# Krypton<sup>3</sup> 80 V | 90 F | 100 F | 110 SIX



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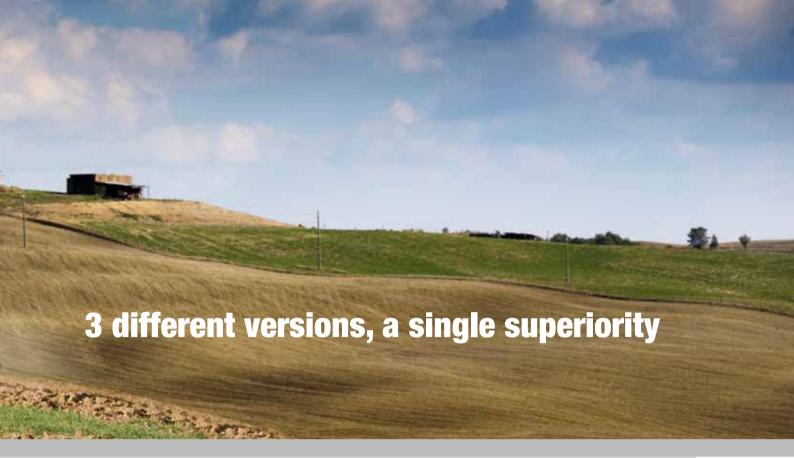
# New Krypton<sup>3</sup> range. Strength and comfort in complete safety









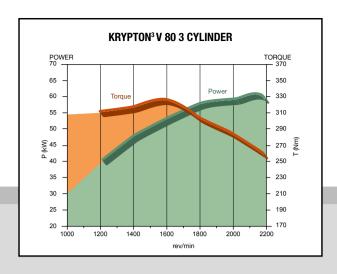


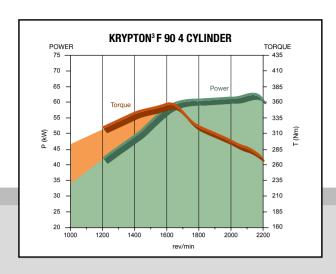


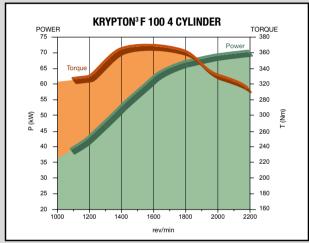


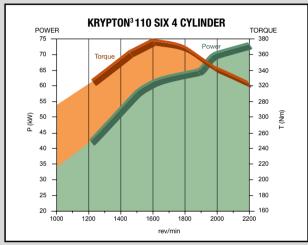
# Optimum power, unparalleled comfort













New water-cooled Euro 3 engines, 1000 cc, 3 or 4 cylinders, turbo, intercooler.

# High pressure fuel injection and electronic engine management. The best of SDF technology



#### **Electronic engine management**

Optimum comfort levels and productivity are delivered consistently by the Krypton<sup>3</sup> engine, thanks to its modern electronic management system, which always guarantees an instant response and a more reliable P.T.O. speed control. All engine operating parameters are monitored constantly by dedicated

sensors and optimised by means of injection system control.

Besides optimum fuel metering, the electronic engine management system ensures stable and consistent performance, with swift, direct and exact response to the different travel and load conditions encountered.



