

The new Stralis briefly

A heavy commercial vehicle is required to carry out a wide range of missions with very different characteristics according to the type of roads (city, suburban, short/medium/long distance), the transported goods (containers, foodstuffs and perishable goods in general, fuels and dangerous fluids, motorcars, building materials, etc...), fittings for special applications (controlled temperature transport, liquids, waste collection, etc...).

Stralis is a work tool thought to meet any kind of heavy transport need on wheels ranging from 19 to 44 tons.

The real innovation with Stralis is mainly the cabin, resulting from the work carried out with great determination, in collaboration with the dealers and customers who took part in the design, to improve its driving comfort and the life onboard.

The novelties can be noticed at first sight. The cabin outside offers wide space at the front to allow customization. The new big-sized radiator cowling integrates newly designed headlights. Wide side storage compartments are now present on both sides and with larger doors (60% more compared to the previous version). The completely redesigned bodysides ensure a Stralis cabin CX improved by 2% despite the larger inhabitable space (+1.8 cubic metres).

The cabin inside, equipped with better climate control system, has been improved in the quality of the stave beds, enlarged and fitted with aluminium access ladder. The folding table surface is now 30% larger compared to the previous version.

The Stralis range is wide and can meet the needs of different types of missions. There are thousands of possible solutions with a wide pitch selection for excellent vehicle adaptability; manual gearboxes, automated and automatic; rear axle ratios selected for an ideal trade-off between speed and hub pickup.

The range includes 3 engines (by 8, 10 and 13 litres), 3 cabins (Active Day, Active Time, Active Space³) and 3 heights (short roof, medium roof, and high roof).

The possible basic configurations are the following:

- traditional 4x2 tractors, in addition to which there are more specific versions: lowered (Low Tractor), with dual ratio axles (HR), with reinforced chassis for more demanding applications (RR);
- 6x2 tractors with turning central axle;
- traditional 4x2 trucks with mechanical and air suspension;
- 6x2 trucks having third axle with single or twin wheels, liftable, fixed or steering – or steering axle in central position, with rear or integral air suspension;
- 6x4 tractors and trucks.

All Stralis versions can be matched with several types of suspension – including the full bump air suspensions to adapt the vehicle to the height required by distribution missions or intermodal transport.

Stralis was designed to offer a low ownership cost to the customer given the reduction of the two main vehicle cost items – maintenance and consumption.

As to the reduction of maintenance costs, Stralis ensures:

- decrease of downtime with prolonged oil change intervals (150,000 Km);
- significant reduction of brake system wear thanks to engine brake manufactured by factory (Iveco Turbo Brake), discs on all wheels, EBL, EBS and ESP;
- high clutch life due to the engine flexibility and the efficiency of automated gearboxes, regardless of the driver's ability;
- diagnostics onboard and in the body shop rapid and accurate;
- arrangements and optional devices designed as to reduce fitting time.

Consumptions are optimised through:

- excellence of Cursor Euro 5 engine, which can ensure fuel consumption below 2 to 5% compared to the already economic Euro 3 versions;
- combustion optimization through EDC (Electronic Diesel Control) of new generation, with time and fuel quantity managed for each cylinder;
- new single pump-injectors with pressure up to 2000 bar;
- new seal rings which ensure reduced oil consumption.

The new Stralis was designed to demonstrate Iveco fundamental values towards excellence: *Commitment* – working with a sense of responsibility for the customer's business; *Reliability* – keeping the promises of the product reliability, life and high safety standards; *Performance* – supporting the customer's business with a vehicle which ensures higher productivity and lower running costs. In addition to these typical company values, Stralis defines a product value: *Power* – excellent engines for power and torque, which also ensure fuel economy, thus placing the product as a market leader.

Commitment, Reliability, Performance, Team Spirit and Power: the values that Stralis shares with the Neo Zealand rugby national team, the All Blacks, the team which in its history has won more than anyone else. To celebrate this value sharing, already sealed by Iveco becoming the All Blacks Official Global Sponsor, on the occasion of its launch the new Stralis was presented with its game dress – the unmistakable black coat with a fern leaf and a reference to the tattoos through which the players stress their continuous link with their ancestors' virtues and qualities.

The values of the new Stralis

The new Stralis was created sharing the same values of the most famous rugby team in the world: same way of being, same style in facing and winning challenges.

In addition to the four company values – *Commitment*, *Reliability*, *Performance*, *Team Spirit* – Stralis has defined a product value, *Power*, to reaffirm one of the strong points which distinguish the excellence of Iveco engineering solutions.

