

AL 85 T

- Buckets : 650 to 1200 litres
- Engine power : 60 HP
- Hydrostatic transmission
- Articulation without greasing points
- New "Z" bar linkage
- Hydraulic attachment quick coupling-device
- Self-stabilizing system of articulation
- Hydraulically-assisted joystick

Articulated chassis



MANI LOADER



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ENGINE

Oil/air-cooled DEUTZ Turbo Diesel Engine,
4 cylinders, 4-stroke, direct injection

Type	BF 4L	1011FT
Power at 2,300 rpm according to ISO 9249	44	kW
	(60 HP)	
Max. torque at 1,800 rpm according to	199	Nm
Fuel consumption at max. torque	220	g/kWh
	161	g/HPH

Air filter aspiration 2 levels (safety cartridge)

Electrics :		
Voltage	12	V
Battery	88	Ah
Alternator output	860 W	60 AT
Starter	(3HP)	2.2 kW

TRANSMISSION

Load-adjusting hydrostatic transmission with two gears giving maximum pushing force, switchable while under load - 4-wheel drive.
Multifunction joystick and forward/reverse lever.

Axles :		planetary axles
Steering and oscillation :		by articulated chassis
Differential :		limited slip differential in front and rear axles
Limited slip differential front and rear :		45% / 45%
Tyres :	standard	365/80 R20
	Option	405/70 R20
Travel speed :	standard	0-20 km/h
	Option	30 km/h
Working speed :		0-7 km/h
Gradeability :		60%
Ground clearance at differential :		345 mm
Ground clearance centre of vehicle :		484 mm

DESIGN

Chassis :

- articulated chassis in high-quality steel, welded, "Z" bar linkage : 100% parallel lift, specially optimised for the use of forks. Automatic return of the bucket to working position.
- Self-stabilizing system of articulation
- Articulation without greasing points (arm / articulation / transmission)

Cab : comfortable, fully suspended (mounted on 4 silent-blocks)

Noise level cab (dynam.) :	79 dB (AT)
Noise level ext. max. (dynam.) :	98 dB (AT)

STEERING

Oscillation angle	2 x 11°
Articulation angle	2 x 40°
Turning radius at the rear	R4 = 3900 mm

BRAKING SYSTEM

Service brake : multi-disc brake (oil immersed), operated hydraulically on the front axle and acting on all 4 wheels by the transmission.

"Inching" function on service brake

Parking brake : hydraulic brake acting by spring-loaded accumulator on the front axle and by the transmission on all 4 wheels.

HYDRAULICS

Single hydraulic system :
Lifting / lowering / crowding / dumping / attachments controls, as well as steering (via priority valve) by hydraulic 3-way distributor with pressure control on outlets.

Hydraulically-assisted steering and joystick control / proportional controls. Attachment lockable and unlockable from the cab

Floating position on loader arm

Flow and pressure max.
at 2,300 rpm : 61 l /min & 230 bar

Cylinders : 2 lift cylinders ø 80 mm
1 tilt cylinder ø 100 mm

Cycle times according to DIN ISO 7131 :

Lifting (with load)	5,8 s
Lowering (without load)	3,8 s
Dumping 90°	1,2 s
Crowding 45°	1,0 s

