



COMPANY  
WITH QUALITY MANAGEMENT  
SYSTEM CERTIFIED BY DNV  
=ISO 9001:2000=

# roto



33.13 K  
30.16 K

## THE RANGE

### ROTO

		ON STABILISERS	
MODEL		30.16 K	33.13 K
<b>WEIGHT</b>			
Operational weight (including forks)	kg	11.350	11.350
<b>PERFORMANCE</b>			
Maximum rated capacity	kg	3.000	3.300
Maximum lift height	mm	15.810	13.400
Maximum forward reach	mm	13.500	11.180
Maximum lift height with rated load	mm	10.000	10.000
Maximum reach with rated load	mm	5.450	5.300
Lift capacity at full lift height	kg	1.500	2.500
Lift capacity at maximum forward reach	kg	500	650
Bucket tearout force (800 litre)	kg	4.230	4.230
Drawbar pull (dynamometer test)	kg	7.800	7.800
Carriage rotation	deg	140	140
Upperstructure slew angle	deg	400	400
<b>SPEED</b>			
Low range	kph	7	7
High range	kph	25	25

## "LOAD-SENSING"

- The "Load-Sensing" hydraulic system automatically regulates pump delivery to ensure most efficient use of engine power. Output is regulated throughout the duty cycle, ensuring high performance and highest efficiency.
- Single variable delivery axial piston pump, with "Load-Sensing" control.
- Maximum flow 120 litres/min.
- Service pressure 210 bar.

### OPERATOR'S CAB

- The structure complies with ISO 3449 (FOPS) and EN 23411 directives.
- Front and rear screens are fitted with wipers and can be opened for additional ventilation.
- The door is split into two independent sections.
- Instrumentation includes: tachometer/revolution counter, hour meter, fuse box, fuel level, coolant temperature, annunciator panel showing blocked engine air filter, hydrostatic oil level and temperature, engine oil pressure, coolant temperature, parking brake warning light.
- Boom and turret are operated by "2 in 1" joysticks.



### SAFETY DEVICES

- Load stability indicator system with visual and acoustic alarm and automatic motion locking, preventing any aggravating motion.
- All boom and stabilising hydraulic cylinders are fitted with pilot-operated check valves.
- The "Fail-safe" parking brake type automatically locks when the diesel engine is turned off.

### BOOM

- Three section high yield steel boom, extending on anti-wear pads.
- Internally mounted extension cylinder.

### ROTO 33.13 K 30.16 K

A mm	5.550	6.370
C mm	2.760	2.760
E mm	4.645	4.645
F mm	350	350
H mm	2.240	2.240
L mm	3.530	3.530
M mm	995	995
N mm	2.220	2.220
P mm	2.790	2.790
R mm	3.920	3.920
S mm	5.440	6.150
Z mm	850	850

### CARRIAGE

- The 'Tac-Lock' hydraulic attachment locking system allows instant locking/unlocking of attachments, controlled from the cab.
- Two hydraulic service lines are supplied to the carriage, permitting the use of double-acting hydraulic.

### PALLET FORKS

- 1200mm long with 130 x 50mm section.
- Manual adjustment of fork separation between 450 - 1050mm.

