

**Scania:
the strength
of an unbeatable
combination.**

What makes an efficient and profitable truck?

A vehicle that is custom-engineered for the job in hand. No single truck can do all things perfectly, but there is an ideal truck for each sector of the haulage market. The truck with the right basic performance is the surest foundation of total economy.

The problem lies in identifying the best combination of performance features, no matter what the haulage work.

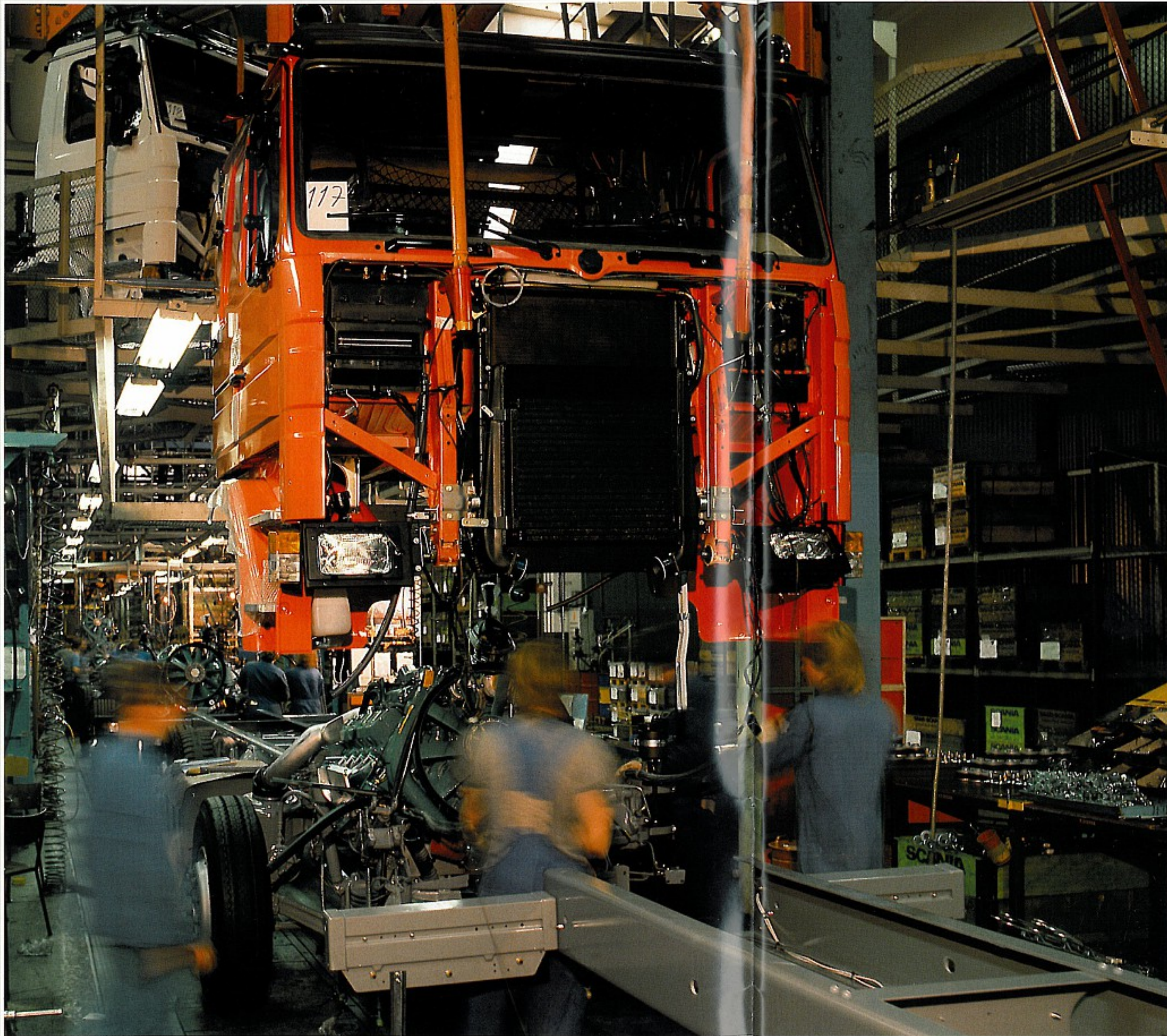
And that's what Scania does. We can quote the ideal combination for all medium-heavy and heavy haulage work.

The Program Scania features a series of basic component modules that are combined to produce the perfect vehicle for the job. The most extensive range of trucks available on the market. No expensive, special designs custom-built for each application.

All modules are built using standard parts and components. Fewer parts for more economic service and shorter downtime.

All Scania's feature the strength of an unbeatable combination. Including total economy.





The makings of unbeatable Total Economy.

It is here that a new Scania takes shape.

This is the moment in time that sets Scania apart from many other truck manufacturers.

For many of them, a new truck turns into a sales problem. Not in our case. Every Scania coming off the line has been built for a purpose. Customer and dealer have analyzed critical performance factors — and drawn up their specifications.

Every Scania that leaves the factory gate has been built for a specific purpose, for a particular customer on a particular market. That's why unbeatable total economy is a product of the assembly line.

The cab on a new Scania is just right: with height, comfort standard and space to match



requirements. The right power plant with the right power output. A chassis that maximizes payload no matter what the road conditions. A driveline that strikes a profitable balance between strength, speed and fuel consumption.

The flexibility of our modular program offers scope for specifying the ideal combination of features and performance for a specific type of haulage work.

And there are several other advantages to this Scania concept of flexibility and component standardization.

There are fewer parts, and they can be used to service more trucks, making more parts interchangeable. That saves money for fleet operators and safeguards the reliability of operations. Training packages for service technicians and drivers are simpler and less expensive.

Quality and precision benefit from long production runs. It takes the cost and worry out of parts availability and cuts expensive downtime.

Program Scania has the scope to offer job versatility and the economy to dispense with superfluous costs. Modules that make an unbeatable combination meet on the assembly line.



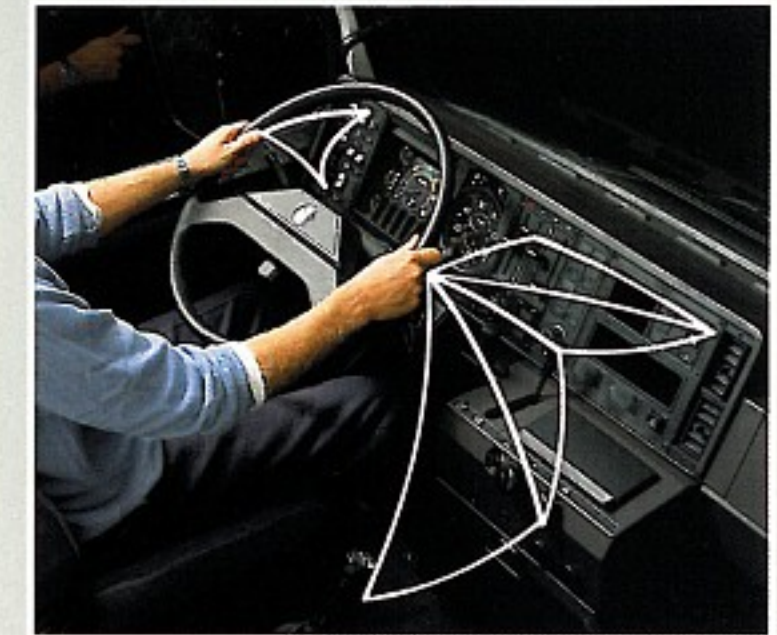
Man is the measure.

Stress, boredom, physical and mental exertion and treacherous fatigue are part and parcel of driving a truck. Controlling tens of tonnes of equipment and goods in busy traffic or tricky terrain is a major responsibility.

That's why man is the measure by which Scania cabs are engineered. Any other approach is out of the question. The cab is a workplace and home from home on for many hours at a stretch.

The cab is a safety factor by any standards of ergonomics and engineering. Interface and communications with the driver and all his senses are the key: not fatigue and frustration.

Our cabs are designed on the basis of years of hard-won, practical experience of what does and does not work in the real world. Correct, hands-on



posture at the wheel, convenient, easy-to-reach controls and logical instrumentation are safety factors as much as ventilation, low noise and good visibility.

Job satisfaction and driver comfort are truck performance features that rank on a par with low fuel consumption and high payload.

In the final analysis, safety and comfort are no more than the sum product of the ability of hundreds of components and features to handle the realities of the day-to-day job. Poor boarding step layout, an uncomfortable driver seat or noisy cab where stereo and CB radio are at full volume and conversation is conducted at a shout are not the ideal conditions for a job that has its full share of stress and responsibility.

The design of the Scania cab is the fruit of the combined efforts of experts in many fields. Aircraft designers, psychologists, specialists in truck ergonomics and, of course, the men at the wheel. That's why the list of features is so long and successful.

Engineering, feel and common sense have combined to create a work environment that is relaxing without being soporific. An environment that is as efficient in busy city traffic as during long lonely hours at the wheel in the dead of night.

The Scania driver is a professional: in his work, and in his attitudes.

Right for the job and safe for the driver.

These are workplaces. Although they are built for different types of haulage operations, they are all configured on models of the same basic design.

And because the cab on so many Scania is an office on wheels and a home from home, there are spacious sleeper cabs for night stop-overs and standard day cabs available with resting equipment. There is always a variant to suit the job in hand.

The G cab features an extra low boarding step height. Ideal for the driver continually entering and leaving the cab. Normally this type of work does not involve night stop-overs and that's why the G cab is not available in sleeper version.

The P cab is an all-round workplace with low boarding step height and small cross-sectional area for low drag. Like the R and T cabs, it is available in



day and sleeper versions.

The R cab is an airy, spacious unit with excellent all-round visibility and a high standard of comfort for long-distance runs.

The T cab, with flat floor pan, features walk-through facility, a high standard of comfort and a very low noise level.

All these cabs are available in several comfort equipment standards to reflect individual preference.

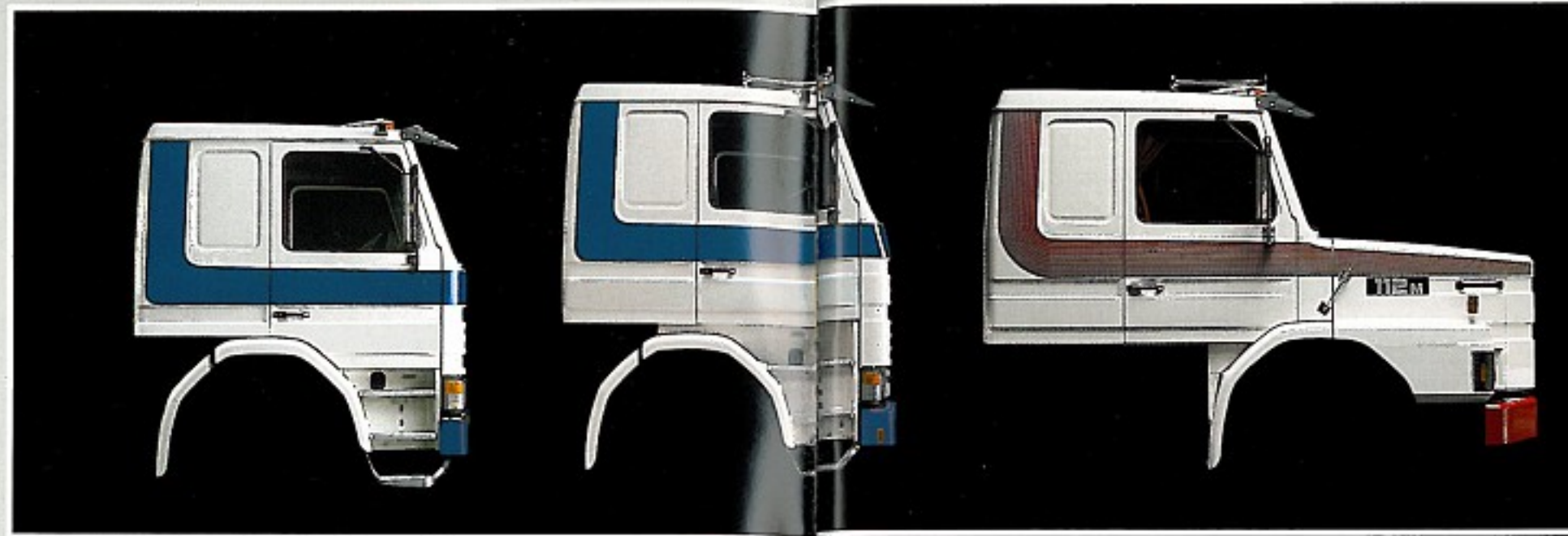
Nevertheless, all cabs have one major advantage in common: they are safe places in which to work. Safe because they are designed around a "safety cage" and engineered to the world's most rigorous standards of impact protection.

And the result: a Scania cab is designed to survive the impact of a one-tonne weight released from a free-fall height of 3 metres against the front and rear of the cab and to withstand a static load on the roof of 15 tonnes, all this without any of the doors bursting open. On completion of the test, the driver area remains an intact unit.

That's why the correct cab model for the job is only half of the strength of the Program Scania.

Safety is as strong an inducement as any to specify Scania.

