



# Mach VRT

250

Stage V



# Even more power and performance: Mach 250 VRT.

The new Mach 250 VRT is the latest evolution of the Lamborghini flagship model that has always been the undisputed benchmark in its class. It offers superior operator comfort, even greater operating range and highest efficiency for lowest fuel consumption and operating costs. Equipped with the Deutz TCD 6.1 Stage V engine and the completely new developed VRT transmission the Lamborghini Mach 250 VRT offers outstanding quality and unrivalled performance in field and on the road. The Mach has been engineered to cater for farmers and farming contractors demanding only the very best in terms of productivity, comfort, reliability and exclusive style.

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## Engine

### Unrivalled reliability, power and efficiency.

The new Lamborghini Mach 250 VRT is powered by a 6 cylinder Deutz TCD engine, which is of course compliant with Stage V emissions standards. The engine offers now up to 247 hp and a maximum torque of 1072 Nm. Common rail injection with injection pressures up to 1600 bar, a turbocharger and air-air intercooler maximise combustion efficiency. Reliability is also outstanding, thanks to solutions such as an injection pump lubricated directly with engine oil. For lowest running costs the engine oil replacement interval has been increased to 1000 hours.

Consisting of an exclusive combination of exhaust aftertreatment solutions (SCR, DOC and passive DPF), the emissions package contributes to an extraordinarily low minimum fuel consumption. Combined with the 505-litre, one-piece fuel tank, the result is an incredibly long reach that allows the tractors to work for hours without interruption,

even on the most difficult tasks.

The cooling system maximizes cooling performance and reduces fan noise. With just one hand movement the system can be opened and closed again. That sets the benchmark and makes servicing much more simple and fast. The electronically controlled clutch of the E-viscostatic fan properly modulates the fan speed based on an efficient thermal management strategy, this is aimed to support engine and transmission warm up and increase power output. A pre-cleaning system on the air filter prevents dirt from entering the filter element, making a substantial difference to service time and costs.



