



**VOLCAN** cultivate your passions



**TRACTORS** - EXCLUSIVE RANGE

# VOLCAN

## SUCCESS DOESN'T ARRIVE BY CHANCE

You need to be committed to reach your goals, collaborating with the most competent specialists and using the best instruments available. You need to look to the future to stay one step ahead of the competition. The **Volcan EP** series has been designed for people who share this philosophy: **people with motivation, determined to realize their goals.**

### MACHINES THAT ALWAYS KEEP THEIR PROMISES.

With the **Volcan EP** series we have improved a range of machines which had been already acknowledged as the best on the market. To do this, we were receptive to the signals from the market, listening to feedback from our customers, to understand both current requirements and future needs.

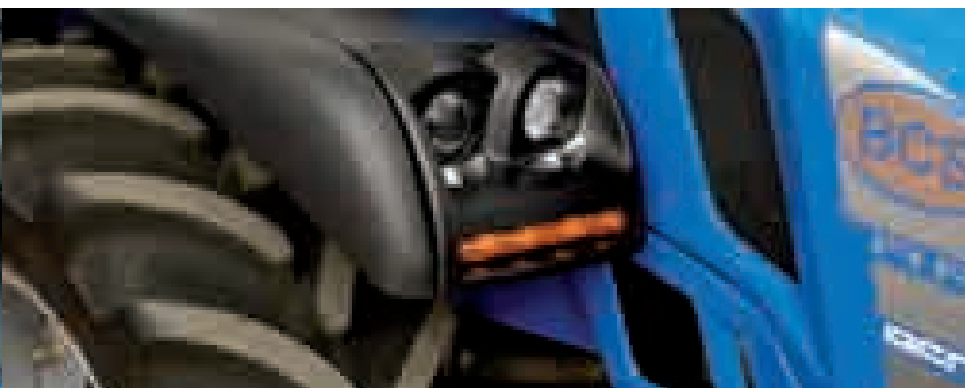
Working with this scope in mind, we realized a range of tractors with many new solutions, both great and small, all of which with the aim of making these machines **instruments to be proud of:** machines that always keep their promises.

### MADE TO MEASURE FOR ANY KIND OF USE.

A great project, to be a successful project, must envisage the largest number of possible solutions: therefore, for the **Volcan EP** series we developed five different versions, each of which designed to meet the different requirements our customers spur us to satisfy every day.

**Performance, overall dimensions, manoeuvrability, comfort and safety** are the qualities our technicians developed scrupulously for this new project: qualities that really make **the difference between a specialized BCS tractor and an ordinary tractor.**





# VOLCAN



**1 A wide range of models.**

**2 High power:**  
because the performances are all for the benefit of cost reduction.

**3 Hydraulic system with high flow rate of oil**  
to the many distributors with oversized hydraulic pumps that guarantee high pressure, so that different tools can be used in combination, lowering costs and reducing working time.

**4 Front-wheel drive disengagement**  
for towing loads quickly and effortlessly even on roads.

**5 Maximum towing capacity:**  
essential to work in vineyards and orchards with old and new systems.

**6 Approved compact cabs which are very comfortable**  
and with great visibility, because for many, the tractor is "home".

**7 Limited steering radiuses**

**8 Multiple disc brakes in oil bath, with hydrostatic control**  
on the four wheels.



## VOLCAN AR



**Reversible isodiametric tractor with central articulation**

This tractor is considered the version of reference for the specialized sector and above all has to satisfy the standards dictated by the particular type of use and in particular, be compatible with the environment in which it is used. The compact dimensions and the reduced turning circle make the **Volcan AR** an irreplaceable machine, able to perform all the tasks it was designed for in the best possible way.

### FOCUS

**The width of just 100 centimetres and the wheelbase of under 150 centimetres**, make this tractor the best in the category.

**The new transmission is integrated with the OS-Frame:** one shaft and one central joint guarantee high transmission power to the wheels and power take-off, for maximum reliability.

**The driving position is reversible** as a standard solution on all versions, a characteristic that makes the **Volcan AR** useful instruments for farm work, in municipal sectors and for working in green areas.

## VOLCAN RS



**Reversible isodiametric tractor with steering wheels**

The traditional version of the Volcan EP suitable for the widest variety of uses. Thanks to their qualities the **Volcan RS** tractors are ideal for the wine-growing and fruit-growing sectors: the compact overall dimensions, the high power and, as for the other Volcan isodiametric tractors, **the correct weight distribution on the axles** with the machine under a working load, make these tractors unbeatable in vineyards and orchards.

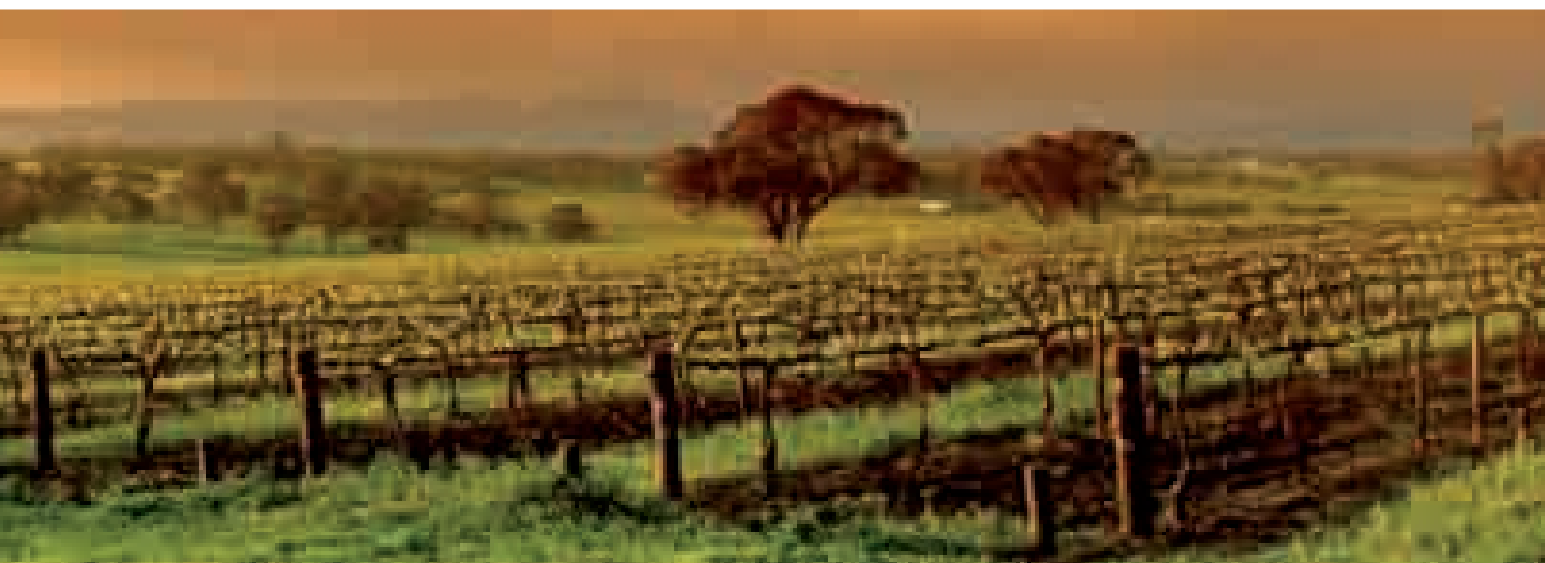
### FOCUS

**The gear ratios on all the Volcan tractors give you an excellent range.**

The gears are always progressive without overlaps, so you can choose just the right gear for every particular situation.

