



Spire F

90 | 95 | 100 | 105 | 115

PLATFORM - Stage V



Spire F Platform Stage V: function and style.

The new Lamborghini Spire F Platform Stage V range is the leader among specialised tractors for customers who, in addition to performance and functionality, are looking for a unique style. Lamborghini Trattori has always been the bearer of refined and functional design for all its ranges. And this tradition is continued by the new generation of machines specifically for the fruit orchard and vineyard. This is no mean feat when you consider the need for the compactness and agility in tight spaces required by specialised tractors of this type,

while at the same time not reduce performance and also meeting emission limits. The attractive lines of the Lamborghini Spire F Platform Stage V also respond to the functional needs of these machines, ensuring an unobstructed view ahead of and to the sides of the tractor and the extraordinary agility needed for manoeuvring between narrowly spaced rows without coming into contact with vines and trellises.

Engine



Power and maximum efficiency under a compact hood.

The modern FARMotion 35 [3-cylinder] and 45 [4-cylinder] engines for the Lamborghini Spire F Platform Stage V are electronically controlled turbo intercooled engines with power ratings from 91 to 116 HP [67 to 85 kW]. The use of the latest emission control solutions ensures that the tractors comply with the most stringent international regulations, thanks to a pool of exhaust gas treatment systems such as externally cooled EGR, DOC and DPF and the SCR system based on AdBlue injections, to cut NOx. The careful layout of all these elements has made it possible to locate everything without affecting the overall dimensions of the tractor. FARMotion 35 and 45 are officially certified to run with HVO [Hydrotreated Vegetable Oil].

Transmissions for every operational requirement.

The base transmission is a new mechanical 4-speed gearbox, which can be upgraded with mechanical underdrive to double forward speeds. The underdrive function is also available on the 30+15 5-speed transmission. The underdrive engages mechanically via the new control integrated with the shuttle lever and guarantees a minimum speed of just 240 m/h. Another feature introduced with the Spire F Platform Stage V is the Hi-Lo transmission with two Powershift speeds. Lastly, there is the famous 45+45 transmission, with 5 ground speed gears and 3 Powershift speeds, which represents excellence among specialised tractor transmissions. The Powershift of the Spire F Platform operates in both forward and reverse gears, allowing precise speed control even when manoeuvring at the end of the field or loading. All 5-speed transmissions, from 15+15 to 45+45, feature the OverSpeed function, which reaches 40 km/h at economical engine speed. The Spire F Platform with hydraulic shuttle are equipped with the exclusive SenseClutch function - which allows the aggressiveness of the shuttle

during direction changes - and Stop&Go to be adjusted: when activated, the driver can stop and restart the tractor by simply pressing and releasing the brake pedals without having to operate the clutch pedal.



PTO

PTO: customised installation.

The PTO of the Spire F Platform can be configured according to different operational needs: the 540 rpm and 540ECO are standard, while the 1000 rpm and ground speed PTO can be added upon request. You can choose between a fixed or a practical interchangeable shaft and also between mechanical engagement or electro-hydraulic engagement. In the first case the PTO is engaged by means of the mechanical lever that controls the PTO clutch, so the driver can directly modulate the PTO engagement. This system is useful when tractors are used with high inertia implements (stone crushers or blowers with large fans). On the other hand the PTO with electro-hydraulic engagement can be easily and conveniently engaged using a special switch. Other options on the Spire F Platform include a 1000 rpm front PTO.



Top hydraulics configurability.