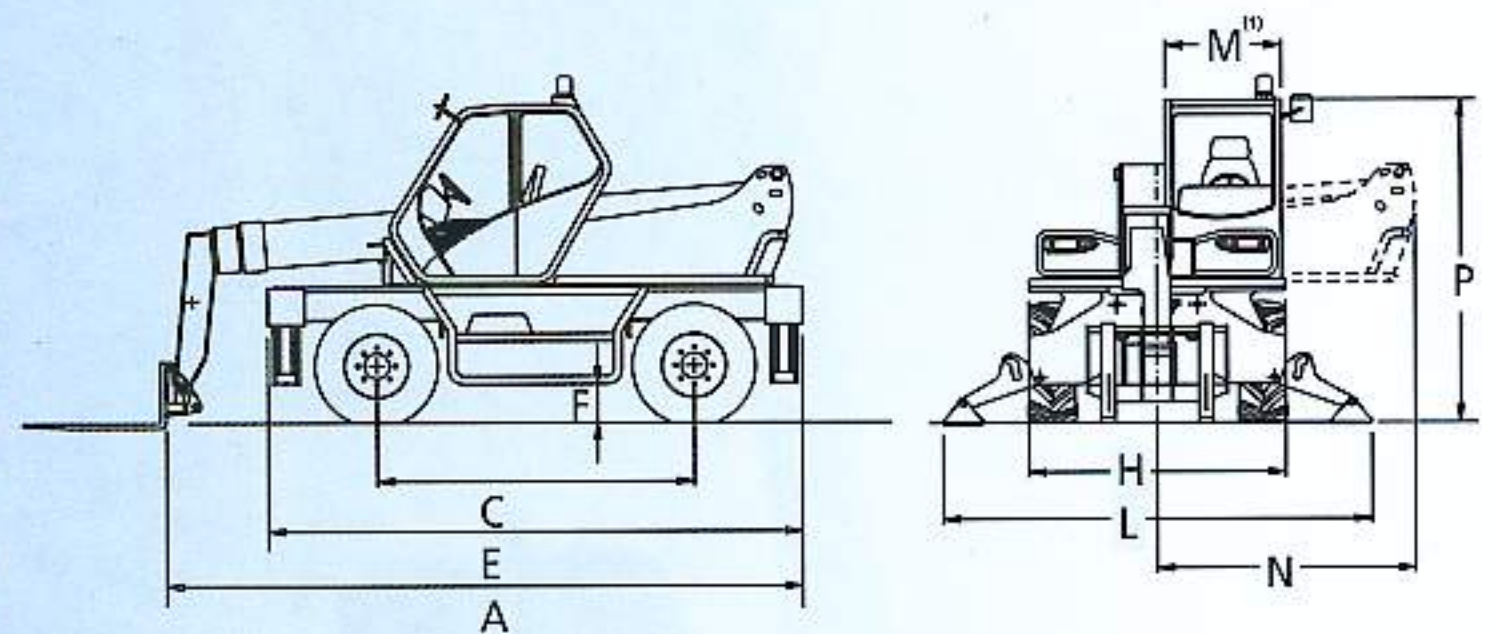
### STABILISERS

- Four independently controlled hydraulic stabilisers.

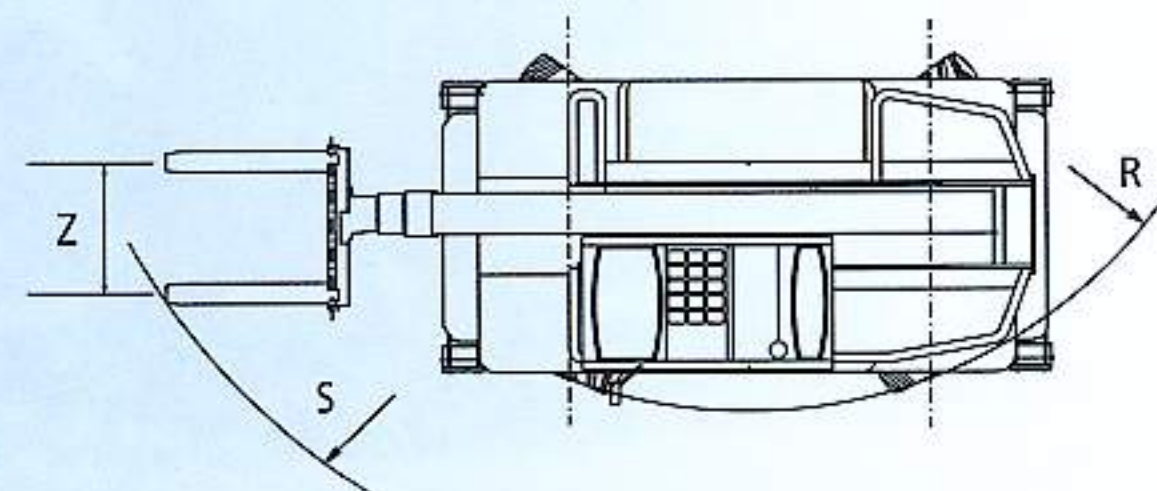
### STEERING

- Four-wheel power assisted steering with automatic synchronisation when misaligned. Three steering modes:
  - Front wheel steer.
  - All wheel steer.
  - Crab steer.

### DIMENSIONS



### STEERING RADIUS



<sup>(1)</sup> Internal width

### ENGINE

- The low emission (Euro 2) 4 cylinder, water-cooled, direct injection turbo Diesel Deutz engine, is rated at 74,9 kW at 2400 rpm (97/68/CE).

### AXLES

- Rigid front axle.
- Oscillating rear axle with automatic locking with upperstructure slewed more than 15°.

### BRAKES

- Hydraulic disc service brakes on all 4 differential output shafts.
- Fail-safe automatic hydraulic park brake.

### ELECTRICAL SYSTEM

- 12 volts, 160 Ah battery and 65 A alternator.
- Road lighting and rotating beacon.