**The OS-Frame transmissions** optimize the traction and stability of the machines at work, thanks also to a single central joint which lets the front axle oscillate by up to 15° with respect to the rear.

**The hydraulics** are double circuit with independent pumps and a heat exchanger, with an overall flow of roughly 80 L/min at working pressures of up to 180 bar, for excellent performance on the whole **Volcan EP** series, the best performance in the category.



## VOLCAN MT



**Reversible isodiametric tractor for haymaking**

This is the version of the steering wheels tractor for cutting fodder, a machine which must be powerful, reliable and safe for the particular use, especially in sloping zones.

The **Volcan MT** tractors have been designed for heavy use in conditions of maximum stress, with the emphasis on performance and especially safety and driver comfort: stanchion frames, comfortable cabs and the characteristic controls, make the driver's cab practical and welcoming. Comfort, ergonomics, practicality and safety combine in an original and exclusive way.

### FOCUS

**The tractor has a very low centre of gravity** to guarantee the maximum stability on slopes and the rational flow of cut fodder under the machine, without compromising ground clearance.

**The Self-Cleaning-System®** is the innovative system with a double fan that keeps the radiator and air suction grilles clean, **protecting the cooling system** from dust and debris produced while cutting and processing the fodder.

**The Dual-Floating-System®** assists the rear lift and lets the equipment float in a harmonious way on the ground, for optimal use.

## VOLCAN DUALSTEER®



**Reversible isodiametric tractor with double steering system**

This version combines the basic elements of the tractor using a central articulation with those of a steering wheel tractor: the result is a product that guarantees the maximum performance and manoeuvrability in any field of use.

The **Dualsteer®** steering system is an exclusive system on **VOLCAN EP** tractors, the most rational solution for the professionals who want to optimise the use of their vehicle for the best yield and highest productivity.

### FOCUS

The **double steering system** means the Dualsteer® tractor has a truly unique performance which is impossible to find in other machines of this kind: in fact you can turn the machine with **steering angles of 70° and a turning circle of just over two metres**, to move around easily even in very restricted spaces.

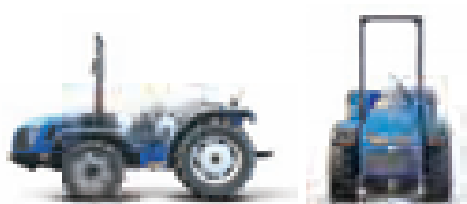
The Dualsteer system also optimises the **trim of the machines** making them particularly stable and capable of delivering the highest performance on slopes.

Finally, this system also guarantees **excellent performance** in green areas, as well as in specialised cultivations.

# VOLCAN range

## VOLCAN EP

### VOLCAN SDT



**Compact mono-directional short-wheelbase tractors with "odd" wheels**



This version combines the basic characteristics of conventional tractors with those of tractors with "even" wheels of the same height, and is the result of the experience of the first company in the world to have designed and produced short-wheelbase tractors with "odd" wheels.

Thanks to the strong frame with the mixed reducer system - planetary gear on the front axle and multi-stage on the rear - to optimize the distribution, the **Volcan SDT** tractors are ideal for situations that require special tractors, as well as those that can be handled by conventional tractors.

Two versions are available; traditional with steering wheels, and the higher performance Dualsteer<sup>®</sup>, with a double steering system.

#### FOCUS

The **low driving position and the exclusive structure of the cabs** make these machines truly unique on the market.

The **air-conditioning system** is the same type fitted in cars with front-fitted air outlets facing the driver, more practical and efficient than traditional overhead systems.

The **compact version of the cab is just 169 cm high**, priceless for working under branches. It is the only compact cab **homologated without a roll bar**, proof of the quality of the product and the excellent work of the BCS technicians.

**The cabs come with a pressurisation system.**



# VOLCAN engine

## STRAIGHT TO THE HEART

We must bid the Tier II engine farewell, grateful for the excellent work done over the years.

For now it's time to give a warm welcome to the next generation, **the new VM D753 and D754 Tier III engines**: thanks to these engines the Volcan EP tractors will have an even bigger and more powerful heart.

The new engines are more efficient than their predecessors from every point of view: more powerful thanks to the use of an intercooler, more ecological and quieter thanks to the new technologies adopted in full respect of the most stringent regulations, and even more sober to embrace the philosophy of the **Volcan EP**, with a fantastic response as soon as the engine starts.



### FROM 70 TO 91 HP.

Three VM engines for the **Volcan EP** series, able to get the power out of every drop of fuel.

- \_ **VM D753 IE3** 2.2 litre, in-line, 3-cylinder turbo diesel. Producing 70HP at 2300 rpm thanks to the intercooler.
- \_ **VM D754 TE3** 3 litre, in-line, 4 cylinder, turbo diesel. Developing 79 HP at 2,300 rpm.
- \_ **VM D754 IE3** 3 litre, in-line, 4 cylinder, turbo diesel. Producing 91 HP at 2,300 rpm thanks to the intercooler.

For these models, VM has developed the new EGR System placed inside the engine. The system recycles the exhaust gases which, opportunely mixed, return to the combustion chamber, drastically reducing the emissions of nitrogen oxide (NOx) and fuel consumption.

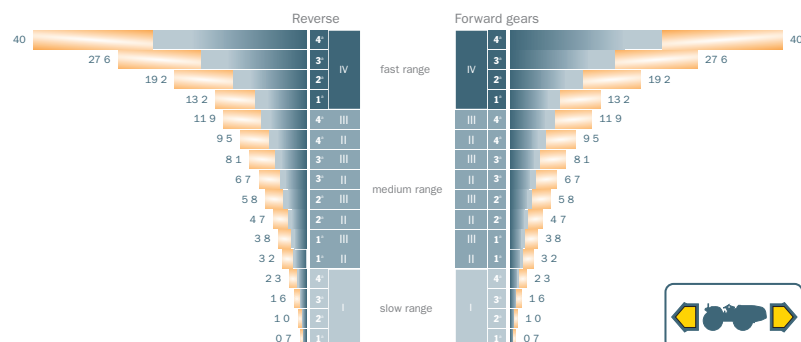
Max revs were kept to **2,300 rpm** to reduce fuel consumption, noise and vibrations for fuel savings and greater comfort.

Full power remains unchanged in any case: in fact, all the engines produce their peak torque between 1,000 and 1,800 rpm.

The exclusive characteristics of all the engines, some of the most compact on the market, include:

- \_ The **tunnel base** for high torsional strength and flexural rigidity.
- \_ The **mechanical rotary injection pumps** for high performance in every condition of use, increasing reliability and the working life of the same.
- \_ The **geared distribution** with forced lubrication, the best possible solution for a diesel engine.
- \_ Maintenance-free **hydraulic tappets** to reduce engine noise to a minimum.
- \_ **Low inertia turbo compressors** for immediate response when power is needed.
- \_ **Balanced shafts** to eliminate vibrations.

