

HD

E6

9





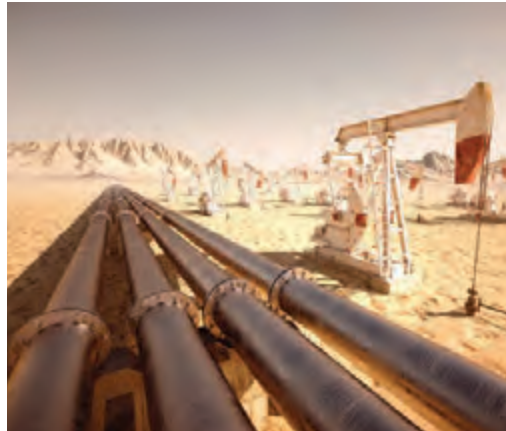
TO BE OPERATED **WITH PROFIT, MINES, QUARRIES AND CHALLENGING JOB SITES** (SUCH AS DAMS OR OIL & GAS PIPELINES) REQUIRE THE MOST ROBUST AND PERFORMING MACHINES ON EARTH. **ASTRA IS THE ONE-STOP SHOP FOR ALL THESE.**



MINING



HEAVY CONSTRUCTION








OIL & GAS



HEAVY HAULAGE



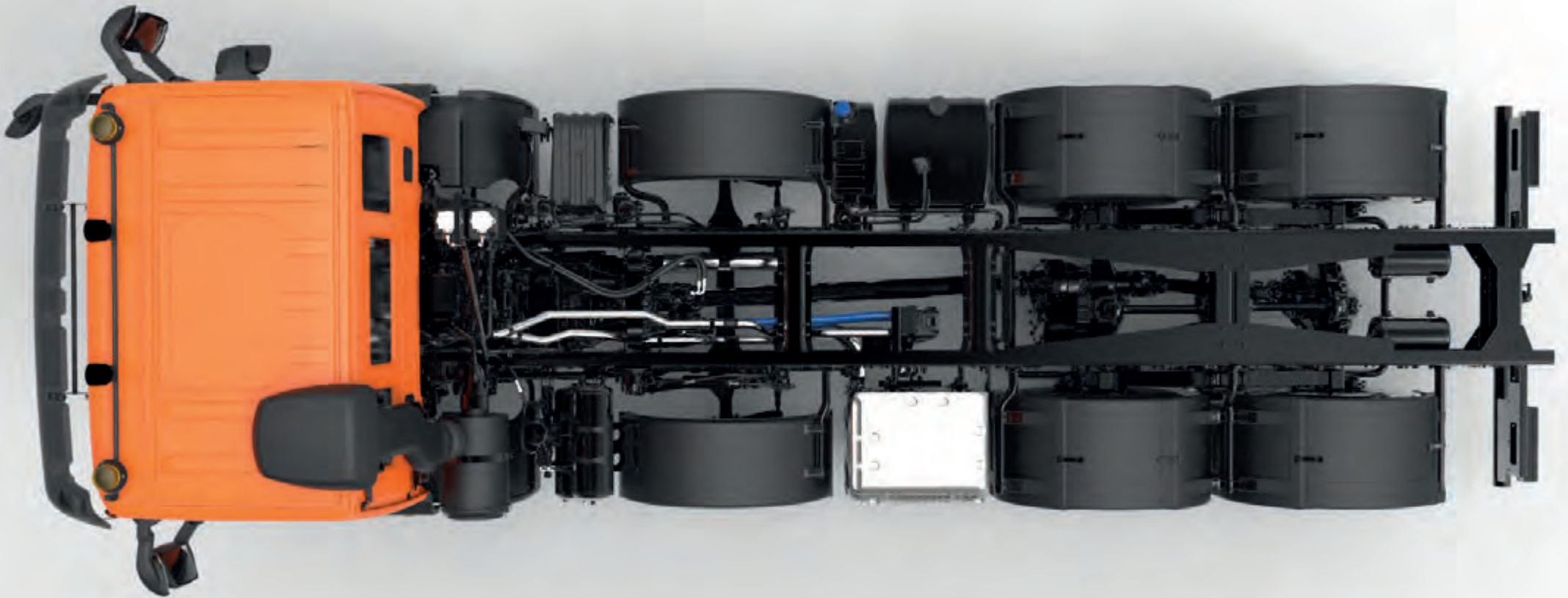
LINE UP

Model	Axle Configuration	Front axle load (kg)	Rear tandem load (kg)	GVW* (kg)	Wheelbase (mm)	Engine type (CV)	Power (hp)	Torque (Nm)	Gearbox
	6x4 Chassis-cab	Up to 9.000	Up to 32.000	Up to 40.000	3.500 ▼ 4.500	C13	450 500 560	2.200 2.300 2.500	Manual (Intarder on request)
	6x6 Chassis-cab	Up to 9.000	Up to 32.000	Up to 40.000	3.500 ▼ 3.800	C13			
	8x4 Chassis-cab	Up to 9.000	Up to 40.000	Up to 60.000	4.250 ▼ 6.000	C13	450 500 560	2.200 2.300 2.500	Automatic with Retarder (only for 8x6 depending on configuration)
	8x6 Chassis-cab	Up to 11.000**	Up to 40.000	Up to 65.000**	4.250 ▼ 5.000	C13			
	8x8 Chassis-cab	Up to 9.000	Up to 32.000	Up to 50.000	4.750 ▼ 5.000	C13	500	2.300	

* Gross Vehicle Weight depending on configuration and speed

** In special configuration max width 2,9 mt.

WORK HARD, EVERYWHERE.



BEYOND THE ROAD

Extra strong machines, ready for extreme conditions and environments. Easy to set-up, repair and maintain through the entire life-cycle. Robustness, versatility, mobility, mission dedication and loading capabilities are the key values of the HD9 range, designed for heavy-duty applications in mining, quarrying, construction, oil & gas, and heavy haulage.