The Scania Blue Cab is one of our three sleeper cabs. The perfect work place and home from home for comfortable night stop-overs on long trips. The Blue Cab and all sleeper cabs on T trucks are available in one or two-bunk versions.



Seven cabs in one. Scania cabs are configured on a modular basis using a minimum of standardized components. Standard components are combined to provide a wide range of options in boarding step height, engine location and cab length to furnish a complete range of cabs covering all types of work.



Standard day cabs are available in several comfort equipment classes featuring an extensive choice of equipment options. The passenger seat illustrated here is one example, a bench seat that doubles up as a resting area is another.

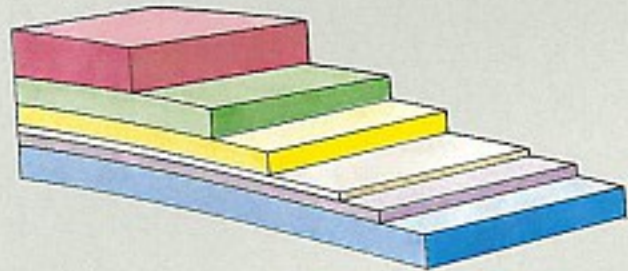
Feeling, knowledge and a sense of driving pleasure.

A heavy burden of responsibility rests with the individual in charge of a rig weighing 20, 30 or even as much as 100 tonnes.

That's why all technical features that can make the job of the driver easier are not mere frills but essential equipment. From the location of the power control for the passenger window to the fibre-optic symbol illumination.

Logical instrument layout enables information to be taken in at a glance. Warning lamps are grouped centrally in a cluster where the driver can see them without taking his eyes off the road. Controls are grouped by function. Intelligible, illuminated symbols take the confusion out of locating switches and controls.

Inside the cab, technology with a human face. On the outside: technology to withstand a hostile environment. The superb colour coat conceals a unique method of surface treatment. Scania is the first truck manufacturer in the world to fabricate a cab using sheet metal that is hot-dip galvanized in a

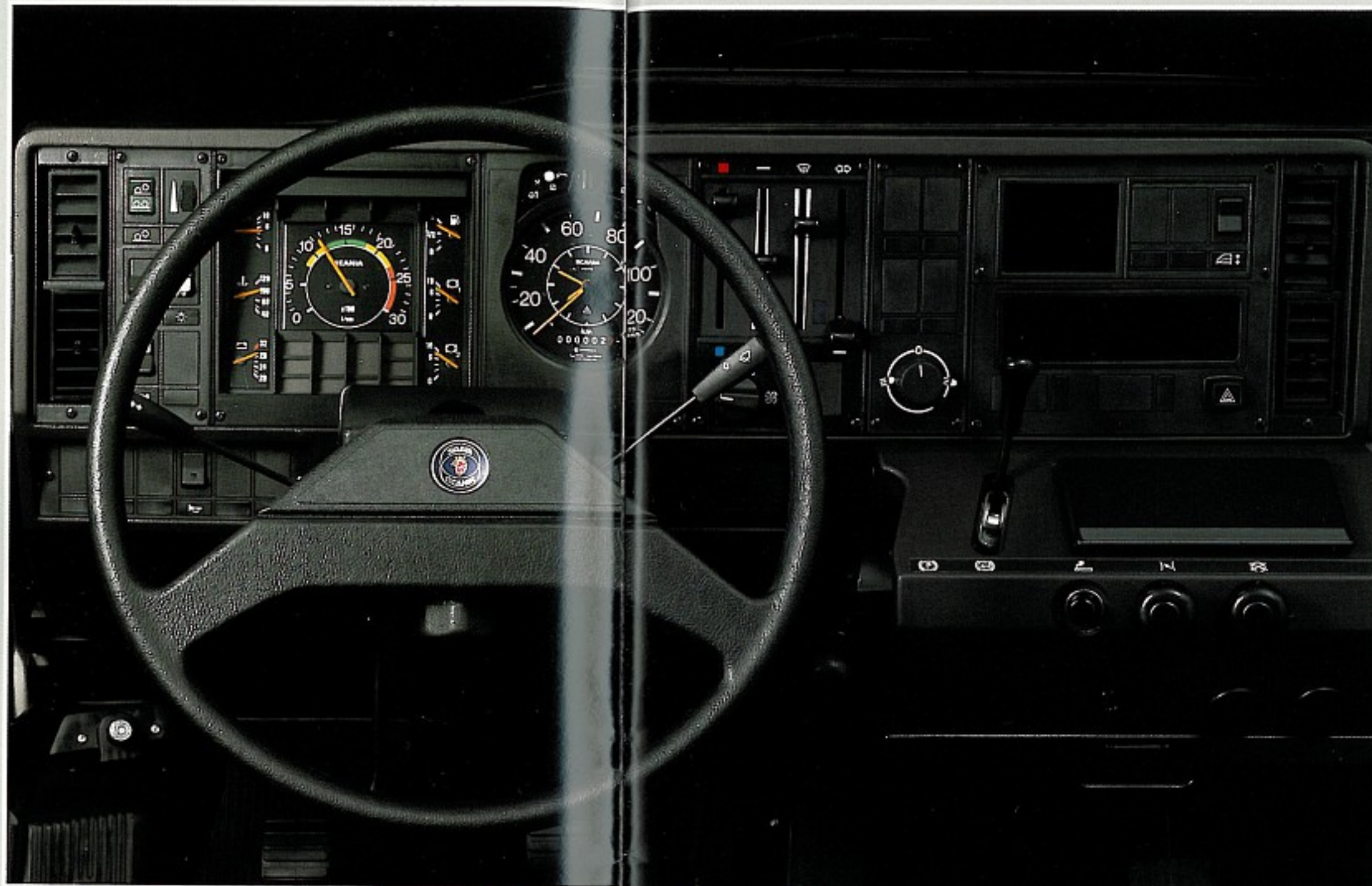


special process. This provides a perfect surface finish and utilizes the excellent corrosion protection properties of zinc.

Zinc is a less noble metal than steel: the zinc coating is sacrificed to protect rust from securing a foothold on the sheet metal beneath. The zinc coating is self-sealing when broken by minor scratches or dents.

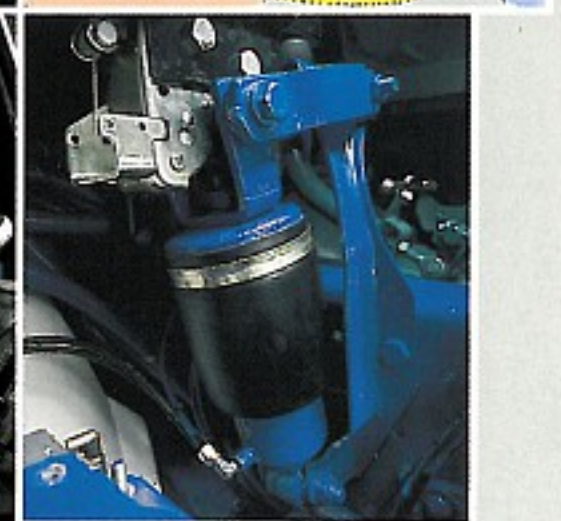
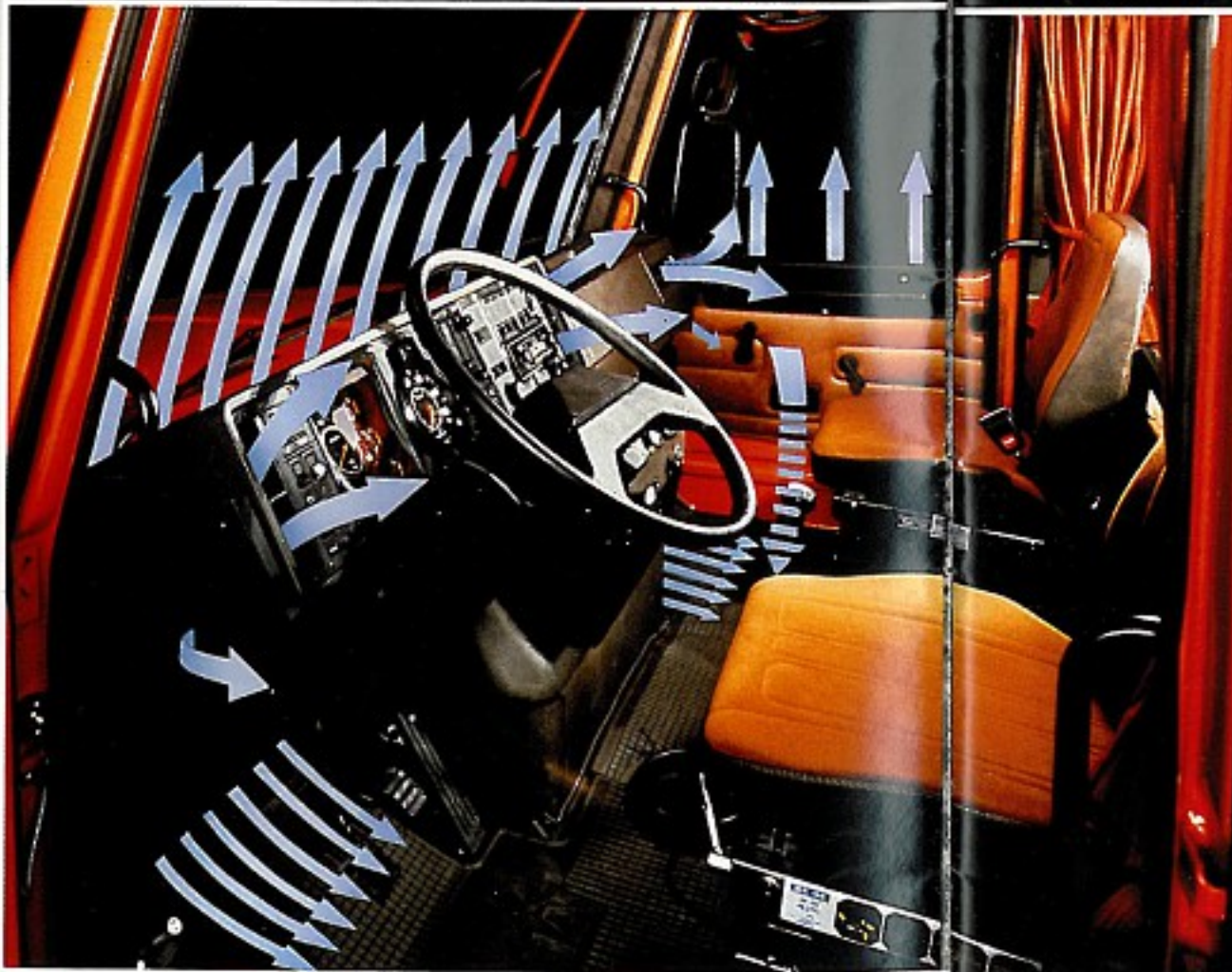
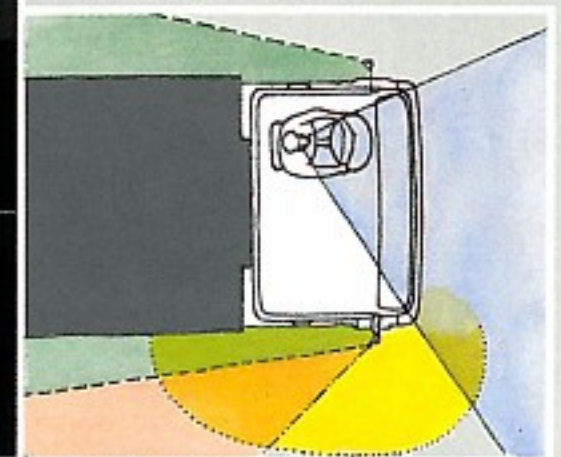
All critical cab components are hot-dip galvanized to provide full protection for exposed sheet metal sections. After degreasing, cleaning, phosphating, chromating, recleaning, drying, anti-corrosion treatment, PVC coating, priming and top-coating, the surface finish is an elegant example of long-life operating economy.

Nevertheless, the interior is still the most important area: ask the driver.



This is the work place of the professional. Instruments and controls are logically grouped by function. The centre panel brings controls within easy reach. Oil pressure gauge, coolant temperature, battery charge, fuel gauge and air pressure warning lamps are grouped, aircraft style, in a cluster around the tachometer.

One of the world's most comprehensive rear-view mirror systems assures perfect, all-round visibility and coverage of the "dead angle" in the immediate vicinity of the vehicle.



Steering wheel height and rake are adjustable for the most comfortable hands-on posture. No matter what seat model is specified, comfort is first class.

Twenty-four effective louvres in the heating and ventilation system ensure a generous and draught-free supply of fresh air. Cab temperature can be controlled at a comfortable level even in freezing arctic weather.

Cab suspension is designed to attenuate vibrations and suppress cab nod. This picture shows the air suspension available on certain tractor models.



Scania engines: penny-pinching power!

Since the turn of the century, we have had one overriding goal — more power from less fuel. Our work over the years has born fruit in the form of technology and engine efficiency that would have been unthinkable only a few years ago — performance that few manufacturers can match even today.