Graph showing speed in km/h with 20-inch wheels – Engine speed: 2300 rpm

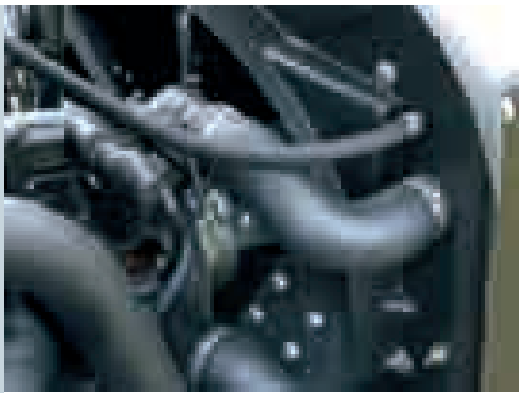
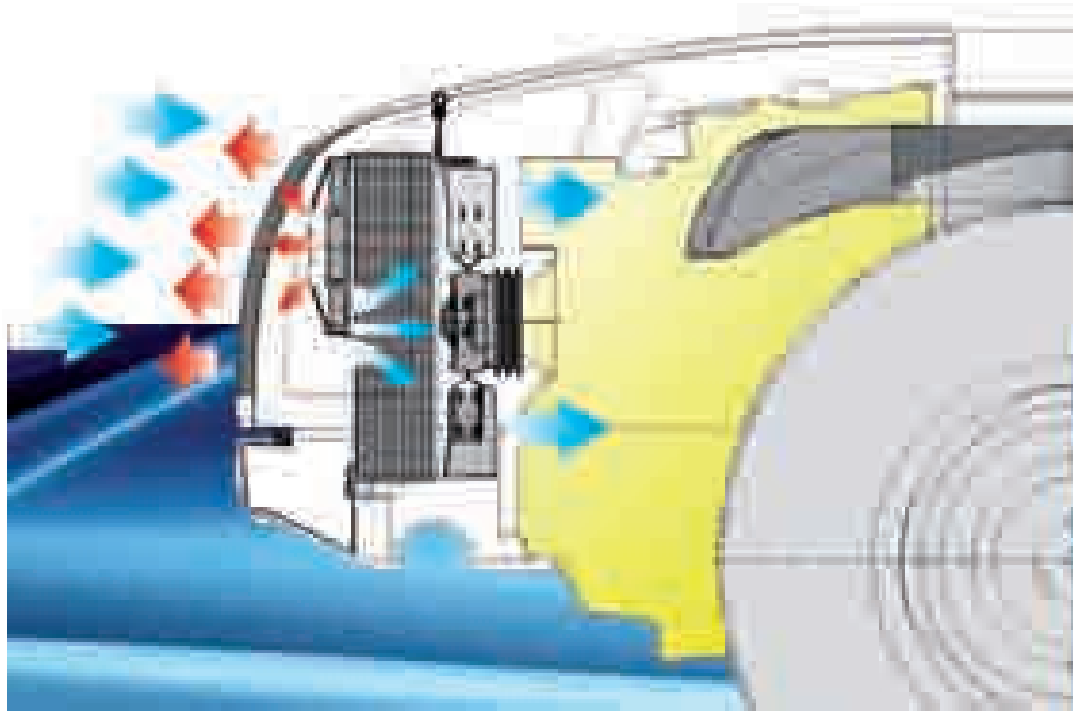


The graph shows the perfect progression of ratios without overlapping speeds in any forward gear range.



### PREVENTION IS BETTER THAN CURE

Keeping the engine and powerful hydraulics cool is essential on compact powerful tractors to let them perform without problems in the harsh conditions they have to work in.



#### COOLING.

The **Volcan EP** has a special cooling system that lets the engine and hydraulics always operate with the maximum safety margin.

An oversize radiator and high flow fan help keeping the engine cool, and a heat exchanger keeps the temperature of the hydraulics stable.

A series of waterproof grilles on the bonnet let the engine breathe and protect the cooling system from being blocked by the impurities in the air produced by machines operating in the area.

#### CLEAN AIR ALWAYS.

For jobs where there is a lot of dust or debris, such as cutting fodder or pruning vine shoots, the standard system can be assisted by the **new SCS (Self Cleaning System)®** which eliminates any problems associated with the blockage of grilles and radiators, stopping the engine and hydraulics overheating.

The system consists of an engine **cooling system**, with an **oversize radiator**, and **two fans** with a combined intermittent function: one suction fan with an electromagnetic control, and an electrical blower fan.

The **Self Cleaning System®** is controlled by a 3-function button, which activates respectively:

- the dual fan SCS system
- the intermittent suction fan
- the constant suction fan.

The operator can select the most suitable function to suit the particular job.



# VOLCAN transmission

## ENHANCING PERFORMANCE

The performance of an engine would be nothing without the best transmission. The new Sincro 32-speed transmission with synchronized reverser and helical gears offers the very best performance, improving the comfort and drivability of the vehicles.

The logical sequence of the gears, without overlaps throughout the range, lets you select just the right gear for any particular situation for a more rational use of the vehicle, saving fuel, and putting the mechanical components under considerably less stress, letting the engine work in its optimal range and moreover improving the quality of work.



### A UNIQUE TRANSMISSION SYSTEM.

The new transmission comes with the **OS-Frame** which, with one single transmission shaft and one central joint, guarantees the maximum mechanical performance. It's a "monolithic" structure in a single cast iron casting.

The joint in the middle of the vehicles lets the front axle oscillate by up to 15° with respect to the rear, for excellent stability on slopes.



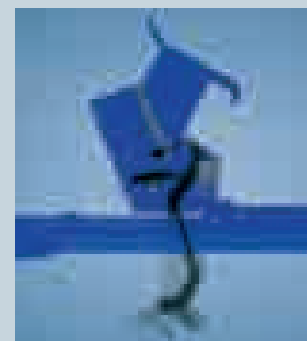
### 4WD WITH TRACTION DISENGAGEMENT.

The four wheel drive can be disengaged on the front axle with an electro-hydraulic control. This allows rational movement both on steep slopes and uneven ground, as well as being the best solution for fast road use.

### PRO ACT-SYSTEM CLUTCH.

The **LONG-LIFE clutch** is a multiple disc hydraulic clutch running in an oil bath, and no adjustment or maintenance is required.

Light and progressive, its performance is guaranteed by the **PRO-ACT System**, a system that lets the driver use the clutch in a comfortable and rational way, thanks to the parallelogram clutch pedal with a progressive action that takes up any play.