## Unimaginable efficiency with the new VRT transmission.

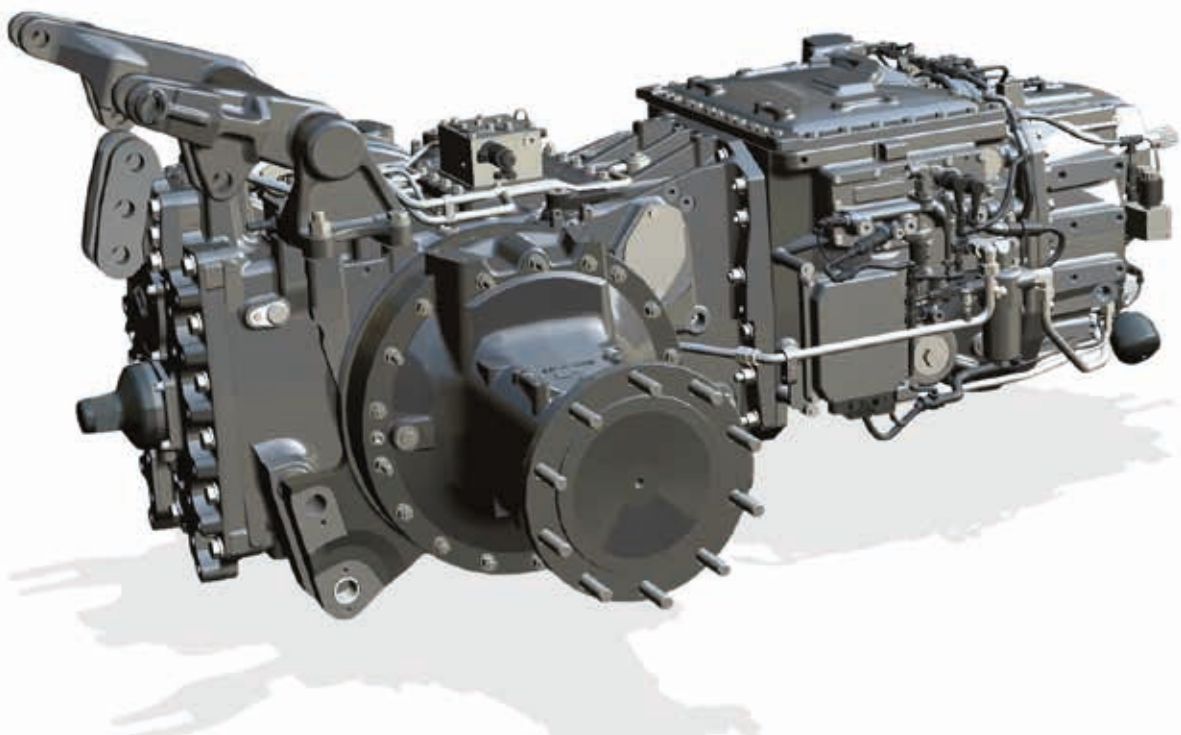
The new continuously variable transmission of the Mach 250 VRT raises the bar for stepless gearboxes both in terms of efficiency and reliability. It was developed together with the new generation of the Lamborghini Mach 250 VRT. The final assembly of tractor with transmission is in the new production site in Lauingen, Germany. This is one of the most advanced tractor plants in the world, ensuring highest quality standards. At the core of the transmission are the multi stage planetary gearbox and the electrohydraulically engaged clutches for shifting between two mechanical drive ratios ensuring no interruption in power delivery. The multi stage planetary gear unit works in conjunction with two highly efficient high pressure hydrostatic units to allow the drive ratio to be varied seamlessly within a range of vehicle speeds from 0 to 60 kph. The innovative configuration of this new VRT transmission ensures progressive power flow management in all possible conditions. Even with frequent, significant changes in vehicle speed, the transmission delivers drive to the wheels with unmatched jolt-free smoothness, for sumptuous operator comfort. Productivity, fuel economy and energy efficiency are outstanding, as power delivery is optimised by the high mechanical power flow in the transmission. The new VRT transmission gives the Lamborghini Mach 250 impressive performance in terms of acceleration, towing capacity and efficiency.

Another feature contributing to comfort and safety is "PowerZero", a function which temporarily holds the machine in a stationary position. As soon as the tractor stops and the driver releases the foot throttle, the tractor is in an active

standstill position without operating the brake pedal. This makes manoeuvring significantly simpler as it allows the tractor to set off again simply and safely when approaching or departing intersections, in poor terrain conditions and when driving on gradients, even if fully loaded.

To maximise draft capability in even the toughest conditions, the torque transmissible to the drive wheels has been significantly increased. In addition, the new VRT transmission allows these tractors to be driven at a road speeds of 60 kph [where permitted] with an engine speed of only 1800 rpm, while at 50 kph it reaches 1500 rpm and at 40 kph the engine turns at only 1200 rpm. This contributes significantly to minimizing consumption and wear and maximizes comfort! The highly acclaimed PowerShuttle is a hydraulic shuttle, letting the driver change direction while on the move and under load with no interruption in torque transmission. Operating the practical lever under the steering wheel or the push buttons on the MaxCom lever inverts direction smoothly, bringing the tractor to a halt and restarting in the opposite direction progressively and fluidly. It offers a choice of 5 user-selectable response levels to adjust the direction change from soft to hard.

The new VRT transmission is the fruit of long experience in producing powertrains. The robust structure combined with less weight, smoothest drivability, easy service access and high mechanical power share is the base for the comfort and dynamic of the new Mach VRT.





## Class-beating power, efficiency and modularity.

A hydraulic system matching extraordinary efficiency and performance and a highly effective PTO are crucial factors in attaining maximum performance with minimised fuel consumption. It is therefore no coincidence that the tractor's hydraulic systems are equipped with the most advanced solutions. The 90 litre capacity main hydraulic circuit is completely independent of the transmission lubrication circuit. Three pump versions are available, with outputs of 120, 160 or 210 l/min. All are load sensing units, preventing unnecessary power absorption when there is no demand for pressurised oil.

