



**VALIANT** the best one



**TRACTORS** - MIDDLE RANGE

## COMMITMENT CREATES TRUST

A project followed by a team of competent and determined people. Hundreds of research and development activities gathered under the aegis of a well defined plan: the launch of a new programme of specialised tractors.

The aim was common to all of us at BCS: to create a quality product able to inspire confidence in the customers who must consider it as a possible alternative in every occasion.

With the new **Valiant range**, **BCS** strengthens its position of prestige in the sector.



### STRONGER AND MORE PROFITABLE THAN EVER.

Like all the products that boast the BCS trademark the new **Valiant range** also stands out thanks to its quality and high level performance. The new models have been designed to add concrete value to the investment: lower consumption, greater performance and wider usability of the machines, these are all advantages that have a positive influence on our customers' financial investment. The principle that inspired the project was that of creating tractors that produce the most favourable working conditions and offer their owners more competitive financial management.

### NEW SOLUTIONS OF GREAT INTEREST.

The attention to our customer's needs was the focal point for the development of the new **Valiant range**. During this task it was of fundamental importance keeping the best features that marked the first **Valiant range**. It is thanks to this approach that resources were dedicated to perfecting those aspects that are considered to be subject to improvement, according to the indications of our customers, while maintaining those well-known qualities that have always distinguished these machines.

So a new range of tractors has been created, with higher performance engines, gearboxes that are suitable for the new powers, increase in reliability, functionality, performance and improvement in driving conditions.



# VALIANT



**1 High power**

because high performance means low cost.

**2 Transmission with an OS-Frame**

which features one transmission shaft and one central articulation, giving the vehicle maximum mechanical efficiency and maximum stability especially on difficult terrain. The system lets the front axle oscillate by more than 15° with respect to the rear axle and vice versa.

**3 A perfect distribution of the weights** optimises the machine's performance and traction in its working set-up, with the tool mounted on the rear lift.

**4 High oil flow rate**

to the numerous distributors with oversize hydraulic pump which guarantees high pressures: ideal for using combined equipment while reducing costs and processing times.

**5 Short wheelbase limited**

to 1390 mm – one of the best of the category – so it easily moves in all crops and on any type of terrain.

**6 Outstanding driving comfort,**

because many “spend the day” on a tractor.

# VALIANT range



## VALIANT AR



**Mono-directional or 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 radius make the **Valiant AR** an irreplaceable machine, able to perform all the tasks it was designed for in the best possible way.

### FOCUS

The width is limited to **less than 100 centimetres** and the wheelbase has been reduced to **139 centimetres**.

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

**The driving position, which is reversible or mono-directional,** makes the **Valiant AR** a useful tool for farming, municipal sectors and for working in green areas.



## VALIANT RS



**Mono-directional or reversible isodiametric tractor with steering wheels**

This is the most practical version of the Valiant and is that which is suitable for a greater variety of uses. Thanks to their qualities the **Valiant RS** tractors are ideal for the wine-growing and fruit-growing sectors: the compact overall dimensions, the high power and, as for the other Valiant isodiametric tractors, **the correct weight distribution on the axles** with the machine under a working load, make these tractors incomparable in vineyards and orchards.

### FOCUS

**The gear ratios on all the Valiant tractors give you an excellent speed 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 axle.

**The hydraulic system** is double circuit, with an overall flow of 44 L/min and heat exchanger at working pressures of up to 180 bar, for excellent performance on the whole **Valiant series**, the best performance in the category.

## VALIANT 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 areas. The **Valiant MT** tractors have been designed for heavy use in conditions of maximum stress, with the emphasis on performance and especially safety and driver comfort: ROPS, 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, thus **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.

# VALIANT engine

## POWER, PERFORMANCE AND ECONOMY.

The route to be taken is always uphill, the work to be done always has strict deadlines that need to be kept to, harvests cannot submit to the demands of your vehicle and that's why you need the very best performance from the **VM D753 Tier III engines** that are supplied on the new **Valiant range**: high performance engines that will allow you to always reach your target because they are produced with the knowledge that our customers' activities depend, above all, on the efficiency, the reliability and the economy of the machine used.



Two VM engines for the **new Valiant series**, able to get the power out of every drop of fuel.

- **VM D753 E3** 2.2 litre, 3 in-line cylinder, aspirated diesel engine. Developing 49 HP at 2600 rpm.
- **VM D753 TE3** 2.2 litre, 3 in-line cylinder, turbo diesel engine. Developing 56 HP at 2600 rpm.

For this latest model, VM has developed the new EGR System positioned 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 2600 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 1950 and 2100 rpm.