#### **Optimized energy consumption**

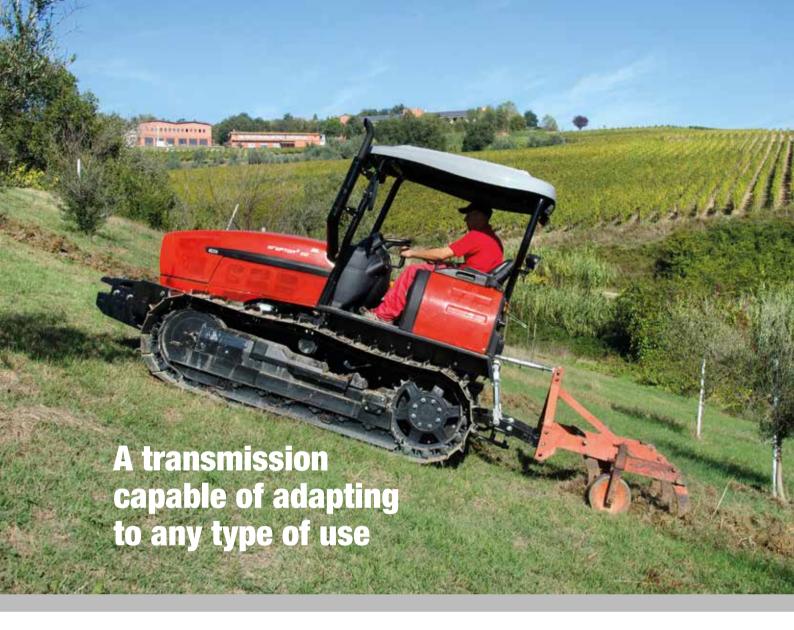
The exclusive SDF fuel injection system — unique, and among the most technologically advanced on the market - features the use of an individual injection pump for each cylinder. The SDF system guarantees a high operating pressure (1400 bar) and instant injection, which is governed by a load-responsive electronic control unit, optimizing performance and fuel consumption. The operator can also save a chosen engine speed at the touch of a button, which will be maintained constant by the control unit, even under changing load conditions, for a reliable and uniform work rate.

A special feature of the Krypton<sup>3</sup> 110 SIX is the VISCOSTATIC cooling fan, which regulates the flow of cooling air according to the actual need, further improving engine efficiency with power consumption savings of up to 4 hp and a consequent reduction in fuel consumption.

**SDF engines: 100% Biodiesel** 

Thanks to their unique design features and quality materials, the engines of Krypton<sup>3</sup> crawlers are not just extremely functional but also totally compatible with biodiesel, allowing blend ratios of up to 100% (biodiesel to EN 14214:2003 specifications). Biodiesel typically has a higher viscosity than other engine fuels and is chemically more aggressive, but SDF engines are equipped with a special fuel injection system utilizing wet pumps — one to each injector — and a fuel feed circuit with components manufactured from special materials, and consequently able to run on these new fuels without difficulty.





#### A transmission to cover every need

For maximum all-round capability, Krypton<sup>3</sup> SIX and Krypton<sup>3</sup> F machines are specified with a 16+16 speed mechanical transmission, available both with underdrive and with a creeper range for ultra low speed applications (minimum speed 0.61 km/h).

A synchronized shuttle ensures that manoeuvres will always be swift and smooth.

Two transmission options are offered for Krypton<sup>3</sup> V crawlers: 8+8 speeds or 12+8 speeds.

A heavy-duty main clutch (13" diameter on the arable model) complements the mechanical strength of the trans-

mission and is provided with a cooler that will keep the oil at a constant temperature, especially when operating under heavy traction forces.

These are features that enable SAME Krypton<sup>3</sup> crawlers to deliver top performance even when taking on the heaviest duties.

## Steering clutches: manoeuvres are fast and effortless

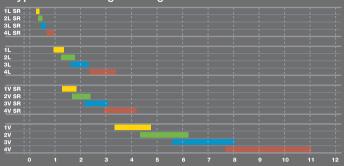
SAME Krypton<sup>3</sup> crawlers are equipped with oil-immersed steering clutches and brakes that will ensure maximum safety even in the most hostile working conditions. Both these units operate progressively and independently on each track, controlled by a pair of low-effort levers with hydraulic servo-

assist incorporated conveniently into the instrument panel.