The new Lamborghini Mach 250 VRT can be equipped with up to 5 rear hydraulic distributors and 2 front distributors (in addition to the distributor for a front lift). All the distributors on the machine are available with electronic proportional control. A Power Beyond coupling with flat face couplers is also available.

The substantial rear lift has a capacity of 10,000 kg, and comes in standard with a specific position for road transport to minimise the risk of interference with the drawbar and implement drive shaft when steering.

The rear lift uses hydraulic or automatic stabilisers, while the front of the tractor may also be equipped with a lift with position control and an impressive lift capacity of 5,450 kg. The front of the tractor can also feature an interface for connecting ISOBUS certified implements.

The rear PTO comes as standard with a practical quickly interchangeable output stub shaft, and with 3 electronically selectable speed modes (540 ECO, 1000 and 1000 ECO).

The front lift is available with a front PTO offered as a 1000 rpm version, a 1000 ECO version and a version with both modes called DualSpeed. The DualSpeed front PTO allows the operator to switch the PTO speeds from 1000 to 1000 ECO in the InfoCentre<sup>Pro</sup>. ECO modes can be used with both rear and front PTOs simultaneously to significantly reduce fuel consumption and noise levels in the cab.



## Outstanding safety and comfort.

The sturdy front axle features electronically controlled active suspension as standard which, combined with pneumatic cab suspension, ensures unrivalled on-board comfort even in the roughest terrain conditions.

For even quicker headland turns and reduced operator strain, these tractors may be equipped with the EasySteer function which, when enabled, halves the number of steering wheel turns needed to steer the wheels fully. Electrohydraulically engaged 4WD and differential locks are standard, while both of these functions may be controlled automatically by the ASM system in relation to groundspeed and steering angle.

Capable of adaptively optimising vehicle stability in all terrain conditions, the active control system of the front suspension also includes an anti-dive function as standard, which counters sudden front suspension compression under braking to ensure even load distribution over the two axles in all situations. This significantly reduces stopping distances and maximises comfort and safety when driving at high road speeds in traffic. The booster brake system and the optional

high performance dry disc brakes on the front wheels ensure excellent stopping power in response to the lightest touch on the brake pedal. But that's not all: for even greater safety and comfort when towing, the optional pneumatic trailer braking system includes the aTBM function (advanced Trailer Brake Management), a solution developed and patented by SDF which not only optimises trailer braking behaviour but also provides the driver with feedback relative to the state of the trailer brakes.





### The comfort of a lounge matched with next generation technology.

The new Lamborghini Mach 250 VRT offers unparalleled on-board comfort even in the most demanding conditions. Uncompromised operator comfort is a crucial prerequisite for staying focused and alert even after a long and tiring work day.

This new iteration of the MaxiVision 2 cab ensuring immediate, simple access and control over the many advanced functions and automated features made possible by the extraordinary technological content of this tractor family.

The generous interior space, ergonomically designed intelligent control layout, pneumatic cab suspension, premium materials

and style all come together to create a supremely comfortable working environment where everything is exactly where you'd expect, and where the operator can work at peak productivity and in total safety even throughout the longest working day.

So much technology has never been so simple to use: The modern and functionally designed controls are organised rationally within easy reach, while the colour screen of the InfoCenter<sup>Pro</sup> with digital display technology shows all the information necessary concerning the functions and operating status of the machine. In addition to this is the mini MMI, which lets the driver access and configure all the settings of the tractor easily.