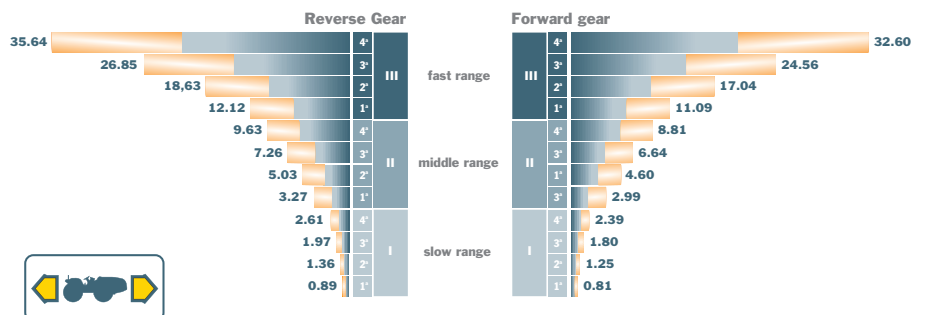
The exclusive characteristics of these engines, some of the most compact on the market, include:

- The tunnel base for high torsion 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.



### Speed diagram in km/h with tyres 11.5/80-15.3



The graphic highlights the perfect ratio progression, without any speed overlap in any forwarding range.

PREVENTION IS  
BETTER THAN CURE.



### COOLING.

Keeping the engine and the hydraulic system cool is essential on such compact and powerful tractors to allow them to perform without problems in the hard conditions they have to work in.

The new **Valiant series** has a cooling system that allows the engine and the hydraulic system to always operate within the maximum safety margins.

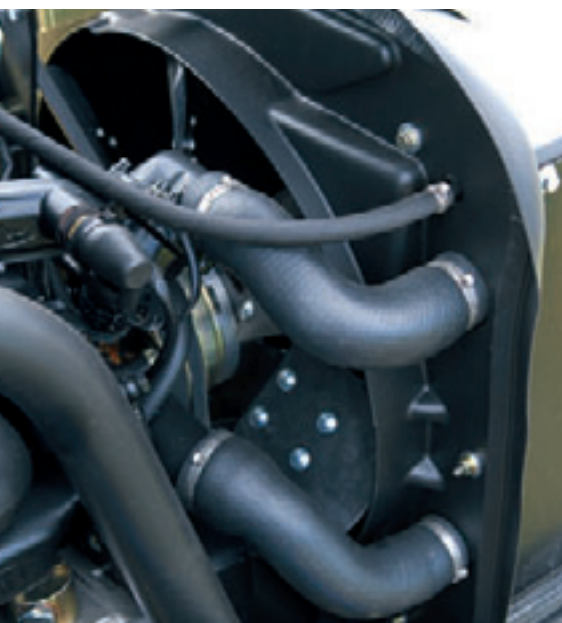
### CLEAN AIR ALWAYS .

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, avoiding the engine and hydraulic system 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 SCS dual fan system
- only the intermittent suction fan
- only the constant suction fan.

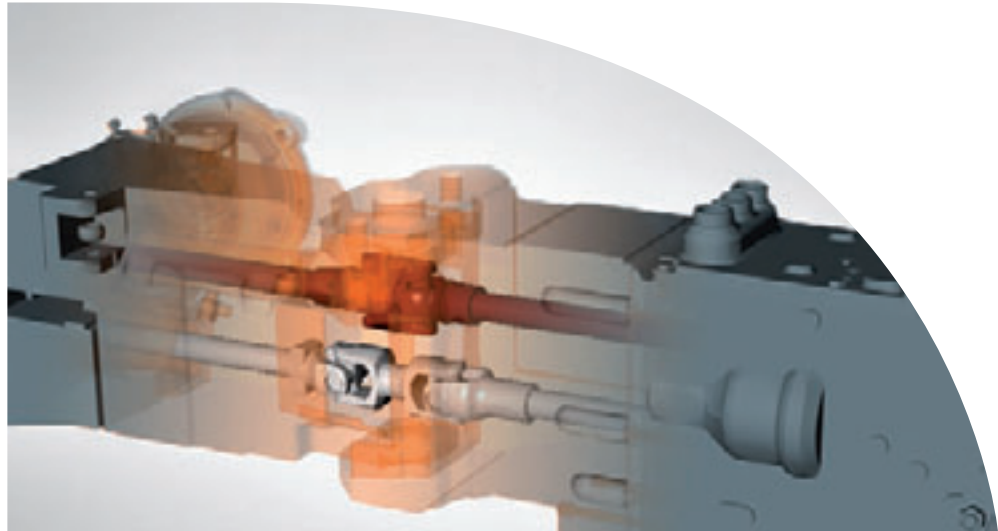
The operator can select the most suitable function to suit the particular job.



