



SPIRE F/S/V VRT

90 | 100 | 90.4

105 | 115



The most futuristic specialised tractor in existence.

The new Lamborghini Spire F/S/V VRT models are the epitome of technological innovation in the field of specialised tractors. Thanks to the range of versions available (F, S and V), they're ideal for planting densities of different widths. These models stand out for their smart, pioneering design, strictly in keeping with the consolidated tradition of the Lamborghini Trattori brand. Never before has such an advanced, seen, with a wealth of first class technological solutions. Available with FARMotion 3- or 4-cylinder engines, the Lamborghini Spire F/S/V VRT are



TRANSMISSION, AXLES AND BRAKES

The brand new VRT transmission guarantees the smooth operation typical of hydrostatic transmissions, but at the same time offering the high efficiency of entirely mechanical versions. In addition, the maximum speed of 40km/h is reached and maintained with the engine running at a cost-saving reduced speed based on the size of the rear wheels. The automatically engaged front wheel drive system and complete differential locking ensure unparalleled productivity in any working condition.

Thanks to the painstakingly rationalised layout, the new transmission is highly compact, manageable and easy to use. The clutch, gears, accelerator and brakes are no longer needed when driving the tractor. The system is extremely user-friendly: all the main commands are immediately to hand, and a dedicated potentiometer lets the operator select from a variety of engine management modes ranging from ECO (to minimise diesel consumption) to Power (which, on the other hand, maximises performance). Furthermore, the control unit software features 3 different operating modes: manual, PTO and automatic. Another aspect of the new continuously variable transmission is that it's suitable for groundspeed PTO mode, which is particularly useful when working with driven axle trailers.

The Lamborghini Spire F/S/V VRT models come with both tilting front axle with tapered support and an innovative front semi-active hydro-pneumatic suspension with four-bar linkage and independent arms.

Its structure makes the two front wheels independent - in other words, each one is free to make its own vertical movements. The exclusive suspension is a pioneering technical solution that not only enhances the level of safety but at the same time increases the productivity of both the machine and the equipment

The most innovative specialised tractor in existence.



also distinguished for their innovative continuously variable transmission and brand new cabs, now even more exclusive and comfortable. The new F/S/V VRT versions, bringing continuously variable transmission on specialised tractors to Lamborghini Trattori for the first time, already boast a wide range of fittings as standard, but these can be further enhanced with independent front suspension with active control and

various high-performance options for the hydraulic system. The elegant design, in keeping with the Lamborghini family feeling, is the umpteenth success of the fruitful collaboration with GFG Style (Giorgetto & Fabrizio Giugiaro), setting the Spire F/S/V VRT models apart with that touch of class that makes the difference.



connected to it. Thanks to dedicated actuators managed by an ECU, the reactivity of the individual suspensions offers outstanding dynamic behaviour; whether in the field or on the road. Besides a significant increase in comfort in every working condition, there's also a considerable improvement in precision when working on foliage. Suspension rigidity is varied continuously - regardless of the load on the front axle - to take full advantage of the damping stroke.

The innovative management software is automatically activated after the 3km/h threshold. In any case however, the suspension can be locked by means of a command in the cab: this is especially handy when carrying out manoeuvres with the rear forklift. The software includes anti-dive and anti-roll functions as standard.

The anti-dive function increases safety when braking, as it prevents the front chassis from ditching, with the consequential transfer of the load onto the front axle.

The result is better load distribution across all four wheels, even during sharp braking, which translates into reducing stopping distances. The anti-roll function, on the other hand, automatically adapts

the suspension system stiffness to the steering angle and ground speed, for better grip and stability both on the road and in the field. On bends, the suspension of the outer wheel is made stiffer than the internal one to limit the roll and enhance machine stability, thereby improving the active safety level. In addition, the self-adaptation function varies suspension rigidity on the basis of the load of the equipment attached to the front or rear, but can also improve the balance of the tractor when heavy implements such as trimming and pruning attachments are loaded in cantilever mode on the sides.



The safest specialised tractor in existence.

DUAL TRACTION

Dual traction, with electrohydraulically engaged 100% locking of the front and rear differentials, ensures superlative traction in all situations.