### SERVICE CAPACITIES

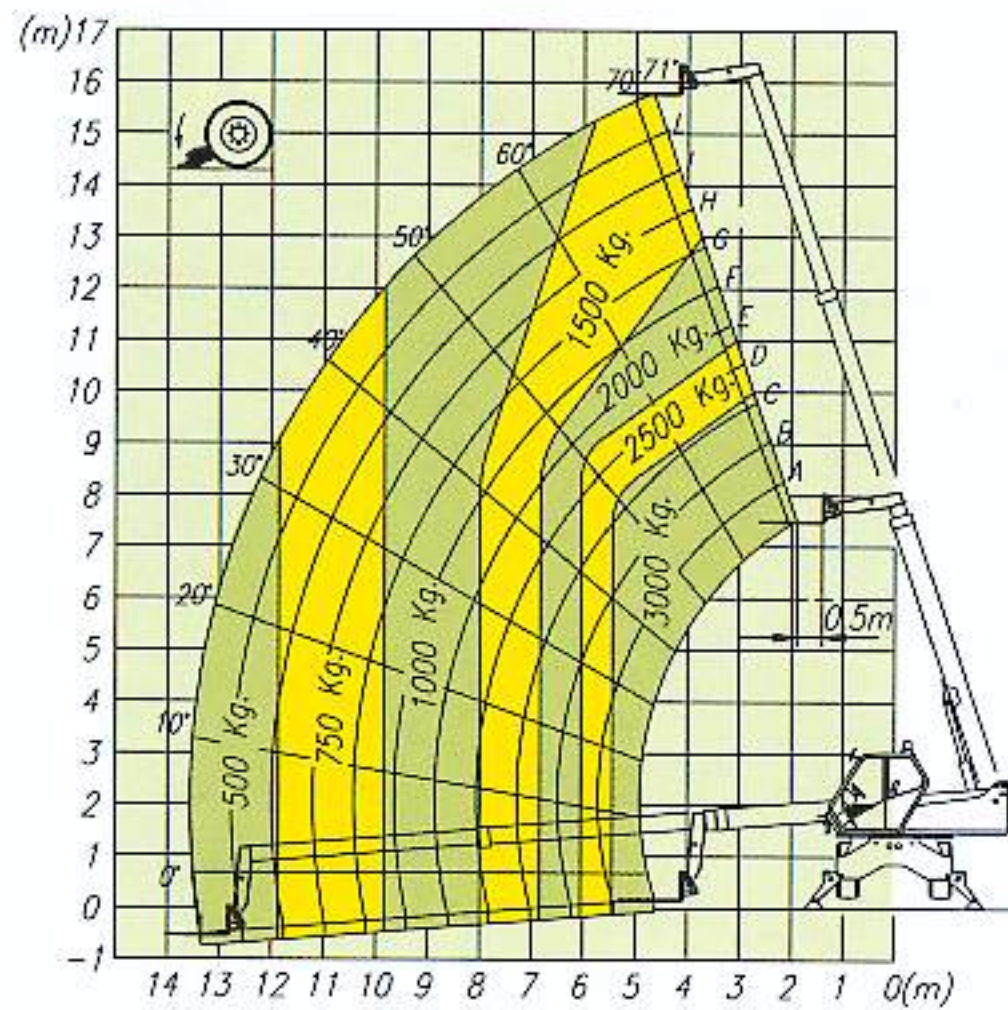
- Hydraulic system: 130 l
- Fuel tank: 155 l
- Hydrostatic oil: 12 l
- Engine oil: 8,5 l
- Engine cooling: 12 l

