



INVICTUS

language



M A D E I N I T A L Y





INVICTUS IS THE RIGHT CHOICE

INVICTUS K300 - K400 AR / RS

A new tractor is an important investment
and choosing the right one is not simple.
It is good sense to consider different models.
Carefully weigh up features, dimensions, and accessories.
And put your faith in a great manufacturer.




MADE IN ITALY



We are an **international company** and one of the most established in the sector of **agricultural machines** and **greens maintenance**.

Founded in 1943 and certified ISO 9001 since 1994, we stand out from the rest thanks to the high quality of our production and the operative capacity that comprises each phase: design, production and distribution.

The **BCS dealers**, an integral part of our sales network, are expert professionals, able to advise and accompany each customer in choosing the most suitable machine for their needs.



We carefully oversee the **after-sale quality services**: authorised dealers and spare parts dealers, alongside the technical and marketing support, are available to anyone who needs safe, rapid assistance.



The reasons for choosing US

And the reasons for choosing THEM



At the moment of purchase, we provide a **two year guarantee on Invictus** tractors, included in the price, which also covers the engine, because Customer satisfaction and safety is our number one aim.



Invictus tractors are the best answer to the requirements of the Hobby-Farmer, or the farmer specialising in farming in glasshouses, nurseries, micro-farming and poultry farming and, more generally, anyone who needs **compact and manageable vehicles, with contained power and weight**.

Versatile, high performance, productive, safe and extremely reliable: these are isodiametric machines available in both **central articulation** and **steering wheels** versions.



THE ADVANTAGES:

- **KUBOTA ENGINES**
latest generation, liquid cooled, specifically set up to be used on compact isodiametric tractors
- **LIMITED DIMENSION AND WEIGHT**
- **HYDRAULIC SYSTEM**
with high performance in order to provide for up to a maximum of 6 auxiliary hydraulic connections
- **CONTROL LEVERS**
placed ergonomically under the steering wheel to facilitate the access to the driving position and to be close at hand at all times
- **DRIVING COMFORT AND PRACTICALITY**
to render them easy to use for the hobby or semi-professional user also
- **LOOK** modern, functional and appealing



MAXIMUM RELIABILITY

SOBRIETY

SILENCE

LIMITED
VIBRATION LEVEL



Engine: heart of power



Kubota engines have been chosen for the **Invictus** tractors. This prestigious brand is recognised at an international level as a sector leader of compact engines, in terms of both production quantity and quality.

The Invictus are moved by two latest generation engines: a **25.2 HP three cylinder** engine and a **35.6 HP four cylinder** engine, both with indirect injection and natural aspiration. The performances, in regards to both absolute power and torque, place them amongst the top performing in the category.

The **emissions** comply with the strict regulations in force for the corresponding power bracket.

The engine **exhaust silencer** is folded away stylishly inside the front cover support and has a characteristic oval vent.

INVICTUS	Type	Power (kw/HP)	No. Cylinders	Displacement	Aspiration	Cooling
K300	D1105	18,6 / 25,2	3	1123	Natural	Liquid
K400	V1505	26,2 / 35,6	4	1498	Natural	Liquid

Exclusive performance

Hydraulic system

The hydraulic system provides **high performance**, with a **16 Lt/min** and 125 bar running pressure.

In addition to being able to accommodate up to **6 rear hydraulic connections**, it ensures maximum steering wheel manoeuvrability.

Rear lift

The external rear jacks hoist is set up with a **cat. 1 three point connection**, complete with stabilisers to restrict the equipment spinning laterally.

The **lifting capacity** at the ball and socket joint is 1050 kg, indispensable for using a wide variety of equipment. The hoisting braces are fixed and feature length-adjustable tie rods.





HIGH PERFORMANCE

RELIABILITY

COMFORT

SAFETY

Power take-off

The rear mechanical control power take-off is at 540 r.p.m, **synchronised with the gearbox**. The gradual connection leaves the work more precise and comfortable, thus increasing productivity.

The **optional independent PTO** with electro-hydraulic connection control grants the maximum versatility of use of the equipment, even those with high inertial charge.



Integral frame

The **OS-FRAME oscillating integral frame** is part of the transmission and is equipped with a central articulation that allows oscillation at +/- 15°.

Front and rear are therefore independent; with the 4 wheels gripping the ground at all times to guarantee maximum traction and safety even when used on broken and sloped land.

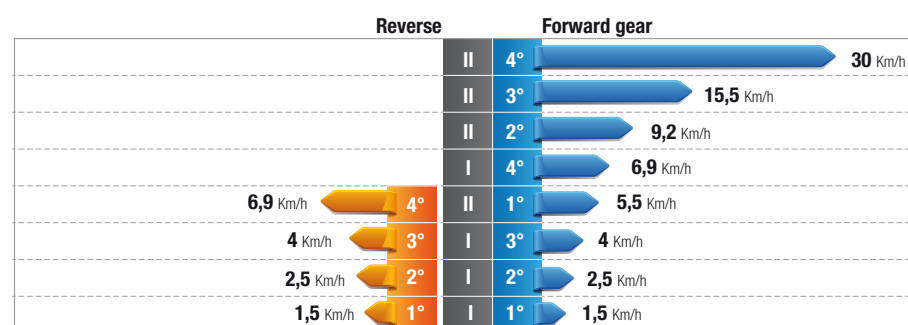


Transmission: total control

Transmission

The transmission has been **created to last over time**, particularly providing for reliability and performance without overlooking comfort and safety. Service maintenance is also reduced to the minimum.

GRAPH OF SPEEDS IN KM/H WITH 210/95R16 TYRES OF THE AR AND RS VERSION TRACTORS.
The graph highlights the perfect progression of the ratios, without any speed overlapping between the ranges.



Axles

The **distribution of the weights** on the axles, 40% on the rear and 60% on the front, is proved optimal once the rear lifting equipment is mounted.

Essentially, the rear load optimises the sharing of the weights on the two tractor axles to increase **stability, safety and traction**.



Gearbox

The easy connection gearbox has **8 forward and 4 reverse speeds, without speed overlapping**. The maximum speed is 30 km/h, vital for moving swiftly on the road.

Clutch

The large, dry single disc clutch grants **gentle and immediate gear connection** to guarantee the utmost in reliability and power transmission.

Centre of gravity

While the free height to the soil is considerable, the centre of gravity is **lowered to increase stability** in case of use in sloped areas.

Differentials

The front and rear differential units can be **blocked simultaneously** by means of a pedal mechanical control that, together with the **4WD integral traction**, guarantees the Invictus maximum traction even in the most difficult situations.





Drive module

The comfortable driving position has been produced with a structured semi-platform around the transmission and at the rear part of the vehicle.

The **lowered driving position** has been studied in accordance with the compact dimensions of the vehicle, allowing them to comply with all intended uses and granting the operator the utmost safety and comfort, even for prolonged use.

The **gear levers** are positioned beneath the dashboard for maximum driving position accessibility and for easy operator access.



Maximum Comfort and Safety levels



The **ergonomic controls** and **pedals** are positioned logically and intuitively for full control of the tractor and equipment at all times.

The **dashboard** and **control instrumentation** have been created with an elegant and fashionable design.

The double circular instruments provide the operator with all of the data necessary for keeping the vehicle operation under control.



Steering wheel

The steering wheel is **hydrostatic with power-steering and double effect gripper** working on the front wheels (version RS) or the central joint (version AR).

Thanks to the **short wheelbase** and the **precise and reactive steering wheel**, Invictus tractors show surprising agility even in the most difficult conditions with broken or sloped terrain. To fully benefit production, the reduced radius also allows steering in confined spaces.



Active and passive safety

The **efficient service brakes**, drum type acting on the front wheels, guarantee modular and completely safe braking. Braking occurs independently (in the steering wheels version) and simultaneously.



The **parking brake** is mechanically controlled.

The approved **front roll-bar** guarantees operator protection.

The seat is spring mounted and approved featuring the relative safety belts.





Fashionable design

The superstructures

The **air aspiration grids** are large in order to facilitate the cooling of the engine and are attractively inserted into the bonnet.

The **double ellipsoidal lights** integrated in the bonnet, in addition to being efficient, give the tractor a particularly refined look, appropriate to machines of higher categories.

The wrap-around mudguards guarantee the operator maximum protection.

The **spacious 43 Lt tank** is not integrated underneath the engine bonnet but is placed in front of the dashboard, under a special board well integrated in the machine setting.

The frontal-opening engine bonnet gives the user total access to the engine during the checks and maintenance operations, making them practical and quick.

Tow hooks

The CUNA and EEC approved tow hooks comply with the regulations in force in most countries and enable **rapid connection of the towed equipment**. Furthermore, the front tow hook is integrated into the bumper structure.



Tyres

There is a wide range of tyres available in **Tractor** or **Garden** version to best suit the various types of terrain and types of farming.

Technical Features _ INVICTUS AR

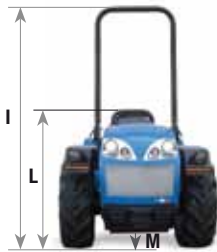
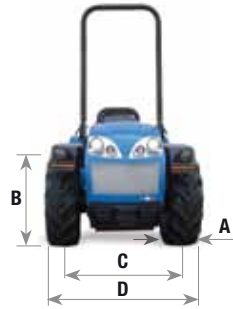
	6.50-16	210/95R16 (7.50-16)	260/70R16	240/70-15
	WITH ADJUSTABLE RIM	WITH ADJUSTABLE RIM	WITH ADJUSTABLE RIM	GARDEN WITH FIXED RIM
A Tyre width mm.	183	209	258	253
B Tyre height mm.	762	806	770	729
C Wheel track min/max mm.	806/1182	806/1182	882/1040	906/1082
D Width min/max mm.	989/1365	1015/1391	1140/1298	1159/1335

TRACTOR DIMENSIONS (AR VERSION) WITH FRONT FRAME (mm):

	E	F	G	H	I Min-Max	L Min-Max	M Min-Max
INVICTUS K300 AR	985	1200	705	2890	1970/1990	1154/1174	237/258
INVICTUS K400 AR	1055	1200	705	2960	1970/1990	1154/1174	237/258

STEERING RADIUS (AR VERSION) WITH THE FORESEEN WHEELS:

Tyre type	6.50-16	210/95R16	260/70R16	240/70-15
mm	2590	2600	2670	2680



Technical Features _ INVICTUS RS

	6.50-16	210/95R16 (7.50-16)	260/70R16	240/70-15
	WITH ADJUSTABLE RIM	WITH ADJUSTABLE RIM	WITH ADJUSTABLE RIM	GARDEN WITH FIXED RIM
A Tyre width mm.	183	209	258	253
B Tyre height mm.	762	806	770	729
C Wheel track min/max mm.	886/1182	886/1182	944/1102	906/1082
D Width min/max mm.	1069/1365	1095/1391	1202/1360	1159/1335

TRACTOR DIMENSIONS (RS VERSION) WITH FRONT FRAME (mm):

	E	F	G	H	I Min-Max	L Min-Max	M Min-Max
INVICTUS K300 RS	985	1200	705	2890	1970/1990	1154/1174	237/258
INVICTUS K400 RS	1055	1200	705	2960	1970/1990	1154/1174	237/258

STEERING RADIUS (RS VERSION) WITH THE FORESEEN WHEELS:

Tyre type	6.50-16	210/95R16	260/70R16	240/70-15
mm	2670	2995	2820	2970

TECHNICAL FEATURES	INVICTUS K300 AR		INVICTUS K400 AR	
CHASSIS	Swinging integral chassis +/- 15° OS-FRAME with central articulation			
DRIVE	Four-wheel drive, permanent			
ENGINE				
Manufacturer	KUBOTA			
Model	D1105		V 1505	
Number of cylinders	3		4	
Displacement cm3	1123		1498	
Suction	Naturally aspired		Naturally aspired	
Emission level	Tier 3A			
Power KW/HP	18,6 / 25,2		26,2 / 35,6	
Nominal speed (rpm)	3000			
Maximum tractor torque (Nm/rpm)	70,4 / 2200		96,5 / 2200	
Cooling	Water			
Tank capacity (lt.)	43			
TRANSMISSION	Gearbox with easy gear engagement: 8 forward and 4 reverse speeds			
Main clutch	Dry single-plate			
DIFFERENTIAL	Front and rear differential lock with mechanical control			
POWER TAKE-OFF	Rear, 540 rpm and synchronized with the gearbox			
HYDRAULIC SYSTEM				
Flow rate to hydraulic pump which controls the hydroguide, the lift and the distributors (lt/min)	16			
Maximum hydraulic pressure (bar)	125			
DISTRIBUTORS	Mechanical control to max. 6 hydraulic couplers			
Rear (Standard)	1 double acting			
Rear (In addition)	1 single acting and 1 double acting or 2 double acting			
ELECTRIC SYSTEM				
Battery (Ah)	12V - 60 Ah			
Alternator (A)	40			
REAR LIFT	With external ram cylinder			
Three-point hitches	With standard couplers cat. 1			
Three-point tie bar	With manual length adjustment			
Lifting capacity at the end of the arms kg	1050			
DRIVING UNIT	With half-platform			
SEATS with safety belts	Sprung seat			
SERVICE BRAKES	Drum brakes, acting on the rear transmission			
Parking brake	Acting on the service brakes			
STEERING	With hydrostatic steering on articulated joint			
SAFETY				
Roll-bar frame	Front, homologated			
CONSOLE	Analogue type with: chrono-tacho-gyrometer, water thermometer, control warning lights and acoustic alarm			
TYRES				
Standard	6.50-16			
Optional	210/95R16 (7.50-16) - 260/70R16 Tractor - 240/70-15 Garden			
TOW HOOKS				
Standard	Front tow hook - Rear cat. C CUNA tow hook			
Optional	Rear tow hook, EC approved			
WEIGHT OPERATIONAL				
With roll-bar (kg.)	1040		1060	
OPTIONAL	Rear work lamp weights for wheels			