# VALIANT transmission

## A UNIQUE TRANSMISSION SYSTEM.

The transmission comes with the **OS-Frame** which, with **one single transmission shaft and one central joint**, guarantees the maximum mechanical performance. It is a “monolithic” structure in a single cast iron casting. The joint in the middle of the machine lets the front axle oscillate by up to 15° with respect to the rear, for excellent stability on slopes.



## 4WD.

The **constant traction on the four wheels** allows you to work safely on any type of terrain by taking full advantage of the traction and safety qualities with which the Valiant tractors have been created.



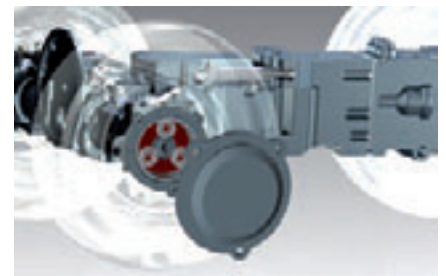
## THE RIGHT GEAR.

The **synchronised 24-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 the right gear for every job.



## TOP QUALITY AXLES.

The choice of using only **axles with planetary gear reducers** 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.



## A CLUTCH THAT LASTS AS LONG AS THE MACHINE.

The **LONG-LIFE clutch** on the gearbox is **multiple disc and runs in an oil bath**, no adjustment or maintenance is required. It can be modulated and is progressive. It is inserted within the gearbox to reduce the overhang of the engine and, as a consequence, the length of the tractor.



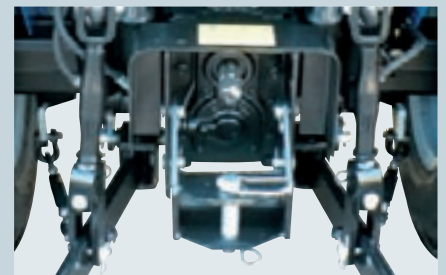
## BRAKES THAT CAN HANDLE ANYTHING.

The **multiple disc brakes running in an oil bath** of the very latest generation guarantee perfect adherence to the ground, for safe braking in any conditions. The parking brake has been designed with a practical and ergonomic grip making it easy to use even when the driver is using the reverse driving position.



## EFFECTIVE AND EFFICIENT POWER TAKE-OFF.

The **rear power take-off with electro-hydraulic control** runs at 540/750 rpm and is independent from the gears and synchronized with all the forward speeds. It can be engaged under load, and has a brake to stop it in the disengaged position.





# VALIANT driver

## THE BEST IN ITS CLASS.

When we designed the **cabs on the new Valiant**, we set out standards high, higher than anyone else had done before.

**The cabs on the new Valiant** have been meticulously studied to guarantee the maximum comfort with the most pleasant living conditions.

The suspension is fully independent from the tractor chassis. Visibility is guaranteed by large glazed openings, by a window in the roof of the cabin and by a 4-post structure, in alternative to the 6-post that are usually used for traditional tractor cabs.

Both **Luxury** and **Comfort** versions are available; the latter has air-conditioning located inside the roof structure, so as not to increase the height of the machine.



### A STEP FORWARDS IN DRIVER COMFORT.

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

**The driving seat** is made-to-measure for the driver: **the cab driving module, with the platform suspended on 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 machine. **The instruments** come in both analogue and digital versions. the latter can display the engine rpm, forward speed and rotation speed of power take-off.



# VALIANT hydraulic system

## NEVER BEEN SO EFFICIENT.

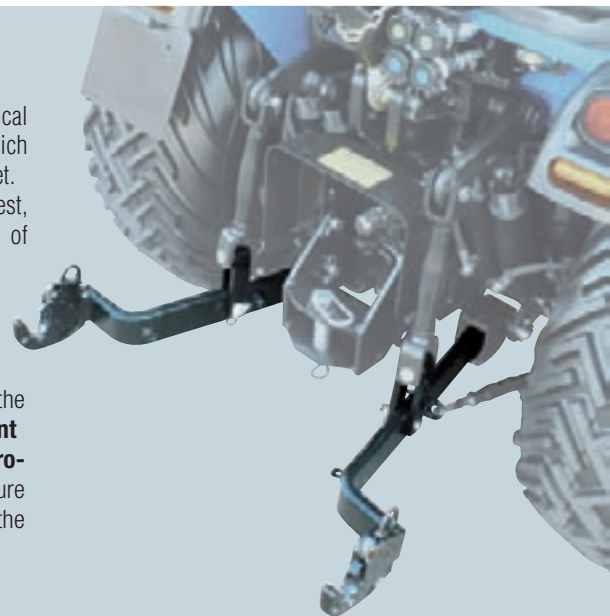
In a specialized tractor, the performance of the hydraulic system is fundamental. The system on the new **Valiant** is double circuit with independent pumps with an overall flow of 44 L/min and heat exchanger at working pressures of up to 180 bar. The hydraulic couplers, at the rear of the machines, allow the connection of equipments that require high-capacity hydraulic supply, often used in vineyard cultivations.



