super's fully integrated engine management system provides advanced computing power, enabling higher integration between the engine's systems – such as the engine's fuel pumps, fuel injectors and fuel optimization unit – as well as the powertrain's gearbox management system.

Lower internal friction losses

The Scania Super is precision engineered to reduce internal friction losses, complemented by the application of high-grade Scania LDF-5 engine oil. At Scania, we formulate our oil blends to provide the best possible performance and total operating economy.



A BIOFUEL CHAMPION

Renewable fuel alternatives are a key part of Scania's commitment to lowering the transport sector's carbon footprint, while ensuring transport leaders can excel in delivering profitable and scalable operations.

As part of this commitment, the Scania Super 13-litre engine range delivers compatibility with a range of low-emission HVO fuels and biodiesel/FAME fuels.

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Up to 90% reduction in CO₂ emissions compared to standard diesel. Hydro-treated vegetable oil (HVO) can be made, for example, from waste oil and rapeseed oil and is used to create high-quality, bio-based diesel fuels.

Available across the entire Scania Super performance range.

Biodiesel

Up to 66% reduction in CO₂ emissions compared to standard diesel. Biodiesel or FAME (fatty acid methyl ester) can be made, for example, from rapeseed and waste cooking oil, and can also be blended with diesel.

Available on Scania Super 460 and 500 horsepower engines.

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