

Turboloader

 **Gianni
Ferrari**



Wheel loader, telescopic handler or skid steer loader? Turboloader has it all!

➤ Turboloader is a versatile machine that is ideal for the garden, for public maintenance work, agriculture, construction work, materials handling and any other industry where power and functionality in a compact package is a key factor.

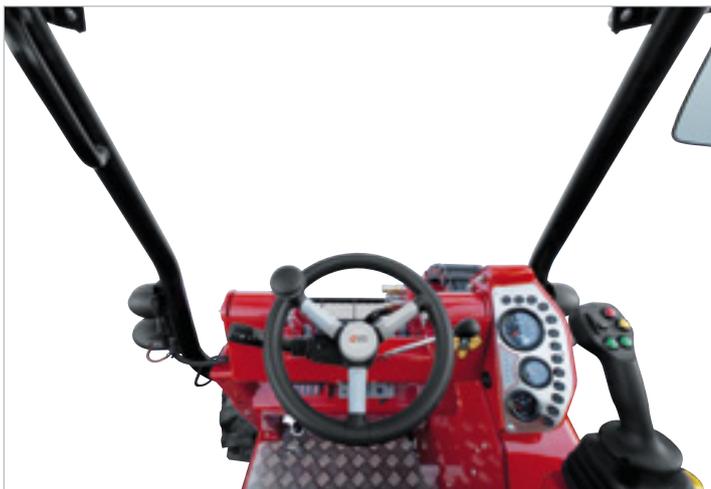


➤ Chassis

The articulated chassis gives a very tight turning radius, reducing the room needed for manoeuvring and enabling Turboloader to move with confidence even in cramped spaces.

The articulated chassis and equal sized wheels ensure agile manoeuvring when used indoors or in building yards. Whatever gap the front half-frame goes through, the rear half-frame will follow.

The rear wheels always follow the same path of the front ones, minimising compaction of the ground. Its articulated steering means Turboloader can work even on the most delicate surfaces without damage, making it ideal for landscaping and maintenance of green areas.



➤ Visibility

Unlike a traditional articulated loader, Turboloader's operator position is located in the machine's front half-frame.

Even when steering the machine, the operator always has a perfect view of the way ahead, the implement and the task being performed.

The elevated driving position offers excellent visibility, enhanced safety and superb comfort as well as improving control of the machine and its implements. The side-mounted dashboard panel and the layout of the lifting boom rams also assist in providing an uncluttered view of the attachment.



- **Turboloader has the manoeuvrability of a wheel loader**
- **Turboloader offers the benefits of a telescopic handler**
- **Turboloader has the compact dimensions of a skid steer loader... and it's even more versatile!**



WATCH THE VIDEOS



This is no compromise, it's a winning combination of great features!

➤ **Telescopic boom**

The telescopic boom of the Turboloader, standard on the M and H models, optional on the S models, allows significant lifting heights and horizontal reach.

With hydraulic parallelogram as standard (optional on S models), the handling of loads is faster, simpler and safer: The self-levelling feature significantly reduces the amount of manual adjustments and loads are lifted in total safety.

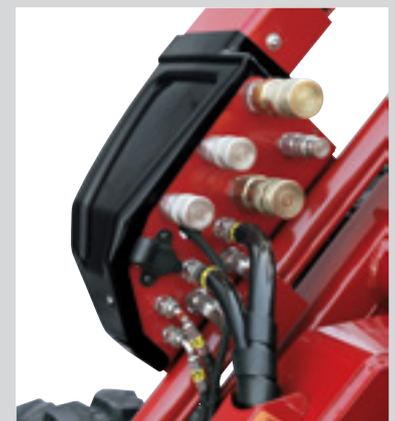
By selecting the floating arm position, the implements will follow irregular surfaces smoothly and with ease.

The simultaneous movement of the arm and bucket helps reduce cycle times and enhance productivity.

➤ **Quick connect**

Replacing the attachments is very quick and only takes a few seconds due to the quick connect system. The implements are easily fitted and released from the operators seat by using an electronic joystick control that activates a pair of hydraulic latches.

The flat-face hydraulic couplings are very easy to clean and are ideal for use in dusty or dirty environments. They prevent fluid leaks and air pockets developing in the circuit during connection and disconnection, aside from guaranteeing better performance thanks to reduced load loss.



Turbo loader

► The range

The S and M range of Turbo loader is fitted with 3-cylinder 22 or 28 hp engines and, with an operating weight of 13 to 20 metric tons, it can handle loads of up to 1.100 kg.

The models of the H range, which have an operating weight between 19 and 23 metric tons, can handle loads of up to

1,400 kg and are equipped with 4-cylinder engines with natural aspiration (H360) and turbocharged (H440).

The long wheelbase of the H range gives the machine exceptional stability and driving comfort. This exclusive configuration increases lifting capacity by over 25% compared to the M range,

S

ESSENTIAL

SERIES

-  35 L / min.
-  900 kg
-  9000 N
-  12 km/h

M

TOP-CLASS COMFORT

SERIES

-  66 (22+42) L / min.
-  1100 kg
-  11200 N
-  12 km/h



while maintaining the same very compact dimensions and the same manoeuvrability. The optimum weight distribution provides better pushing force delivery and therefore improved bucketing.

H
SERIES

TOP-CLASS COMFORT

-  66 (22+42) L / min.
-  1400 kg
-  11200 - 15000 N
-  12 - 19 - 24 km/h



Turbo loader

▶ Driving position

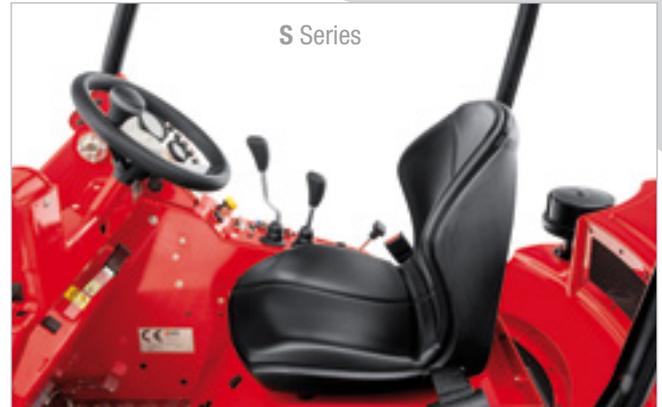
The Turbo loader M and H offer the best comfort as standard: the control joystick and the console are suspended and adjustable and move with the seat for maximum ergonomics of use. The joystick is electro-hydraulic and proportional, smooth and precise to use. The comfortable Grammer seat with lumbar support and headrest, adjustable arm rests and suspension springs is also available in a heated version.

The driver seat of the S series is characterized by a more essential set-up, with a proportional mechanical double joystick which, together with the control console, is fixed to the bodywork.

The standard seat is integral with a wraparound backrest.

The suspension Grammer seat is available on request.

The cruise-control and the DEC™ device (Dynamic Engine Control), which manages the engine rotation speed as in the automotive sector, are standard on all models: driving comfort and fuel consumption gain advantages and the engine never stalls.



▶ Cab

Turbo loader can be equipped with an optional heated cab. The 5 adjustable air vents ensure a uniformly distributed flow of air inside the cab, at both footrest and head level. The external thermal unit is behind the cab so as not to increase the overall height of the machine.

All the glazed surfaces are made of approved tempered glass. The integral, one-piece windscreen ensures optimum visibility without obstacles or distortions, while the rear windows provide the field of view required for manoeuvring. The cab equipment includes two pairs of work lights (front and rear), the kit for road use (headlights, indicators, rotating beacon, horn and rear-view mirrors) and the front windscreen wiper. Inside the cab, the courtesy light, 12V electric socket (cigarette lighter receptacle) and amplified stereo speakers with connection for an MP3 player offer high levels of comfort. Air conditioning is available on request.



H Series

▶ Engine

Turboloader is equipped with low-emission engines that are fully compliant with the current anti-pollution directives. The radiator with anti-clog fin is generously proportioned and ensures high heat exchange even in unfavourable conditions, thus prolonging the life of the engine, the oil and the hydraulic components. On H models a practical hatch provides handy access to the engine compartment for easy checks and daily maintenance.



4WD

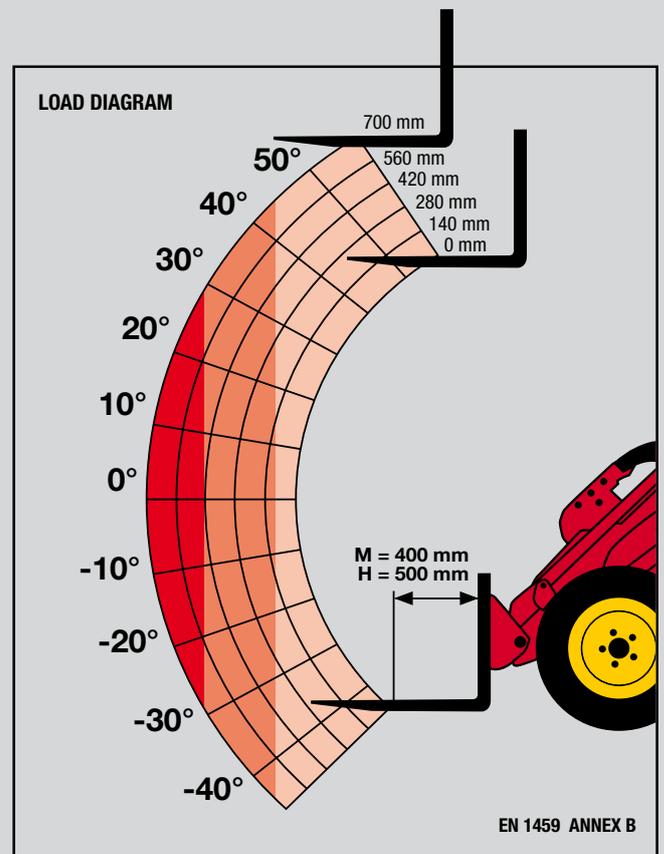
▶ Transmission

The permanent 4-wheel drive hydrostatic transmission uses high quality, robust, reliable components. The high specification of the components ensures ample pushing force together with a high transport speed, allowing for maximum productivity. Turboloader's standard equipment includes a useful anti-slip device which can help extricate the machine in low-grip situations. As an additional aid for difficult situations a flow divider can be activated which divides the hydraulic flow (optional) and obtain a differential locking effect.



▶ Safety

An FOPS protection structure against falling objects equips all models, both those with ROPS protection frame and those fitted with cab. The standard equipment of the Turboloader includes a machine anti-spill device that warns the operator in case of excessive lightening of the rear axle and, in models M and H, locks the telescopic extension of the boom. Furthermore, the M and H ranges feature an load anti-spill device that prevents the load accidentally spilling backwards on top of the operator.* with counterweights, PU filled tyres and cab.



S RANGE	220 kg	450 kg*	330 kg	590 kg*	530 kg	900 kg*
M RANGE	270 kg	550 kg*	400 kg	720 kg*	640 kg	1100 kg*
H RANGE	400 kg	850 kg*	550 kg	1050 kg*	750 kg	1400 kg*

* with ballasts, full wheels and cabin



Attachments



Utility bucket

Width	115 cm	135 cm
Capacity (ISO 7546)	0,23 m ³	0,27 m ³
Weight	78 Kg	85 Kg
Tooth bar	optional	optional
Teeth	7	8



Multipurpose 4 in 1 bucket

Width	115 cm	135 cm
Capacity (ISO 7546)	0,26 m ³	0,31 m ³
Weight	152 Kg	164 Kg
Tooth bar	optional	optional
Teeth	7	8



Mixing bucket

Capacity	150 L		200 L	
Empty	Central	Lateral	Central	Lateral
Width	126 cm	128 cm	126 cm	149 cm
Weight	270 kg	290 kg	270 kg	315 kg
Weight when fully loaded	630 kg	750 kg	650 kg	795 kg



High tip bucket

Width	115 cm	135 cm
Capacity (ISO 7546)	0,41 m ³	0,48 m ³
Weight	161 Kg	170 Kg
Max. tipping height	284 ¹ – 332 ²	

¹ S - ² M/H



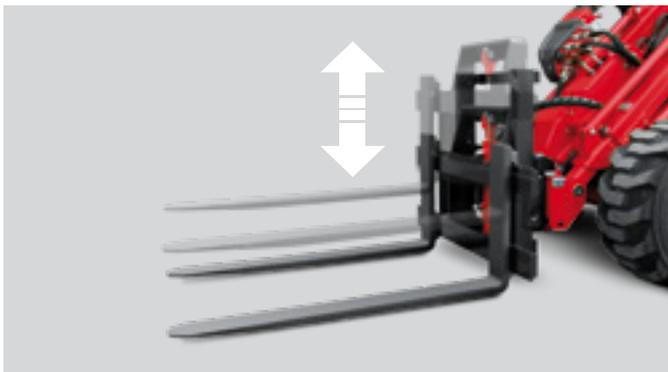
Light material bucket

Width	150 cm
Capacity (ISO 7546)	0,69 m ³
Weight	122 Kg



Pallet fork

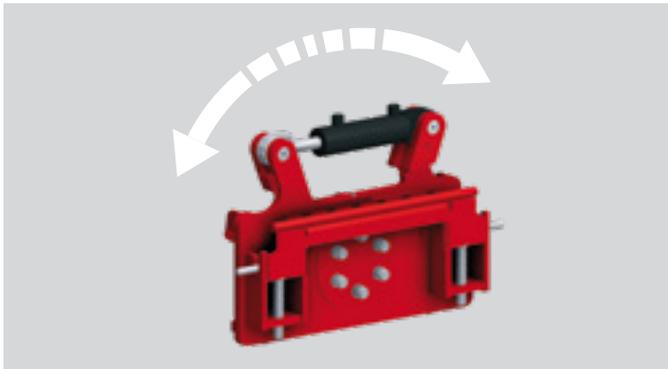
Length	80 cm	115 cm
Fork carriage - Class	FEM 2A	FEM 2A
Load capacity	1000 Kg	1200 Kg
Weight	100 Kg	125 Kg



Pallet fork with Extra-Lift

Pallet fork with Extra-Lift It allows to reach up to 30 cm higher

Lifting (Extra-Lift)	30 cm
Fork length	115 cm
Fork carriage - Class	FEM 2A
Load capacity	1200 kg
Weight	200 kg



Tilt attach plate

It allows to tilt attachments up to 13 degrees left and right

Tilting	hydraulic, $\pm 13^\circ$
Depth	120 mm
Weight	75 kg



Industrial type grapple fork

Width	110 cm	130 cm
Tines length	57 cm	57 cm
(Bolt-on replaceable) Tines	7	9
Weight	149 Kg	157 Kg



Manure fork

Width	125 cm
Tines length	52 cm
Tines	8
Weight	73 Kg



Attachments



Bale fork

Vertically folding tines for safe transportation

Tines distance (centre-to-centre)	85 cm
Tines length	140 cm
Weight	95 Kg



Grabbing tool for round bales

Weight	200 kg
Bale diameter	120 ÷ 180 cm



Snow thrower

Type	double stage
Working width	130 cm
Ejection pipe rotation	hydraulic
Deflector chute inclination	electric
Cutting edge	bolt-on replaceable



Snow blade

Optional rubber or steel cutting edge

Width	175 cm
Angling	hydraulic, ± 30°
Trip springs	4



Spreader

Capacity	110 – 170 L
Spreading width	0,8 ÷ 6 m
Power supply	12 V



Hydraulic hammer

Withmoil and chisel tools

Weight	95 kg
Tool diameter	45 mm
Impact energy	240 J
Impact frequency	1200 BPM
Asphalt cutter tool	available
Stake driver tool	available



Grabbing tool

Maximum jaw opening	65 cm
Jaw length	56 cm
Overall length	76 cm
Max lifting weight	850 kg
Weight	102 kg



Roller-compactor

Can be filled with water for 100 kg additional weight

Working width	130 cm
Roller diameter	35 cm
Weight	225 kg



Leveller

Width	150 cm
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Auger

Regular or rocky soil boring head as option

Hexagonal drive shaft	CH 50
Auger drill diameter (range)	100 ÷ 450 mm
Tines length	100 cm
Extension shafts	optional



Attachments



Trencher

Max. digging depth	100 cm (40")
Digging width	15 cm
Trench cleaner	included
Teeth	"Shark" type
Refill blade	included



Rotary tiller

Working width	130 cm
Max. working depth	25 cm
Hoes	24



Stone burier

Working width	125 cm
Max. working depth	15 cm
Hoes	24
Roller width	145 cm



Front hoe

Max. digging depth	2,3 m
Swing arc	170°
Bucket width	40 cm
Bucket capacity (ISO 7451)	0,036 m ³
Breakout force at the tooth	2.200 Kg
Stabilizer width	130 cm
Stabilizer bars	hydraulic
Side shift	hydraulic lock



Swing dipper arm

Max. digging depth	1,5 m
Swing arc	170°
Bucket width	30 cm
Bucket capacity (ISO 7451)	0,025 m ³
Breakout force at the tooth	2.200 Kg