### THE STRENGTH OF LEVERS.

**The rear lifts** are strong and use practical and versatile multi-purpose attachments, which adapt well to all the equipment on the market. Supported by the hydraulic system, on request, they can be provided with the assistance of position and draft control.

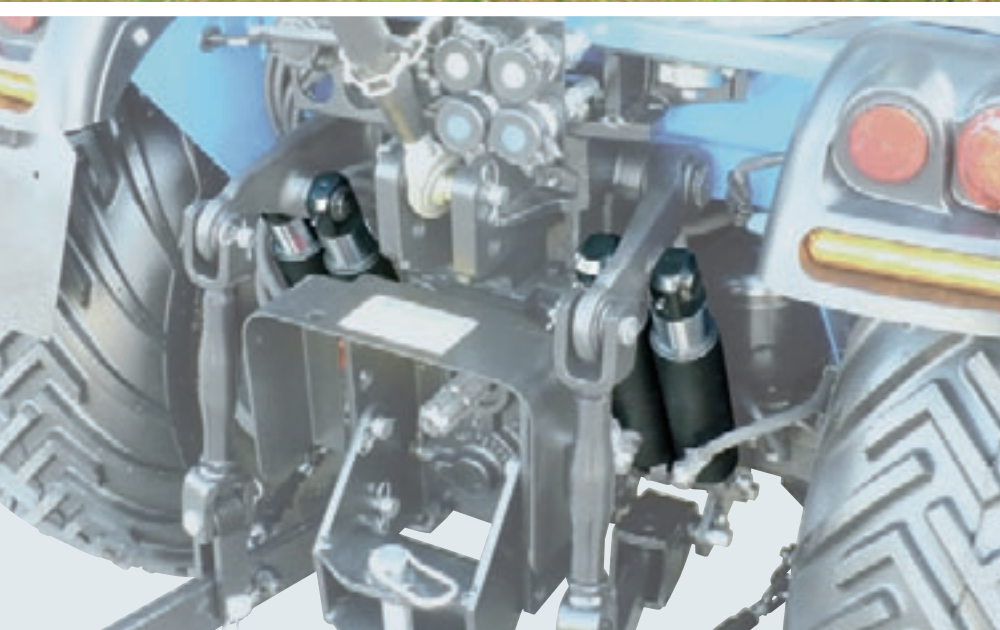
To control both the hydraulic system and the lifts by one device only, the **new Valiant** tractors can be equipped with an **electro-hydraulically controlled Joy-Stick**, to ensure functional and safe hydraulic movement of the unit.



# VALIANT Dual Floating System®

## THE WORLD ISN'T PERFECTLY FLAT.

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



The system uses two cylinders connected to the independent hydraulic system 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®**” 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 analogue manometer, you can change the internal pressure of the hydraulic suspension system at any time, and therefore the actual suspension capacity required.

# OPTIONAL

## OTHER GOOD REASONS TO CHOOSE A VALIANT.

The **VALIANT** are specialised tractors like few others and have been built for those who pretend only the best. The available optional and the BCS original accessories make them more than unique.

- 1 Wheels
- 2 Third points
- 3 Weights

### ACCESSIBLE TO ALL.

- 1 The width and the 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 new Valiant, so that our customers will always have the right solution to meet their requirements.

- 1 **TRACTOR**      **XTC**      **STG**      **GARDEN**



- 2 To make the coupling of the attachment to the machine easier and quicker directly from the driver's position, the rear lift with 3-point hitch can be equipped with quick couplers and length adjustable tie rods.



# VALIANT BCS services

## AS IMPORTANT AS THE TRACTORS.

BCS provides many services so that its customers can get the very best out of their Valiant, 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.

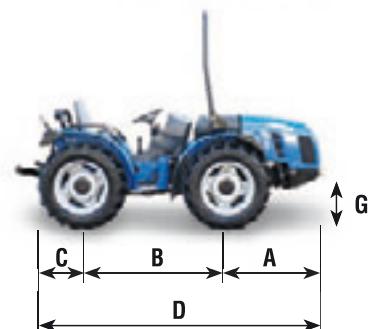
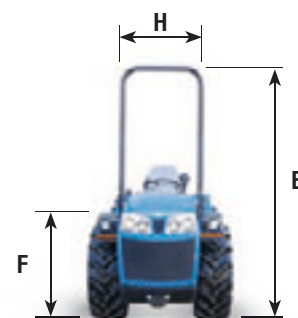
**Safety first and foremost.** As always. The maximum safety built into our vehicles is the result of over 70 years of experience in farm machinery. **BCS is certified ISO 9001.** All our suppliers, the materials used in the construction of the machines, the cycles of the processes and the distribution 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.