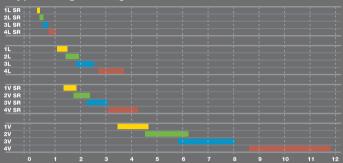
Steering and braking manoeuvres are simple and precise: when the lever is pulled to half-travel, it will activate the corresponding clutch, and beyond this point, the brakes come into operation as well. The brakes can also be operated mechanically, using the pedals. Safety is absolute, accompanied by simplicity of use and minimal maintenance.

### Ground speed in km/h

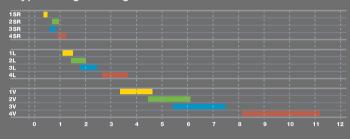
### Krypton<sup>3</sup> 110 SIX gear range



### Krypton<sup>3</sup> F gear range



#### Krypton<sup>3</sup> V gear range

















## Different PTO options to suit all kinds of implements

To enable operation with implements of every description, Krypton<sup>3</sup> machines offer a choice of two rear PTO speed options: 540/540 Eco or 540/540 Eco/1000.

The PTO clutch on Krypton³ 110 SIX and Krypton³ F models is an oil-immersed multi-disc hydraulic type, operated electrohydraulically by push-button for soft engagement. This is a feature found normally on big-horsepower wheeled tractors and will guarantee

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optimum reliability and durability when using the PTO, even for even heavy duty applications.

In addition, the speed selection gears are cut with helical teeth, for greater efficiency and smooth, noiseless operation.

And to emphasize the versatility of SAME crawlers still further, the PTO output shaft is also interchangeable.







# Krypton<sup>3</sup> Maximum reliability with any implement





# Hydraulic system: split in 2 to guarantee constant power and performance

## Two separate circuits for total efficiency

The hydraulic system of Krypton<sup>3</sup> crawlers incorporates two separate circuits and a dual pump: a main pump serving the lift and auxiliary spool valves, and a secondary pump serving the steering clutches, brakes. PTO and transmission lube system — especially important when the tractor is operating on steep slopes.

With this type of system, power is always evenly distributed, and hydraulically operated implements are unaffected by the demands of the vehicle hydraulics.

For example, the steering clutches stay light to the touch and quick to respond even when the implement needs to be lifted on the linkage during the course of manoeuvres.

Efficiency is always high, whatever the working conditions.

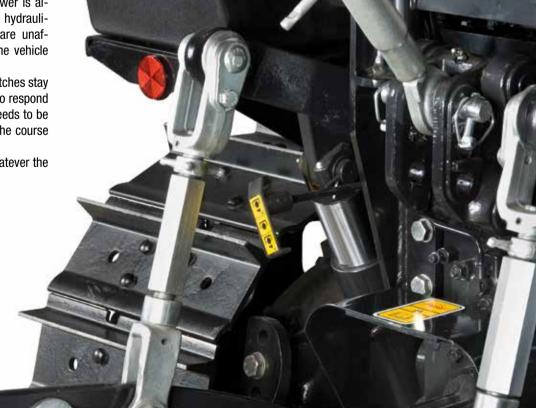
#### **Auxiliary spool valves**

Krypton<sup>3</sup> SIX crawlers are equipped with 3 double acting spool valves or, optionally, with 5 double acting valves and a total of 10 external ports, to which hydraulically operated implements can be connected. Changeovers from one implement to another will always be quick and easy, as the external ports are designed to accept push-pull quick couplers that

can be connected and disconnected in seconds, even with the oil lines under pressure.

Krypton<sup>3</sup> F models can also be equipped with duplicate ports on the forward right hand side, for greater convenience when coupling mid and front mounted implements.

This is particularly useful when operating a pruner attachment, vine shoot cutter, post driver or other implements com-











monly used in specialist cultivation.

The mechanically-controlled rear lift has draft, position, mixed and float control functions and all versions have a generous lifting capacity of 3000 kg, more than enough to meet the all operating requirements for a machine in this category. The Krypton<sup>3</sup> V, is also available in a "Heavy duty" version, specially designed to cope with exceptionally heavy

implements requiring plenty of tractive power. At work, adjustable draft control and lift arm lowering speed complete the specifications of a crawler supplying a superior class of performance and safety.