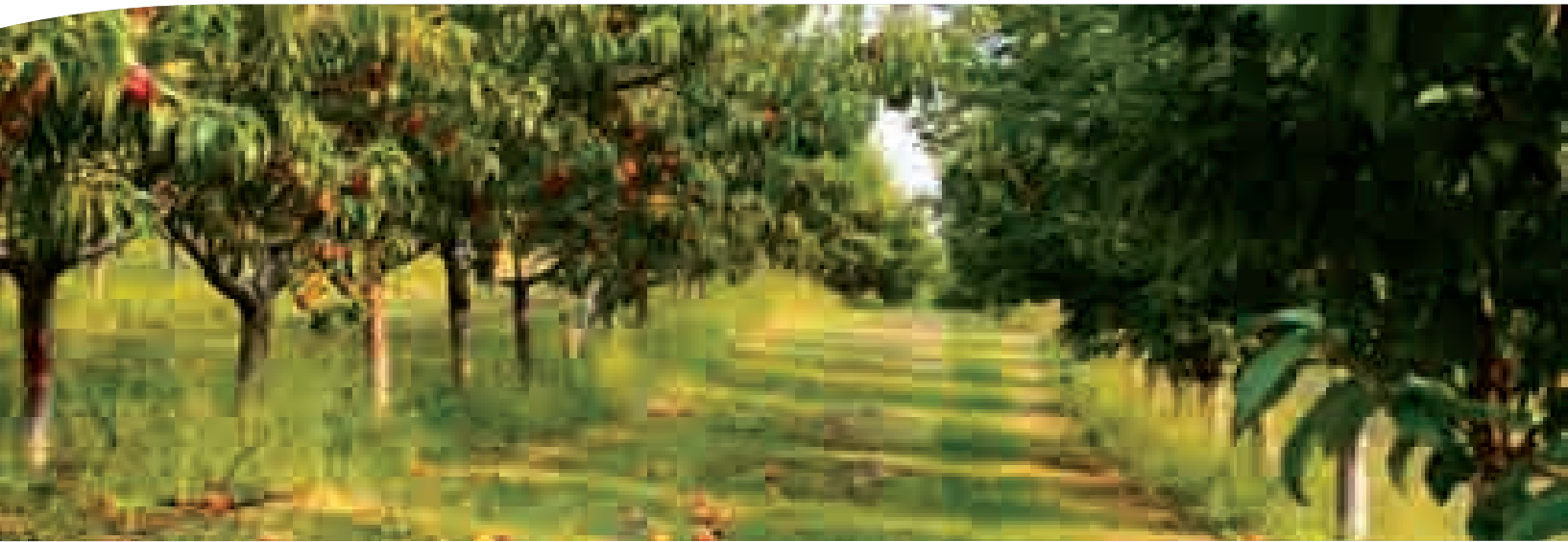


### FLUID MECHANICAL GEAR

The synchronised 32-speed gearbox with **Sincro reverser** is easy to use, with precise and progressive gear changes.

**Designed to avoid gear overlaps** in the four ranges, you will always find just the right gear for the job.





### EFFECTIVE AND EFFICIENT POWER TAKE-OFF.

The rear electro-hydraulic power take-off is independent from the gearbox and synchronized with all gears.

It can be engaged under load, and has a brake to stop it in the disengaged position. The independent PTO runs at **540/750 rpm**, or **540/1000 rpm**, available on request.

### THE VERY BEST IN BRAKES AND MORE.

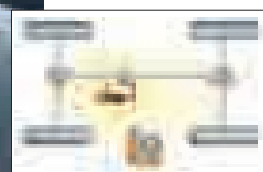
Four multiple disc brakes running in an oil bath of the very latest generation with hydrostatic control guarantee perfect adherence to the ground, for safe braking in any conditions.

The hydrostatic control acts as a brake force distributor, sending the same pressure to the 4 wheels simultaneously when the pedal is pressed. The Volcan EP has the exclusive independent **BRAKE-OFF parking brake system**, which is automatically activated when the engine is turned off.

When the engine is running however, it is controlled by a practical button on the dashboard with a safety block.

### TOP QUALITY AXLES.

The choice of using only **axles with planetary gear reducers** on the isodiametric versions of the Volcan EP was dictated by the need to keep the wheelbase as short as possible to increase manoeuvrability, as well as having a higher performance and more reliable system.



**BRAKE-OFF**

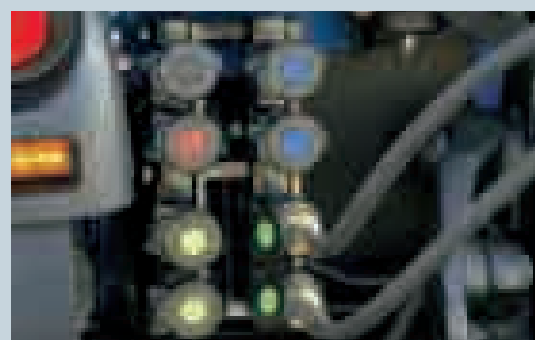
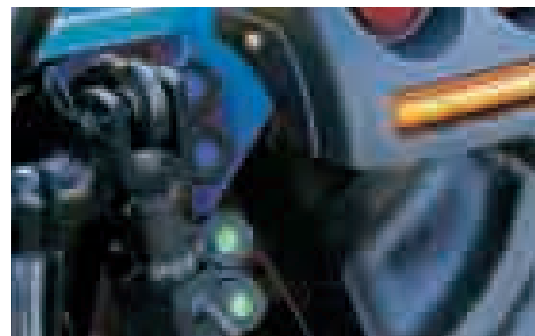
# **VOLCAN** hydraulic system

## HAVE NEVER BEEN SO EFFICIENT

In a specialized tractor, the performance of the hydraulics is fundamental. The **Volcan EP** has a double hydraulic circuit with independent pumps and a dedicated heat exchanger:

- **power steering pump: capacity - 31 L/min**
- **services pump: capacity - 31 L/min (optional - 49 L/min)**
- **hydraulic pressure: 180 bar.**

There are 8 hydraulic outlets at the rear of the machines to connect equipment that requires high-capacity hydraulic supply, often used in vineyard cultivations.



### EVERYTHING YOU NEED AT HAND.

The value of a vehicle depends on the flexibility of the design. To meet the requirements of our most demanding customers, we have studied **electronically controlled Joy-Sticks**, specific for each machine, so you can control all functions using just one device.

**The BCS Joy-Sticks in fact**, control not only the hydraulics but also the lifts, so every hydraulic movement of the machine is functional and safe.

Furthermore, **the Joy-Sticks control more hydraulic outlets than those that could be controlled with standard systems**: in the highest performance version of the Volcan SDT the joysticks control 9 hydraulic outlets at the front of the tractor and 5 hydraulic outlets at the rear.

### NINETY DEGREES OF ACCESSIBILITY.

The **Volcan EP** tractors have been designed to make maintenance as simple as possible. The bonnet can be opened from the front for example, for easy access to the engine.



# Dual Floating System<sup>®</sup>

## THE WORLD ISN'T PERFECTLY FLAT.

For equipment which has to adapt to uneven terrain and follows dips or rises in the ground without damaging the surface, BCS has come up with the “**Dual Floating System<sup>®</sup>**”, a system that optimizes the load of the equipment on the ground applied at the 3-point hitch of the Volcan, for optimal performance on any kind of terrain.

The system uses two cylinders connected to the independent hydraulics with a nitrogen accumulator which, with those of the rear lift, control the suspension of the equipment in a fully autonomous way with respect to the lift itself.

The “**Dual Floating System<sup>®</sup>**” makes sure the tool is always parallel to the ground and lets you adjust the load of the equipment on the ground with extreme precision, in relation to the weight.