# VALIANT AR 550 - 650

## TRACTOR DIMENSIONS (AR VERSION) WITH FRONT FRAME

	A	B	C	D	E min/max	F min/max	G min/max	H
VALIANT 550 AR	1040	1390	450	2880	2139 2190	1090 1140	190 295	675
VALIANT 650 AR	1040	1390	450	2880	2139 2190	1090 1140	190 295	675



## TRACTOR WIDTH (AR VERSION) WITH THE FORESEEN WHEELS

Tyre type with relevant rim	Tyre width mm.	Tyre height mm.	I Wheel track min/max mm.	L Width min/max mm.
7.50-16 With adjustable rim	208	798	Mono 787 – 1107	Mono 995 – 1315
			Rev 827 – 1107	Rev 1035 – 1315
8.25-16 With adjustable rim	212	820	Mono 787 – 1107	Mono 999 – 1319
			Rev 827 – 1107	Rev 1039 – 1319
250/80-18 With adjustable rim	240	879	Mono 865 – 1107	Mono 1105 – 1347
			Rev 865 – 1107	Rev 1105 – 1347
280/70-18 With adjustable rim	282	849	Mono 869 – 1119	Mono 1151 – 1401
			Rev 931 – 1119	Rev 1213 – 1401
300/65-18 With adjustable rim	295	849	Mono 869 – 1119	Mono 1164 – 1414
			Rev 931 – 1119	Rev 1226 – 1414
320/65-18 With adjustable rim	319	873	Mono 931 – 1119	Mono 1196 – 1438
			Rev 931 – 1119	Rev 1250 – 1438
11.5/80-15.3 With adjustable rim	290	838	Mono 877 – 1087	Mono 1167 – 1377
			Rev 1021 – 1087	Rev 1311 – 1377
260/70-20 With adjustable rim	258	877	Mono 846 – 1120	Mono 1104 – 1378
			Rev 908 – 1120	Rev 1160 – 1378
31x15.50-15 XTC o STG With fixed rim	389	800	999	1388
33x12.50-15 Soft Track With fixed rim	345	843	1037	1382



## STEERING RADIUS WITH THE FORESEEN WHEELS (AR VERSION)

Tyre type	7.50-16	8.25-16	250/80 18	280/70-18 300/65-18	320/65 18	11.5/80 15.3	260/70 20	31x15.50 15	33x12.50 15
mm	2450	2450	2500	2530	2650	2550	2600	2700	2700



TECHNICAL FEATURES

VALIANT 550 AR

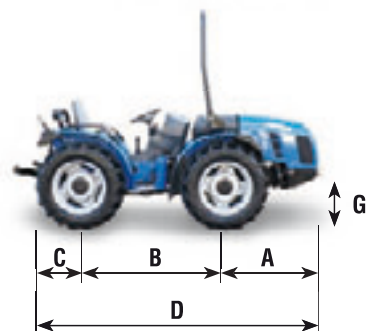
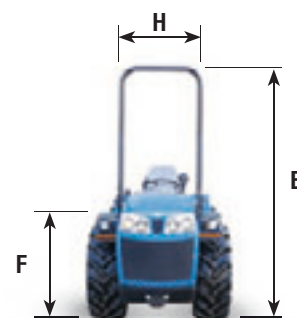
VALIANT 650 AR