Flail mower

Cutting width	120 cm	150 cm
Blade reel	56 blade rotor (28 sets)	100 blade rotor (50 sets)
Cutting height adjustment	2 ÷ 9 cm	2 ÷ 9 cm



Flail mower with collector

Cutting width	120 cm
Blade reel	40 spatula blades
Cutting height adjustment	2 ÷ 9 cm
Collector capacity	700 L



Side discharge + mulching mower deck

Conversion kit included

Cutting width	150 cm
Blades	3
Cutting height adjustment	SA™ rapid adjustment 2.5 ÷ 7 cm



Stump grinder

Grinding wheel diameter	500 mm
Teeth	9
Sweep	hydraulic



Shredder

Shredding capacity	90 mm
Disc cutters	8 hammers + 2 knives
Feed hopper opening	700 x 570 mm
Discharge	270° adjustable
Feed system	hydraulic feed roller (NOSTRESS electronic power control as option)
Weight	230 kg

Attachments



1-side hedgecutter

Can be configured to work on left side or right side

Cutterbar length	150 cm
Tilt adjustment	hydraulic
Tilt angle	120° (+15° up; -105° down)
Max. cutting height vertical bar	407 cm
Max. cutting height horizontal bar	412 cm
Side shift	manual, 58 cm
Max. side reach vertical bar	130 cm, from machine centre
Max. side reach horizontal bar	272 cm, from machine centre



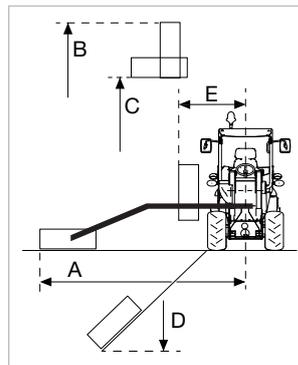
2-side reach arm hedgecutter

Cuts both right and left sides as standard

Cutterbar length	150 cm
Controls	hydraulic
Operating angle	360°
Max. cutting height vertical bar	710 cm
Max. cutting height horizontal bar	588 cm
Max. side reach vertical bar	240 cm, from machine centre
Max. side reach horizontal bar	355 cm, from machine centre



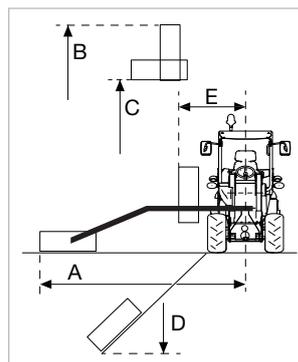
Brush cutter boom



Head	Flail mower	Flail mower
Cutting width	80 cm	100 cm
A	320	330
B	380	390
C	210	210
D	170	180
E	180	180



Rotary brush cutter



Head	Rotary
Cutting width	130 cm
A	345
B	405
C	205
D	195
E	185



Big bag lifter

Load capacity	1000 kg
Lift hook height	110 cm
Width	120 cm
Weight	80 kg



Extension boom

Length	110 cm
Weight	42 Kg



Telescopic extension boom

Min. boom length (retracted)	130 cm
Max. boom length (extended)	200 cm
Extension	hydraulic
Weight	70 Kg



Turbo loader is a versatile, compact, agile and powerful machine.

Turbo loader: don't call it just "loader" ...

