



The Game Changer

Volvo Trucks introduces the first FM 480 10x4 dump truck with 43 (US) tonne capacity for mining applications in India.

Volvo Trucks recently launched the innovative, all new Volvo FM480 10x4 dump truck in India, built specifically for deep opencast mining. Keeping pace with the dynamics of the industry for over a decade and a half, this truck is an innovation that will set new benchmarks in the mining industry. Built on the powerful, reliable and proven Volvo FM13-litre platform, the FM480 10x4 dump truck is slated to be the next big 'Game Changer' in the mining application business.

Philippe Divry, Managing Director, Volvo India, and a VECV Board Member, said, "At a time where business is tough for everybody in the mining sector, Volvo, the market leader, once again innovates to create value for its customers. This is the biggest truck ever in India; it looks like a truck, but produces like a

machine. The Volvo FM480 10x4 dump truck is slated to be the next big Game Changer in the mining industry"

Volvo trucks operate only in select premium and niche segments in India and hold the Number 1 position in the premium European truck segment in India. Our direct service philosophy to provide premium care for premium trucks is very distinctive and a key differentiator. With higher productivity at optimum cost being the need of the hour, we have designed the Volvo 10x4 in such a way that it'll strike the perfect balance between productivity, performance and efficiency.

Volvo FM 480 is an innovation that will redefine productivity. The sturdy 5-axle Dump Truck features the most technologically advanced powerful driveline, delivering 480HP, best-in-class



Philippe Divry,
Managing Director,
Volvo India

"The Volvo FM480 10x4 Dump Truck is slated to be the next big Game Changer in the mining industry."

2,400 Nm torque, power-to-weight ratio of 7.38 and a robust body with 24 M3 struck volume which brings along with it the unmatched Volvo quality and reliability. The higher power-to-weight

ratio provides superior average speeds thereby increased productivity, whereas the lower kerb weight gives superior fuel economy. The Volvo FM 480 10x4 dump truck comes with 24 M3 rock body suitable for rough and tough mining applications.

Vinod Aggarwal, Chief Executive Officer of VE Commercial Vehicles said, "The Volvo FM 480 is the first 10x4 dump truck concept in the Indian market for mining applications. The Volvo 10x4 benefits the customers with higher productivity and lower overall operating costs. The higher capacity rock body enables the customers to derive the best-in-class productivity; thereby reducing their fleet size and helping them achieve increased profitability and higher operating efficiency."

D13A480 Engine: Volvo D13A480 is a 480HP, 12.8 litre in-line 6-cylinder engine with an overhead camshaft, 4 valves per cylinder and electronically controlled unit injectors. The engine meets Euro3 exhaust emission regulations. The D13A480 is designed to ensure excellent driving characteristics, high reliability and excellent fuel efficiency.

VT2514B gear box: Volvo VT2514 is a 14-speed range and splitter gearbox, designed for maximum engine torque of 2500 Nm. The gearbox has a wide range of gear ratios, and close, well-balanced shift increments. This provides very high starting traction while also offering the capacity for high average speeds. The VT2514B is equipped with a newly developed shift by cable which results in short, distinct gear lever movements. The gear lever is completely free of vibration, which contributes to comfortable operation and a lower noise level in the cab. The gear box also has patented synchronisation which with the assistance of a mechanical servo function, provides extra power at the moment of synchronisation.

3 steerable front axles: Three heavy duty straight I-beam front axles ensure high front approach angle required for off-road applications. Each axle's technical load capacity is 9 tonnes. The axles are fitted with maintenance free unit bearing pre-mounted in hub, which leads to less maintenance and faster repairs. All the



Volvo FM 480 10x4 dump truck comes with 24 M3 rock body.



Vinod Aggarwal,
Chief Executive
Officer of VE Commercial Vehicles

three axles are steerable. The first tow axles are mechanical steerable with hydraulic assistance. The third axle is steered by electronic actuation and hydraulic assistance. The steerability of all the three front axles improves the maneuverability and dynamic stability of the vehicle.

RT 3210HV rear axle: Volvo RT3210HV is a tandem axle with hub reduction, designed for maximum loading capacity of 32 tonne and engine torque of 3550 Nm and high rear axle ratio of 7.21:1 ensures enough tractive effort on the tyre to negotiate the steepest gradient with ease, even under heavy load.

Less kerb weight: More than the necessary expenditure of energy contributes to excessive consumption of fuel. Less kerb weight for given payload consumes less energy for transportation which directly translates to less fuel. More productivity is achieved with less kerb weight of the vehicle and more payloads. The power to weight ratio improved with less kerb weight.

Electronically controlled operations: the engine control module takes in data from several sensors on the engine and the vehicle. The control unit compares current readings with stored parameters and adjusts fuel quantity and injection timing accordingly, through the engine's operation. The vehicle control unit collects data from various sensors for vehicle speed, accelerator position, service brake, parking brake, cruise

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control, retarder and power takeoff, and then transmit it to various other control units in the system. All electronic control units are integrated with each other for accuracy in controls. This keeps the fuel consumption low.

Integrated split gear: The split gear, which is a compact and sturdily supported unit, is fitted on the input shaft in the forward part of the basic unit. The split gear is operated by compressed air, and the split cylinder is integrated into the clutch casing. The high and low positions of the split gear are preselected with a button on the gear lever knob shifting takes place as soon as the clutch pedal is depressed. In the low-split position, a downshift takes place with halves the

KEY FEATURES

- Proven, reliable and powerful driveline.
- Larger footprint for superior stability.
- Air suspended pusher axle with electronically controlled suspension for optimized load distribution.
- Electronically controlled and hydraulically operated steering system for precise steering control and maneuverability.
- The additional parking brake on rear-rear axle improves braking performance, critical in steep gradients.
- The extra strong chassis designed to operate in tough and demanding mining conditions

shifting step between two basic gears. Thanks to the low split function, the correct gear can be selected in relation to the engine's economy speed, which results in lower fuel consumption. The high split together with 6th gear provides a direct gear where the power passes straight through the gearbox with a minimum of friction losses.

Volvo FM480 10x4 tipper comes with uniquely developed rock body suitable for rough and tough application of mining. It comes with specially designed 24 cu m body to be

employed in the highly demanding environment and applications. The higher capacity body enables the customers to get the best in class productivity without much brunt on the fuel efficiency. Higher capacity helps the customer reducing the fleet size for the same gamut of work and thus helps increasing the overall profitability for the customer.

Volvo FM L1EH1 cab offers a very high level of comfort with ideal driving position, anatomically designed seats, low noise level,

high capacity climate control system and a world class safety level. The cab's instruments have a simple and logical design with convenient and easy to use controls. The tipper is fitted with 5 different electronic control units to have all-round control of the vehicle.

VE Commercial Vehicles is a 50-50 per cent joint venture between the Volvo Group and Eicher Motors (EML). It is a partnership that brings together global leadership in technology, quality, safety and environmental care along with the deep knowledge and understanding of the Indian CV market. VECV has its Eicher commercial vehicle manufacturing unit in Pithampur industrial area, Madhya Pradesh.

Volvo Trucks in India is synonymous with the mining and construction industries. Over the years Volvo Trucks has built up an elite customer base having over 100 vehicles in their fleet operating at various mining sites across India.

With resources becoming increasingly scarce and expensive, with higher productivity at optimum cost being the need of the hour, the Volvo FM 480 10x4 43(US) tonne dump truck is the obvious choice of a dump truck for demanding mining applications, requiring higher productivity and performance. With increased productivity and superior fuel economy, it is truly designed to "Do More, With Less." **EI**



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