<b>CHASSIS</b>	Swinging integral chassis OS-FRAME with central articulation	
<b>DRIVE</b>	Four-wheel drive, permanent	
<b>ENGINE</b>		
Manufacturer	VM	
Model	D753 E3	D753 TE3
Number of cylinders	3	3
Displacement cm <sup>3</sup>	2230	2230
Suction	Naturally aspirated	Turbo
Emission level	Tier 3	
Power KW/CV	36 / 49	41,2 / 56
Nominal speed (rpm)	2600	
Maximum tractor torque (Nm/rpm)	140 / 2100	185 / 1950
Cooling	Water	
Tank capacity (lt.)	45	
<b>TRANSMISSION</b>	Synchronized gearbox: 12 forward and 12 reverse speeds with synchronized reverser	
Main clutch	Multidisc, in oil bath	
<b>DIFFERENTIAL</b>	Front and rear differential lock, electro-hydraulically controlled	
<b>AXLES</b>	Front and rear, with epicyclic reduction units	
<b>POWER TAKE-OFF</b>		
Rear (Standard)	Independent from the gearbox with electro-hydraulic control, 540/750 r.p.m. and synchronized with the gearbox	
PTO clutch	Multidisc, in oil bath	
<b>HYDRAULIC SYSTEM</b>	Double circuit	
Flow rate to hydraulic pump which controls the hydroguide and electro-hydraulic control + Flow rate to the hoist and the distributors (l/min.)	8 + 28 (optional 9 + 35, standard with joy-stick)	
Maximum hydraulic pressure (bar)	180	
<b>DISTRIBUTORS</b>	Mechanical control to max. 6 hydraulic couplers	
Rear (Standard)	1 double acting (hydraulic lift by rams) 2 double acting (Draft and position control)	
Rear (optional)	1 single acting and 1 double acting with float or 2 double acting (Hydraulic lift by rams) 1 single acting and 1 double acting with float instead of the serial ones (Draft and position control)	
Joy-Stick (optional)	Electronic control of distributors composed of: 1 single-acting with adjustable flow and 3 double-acting.	
<b>ELECTRIC SYSTEM</b>		
Battery (Ah)	70	
Alternator (A)	55	
<b>REAR LIFT</b>	Standard: by two external rams - Optional: Draft and position control	
Three-point hitches	Standard: standard couplers cat. 1 and adjustable tie rods Optional: quick couplers cat. 1 and tie rods adjustable in length	
Three-point tie bar	with manual adjustment	
Lifting capacity at the end of the arms kg	1800	
<b>FRONT LIFT (optional)</b>	With two external rams with front protection and 1 double acting control valve	
Three-point hitches	Rigid, with quick couplers Cat. 1	
Carrying capacity kg	600	
<b>DRIVING UNIT</b>	With half-platform for the mono-directional version - with suspended platform on "silent-block" for the reversible version	
Driving platform	Mono-directional or reversible with rotating platform and twin pedal assembly	
<b>SEATS</b> with safety belts	Standard: Sprung seat - Optional: 'Bostrom' seat	
<b>SERVICE BRAKES</b>	Oil immersed multidisc, acting on the rear transmission, simultaneously or independently	
Parking brake	Acting on the service brakes	
<b>STEERING</b>	With hydrostatic steering on articulated joint. Flow deviator for steering unit	
<b>SAFETY</b>		
Roll-bar frame (standard)	Front, homologated	
Cabin (optional)	Sound proofed, mounted on 'Silent block', heating and ventilation systems. Optional: air conditioning	
<b>CONSOLE</b>	Analogue type with: chrono-tacho-gyrometer, water thermometer, control warning lights and acoustic alarm. Optional: Digital type with reading of rpm, forward speed and rotation speed of power takeoff	
<b>TYRES</b>		
Standard	7.50-16	
Optional	8.25-16 *250/80-18* 280/70-18 * 300/65-18 * 320/65-18 * 11.5/80-15.3 * 260/70-20 * 31X15.50-15 XTC and STG * 33x12.50-15 Soft-Track	
<b>TOW HOOKS</b>		
Standard	Rear cat. C and front tow hoov	
optional	Rear rotating or rear adjustable in height (Slider type) tow hooks, both EC approved	
<b>WEIGHT OPERATIONAL</b>		
With chassis (kg.)	1380	1400
With cabin (kg.)	1540	1560
<b>OPTIONAL</b>	Flash light, radiator and air suction grille cleaning system "Self Cleaning System" , front weight and weights for wheels.	

# VALIANT RS 550 - 650

## TRACTOR DIMENSIONS (RS VERSION) WITH FRONT FRAME

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## TRACTOR WIDTH (RS VERSION) WITH THE FORESEEN WHEELS

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280/70-18 With adjustable rim	282	849	984 - 1324	1259 - 1599
300/65-18 With adjustable rim	295	849	1074 - 1324	1369 - 1619
320/65-18 With adjustable rim	319	873	1074 - 1324	1393 - 1643
11.5/80-15.3 With adjustable rim	290	838	1016 - 1292	1306 - 1582
260/70-20 With adjustable rim	258	877	987 - 1325	1245 - 1583
31x15.50-15 XTC o STG With fixed rim	389	800	1100 - 1204	1489 - 1593
33x12.50-15 Soft Track With fixed rim	345	843	1066 - 1242	1411 - 1587



## STEERING RADIUS WITH THE FORESEEN WHEELS (RS VERSION)

Tyre type	7.50-16	8.25-16	250/80 18	280/70-18 300/65-18	320/65 18	11.5/80 15.3	260/70 20	31x15.50 15	33x12.50 15
mm	2800	2800	2830	2930	2950	3130	3350	3250	3200





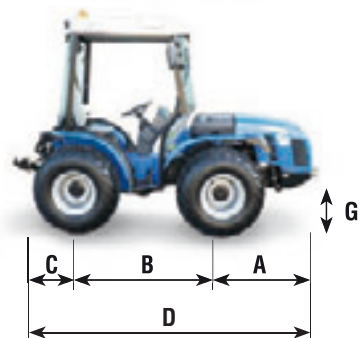
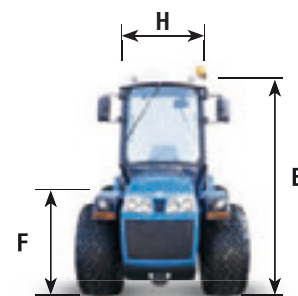
**TECHNICAL FEATURES**
**VALIANT 550 RS**
**VALIANT 650 RS**