Much of Scania's international reputation is based on our skill as engine-builders. With a product philosophy embodied in the phrase "high torque at low engine speed" we have spearheaded development work in the field of fuel-efficient engines. The tachometer symbolizes energy efficiency and operating economy. The successful combination of high torque and low engine speed translates into major savings. Costs decline in proportion to a drop in the number of piston strokes needed to cover a kilometre of road.

Nevertheless our prime-mover technology spans a wider field than the low-rev philosophy. Power and fuel efficiency are just two of the critical features of a Scania diesel, whether it is used to



power a heavy rig through thick and thin or whatever the application.

Service life and reliability. Operating reliability and rugged endurance are as much features of our diesels as power and fuel-efficient performance.

Power, speed and strength on tap are essential components of operating economy in the long term. The following pages contain several examples of our approach to solving this complex equation and its variables: power, cost and service life.

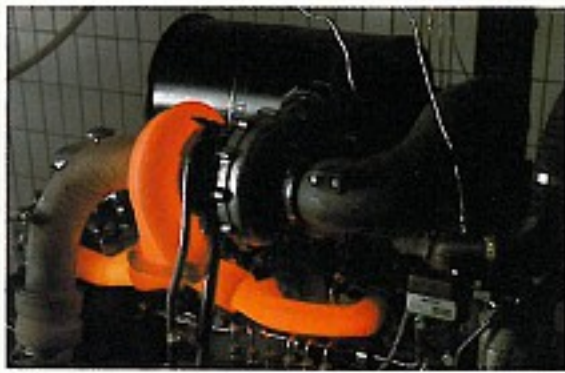
Fuel-efficient engine range.

The wide range of fuel-efficient and reliable engines are key qualities of the Program Scania. Straight sixes with swept volumes of up to 11 litres and a 14-litre V8 span the power spectrum from 204 bhp to 420 bhp – or 150 kW to 309 kW – in evenly spaced stages.

Innovative thinking is one of the hallmarks of this engine range: innovative thinking as in the new, light-weight, compact 8.5-litre engine incorporating new design principles for fuel economy in a class of its own.

Specific fuel consumption of the range of Scania engines is generally lower than any equivalent engine available on the market. And a new design approach, the "hot side – cold side" engine, is one of the secrets of the outstanding operating economy of the 8.5-litre power plant. Fuel pipes and fuel injection system are located on the cold side of the engine, well out of the way of the exhaust manifold and other engine hot spots grouped on the hot side of the engine.

Although the design is new, the DS9 and DSC9



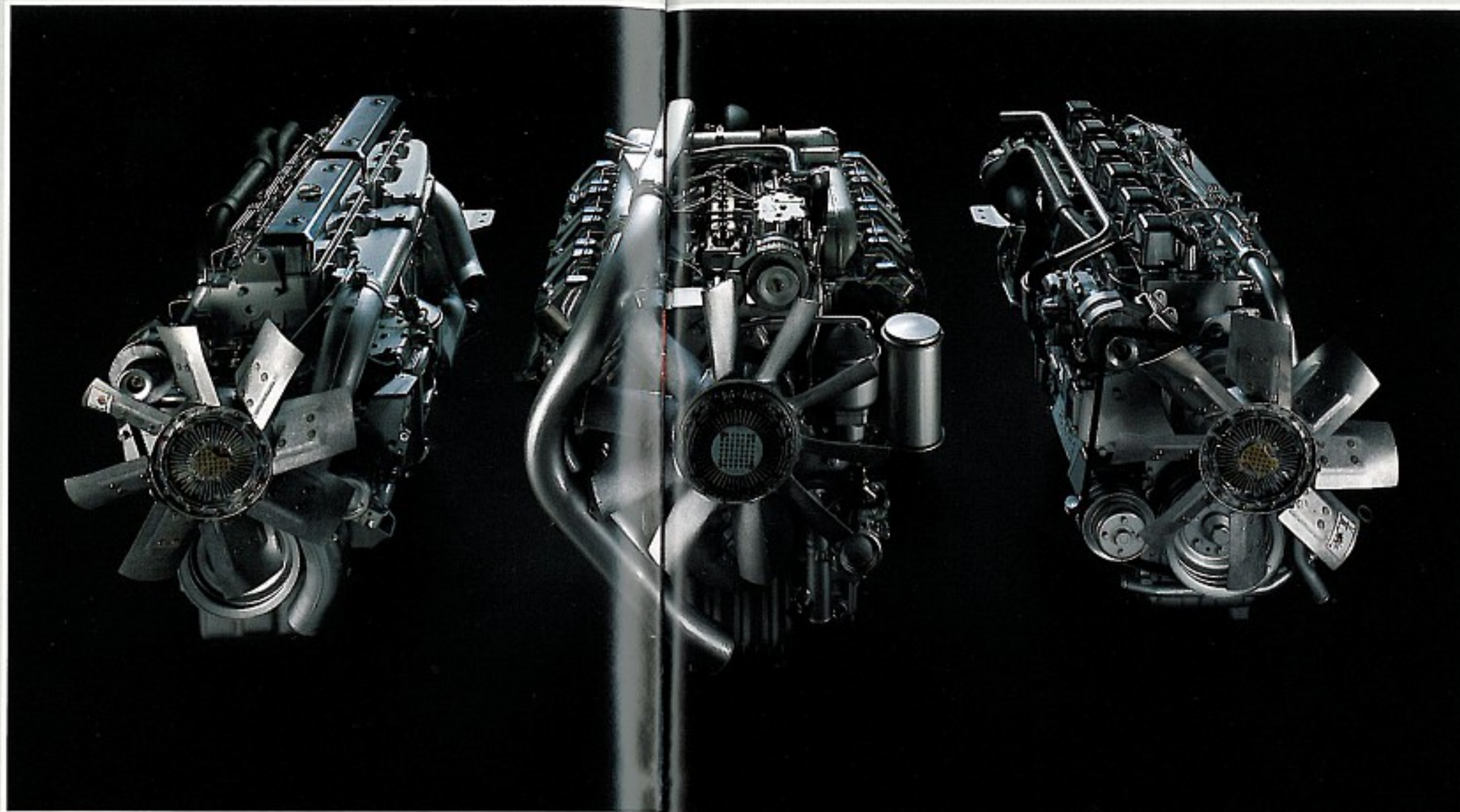
engines were only released on the market after millions of kilometres of rigorous practical tests. Performance that was proven in field trials has now been confirmed by their reliability in day-to-day work.

The lab picture of a cherry-red turbo unit is a typical example of research and developed trials in laboratory conditions that are tougher and more demanding than the tribulation of the real world. The ultimate objective is more power from less fuel.

The Intercooler is a typical example of making good performance better: compare the power diagrams to the right.

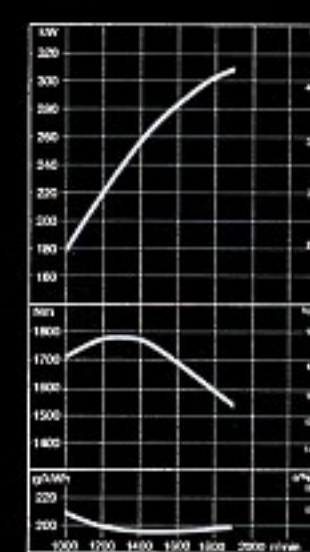
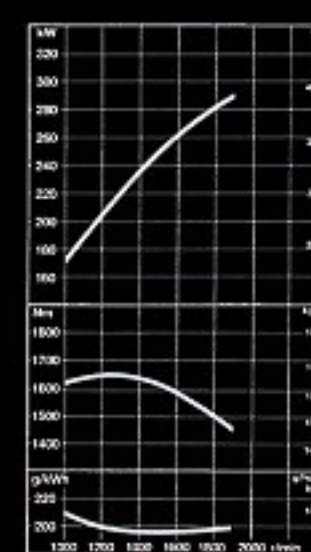
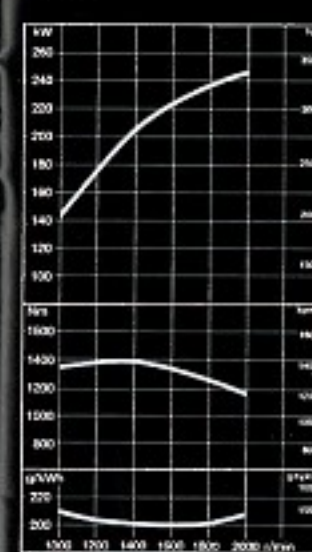
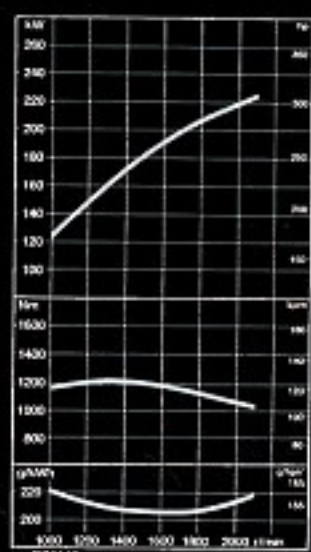
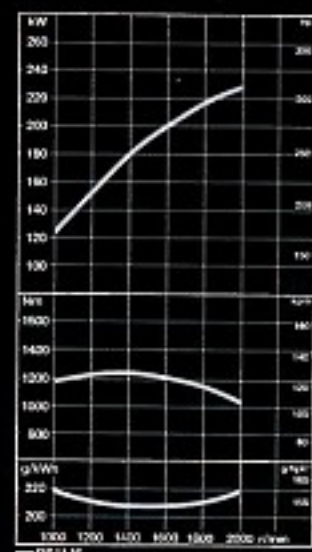
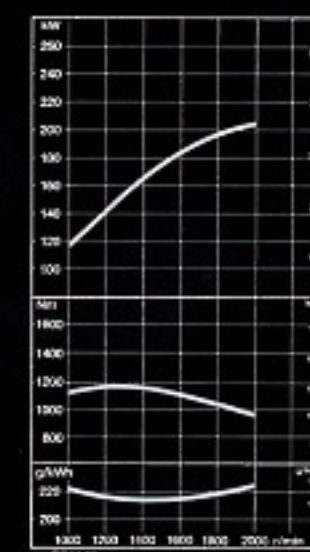
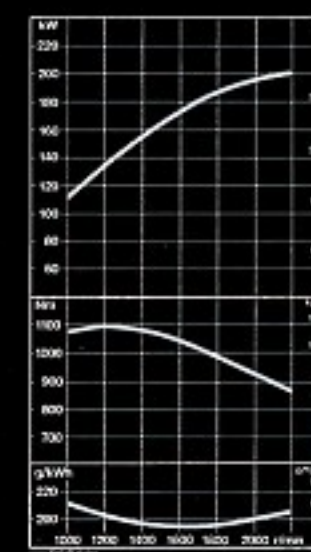
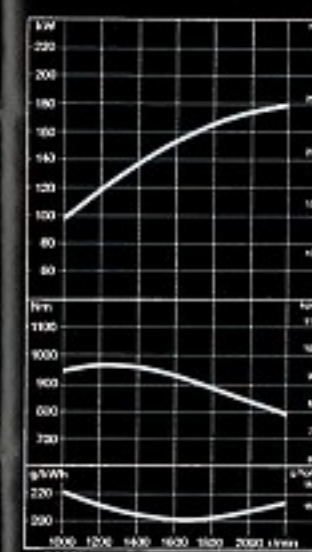
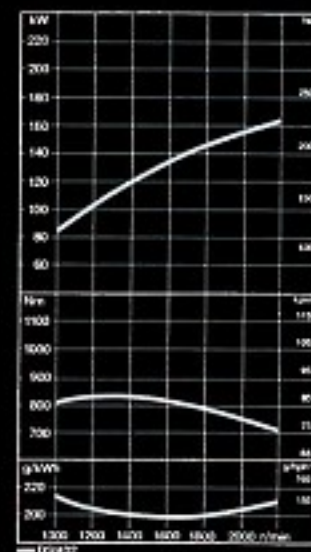
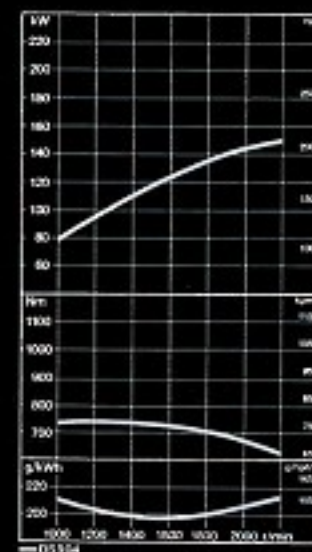
Intricate data and performance curves do not themselves demonstrate the long-term benefits of the Scania engine. Service life, operating reliability, accessibility and serviceability are equally important to the haulage operator as power and fuel efficiency. No matter which Scania you choose, you'll get an engine that offers economy in the long term.

Performance characteristics that can be matched by few, if any, competitors. The toughest competitors are probably on these pages, too.



Two straight sixes and the V8 you know as DSC14, one of the most powerful truck diesels in Europe. With a choice of several output options, customers can specify the ideal combination of power and fuel consumption.

Our 14-litre V8 engines are available in two outputs. Both are Intercooler power plants featuring air-to-air charge-air cooling.



Curves like these are powerful incentives to choose Scania. High torque at low engine speed, low engine noise and excellent operating economy.