Power

For Stralis, *Power* means offering the extremely modern Cursor Euro5 SCR engines with pump-injectors and variable-geometry turbine, capacity from 8 to 13 litres, power from 310 to 560 HP and maximum torque from 1,300 to 2,500 Nm. Efficient, ecological engines, essentially reliable, with power and torque delivery optimized according to commercial use speeds to keep consumption low.

Commitment

Stralis *Commitment* is the sense of responsibility for the customer's business without forgetting the comfort and safety of who spends most of his/her time on a truck. With great determination, Iveco works to offer the customers highly ergonomic cabins, top level travelling standards and an ideal experience of life onboard. But Stralis customers are also offered a unique design, because respecting who drives also means to offer him/her a truck which is nice to be seen.

Reliability

For Stralis it means keeping promises: products reliability, life and high safety standards in every situation. The disc braking system with EBS and ESP ensures minimum stop distances in any load and road conditions. The decompression engine brake - Iveco Turbo Brake - and the Intarder increase the driveline operating life, and allow reaching high commercial speeds safely. The

generous torque (starting from 1,000 revolutions for a wide range of rpm) makes the engine work in ideal conditions, thus increasing reliability and durability.

Performance

Stralis *Performance* is expressed only supporting the customer's business value. It means raising productivity and reducing running costs. Stralis assets are consumption, maintenance and downtime. The cost/efficiency ratio is ensured by a range including more than 500 versions and thousands of possible alternatives, all easy to fit, in order to meet the needs specific to each mission – tractors and cabin trucks with 4x2, 6x2 and 6x4 setting, and specific models for “heavy-duty” missions.

Team Spirit

It means working alongside the customer for the whole vehicle life: during the product development, through the work of 2,500 skilled designers and 15 R&D centres which involve the Customer in the design stage; during the purchase, with the support of skilled dealers and loan solutions to meet all company needs; during the vehicle operation, through the daily work of a 24/7 call centre and an efficient and widespread service network (more than 3,000 service points in over 100 countries).

Born for the driver

The Stralis range, presented in 2002, was immediately very successful in terms of sales and reviews by specialised magazines, up to the point that it was awarded the title of “Truck of the Year 2003” for Stralis AS.

Since its launch, Stralis has proved to be reliable and efficient. Not by chance, the competitive factors at the basis of Stralis success are the vehicle characteristics considered as the most important by transport operators.

The new cabin

We have designed Stralis focusing on the comfort and wellbeing of the driver and the passenger. The experience of life onboard substantially means cabin quality. For this reason, the new Stralis cabin was designed following the suggestions and advice given by the dealers and the customers, who led the designers' pencil. More room inside, the bed size, the covering features, the internal lighting, more space to store objects and personal belongings (+15%) are all the result of this team work.

Three different types of cabin for specific missions:

- Stralis Active Day: equipped with low roof short cabin, suitable for medium-range missions, for city and suburban uses which do not require overnight stays.
- Stralis Active Time: used for medium and long distances, national or international, with low or high roof long cabin.
- Stralis Active Space³: the top of Stralis 2007 range, whose name is due to its extraordinary internal comfort and whose size makes it look like a cube (available also in the version with low roof).

Driving comfort

On every cabin model each driver can find his/her ideal driving position thanks to the new air seat with four comfort levels (travel increased by 40 mm compared to the previous model, for a total of 220 mm) and the driving wheel adjustment system.

Decompression engine brake, hydraulic retarder, radio, cruise control can all be operated without taking the hands off the steering wheel. Also the EuroTronic gearbox selector is built in the steering wheel.

In particular, on AS³ the following improvements have been made:

- New fabrics, cotton and microfiber, which ensure comfort and resistance in time
- The dashboard has been improved by new plastic materials and new soft paints which raise touching pleasantness
- The multifunction instrument panel with colour display, which supplies the information on the vehicle system operation, has a graphics easier to read
- The new lit up pointers improve the 4 round indicator reading

All the controls are clearly visible and easy to reach in order to keep the vehicle always under control in complete safety and comfort.

Given the efficient climate control system and the excellent soundproofing, Stralis can offer the driver a comfortable and safe driving also in adverse conditions.

Life onboard

At the top of the Stralis range there is the brand new Active Space³ in the high roof version which, given the roof profile and the rear wall, offers:

- +95 mm in height,
- +90 mm in depth,
- for a total 1.8 m³ more in volume.

More space to move, more space to rest, more space to store objects.

The stave-beds are bigger (746x2020mm for the lower bed, 784x1940 for the upper one); their comfort is improved by the use of new materials and the folding system of the upper bed (with air springs) enable its quick and comfortable opening. The bed can be reached by the brand new aluminium ladder.

As to the lower bed, there are three possible layouts:

- Bed consisting of three modules, with table built in the central module, for a homelike cosy environment
- Three modules with built in passenger's seat, with a significant comfort improvement compared to the solution available up to now on Stralis AS
- Bed consisting of one single module, to obtain maximum comfort at night, and a sliding container (capacity 100 litres) next to the fridge.