### TYRES

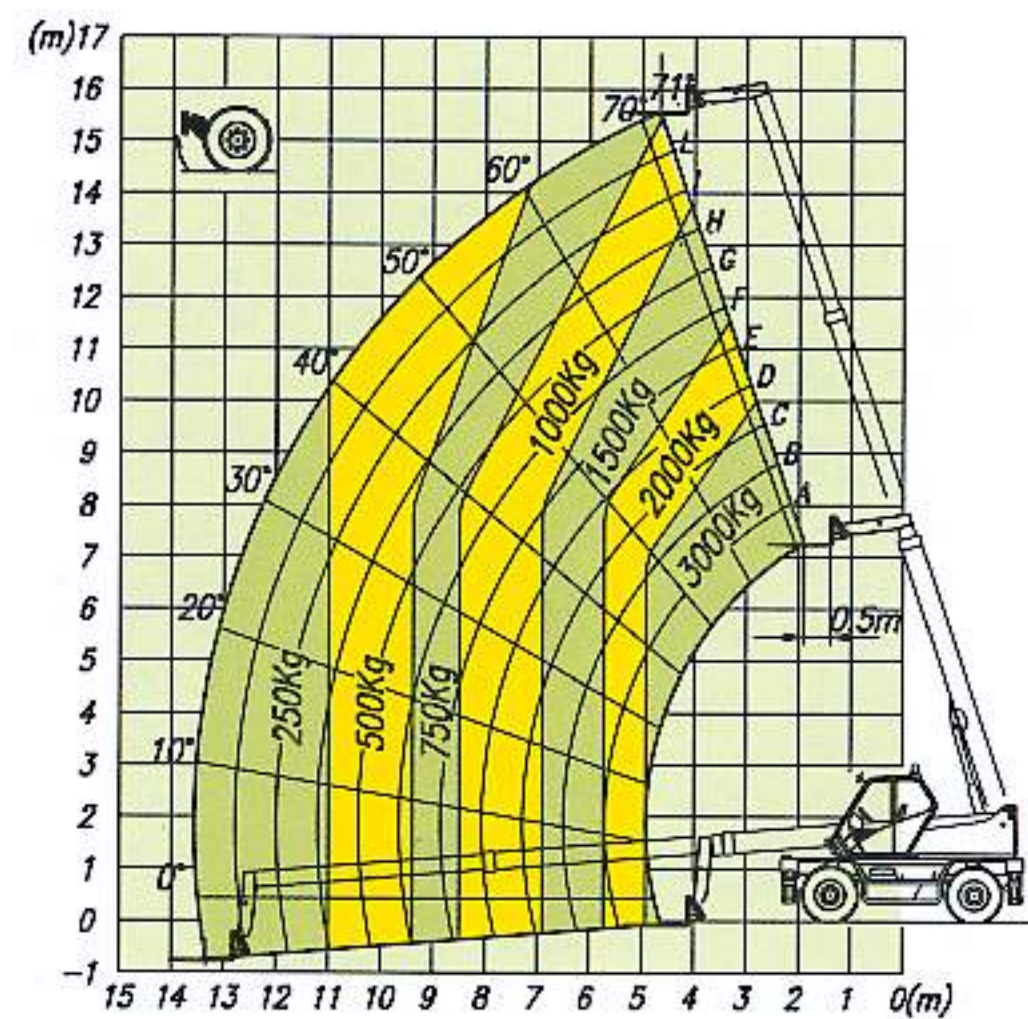
- 400/70-20 14 PR

# ROTO K

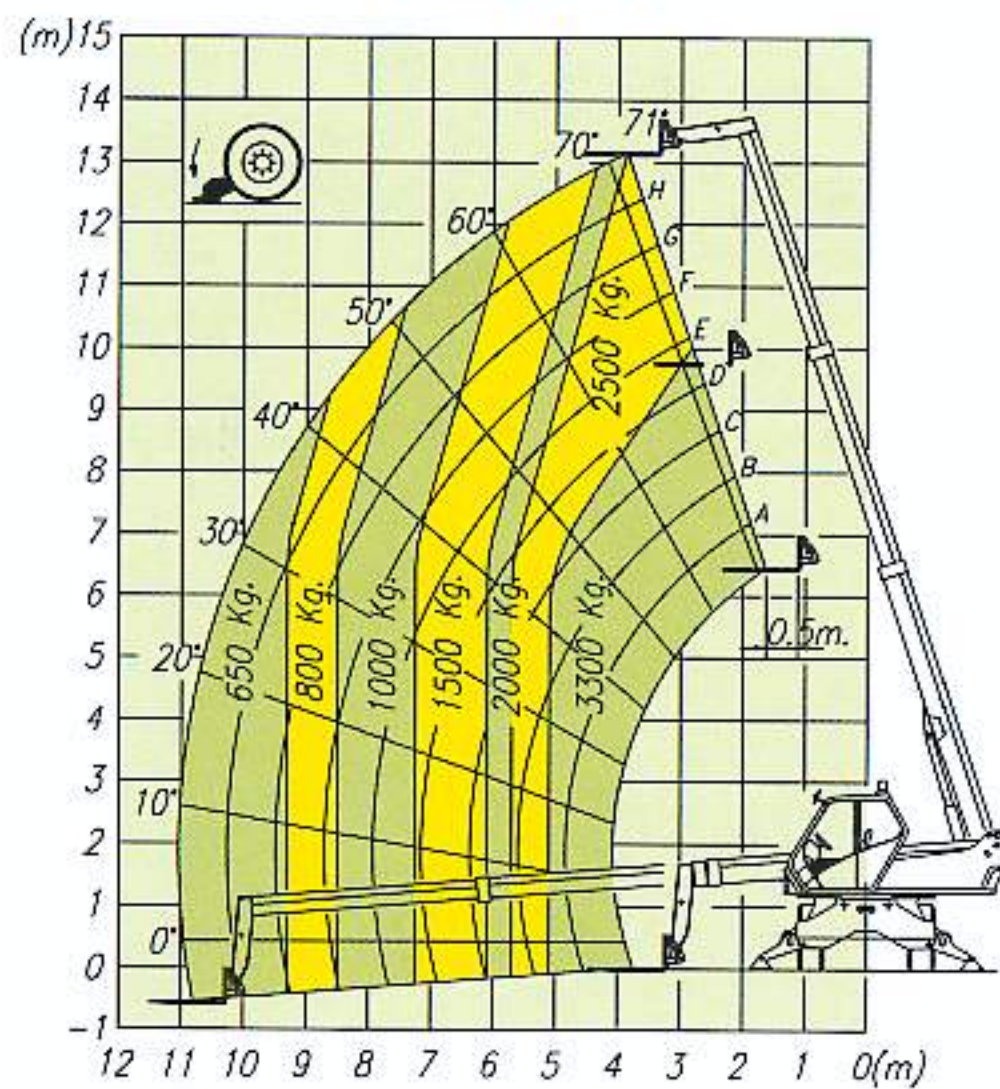
## 30.16 K ON STABILISERS



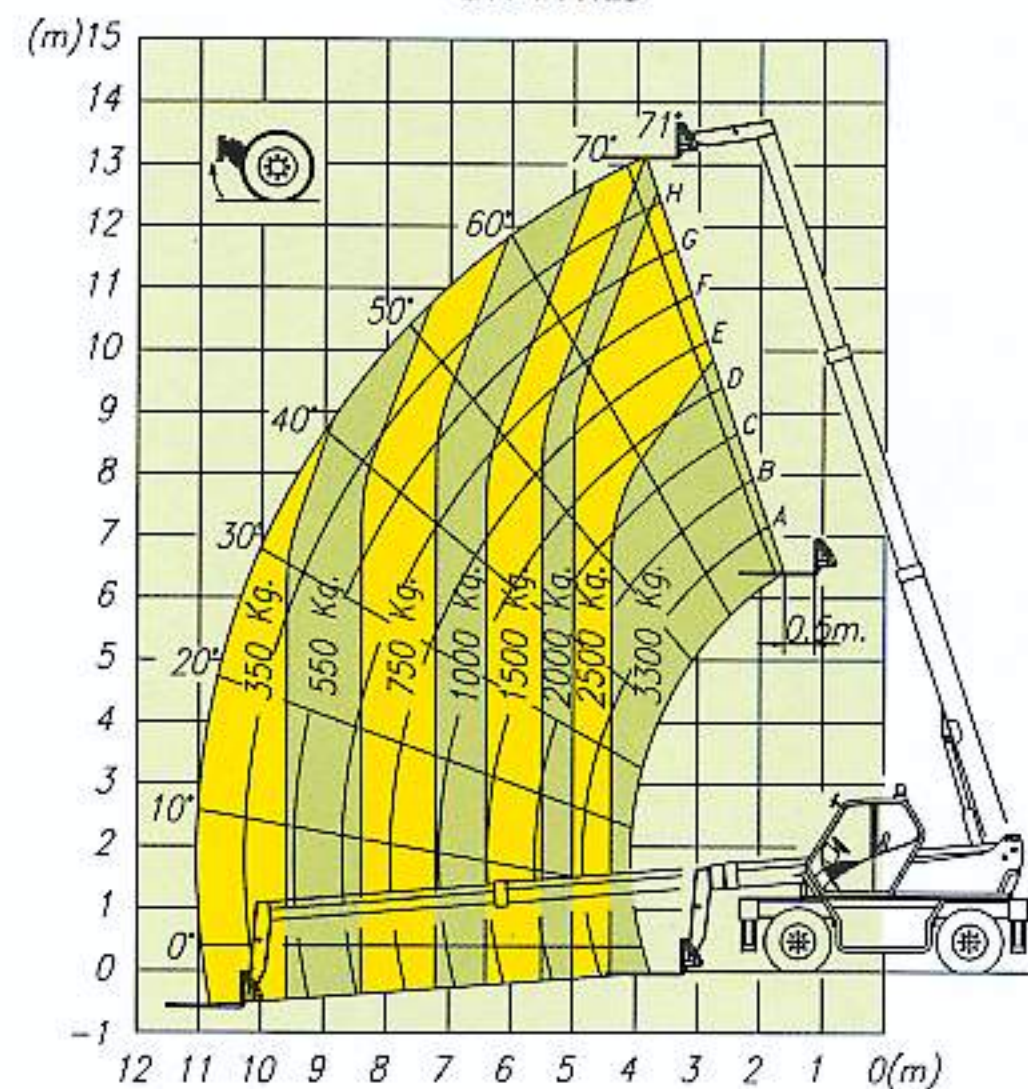
## 30.16 K ON TYRES



## 33.13 K ON STABILISERS



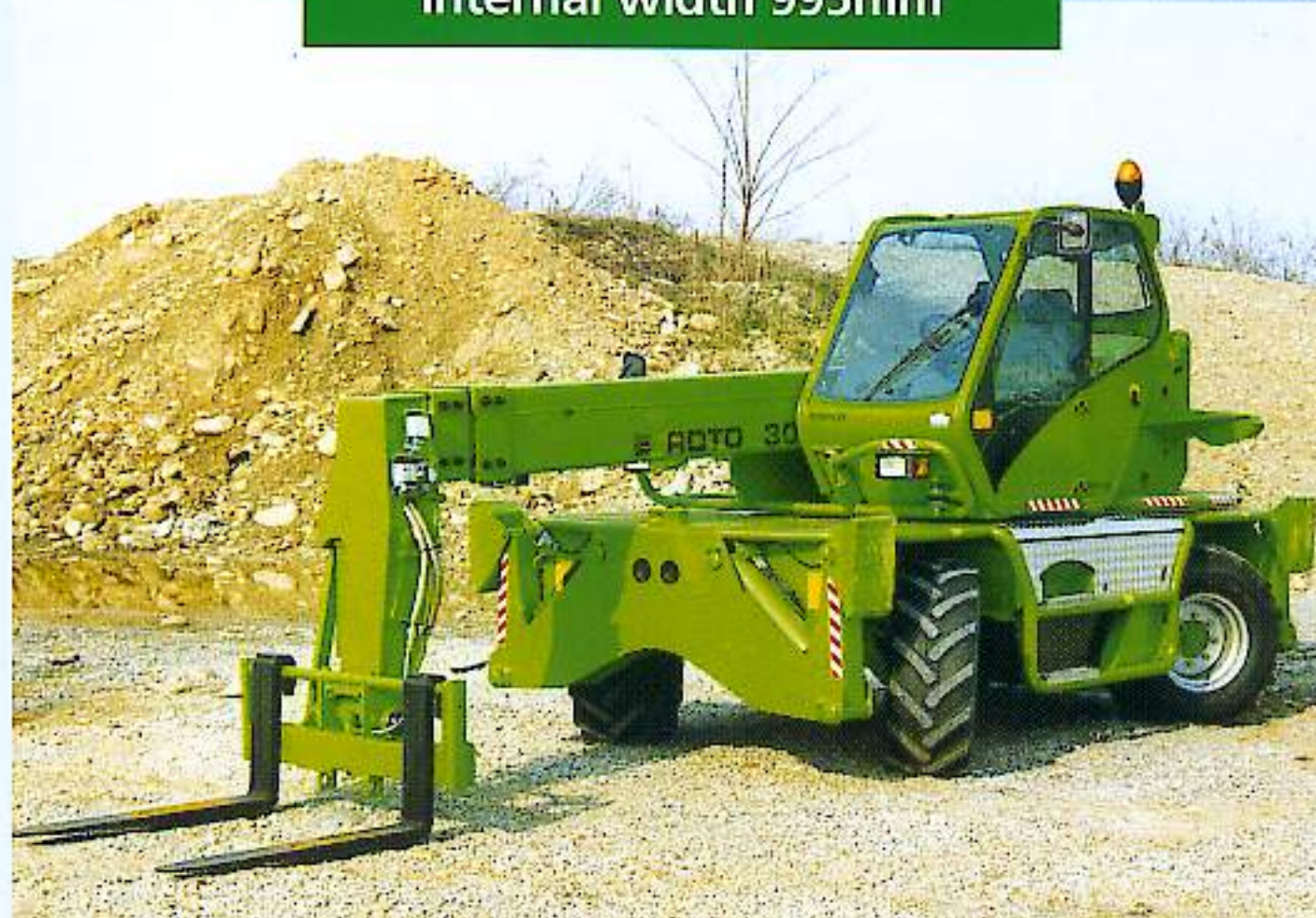
## 33.13 K ON TYRES



### HYDROSTATIC TRANSMISSION

- The hydrostatic transmission ensures automatic and continuous speed regulation from standstill to maximum speed (25kph), simply by operating the accelerator pedal.
- The two speed range gear box is electrically operated.
- With the "Finger-Touch" system it is possible to change driving direction even when the machine is moving, without the operator having to remove his hands from the steering wheel.
- Permanent four-wheel drive traction, with drop portal axles to ensure excellent ground clearance.