Special heavy-duty chassis, state-of-the-art driveline, simple electric and electronic architectures: everything has been designed to face the most demanding situations for climate, terrain and loading capabilities. This makes the new Astra HD9 Euro VI the ideal partner on those missions where working hard is the rule.

Seventy years of constant dedication and experience, coupled with innovative technologies, allow the new Astra HD9 to match the most professional requirements and ensure efficient and productive solutions worldwide.

EXTRA STRONG COMPONENTS

The HD9 features heavy-duty components designed to provide robustness and reliability for the most demanding off-road use, allowing for a total **GVW up to 50 ton** and over:

A unique heavy-duty chassis:

820mm wide, made of sturdy high-tensile steel side members with large section dimensions (320x90x10mm) to ensure a high torsional stiffness, high stability and vehicle dynamic performance. The side members have constant and parallel section for the entire length of the frame to simplify body and components mounting operations.

An exclusive “power-ring” rear tandem solution:

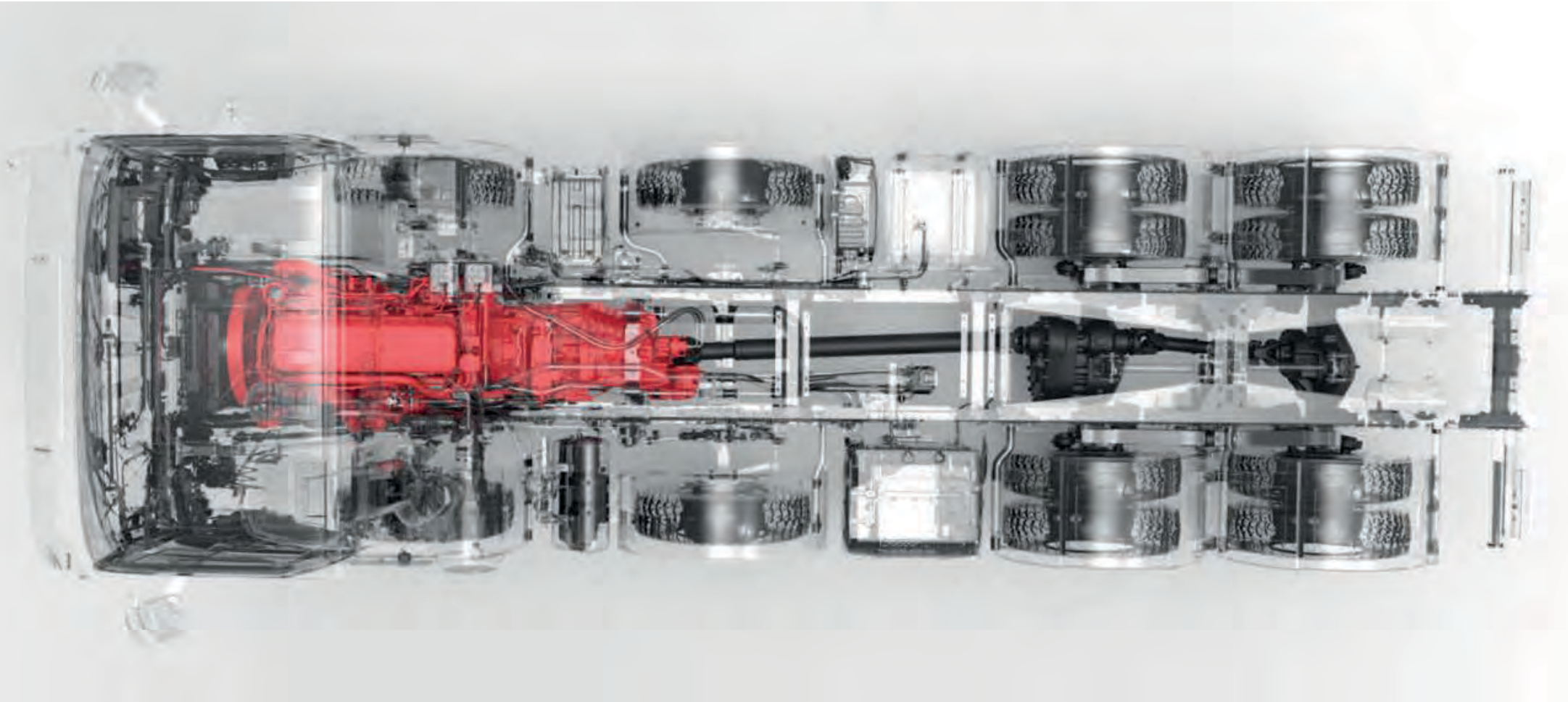
designed with the highest safety standards for a limit of 40 ton to increase the strength and the rigidity of the entire chassis structure.