The new top crossbar includes several compartments with lids which can be easily opened/closed by means of gas springs; large space is available also below the bottom berth and on both cabin sides.

The folding table is bigger (+30% in surface: 580x545mm)

The volume available inside the compartments has been increased by another 15%; the central compartment of the new Stralis now measures 450x780mm against 220x595 of the previous model.

The interior lighting is now more powerful with new roof lamps.

In the layout with one or two drivers, with fixed or turning passenger's seat, with double berth or top luggage compartment – Active Space³ proves to be the ideal working and living environment for long range missions.

Design

Stralis has a typical design, developed by Iveco Style Centre in compliance with the needs pointed out by the customers, because respecting who drives also means providing him/her with a nice looking truck. The new style further stresses the vehicle personality together with the image and functionality of the cabin space.

The cabin external lines were designed for an ideal aerodynamic efficiency: despite the roof bigger size, the CX has improved by 2%.

On the two bodysides, completely redesigned, now there is a large compartment (with electric power control opening whose size has been raised by 60% compared to the previous Stralis model) and a compartment under the cabin, on both sides, for an overall stowage of 480 litres. The new radiator cowling has a big grill and wide space for personal customization. The new line style integrates the new bumper in the cowling lines incorporating the headlight clusters in one single dedicated area which facilitates accessibility for maintenance.

Stralis heart is called Cursor

Flexibility and power

Cursor engines are Stralis heart. An engine family which has already widely proved its qualities in terms of performance, consumption and reliability given its many characteristics:

- single pump-injector with injection pressure up to 2000 bars
- head camshaft
- 4 valves per cylinder
- under-basement and single cylinder head to ensure higher rigidity
- decompression engine brake
- time and fuel quantity electronic control for each cylinder
- variable-geometry turbine for a prompt response in any rpm conditions.

For this reason Cursor power is always reliable, as shown by the torque curves which reach the maximum value below one thousand revolutions and keep it for the whole use range.

In the versions by 8, 10 and 13 litres, these engines have power range from 310 to 560 HP and max torque values up to 2,500 Newton/metre.

Powerful and reliable, Cursor engines have been designed to ensure not only excellent performance, but also low running costs, in addition to a higher driving comfort given their extraordinary flexibility.

Engine characteristics	Cursor 8			Cursor 10		Cursor 13	
	310	330	360	420	450	500	560
Cylinder displacement (cc)	7,790			10,300		12,880	
Turbo-compressor unit	FG			VGT			
Injection system	Pump-injector						
Dry weight (kg)	680			932		1,006	

Durability and fuel economy

Stralis is designed to offer an overall low ownership cost to the customer as a result of the reduction of the vehicle two main cost items, i.e. maintenance and fuel. Stralis reduces maintenance costs minimizing downtime with prolonged oil change intervals (150,000 Km) and through a quick and accurate diagnostics onboard.

Cursor Euro 5 engines are a reference point in terms of torque, life, maintenance and operating costs: they consume 2 to 5% less compared to the already economic Euro 3 versions.

Gearboxes, front and rear axles

In addition to the engines, a wide range of gearboxes, front and rear axles ensure the optimal correspondence between the kinematic chain and the use missions, thus enhancing the vehicle productivity.

To deliver the whole power of Cursor engines to the drive wheels, Iveco uses top market components and technologies.

The gearboxes are supplied in a wide range of versions:

- mechanical - ZF with 9 or 16 speed gears (with servoshift to ensure comfortable gear shifting);
- automatic - Allison (specifically for “stop and go” missions);
- EuroTronic fully-automated with 12 gears, known and appreciated for its ergonomics and reliability on Stralis and Trakker range.

The 9-speed gearbox 9S1310TO with “simple H” is installed on models with engines Cursor 8, 310 and 330 HP; the automated gearbox Eurotronic 12AS1420TD is installed on models with Cursor 8, 310 and 330 HP. The manual gearbox with 16 gears is available also on models with Cursor 13 560 HP.

The automatic logics applies the principles at the basis of economic driving, which means selecting the ideal gear ratio, protecting the gearbox against over-revving, safeguarding the clutch life, reducing consumption and noise.

Arvin Meritor and Iveco rear axles are extremely robust and require limited maintenance. They are supplied both in the simple and dual ratio version to ensure maximum safety and reliability also in the most demanding missions.

Reliability and safety of a top-class truck

Chassis

The life of a commercial vehicle, and especially heavy, depends first of all on the chassis capacity to bear intense and prolonged strains without any fatigue.