Thanks to an easily accessible control, connected to an analog manometer, you can change the internal pressure of the hydraulic suspension system at any time, and therefore the actual suspension capacity required.

## THE FORCE OF THE LEVERS.

The **Volcan EP** tractors are often used with tools on the lift. For this reason **the strong rear** lifts have practical and versatile multipurpose linkages, suitable for all kinds of equipment on the market.

On request the tractors can be fitted with a controlled force and position system, for all equipment that requires the same. The 3-point hitch, with normal or quick-fit linkages, arms and adjustable tie-rods, can be fitted with a hydraulic strut and tie-rod.

The **Volcan EP** can also be equipped with a practical **front lift**, essential for combined use, supplied with four hydraulic outlets.



# VOLCAN driver



## THE BEST IN ITS CLASS

When we designed the **cabs on the Volcan EP**, we set out standards high, higher than anyone else had done before. **The cabs on the Volcan EP** have been meticulously studied to guarantee the maximum comfort with the most pleasant living conditions. The suspension is fully independent of the tractor chassis.

### DETAILS THAT COUNT.

On the **Lusso (Luxury) and Comfort** version the large windows optimize the driver's environment. The **Compact** series, available on the SDT version, has a particular structure that keeps the height of the **vehicle down to just 169 cm** for working under branches.

Furthermore, this is the only homologated cab on the market with these characteristics **that doesn't have a roll bar**. Despite the compact dimensions, **the Joy-Stick for controlling the hydraulics** is also inside the cab, a plus for the Volcan with respect to competitors.

**All the Volcan SDT cabs are pressurised.** The air conditioning and heating are controlled by an efficient plant which, in the versions with isodiametric wheels is installed in the traditional position inside the roof of the cabs, while a car-type conditioning unit is used in the SDT versions, integrated in the front control console.





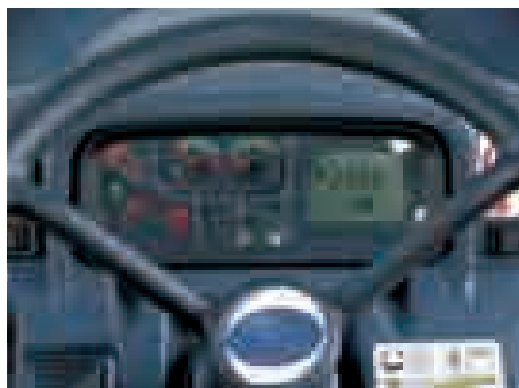
## A STEP FORWARDS IN DRIVER COMFORT.

**The driver's environment on the Volcan EP** is one of the best in the category: it combines comfort, ergonomic qualities, functionality and safety in an absolutely original way.

**The driving seat and controls** are made-to-measure for the driver. **The cab driving module, with the platform riding on a silent-block**, guarantees the maximum comfort.

The **instrument console** contains the functions in a central display with a logical layout, and guarantees excellent control of the vehicle.

**The instruments** are available both in analog and digital versions; the latter can display the engine rpm, vehicle speed and PTO speed simultaneously.



# OPTIONAL

## OTHER GOOD REASONS FOR CHOOSING VOLCAN EP

The **Volcan EP** tractors are specialized machines, unrivalled in the field. Built for those who want the best. The vast range of original BCS options and accessories means you can create your very own tractor.

- 1 3-point hitch range
- 2 Wheels range
- 3 Ballast range
- 4 Prefilters range

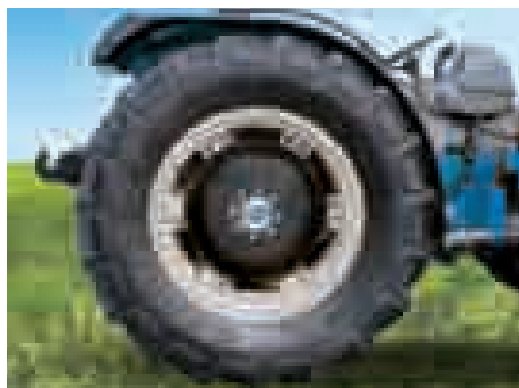
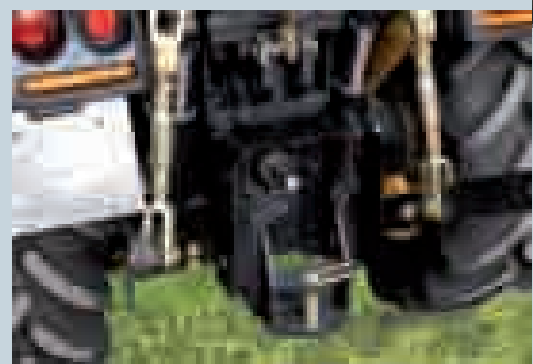
### ACCESSIBLE TO ALL.

The width and height, the footprint on the ground, and the more or less aggressive 'GRIP' are just some of the aspects that give the wheels of specialized tractors a fundamentally important role.

We have tested the best alternatives on the market for the **Volcan EP**, so our customers will always have just the right solution to meet their requirements.

### SAFE TOWING.

The high towing capacity of the **Volcan EP** is guaranteed by homologated towing hooks that meet the regulations in force in a number of Countries. This system can also be fitted with easily-adjustable frames, to optimize its use with a variety of trailers.





# BCS services

## AS IMPORTANT AS THE TRACTORS

BCS provides many services so its customers can get the very best out of their **Volcan EP**, with one of the largest networks of dealers and mechanics in the sector, operating in most countries all over the world.

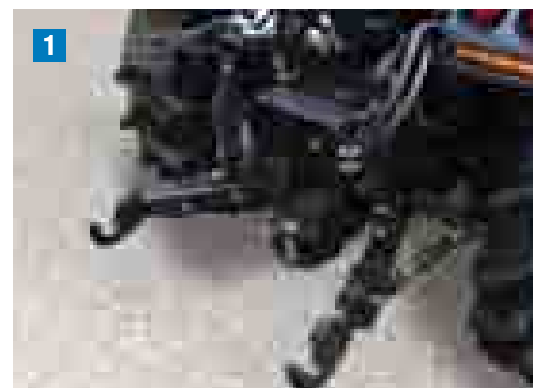
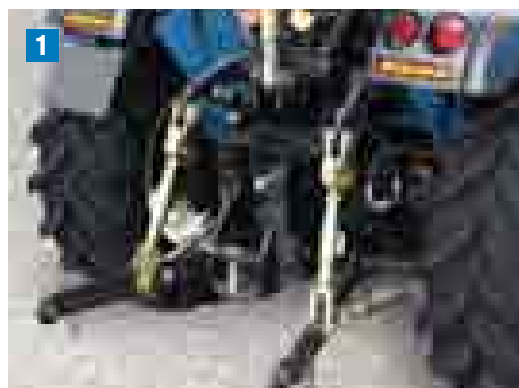
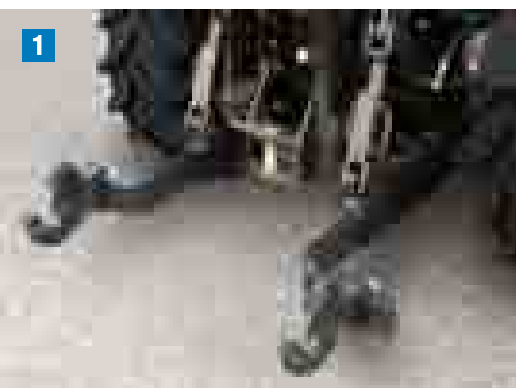
We can offer advice for your purchase, assistance and financial services studied to meet every particular requirement. Our original spare parts distribution service is fast and efficient, also thanks to our collaboration with the best international carriers, to guarantee the maximum efficiency of your tractor always.