Technology that brightens the bottom line.

High efficiency, low fuel consumption, long service life, minimum weight, compact dimensions, excellent serviceability – such are the factors that bring the benefits of superior technology to the bottom line.

The Intercooler engine is a typical case in point: lowering the temperature of intake air compressed by the turbo brings denser air into the cylinder. Higher air density provides more power for lower specific fuel consumption. But to keep temperatures down, we prefer to reap the benefit in the form of a marked reduction in fuel consumption and a moderate increase in power.

Swirl is imparted to the intake air before it enters the combustion area. The configuration of the combustion area accelerates this motion to optimize the combustion of the air-fuel mixture.

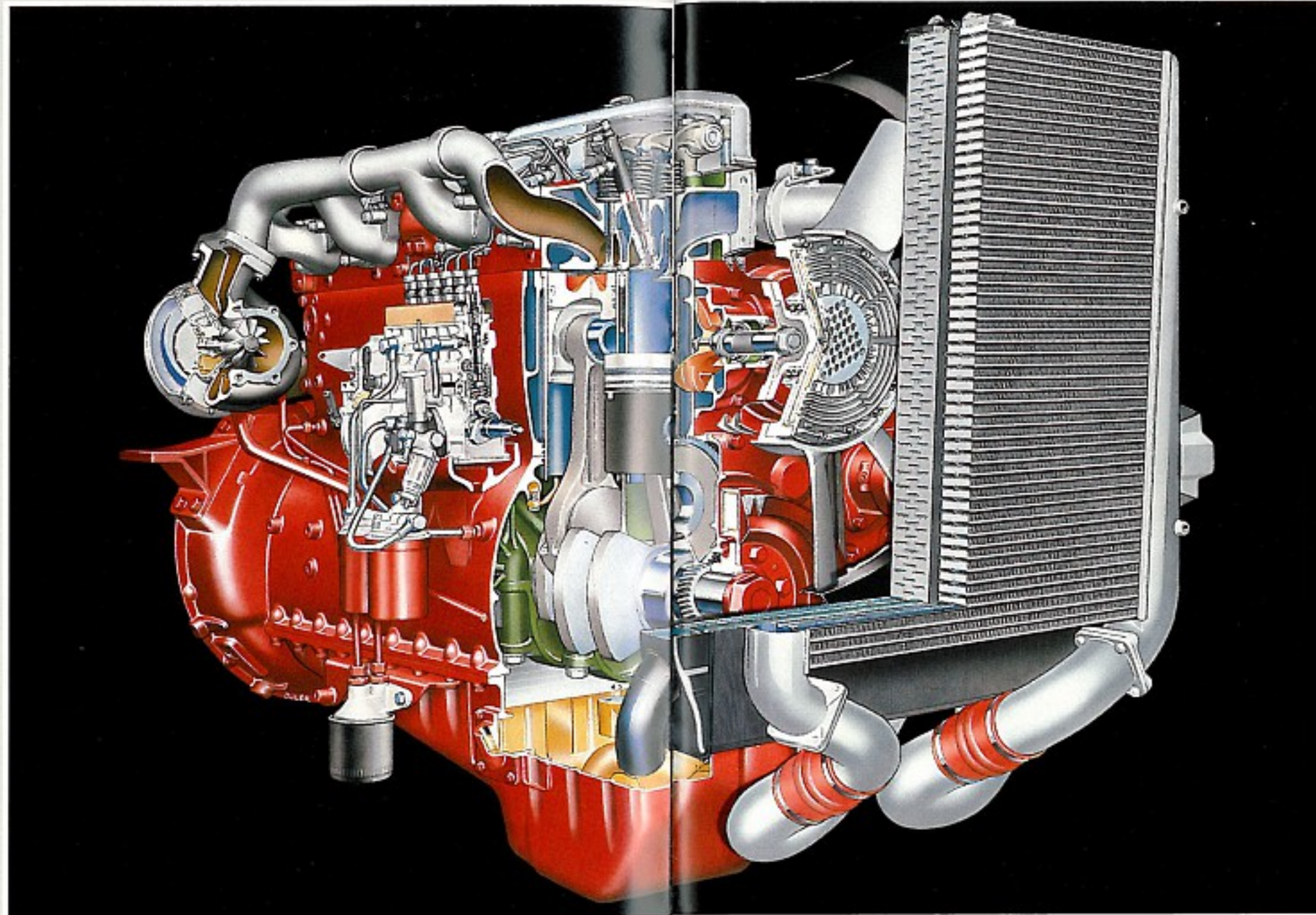
The very fast injection times of the new, high-performance fuel injection pump improves emission standards by promoting more efficient combustion and cleaner exhaust.

Oil-cooled pistons help extend engine service life



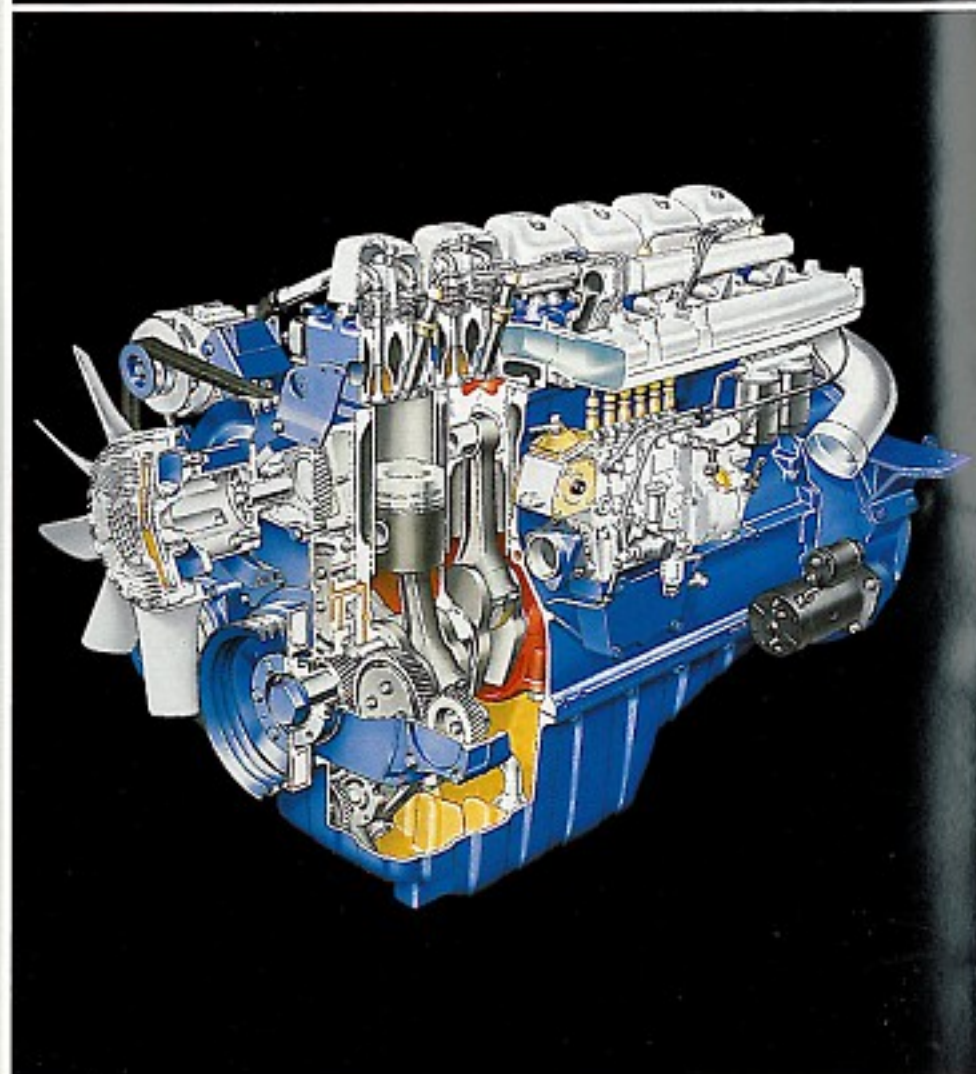
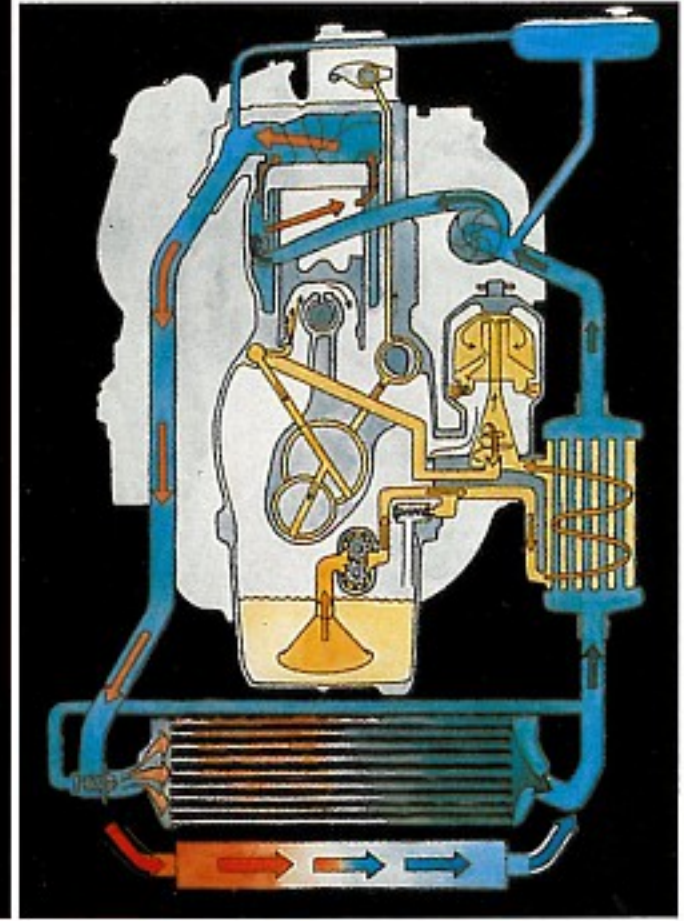
by keeping running temperatures down. The lubrication system features the Scania cyclone oil cleaner with its unique, patented centrifugal principle. The oil that cools and lubricates critical engine components is as clean as it can be. This is an effective engineering solution that ensures maximum engine life potential by optimizing operating conditions. The immediate benefits include operating economy: the long-term pay-off is in service life.

Technology that brightens the bottom line. That sums up the innovative engineering in a Scania.

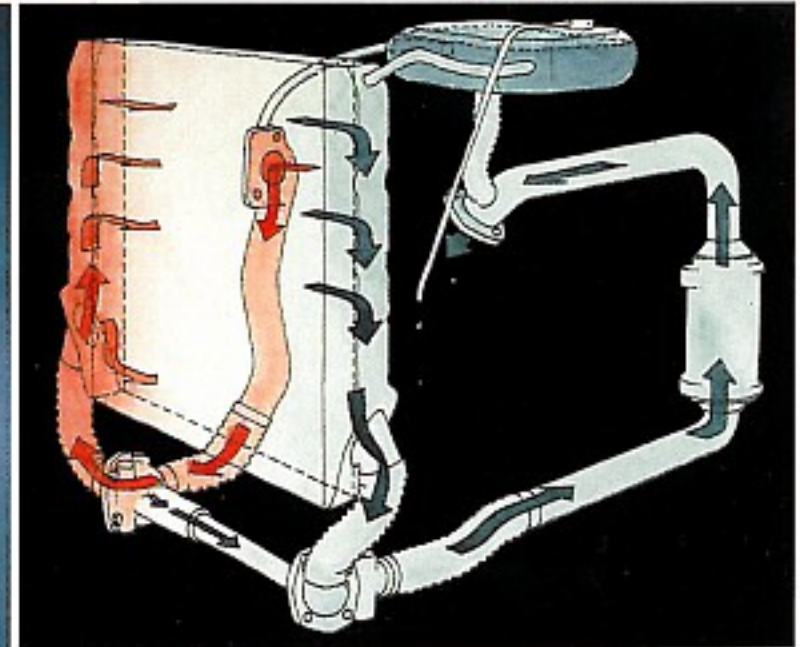
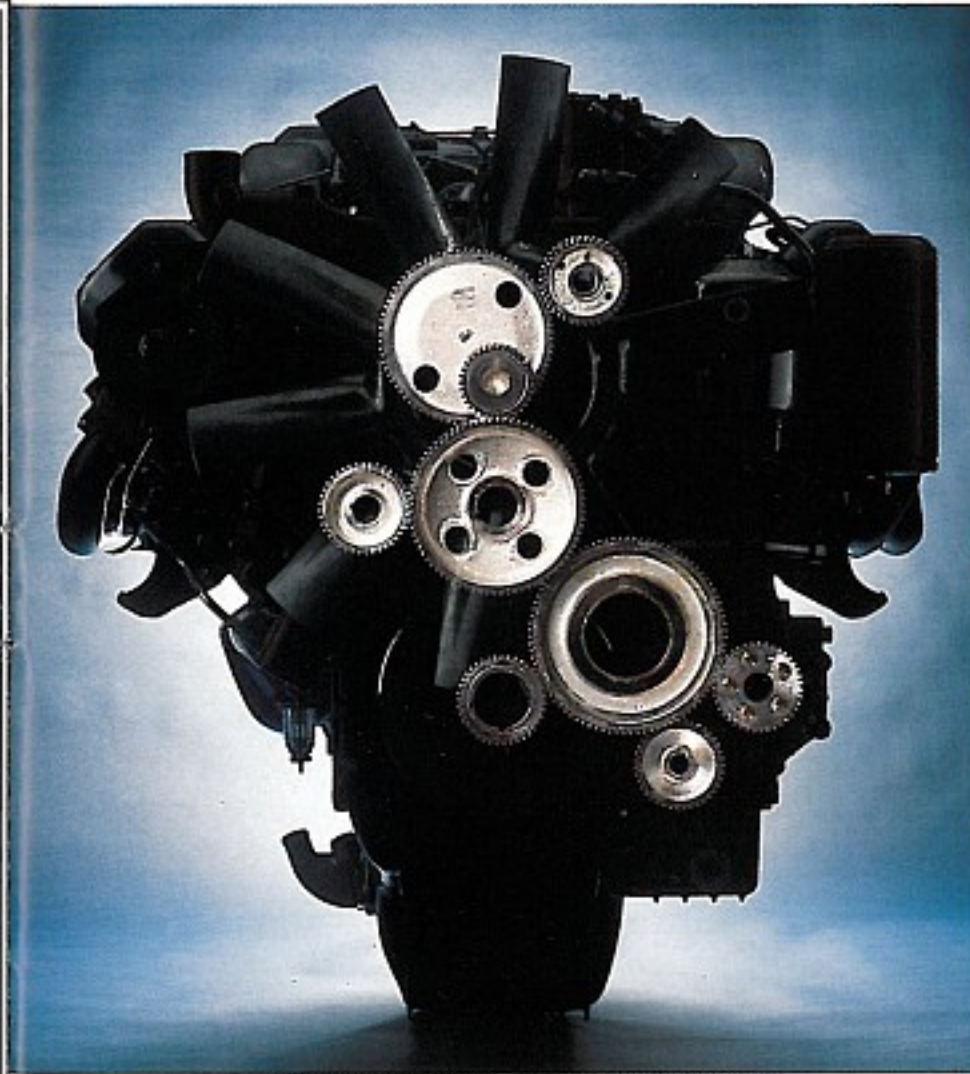


