

V O L V O

Volvo FMX 460 8X4 Coal Tipper

**Push the limits of
productivity**



Volvo Trucks. Driving Progress

VOLVO FMX 460 8X4

Safety always remains the prime value pillar

Volvo is synonymous with safety. The slimmer A-pillar, larger windscreen and lower door lines have improved direct visibility by 10%. Tinted windshield helps reduce glare and improved rear view mirrors gives you the best views. With improved visibility driver is more confident and chances of accidents are minimized. Power windows and central door locking secures the truck. Volvo cabs have been subjected to the toughest tests including the Swedish crash test. Electrically operated steel roof hatch provided as emergency exit. Electronic braking system give you all the more confidence while driving in rough terrain. Downhill cruise control maintains a set speed when the loaded truck is going down the slopes using auxiliary brakes VEB+ (Volvo Engine Brake). This also reduces brake wear and improve service life.

The truck is now provided with reverse camera with the view available on the digital instrument panel.

A body builder module ECU prevents the truck from exceeding 5 kmph speed when the dump body is in raised position, thus preventing accidents at the dump yard.

An inclinometer is provided which stops the truck's tipping system while on uneven surface. This prevents toppling while unloading.





Rear view camera



Inclinometer

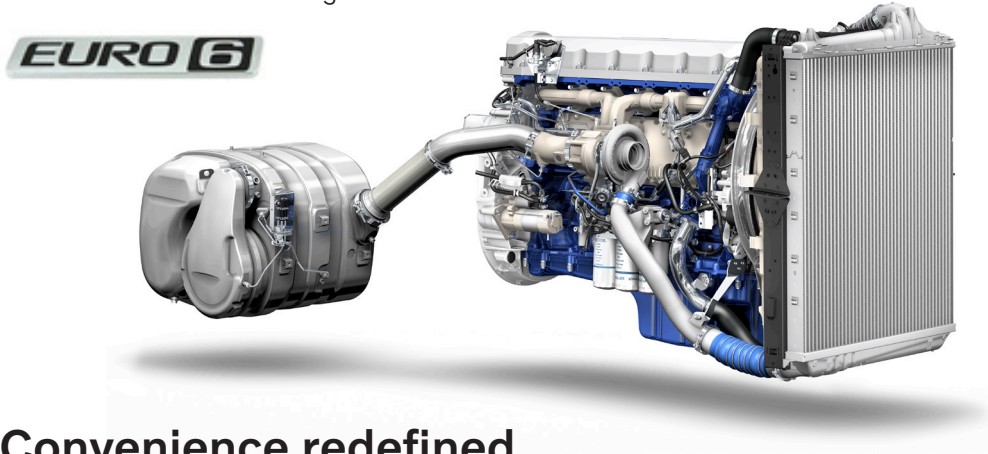
Most comfortable cab

Drivers are the most important part of the trucking industry and their comfort is directly proportional to the productivity. The new FMX460 cab has been designed keeping this in mind. With 800 ltr more cabin space, climate control with enhanced thermal insulation, 2dB quieter cab, and excellent internal and external storage space, soft closure of doors and better vibration arresting... drivers are sure to guarantee few extra trips per shift.



More efficient

The cabin aerodynamics are improved to give better fuel economy. Volvo has been improving their Euro 6 technology since 2013. The latest engine management system, better gear shift programming over and above subtle design improvements in the engine like smoother cylinder liners, oil scraper ring, turbo impeller with inverse design, new low viscous VDS 5 oil with longer change intervals... help save some more liters of fuel in the long run.



Convenience redefined

The new Volvo FMX 460 has the state of the art I-Shift 12 speed automated manual transmission which chooses the best gear in the interest of power and fuel economy. The ergonomically designed new gear control lever fits snugly in palm. Switch between drive modes like economy, standard, performance and off-road with a push of a button. With I-Shift your driver has one less activity to focus on.

Add to this cruise control and downhill cruise control to maintain speed.

Pre-trip check diagnoses all the vital parameters of the truck and alerts if something needs your attention with pop up message on the driver information display. If not, just turn the ignition and keep rolling. You can avoid the physical inspection of the truck at the beginning of every shift, thus improving the utilization.



I-Shift Automated Manual Transmission



Driver information display



Pre-trip check diagnostics

Ultra-modern displays & controls

The Driver Information Display on the new cabin is a fully digital 12" unit which is dynamic to suit the preferences of the driver. Choose between the classic analogue or digital view using buttons on the steering wheel. All vital statistics of the truck, alerts, driver timers etc. become part of the display. What's more – connect your phone to the truck and drive safe with hands-free comfort.

