

Spire VRT





The ultimate high-tech, compact tractors.

The models of the new Lamborghini Spire VRT Stage V family are just compact machines with sophisticated, elegant looks, and are also comprehensively equipped with high-tech features. With the extensive scope for configuration - allowing for a choice of overall widths from 1.75 to 2.20 metres - they are extraordinarily versatile.

This is a range of technologically advanced models which, as well as being outstanding all-rounders for the traditional farm, where they can easily tackle the most common open field jobs, they are also ideal for working in widely spaced fruit orchards and vineyards and for road maintenance applications, as they can be fitted with specific tyres for roadwork tasks.

The strengths of the new Lamborghini Spire VRT family are many, such as a modern but proven continuously variable transmission designed and built entirely by Lamborghini Trattori capable of achieving a mechanical transmission efficiency up to 100% in certain operating conditions, and which also includes the PowerZero function, which holds the machine in complete safety even on steep gradients, without the driver using the brake pedal.

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Reliable and powerful, because it's designed specifically for agricultural applications.

Despite their compact size, the state of the art FARMotion 45 engines boast one of the largest unitary displacements in this class to ensure generous torque even at low engine speeds. These are engines conceived specifically for agriculture, with outstanding performance not only in terms of torque and power delivery but also in terms of fuel consumption. FARMotion 45 features high pressure Common Rail injection (with injection pressures up to 2000 bar), 7-hole injectors and an electronically controlled viscostatic cooling fan: an impressive package of high-tech solutions tailored to deliver maximum performance matched with excellent fuel economy at all times, and extraordinary reliability with minimal maintenance requirements. The tidy under bonnet facilitates ordinary and extraordinary maintenance. Oil change interval has been now extended to 600 h.





Design



Elegant, eye-catching style that could only be Lamborghini Trattori.

Lamborghini Spire VRT Stage V tractors are unquestionably at the top of their class: not just in terms of performance, advanced technology and driver comfort, but also for their unmistakeable, unique, modern and attractive looks.

The compact and perfectly proportioned design of the Spire VRT family, with a state of the art 4-pillar cab and sloped bonnet, expresses the sophistication and outstanding performance of these highly versatile and extraordinarily elegant machines to perfection.



Transmission

The smooth power delivery of hydraulics with the efficiency of a mechanical gearbox: only a VRT transmission can offer so much.

As well as setting the benchmark for reliability and comfort, the modern but already proven VRT transmission is capable of varying ratio and groundspeed seamlessly to take full advantage of the power of the FARMotion 45 engine and make work simpler and more productive than ever. These tractors offer outstanding safety and boast high efficiency thanks to 100% mechanical power flow in certain operating conditions, and the PowerZero function, which holds the machine in complete safety even on steep gradients, without the driver using the brake pedal.

Spire VRT Stage V tractors can be driven on the road at up to 40 km/h while remaining at low engine speeds, whereas electrohydraulically engaged 4WD and differential locks, offered as standard, ensure excellent productivity in the field in all terrain conditions.

The MaxCom armrest with its highly ergonomic joystick ensures simple, intuitive control of the machine. All the primary functions are at the operator's fingertips, while the practical integrated dial lets the operator choose from a wide choice of engine management modes, including "Eco", for minimised fuel consumption, and "Power", for maximised power.





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Generously equipped for outstanding versatility.

The rear PTO offers 540 rpm, 540 ECO and 1000 rpm modes as standard, as well as a function which engages and disengages the PTO automatically in relation to rear lift height and an interchangeable stub shaft. The PTO features a proportionally engaged electromechanical clutch for starting and stopping even high inertia implements without sudden kickback.

The rear PTO is usually operated from the specific ergonomically positioned control on the MaxCom armrest, but can also be controlled directly from outside the cab, with buttons situated on the rear mudguards. A groundspeed PTO and a 1000 rpm front PTO are also available as options.





Axles and brakes

Premium solutions as standard for axles and braking, while the revolutionary independent front axle suspension is available as an option.

For even quicker headland turns, these tractors may be equipped with the SDD function which, when enabled, halves the number of steering wheel turns needed to steer the wheels fully. Electrohydraulically engaged 4WD and differential locks are offered as standard. These functions can also be controlled automatically by the ASM, which engages and disengages 4WD and the differential locks in relation to groundspeed and steering angle. Braking safety is ensured by all-wheel brakes and the HPB hydraulic parking brake, with impeccable holding performance even on very steep gradients.





Front axle with independent articulated quadrilateral suspension.

As an alternative to a conventional swing axle, Spire VRT tractors are available with innovative articulated quadrilateral front suspension. The suspension cylinders are managed adaptively by a dedicated control unit, which works in concert with the DTC front differential control function.

Offering a combination of active damping, self-levelling and traction control capabilities, the exclusive independent suspension system of Spire VRT tractors improves stability, grip, traction, comfort and safety in all terrain conditions, both in the field and on the road. Boasting a compact design and highly effective integrated management functions, this solution also includes Anti-Dive and Anti-Roll functions, which significantly increase active safety and driver comfort, but also productivity in tasks demanding extreme precision, such as row, hedge and living wall maintenance.

Two new buttons - located on the left side of steering wheel - allow the manual adjustment of the stroke of front axle suspension in order to facilitate coupling manoeuvres with front implements and maintenance operations.





All the power and configurability you could ever want.

Lamborghini Spire VRT Stage V tractors offer huge scope for configuring the hydraulic system, with a choice ranging from an 84 I/min pump dedicated to the lift and distributors to a closed centre system with Load Sensing pump capable of delivering up to 100 I/min and an engine speed of just 1850 rpm, for trouble-free operation even with implements with very high hydraulic flow demands. All variants come as standard with an additional 42 I/min pump dedicated to the hydraulic steering system, for smooth, progressive steering action in all conditions.

The hydraulic distributors are available in a choice of configurations with from 6 to 10 rear couplers. All configurations include free return couplers, electronic hydraulic flow control and adjustable timer control. As options, tractors can also be equipped with the Power Beyond and an additional 2 or 4 mid-mounted couplers with free return and 2 front couplers.

To maximise the versatility and multi-role capability of these machines, the Spire VRT family is offered with two different versions of the rear 3-point linkage: with a standard configuration linkage for open field tasks and another, compact linkage making narrower track widths possible. Both rear lift variants are electronically controlled and feature a system for damping implement oscillation when driving on roads as standard. Impressive lifting capacity lets these tractors work effectively with any type of mounted implement: the compact version is capable of lifting up to 3660 kg (at the quick hitch couplers), while the standard version can lift a remarkable 4310 kg. A 2100 kg front lift is available as an option, which can also be equipped with a 1000 rpm front PTO.







Driving position





A concentrated package of high technology for unparalleled operator comfort.

The 4 pillar cab suspended on Hydro Silent-Blocks offers unrivalled levels of safety, visibility and comfort. The standard equipment already includes air conditioning, the InfoCentrePro colour display and a liftable panel at the rear of the cab roof. The generous choice of options on offer includes a number of different driver seats, an audio system with Bluetooth, a practical folding work surface with oddments storage compartment and the 8" iMonitor. In addition to these is a cab variant with certified category 4 filtration, suitable for use as PPE when working with protective crop treatments: this cab configuration means that Spire VRT Stage V tractors may be used to apply crop treatment chemicals in total safety, without requiring the operator to wear bulky and uncomfortable protective overalls and masks while working. All the controls in the cab are ergonomically laid out and easy to use, while superior levels of comfort are ensured by hightech features you'd normally expect to see only in rangetopping premium models, such as the exclusive MaxCom armrest, which lets the operator control all the functions and systems of the machine, from the transmission and hydraulic functions to engagement of the four wheel drive system and differential locks.

Ample scope for configuration is also offered for the auxiliary electrical connectors inside and outside the cab, while the road and work lights are available as both halogen or LED variants. And the ultimate in terms of connectivity, these tractors can be equipped with the latest SDF Smart Farming Solutions, such as ISOBUS, telemetry and fully integrated auto-guidance.



TECHNICAL DATA		SPIRE VRT		
		95	105	115
ENGINE				
Model			FARMotion 45	
Emission level			Stage V	
Cylinders/Displacement	nº/cc		4 / 3849	
Turbocharger with charge air cooling e-VISCO cooling fan				
Injection @ pressure	Type/ bar		Common Rail @ 2.000	
Max. power (ECE R120)	kW/Hp	70/95	78/106	85/116
Max. power with Boost (ECE R120)	kW/Hp	-	-	93/126
Power at rated speed (ECE R120)	kW/Hp	66,4/90	74/101	80,6/110
Speed at maximum power	rpm	2000	2000	2000
Max. engine speed (rated)	rpm	2200	2200	2200
Max. torque	Nm	389	433	472
Max. torque with Boost	Nm	-	-	444
Speed at maximum torque	rpm	1400	1400	1400
Air filter with dust ejector				
Fuel tank capacity (STD/OPT)	1		95/115	
AdBlue capacity			13	
Oil change interval	Hours	600	600	600
TRANSMISSION	1			
Model			CVT transmission	
Transmission ratio			1,3832	
PowerShuttle with 5 different settings VRT	I I		-	
Gearbox			VRT - Stepless transmission	
Cruise control	qty.		2 each direction	
Driving strategies			Auto / PTO / Manual	
Active Standstill (PowerZero)				
Top speed 40 km/h SuperECO	rpm		1730	
HYDRAULICS AND LINKAGE				
Pump flow (STD)	l/min		84	
Pump flow (OPT)	l/min		100 LS	
Separate steering pump				
Spool valves controls	Туре		Electronic	
Hydraulic auxiliary control valves (STD)	nº		3	
Hydraulic auxiliary control valves (OPT)	n°		up to 5 rear / 1 for front lift	
Aux valves settable in time and flow - proportional engagement				
Power Beyond (standard couplers)				
Free pressureless return Mid-mounted hydraulic ways	n°		0/2/4	
Front hydraulic ways	n°		0/2/4	
Automatic lower link stabilisers (mechanical)				
Rear linkage lifting capacity (STD)	Kg		4310	
Rear linkage lifting capacity (OPT - Compact Three point hitch)	Kg		3660	
Rear linkage lift category	Cat.			
External operation on rear fenders				
Front linkage				
Front linkage lifting capacity	Kg		2100	
Hydraulic tie rod				
Hydraulic stabilisers				
Oil change interval	Hours		1200	
PTO				
Rear PTO 540/540ECO/1000			_	
Rear auto PTO				
Groundspeed PTO				
Front PTO 1000 AXLES AND BRAKES	I		U	
Model			SDF	
Independent suspended front axle				
Electro-hydraulic differential lock 100%				
Auto 4WD system				
ASM system				
Steering Double Displacement SDD				
Performance steering ready with EasySteer function				
	Degrees		55	
Steering angle	Degrees			
Steering angle Hydraulic Parking Brake (HPB)	Degrees			

		SPIRE VRT				
TECHNICAL DATA		95 105 115				
ELECTRICAL SYSTEM						
Voltage	V	12				
Standard battery	V /Ah	12 / 100				
Alternator	V/A	14 / 170				
Starter motor	V / kW					
External socket						
Interface for attachments 11786 (7-pole)						
External mid-mounted electric sockets						
CAB						
4-pillar cab						
Suspended on Hydro Silent-Block						
Adjustable and telescopic rear view mirrors						
Heated and electronic adjustable rear view mirrors						
Air conditioning						
Liftable rear top roof						
FOPS roof						
MaxCom armrest						
iMonitor 8"						
AutoTurn						
XTEND						
ISOBUS (with rear and in-cab connectors)						
VRC (Variable Rate Control)						
SC (Section Control) 200 sections						
SR20 RTK receiver						
CTM connectivity module						
Comfortip Professional						
Seat with pneumatic suspension						
Pre-arrangement for radio with antenna and loud speakers						
Radio with Bluetooth						
4x Halogen work lights on cab roof						
Up to 8x LED work lights						
Beacon light LED						
DIMENSIONS AND WEIGHTS						
Front tyres (min.)		280/85 R24				
Rear tyres (min.)		320/85 R36				
Front tyres (max.)		380/70 R20				
Rear tyres (max.)		540/65 R30				
Wheelbase	mm					
Length	mm					
Height (max.)	mm					
Width (minmax.)	mm					
Ground clearance	mm					
Front axle width (flange to flange)	mm					
Rear axle width (flange to flange)	mm					
Unladen weight, front	kg					
Unladen weight, rear	kg kg					
Total unladen weight	kg					
Maximum permissible axle load, front	kg					
Maximum permissible axle load, rear	kg					
Maximum permissible weight	kg					

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STD 🔳 OPT 🗖 Not available -



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