

Zetor

FORTERRA

FORTERRA
FORTERRA HSX
FORTERRA HD



INEXHAUSTIBLE POWER



Tractor is Zetor. Since 1946.



THE STRONGEST AND BEST-EQUIPPED TRACTORS IN THE ZETOR PORTFOLIO

	F		F HSX		F HD
Max. Power (kW)	100.2	=	100.2	↗	108.2
Max. Torque (Nm)	581	=	581	↗	589
Transmission	Mechanical 4-stage with 3-stage multiplier, reverse synchronized clutch	↗	5-stage with automatic 3-stage multiplier, reverse wet two-disk clutch	=	5-stage with automatic 3-stage multiplier, reverse wet two-disk clutch
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
Outer Circuits Tapping	6+1	=	6+1	↗	8+1
Multiple-Function Control Panel	-	×	-	↗	Standard
Max. Front Ballast (kg)	700	=	700	↗	900
Tank Capacity (l)	180	↗	220	=	220
Wheelbase (mm)	2,490	↗	2,590	↗	2,720
Max. Operating Weight (kg)	4,800	↗	4,900	↗	5,500
Spring-Mounted Front Axle	-	×	-	↗	Yes



PERFORMANCE

Forterra tractors rank among the most powerful in the ZETOR TRACTORS portfolio. 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 very efficient as to fuel and oil consumption, and affordable spare parts make their operating costs hard to beat.

Forterra

The Zetor Forterra series offers engine powers of up to 140 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 the most up-to-date technology: the latest Powershuttle generation, a new five-speed gearbox with three-stage multiplier, a more powerful hydraulic system, HitchTronic three-point hitch controls, LCD display, safety driver's seat and more. This is the ultimate package of performance, endurance and total cost of ownership from Zetor.

Forterra HD

The most powerful and best equipped tractors in the Zetor portfolio. Reinforced axle drive, larger rear axle, an extended wheelbase for greater stability, with a spring-mounted front axle and cab. These combine to make Forterra HD a strong partner for high productivity.

- **SPRING-MOUNTED FRONT AXLE AND CAB**
More comfortable drive
- **NEW RIGHT-HAND PANEL WITH ELECTRONIC CONTROL**
Simple and easy control, more comfort
- **INCREASED GEAR PUMP CAPACITY**
Greater variety of implements
- **ERGONOMIC ACCELERATOR PEDAL**
Comfortable control
- **REINFORCED AXLE DRIVE AND LONGER WHEELBASE**
Handles heavy loads





ENGINE

ZETOR TRACTORS ARE FITTED WITH ENGINES DESIGNED IN-HOUSE.

The exceptional popularity of Zetor engines is based on low fuel consumption, high reliability and simple design – these reward the customer not only with low purchase costs, but also low operating costs and great reliability. The 16-valve engines obtained one of the best evaluations in a stringent test carried out by the German Agricultural Association (DLG). Tractors with these engines therefore rank among the most economical in the market.

ZETOR TRACTORS a.s. manufactures the largest number of compression ignition engines in the Czech Republic. This manufacturing tradition dates back to the 1920s.





Proven by generations of users

- **IN-HOUSE DEVELOPMENT AND MANUFACTURE**

guaranteed precise workmanship using quality materials

- **LOW CONSUMPTION**

ensures a very low operating fluid 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

- **OPTIONAL COOLANT HEATER**

reduces warm-up time, thus saving fuel

- **GLOW PLUG IN EVERY CYLINDER**

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

- **ENVIRONMENTALLY FRIENDLY OPERATION**

Zetor tractors have a particulate filter 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.





Zetor



GEARBOXES

FORTERRA

The classic, four-speed, fully synchronized gearbox in Forterra tractors, supplemented with two speed ranges and a three-stage multiplier (24/18), features larger gears and bearings for a good service life. 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. The pair of wet disk clutches is reliable with smooth reversing.

The working range offers nine speeds.