STEERING

Their excellent steering angle makes the Lamborghini Spire F/S/V VRT highly manoeuvrable, even in the narrowest headlands. Thanks to the low centre of gravity and the constantly correct allocation of weights on the front and rear axles, traction is exceptional on even the most difficult ground. With the "AUTO 4WD" function, the operator no longer has to worry about engaging/



MAXCOM ARMREST

Specialised farming often entails the use of hydraulic implements requiring very high oil flow demands. With their first-class hydraulic systems and a wide choice of distributor numbers and positions, the Lamborghini Spire F/S/V VRT offer remarkable versatility. But what really makes them stand out from the competition are the new MaxCom armrests: sophisticated technology concentrated in just 20cm of width, making them ideal for the limited space inside an orchard/vineyard tractor. The MaxCom armrests make it easier, quicker and more practical to control the machine and all the hydraulically activated equipment. MaxCom has a handy new joystick that's simple and user-friendly, for managing the transmission, the automatic sequence of manoeuvres at the end of the field, and the hydraulic distributors. The armrest is fully integrated with the seat structure, and can be adjusted lengthwise to ensure that the operator can reach all the commands with the tips of his fingers while his right arm remains supported, thereby avoiding the typical jolts to the shoulder when using side consoles.

Each distributor is associated with a single command, and all the commands are arranged according to their function, using a colour logic to avoid mistakes. In the most complete configuration, the nine distributors (five at the rear and four at the front) can be activated independently by nine dedicated armrest commands. No other specialist tractor offers more! Thanks to the personalisation of the hydraulic controls, the matching of each distributor with a different command ergonomically most suitable for a

The most advanced specialised tractor in existence.

disengaging front wheel drive as it's managed automatically on the basis of ground speed and steering angle. The front differential is also controlled automatically: thanks to the two speed sensors on the front wheels, engagement/disengagement is gradual. The driver doesn't need to deal with these repetitive operations, and this means a notable improvement in comfort, productivity and active safety. The tapered chassis, new hood profile, innovative front axle and optimised positioning of the systems all contribute to give the Lamborghini Spire F/S/V

VRT a highly reduced turning radius that can be limited even further with the pioneering rear steering axle. The 4-wheel steering system available on the Spire F VRT models ensures optimum manoeuvrability and operating safety on slopes, thanks to the possibility to choose from various automated steering modes and to define a rear steering angle to compensate for the downhill slide of the rear chassis. The steering system is powered via a dedicated gear pump, making the steering action smooth and responsive in all conditions.

BRAKES

The use of oil-bath brakes on all 4 wheels guarantees an outstanding level of safety in every situation, whereas the option of a rear differential with discs ensures smooth, progressive engagement and disengagement.



given application, and the programmable functions (time, flow, priority), the hydraulic system can be successfully connected to even the most complex equipment.

The new MaxCom armrest allows the operator to fully manage the functions of the equipment via the commands on the tractor itself, without having to install bulky additional command units in the cab just for those specific implements.

The most efficient specialised tractor in existence.

HYDRAULICS.

To meet the ever growing hydraulic capacity needs, the Spire F/S/V VRT models are fitted with a powerful Load Sensing pump that guarantees 100 l/min at just 1,850 rpm (for the lifts and distributors) and another pump - 42 l/min - for the power steering system, to ensure progressive, adjustable steering even with the engine running at minimum speed and regardless of any other hydraulic requests. If the hydraulic capacity request of the equipment is lower, the Spire F VRT can be fitted with an open-centre system with an 84 l/min pump.



CAB

The cab structure uses just 4 pillars to ensure optimum visibility in every direction. The new Hydro Silent-Block suspension between the cab and the main body of the tractor further improve the already high level of comfort; the driver area, with a flat platform (i.e. without the cumbersome central tunnel), guarantees excellent comfort levels during the longest working days.

Thanks to a detailed ergonomic study, the typically limited space of the specialised tractor can be fitted out with the technology usually adopted on top-of-the-range models, whilst at the same time ensuring remarkably easy use of even the most advanced functions. The cab comes with mudguards shaped to house both tall tyres (28") and short ones (20"). Furthermore, an openable windscreen is available for all versions, apart from the monolithic high visibility one. The cab is type-approved as "category 4", meaning that it guarantees effective protection of the operator when working with crop treatment products.

The most attractive specialised tractor in existence

Up to five electronically controlled distributors can be installed at the rear (for a total of ten couplings). Another eight couplings can be installed at the front, adding two high-capacity distributors (one of them double-acting), duplicated by two more rear couplings and two free return lines. In any case, the electronic control allows the quantities and times to be programmed for the flow rates required on the various couplings, and also enables any possible supply priorities to be established.