### ACTIVE AND PASSIVE SAFETY.

**Safety first and foremost.** As always. The maximum safety built into our vehicles is the result of over 70 years of experience in farm machinery. **BCS is certified ISO 9001.**

All of our suppliers, the materials used in the construction of the machines, the cycles of the processes and the distribution are regulated by the strictest qualitative standards. We are committed to respecting these standards always, and this means building safer and safer tractors for the next generation.





# VOLCAN series: technical features



## VOLCAN AR

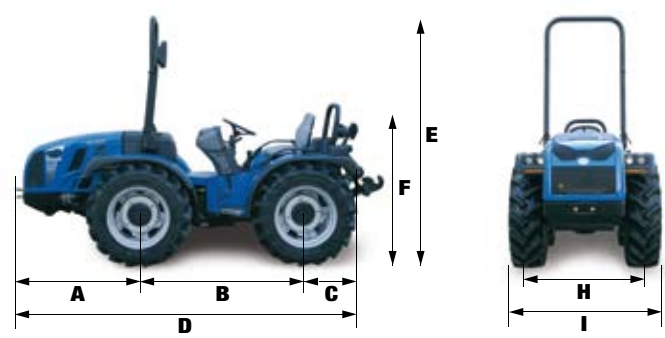


Table of dimensions of tractors AR version with roll-bar

AR	A	B	C	D	E	F	G
				min-max	min-max	min-max	
With 3-cylinder engine mm.	1030	1495	563	3088	2102-2195	1121-1214	237-330
With 4-cylinder engine mm.	1142	1495	563	3200	2102-2195	1121-1214	237-330

Table of widths of tractors AR version with different wheel types

TYPE OF TYRE AND RIM	TYRE WIDTH MM.	TYRE HEIGHT MM.	H Min/max TREAD MM.	I Min/max WIDTH MM.
250/80-18 with adjustable rim	240	879	900 - 1108	1140 - 1348
280/70-18 with adjustable rim	282	849	1020 - 1108	1302 - 1390
320/65-18 with adjustable rim	320	873	1020 - 1108	1340 - 1428
11.5/80-15.3 with fixed rim	290	888	948 - 972	1238 - 1262
8.00-20 with adjustable rim	217	945	840 - 1080	1057 - 1297
9.50-20 with adjustable rim	245	937	882 - 1230	1127 - 1475
300/70-20 with adjustable rim	286	947	942 - 1144	1228 - 1430
320/70-20 with adjustable rim	316	975	996 - 1144	1312 - 1460
340/65-20 with adjustable rim	343	958	996 - 1144	1339 - 1487
31x15.50-15 XTC o STG with fixed rim	390	790	1016	1406
33x12.50-15 with fixed rim	325	846	959	1284
13/6-16/4 Garden with fixed rim	390	968	1042	1432

Steering radius of tractors AR version with different wheel types

TYRE TYPE	250/80-18	280/70-18	320/65-18	11.5/80-15.3	8.00-20	9.50-20
mm.	2680	2700	2770	2710	2660	2670
TYRE TYPE	300/70-20	320/70-20	340/65-20	31x15.50-15	33x12.50-15	13/6-16/4
mm.	2740	2760	2775	2930	2870	2950

## VOLCAN RS

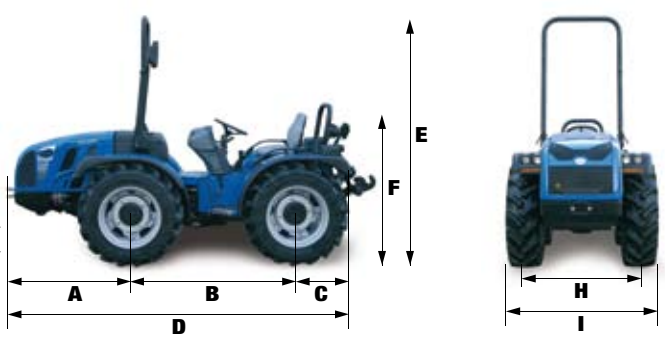


Table of dimensions of tractors RS version with roll-bar

RS	A	B	C	D	E	F	G
				min-max	min-max	min-max	
With 3-cylinder engine mm.	1030	1495	563	3088	2102-2202	1121-1221	237-337
With 4-cylinder engine mm.	1142	1495	563	3200	2102-2202	1121-1221	237-337

Table of widths of tractors RS version with different wheel types

TYPE OF TYRE AND RIM	TYRE WIDTH MM.	TYRE HEIGHT MM.	H Min/max TREAD MM.	I Min/max WIDTH MM.
280/70-18 with adjustable rim	282	849	1064 - 1476	1346 - 1758
320/65-18 with adjustable rim	320	873	1170 - 1466	1490 - 1786
340/65-18 with adjustable rim	343	899	1170 - 1466	1513 - 1809
9.50-20 with adjustable rim	245	937	1046 - 1588	1291 - 1833
11.2-20 with adjustable rim	277	982	1134 - 1618	1411 - 1895
320/70-20 with adjustable rim	316	975	1134 - 1618	1450 - 1934
340/65-20 with adjustable rim	343	958	1134 - 1618	1477 - 1961
31x15.50-15 XTC o STG with fixed rim	390	790	1260 - 1374	1650 - 1764
38/14-20 STG with adjustable rim	356	990	1238 - 1618	1594 - 1974
13/6-16/4 Garden with fixed rim	390	968	1240 - 1400	1630 - 1790

Steering radius of tractors RS version with different wheel types

TYRE TYPE	280/70-18	320/65-18	340/65-18	9.50-20	11.2-20
mm.	3240	3260	3280	3150	3200
TYRE TYPE	320/70-20	340/65-20	31x15.50-15	38/14-20	13/6-16/4
mm.	3250	3280	3280	3280	3600

## VOLCAN MT

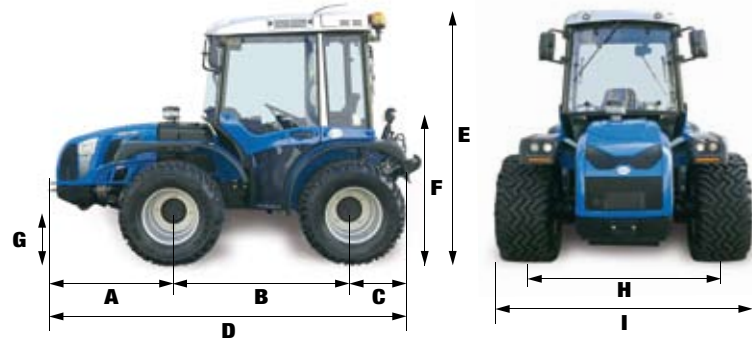


Table of dimensions of tractors MT version with roll-bar

MT	A	B	C	D	E	F	G
				min-max	min-max	min-max	
With 3-cylinder engine mm.	1142	1495	563	3200	2050-2150	1121-1221	237-337

