

Zetor

FORTERRA

FORTERRA CL
FORTERRA HSX
FORTERRA HD



INEXHAUSTIBLE POWER



Tractor is Zetor. Since 1946.



PERFORMANCE

The combination of powerful engine and higher tractor weight ensures maximum power in all conditions.

ENDURANCE

Great emphasis is put on simple, smart and effective design of Forterra models. Our tractors have a simple design for simple maintenance and serviceability.

TOTAL COST OF OWNERSHIP

With in-house 16-valve engine manufacture, Forterra models are fuel efficient. Along with affordable spare parts make their operating costs hard to beat.

THE BEST-EQUIPPED TRACTORS IN THE ZETOR PORTFOLIO

| | F CL | | F HSX | | F HD |
|-----------------------------------|--|---|---|---|---|
| Power (HP) | 96-136 | = | 117 -136 | ↗ | 127-147 |
| Max. Torque (Nm) | 607 | = | 607 | = | 607 |
| Transmission | 4-stage with automatic 3-stage multiplier, mechanical reverser | ↗ | 5-stage with automatic 3-stage multiplier, electrohydraulic reverser (PowerShuttle) | = | 5-stage with automatic 3-stage multiplier, electrohydraulic reverser (PowerShuttle) |
| Number of Gears | 24/18 | ↗ | 30/30 | = | 30/30 |
| Three-Point Hitch | Category II Optional category III N | = | Category II Optional category III N | ↗ | Category III |
| Maximum Lift Force (kN) | 77 | ↗ | 85 | = | 85 |
| Hydraulic Pump Capacity (l/min) | 70 | = | 70 | ↗ | 85 |
| Hydraulic remotes (Quickcouplers) | 6+1 | = | 6+1 | ↗ | 8+1 |
| Multiple-Function Control Panel | - | × | - | ↗ | Standard |
| Max. Front Ballast (kg) | 700 | = | 700 | ↗ | 900 |
| Tank Capacity (l) | 230 | ↗ | 270 | = | 270 |
| Wheelbase (mm) | 2,490 | ↗ | 2,590 | ↗ | 2,720 |
| Max. Operating Weight (kg) | 5,200 | ↗ | 5,300 | ↗ | 5,500 |
| Suspended Front Axle | - | ↗ | YES ^{OPT} | ↗ | Yes |



NEW IN 2018 MODELS

- 40 ECO transmission (HSX & HD), which reduces engine rpm, fuel consumption, noise and engine wear
- Safety package (more powerful brakes, seat with safety sensor, seat-belts...)
- Higher overpressure in the cabin and more powerful heating and aircondition
- New dashboard with enhanced features and color LED panel
- Newly designed switches and controls with improved ergonomics
- Independently suspended front axle for FORTERRA HSX and HD

Forterra CL

The Zetor Forterra CL series offers engine powers of up to 136 HP, which makes it a very strong alternative to rival six-cylinder tractors. Construction of Forterra tractors has been adapted accordingly – these are robust, heavyweight tractors. Due to very good torque parameters, they are appreciated as hard workers and excellent value for money. Forterra tractors are unbeatable in terms of operational costs.

Forterra HSX

Forterra HSX is equipped with technology which ensures higher comfort during your daily work: the 40ECO transmission, Power-Shuttle, five-speed gearbox with three-stage multiplier, increased rear linkage capacity,

HitchTronic threepoint hitch controls, suspended front axle and cab, and much more. This is the ultimate package of performance, endurance and total cost of ownership from Zetor.

Forterra HD

The best equipped tractors in the Zetor portfolio. Reinforced axle drive, larger rear axle, an extended wheelbase for greater stability, with a suspended front axle and cab, right-hand panel with electronic control, larger fuel tank etc. This combination makes Forterra HD a strong partner for high productivity.





ENGINE

The exceptional popularity of Zetor tractors is based on low fuel consumption, high reliability and simple design – these reward the customer not only with low operating costs but also great reliability, and low maintenance and service requirements. Tractors with these engines therefore rank among the most economical in the market. Independent tests proved that Stage IV engines have lower consumption by 15-19% than the previous types.



LOW CONSUMPTION LEADER

New engine generation brings a further consumption and emission reduction. Zetor tractors equipped with the new engines meeting the Stage IV emission standard were tested by scientists from Mendel University. The study results confirmed that fuel consumption of the new engines is up to 19.2 % lower than the previous engine generation.