The electronically controlled rear lift has a maximum capacity of 3,800kg (2,600kg on the Spire S/V VRT), whereas the optional front lift has a maximum capacity of 1,500kg.



INSTRUMENT PANEL

The new central instrument panel automatically follows the steering column (in terms of both tilt and length stroke) to make sure the on-board instruments are always perfectly visible. The indications relating to machine settings and functioning are shown in a clear, easily understandable way on the InfoCentrePro display and, upon request, on the on-board computer with 8" touch-screen iMonitor that allows the driver not only to adjust the main machine parameters but also to use the video cameras and the Agrosky automatic satellite driving system.

ROOF

On the Lamborghini Spire F/S/V VRT, even the roof has been designed with painstaking care. Its tapered, corner-free profile means the Spire F/S/V VRT models can move easily between hanging branches without damaging them. The inside of the roof contains a powerful air-conditioning system, now with a new condenser and cover to further boost efficiency.

The positioning of the numerous adjustable vents has been updated to ensure a more even and constant flow of conditioned air in the cab. Filter maintenance is quick and simple because the filters can so easily be removed from their side seat. The front part of the new roof houses four work LED headlights (the two at the sides can be orientated as necessary). The back part of the roof can be raised for better upward visibility, which is handy when using a rear loader.

**The most
powerful
specialised
tractor in
existence.**



ENGINE, PTO

3 or 4 cylinders, to maximise handling or load capacity: this is the well-known and well-tested FARMotion - an engine purposely designed for the agricultural environment but which, in this version, stands out for its uniquely compact form and excellent torque and power levels that are ideal for working along the rows of vines.

The FARMotion is also characterised by cost-effective running, thanks to specific consumption values amongst the best of its category and guaranteed by an electronically controlled Common Rail (up to 2,000 bar), a turbocharger with intercooler, a viscostatic cooling fan and DOC exhaust gas post-treatment (a maintenance-free element that alone ensures compliance with Stage III B in terms of the limitation of polluting emissions). Class-beating performance: at just 2,200 rpm, the Lamborghini Spire F/S/V VRT 115 supplies 113 HP. PTO is standard, with progressive electrohydraulic coupling and three different operating modes (540, 540 ECO and 1000 rpm). The Auto PTO function automatically engages and disengages the PTO according to the position of the implement hitched to the 3-point linkage; an operating mode synchronised with the gearbox is available upon request. Also at the purchaser's request, a front PTO (1,000 rpm) can be installed.



| SPIRE F VRT | | 90 | 100 | 90.4 | 105 | 115 |
|--|----|------------|------------|-------------|------------|------------|
| With front tyres (ETRTO section) | | 280/70 R16 | 280/70 R16 | 280/70 R16 | 280/70 R16 | 280/70 R16 |
| With rear tyres (ETRTO section) | | 380/70 R24 | 380/70 R24 | 380/70 R24 | 380/70 R24 | 380/70 R24 |
| Length from the front ballast support to the rear lift arm | mm | 3718 | 3718 | 3848 | 3848 | 3848 |
| Max width (A) | mm | 1588 | 1588 | 1588 | 1588 | 1588 |
| Height at cab (B) | mm | 2445 | 2445 | 2445 | 2445 | 2445 |
| Height from wheel centre to cab roof | mm | 1870 | 1870 | 1870 | 1870 | 1870 |
| Ground clearance | mm | 247 | 247 | 247 | 247 | 247 |
| Wheelbase | mm | 2044 | 2044 | 2174 | 2174 | 2174 |
| Total unladen weight (min-max) | kg | 3187-3780 | 3187-3780 | 3415-4008 | 3415-4008 | 3415-4008 |
| Maximum permitted load | kg | 5200 | 5200 | 5200 | 5200 | 5200 |

| SPIRE S VRT | | 90 | 100 | 90.4 | 105 | 115 |
|--|----|------------|------------|-------------|------------|------------|
| With front tyres (ETRTO section) | | 240/70 R16 | 240/70 R16 | 240/70 R16 | 240/70 R16 | 240/70 R16 |
| With rear tyres (ETRTO section) | | 360/70 R24 | 360/70 R24 | 360/70 R24 | 360/70 R24 | 360/70 R24 |
| Length from the front ballast support to the rear lift arm | mm | 3738 | 3738 | 3868 | 3868 | 3868 |
| Max width (A) | mm | 1369 | 1369 | 1369 | 1369 | 1369 |
| Height at cab (B) | mm | 2420 | 2420 | 2420 | 2420 | 2420 |
| Height from wheel centre to cab roof | mm | 1870 | 1870 | 1870 | 1870 | 1870 |
| Ground clearance | mm | 233 | 233 | 233 | 233 | 233 |
| Wheelbase | mm | 2086 | 2086 | 2216 | 2216 | 2216 |
| Total unladen weight (min-max) | kg | 3165-3768 | 3165-3768 | 3218-3821 | 3218-3821 | 3218-3821 |
| Maximum permitted load | kg | 4800 | 4800 | 4800 | 4800 | 4800 |

| SPIRE V VRT | | 90 | 100 | 90.4 | 105 | 115 |
|--|----|------------|------------|-------------|------------|------------|
| With front tyres (ETRTO section) | | 240/70 R16 | 240/70 R16 | 240/70 R16 | 240/70 R16 | 240/70 R16 |
| With rear tyres (ETRTO section) | | 380/70 R20 | 380/70 R20 | 380/70 R20 | 380/70 R20 | 380/70 R20 |
| Length from the front ballast support to the rear lift arm | mm | 3735 | 3735 | 3865 | 3865 | 3865 |
| Max width (A) | mm | 1293 | 1293 | 1293 | 1293 | 1293 |
| Height at cab (B) | mm | 2395 | 2395 | 2395 | 2395 | 2395 |
| Height from wheel centre to cab roof | mm | 1870 | 1870 | 1870 | 1870 | 1870 |
| Ground clearance | mm | 241 | 241 | 241 | 241 | 241 |
| Wheelbase | mm | 2086 | 2086 | 2216 | 2216 | 2216 |
| Total unladen weight (min-max) | kg | 3081-3590 | 3081-3590 | 3134-3643 | 3134-3643 | 3134-3643 |
| Maximum permitted load | kg | 4800 | 4800 | 4800 | 4800 | 4800 |

Technical data.

| SPIRE F-S-V VRT | | 90 | 100 | 90.4 | 105 | 115 |
|--|--------|-------------|-------------|-------------|-------------|-------------|
| ENGINE | | | | | | |
| Manufacturer | | SDF | SDF | SDF | SDF | SDF |
| Model | | FARMotion | FARMotion | FARMotion | FARMotion | FARMotion |
| Emissions | | Stage III B |
| Cylinders/Capacity | no./cc | 3/2887 | 3/2887 | 4/3849 | 4/3849 | 4/3849 |
| 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 |
| Maximum torque | Nm | 354 | 369 | 354 | 408 | 435 |
| Engine speed at maximum torque | rpm | 1600 | 1600 | 1600 | 1600 | 1600 |
| Electronic engine control | | • | • | • | • | • |
| Diesel tank capacity | litres | 95 (85 S/V) |
| Diesel tank capacity with front lift + PTO | litres | 75 (65 S/V) |

| | | | | | | |
|--------------------------------------|------|-----------|-----------|-----------|-----------|-----------|
| CONTINUOUSLY VARIABLE TRANSMISSION | | | | | | |
| Manufacturer | | SDF | SDF | SDF | SDF | SDF |
| Model | | T3500 CVT |
| Number of gears | no. | 2 | 2 | 2 | 2 | 2 |
| Maximum speed (with 28" wheels) | km/h | 40@1650 | 40@1650 | 40@1650 | 40@1650 | 40@1650 |
| PowerZero | | • | • | • | • | • |
| CruiseSpeed | no. | 2+2 | 2+2 | 2+2 | 2+2 | 2+2 |
| Driving strategies (Auto/Manual/PTO) | | • | • | • | • | • |
| Eco/Power control | | • | • | • | • | • |
| Hydraulic reverse shuttle | | • | • | • | • | • |
| SenseClutch with 5 response levels | | • | • | • | • | • |