As on previous versions, the cab is physically separated from the engine bay to minimise the heat, vibration and noise transmitted to the interior of the cab itself. For even greater



operator comfort, a lower rear panel in acoustically insulating glass helps minimise noise in the cab. Peak noise levels of just 69 dB(A) at maximum engine speed occur. The MaxView windscreen, together with the generously sized side windows and the tapering, sloped design of the bonnet, ensure clear and unobstructed visibility in all directions. With the optional lighting package available for the Lamborghini Mach 250 VRT with 23x LED work lights (for an astonishing 50,000 lumens of total lighting power) turns even the darkest night into day! Owners can take the already sumptuous comfort of the Mach 250 VRT to even greater heights with a choice of exclusive and luxurious optional equipment features and accessories. For example generously sized, comfortable leather seats for both the driver and passenger (The driver seat is capable to swivel by up to 23°) a multifunction armrest with adjustable

position, the automatic air conditioning system, additional new air vents, DAB+ radio with hands free function and Bluetooth, a practical smartphone holder, a tablet rail with RAM socket and much more.

For higher air circulation and best viewing angles the opening roof hatch is offered in a choice of three variants: with an opaque shade screen, with a special surface coating reducing UV light transmission by 70% or in high density, clear polycarbonate certified as a FOPS (Falling Object Protective Structure). All solutions meet the needs of each operator.





## Unparalleled versatility and simplicity for maintenance tasks.

Designing and building tractors with simplified periodical maintenance is a long-standing Lamborghini tradition: The maintenance intervals of these machines have always been extended, while easier access to the parts to be serviced reduces maintenance times.

So it was only natural for the new Mach 250 VRT to stay true to this tradition. Engine oil change intervals have now been extended to an astonishing 1000 hours (or latest after 2 years). The ability to check the engine lubricant level without even opening the bonnet, and to check coolant, hydraulic oil, transmission oil and front PTO oil levels via sight glasses drastically cuts the time necessary to check the machine before even the longest and most arduous working day.

For quick cleaning of the cab, filters and cooling units and to simplify routine maintenance, the Mach 250 VRT tractor has a convenient compressed air connection under the left access ladder. Other features facilitating maintenance include the swing-out cooling pack, a battery accessible easily via a

practical hatch and fuses which can be checked directly inside the cab.

Two SDF ExtraCare extended warranty packs are offered, offering a coverage of 3 years (or 3000 hours) or 5 years (or 5000 hours) respectively.

The new Lamborghini Mach 250 VRT also delivers outstanding performance when used in combination with a front loader. For the first time, the loader kits are also available for the Lamborghini flagship models. A choice of two kits is offered for subsequent installation of a front loader, denominated named "Light kit" and "Ready kit". For highest comfort the front-loader control is fully integrated in the MaxCom armrest – featuring the control of the front loader including 3rd function, the damping system and the easy steer fast steering, making routine loader tasks significantly easier. The new Lamborghini Mach 250 VRT offers versatility in every situation.





### Precision is the basic prerequisite for productivity.

SDF Smart Farming Solutions combines a large number of digital solutions for efficient and comfortable operation of tractors. These solutions include reliable and extremely precise auto-guidance systems, ISOBUS applications and a number of data management systems. The iMonitor is a simple to use centralised controller which plays a key role in the majority of these solutions and applications.

#### SDF Guidance

##### SDF Guidance

Auto-guidance systems feature increasingly as standard equipment in the tractors used by many farms today, due to the evident advantages they offer: saving resources, increasing convenience and productivity as well as reliable precision. Operators can trust its high reliability even in difficult working conditions such as fog or night time. Anyone who has ever worked with a steering system will never want to be without it again. Many precision farming applications are based on satellite navigation. Our receivers use free, internationally available signals which offer different accuracy levels depending on the correction service and the receiver model. Our customers can choose the system that best suits their operation.

#### SDF Data Management

##### SDF Data management

Efficient data management is becoming increasingly important to optimise work processes. No matter which type of data our customer want to work with, whether it's machine or agronomic data: SDF provides various applications for reliable transfer and insight of valuable data. Using standard file formats, customers can keep an overview at all times and data are transferred in a coordinated manner. This ensures maximum compatibility while our customers are always master of their decisions.

#### SDF Fleet Management

##### SDF Fleet management

Optimise operations. Increase efficiency. The new SDF Fleet Management offers customized solutions to manage relevant machine data at a glance. Our customers like farmers, contractors or any other users benefit from full control of their machines by accessing various valuable data. The browser-based SDF Fleet Management application is the central interface to insight telemetry data for Lamborghini Trattori machines. Machine data like fuel level, position or speed are transferred in real time into the application where users can monitor, analyse and optimise the use of their machinery. Error messages can be transmitted to dealer's service manager to prevent upcoming issues and decrease even machine downtime.



##### Agrirouter

For reliable online data exchange between different endpoints, Lamborghini Trattori provides an interface to the agrirouter. It is a universal data exchange platform that allows farmers and contractors to exchange data like field boundaries or guidelines between machinery and any agricultural software applications (e.g. an FMIS) from a wide range of manufacturers.



##### ISOBUS

Electronics make agricultural machinery safer, more powerful, more precise and more efficient. ISOBUS connectivity lets the operator use multiple applications to control different implements individually from a single monitor. iMonitor is the central controller for all ISOBUS applications and can perform many different tasks intuitively and easily, such as assigning AUX-N functions, generating and handling application maps and automatically controlling up to 200 different sections. A great number of functions are even available without activation. TIM automizes various functions between tractor and implement to increase comfort, efficiency and ensures highest level of work quality. A wide range of Lamborghini Trattori tractor models are already TIM-ready and can easily be activated for full usage of tractor implement management.

### HIGHLIGHTS

- Increased productivity
- Easy to use
- Secure data
- Added convenience
- Unprecedented precision
- Advanced connectivity
- Superior compatibility
- Maximised profitability
- More efficient task management

ENGINE		
Model		DEUTZ TCD 6.1 L06
Emission level		Stage V
Cylinders/Displacement	n°/cc	6 / 6058
Turbocharger with charge air cooling		■
e-VISCO cooling fan		■
Injection @ pressure	Type/ bar	Common Rail @ 1.600
Max. power [ECE R120]	kW/Hp	181 / 247
Power at rated speed [ECE R120]	kW/Hp	174 / 237
Speed at maximum power	rpm	1900
Max. engine speed [rated]	rpm	2100
Max. torque	Nm	1072
Speed at maximum torque	rpm	1500
Air filter with dust ejector		■
Fuel tank capacity	l	505
AdBlue capacity	l	35
Oil change interval	Hours	1000
TRANSMISSION		
Model		VRT transmission T7560
Transmission ratio		1,3584
PowerShuttle with 5 different settings		■
Gearbox		VRT - Stepless transmission
Cruise control	qty.	2 each direction
Driving strategies		Auto / Advanced Auto / PTO / Manual
Active standstill (PowerZero)		■
Top speed 40 km/h UltraECO	rpm	1199
Top speed 50 km/h SuperECO	rpm	1499
Top speed 60 km/h ECO	rpm	1799
HYDRAULICS AND LINKAGE		
Pump flow [STD]	l/min	120 LS
Pump flow [OPT]	l/min	160 LS / 210 LS
Separate steering pump (double)	l/min	58 + 28
Spool valves controls	Type	Electronic
Hydraulic auxiliary control valves [STD]	n°	4
Hydraulic auxiliary control valves [OPT]	n°	5 rear / 1 or 2 in front / 1 for front lift
Aux valves settable in time and flow - proportional engagement		■
Power Beyond (standard couplers)		□
Power Beyond (flat face couplers)		□
Automatic lower link stabilisers (mechanical)		■
Automatic lower link stabilisers (hydraulic)		□
Rear linkage lifting capacity [STD]	Kg	10000
External operation on rear fenders		■
Front linkage		□
Front linkage lifting capacity	Kg	5450
Hydraulic upper link		□
Oil change interval	Hours	2000
PTO		
Rear PTO 540ECO/1000/1000ECO		■
Rear auto PTO		■
Front PTO 1000 or 1000 ECO		□
Front PTO DualSpeed 1000/1000ECO changeable in InfoCentre <sup>Pro</sup>		□
Front auto PTO		□
AXLES AND BRAKES		
Model		DANA M60L
Suspended adaptive front axle		□
Electro-hydraulic differential lock 100%		■
ASM system		■
Performance steering ready with EasySteer function		□
Steering angle	Degrees	52
Brake booster (PowerBrake)		■
External dry disc brakes, front		□
Electronic parking Brake (EPB)		■
Pneumatic trailer brake (with aTBM)		□
Hydraulic trailer brake with DualMode function		□
ABS socket		□
Exhaust Engine Brake <sup>Plus</sup>		□



# TECHNICAL DATA

## Mach VRT

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ELECTRICAL SYSTEM		
Voltage	V	12
Standard battery	V/Ah	12 / 180
Alternator	V/A	14 / 200
Starter motor	V/kW	12 / 3,1
External socket		■
Interface for attachments 11786 (7-pole)		□
MAXIVISION CAB		
6-pillar cab		MaxiVision II
Mechanic cab suspension		■
Pneumatic cab suspension		□
Adjustable and telescopic rear view mirrors		■
Heated and electronic adjustable rear view mirrors		□
Air conditioning		■
High visibility roof		□
High visibility roof FOPS		□
Multifunction satellite armrest with MaxCom joystick		■
iMonitor with 8" or 12"		□
AutoTurn		□
XTEND		□
ISOBUS (with rear and in-cab connectors)		□
TIM (Tractor Implement Management)		□
VRC (Variable Rate Control)		□
SC (Section Control) 200 sections		□
SR20 RTK receiver		□
CTM connectivity module		■
Attachment bracket		□
Comfortip Professional		□
Seat Max-Comfort Plus XL with heating function		■
Seat Max-Dynamic Plus DDS XXL with 23° swivel, heating and dynamic damping system		□
Seat Max-Dynamic Evo DDS XXL with synthetic leather, 23° swivel, active climate system and dynamic damping system		□
Passenger seat		■
Pre-arrangement for radio with antenna and loud speakers		■
High-level DAB+ Radio with Bluetooth		□
12x Halogen work lights on cab roof		■
Up to 23x LED work lights		□
Up to 2x Beacon light LED		□
LED driving light		□
FRONT LOADER		
Pre-arrangement light kit		□
Pre-arrangement ready kit with electronic joystick (including HydroFix)		□
Front loader model		FZ 48-33   FZ 48-42
Overloading height	mm	4590
Breakout force 800 mm before the pivot point	daN	4140   4900
DIMENSIONS AND WEIGHTS		
Front tyres (min.)		420/85 R30"
Rear tyres (min.)		520/85 R42"
Front tyres (max.)		710/55 R30"
Rear tyres (max.)		900/60 R38"
Wheelbase	mm	2918
Length	mm	4867 - 6271
Height (max.)	mm	3250 - 3300
Width (max.)	mm	2499 - 2990
Ground clearance	mm	510 -560
Front axle width (flange to flange)	mm	1940
Front axle width with external dry disk brakes (flange to flange)	mm	2046
Rear axle width (flange to flange)	mm	1890
Unladen weight, front	Kg	3640 - 4385
Unladen weight, rear	Kg	5390 - 5940
Total unladen weight	Kg	9030 - 10.325
Wheel weights		□
Maximum permissible axle load, front	Kg	6000
Maximum permissible axle load, rear	Kg	11000
Maximum permissible weight @ 60 kph	Kg	15500

STD ■ OPT □ Not available -

[www.lamborghini-tractors.com](http://www.lamborghini-tractors.com)



Lamborghini Trattori is a brand of  **SDF**

