



Ultimate Versatility, Distinctive Quality

The TWIGA SPV 2 is the professionals choice in every application delivering ultimate versatility and distinctive quality. With a unique selection of seven different arm-sets, optional engine horse powers, selectable steering configurations and a host of attachments, the TWIGA SPV 2 is delivered to meet your every demand. Productivity, comfort, visibility, stability and safety are all standard features ensuring that whatever your requirements the experience always remains truly enjoyable. Read on to discover how the TWIGA SPV 2 will help your business evolve.



TWIGA SPV 2 Series



TWIGA SPV 2 V Series



TWIGA SPV 2 X Series



TWIGA SPV Experience

Climb into the TWIGA SPV 2 and you will benefit from a unique experience, an experience unlike any delivered by a tractor – reach mower combination.

- Enhanced Comfort
- Unrivalled Visibility
- Controlled Stability
- Agile Manoeuvrability
- Extreme Power
- Distinctive Versatility
- Ultimate Productivity

With Spearhead establish a partnership that builds solutions to deliver strong benefits for you, your business and your customers, including optimised vehicle specifications, tailored finance options and professional service contracts. Together your partnership with Spearhead can lead the way.





Comfort

Inside your cabin you will find innovative features and options that benefit your operations, day in – day out.

Formed to meet the strict requirements necessary to meet ROPS compliance, the TWIGA SPV cabin has been developed through extensive testing against all round impacts. Designed with ease of access in mind the cabin benefits from wide steps and long ergonomic handrails, with comfort ensured in the shape of a suspension seat and adjustable steering column. On the hottest of days keep perspiration to a minimum with the built in Clima air conditioning system, whilst generous in cab storage will also allow you to have all of your refreshments at hand. Take a seat inside the TWIGA SPV active cabin and benefit from an enjoyable and pain free day at work.

At your Fingertips

With ergonomics considered, the proportional multifunction joystick control for the operation of the main arm functions is built generously into your armrest. Developed with the operator in mind the all in one system provides precise but simple control.

From the comfort of your right hand control lift, reach, secondary reach, head angle, head rotate, telescope and slew without taking your left hand off the steering wheel meaning that control and safety is never compromised. In addition specify your machine with an option such as front linkage or a barrier mower and utilise exactly the same amount of functions in your left hand to.





Visibility

Designed around the needs of the modern operator, an ergonomic environment driven from the development of the patented rotating cabin results, ensuring that operator comfort, visibility and safety are maintained at all times. Everything is within comfortable reach, on view and accessible allowing operator focus to remain on the task in hand.

Visibility

Visibility is a key machine feature and is delivered in exemplary fashion. A large windscreen that extends from the top of the cab to the foot well directly in front of the driver allows vision in the widest of angles. With nothing in front of the cab in both transport and work positions, operation can be followed right up to the wheels. Optional reversing cameras are also available benefiting the drivers field of vision still further where required.

Roating Cabin

One of the main features of the TWIGA SPV 2 is the patented rotating cabin which allows ninety degrees of movement from transport to work position to ensure that best possible visibility is constantly maintained.

In transport position the operator looks directly over the front of the machine with the view point forward towards the road ahead.

In work position the cabin is rotated and the operator looks directly over the flailhead utilising the machine in a forward and back motion whilst being positioned to view the front and rear of the machine for safe operation.

Safety

Twisting of the neck and back are daily stresses of the rear mounted mower operator, they have to swivel or arch to follow the working position of the flailhead. At the end of the day fatigue and stress accumulate resulting in a lower efficiency and decreased output. With the TWIGA SPV 2 you will be completely void of these issues. In the comfort of the rotating cabin you are always facing the working area promoting good posture without the necessity to move your body. After a solid days work the TWIGA SPV operator will still be fresh.