The Scania DSC11 – our charge-air cooled 11-litre power plant. The cooler unit is in front of the radiator.

The cooling and lubricating system in our in-line 11-litre engines. Oil pump capacity is overspecified by a factor of 20 to safeguard the engine and guarantee a generous supply of lubricating oil.



A view of the cold side of the Scania DSC9. No matter how hard the engine is working, fuel injection pump and fuel lines are sheltered from the heat build-up.



All Scania engines have high-performance, cross-flow radiators, designed to promote engine life. A high-capacity coolant pump, big radiator for efficient heat transfer and fast air flow through the engine compartment assure accurate engine temperature control in all conditions.

All ancillary equipment on the compact V8 is gear-driven – only the alternator and air conditioning compressor are belt driven.



Payload, speed, and roadability on all surfaces.

We have already seen how cab and engine can be specified for the job: The Program Scania offers scope for choosing the ideal combination of power, weight, payload, comfort and roadability. Because strength and weight go hand-in-hand, accurate strength specifications will maximize payload and life expectancy.

The modular configuration of our truck range makes accurate specification of all vehicle equipment an easy task. The Program Scania offers three chassis strength classes. For obvious reasons,



high cube, low weight, cargoes on good roads will not call for as strong a frame, suspension or axles as heavy loads on and off roads with poor surface conditions.

The Scania customer is thus free to compose his own vehicle from scratch. If roadability is at a premium, very heavy-duty chassis are available with the option of extra high ground clearance and several other features.

Front axle weight rating, wheelbase or special-purpose bodywork will impose their own demands on the vehicle. Special demands that are covered by our standard range.

There is more at stake than the weight and payload capacity of the chassis. A similar choice of options is available in specifying the driveline to strike an accurate balance between cruising speed and sheer pulling power.

And a suspension system to match payload, road conditions and comfort standards. And because we sell to the heavy haulage industry all over the world, the Program Scania includes the right vehicle for the job: the right vehicle for dumper operations, long-distance haulage on good roads, forestry work or delivering fragile electronic equipment in busy city traffic.

The correct combination of frame, wheelbase, front axle, rear axle, bogie and suspension is typical of a Scania.

Typical, too, is the most cost-effective combination of payload, weight, ride and roadability.

The strength of an unbeatable combination.

The right combination of frame, axles and suspension determine payload. To round off the concept of the Program Scania, we have three chassis strength classes and an extensive range of options:

The M class chassis, or Medium Duty, is the lightest. Frame and suspension rated for maximum payload on good roads.

The H class chassis, or Heavy Duty, features a stronger frame and sturdier structural components to handle heavy payloads on poorer quality roads.

The E class chassis, Extra Heavy Duty, is designed for operating on very poor roads or off road with heavy payloads. This class features the strongest suspension options and the strongest, double frames.

That's why the frame offers strength without incurring a weight penalty. Frames consist of single or double steel side members. Crossmembers that absorb torsional stresses are fastened in precision-



drilled holes to give the frame the correct degree of flexibility and torsional strength.

Three different rear axle housings and seven central gear options assure flexibility for specifying the perfect rear axle set-up.

There is a Scania suspension option to suit all chassis strength classes and wheel configurations. Air suspension for the smoothest ride and faster semi-trailer attachment, parabolic springs, for high comfort, and taper-leaf springs for the heaviest loads.

Four-wheeler trucks feature progressive, twin-assembly suspension at the rear — a configuration that combines a smooth ride when the vehicle is running empty with the strength to carry a full payload.

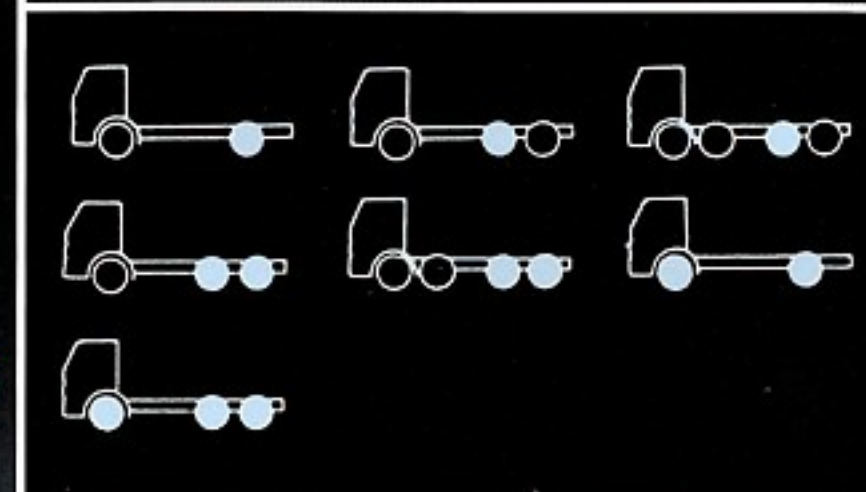
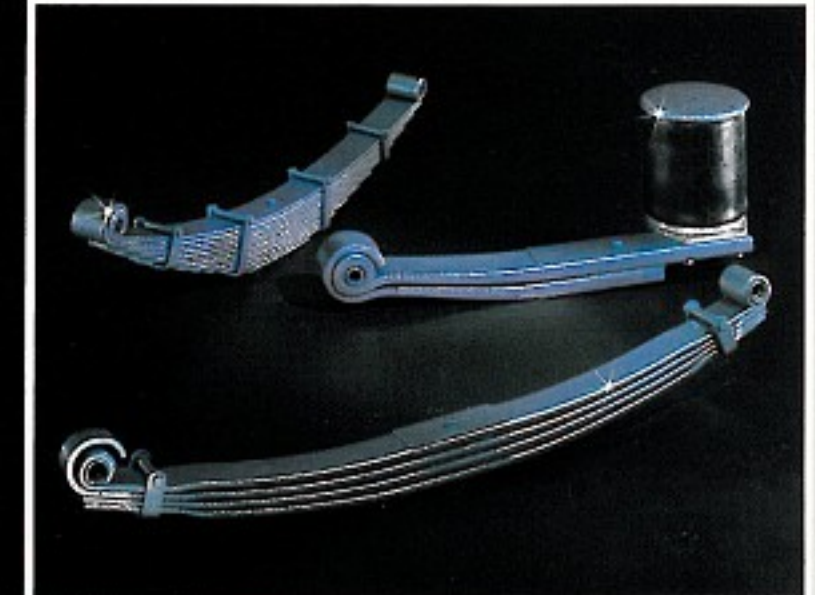
The two rear axles on a trailing axle bogie share the same spring assemblies. Tandem-drive vehicles may be equipped with a light four-spring bogie or a sturdy two-spring variant.

The AD80, AD90 and AD100 rear axle housings in ascending order of strength for striking the correct balance between weight and strength.



Frame members on the light distribution truck is 7 mm thick, M class chassis are 8 mm thick. Four-wheeler H class chassis feature stronger, single frames. Six-and-eight-wheel H class vehicles have double pressed side members with a steel thickness of 13.5 or 17.5 mm, the same as that used on E class chassis.

Parabolic leaf springs and air suspension are viable alternatives to taper-leaf assemblies. Anti-roll bars may be fitted to front and drive axles.



All these features are matched by an extensive range of axle configurations: 4x2, 6x2, 8x2, 6x4, 8x4 and 4x4 and 6x6 all-wheel-drive vehicles.

Tractor units with the special MA chassis are factory-equipped with a sturdy subframe flush with the chassis frame. The MA chassis is light-weight, low and flat to allow plenty of space for high-cube semi-trailers.

There is no finer concept than quality.

Poor surfaces, heavy loads and hostile conditions can all too easily transform a profitable contract into a costly breakdown.

A situation that should not and must not arise. That's why we engineer rugged strength and a long service life into the product right from the start. Shock, bumps, vibrations, impact and torsional



stresses — a Scania takes all in its stride.

Take the case of the frame. Punching is, of course, a cheaper method of making holes in the frame to carry crossmembers and components — but it lacks the precision of drilling. Additional holes for the bodywork and optional items of equipment are factory-drilled: holes are carefully located to obviate the problem of weakening the frame and strength is the keynote of a Scania from the very first station on the assembly line.

Strength need not necessarily involve a payload penalty: the single-mounted wheels of the trailing axle on 6x2 vehicles in the M strength class prove this point. They provide extra payload capacity and save about 300 kg in kerb weight for a corresponding boost in payload on each trip.

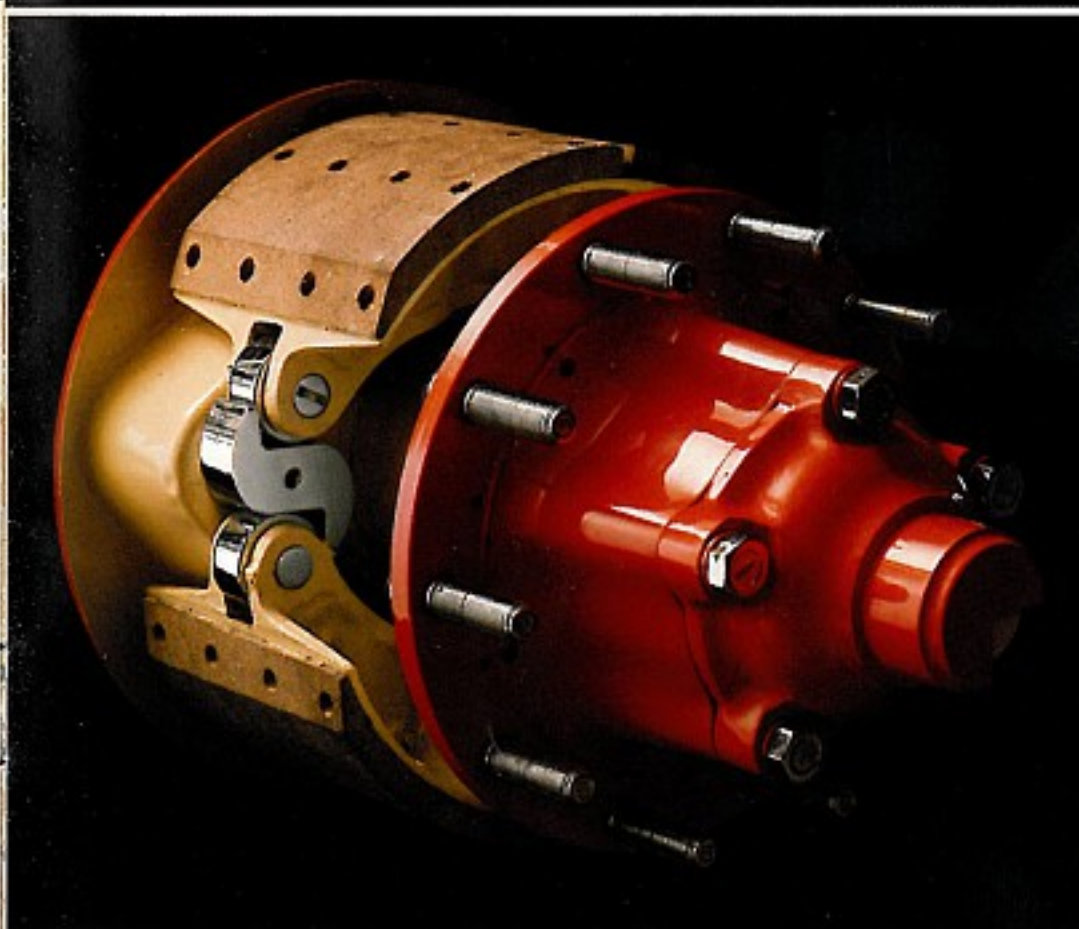
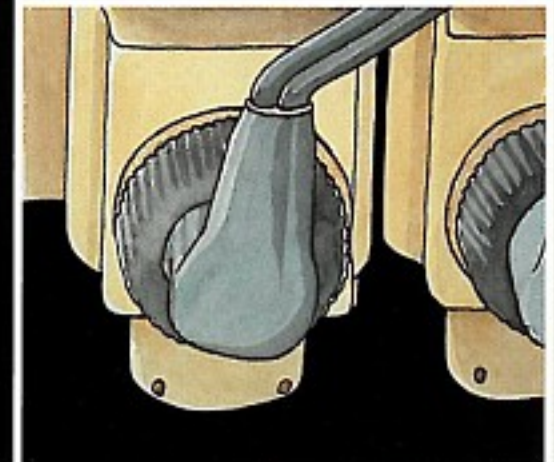
The Scania MA factory-built tractor unit chassis is an excellent example of how we incorporate profitability on the drawing board: the fifth wheel is located very low on the frame to provide more payload cube by using higher semi-trailer bodies. The subframe is flush with the vehicle frame and the gearbox suspension provides a generous angle of clearance between semitrailer and the low catwalk.