Specialised orchard and vineyard tractors are required to carry out work that is very different from that carried out by conventional tractors: modern vineyard equipment requires high hydraulic power and a large number of hydraulic connections, both at the rear and central positions. On the Lamborghini Spire F Platform Stage V, a state-of-the-art hydraulic system has been installed, based on a single or dual tandem pump with flow rates up to 68 l/min, to effectively meet all possible hydraulic requirements. In any case, there is always an independent pump dedicated to steering - with a flow rate of up to 40 l/min - for smooth steering in all conditions. At the rear, up to 10 hydraulics connections are available, while at the

centre: 4-ways duplicated from the rear and a free return can be installed. As standard configuration, the rear lift of Spire F Platform models feature an effective and precise mechanical control which can be optionally upgraded to electronic control. Regardless the configuration, rear lift has a capacity of 3130 kg which can be increased to 3940 kg with additional auxiliary cylinders. The optional front lift has a lifting capacity of up to 1500 kg: it was specially designed by Lamborghini Trattori for this type of tractor and is therefore fully integrated with the front chassis of the Spire F Platform. When not in use, the lower link arms of the lift can be folded to minimise the overall footprint of the machine.



Maximum agility and comfort.

Spire F Stage V models are available with the practical open platform with 2-post foldable safety frame. Spire F Platform models are the perfect tractor for the fruit growers who are asking for agility and compact dimension to work inside low vineyards and orchards, such as pergola training system or citrus cultivation. The driver station has been carefully designed by Lamborghini Trattori engineers: controls are ergonomically laid-out in the right-side console and are grouped following the colour-coding scheme. The platform is available

in two size according to rear tyre dimension: "high" platform is able to accommodate up to 28" rear tyres, while the lower platform has been specifically designed in order to keep the tractor as low as possible increasing the agility when working close to tree branches. With the smallest tyres and low platform, Spire F models have a mudguard height of just 1.18 m. Regardless its dimension, the platform is always suspended on 4 Hydro Silent-Blocks in order to reduce the transmission of vibrations from powertrain to the seat. In addition to that a pneumatically suspended driver seat is available as option.



Axles and brakes

Comfort, stability and safety.

The front axle of the Spire F, which is specially designed for specialised tractors, is available in several variants depending on operating requirements. Upon request, a front axle with independent front wheel suspension can be fitted on all models. This exclusive technology allows for independent vertical travel of each front wheel. This provides maximum suspension in all situations, integrating the functions of roll stabilisation when cornering (Anti-Roll) and Anti-Dive, increasing braking safety. Regardless of the type of front axle - fixed or suspended - brakes on all four wheels are standard, as is the 100% differential lock. The SDD system which halves the number of steering wheel turns required to make a complete turn is available upon request as is the Auto 4WD system, which automatically engages and disengages 4-wheel drive according to forward speed and steering angle.



Precision is the basic prerequisite for productivity.

The tractors of the Spire F Platform family offer class-beating technology, letting you get on with your work with even more intelligent solutions. The tractors may be equipped as an option with the most advanced and sophisticated telemetry systems. The connectivity solutions offered by Lamborghini Trattori make interaction between the office and machinery even simpler. The new SDF Fleet Management suite puts the user in total control of the new Spire F Platform. The application lets the owner keep track of the position of the tractor in real time, wherever it is. SDF Fleet Management can also be used as an effective tool for planning maintenance, by making use of its notification functions, and for acquiring data relative to performance and fuel consumption. With the SDF Fleet Management application, dealers can always assist drivers in case of any upcoming issues that may occur. This reduces downtime and increases operation reliability of customer's machine.

SDF Fleet Management

With the new SDF Fleet Management application, SDF offers customisable solutions for the real-time management of key data concerning the operation of the machine. Our clients benefit significantly from being in total control of their machines and from the ability to manage a host of vital data, such as tracking data relative to activities. The SDF Fleet Management suite of applications is the centralised control interface for analysing telemetry data from Lamborghini Trattori machines. Tractor data is transmitted in real time over a mobile internet connection to the application, which allows users to analyse, monitor and even optimise the use of their machinery. The "map" view shows the location and status of machines or an entire fleet, and can also display historical data. On request, you can set up virtual fences to receive warnings if a machine leaves the area. Error messages may be forwarded to the technical support team of the dealership, and used to predict failure and reduce unnecessary machine down time.