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Suction	Naturally aspirated	Turbo
Emission level	Tier 3	
Power KW/CV	36 / 49	41,2 / 56
Nominal speed (rpm)	2600	
Maximum tractor torque (Nm/rpm)	140 / 2100	185 / 1950
Cooling	Water	
Tank capacity (lt.)	45	
<b>TRANSMISSION</b>	Synchronized gearbox: 12 forward and 12 reverse speeds with synchronized reverser	
Main clutch	Multidisc, in oil bath	
<b>DIFFERENTIAL</b>	Front and rear differential lock, electro-hydraulically controlled	
<b>AXLES</b>	Front and rear, with epicyclic reduction units	
<b>POWER TAKE-OFF</b>		
Rear (Standard)	Independent from the gearbox with electro-hydraulic control, 540/750 r.p.m. and synchronized with the gearbox	
PTO clutch	Multidisc, in oil bath	
<b>HYDRAULIC SYSTEM</b>	Double circuit	
Flow rate to hydraulic pump which controls the hydroguide and electro-hydraulic control + Flow rate to the hoist and the distributors (l/min.)	8 + 28 (optional 9 + 35, standard with joy-stick)	
Maximum hydraulic pressure (bar)	180	
<b>DISTRIBUTORS</b>	Mechanical control to max. 6 hydraulic couplers	
Rear (Standard)	1 double acting (hydraulic lift by rams) 2 double acting (Draft and position control)	
Rear (optional)	1 single acting and 1 double acting with float or 2 double acting (Hydraulic lift by rams) 1 single acting and 1 double acting with float instead of the serial ones (Draft and position control)	
Joy-Stick (optional)	Electronic control of distributors composed of: 1 single-acting with adjustable flow and 3 double-acting.	
<b>ELECTRIC SYSTEM</b>		
Battery (Ah)	70	
Alternator (A)	55	
<b>REAR LIFT</b>	Standard: by two external rams - Optional: Draft and position control	
Three-point hitches	Standard: standard couplers cat. 1 and adjustable tie rods Optional: quick couplers cat. 1 and tie rods adjustable in length	
Three-point tie bar	with manual adjustment	
Lifting capacity at the end of the arms kg	1800	
<b>FRONT LIFT (optional)</b>	With two external rams with front protection and 1 double acting control valve	
Three-point hitches	Rigid, with quick couplers Cat. 1	
Carrying capacity kg	600	
<b>DRIVING UNIT</b>	With half-platform for the mono-directional version - with suspended platform on "silent-block" for the reversible versión	
Driving platform	Mono-directional or reversible with rotating platform and twin pedal assembly	
<b>SEATS</b> with safety belts	Standard: Sprung seat - Optional: 'Bostrom' seat	
<b>SERVICE BRAKES</b>	Oil immersed multidisc, acting on the rear transmission, simultaneously or independently	
Parking brake	Acting on the service brake	
<b>STEERING</b>	With hydrostatic steering, acting on the front wheels. Flow deviator for steering unit	
<b>SAFETY</b>		
Roll-bar frame (standard)	Front, homologated	
Cabin (optional)	Sound proofed, mounted on 'Silent block', heating and ventilation systems. Optional: air conditioning	
<b>CONSOLE</b>	Analogue type with: chrono-tacho-gyrometer, water thermometer, control warning lights and acoustic alarm. Optional: Digital type with reading of rpm, forward speed and rotation speed of power takeoff	
<b>TYRES</b>		
Standard	7.50-16	
Optional	8.25-16 *250/80-18* 280/70-18 * 300/65-18 * 320/65-18 * 11.5/80-15.3 * 260/70-20 * 31X15.50-15 XTC and STG * 33x12.50-15 Soft-Track	
<b>TOW HOOKS</b>		
Standard	Rear cat. C and front tow hoov	
optional	Rear rotating or rear adjustable in height (Slider type) tow hooks, both EC approved	
<b>WEIGHT OPERATIONAL</b>		
With chassis (kg.)	1360	1380
With cabin (kg.)	1520	1540
<b>OPTIONAL</b>	Flash light, radiator and air suction grille cleaning system "Self Cleaning System" , front weight and weights for wheels.	