The new Traction Control unit makes it easier to handle demanding situations like loose soil, slush etc... which is very common during monsoon. The more you turn the knob, the more traction you get. You also get visual feedback of the traction status in the instrument display.



Traction control knob and display



Technical specifications

ENGINE	
Six-cylinder, in-line direct injection diesel engine	
Overhead camshaft with four valves per cylinder	
Electronically regulated common rail fuel injection with unit injectors	
Heavy duty turbocharger and intercooler	
Engine management system with driving information and diagnosis	
Exhaust after treatment by Selective Catalytic Reduction (SCR) technology with additional AdBlue tank Exhaust Gas Recirculation (EGR).	
Displacement	12.8 litre
Bore x stroke	131 mm x 158 mm
Compression ratio	18.0 :1
Max. Power	460 hp @ 1400-1800 rpm
Max. Torque	2300 Nm @ 900-1400 rpm
Economy speed range	950-1400 rpm
Emissions*	BS-VI / Euro 6
Max. Engine brake power	503 hp (VEB+) @ 2300 rpm
* Emission requirements conform to ECE/EEC regulations and AIS 137as notified by MoRTH vide GSR 889(E) dtd.16.09.2016 w.e.f 01 April, 2020.	
CLUTCH	
Power assisted push-type single plate friction disc	
Plate Diameter	430 mm
GEARBOX	
I-Shift (Automated range / splitter gearbox)	
Heavy duty transmission oil cooler with additional radiator	
Enhanced software for mining and off-road conditions	
Economy, Standard, Performance, Off-road drive modes	
No. of gears	12 forward + 4 reverse
POWER TAKE-OFF	
Clutch dependent gearbox mounted power take-off	
FRONT AXLES	
Twin heavy duty steerable front axle with high ground clearance	
Capacity (twin axles)	18000 kg
REAR AXLES	
Drive tandem hub reduction axle with four planetary gears	
Differential locks – inter-wheels and inter-axles, Differential Lock Control (DLC)	
Traction Control System (TCS)	
Ratio	5.41:1
Capacity (Tandem axles)	33000 kg
SUSPENSION	
Front	
Parabolic suspension with S-shaped leaf geometry	
Double action shock absorbers and stabilisers	
No. of leaves	3
Rear	
Heavy duty bogie suspension with conventional multi-leaf spring	
Rubber journalled V-stays, reaction rods, stabiliser and two shock absorbers	
No. of leaves	11

WHEELS AND TYRES	
Tyre Size	12" x 20" Cross Ply
Wheel rim size	8.5" x 20"
Total no. of wheels fitted	12
1 no. spare wheel rim and tyre	
CHASSIS FRAME	
'C' channel section side members made of high strength steel	
Cross Section	300mm x 90mm x 8mm
Full length inner reinforcement	
Inner reinforcement thickness	5 mm
STEERING	
Hydraulic power steering with variable displacement pump	
Tilt and telescopic adjustable steering wheel	
Steering Wheel Diameter	500 mm
FUEL AND ADBLUE TANKS	
Fuel tank mounted on the left hand side between 1 st and 2 nd front axle	
Fuel tank capacity	290 litres
AdBlue tank capacity	57 litres
EXHAUST SYSTEM	
Horizontal muffler, vertical exhaust outlet on right-hand side	
BRAKES	
Electronic Brake System (EBS)	
Dual-line air brake system with ABS	
Hill start aid	
Z-cam drum brakes with automatic adjustments	
Electronic parking brake activation	
Spring type parking brake chambers on 2 nd front axle, 1 st rear axle and 2 nd rear axle	
PNEUMATICS	
Gear driven, double-cylinder reciprocating air compressor	
Max. compressor capacity	900 l/min
Electronically controlled air production modulator (APM)	
Total air tank capacity	123 litres
ELECTRICALS	
System voltage	24V
Volvo enhanced flooded batteries (2 nos.) with battery reconditioner	
Battery voltage	12V
Battery capacity	170Ah
Alternator capacity	110A
CAB	
New FMX day cabin fully suspended by four coil springs and shock absorbers	
Crash-tested steel welded structure	
Accommodation	1 driver + 1 co-driver
Cabin tilt angle	70°

Interiors

12" fully dynamic digital instrument cluster with Home & Focus views

Slimmer A-pillar, larger windscreen & lower door lines enhances direct visibility

Ergonomically designed new dashboard with easy-access stalks, switches & controls

Electrical manually controlled climate unit

Central door locking and power windows

Air suspended driver's seat with adjustment of fore-aft, height, backrest, lumbar support, shoulder, seat cushion extension, seat tilt