A specific steering system design:

oversize steering rods to increase mobility capabilities and driving comfort in difficult terrain or extra load conditions.



HIGH PERFORMANCE DRIVELINE



BEYOND THE ROAD

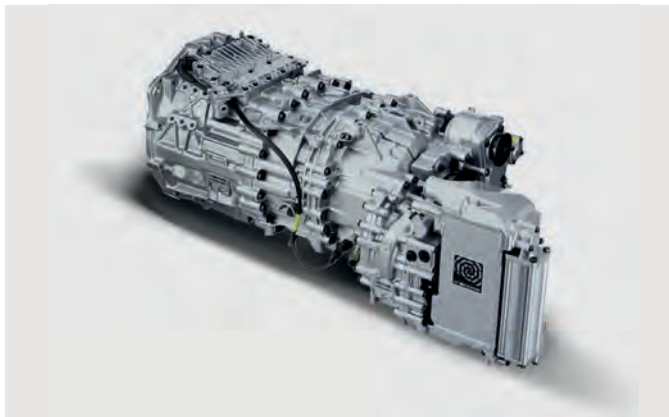
EURO VI ENGINE

The new Astra HD9 is powered by the FPT 13 liter Euro VI Cursor engine featuring the following innovative solutions:

- The **New Common Rail High Pressure Injection system** improves the combustion process and increases the engine efficiency in terms of power output (up to 560hp) and torque rising while reducing noise and minimizing fuel consumption. The third-generation multiple injection system is integrated and protected by the engine cover and the extended oil change intervals ensure an improved package and maintenance standards.
- The **Hi-eSCR system without EGR** (Exhaust Gas Recirculation) allows best thermal efficiency while reducing weight and complexity. The conversion efficiency also allows a passive continuous regeneration of the DPF (Diesel Particulate Filter) which ensures lower maintenance costs.



- The **EVGT** (Electronic controlled Variable Geometry Turbocharger) delivers excellent performances in terms of vehicle dynamics and optimal transient response. High torque (up to 2.500 Nm) at low engine speed (1.000 rpm) ensures excellent driving elasticity in any condition, no matter the slopes and loads.
- The **Super Engine Brake** improves the thermal management of the after-treatment system, thanks to an innovative butterfly valve on the exhaust.