Table of widths of tractors MT version with different wheel types

TYPE OF TYRE AND RIM	TYRE WIDTH MM.	TYRE HEIGHT MM.	H Min/max TREAD MM.	I Min/max WIDTH MM.
31x15.50-15 XTC o STG with fixed rim	390	790	1510	1900
425/55-17 All Ground o AC70G with fixed rim	428	884	1471	1899
340/65-20 with adjustable rim	343	958	1354 - 1618	1697 - 1961
38/14-20 STG with adjustable rim	356	990	1354 - 1618	1710 - 1974

Steering radius of tractors MT version with different wheel types

TYRE TYPE	31x15.50-15	425/55-17	340/65-20	38/14-20
mm.	3340	3350	3280	3280

# VOLCAN

# VOLCAN DUALSTEER

## VOLCAN DUALSTEER®

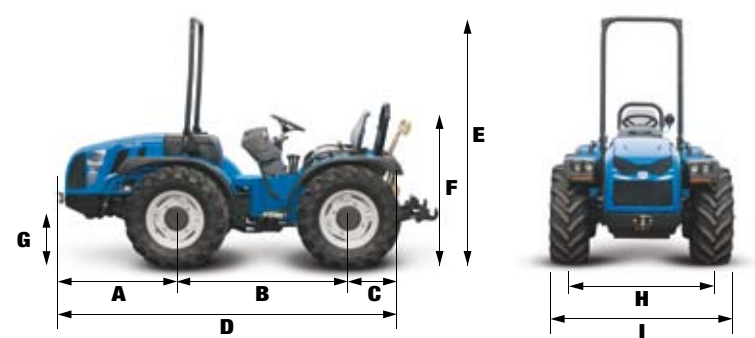


Table of dimensions of tractors DS version with roll-bar

DS	A	B	C	D	E	F	G
				min-max	min-max	min-max	
With 3-cylinder engine mm.	1030	1495	563	3088	2102-2202	1121-1221	237-337
With 4-cylinder engine mm.	1142	1495	563	3200	2102-2202	1121-1221	237-337

Table of widths of tractors DS version with different wheel types

TYPE OF TYRE AND RIM	TYRE WIDTH MM.	TYRE HEIGHT MM.	H Min/max TREAD MM.	I Min/max WIDTH MM.
280/70-18 with adjustable rim	282	849	1064 - 1476	1346 - 1758
320/65-18 with adjustable rim	320	873	1170 - 1466	1490 - 1786
340/65-18 with adjustable rim	343	899	1170 - 1466	1513 - 1809
9.50-20 with adjustable rim	245	937	1046 - 1588	1291 - 1833
11.2-20 with adjustable rim	277	982	1134 - 1618	1411 - 1895
320/70-20 with adjustable rim	316	975	1134 - 1618	1450 - 1934
340/65-20 with adjustable rim	343	958	1134 - 1618	1477 - 1961
31x15.50-15 XTC o STG with fixed rim	390	790	1220 - 1414	1610 - 1804
38/14-20 STG with adjustable rim	356	990	1238 - 1618	1594 - 1974
13/6-16/4 Garden with fixed rim	390	968	1240 - 1400	1630 - 1790

Steering radius of tractors DS version with different wheel types

TYRE TYPE	280/70-18	320/65-18	340/65-18	9.50-20	11.2-20
mm.	2200	2350	2470	2460	2850
TYRE TYPE	320/70-20	340/65-20	31x15.50-15	38/14-20	13/6-16/4
mm.	2710	2850	2460	2730	2940

## VOLCAN 750 - 850 - 950 AR

SPECIFICATIONS	VOLCAN 750EP AR	VOLCAN 850EP AR	VOLCAN 950EP AR
<b>CHASSIS</b>	Swinging integral chassis <b>OS-FRAME</b> with central articulation		
<b>DRIVE</b>	Four wheel drive * Front-wheel drive disengagement with electrohydraulic control		
<b>ENGINE</b>	4-stroke Diesel with direct injection		
Manufacturer	VM		
Type	D753 IE3	D754 TE3	D754 IE3
N° Cylinders	3	4	4
Displacement cc	2230	2970	2970
Induction	Turbo intercooler	Turbo	Turbo intercooler
Emission level	Tier 3		
Power KW/CV	51,4/70	58/79	67/91
Nominal speed (rpm)	2300	2300	2300
Maximum tractor torque (Nm/rpm)	265/1200	274/1800	420/1000
Cooling	Liquid	Liquid	Liquid
Specific fuel consumption (gr/KWh)	250	230	226
Tank capacity (lt.)	55	55	55
Air filter	-		
Radiator and air suction grille cleaning system	-		
<b>TRANSMISSION</b>	32-speed synchronesh gear: 16 AV and 16 RM with synchronized reverser		
Main clutch	With multiple discs in oil bath with hydraulic control		
<b>DIFFERENTIAL LOCK</b>	Front and rear. Differential locks: simultaneous front and rear or only rear with electrohydraulic control		
<b>AXLES</b>	Front and rear with epicyclic reduction gear		
<b>POWER TAKE-OFF</b>	Rear independent from gear and synchronized with forward speed. Engages under load with brake disengaged.		
PTO clutch	With multiple discs in oil bath		
Engagement control	Electrohydraulic		
Independent PTO rotation speed (rpm)	Standard: 540/750 - Optional: 540/1000		
<b>HYDRAULIC SYSTEM</b>	Two circuits with independent pumps and heat exchanger		
Flow rate to hydraulic pump which controls the hydroguide and electrohydraulic controls (l/min)	31		
Flow rate to hydraulic pump which controls the hoist and the distributors (l/min)	31 (optional 49, standard joy-stick)		
Maximum hydraulic pressure (bar)	180		
<b>DISTRIBUTORS</b>	Mechanical control to maximum 8 fluid power takeoffs		
Rear (Standard)	2 with double effect with oil recovery		
Rear (Optional)	1 single-acting and 1 double-acting or 1 double-acting and 1 double-acting floating type		
Joystick (Optional)	Electronic control of distributors composed of: 1 single-acting with adjustable flow and 5 double-acting		
<b>HYDRAULIC ACCUMULATOR</b>	-		
For weight compensation of the mower	-		
<b>ELECTRICAL SYSTEM</b>	100		
Battery (Ah)	55		
Alternator (A)	-		
<b>REAR IRT</b>	Standard: with two external rams - Optional: draft and position control		
Three-point hitches	Standard: adjustable in width with couplings cat. 1 and 2 Optional: rigid with quick couplings adjustable in width and length cat. 1 and 2		
Three-point tie bar	Standard: with manual adjustment Optional: hydraulically controlled upper link and tie rod for right link arm		
Lifting capacity at the end of the arms kg	2300		
<b>FRONT IRT (Optional)</b>	With two external rams with front guard and two double-acting distributors rigid with quick couplings Cat. 1		
Three-point hitches	800		
Carrying capacity kg	800		
<b>DRIVING UNIT</b>	With platform suspended on 'Silent block'		
Driving platform	Reversible with rotating platform, suspended brake-clutch pedals mounted on revolving control column		
Steering wheel	Height adjustable		
<b>Gas spring SEATS with easy adjustment and seat belt</b>	Standard: comfortable spring suspension seat adjustable according to the driver's weight Optional: 'Bostrom' suspension and seat - seat with pneumatic spring suspension system		
<b>SERVICE BRAKE</b>	With multiple discs in oil bath with hydraulic control, acting on the 4 wheels Automatic and independent with <b>BRAKE-OFF SYSTEM</b>		
<b>STEERING</b>	Hydraulic steering with dual-rams acting on articulated joint		
<b>SAFETY</b>	-		
Roll-bar frame (Standard)	Front folding		
Cab (Optional)	Monocoque body, soundproof, mounted on 'Silent block', safety cell integrated in the structure		
<b>CONSOLE</b>	Complete with: speed gauge, hour and revolution counter, speedometer, water thermometer, pilot lights and sound warning With simultaneous reading of rpm, forward speed and rotation speed of power takeoff		
Analog (Standard)	-		
Digital (Optional)	Standard With simultaneous reading of rpm, forward speed and rotation speed of power takeoff		
<b>TYRES</b>	-		
Standard	280/70-18 * 320/65-18 * 11.5/80-15.3 * 8.00-20 * 9.50-20 * 300/70-20 * 320/70-20 * 340/65-20 * 31x15.50-15 with tread XTC o STG * 33x12.50-15 XTC * 13/6-16/4 Garden		
Optional:	-		
<b>TOW HOOKS</b>	Rear tow hook cat.C and front tow hook		
Standard	Rear towing device CEE or CEE with Slider chassis		
Optional:	-		
<b>WEIGHT-OPERATIONAL</b>	2170		
With chassis (Kg)	2250		
With cab (Kg)	-		
<b>OPTIONAL</b>	Hydraulic brakes for trailers, Rotating lamp kit, silencer protection kit, oil filter protection kit, cyclone prefilter with external air intake, radiator and air suction grille cleaning system, Self cleaning system, front ballasts and wheel ballasts		