The innovative undercarriage design with 6 track rollers and a 1850 mm wheelbase render the Krypton<sup>3</sup> 110 SIX the ideal crawler for all tasks where trac-

tive power and stability are paramount. The track rollers are of the flanged long-life type, designed to withstand high axial loads.

The longer wheelbase and greater number of track plates ensures the Krypton<sup>3</sup> 110 SIX makes a larger footprint and reduces soil compaction.



# High level comfort and safety.

SAME Krypton<sup>3</sup> tractors are genuinely exclusive — remarkably so, for crawlers. In effect, the driving position is designed to offer comfort levels similar to those of a wheeled tractor, completely isolated from sources of vibration.

To achieve this, the platform of the Krypton<sup>3</sup> is mounted on four silent block bushes to absorb vibration, while the driving seat (available with a choice of air or mechanical suspension) is very comfortable.

Comfort is also enhanced considerably by the layout of the controls: these are grouped together by functionality on the instrument panel and the right hand console, conveniently positioned and leaving plenty of room for the operator. The instrument panel has an anti-reflective screen and well defined warning lights, to remain clearly visible and easy to read in all light conditions. Simple and convenient management of the tractor functions is also guaranteed

by the modulating brake and transmission clutch pedals, and steering and PTO clutches with hydraulic servo. Work will always be effortless, and your productivity benefits as a result.

Also available on request for the Krypton<sup>3</sup> SIX, are lubricated track chains, which not only reduce power demand and the effects of wear, but also attenuate noise considerably.

All these features combine to create a comfortable, stress-free work environment, which in turn means that productivity increases.

#### **Total safety**

Particularly close attention is given to the aspect of safety on SAME Krypton<sup>3</sup> machines, as reflected in the introduction of a new crossbar and stronger track tension springs, which help to eliminate any risk of the track chains jumping off.

As a result, the stability of the tractor is guaranteed even when working on steep gradients.

In addition, the driving position is protected by a fixed four post ROPS on Krypton<sup>3</sup> SIX models, and by a folding roll bar on Krypton<sup>3</sup> F and V versions.









## Simple to maintain

## Maintenance has never been simpler

Krypton<sup>3</sup> SIX tractors are simple to drive, and just as simple to maintain and service: the one-piece tip-up hood is lifted with minimal effort and held in the raised position by a special hinge mechanism.

This gives easy and immediate access to the engine and to the cooling pack, which are equipped with a fly screen that traps dust and other foreign matter, making general maintenance much simpler.

On the right hand side are the engine service points, all easily accessible, whilst the steering clutches incorporate a self-adjusting take-up mechanism and are virtually maintenance-free. SAME design engineers have been able to specify long oil change intervals (300 hours for engine oil, 1200 hours for transmission oil), which will save the operator a considerable amount of time.

TECHNICAL DATA			KRYPT0	N <sup>3</sup> V 80				
		С	N	M	L			
ENGINE			SDF TIE					
Cylinders / Displacement	n°/cm³		3/300	00				
Air intake		Turbo/Intercooler						
Maximum power, Homologated (2000/25/EC)	(HP/kW)		82/6	60				
Maximum power (2000/25/EC)	(HP/kW)		82/6	60				
Rated engine speed	rpm		220	0				
Maximum torque	Nm		310	)				
Revs at maximum torque	rpm		160	0				
Torque rise	%		15.8	8				
Cooling			liquid	-oil				
Engine control (governor)			electro	onic				
Air cleaner			dry type with safety elem	ent and dust unloader				
Silencer under hood		with side exhaust under footstep						
Fuel tank capacity	litres	73						
TRACKS								
Track chains			dry					
Rollers and track idlers			oil-imme	ersed				
Bottom rollers	n°		4		5			
Top rollers	n°		1	1				
Cleats per track	n°	36	33	35				
Track guards			sheet s	steel				
Cleat width	mm	280	310	310/360 opt	360			
Footprint	cm <sup>2</sup>	7252	8370		340			
Ballast			Heavy duty front					
			2+2 side weight	s, 40 kg each				
DIMENSIONS AND WEIGHTS								
Length	mm		306					
Width	mm	1180	1279	1434	1602			
Max. height to hood	mm	1212		1230				
Ground clearance	mm	232		250				
Wheelbase	mm	1410	1430		75			
Track width	mm	900	969	1124	1242			
Weight with ROPS	kg	3160	3330	3476	3490			