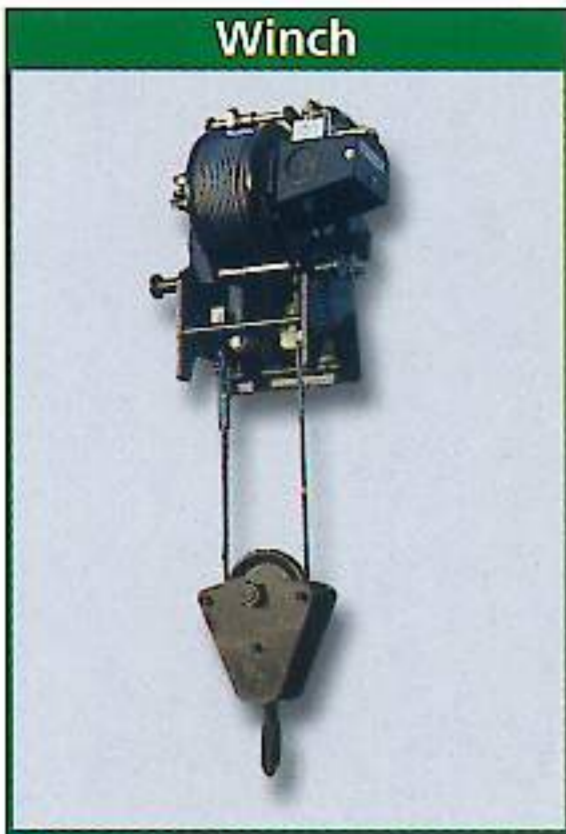
Internal width 995mm



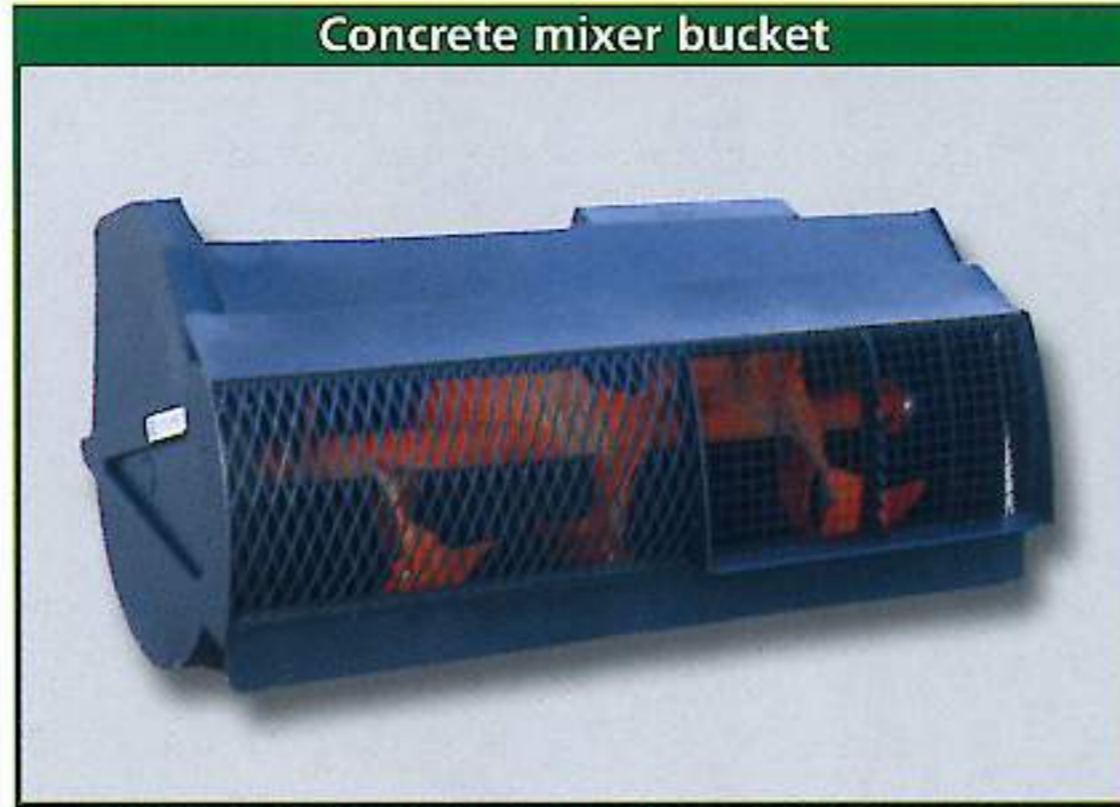
### OPTIONS

- 18-19.5 16 PR tyres.
- '5 in 1' electronic joystick control
- Roof window wiper
- Rear axle differential lock
- Prearrangement for attachments requiring two hydraulic services (ie. concrete mixer)
- Front screen guard
- Cab mounted working lights