TECHNICAL FEATURES	INVICTUS K300 RS		INVICTUS K400 RS	
CHASSIS	Swinging integral chassis +/- 15° OS-FRAME with steering wheels			
DRIVE	Four-wheel drive, permanent			
ENGINE				
Manufacturer	KUBOTA			
Model	D1105		V 1505	
Number of cylinders	3		4	
Displacement cm3	1123		1498	
Suction	Naturally aspired		Naturally aspired	
Emission level	Tier 3A			
Power KW/HP	18,6 / 25,2		26,2 / 35,6	
Nominal speed (rpm)	3000			
Maximum tractor torque (Nm/rpm)	70,4 / 2200		96,5 / 2200	
Cooling	Water			
Tank capacity (lt.)	43			
TRANSMISSION	Gearbox with easy gear engagement: 8 forward and 4 reverse speeds			
Main clutch	Dry single-plate			
DIFFERENTIAL	Front and rear differential lock with mechanical control			
POWER TAKE-OFF	Rear, 540 rpm and synchronized with the gearbox			
HYDRAULIC SYSTEM				
Flow rate to hydraulic pump which controls the hydroguide, the lift and the distributors (lt/min)	16			
Maximum hydraulic pressure (bar)	125			
DISTRIBUTORS	Mechanical control to max. 4 hydraulic couplers			
Rear (Standard)	1 double acting			
Rear (In addition)	1 single acting or 1 double acting or 1 double acting with float			
ELECTRIC SYSTEM				
Battery (Ah)	12V - 60 Ah			
Alternator (A)	40			
REAR LIFT	With external ram cylinder			
Three-point hitches	With standard couplers cat. 1			
Three-point tie bar	With manual length adjustment			
Lifting capacity at the end of the arms kg	1050			
DRIVING UNIT	With half-platform			
SEATS with safety belts	Sprung seat			
SERVICE BRAKES	Drum brakes, acting on the rear transmission, simultaneously or independently			
Parking brake	Acting on the service brakes			
STEERING	With hydrostatic steering acting on the front wheels			
SAFETY				
Roll-bar frame	Front, homologated			
CONSOLE	Analogue type with: chrono-tacho-gyrometer, water thermometer, control warning lights and acoustic alarm			
TYRES				
Standard	6.50-16			
Optional	210/95R16 (7.50-16) - 260/70R16 Tractor - 240/70-15 Garden			
TOW HOOKS				
Standard	Front tow hook - Rear cat. C CUNA tow hook			
Optional	Rear tow hook, EC approved			
WEIGHT OPERATIONAL				
With roll-bar (kg.)	1060		1080	
OPTIONAL	Independent PTO with electro-hydraulic engagement, rear work lamp, weights for wheels			

BCS guarantees:



PROJECT

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



CHECK

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.



SPARE PARTS

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



ASSISTANCE

Efficient and valid assistance service with the support of friendly and competent technical staff: E-service is the on-line tool supporting the service.



SALES FORCE

An extensive and efficient sales force guaranteeing service and assistance.

We look forward to meeting you at your nearest BCS dealer, or visit
www.bcsagri.it to see the latest innovations.