# VALIANT MT 550 - 650

## TRACTOR DIMENSIONS (MT VERSION) WITH 4 - POST ROPS WITH ROOF

	A	B	C	D	E min/max	F min/max	G min/max	H
VALIANT 550 MT	1040	1390	400	2830	2025 2096	1137 1159	190 295	1040
VALIANT 650 MT	1040	1390	400	2830	2025 2096	1137 1159	190 295	1040



## TRACTOR WIDTH (MT VERSION) WITH THE FORESEEN WHEELS

Tyre type with relevant rim	Tyre width mm.	Tyre height mm.	I Wheel track min/max mm.	L Width min/max mm.
31x15.50-15 XTC - STG con cerchio fisso	389	800	1100 - 1204	1489 - 1593
33x15.50-15 XTC con cerchio fisso	391	843	1100 - 1204	1491 - 1595



## STEERING RADIUS

Tyre type	31x15.50-15	33x15.50-15
mm	3250	3250



**TECHNICAL FEATURES**
**VALIANT 550 MT**
**VALIANT 650 MT**

<b>CHASSIS</b>	Swinging integral chassis OS-FRAME with steering wheels	
<b>DRIVE</b>	Four-wheel drive, permanent	
<b>ENGINE</b>		
Manufacturer	VM	
Model	D753 E3	D753 TE3
Number of cylinders	3	3
Displacement cm <sup>3</sup>	2230	2230
Suction	Naturally aspirated	Turbo
Emission level	Tier 3	
Power KW/CV	36 / 49	41,2 / 56
Nominal speed (rpm)	2600	
Maximum tractor torque (Nm/rpm)	140 / 2100	185 / 1950
Cooling	Water	
Tank capacity (lt.)	45	
Radiator and air suction grille cleaning system	Self Cleaning System	
<b>TRANSMISSION</b>	Synchronized gearbox: 12 forward and 12 reverse speeds with synchronized reverser	
Main clutch	Multidisc, in oil bath	
<b>DIFFERENTIAL</b>	Front and rear differential lock, electro-hydraulically controlled	
<b>AXLES</b>	Front and rear, with epicyclic reduction units	
<b>POWER TAKE-OFF</b>		
Rear (Standard)	independent from the gearbox with electro-hydraulic control, 540/750 r.p.m. and synchronized with the gearbox	
PTO clutch	Multidisc, in oil bath	
<b>HYDRAULIC SYSTEM</b>	Double circuit	
Flow rate to hydraulic pump which controls the hydroguide and electro-hydraulic control (l/min.)	8	
Flow rate to hydraulic pump which controls the hoist and the distributors (l/min.)	28	
Maximum hydraulic pressure (bar)	180 bar	
<b>DISTRIBUTORS</b>	Mechanical control to max. 6 hydraulic couplers	
Rear (Standard)	1 single acting and 1 double acting with float	
Rear (Optional)	2 double acting	
<b>HYDRAULIC ACCUMULATOR</b> with Dual Floating System	serial	
<b>ELECTRIC SYSTEM</b>		
Battery (Ah)	70	
Alternator (A)	55	
<b>REAR LIFT</b>	by four external rams	
Three-point hitches	Standard: standard couplers cat. 1 and adjustable tie rods Optional: quick couplers cat. 1 and tie rods adjustable in length	
Three-point tie bar	with manual adjustment	
Lifting capacity at the end of the arms kg	1800	
<b>DRIVING UNIT</b>	With suspended platform on "Silent block"	
Driving platform	Reversible with rotating platform and twin pedal assembly	
<b>SEATS</b> with safety belts	Standard: Sprung seat - Optional: 'Bostrom' seat	
<b>SERVICE BRAKES</b>	Oil immersed multidisc, acting on the rear transmission, simultaneously or independently	
Parking brake	Acting on the service brakes	
<b>STEERING</b>	With hydrostatic steering, acting on the front wheels. Flow deviator for steering unit	
<b>SAFETY</b>		
Roll-bar frame (standard)	4-post ROPS with roof, front and rear windscreen wipers and washers, rear view mirrors and lights	
Cabin (optional)	Sound proofed, mounted on 'Silent block', with heating and ventilation system. Optional with air conditioning	
<b>CONSOLE</b>	Digital type with reading of rpm, forward speed and rotation speed of power takeoff, water thermometer, control warning lights and acoustic alarm.	
<b>TYRES</b>		
Standard	31x15.50-15 XTC	
Optional	31x15.50-15 STG * 33x15.50-15 XTC	
<b>TOW HOOKS</b>		
Standard	Rear cat. C and front tow hook	
optional	Rear rotating or rear adjustable in height (Slider type) tow hooks, both EC approved	
<b>WEIGHT OPERATIONAL</b>		
With chassis (kg.)	1530	1560
With cabin (kg.)	1590	1610
<b>OPTIONAL</b>	Flash light, front weight.	

### BCS guarantees:



PROJECT

The design criteria have the support of very modern programs that work in 3D.



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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.



COMFORT

Designing for comfort is one of the essential components of our technical staff's Mission.



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Tested and guaranteed original spare parts  
E-parts is the on-line support for fast and easy service.



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