Stability

As a machine specifically designed to tackle vegetation maintenance work, and not a machine that someone just decided to attach an arm to, the TWIGA SPV 2 is perfectly balanced to provide ultimate stability when working at long reach. From the early design stages core stability was a prerequisite requirement massively important to the safety, comfort and control of all operators but also a key demand of organisations such as the Environment Agency.

Weight is evenly distributed across the machine, 50% to the front and 50% to the rear, ensuring that regulations are adhered to and stability is maintained. Arms are also counterbalanced by ballasting and the strategic placement of major mechanical components.

Optional Hydraulic Sliding Ballast

For further peace of mind an optional hydraulic sliding ballast is available that can be moved outwards when the arm is at full reach to provide extra counter ballasting when operating in sloped areas or on rough terrain. By pushing a switch within the cabin the sliding ballast is simply pushed out when extra compensation is required.

Grip Strength

Four equal sized wheels put power to the ground providing enhanced traction when operating in the stickiest of situations. Constant four wheel drive ensures that equal grip is maintained with 100% rear differential lock and 40% frontal differential lock at hand should further control be required.

Front Axle Lock

When required front axle oscillation can be locked out to aid stability. Two hydraulic cylinders power down to secure the axle in position and remove the possibility of machine over centre.





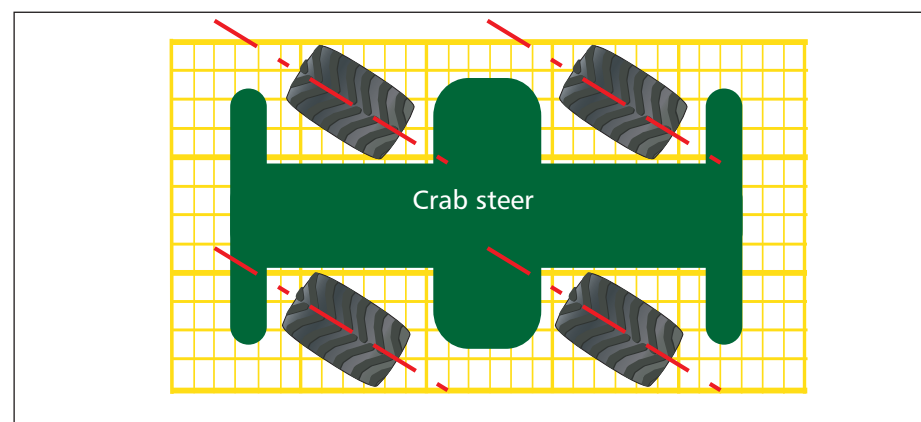
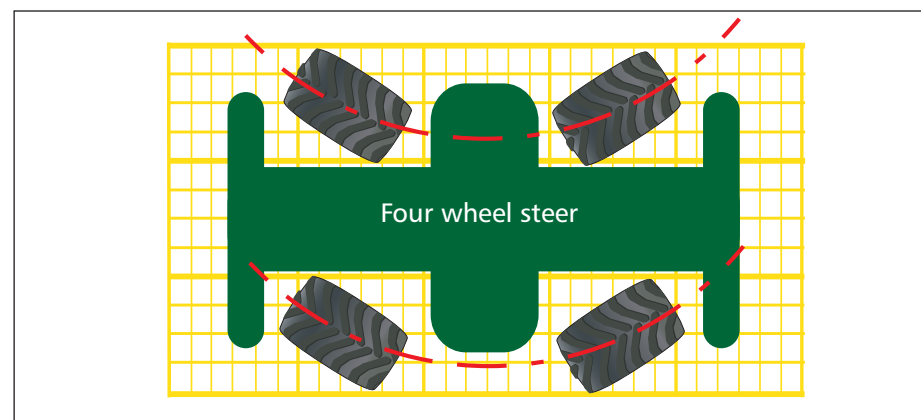
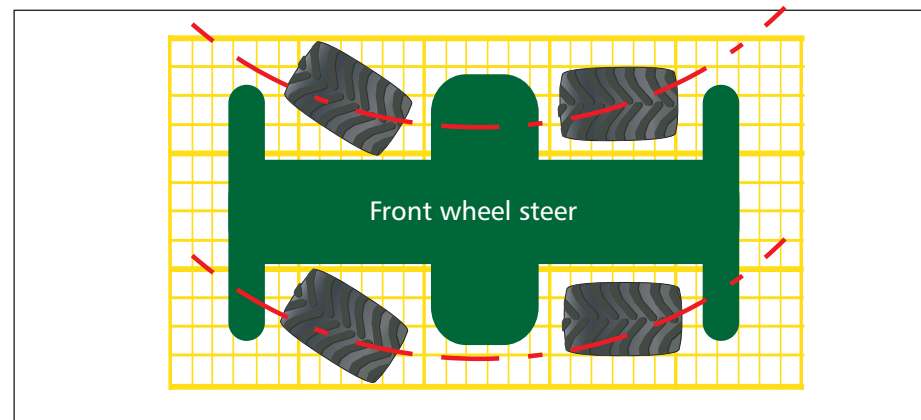
Manoeuvrability