Fuel tanks are fabricated in aluminized sheet steel to combine low weight with strength, service life and versatility. Vehicle range on a full tank can be adapted to operational requirements by specifying the number of fuel tank modules. This avoids the problem of carrying unnecessary amounts of fuel at the expense of payload.

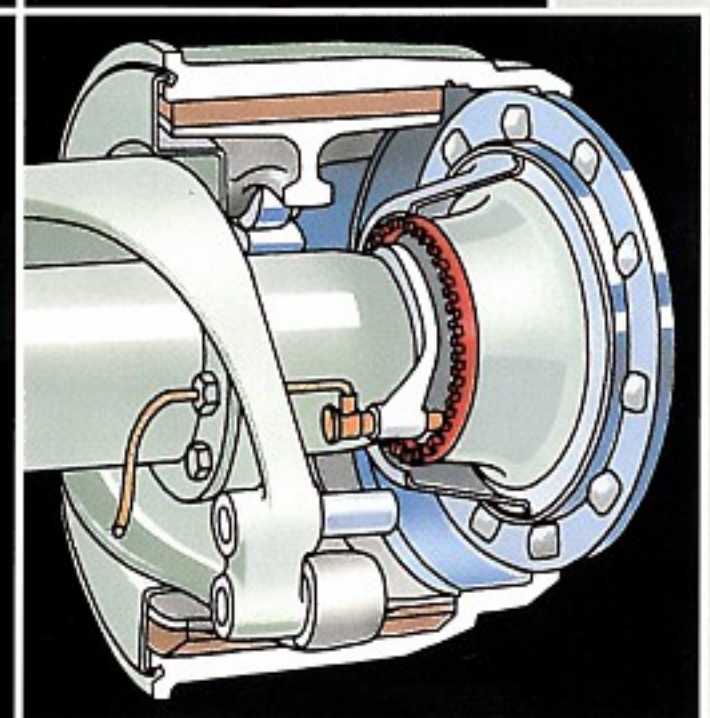


No matter what the chassis strength class, wheel configuration, rear axle and suspension, the top of a Scania frame is always flat with side members of uniform height along their entire length to minimize natural resonance. Frame members are configured to minimize load on the front running gear.

All wires and cables are carefully protected inside the frame. The electric system has a minimum of specially designed connection points and all terminals are effectively sealed.



The advantages of high-friction linings include longer service life for drums and linings and a minimum of fade. The brake system has four separate circuits.



The Scania ABS — anti-lock brake system — prevents the loss of steering when braking on slippery surfaces, obviates jack-knifing and suppresses uncontrolled skids and trailer snaking. The micro-processor-controlled ABS provides maximum braking action without locking the wheels.



A good grip from gearstick to tyre tread.

Whatever Scania you choose, you will find it has a strong and reliable link between engine and road.

All driveline components have one common denominator: Scania quality. We build them all ourselves – engine, transmission, rear axle gear and hub reduction.

And each driveline component is matched to the others to work in unison. Because we design and build the components ourselves, we can produce a



better end-product than by putting together a driveline using sourced parts supplied by several manufacturers.

This is contrary to the practice of many other manufacturers. Moreover, we consider it essential, for several reasons. What is the use of our low-rev philosophy and engine technology unless we can guarantee that power and operating economy survive the journey down the driveline?

The total economy of a Scania depends on this accurate driveline balance. The customer who buys a Scania specifies the correct combination of components to suit his own particular type of work.

And whatever combination he specifies, the entire system from transmission to hub reduction is designed, developed, laboratory-tested, field-proven and manufactured by us.

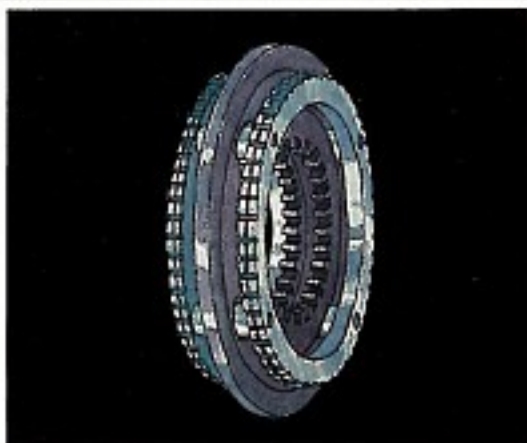
A good grip on performance and quality right down the line.

Precision engineering — the art of taming power.

The driveline may be likened to a route through which power is channeled.

And it's a two-way street: the driveline accelerates the vehicle as well as transmits braking action of the engine when the driver releases the accelerator to slow down.

It handles all the shock caused by jerky starts and heavy loads.



Survival in such a harsh reality calls for accurate material specifications, first-class design and precision manufacture and assembly.

The synchronization ring in a Scania gearbox is manufactured of molybdenum alloy: it is rated for half a million gear changes without showing the slightest signs of wear.

Careful attention to the configuration of contact surfaces assures fast synchronization and guarantees maximum service life.

Similarly, the entire gearbox is designed to handle large forces and heavy wear and tear. The GR871 manual gearbox in the large picture is a compact, light-weight unit.

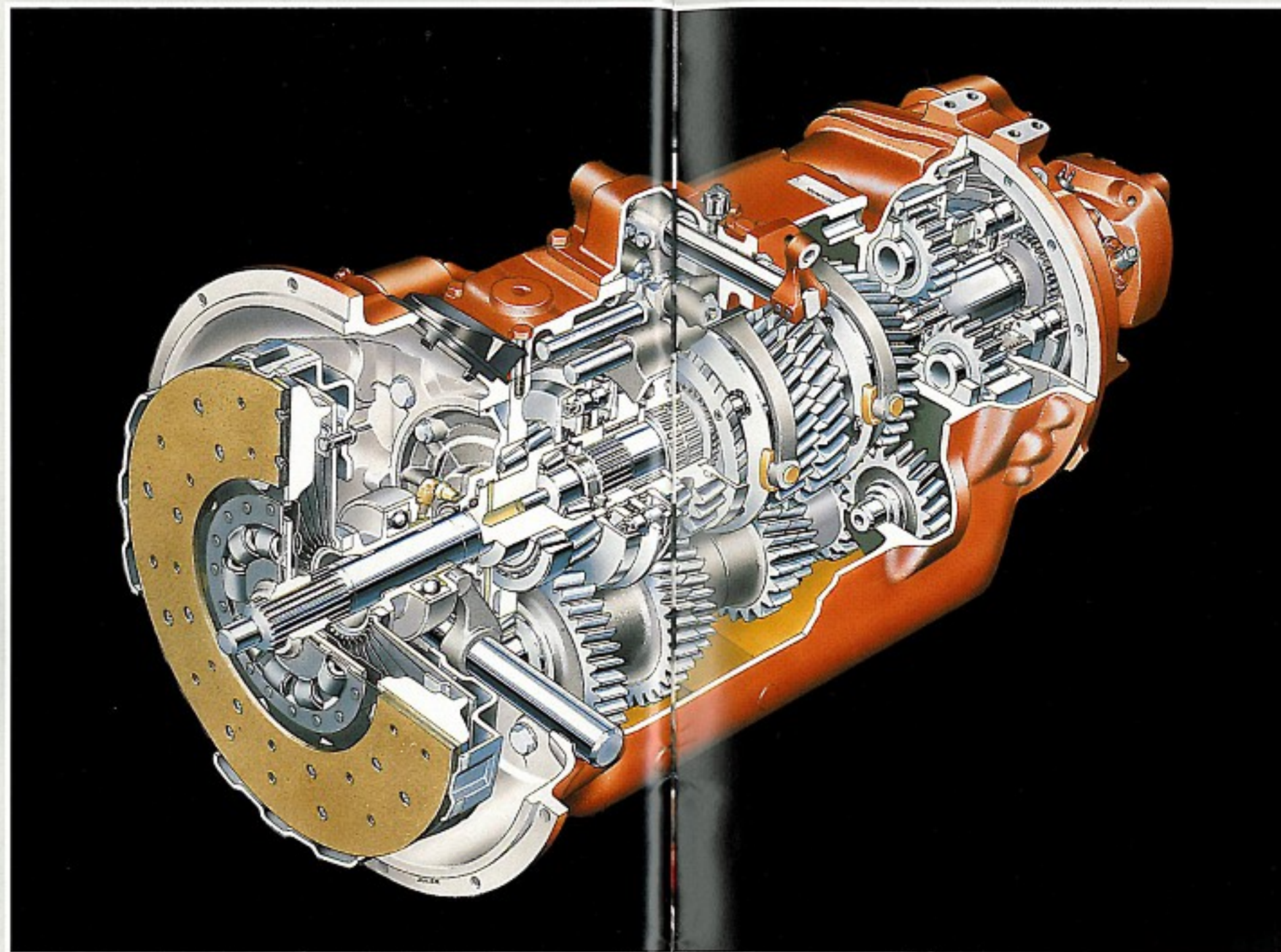
Quiet operation is assured by precision-made components, large mesh surfaces and skilful design.

A direct-drive shaft reduces losses in the gearbox and all gear shafts are carried in sturdy needle bearings to minimize friction.

The nuts and bolts of truck engineering they may be, but their importance is critical to service life, reliability and profitable operations.