Proven by generations of users

- **IN-HOUSE DEVELOPMENT AND MANUFACTURE**

guaranteed precise workmanship using quality materials

- **LOW CONSUMPTION**

ensures a very low operating fuel consumption

- **MECHANICAL INJECTION PUMP**

reliable and trouble-free operation, long service life

- **TWO BALANCE SHAFTS**

reduce vibrations and make the engine run more smoothly

- **PRESSURIZED OIL-COOLED PISTON CROWNS**

increase combustion efficiency and prolong engine life

- **GLOW PLUG IN EVERY CYLINDER**

(direct combustion engine pre-heating) – guarantees reliable starting at low temperatures

- **ENVIRONMENTALLY FRIENDLY OPERATION**

Forterra series use SCR and DPF system in order to meet the most stringent emission limits

No power boost restricted only to certain conditions

Zetor tractors do not use power boost, i.e. power available only under certain conditions. Zetor engines have full power available regardless of what speed the tractor is travelling or whether the PTO has been engaged.

Excellent torque characteristics give the engines resilience and the capability to work at low speeds with heavy loads, without the need for frequent shifting.





GEARBOXES

Gearboxes for the Forterra range are developed and manufactured directly by Zetor. Own production allows the company to control the quality, design and wide variability of options offered. High endurance and long life is achieved by using high quality materials.

FORTERRA CL

The classic, four-speed, fully synchronized gearbox in Forterra tractors, supplemented with two speed ranges and a three-stage multiplier (24/18). Gears are suitably spaced with seven speeds available within the operating range from 6–12 kph.

FORTERRA HSX / HD

A five-speed gearbox with two driving speed ranges, a three-stage multiplier and a reverser under load (30/30) satisfies the demands of users requiring a higher level of comfort. Wet disk clutches give reliable and smooth reversing.

Inovated transmission with ECO regime allows to reach maximum traveling speed (40 kmh) at reduced engine rpm (around 1800 rpm). This optimisation helps to reduce fuel consumption by approximately 15–20 %, reduce engine wear and noise.

There are 13 gears within the operating range from 6-12 kph.





Perfect synchronization of power and accuracy

- **IN-HOUSE PRODUCTION**
control and enforcement of high quality standards
- **LONG SERVICE LIFE**
high-quality and durable materials ensure long service life
- **GEAR RATIO**
Optimizes power to weight ratio
- **COMFORT**
simple and easy shifting
- **INDEPENDENT PTO**

PTO

The rear PTO speed is completely independent of the travelling speed, and depends on the engine rpm. The tractor has the following rear PTO speed combinations: 540 / 540E / 1,000 / 1,000E. Tractor can be optionally equipped with ground speed 540/1,000.

PTO CLUTCH

The wet plate clutch in an oil bath provides long service life. Modulated switching ensures that attached implements start up smoothly.

FORTERRA HD

The rear PTO clutch has feedback-controlled starting that ensures easy, comfortable starting and a longer life for the clutch.





HYDRAULICS

Forterra tractors are equipped with EHR (Bosch electrohydraulics) with Hitchtronic function. Two auxiliary hydraulic cylinders ensure uniform tractor loading and maximum lifting capacity up to 77 kN for Forterra CL and up to 85 kN for Forterra HSX and Forterra HD. Forterra HD offers four auxiliary hydraulic quick couplers with electro-hydraulic control. In combination with Category III hitches, you can enjoy a wide selection of usable implements.

- **OPTION TO USE HEAVY IMPLEMENTS, MAXIMUM HYDRAULIC LIFTING CAPACITY UP TO 7,700 Kg (F-CL) OR 8,500 Kg (F-HSX & F-HD)**
- **HIGH PRODUCTIVITY THANKS TO HITCHTRONIC AUTOMATIC CONTROL OF THREE-POINT HITCH**
- **RESISTANT TO UNEVEN TPH LOAD**

HEADLAND TURNING SEQUENCES

Forterra HD is equipped with the possibility of combinations of automatic operation of the front driving axle 4WD, differential locks and the rear PTO – depending on the combination of travel speed, wheel turning angle and rear three-point hitch position. This significantly increases comfort during field work; to increase pulling force it is not necessary to manually switch on and again switch off at headlands to improve manoeuvrability.



High efficiency of work



Zetor was the first to offer the **HITCHTRONIC** function – a subsequent winner of many awards

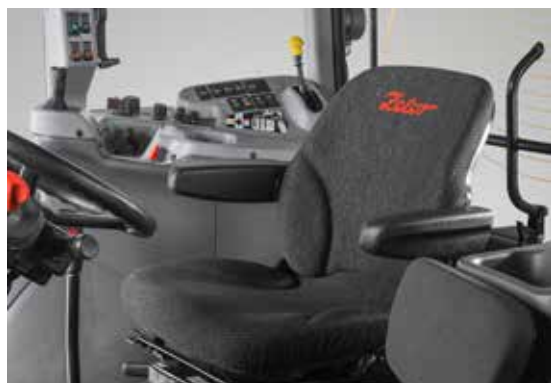
The Bosch electro-hydraulic system is fitted with the HitchTronic function, a unique system to automatically control the rear three-point hitch. When using this system, there is no need to set up types of regulation or combinations.