Iveco is famous for its robust chassis, and Stralis chassis is no exception. The side members, with double bottleneck with U section connected by nailed crossbars, are made with a special type of steel Fe E 490 with high yield level and with thickness between 6.7 mm to 7.7 mm.

Electric system

Obviously, the mechanical robustness alone is not sufficient to ensure a lasting efficiency without a reliable electric and electronic system.

For this reason Stralis wiring, in the cabin and on the chassis, is made with CAN-Bus architecture and Multiplex technology: a solution which enables highly efficient communication among all the control units of the main vehicle components and sensors.

Instead of the traditional wires where just one electric pulse usually passes through, Stralis uses Multiplex wires through which it is possible to transmit multiple signals simultaneously. The reduction of the number of wires onboard (- 45%) and of the connection points means higher system reliability, an elegant and clean layout on the chassis and a significant fall in time and service costs.

Braking system

Safety also means a technologically advanced braking system. The whole Stralis range is equipped by factory with a top-quality fan disc system and EBS electronic control.

The EBS function is to optimize the braking action: by pressing the brake pedal, the driver sets an acceleration value and the electronic control unit of the braking system regulates the speed reduction parameters:

- it adjusts the pressure inside the vehicle brake cylinders;
- it regulates the trailer (if any) brake supply pressure as to obtain an even distribution of the braking force between the axles;
- it operates the decompression brake called ITB (Iveco Turbo Brake).

For the missions on roads with high gradients, Stralis is equipped with the second generation ZF Intarder which offers a wider range of rpm for the maximum slowing down torque and reduces free power absorption, thus improving consumption.

Active safety

The whole Stralis range is equipped with electronic stability program - ESP.

In addition to ESP, it is possible to fit on the vehicle a set of state-of-the-art devices which ensure its active safety:

- the Hill Holder helps the driver start up the vehicle on slopes preventing the vehicle spontaneous moving back for some seconds;
- the ACC (Adaptive Cruise Control) is a system which helps the driver keep the safety distance from the vehicle travelling in front of it by automatically operating the Turbo Brake, the Intarder and finally the service brake in this order;
- the Lane Departure Warning System signals when the vehicle is crossing the lane centre line without turning on direction indicators.

Iveco-All Blacks Roadshow: driven by one spirit

Stralis has grown in quality, personality and self-confidence. Moreover, it is eager to put itself to the test. Stronger, due to this new character, the new Stralis has broken the rules and started travelling all over Europe to meet its public, not only its drivers, but also those who do not drive Iveco yet. But Stralis Roadshow, realized thanks to the sponsorships of Alcoa, Bridgestone, Schmitz Cargobull and Sony, is more than that, as it involves also the people who do not drive a heavy commercial vehicle, thus starting a new relationship based on curiosity and friendship.

A set of small Stralis fleets, for a total amount of 100 vehicles wearing the All Blacks dress, are travelling throughout 26 European countries visiting 250 locations in 200 days, covering an overall distance of 2 millions kilometres. These are the main figures of a great travelling show thought to offer an unforgettable *brand experience* consisting of vehicle tests, events and on-line contests on Iveco websites, just in the places where transport professionals work and meet: Iveco dealerships and logistic nodes, but also service areas and the motorway waiting areas of the European network. All without forgetting Iveco employees, men and women to whom Stralis owes its great success: the Roadshow will touch also the European plants with a "Family Day" just for them. Each fleet making up the Roadshow is supported by an Iveco Promotion Mobile Unit (IPMU) which, hauled by a Stralis truck of course, will offer comfort and the equipment required to improve knowledge on the product and the designers, and at the same time to relax after each test drive.

Iveco financial services

Alongside the customers

Iveco Financial Services is the financial company of the Iveco Group and offers a wide range of solutions for the purchase, rent or leasing of any type of vehicle – new and used – for fittings, trailers and half-trailers.

With its 23 companies in 17 countries, Iveco Financial Services can support customers in the choice of the most suitable financial products and services to meet anyone's needs. A wide range of financial and leasing services, developed to meet all the needs of Iveco customers: this is the financial service offer proposed by the company. The expertise in the transport sector, together with the deep knowledge of the customers, makes Iveco Financial Services a unique partner for the purchase of an Iveco product.

Customer Centre — close to customers any time, any place

Iveco's Customer Service Centre aims to provide services and solutions for the world of transport, both within Iveco and elsewhere. Located in Turin, it is a central resource for all major Iveco skill bases and know-how, including diagnostics, technical training, technical documentation, remote diagnosis, corporate marketing and much, much more.

The Customer Centre is staffed by a team of over one hundred Iveco operators who are available to answer customers queries or assistance needs, 24 hours a day, seven days a week. A further strategic task of the Iveco Customer Centre is establishing new contacts with potential customers, whilst maintaining contacts with existing customers.