Cushioned foldable co-driver seat

Cruise control + Downhill cruise control

Red safety belt

Exteriors

Aerodynamically designed with smooth surfaces and rounded corners at the front

Heavy duty bumper with extremely robust design and high approach angle

Robust front towing device rated for 32 tonnes

Rear view camera with colour display in dashboard for enhanced visibility

Distinct V-shape daytime running light (DRL)

New heavy duty headlamp unit with higher illumination main beam

Electrically operated steel roof hatch as emergency exit

TELEMATICS

Volvo Connect onboard telematics collects and transmits all the vital statistics and performance parameters of the truck

Performance and health of the truck can be monitored from the convenience of your home

TOOLS AND ACCESSORIES

Standard tool kit, first-aid kit, two warning triangles, bulb and fuse kit

20 ton hydraulic jack

TIPPER BODY & HYDRAULICS

Steel U type body for raw and washed coal transportation

Hydraulic tail gate mechanism with pneumatic operated lock

Struck volume 33 Cu.m

Full length canopy

Tipping angle with knock-off valve 41 deg

Scow angle 9 deg

Heavy duty front mounted telescopic cylinder

Direct mounted hydraulic pump on PTO

Oil tank with breather filter, oil level indicator and return line filter

Oil tank capacity 135 litres

Inclinometer for enhanced safety while unloading

VEHICLE DIMENSIONS mm

Wheel base 6285

Overall length 10332

Overall width 2598

Overall height 3777

Turning circle diameter 23200

Minimum ground clearance 340

VEHICLE WEIGHTS

Laden weight, kg (as per CMVR limits)

Front axles (Twin) 14000

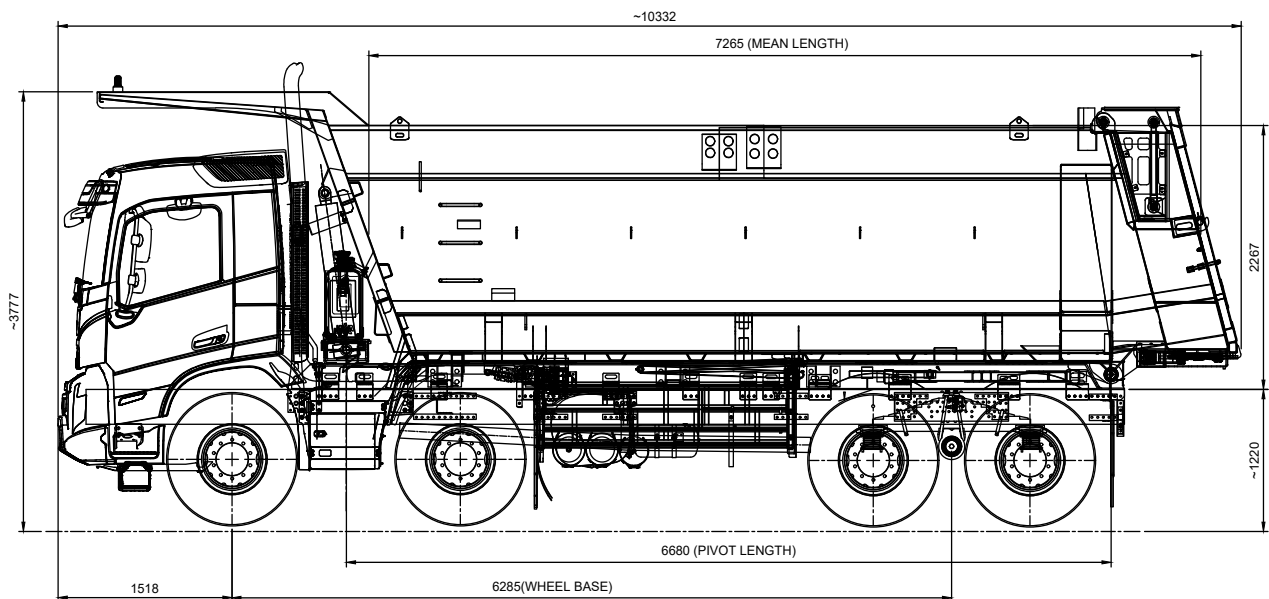
Rear axles (Bogie) 21000

Gross vehicle weight 35000

PERFORMANCE DATA

Economy speed range on top gear 38-57 kmph

Max. speed (with electronic speed limiter) 45 kmph



Caution: Do not drill or weld on the frame. Note: Volvo has a policy of continual product improvement. The specifications / images shown here are indicative and are subject to change without prior notice. Performance parameters are subject to stability of the vehicle.

V O L V O

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