Three steering modes provide versatility in manoeuvring - front wheel steer, four wheel steer and crab steer are all standard and can be selected by a simple switch.

During road transport agility is maintained by locking the rear wheels and switching to road gear operating only with the front wheel steer option.

In tight situations during work, four wheel steer can be selected helping to overcome tight turns on the top of an embankment or through a hard to negotiate area. Where a tractor – arm combination may need a three to four point turn the TWIGA SPV can manage in one, delivering a more comfortable and efficient experience for the operator.

Where the transversal of an embankment may be required, crab mode can be selected to pull the machine out of trouble or move it away from an obstacle.





Power

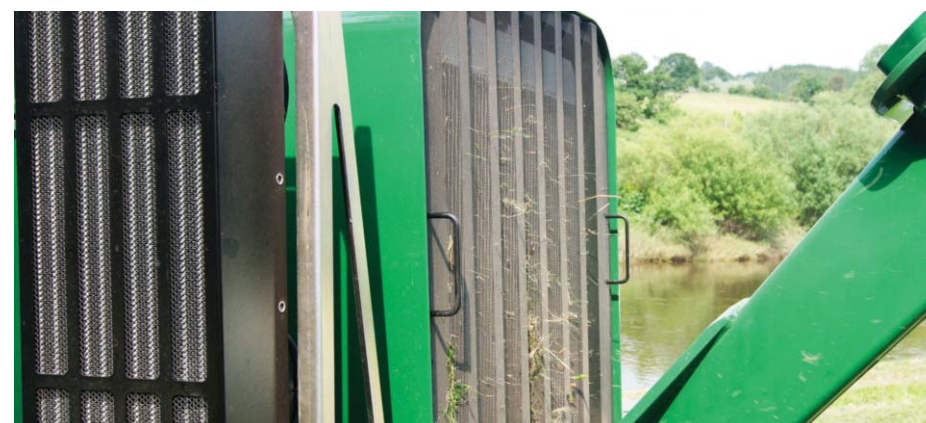
With a reputation for delivering hard working, reliable and efficient engines, Spearhead specify a John Deere power unit to provide a potent delivery day after day.

As standard a 140HP PowerTech Unit is fitted featuring 2 valve heads and fixed geometry turbochargers with full electric control ensuring a sophisticated fuel delivery.

As an option it is possible to specify your machine with a 173HP PowerTech Plus unit providing extra power when operating extra tools. The PowerTech Plus engine utilises a 4 valve cylinder head, full electric controls, a variable geometry turbocharger and cooled exhaust gas recirculation providing best in class fuel economy and ultimate performance.

Reversible Fans - Clean Fix

A clean radiator saves fuel and time whilst protecting your machine from overheating. Should grass and debris build up during the working day the built in Clean-Fix system can be used to blow debris away. At the flick of a switch the radiator fan is reversed at full speed to blow back any build up that has settled on the grill.