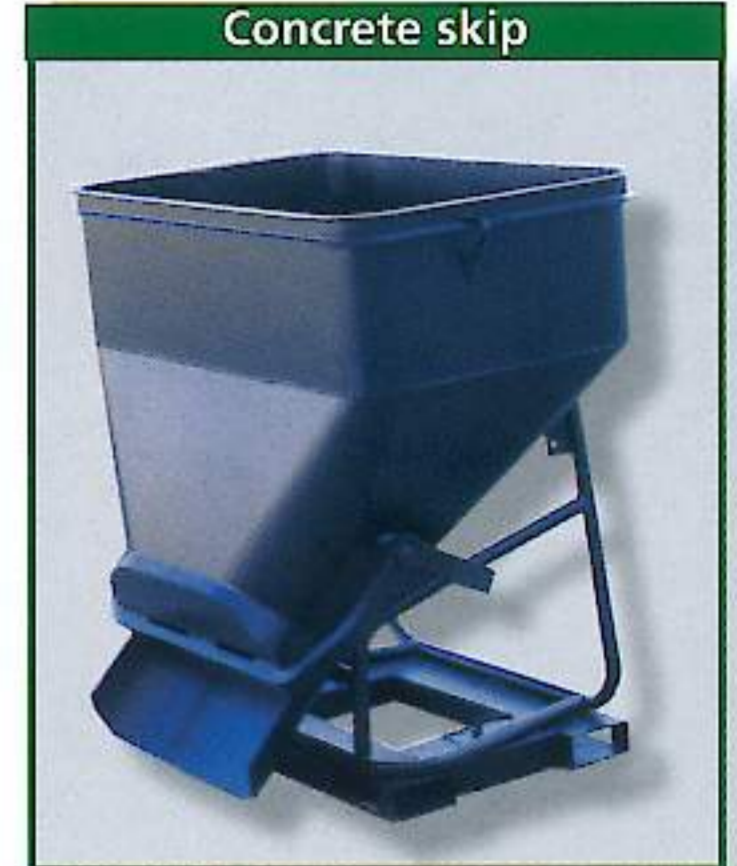
An enormous range of interchangeable attachments and options increase the versatility and performance of ROTO K series slewing handlers



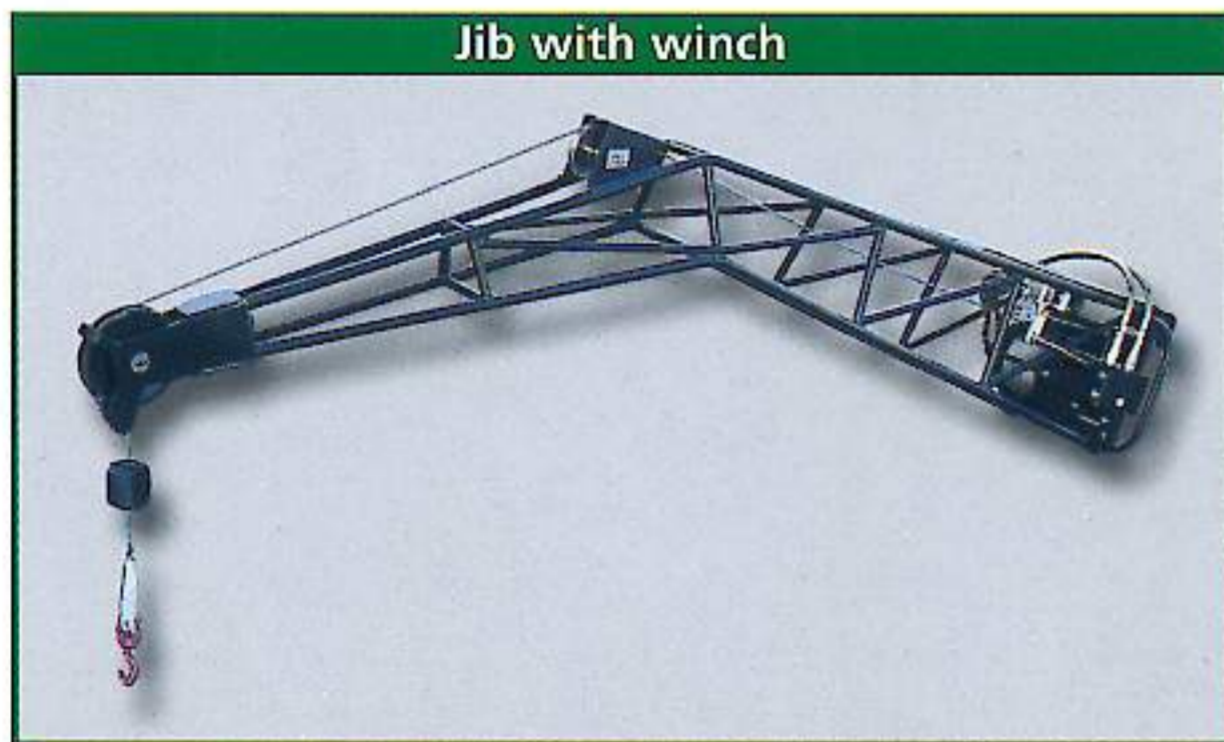
Winch



Concrete mixer bucket



Concrete skip



Jib with winch



Fully-integrated aerial work platforms



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