Only the implement working depth is set. When the implement attached to the rear three-point hitch reaches the set depth, the control system measures the soil resistance, and this value is used as the initial value for automatic hitch control.





Convenience, comfort and user-friendly, ergonomic design – these are the main features of Forterra cabs. Every item has been designed with specific regard to tractor operation, to increase maximum utility and comfort in all terrains and environments.



The tractor can be equipped with the mechanically or air suspended swivel seat that guarantees driver comfort.

Forterra HD is equipped with the ergonomic, multifunctional panel with various controls. Thanks to their position on the right, the driver has everything at hand, from controlling the hydraulics to activating automatic headland turning.



Completely new dashboard with color display improves clarity and awareness of information given to the driver. All important data are placed in one place.



Comfort and ergonomics



SUSPENDED CAB

All Forterra models can be optionally equipped with cab suspended system to maximize operator's comfort.



SUSPENDED FRONT AXLE

The front driven axle of the Forterra HSX and HD models can be optionally suspended. In combination with the suspended cab, this offers a smooth and comfortable drive.





Only originals fit perfectly

Respect your tractor's identity

ZETOR TRACTORS a.s. supplies its original spare parts world, through the dealer network. The quality of original spare parts is checked constantly throughout production and matches the quality of parts used for assembling new products.

Original spare parts also incorporate all improvements and innovations. This guarantees

that the operational qualities of the repaired machine are fully restored. The originality of supplied spare parts is guaranteed by packing them in original packaging with a unique identification number.

Zetor spare parts achieve high quality and represent the best value for money.

To maintain a long tractor life, we recommend using only original spare parts.



**For more information please contact
your authorized Zetor dealer.**



Developed and manufactured in the heart of Europe

More than a million customers
can't be wrong

The comprehensive development and manufacture of Zetor components and tractors are concentrated under one roof in the Zetor manufacturing plant in Brno, Czech Republic. The facilities of the development and production center allow the company to effectively control the development and manufacture process and to secure the high quality of our products.

The team of designers, engineers and other personnel of the research and development centre provides comprehensive research and the development of new products, from the conception, design, construction, and manufacture of prototypes to laboratory and operating tests of individual components or whole machines.

Over the last several years, the company has invested tens of millions of EURO in the development of new products and the modernization of development equipment and technologies. The production process has also undergone an extensive modernization. Thanks to the construction of a new logistics hall and the acquisition of new technologies, the company has made logistics processes even more effective. The acquisition of new machines and the production automation have lead to improved quality, the elimination of possible personnel errors, and reductions in costs.

ZETOR TRACTORS a.s. is a holder of quality certificate according to ISO 9001 which guarantee that the company bservees the principles for the comprehensive quality control.





| | | FORTERRA CL | | | | | FORTERRA HSX | | | FORTERRA HD | | |
|--------------------------------------|-------|---|-------|-------|-------|-------|---|-------|-------|-------------|-------|-------|
| MODEL | UNITS | 100 | 110 | 120 | 130 | 140 | 120 | 130 | 140 | 130 | 140 | 150 |
| ENGINE | | | | | | | | | | | | |
| Engine Type | • | Z1017 | Z1317 | Z1417 | Z1517 | Z1617 | Z1417 | Z1517 | Z1617 | Z1517 | Z1617 | Z1717 |
| Emission level | • | Stage IV / Tier 4 Final | | | | | | | | | | |
| Power (2000/25/EC) | kW | 70.4 | 78.4 | 86.2 | 93.2 | 100.2 | 86.2 | 93.2 | 100.2 | 93.2 | 100.2 | 108.2 |
| | HP | 96 | 106 | 117 | 127 | 136 | 117 | 127 | 136 | 127 | 136 | 147 |
| Rated Speed | rpm | 2,200 | | | | | | | | | | |
| No. of Cylinders / Valves | • | 4 / 16 | | | | | | | | | | |
| Aspiration | • | Turbocharged | | | | | | | | | | |
| Displacement | cm³ | 4,156 | | | | | | | | | | |
| Bore / Stroke | mm | 105 / 120 | | | | | | | | | | |
| Max. Torque | Nm | 420 | 472 | 507 | 558 | 607 | 507 | 558 | 607 | 558 | 607 | 607 |
| Torque Rise | % | 42 | 43 | 40 | 42 | 43 | 40 | 42 | 43 | 42 | 43 | 32 |
| TRANSMISSION | | | | | | | | | | | | |
| Type | • | Reversing 4-stage with automatic 3-stage multiplier | | | | | Reversing 5-stage with automatic 3-stage multiplier | | | | | |
| Number of Gears | • | 24/18 | | | | | 30/30 | | | | | |
| Shifting | • | Fully synchronized | | | | | | | | | | |
| Reverser | • | Mechanical | | | | | PowerShuttle (Electro-Hydraulic) | | | | | |
| Multiplier | • | 3° PowerShift | | | | | 3° PowerShift | | | | | |
| Max. Speed | km/h | 40 | | | | | 40 ECO | | | | | |
| PTO | | | | | | | | | | | | |
| Type | • | multi-plate PTO clutch | | | | | | | | | | |
| Rear PTO Revolutions | rpm | independent (540/540E/1,000/1,000E) or independent & ground speed (540/1,000) | | | | | | | | | | |
| Front PTO Revolutions ^{OPT} | rpm | 1,000 | | | | | | | | | | |
| Max. Power of Front PTO | kW | up to 60 kW | | | | | up to 90 kW | | | | | |
| HYDRAULICS | | | | | | | | | | | | |
| Type | • | Bosch electro-hydraulics with HitchTronic, 2 auxiliary cylinders | | | | | | | | | | |
| Three-Point Hitch | • | Category II or Category III N ^{OPT} | | | | | | | | | | |
| Max. Lifting Capacity | kN | 77 | | | | | 85 | | | | | |
| Lifting Capacity in full range | kN | 69 | | | | | 76 | | | | | |
| Operating Pressure | MPa | 20 | | | | | | | | | | |
| Pump Capacity | l/min | 70 (gear) | | | | | | | | 85 (gear) | | |
| Hydraulic remotes (Quickcouplers) | • | 6+1 | | | | | | | | 8+1 | | |