Versatility

At the business end of your TWIGA SPV 2 you will find cutting edge equipment that provides you with versatility and options whilst helping to maximise the output achievable with your machine.

Fitted as standard with a 1.2 metre flailhead, the ultimate in reach mowing technology is backed up by the durability and cutting efficiency of a heavy duty attachment to further increase cutting prowess. Also available in a wider 1.5 metre cutting width the SPV flailhead can be specified with a number of different rotor and flail options to allow the cutting of fine grass or thick and heavy forestry re-growth.

Rotator Unit

TWIGA SPV 2 output is boosted by the standard top mounted rotator unit offering 180 degrees of head rotation to allow cutting in both directions. Move to the end of your first cutting run and instead of back tracking like when utilising a standard tractor mounted unit simply rotate the head and cut in the opposite direction saving valuable time and fuel. In addition to cutting in both directions the head can also be positioned anywhere within the 180 degree plane to allow cutting around obstacles and obstructions.

Compliment your Capabilities

Specify your machine with additional accessories to compliment your machines capabilities still further.

Add a front linkage and PTO unit to allow the mounting of your choice of attachments from a QHD Flail Unit to a Snow Plough or Road Brush. Further your versatility by including a barrier mower for high output roadside mowing and ultimately make your arm a jack of all trades by swapping the flailhead for a range of additions from finger cutters and tree shears, to mowing discs and the Spearhead QUADSAW. Whatever your requirements discover the TWIGA SPV 2 and tailor your machine to your specific demands and needs.