TECHNICAL DATA	SPIRE F PLATFORM					
	90	95	100	105	115	
ENGINE						
Model		FARMotion 35	FARMotion 45	FARMotion 35	FARMotion 45	
Emission level		Stage V				
Aspiration		Turbo Intercooler				
Injection @ pressure	Type	Common Rail @ 2000 bar				
Cylinder/Displacement	n°/cc	3/2887	4/3849	3/2887	4/3849	
Max. power [ECE R120]	kW/HP	67/91	70/95	75/102	78/106	85/116
Power at rated engine speed [ECE R120]	kW/HP	63.5/86	66.4/90	71.1/97	74/101	80.6/110
Max torque @ 1400 rpm	Nm	372	389	417	433	472
Fuel tank capacity	l	82				
AdBlue tank capacity	l	13				
TRANSMISSION - MECHANICAL SHUTTLE						
Number of speeds - 4 gears transmission		12+12 or 24+12 (with mechanical splitter)				
Max. speed - 4 gears transmission	km/h	40				
Number of speeds - 5 gears transmission		15+15 or 30+15 (with mechanical splitter) or 30+30 (with Hi-Lo 2-Powershift steps)				
Max. speed - 5 gears transmission	km/h	40 ECO*				
TRANSMISSION - POWERSHUTTLE						
Number of speeds - 5 gears transmission		15+15 or 30+30 (with Hi-Lo 2-Powershift steps) or 45+45 (with HML 3-Powershift steps)				
Max. speed - 5 gears transmission	km/h	40 ECO*				
PTO						
PTO speeds		540/540ECO or 540/540ECO/1000				
Groundspeed PTO		□				
Front PTO		□				
LIFT						
Mechanical rear lift		■				
Electronic rear lift		□				
Rear lift capacity [STD/OPT]	kg	3130/3940				
Hydraulic right tie rod and stabilisers		□				
Front lift [1500 kg]		□				
HYDRAULICS						
Open centre hydraulic system [STD/OPT]	l/min	48/56				
Open centre hydraulic system with double pump [OPT]	l/min	68				
Flow divider for simultaneous use of rear lift and spool valves		□				
Rear hydraulic ways [STD/OPT]	n°	4/6/10				
Flow regulator		□				
Rear free return		■				
Mid-mounted hydraulic ways - duplicated from rear [OPT]	n° of ways	4				
Mid-mounted free return		■				
BRAKES						
4 wheel braking		■				
Hydraulic trailer brake		□				
FRONT AXLE						
Electrohydraulic engagement for 4WD and Diff.Lock		■				
Independent steering pump		■				
INDEPENDENT FRONT AXLE SUSPENSION [OPT]						
Adaptive-Damping, Active Self-Levelling functions		■				
Anti-Dive, Anti-Roll functions		■				
Differential Traction Control [DTC]		■				
DRIVING POSITION						
Welded platform with tunnel		■				
2-post foldable safety frame		□				
Suspended on Hydro Silent-Block		■				
Driver seat with mechanical suspension		■				
Driver seat with pneumatic suspension		□				
Height adjustment of steering column		■				
Smartphone holder with 2 USB chargers		■				
LED driving and working lights		□				
CTM [EU]		■				
DIMENSIONS AND WEIGHTS						
With front tyre	Size	240/70 R16				
With rear tyre	Size	380/70 R20				
Wheelbase	mm	2044	2174	2044	2174	
Max. length	mm	3825	3955	3825	3955	
Total height - ROPS	mm	2225	2355	2225	2355	
Height at bonnet	mm	1351				
Height at mudguards		1180				
Width	mm	1540				
Weight	kg	2590	2650	2590	2650	
Total admissible load	kg	5000				

*according to rear tyres size.

STD ■ OPT □ Not available -

www.lamborghini-tractors.com



Lamborghini Trattori is a brand of  SDF