| | | FORTERRA CL | | | | | FORTERRA HSX | | | FORTERRA HD | | | |
|-----------------------------------|-------|---|-----|-----|-----|-----|-----------------------------------|-----|-----|-------------|-----|-----|--|
| MODEL | UNITS | 100 | 110 | 120 | 130 | 140 | 120 | 130 | 140 | 130 | 140 | 150 | |
| CAB | | | | | | | | | | | | | |
| Cab suspension | • | Optional | | | | | | | | Standard | | | |
| Seat | • | Mechanical suspended with safety belt or Pneumatically suspended with safety belt | | | | | | | | | | | |
| Passenger Seat | • | Standard (with safety belt) | | | | | | | | | | | |
| Heating | • | Standard | | | | | | | | | | | |
| Air-Conditioning | • | Optional | | | | | | | | | | | |
| Heated Mirrors and Rear Defroster | • | Standard | | | | | | | | | | | |
| Roof | • | With sunroof (standard) / sunroof with FOPS protection (optional) | | | | | | | | | | | |
| Pre-Wiring for Radio / Radio | • | Standard / Optional | | | | | | | | | | | |
| Steering Wheel | • | Tiltable and telescopic | | | | | | | | | | | |
| UNDERCARRIAGE | | | | | | | | | | | | | |
| Drive System | • | 4WD | | | | | | | | | | | |
| Front driven axle | • | Solid | | | | | Solid or Suspended ^{OPT} | | | Suspended | | | |
| Steering | • | Hydrostatic | | | | | | | | | | | |
| Operating brakes | • | Independent hydraulic wet four wheel brakes | | | | | | | | | | | |
| Trailer brakes ^{OPT} | • | Pneumatic 2+1 hoses or hydraulic & pneumatic 2+0 hoses | | | | | | | | | | | |
| Fuel tank / Urea tank | l | 230 / 28 | | | | | 270 / 28 | | | | | | |
| Front Mudguards | • | Fixed or Pivoting ^{OPT} | | | | | | | | Pivoting | | | |
| OTHER SPECIFICATION | | | | | | | | | | | | | |
| Operating Weight* | kg | 4,300-5,200 | | | | | 4,300 - 5,310 | | | 4,800-5,500 | | | |
| Max. Front Ballast | kg | 800 | | | | | | | | | | | |
| Max. Rear Wheel Ballast | kg | 472 | | | | | | | | | | | |
| Max. Total Weight | kg | 8,000 | | | | | 8,000 | | | 10,000 | | | |
| Max. Length | mm | 5,100 | | | | | 5,200 | | | 5,766 | | | |
| Max. Width | mm | 2,430 | | | | | 2,430 | | | 2,550 | | | |
| Max. Height | mm | 2,775 | | | | | 2,775 | | | 2,903 | | | |
| Wheelbase | mm | 2,490 | | | | | 2,590 | | | 2,720 | | | |

OPT Optional

* Without front and rear ballast

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


**My family.
My work.
My Zetor.**



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DEALER: