



Spire VRT

90 | 100 | 90.4 | 100.4 | 110.4



The ultimate high-tech, compact tractors.

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

Engine

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

Despite their compact size, the state of the art FARMotion 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. 90 and 100 models are offered with a choice of 3 or 4 cylinders - the former for greater agility and the latter for impressive draft power - while the Spire 110.4 is powered by a 4 cylinder unit. All versions feature high pressure Common Rail injection (with injection pressures up to 2000 bar), 7-hole injectors and an electronically controlled viscous cooling fan: an impressive package of high-tech solutions tailored to deliver superlative performance matched with excellent fuel economy at all times, and extraordinary reliability with minimal maintenance requirements. Compliance with Stage III B emissions regulations is attained with a DOC catalytic converter and an electronically controlled external EGR system, both of which are maintenance-free and requiring no costly periodical regeneration cycles.





Design

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

Lamborghini Spire VRT tractors are unquestionably at the top of their class: not just in terms of performance, advanced technology and driver comfort, but also for their unmistakable, 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 cowl, 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 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 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.



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, and 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 arm front axle 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.



Hydraulics and lifts

All the power and configurability you could ever want.

Lamborghini Spire VRT tractors offer huge scope for configuring the hydraulic system, with a choice ranging from an 84 l/min pump dedicated to the lift and distributors to a closed centre system with Load Sensing pump capable of delivering up to 100 l/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 l/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 4 to 10 rear couplers. All configurations include free return couplers, electronic hydraulic flow control and settable timer control. As options, tractors can also be equipped with the Power Beyond and an additional 2 or 4 belly 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 2880 kg front lift is available as an option, which can also be equipped with a 1000 rpm front PTO.



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 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 superlative levels of comfort are ensured by high-tech features you'd normally expect to see only in range-topping 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 Connected Farming Systems technology, such as ISOBUS, telemetry and GPS capability.





TECHNICAL DATA		Spire VRT				
		90	100	90.4	100.4	110.4
ENGINE						
Manufacturer		SDF	SDF	SDF	SDF	SDF
Model		FARMotion	FARMotion	FARMotion	FARMotion	FARMotion
Emissions compliance		Stage III B				
Cylinders/capacity	No./cc	3/2887	3/2887	4/3849	4/3849	4/3849
Common Rail	bar	2000	2000	2000	2000	2000
Turbo Intercooler		■	■	■	■	■
Maximum power (ECE R120)	kW/HP	65/88	71/97	65/88	75/102	83/113
Power at rated engine speed (ECE R120)	kW/HP	61,5/83	67/91	61,8/84	71,5/97	79/107
Max. torque at 1600 rpm	Nm	354	369	354	408	435
Fuel tank capacity (std/opt)	Litres	95/115	95/115	95/115	95/115	95/115
VRT CONTINUOUSLY VARIABLE TRANSMISSION						
Max. speed	km/h@rpm	40@1730	40@1730	40@1730	40@1730	40@1730
PowerZero		■	■	■	■	■
Hydraulic reverse shuttle with SenseClutch		■	■	■	■	■
REAR PTO						
Electrohydraulically engaged		■	■	■	■	■
540/540ECO/1000 PTO		■	■	■	■	■
540/540ECO PTO and ground speed PTO		□	□	□	□	□
FRONT PTO						
Electrohydraulically engaged		■	■	■	■	■
PTO 1000		□	□	□	□	□
AXLES AND BRAKES						
Auto 4WD		□	□	□	□	□
ASM		□	□	□	□	□
Hydraulic parking brake (HPB)		■	■	■	■	■
Hydraulic trailer braking		□	□	□	□	□
Rapid steering system (SDD)		□	□	□	□	□
FRONT AXLE WITH INDEPENDENT SUSPENSION						
Adaptive Damping		■	■	■	■	■
Active Self-Levelling		■	■	■	■	■
Anti-Dive		■	■	■	■	■
Anti-Roll		■	■	■	■	■
DTC (Differential Traction Control)		■	■	■	■	■
LIFT						
Vibration damping system		■	■	■	■	■
Rear lift load capacity (standard 3-point linkage)	kg	4310	4310	4310	4310	4310
Rear lift load capacity (compact 3-point linkage)	kg	3660	3660	3660	3660	3660
Front lift		□	□	□	□	□
Front lift capacity	kg	2880	2880	2880	2880	2880
HYDRAULIC SYSTEM						
Load Sensing pump capacity	l/min	100	100	100	100	100
Fixed displacement pump flow rate	l/min	84	84	84	84	84
Rear electrohydraulic distributors	No. of couplers	4/6/8/10	4/6/8/10	4/6/8/10	4/6/8/10	4/6/8/10
Belly couplers, inclusive of free return couplers (opt)	No. of couplers	2+1/4+1/ 6+1	2+1/4+1/ 6+1	2+1/4+1/ 6+1	2+1/4+1/ 6+1	2+1/4+1/ 6+1
CAB						
Comfortip (headland turn management system)		■	■	■	■	■
Air-sprung seat suspension		■	■	■	■	■
Cab with Hydro Silent-Block suspension		■	■	■	■	■
LED work lights (4th generation)		□	□	□	□	□
Cat. 4 air filtration system		□	□	□	□	□
8" iMonitor		□	□	□	□	□
Rear cameras		□	□	□	□	□
DIMENSIONS AND WEIGHTS						
Wheelbase	mm	2141	2141	2271	2271	2271
Overall width (min-max)	mm	1745-2174	1745-2174	1745-2182	1745-2182	1745-2182
Total unladen weight	kg	3950	3950	4050	4050	4050
Maximum permissible load	kg	5800	5800	5800	5800	5800

STD ■ OPT □ Not available -

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Lamborghini Trattori is a brand of  SDF