Perfect synchronization of power and accuracy

- **IN-HOUSE PRODUCTION**
control and enforcement of high quality standards
- **SERVICE LIFE**
high-quality and durable materials ensure long service life
- **HIGHLY CONFIGURABLE**
solution tailored to customer's needs
- **GEAR RATIO**
Optimizes power to weight ratio
- **COMFORT**
simple and easy shifting
- **PTO GROUND SPEED**
standard offer

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 / and 1,000E.

PTO CLUTCH

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

NEW FORTERRA HD

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



Fetor



HYDRAULICS

Two auxiliary hydraulic cylinders ensure uniform tractor loading and maximum lifting force, up to 77 kN for Forterra and up to 85 kN for Forterra HSX.

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. The tractor also has programmable headland turning sequences to simplify and improve field work.

- **OPTION TO USE HEAVY IMPLEMENTS, MAXIMUM HYDRAULIC LIFTING CAPACITY UP TO:**
F – 7,700 KG
HSX/HD – 8,500 KG
- **HIGH PRODUCTIVITY THANKS TO HITCHTRONIC AUTOMATIC CONTROL OF THREE-POINT HITCH**
- **LONG LIFE WITH UNEVEN THREE-POINT HITCH LOAD**



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.



Zetor



CAB

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 Zetor seat ensures long life, ergonomics and comfortable sitting.



MULTI-FUNCTIONAL PANEL

The major innovation for the Forterra HD series is the ergonomic, multifunctional panel with various controls. Everything is intuitive and controls are very comfortable and easy to use. Thanks to their position on the right, the driver has everything at hand, from controlling the hydraulics to activating automatic headland turning.



Comfort and ergonomics



SPRING-MOUNTED CAB

All Forterra models have the cab spring-mounting system to maximize operator's comfort.



SPRING-MOUNTED FRONT DRIVEN AXLE

The front driven axle of the Forterra HD models can be optionally mounted on springs. In combination with the spring-mounted cab, this offers a smooth and comfortable drive.



Zetor



Only originals fit perfectly

Respect your tractor's identity

ZETOR TRACTORS a.s. sells its original spare parts world-wide, for both warranty and post-warranty service of Zetor tractors, through the sales network of our contracted representatives.

The quality of original spare parts is checked constantly throughout production and matches the quality of parts used for assembling new products.

Zetor spare parts achieve high quality at a reasonable price.

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

Original spare parts also incorporate all improvements and innovations. This guarantees that the operational qualities and utility of the repaired machine are fully restored. The originality of supplied spare parts is secured by packing them in original packaging with a unique identification number.

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

ZETOR HAS BEEN PRODUCING TRACTORS SINCE 1946. IN THE COURSE OF ITS EXISTENCE, IT HAS PRODUCED MORE THAN 1.2 MILLION TRACTORS, MOST OF WHICH HAVE BEEN EXPORTED TO MORE THAN 90 COUNTRIES AROUND THE WORLD.

PRODUCTION

Production of Zetor tractors and engines is concentrated in Central Europe, in the Czech Republic.

Having an in-house development and production centre helps ensure that the products we offer are of the very highest quality, and supports the introduction of many innovations.

Product assembly effectively combines and balances the mix of parts made in our own facilities and those parts and units purchased from specialist suppliers.

DEVELOPMENT

The Engineering Department is Zetor's longstanding permanent research, development and testing facility.

It comprises a team of development engineers engaged in high-level specialist research, which draws on a wide knowledge base and professional skills, and is supported by state-of-the-art technologies.

The department provides comprehensive, systematic research and development of the production programme – from concept, design, construction, the production of functional samples and prototypes, right up to testing tractors and motors in the laboratory and in the field.





MODEL	FORTERRA					FORTERRA HSX					FORTERRA HD			
	100	110	120	130	140	100	110	120	130	140	130	140	150	
ENGINE														
Stage III B Type	1006	1306	1406	1506	1606	1006	1306	1406	1506	1606	1506	1606	1716	
Homologated Power (kW) (2000/25/EC)	70.3	78.4	86.2	93.2	100.2	70.3	78.4	86.2	93.2	100.2	93.2	100.2	108.2	
Homologated Power (hP) (2000/25/EC)	96	106	117	127	136	96	106	117	127	136	127	136	147	
Rated Speed (rpm)	2,200													
Number of Cylinders	4													
Number of Valves	16													
Aspiration	Turbocharged													
Bore/Stroke (mm)	105/120													
Displacement (cm ³)	4,156													
Cooling	Viscous fan clutch													
Max. Torque (Nm) (2000/25/EC)	429	461	493	551	581	429	461	493	551	581	551	581	589	
Improvement of Torque (%) (ECE R24)	46	40	37	41	38	46	40	37	41	38	41	38	30	
TRANSMISSION														
Type	Mechanical with 3-stage multiplier, reversing					Reversing 5-stage with automatic 3-stage multiplier								
Reverser	-					Under load at 10 kph								
Shifting	Fully synchronized													
Number of Gears (F/R)	24/18					30/30								
Speed (kph)	40													
PTO														
Type	Independent, multi-plate PTO clutch													
Rear PTO Revolutions	540/540E/1,000/1,000E, optional 540/1,000 + dependent													
Front PTO Revolutions	1,000													
Max. Power of Front PTO (kW)	Power transmission up to 60 kW										Power transmission up to 90 kW			
HYDRAULICS														
Type	Bosch electro-hydraulics with HitchTronic, 2 auxiliary cylinders													
Three-Point Hitch	Category II, optional Category III N										Category III			
Control	Electronic													
Max. Lift Force (kN)	77					85					85			
Operating Pressure (MPa)	20										20+0,2			
Pump Capacity (l)	70										85 (gear)/120 (axial)			
Outer circuits (hydraulic quick couplers)	6+1 or 4+1										8+1			
Hitches	Modular CBM hitch system – level quick-adjustable with automatic nozzle and hitch for one-axle trailer (+ automatic swinging drawbar for F HD)													

MODEL	FORTERRA					FORTERRA HSX					FORTERRA HD			
	100	110	120	130	140	100	110	120	130	140	130	140	150	
CAB														
Spring-Mounting	Fixed standard; suspended optional													
Roof with Hatch	Standard													
Seat	Zetor seat with pneumatic / mechanical suspension													
Passenger Seat	Standard with safety belt													
Multi-Functional Panel	-										Standard			
Steering Wheel	Tiltable and telescopic													
Air-Conditioning	Manual (optional)	Manual			Manual (optional)	Manual			Manual					
OTHER SPECIFICATIONS														
Drive System	4WD													
Front drive axle	Solid										Suspension			
Steering	Hydrostatic													
Operating/Parking Brakes	Hydrostatic													
Front Brakes	By connecting front driven axle, using hydraulic clutch													
Trailer Brakes	Optional pneumatic 2+1													
Max. Front Ballast (kg)	800										900			
Max. Rear Wheel Ballast (kg)	472													
Tank Volume (l)	180					220								
Front Mudguards	Fixed / swivel										Swivel			
Heated Mirrors, Rear Defroster	Standard													
Pre-Wiring for Radio	Standard													
DIMENSIONS														
Operating Weight* (kg)	4,300-4,800					4,400-4,900					4,800-5,500			
Length (mm)	5,000					5,000					5,766			
Width (mm)	2,270					2,430					2,550			
Height (mm)	2,870					2,775					2,803			
Wheelbase (mm)	2,490					2,590					2,720			
Front Wheels ** (mm)	380/85-R24 (14,9 R24) disc					380/85-R24 (14,9 R24) disc					380/85-R24 (14,9 R24) disc			
Rear Wheels ** (mm)	460/85-R38 (18,4 R38) disc					460/85-R38 (18,4 R38) disc					460/85-R38 (18,4 R38) disc			

* Without front and rear ballast

** Standard wheels; for more options contact your dealer

Zetor



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



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SUBJECT TO CHANGE. 08/2014



DEALER:



Made in EU