TRANSMISSION	
Gearshift clutch	dry single-plate
4-speed box, mechanical shift with 2 ranges (min. speed: 1.57 km/h	8 FWD+8 REV
4-speed box, mechanical shift with 2 ranges +creeper (min. speed: 0.52 km/h)	12 FWD + 8 REV
Shuttle	mechanical
REAR PTO	
Clutch	dry single-plate
Speeds rpm	540-540 ECO-1000
Operation	mechanical
BRAKES AND STEERING	
Steering clutches	oil-immersed multi-disc with hydraulic servo
Steering brakes	oil-immersed band type with hydraulic servo
Brake clutch operation	sequential, via levers under the instrument panel
Service brakes	pedal operated

HYDRAULIC LIFT		
Rear lift		mechanical with draft, position and mix control
Maximum lifting capacity	kg	2500
Pump flow rate	l/min.	42 + 18 with dual pump
Auxiliary spool valves	n° ports	6/8 with flow divider
Heavy Duty three point linkage (lift links and top link)		with fixed hitch ends
DRIVING POSITION		
Rollover protective structure		folding
Instrumentation		analogue
Driving seat		mechanically adjustable with seat belt
Shift levers		central
Shuttle lever		to side of instrument panel

	8 FWD + 8 REV TRANSMISSION - SPEEDS IN KM/H AT 2350 RPM							
1L	2L	3L	4L	1 H	2 H	3 H	4 H	
1.51	2.01	2.46	3.67	4.61	6.12	7.50	11.20	

N.B.: REVERSE SPEEDS ARE LOWER THAN THE CORRESPONDING FORWARD SPEEDS  $\,$ 

	12 FWD + 8 REV TRANSMISSION - SPEEDS IN KM/H AT 2350 RPM										
1 CRP	2 CRP	3 CRP	4 CRP	1 L	2 L	3 L	4 L	1 H	2 H	3 H	4 H
0.52	0.69	0.84	1.25	1.51	2.01	2.46	3.67	4.61	6.12	7.50	11.20

TECHNICAL DATA		K	RYPTON <sup>3</sup> F 9	90	KRYPT0	N <sup>3</sup> F 100	
	Version	С	N	M	N	M	
ENGINE			SDF TIER III		SDF	TIER III	
Cylinders / Displacement	n°/cm³		4/4000		4/-	4000	
Air intake		Turbo/Intercooler Turbo/Intercooler					
Maximum power, Homologated (2000/25/EC)	(HP/kW)		85/62.5		95	5/70	
Maximum power (2000/25/EC)	(HP/kW)		85/62.5		95	5/70	
Rated engine speed	rpm		2200		2	200	
Maximum torque	Nm		345		3	73	
Revs at maximum torque	rpm		1600		1	600	
Torque rise	%		27.2		2	3.1	
Cooling				liqui	d-oil		
Engine control (governor)				elec	ronic		
Air cleaner				dry type with safety ele	ment and dust unloader		
Silencer under hood				with side exhau	st under footstep		
Fuel tank capacity	litres			g	0		
TRACKS							
Track chains				d	ry		
Rollers and track idlers				semi-lubricate	ed / lubricated		
Bottom rollers	n°				5		
Top rollers	n°				1		
Cleats per track	n°			3	7		
Track guards				sheet	steel		
Cleat width	mm	310	360	400	360	450	
Footprint	cm <sup>2</sup>	8990	10454	11600	10454	13032	
Front hallost weights				8 front weigh	ts, 40 kg each		
Front ballast weights				2+2 side weig	hts, 40 kg each		
DIMENSIONS AND WEIGHTS							
Length	mm		3445		3	407	
Width	mm	1360	1460	1750	1460	1800	
Track width	mm	1050	1100	1350	1100	1350	
Height to seat cushion	mm			10	70		
Height to instrument panel	mm			14	30		
Ground clearance	mm			2	50		
Wheelbase	mm			16	50		
Weight	kg	4283	4335	4514	4335	4630	