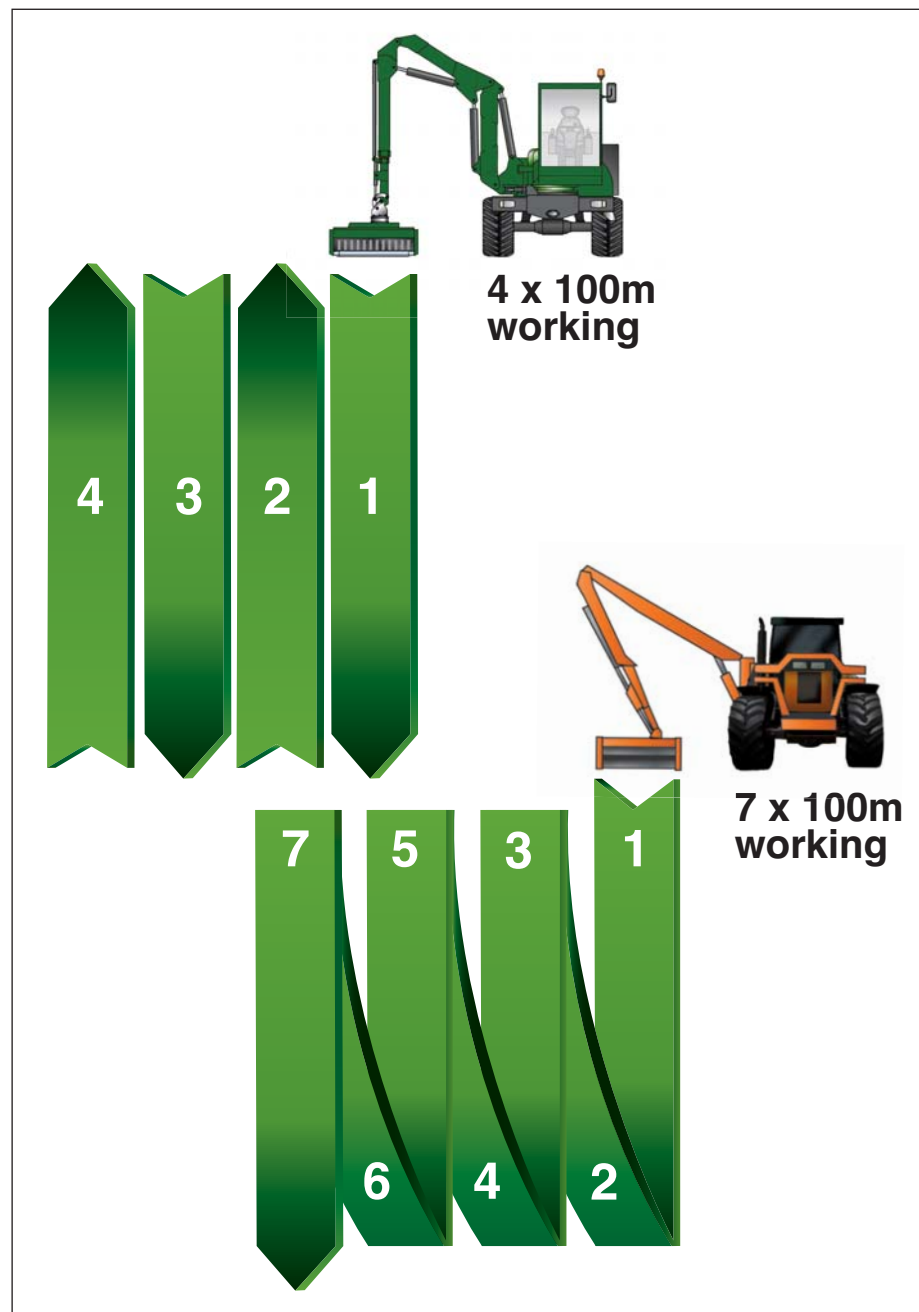
Productivity

Output, output and more output - that is what is delivered by the TWIGA SPV 2, combining enhanced comfort, unrivalled visibility, controlled stability, agile manoeuvrability, extreme power, and distinctive versatility to provide you with the ultimate reach mowing machine.

The rotating cabin perfectly compliments the rotating flailhead allowing bi-directional cutting to take place at equal speeds, whilst the heavy duty flailhead ensures that any type of vegetation is aptly dealt with.

When your mowing work is done add an alternative attachment such as a weed bucket or tree shear to provide even further profitability from your machine and even continue through winter by adding snow equipment via the optional DIN Plate or Front Linkage.

Massively increase your profitability today by adding a TWIGA SPV 2 machine to your operation.





Applicable anywhere

The versatility of the TWIGA SPV 2 lends itself to a host of different applications. Equally at home on the riverbank or the rail-track the TWIGA SPV 2 provides distinctive results and unrivalled output all delivered in a safe and comfortable package.

Whatever your requirements add a TWIGA SPV 2 to your fleet today:

- Internal Drainage Boards
- Environmental Agencies
- Highways Authorities
- Local Authorities
- Railways Agencies
- Naval, Military and Air Force Site Maintenance Authorities
- Commercial and Industrial Site Maintenance Authorities
- Forestry Commission
- Utilities Agencies
- National and Heritage Trusts
- Airport Authorities





Specifications

Engine

Make	John Deere PowerTech 4045 Turbo
Cylinders	4
Cooling System	Liquid
Power (hp)	140 (173 option)
Power (kW)	104 (123 option)
Rated Engine Speed (rpm)	2400
Max Torque @ 1400 rpm (Nm)	394
Capacity (cc)	4500
Air Cleaner	Dry Element

Electrical System

Working Voltage (Volt)	12 DC
Alternator Output (Amp)	120
Battery Capacity (Amp hour)	180

Capacities

Fuel Tank (Litres)	270
Hydraulic Oil (Litres)	250

Transmission Hydraulic System

Circuit Type	Closed
Pump	Piston
Flow at Rated Engine Speed (l/min)	170
Operating Pressure (bar)	420

Cutting Head Hydraulic System

Circuit Type	Closed
Pump	Piston
Flow at Rated Engine Speed (l/min)	140
Operating Pressure (bar)	290