## VOLCAN 750 - 850 - 950 RS

SPECIFICATIONS	VOLCAN 750EP RS	VOLCAN 850EP RS	VOLCAN 950EP RS
<b>CHASSIS</b>	Swinging integral chassis <b>OS-FRAME</b> with steering wheels		
<b>DRIVE</b>	Four wheel drive * Front-wheel drive disengagement with electrohydraulic control		
<b>ENGINE</b>	4-stroke Diesel with direct injection		
Manufacturer	VM		
Type	D753 IE3	D754 TE3	D754 IE3
N° Cylinders	3	4	4
Displacement cc	2230	2970	2970
Induction	Turbo intercooler	Turbo	Turbo intercooler
Emission level	Tier 3		
Power KW/CV	51,4/70	58/79	67/91
Nominal speed (rpm)	2300	2300	2300
Maximum tractor torque (Nm/rpm)	265/1200	274/1800	420/1000
Cooling	Liquid	Liquid	Liquid
Specific fuel consumption (gr/KWh)	250	230	226
Tank capacity (lt.)	55	55	55
Air filter	-		
Radiator and air suction grille cleaning system	-		
<b>TRANSMISSION</b>	32-speed synchronesh gear: 16 AV and 16 RM with synchronized reverser		
Main clutch	With multiple discs in oil bath with hydraulic control		
<b>DIFFERENTIAL LOCK</b>	Front and rear. Differential locks: simultaneous front and rear or only rear with electrohydraulic control		
<b>AXLES</b>	Front and rear with epicyclic reduction gear		
<b>POWER TAKE-OFF</b>	Rear independent from gear and synchronized with forward speed. Engages under load with brake disengaged.		
PTO clutch	With multiple discs in oil bath		
Engagement control	Electrohydraulic		
Independent PTO rotation speed (rpm)	Standard: 540/750 - Optional: 540/1000		
<b>HYDRAULIC SYSTEM</b>	Two circuits with independent pumps and heat exchanger		
Flow rate to hydraulic pump which controls the hydroguide and electrohydraulic controls (l/min)	31		
Flow rate to hydraulic pump which controls the hoist and the distributors (l/min)	31 (optional 49, standard joy-stick)		
Maximum hydraulic pressure (bar)	180		
<b>DISTRIBUTORS</b>	Mechanical control to max 8 fluid power takeoffs		
Rear (Standard)	2 with double effect		
Rear (Optional)	1 single-acting and 1 double-acting or 1 double-acting and 1 double-acting floating type		
Joystick (Optional)	Electronic control of distributors composed of: 1 single-acting with adjustable flow and 5 double-acting		
<b>HYDRAULIC ACCUMULATOR</b>	-		
For weight compensation of the mower	-		
<b>ELECTRICAL SYSTEM</b>	100		
Battery (Ah)	55		
Alternator (A)	-		
<b>REAR IRT</b>	Standard: with two external rams - Optional: draft and position control		
Three-point hitches	Standard: adjustable in width with couplings cat. 1 and 2 Optional: adjustable in width and length with quick couplings cat. rigid with quick couplings adjustable in width and length cat. 1 and 2		
Three-point tie bar	Standard: with manual adjustment Optional: hydraulically controlled upper link and tie rod for right link arm		
Lifting capacity at the end of the arms kg	2300		
<b>FRONT IRT (Optional)</b>	With two external rams with front guard and two double-acting distributors rigid with quick couplings Cat. 1		
Three-point hitches	800		
Carrying capacity kg	800		
<b>DRIVING UNIT</b>	With platform suspended on 'Silent block'		
Driving platform	Reversible with rotating platform, suspended brake-clutch pedals mounted on revolving control column		
Steering wheel	Height adjustable		
<b>Gas spring SEATS with easy adjustment and seat belt</b>	Standard: comfortable spring suspension seat adjustable according to the driver's weight Optional: 'Bostrom' suspension and seat - seat with pneumatic spring suspension system		
<b>SERVICE BRAKE</b>	With multiple discs in oil bath with hydraulic control, acting on the 4 wheels Automatic and independent with <b>BRAKE-OFF SYSTEM</b>		
<b>STEERING</b>	With hydrostatic steering with two rams acting on centers wheels		
<b>SAFETY</b>	-		
Roll-bar frame (Standard)	Front folding		
Cab (Optional)	Monocoque body, soundproof, mounted on 'Silent block', safety cell integrated in the structure		
<b>CONSOLE</b>	Complete with: speed gauge, hour and revolution counter, speedometer, water thermometer, pilot lights and sound warning With simultaneous reading of rpm, forward speed and rotation speed of power takeoff		
Analog (Standard)	-		
Digital (Optional)	Standard With simultaneous reading of rpm, forward speed and rotation speed of power takeoff		
<b>TYRES</b>	-		
Standard	280/70-18 * 320/65-18 * 340/65-18 * 11.2-20 * 320/70		

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All the components of our machines are tested before going into production. This guarantees the quality and reliability of our products.



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E-parts is the on-line support for fast and easy service.



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