TRANSMISSION	
Gearshift clutch	dry single-plate
4-speed, mechanical shift synchromesh gearbox with 2 ranges + Underdrive (minimum speed: 1.33 km/h)	16 FWD + 16 REV
4-speed, mechanical shift synchromesh gearbox with 2 ranges + creeper (minimum speed: 0.61 km/h)	16 FWD + 16 REV
Shuttle	mechanical, synchronized
REAR PTO	
Clutch	dry single-plate
Speeds rpm	540-540 ECO
Operation	hydraulic servo
BRAKES AND STEERING	
Steering clutches	oil-immersed multi-disc with hydrostatic servo
Steering brakes	oil-immersed band type with hydraulic servo
Brake clutch operation	sequential, via levers under the instrument panel
Service brakes	pedal operated

HYDRAULIC LIFT				
Rear lift		mechanical		
near iiit		with draft, position and mix control		
Maximum lifting capacity	kg	3000		
Rated flow of pumps	l/min.	50 + 24 with dual pump		
Auxiliary spool valves	n° ports	6/8 with flow control, duplicated at front		
Heavy Duty three point linkage		with fixed hitch ends		
(lift links and top link)		with auto hitch ends		
DRIVING POSITION				
Platform		mounted on silent-block isomounts		
Rollover protective structure		folding		
Shift levers		right of driving seat		
Shuttle lever		to right of driving seat		
Driving cost		mechanically adjustable with seat belt		
Driving seat		air suspension with seat belt		

				°16 FWD +	- 16 REV TRAI	VSMISSION W	TH SHUTTLE	and HI-LO - S	SPEEDS IN KM	/H AT 2200 RI	PM ENGINE				
1 L Lo	1 L	2 L Lo	2 L	3 L Lo	3 L	4 L Lo	4 L	1 H Lo	1 H	2 H Lo	2 H	3 H Lo	3 H	4 H Lo	4 H
1.25	1.50	1.62	1.95	2.09	2.52	3.07	3.70	3.97	4.78	5.17	6.22	6.67	8.03	9.82	11.82

	16 FWD + 16 REV TRANSMISSION WITH SHUTTLE AND AND UNDERDRIVE - SPEEDS IN KM/H AT 2200 RPM ENGINE														
1 L Cr	2 L Cr	3 L Cr	4 L Cr	1 L	1 H Cr	2 L	2 H Cr	3 L	3 H Cr	4 L	4 H Cr	1 H	2 H	3 H	4 H
0.43	0.56	0.73	1.07	1.50	1.84	1.95	2.39	2.52	3.08	3.70	4.25	4.78	6.22	8.03	11.82