| | | | | | | |
|--|---------|----|----|----|----|----|
| AXLES AND BRAKES | | | | | | |
| 4WD engagement with electrohydraulic command | | • | • | • | • | • |
| Differential block with electrohydraulic command | | • | • | • | • | • |
| Auto 4WD | | o | o | o | o | o |
| ASM | | o | o | o | o | o |
| Four-wheel braking system | | • | • | • | • | • |
| Hydraulic parking brake (HPB) | | • | • | • | • | • |
| Hydraulic trailer braking | | o | o | o | o | o |
| Power steering with independent pump | l/min | 42 | 42 | 42 | 42 | 42 |
| Rapid steering system (SDD) | | o | o | o | o | o |
| Front axle steering angle | degrees | 60 | 60 | 60 | 60 | 60 |
| 4-wheel steering system (Spire F CVT) | | - | o | - | - | o |
| Rear axle steering angle | degrees | - | 18 | - | - | 18 |

| | | | | | | |
|-------------------------------------|--|---|---|---|---|---|
| REAR PTO | | | | | | |
| Electrohydraulic engagement | | • | • | • | • | • |
| PTO 540/540ECO/1000 | | • | • | • | • | • |
| 540/540ECO PTO and ground speed PTO | | o | o | o | o | o |

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|---|-----------|-----------|------------|-------------|------------|------------|
| FRONT PTO | | | | | | |
| Electrohydraulic engagement | | • | • | • | • | • |
| PTO 1000 | | ○ | ○ | ○ | ○ | ○ |
| ACTIVEDRIVE SUSPENSION (OPT) | | | | | | |
| Adaptive-damping | | • | • | • | • | • |
| Active Self-Levelling | | • | • | • | • | • |
| Anti-Dive | | • | • | • | • | • |
| Anti-Roll | | • | • | • | • | • |
| DTC (Differential Traction Control) | | • | • | • | • | • |
| LIFT | | | | | | |
| Rear lift with electronic command | | • | • | • | • | • |
| Rear lift capacity (Frutteto S and Frutteto V) | kg | 2600 | 2600 | 2600 | 2600 | 2600 |
| Rear lift capacity (Frutteto) | kg | 3800 | 3800 | 3800 | 3800 | 3800 |
| Front lift | | ○ | ○ | ○ | ○ | ○ |
| Front lift capacity | kg | 1500 | 1500 | 1500 | 1500 | 1500 |
| HYDRAULIC SYSTEM | | | | | | |
| Closed centre hydraulic system | | • | • | • | • | • |
| Load Sensing pump capacity | l/min | 100 | 100 | 100 | 100 | 100 |
| Open-centre hydraulic system (Spire F CVT) | | ○ | ○ | ○ | ○ | ○ |
| Fixed displacement pump output (Spire F CVT) | l/min | 84 | 84 | 84 | 84 | 84 |
| Electronic joystick with proportional command for hydraulic control | | • | • | • | • | • |
| Rear electrohydraulic distributors (std) | | 3 | 3 | 3 | 3 | 3 |
| Rear electrohydraulic distributors (std) (Spire F CVT) | | 2 | 2 | 2 | 2 | 2 |
| Rear electrohydraulic distributors (opt) | | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 |
| Front hydraulic couplers, free return lines included (opt) (max.) | couplings | 13 | 13 | 13 | 13 | 13 |
| Front electricity sockets | no. | 2 | 2 | 2 | 2 | 2 |
| CAB | | | | | | |
| Cab with 4 pillars with rounded profile and flat floor | | • | • | • | • | • |
| InfoCentre ^{Pro} (5" premium instrument panel) | | • | • | • | • | • |
| Comfortip (headland turning management) | | • | • | • | • | • |
| Steering column adjustable with pedal | | • | • | • | • | • |
| Air sprung seat | | • | • | • | • | • |
| MaxCom multifunction armrest with ergonomic design | | • | • | • | • | • |
| Cab with Hydro Silent-Block suspension | | • | • | • | • | • |
| Air conditioning | | • | • | • | • | • |
| LED sidelights and indicator lights with narrow profile | | • | • | • | • | • |
| Halogen work lights | | • | • | • | • | • |
| LED work lights (4th generation) | | ○ | ○ | ○ | ○ | ○ |
| Filtering system cat. 4 | | ○ | ○ | ○ | ○ | ○ |

STD • OPT ○ Not available -

The technical data and images contained herein are indicative only. Lamborghini Trattori reserves the right to modify its products at any time without prior notice.

DEALER

www.lamborghini-tractors.com



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