Arm Hydraulic System

Pump	Gear
Flow at Rated Engine Speed (l/min)	80
Operating Pressure (bar)	210

Auxiliary Hydraulic System

Pump	Twin Gear
Flow at Rated Engine Speed (l/min)	80
Operating Pressure (bar)	180

Transmission

Type	2 Speed Hydrostatic	
Max Speeds (km/h @ 2400 rpm)	Forward	Reverse
Low Range	12	12
High Range	40	40

Axles

Type	Steering and motorised with Epicyclic Reducers in the Hubs	
Front	Oscillating with Steering	
Rear	Rigid with Steering	
Differentials	100% Rear and 45% Front (Electro Hydraulic)	
Front Axle Lock Out (Oscillation)	Hydraulic	
Steering Angle	27 degrees	
Brakes	Hydraulic - 6 Disc Oil Bathed	

Cab

- ROTATING CAB UP TO 90°
- ADJUSTABLE STEERING WHEEL
- SEAT WITH ADJUSTABLE PNEUMATIC SUSPENSION AND LUMBAR SUPPORT
- ADJUSTABLE SEAT ARMRESTS WITH INTEGRATED JOYSTICK SUPPORT
- AIR CONDITIONING SYSTEM WITH TEMPERATURE GAUGE
- ANTI POLLEN FILTER
- TINTED WINDOWS
- COMPUTER DISPLAY TO CONTROL ENGINE DATA
- PROPORTIONAL ELECTRONIC MULTIFUNCTIONAL JOYSTICK FOR BOOM OPERATION
- WARNING BEACON
- SPLIT CABIN DOOR 60/40
- 12 VOLT ELECTRICAL SOCKET
- FOPS - ROPS HOMOLOGATION
- FRONT SUN SHIELD
- FRONT WASH-WIPE
- FULL ROAD LIGHTING EQUIPMENT
- STORAGE COMPARTMENT
- RADIO PREPARATION

Optional Equipment

- DIESEL ENGINE UPGRADE TO 173HP
- CUSTOM PAINT COLOUR
- BIO-DEGRADABLE OIL - PANOLIN
- 1.5 METRE CUTTING HEAD UPGRADE
- HYDRAULICALLY MOVEABLE BALLAST
- HYDRAULIC TRAILER BRAKE KIT
- FRONT LINKAGE AND PTO
- AIR COMPRESSOR
- DEBRIS BLOWER
- CRUISE CONTROL
- INVERSION PEDAL
- RADIO/CD PLAYER
- CAMERA WITH REMOTE CONTROL AND 7 INCH SCREEN
- WORKING LIGHT KIT (2 CAB, 1 ARM, 1 BONNET)
- HEAVY DUTY CAB GUARD KIT
- EXTENDABLE LATERAL RIGHT WINDOW GLASS
- ROOF GLASS WITH GRATING
- SUN SHIELD FOR ROOF GLASS
- LATERAL RIGHT WINDSCREEN WIPER
- WINDSCREEN WIPER ON ROOF GLASS
- FIRE EXTINGUISHER
- REAR IDENTIFYING TRIANGLE AND WARNING ARROW KIT
- TOW BAR
- QUICK COUPLING KIT - ARM
- INCREASED CAPACITY PUMP FOR THE ARM CIRCUIT