TECHNICAL SPECIFICATIONS

Model	S 322	S 328	M 280	H 360	H 440	H 440-2s
Engine						
Fuel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel
Model	Kubota D902	Kubota D1105	Kubota D1105	Kubota V1505	Kubota V1505-T	Kubota V1505-T
Power / Displacement	22 hp / 898 cc.	28 hp / 1123 cc.	28 hp / 1123 cc.	36 hp / 1498 cc.	44 hp / 1498 cc.	44 hp / 1498 cc.
No. Cylinders / Cooling	3 / Liquid	3 / Liquid	3 / Liquid	4 / Liquid	4 / Liquid	4 / Liquid
Fuel tank capacity	24 L	24 L	24 L	24 L	24 L	24 L
Transmission						
Type	Hydrostatic closed loop system with variable displacement piston pump and rotary motors					
Pump	Piston pump, Poclain	Piston pump, Poclain	Piston pump, Poclain	Piston pump, Poclain	Piston pump, Danfoss	Piston pump, Poclain
Wheel motors	orbital type, Danfoss	orbital type, Danfoss	orbital type, Danfoss	orbital type, Danfoss	orbital type, Danfoss	radial piston type, Poclain
Pushing force	9.000 N	9.000 N	11.200 N	11.200 N	11.200 N	15.000 N
Traction control	Anti-slip selector switch circuit (standard) - Differential lock through hydraulic flow divider (optional)					
Forward / reverse motion	2 pedals (forward foot pedal + reverse foot pedal) - with Dynamic Engine Control™					
Maximum speed	12 km/h	12 km/h	12 km/h	12 km/h	19 km/h	12-24 km/h (2 speeds)
Parking brake	Mechanical			Hydraulic negative action multi-disc brakes in oil bath		
Steering system	Articulated chassis, with power steering wheel					
Wheels/Tyres						
Industrial type (standard) / Turf type (optional) / Agricultural type (optional)	23x8.50-12	23x8.50-12	26x12.00-12	26x12.00-12	26x12.00-12	26x12.00-12
Puncture proof infilling	Optional	Optional	Optional	Optional	Optional	Optional
Lift boom						
Telescopic arm*	Optional	Optional	•	•	•	•
Maximum lifting height (at pin)	260 cm - 304 cm*	260 cm - 304 cm*	308 cm	308 cm	308 cm	308 cm
Maximum overhang (at mounting plate)	69 cm	69 cm	120 cm	120 cm	120 cm	120 cm
Breakout force (at 50 cm from mounting plate)	1.420 kg	1.420 kg	1.420 kg	1.420 kg	1.420 kg	1.420 kg
Hydraulic lifting capacity (at pin)**	2.100 kg	2.100 kg	2.100 kg	2.100 kg	2.100 kg	2.100 kg
Self-levelling (hydraulic parallelogram)	Optional	Optional	•	•	•	•
Floating position	•	•	•	•	•	•
Mounting plate	Quick connect & release system controlled from the driver's seat					
Hydraulic system						
Type	Open loop with 1 gear pump			Open loop with 2 gear pumps		
Load capacity	35 L/min	35 L/min	66 (24+42) L/min	66 (24+42) L/min	66 (24+42) L/min	66 (24+42) L/min
Maximum pressure	200 bar	200 bar	200 bar	200 bar	200 bar	200 bar
Oil tank capacity	24 L	24 L	24 L	44 L	44 L	44 L
Hydraulic controls	Proportional mechanical joystick		12 function electro-hydraulic proportional and servo-controlled joystick			
Front hydraulic outlets						
PTO auxiliary hydraulics (High Flow)	3 flat-face quick-release couplings 3/8"		3 flat-face quick-release couplings, 3/4" inlet and outlet, 3/8" drainage			
Auxiliary hydraulics	—		2 flat-face quick-release couplings 3/8"			
Rear hydraulic outlets (optional)						
Auxiliary hydraulics	2 flat-face quick-release couplings 3/8"					
Electrical system						
Battery	12 V / 70 Ah – battery master switch as standard					
Alternator	40 A	40 A	40 A	40 A	40 A	40 A
Electrical outlet	12 V DC socket on lift boom, for electric controls and actuators power					
Optional	Front and rear work lights – Road legal light kit with rotating beacon					
Driving position						
Control console and joystick	Fixed, integrated into the chassis		Suspended and adjustable, fixed to the seat			
Seat	Contour-molded seat with wrap-around backrest		Delux Grammer seat with lumbar support and headrest. Adjustable armrest and backrest.			
Seat suspension	—		Parallelogram suspension with adjustable height position and driver's weight adjustment			
Safety devices						
Safety sensors	EEC European Standard / ISO					
Load anti-spill device	—	—	•	•	•	•
Machine anti-tip device	•	•	•	•	•	•
ROPS - FOPS	4-post, rigid, with transparent polycarbonate visor					
Cab (optional)						
Cab features	Ventilation and heating system – On-road use equipment – 2 front and 2 rear work lights – front wiper – courtesy light – 12 V socket (cigarette lighter receptacle) – stereo speakers with connection for an MP3 player. A/C (optional, not available for S 322).					
Weight and measures (with ROPS)						
Unloaded weight	1.250 kg	1.270 kg	1.440 kg	1.640 kg	1.680 kg	1.710 kg
Length / Width / Height	258 x 111 x 207 cm	258 x 111 x 207 cm	248 x 126 x 211 cm	248 x 126 x 211 cm	248 x 126 x 211 cm	248 x 126 x 211 cm



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** for the operative load capacity refer to the load diagram

The availability of models, versions and trim may vary depending on the country.