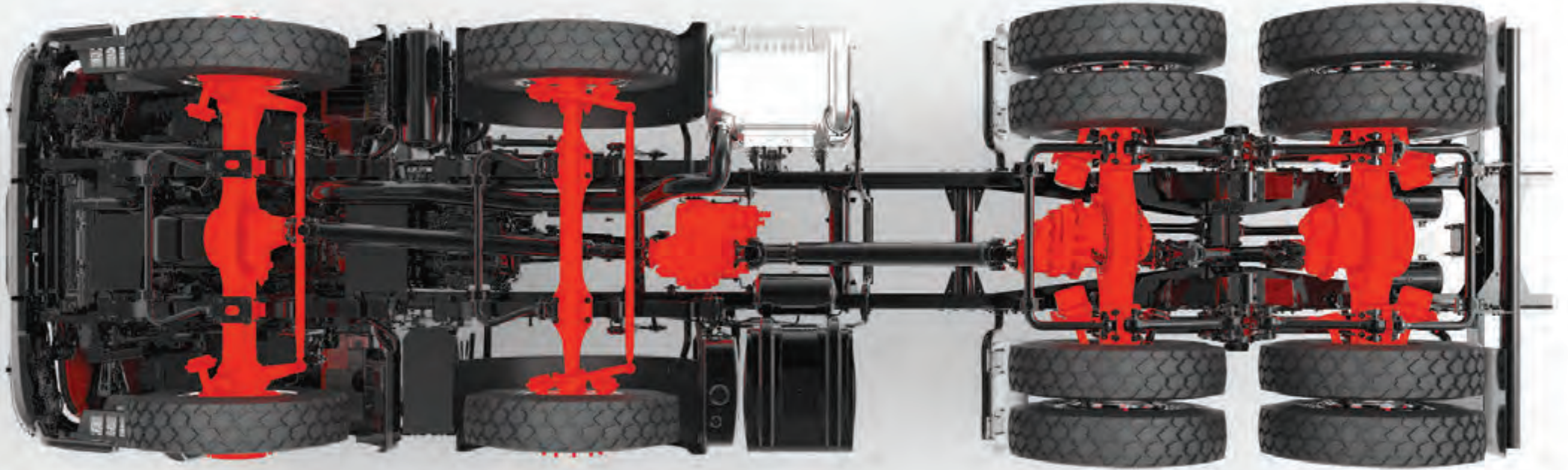


GEARBOX

The HD9 Euro VI Range is always your 'working hard' Partner featuring the following transmission solutions:

- The strong and reliable **Manual gearbox**, with its 16 synchronized gears, is the perfect ally to face even the heaviest off road missions. With the pneumatic shifting assistance, the driver can select the optimal gear quickly and with low expenditure of energy. The light weight of the gearbox allows higher payload capacity and the integrated retarder (optional) improves the deceleration, preserves the brakes and increases safety.
- The **Automated gearbox**, with its 16 fine-tuned gears, is the perfect choice when reduced cost of exercise and high driving comfort are needed. The electronic control unit ensures an optimal communication among the engine, clutch and gearbox, preserving the entire driveline, extending the life of the components and reducing the fuel consumption. The additional integrated retarder (optional) is also available to assist the driver in the hardest off road missions.
- The **Automatic gearbox**, with 7 forward gears is ideal when top performance is required for heavy haulage and extreme off-road conditions. The hydraulic converter allows flexible engine/transmission connection for an uninterrupted engine power to the wheels, which means superior acceleration and smooth drive, effortless shifting and precise traction control, even in harsh or rugged conditions.

HIGH PERFORMANCE DRIVELINE






BEYOND THE ROAD

AXLES

The new HD9 Euro VI range offers a great variety of front and rear axles configurations, in order to grant the maximum in terms of robustness and productivity in off-road conditions. Loads up to 9 ton on front

axles with the possibility to have a reinforced version for all wheel drive (AWD) and up to 40 ton on rear tandem depending on configuration with adequate tyres and speed.

	Axle type	Axle load (kg)	6x4	6x6	8x4	8x6	8x8
	Front standard	8.000 9.000					
	Front standard	8.000 9.000					
	Front reinforced	9.000 11.000*					
	Rear tandem standard	32.000					
	Rear tandem reinforced	40.000					

* Only for model 8x6 in special configuration max width 2.9 mt.



TRANSFER BOX

Availability of powerful transfer boxes for the maximum robustness in difficult conditions when all wheel drive mode is needed. In case this is not necessary, the option of the engageable transfer box ensures the efficiency of a rear wheels drive while granting the extreme mobility of an all wheels traction whenever is needed.

FUNCTIONAL COMFORT



BEYOND THE ROAD

The new HD9 EuroVI workplace is specifically designed and optimized to match the excellent ergonomics and relaxing internal comfort with the highest functionality, in order to easily allow to face the hardest and most challenging off road missions... in perfect Astra style.

Storage-Ability

The new workplace is designed to maximize the space available for the driver comfort, in order to ensure the most functional storage capability. Practically, there are many and easily accessible supports, pads and drawers useful to hold and store documents, keys, bottles and many other accessories, located on the front dashboard, as well as on the upper shelf and side doors.

Ergonomic Workplace

The new and wide HD9 Euro VI dashboard re-defines the internal space of the cab in a very functional and comfortable way. The instrument panel surrounds the driver and makes easy and safe the handling of all the controls, even in the most challenging working conditions. Safety is also magnified by the essential and helpful additional low windows on the doors, necessary to ensure full visibility for driving throughout the obstacles and on the roughest terrains. The workplace is always comfortable thanks to the adjustable driving seat and steering column, as well as thanks to the new optimized lighting provided by n°4 spotlights on the upper shelf and the hi-fidelity sound played by the Bluetooth radio CD MP3 with steering wheel controls (optional).