SPV2 Series

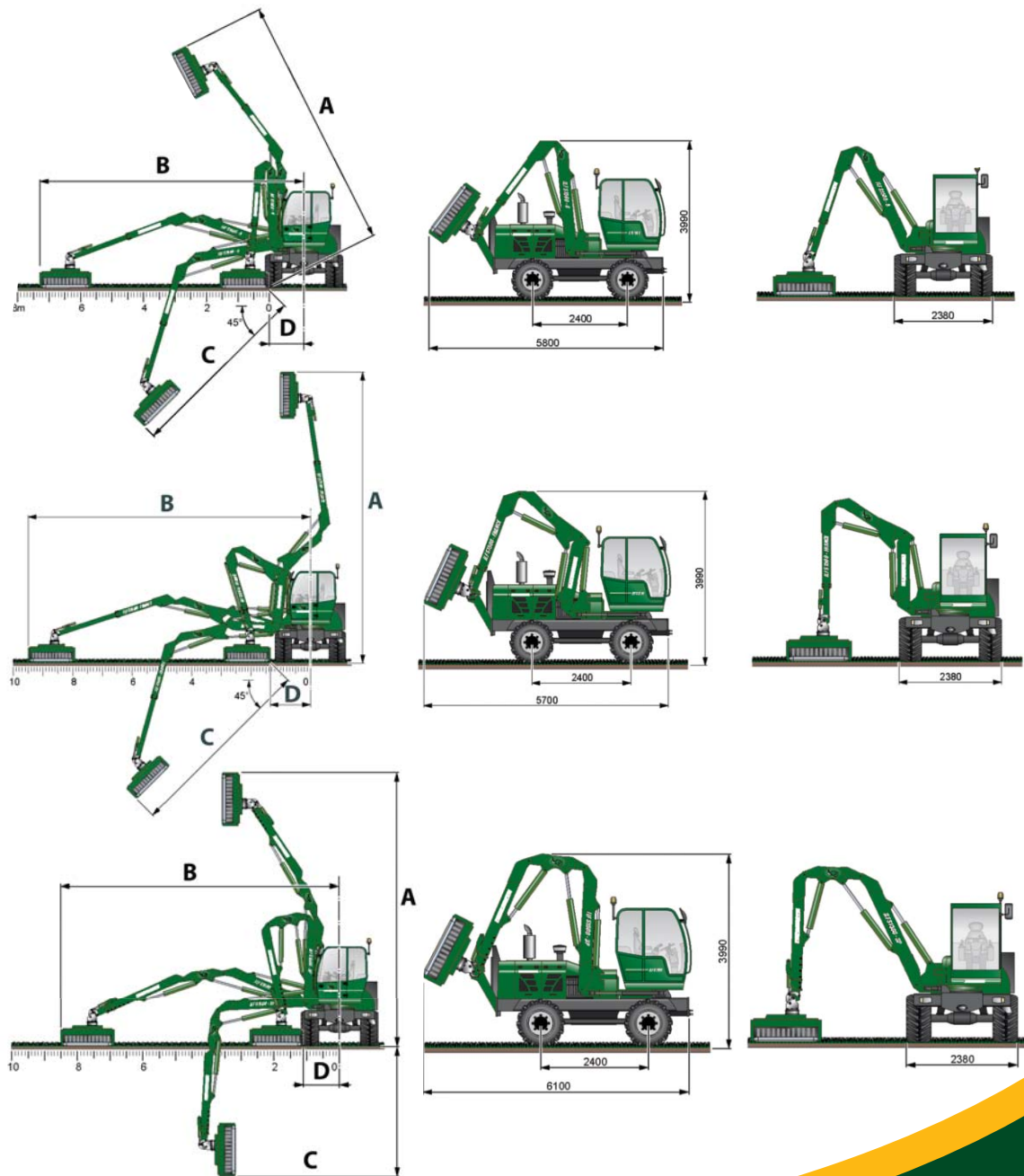
	A	B	C	D
SPV2 800T	8,300mm	8,200mm	5,850mm	1,100mm
SPV2 1000T	10,300mm	10,000mm	8,000mm	1,150mm
SPV2 1200T	12,000mm	11,800mm	9,900mm	1,150mm

SPV2 V Series

	A	B	C	D
SPV2 950VT	9,800mm	9,500mm	6,400mm	1,350mm
SPV2 1100VT	11,300mm	11,000mm	8,200mm	1,350mm

SPV2 X Series

	A	B	C	D
SPV2 850X	8,500mm	8,500mm	4,000mm	1,100mm
SPV2 970XT	9,700mm	9,700mm	5,200mm	1,100mm





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