#### **KRYPTON<sup>3</sup> 110 SIX TECHNICAL DATA**

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ENGINE		SDF TIER III
Cylinders / Displacement	n°/cm³	4/4000
Air intake		Turbo/Intercooler
Maximum power, Homologated (2000/25/EC)	(HP/kW)	102/75
Maximum power (2000/25/EC)	(HP/kW)	102/75
Rated engine speed	rpm	2300
Maximum torque	Nm	376
Revs at maximum torque	rpm	1600
Torque rise	%	21.3
Cooling		liquid-oil
Engine control (governor)		electronic
Air cleaner		dry type with safety element and dust unloader
Silencer under hood		with vertical exhaust adjacent to ROPS upright
Fuel tank capacity	litres	130
TRACKS	·	
Track chains		dry
ITAUK CHAIRS		lubricated
Rollers and track idlers		oil-immersed
Bottom rollers	n°	6
Top rollers	n°	1
Cleats per track	n°	40
Track guards	type	cast
Cleat width	mm	450
Footprint	cm <sup>2</sup>	14,292
Front hallost weights	nº	8 front weights, 40 kg each
Front ballast weights	n°	2+2 side weights, 40 kg each
DIMENSIONS AND WEIGHTS		
Length	mm	3472
Width	mm	1800
Track width	mm	1350
Ground clearance	mm	400
Wheelbase	mm	1850
Weight	ka	5 <i>/</i> 17/1*

TRANSMISSION	
Gearshift clutch	pedal operated
4-speed, mechanical shift synchromesh gearbox with 2 ranges + Underdrive (minimum speed: 1.33 km/h	16 FWD+16 REV
4-speed, mechanical shift synchromesh gearbox with 2 ranges + creeper (minimum speed: 0.61 km/h)	16 FWD+16 REV
Shuttle	mechanical, synchronized
Lubrication	pressure circuit + transmission oil cooler
REAR P.T.O. REAR P.T.O.	
Clutch	oil-immersed multi-disc
Speeds rp	m 540-540 ECO-1000
Operation	hydraulic servo
BRAKES AND STEERING	
Steering clutches	oil-immersed multi-disc with hydrostatic servo
Steering brakes	oil-immersed band type with hydraulic servo
Clutch-brake control	sequential, via levers under the instrument panel
Service brakes	pedal operated

HYDRAULIC LIFT		mechanical					
Rear lift		with draft, position and mix control					
Maximum lifting capacity	kg	3000					
Rated flow of pumps //min.		52 + 25 with dual pump					
Auxiliary spool valves	n° ports	6/10 with flow control					
Heavy Duty three point linkage		with fixed link ends					
(lift links and top link)		with auto hitch ends					
DRIVING POSITION							
Platform		mounted on silent-block isomounts					
Rollover protective structure		with 4 uprights					
		sunshade roof and 4 work lights					
Shift levers		right of driving seat					
Shuttle lever		right of driving seat					
Accelerator		hand throttle and decelerator pedal					
Driving seat		mechanically adjustable with seat belt					
		air suspension with seat belt					

°16 FWD + 16 REV TRANSMISSION WITH SHUTTLE AND HI-LO - SPEEDS IN KM/H AT 2500 RPM ENGINE															
1 L Lo	1L	2 L Lo	2 L	3 L Lo	3 L	4 L Lo	4 L	1 H Lo	1 H	2 H Lo	2 H	3 H Lo	3 H	4 H Lo	4 H
1.15	1.38	1.49	1.79	1.92	2.32	2.83	3.40	3.66	4.40	4.76	5.76	6.14	7.39	9.04	11.07
16 FWD + 16 REV TRANSMISSION WITH SHUTTLE AND AND UNDERDRIVE - SPEEDS IN KM/H AT 2500 RPM ENGINE															
	010	010-	410-	4.1	1110-	0.1	2 H Cr	3 L	3 H Cr	4 L	4 H Cr	1 H	2 H	3 H	
1 L Cr	2 L Cr	3 L Cr	4 L Cr	1 L	1 H Cr	2 L	2 11 11	3 L	3 11 11	4 L	4 H U	111	211	311	4 H

The above specifications refer to the highest available equipment package. For standard equipment and options, refer to the current price list and ask your local dealer for details.

\*= WITH CAST TRACK GUARD N.B.: REVERSE SPEEDS ARE SLIGHTLY HIGHER THAN THE CORRESPONDING FORWARD SPEEDS





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