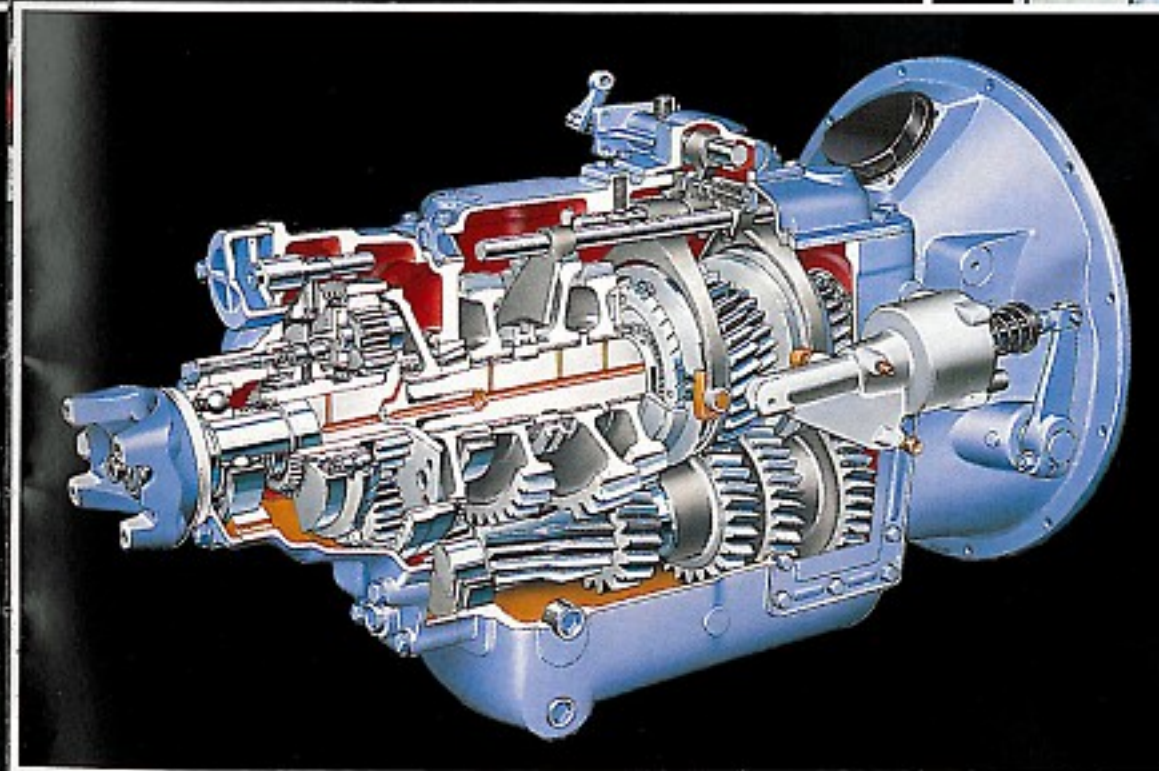
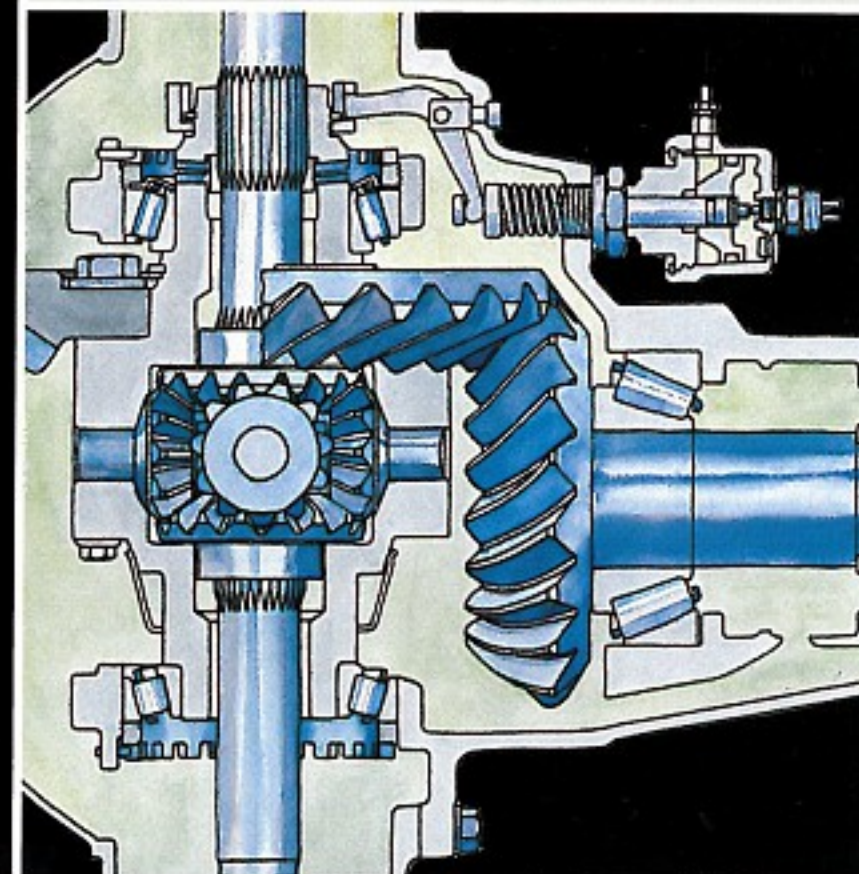
After several years of wear and tear and pounding in poor conditions, operating reliability is literally reduced to a matter of precision engineering and quality — quality that is measured in thousands of a millimetre.

We manufacture several rear axle gears with ratios ranging from 3.25:1 to 6.71:1. All are designed to withstand heavy punishment. The asymmetric, hypoid-cut gear configuration spreads forces over a maximum mesh area.

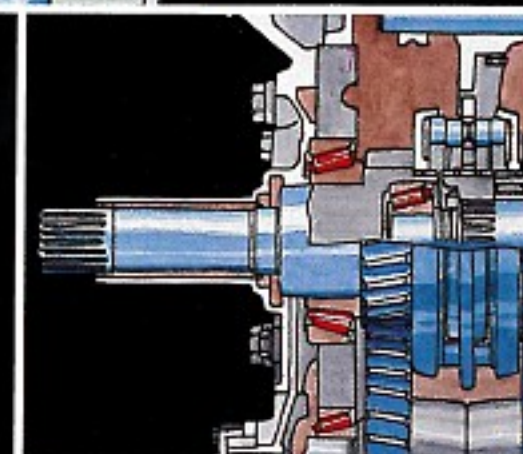


As with all other Scania manual gearboxes, top gear on the GR871 has a ratio of 1:1 to dispense with an underpowered overdrive. Bottom has a ratio of 13.51:1 and reverse 13.77:1 for power at crawling speeds.

The air-operated differential lock makes a valuable contribution to roadability by improving the traction of all driven wheels.



The GS771 10-speed splitter combines high performance with smooth changing and excellent resistance to wear and tear. All critical bearing surfaces are force-feed lubricated by a direct drive pump.



Taper roller bearings are capable of absorbing high thrust forces. Just one of the many special items that contribute towards the exceptional service life of Scania transmissions.

Power on tap.

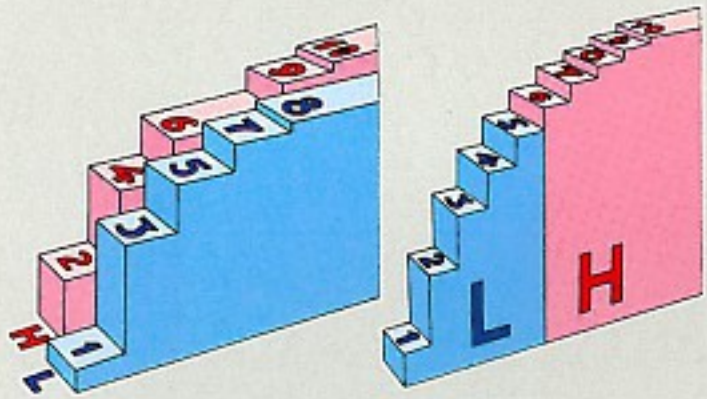
Getting power from the engine on to the road is a question of optimizing the combination of components:

Torque, road speed, engine speed, operating conditions, service life and payload determine the combination of gearbox and rear axle gear options. Driveline performance can be maximized by specifying from a full range of component options.

The 10-speed splitter combines smooth changing with a broad spectrum of ratios. Convenient, 5-speed operation for light loads and smooth changing through all ten gears when the going gets heavy.

The 10-speed, fully synchronized range unit is the preferred option for high train weights and very heavy duty operations. With an extra low reverse ratio and first designed for pulling away smoothly with heavy loads or manoeuvring in confined areas. The same, easy-action gearlever pattern is used for the five gears in each range.

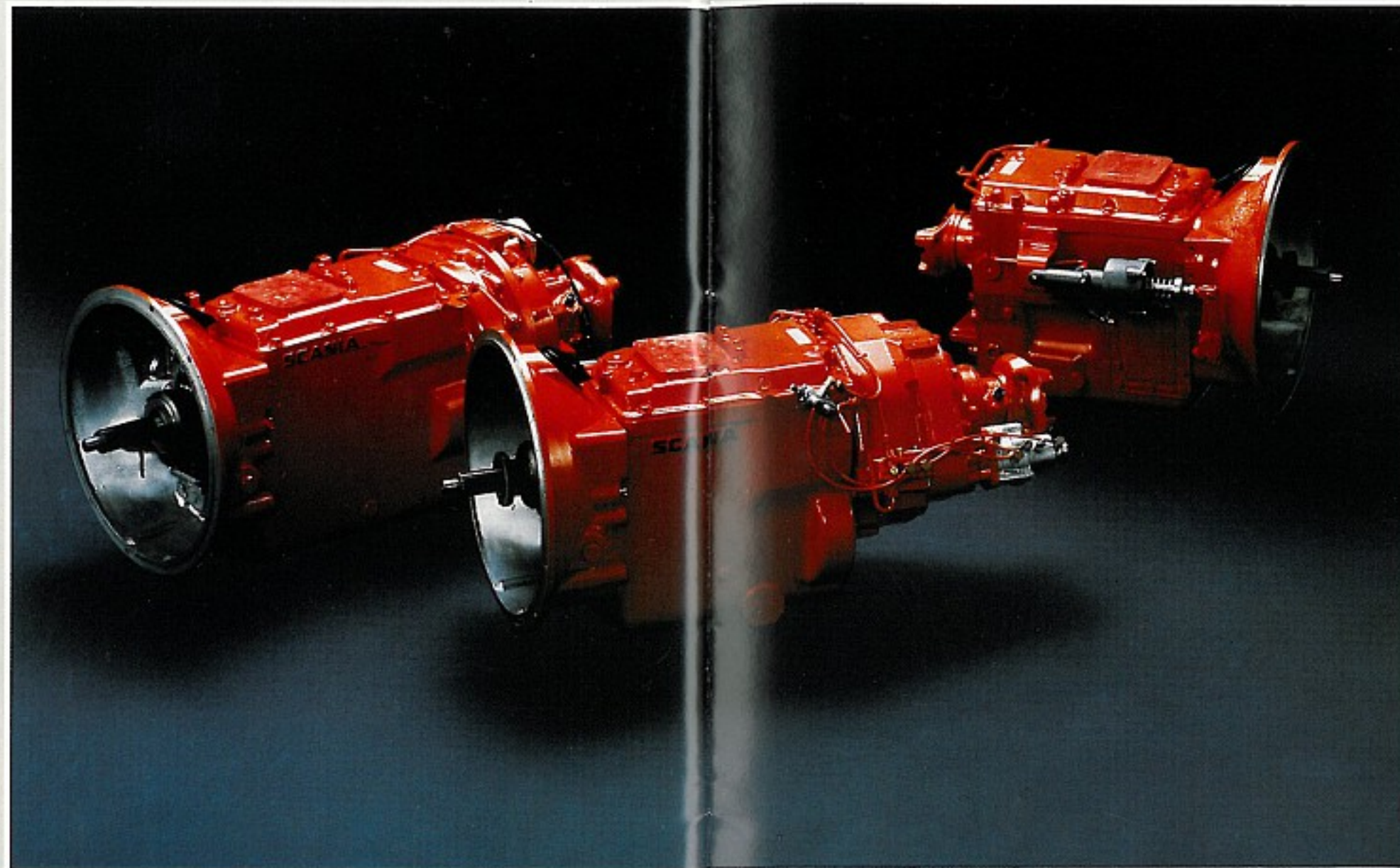
CAG, the Scania Computer-Aided Gear changing feature, successfully combines the convenience of the automatic transmission with the fuel economy of the manual unit. CAG, a feature that can be



specified with all 5 and 10-speed Scania manual gearboxes, consists of a microprocessor unit that monitors road speed and engine revs and controls an air-operated system that changes gear when the driver declutches. The microprocessor computes the most fuel-efficient gear for any given situation and displays its proposal to the driver. He can accept by declutching or override using manual preselection.

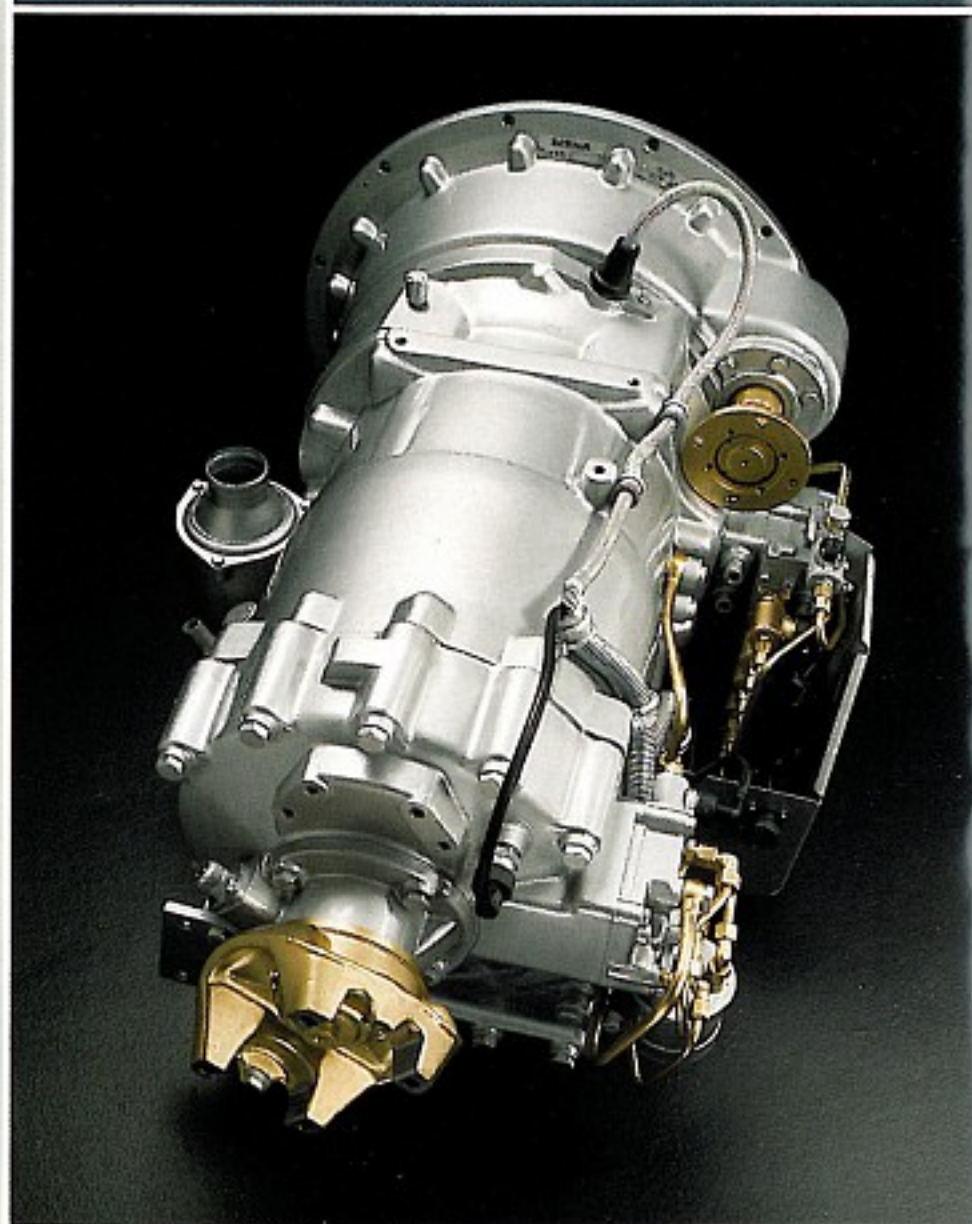
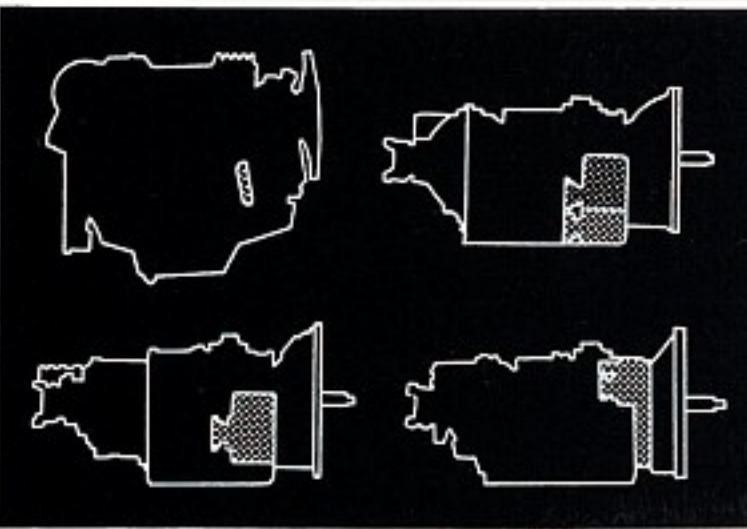
The hub is the ultimate station in the driveline. Hub reduction decreases wear and tear on propeller shafts and half shafts and permits the use of a more compact rear axle gear by transferring part of the reduction to the gearing in the hub. This is an important feature for several types of work, particularly vehicles operating on very poor surfaces.

Hub reduction, a preferred feature for high train weights and heavy axle weight ratings, is standard on all Scania with E class chassis.



There are several versions of the three main types of manual gearbox: the 5-speed G770, the 10-speed GS771 splitter and the 10-speed GR871 range unit.

An extensive choice of power take-off options can be flanged to drive most hydraulic pumps. The ED90 and ED140 power take-offs are engine mounted; the EG, EGS, EGA and EGR units are powered by the gearbox. The EK421 is a continuous operation pto powered by the engine.



The GA771 automatic transmission is designed for use with all levels of engine outputs found in the 9-litre engine range.



CAG, the Scania Computer-Aided Gear changing system, combines the convenience of the automatic transmission with the fuel-pinching performance of the manual unit.



Off-road performance is also standard.

For many operators, abnormal conditions are part of the normal job — and a familiar environment to many Scania. Scania is used for hauling timber beyond the arctic circle, long-distance runs in the desert heat or pulling rigs of up to 100 tonnes across the Australian continent.

And there are many more examples close at hand. Many trips begin or end in the quagmire of the construction site or on very poor surfaces. Our all-wheel drive vehicles are customized for this type of work. The Scania 4×4 and 6×6 make easy



going of this type of terrain and with a front axle weight rating of 7.5 tonnes they can carry the payload to do the job at a profit.

The six-wheeler all-wheel drive vehicles feature a balanced bogie to provide maximum traction on all wheels.

A sturdy transfer box channels engine power to the front and rear wheels. Ground clearance is improved considerably by using hub reduction to reduce the size of the crownwheel for a more compact rear axle unit.

Our product range includes several special-purpose vehicles. Scania twin-steer eight-wheelers offer a number of advantages. Twin-steer configuration permits a substantial increase in payload without hitching a trailer to the truck. And it includes the improved operating economy and the greater manoeuvrability and roadability to the solo truck.

Scania AWD trucks and twin-steer eight-wheelers are typical examples of the strength of our versatile, modular product range. Such special-purpose vehicles are built using standard Scania components on standard Scania frames. Axles and steering gear are identical to the equipment used on all other Scania. AWD and special-purpose vehicles are as efficient and cost-effective to run as all other Scania.

Off-the-road, yes, but on course in terms of price, service and parts.

Unique features available off-the-shelf.

This is a selection of the special-purpose vehicles built using Scania components.

An eight-wheeler with a high payload capacity is, of course, the preferred option for really heavy haulage work. The Scania 8x4 is a highly mobile, powerful payload platform. The tandem-drive balance bogie assures maximum traction on poor surfaces and the extra safety of three differential locks.

The front suspension with asymmetric spring assemblies minimizes the twin-steer wheelbase by facing the short ends of the spring assemblies opposite one another. A feature that improves suspension action, ride and tyre life. Power steering on both axles for safe and comfortable operation.



The 8x2 configuration is the preferred option for bodyworking as a road tanker or tractor unit for container work on medium to good class roads. These vehicles feature a trailing axle bogie with anti-roll bars and axle hoist as optional equipment.

Powerful, reliable engines, automatic transmission and correct chassis strength combine to give the perfect vehicle for the type of work that calls for a high standard of operating reliability, stand-by capability and special equipment. The fire engine is an excellent example of the efficient utilization of the strong points of the Program Scania. A special extended cab provides plenty of space for equipment and crew. The dependability of the Scania guarantees that the fire engine can answer calls promptly and the engine provides plenty of extra power for operating pumps and other equipment on site.

The refuse collection vehicle chassis features extra low ground clearance and boarding steps that make light work of continually entering and leaving the cab. A low-slung chassis can safely handle the continuous changes in the centre of gravity associated with refuse collection vehicles.

No matter where in the world these vehicles are giving useful service, their proximity to the nearest Scania parts store and service outlet is the same as their conventional counterparts.

Thanks to the Scania policy of component standardization.

The ultra-low MD chassis combines the low boarding step of the G cab, straight front-axle beam, asymmetric rear suspension and the Scania automatic transmission to offer the perfect platform for refuse collection vehicles.



The R142E 8x4 is a very special product. The T and R142E 6x4 normally possess the power and payload capacity for most types of heavy haulage work.

The extended cab on the fire engine is built from two standard cabs.



The Scania P112H 6x4 chassis is the standard, cost-effective platform on which this sturdy rescue and recovery vehicle is bodyworked.



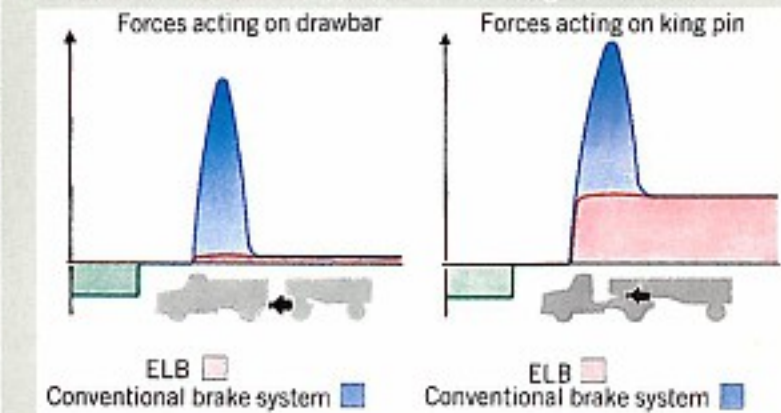
New features in the pipeline.

Research and development have a long tradition of excellence at Scania. The today's range of modular, standardized components in the Program Scania traces its roots back to the diesel engines we built in the 1930s. At the time, we used a "standard cylinder" to build 4-, 6- and 8-cylinder diesels to cover a broad spectrum of engine outputs at highly competitive prices backed by simple servicing.

We were the first in Europe to build a V8 truck power plant. We have developed special simulation software – STRASS – that allows us to study haulage economy, driveline configurations and different driving practices on stretches of road drawn from the real world and vary the operating parameters to study the effects.

There is a wealth of skill and expertise in the fields of aerodynamics and electronics available in the Saab-Scania Group. The styling of the Scania cabs is based on extensive wind tunnel tests using 1:2 scale mock-ups.

What can we expect in the future? Scania ELB is an excellent example of our innovative thinking. This is an electrical brake control system that,



when combined with ABS, furnishes a brake system unparalleled anywhere on the market. The ELB uses microprocessors to control brake chamber operation. By monitoring the speed of all wheels and accurately controlling brake application, the system ensures that pressure on the brake pedal is instantaneously reflected in the application of the brakes with a minimum loss of time.

In normal conditions, ELB applies the brakes quickly and with great precision. In an emergency, it drastically improves the margin of safety. The quick reaction of the entire brake system eliminates the time lag between truck and trailer so frequently associated with jackknifing.

Should the ELB system drop out, the brakes operate as a conventional air-controlled, multi-circuit system.



Engine failure, downtime? No, putting profits in the picture.

Unscheduled workshop calls and unexpected downtime are a far cry from the working day of the Scania operator.

Trucks that are out on the road earning money, not in the workshop losing it. That's why Scania's are built with cost-effective components to simplify the daily inspection and promote service and maintenance — savings in time and repairs that mount up to considerable sums over the years.



And we keep downtime out of the picture by incorporating reliability on the drawing board. High efficiency intake air cleaners to extend engine life are one example, the location of the fuse box and relay bank in the cab, well out of harm's way is another and rubber suspension for tail light clusters for long bulb life a third.

Unfortunately no amount of design work can prevent an incident like this. And if it happens, the Scania driver is in a much better position than many of his colleagues.

The same windscreen fits all our cabs. Because we use fewer parts to service more vehicles, the Scania owner is never far from off-the-shelf availability. An approach that simplifies stock control for our service networks in 70 countries all over the world. It also saves money: for us as well as for all those who drive or operate a Scania.

The same design philosophy shines through in the vehicle electrics, and in the brake system. The speed and efficiency of Scania service is not an accident: it's a result of careful planning.

Just one of the many benefits of a standardized, modular range of components.



Scania means more.

No matter what truck you buy, there is always a lot at stake. Although the Program Scania offers an extensive choice of options for medium-heavy and heavy haulage, that alone is not enough.



The market is increasingly insisting on a vehicle customized for the job. That's why we have made a major commitment to total economy and that's why we offer so many advantages, on the road and on the bottom line.

We can provide advice and recommendations in specifying a truck to suit your individual requirements.

We can provide advice and assistance in funding your purchase. We train drivers to get the best out of their Scania, and our system of genuine parts enables you to preserve the factory quality of your Scania throughout its long service life.

Our exchange system offers factory-rebuilt components – from clutches to engines – to keep profits up and downtime down.

And we guarantee our work – time and material – anywhere in the world. We operate 24-hour emergency services, a credit card system and a complete range of genuine accessories engineered to Scania standards of quality.

A new truck guarantee accompanies every Scania purchase. It includes scheduled service and maintenance to keep your vehicle in perfect working condition, to avoid unpleasant and expensive surprises and to maintain the long-term resale value of your investment.

All these benefits are included in the Plus Program Scania concept. And because we market and maintain heavy trucks in virtually every country of the world, it's always carefully adapted to match the local conditions.

With our world-wide commitment to this type of backing and support your truck will continue a profitable business on wheels for many years to come.

Scania means more.



Your haulage and engineering specialist.

This brochure contains a survey of the concept and philosophy underlying our truck range and lists examples of the engineering excellence that has made us one of the world's leading manufacturers of heavy vehicles.

Basic models are described in greater detail in a series of product brochures. Detailed technical specifications are available describing all the models in the world's largest range of heavy trucks.

The Program Scania can provide the ideal vehicle for heavy and medium-heavy haulage work, anywhere in the world. A modular product range that features opportunities for profit at no extra cost.

The Scania Division of the Saab-Scania Group is headquartered in the town of Södertälje in Sweden. We build trucks and buses in Argentina, Brazil, the Netherlands and the USA. We operate assembly plants in several other countries and our network of dealers and service outlets covers more than 70 countries on all five continents.

Scania is a division of the Saab-Scania Group. The Group also designs and manufactures cars, space research equipment, electronics and military and commercial aircraft.



Corporate policy is one of continued product development and improvement and Scania reserves the right to change product specifications without prior notice.