FILLING CAPACITIES

Fuel tank	70 l
Hydraulic circuit including tank	100 l

PERFORMANCE

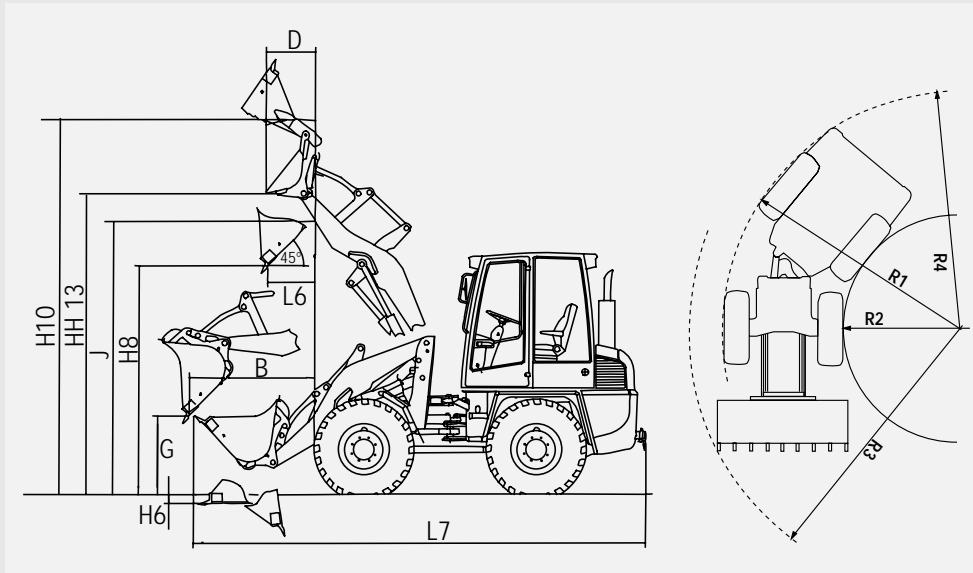
Digging depth (standard bucket) 60 mm

Bucket angle	Crowding 49°
	Dumping high 49°
	Dumping max. 93°

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DIAGRAMS

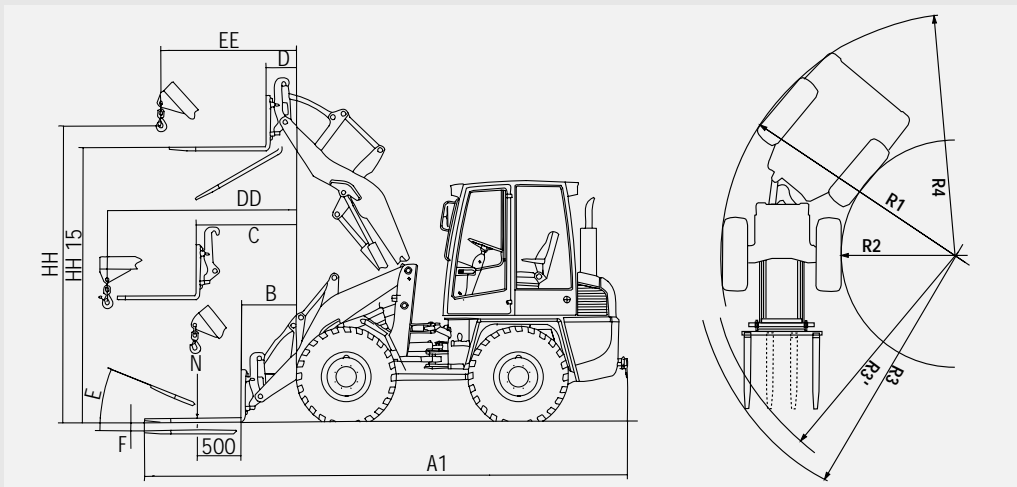


	Standard	Multipurpose
Volume :	0,8 m ³	0,65 m ³
B	1335	1370
G	890	760
H6	60	135
H8	2600	2475
H10	4130	4090
J	3150	3150
L6	500	575
L7	5115	5150
D (open)		535
HH 13 (open)		3385
R1	3800	
R2	1900	
R3	3995	
R4	3900	

Dimensions of machine	Dimensions in mm
	AL 85 T
Height	2720
Width over tyres	1790
Width over standard bucket 0,8 m ³	1850
Wheelbase	1950
Length with standard bucket 0,8 m ³	5115

TECHNICAL CHARACTERISTICS

CHARACTERISTICS WITH 365/80 R20 TYRES		STANDARD BUCKET		MULTIPURPOSE BUCKET	LIGHT-DUTY BUCKET
Volume according to DIN ISO 7546	m ³	0,8	0,7	0,65	1,2
Density according to ISO 8313	t/m ³	1,7	1,95	1,8	1,0
Tipping load at max. reach in line acc. to ISO 8313	kg	3170	3220	3000	3000
Tipping load at max. reach, articul. acc. to ISO 8313	kg	2610	2640	2460	2460
Lifting force according to ISO 8313	daN	4100	4100	4100	4100
Tractive force	kN	38	38	38	38
Breakout force according to ISO 8313	daN	4560	4560	4405	3625
Width of the bucket	mm	1850	1800	1850	2000
Turning radius with bucket	mm	3995	3965	3980	4100
Dumping height under bucket	mm	2600	2655	2475	2420
Reach at max. height	mm	500	480	575	675
Maximum reach	mm	1335	1315	1370	1465
Permitted load - front axle	kg	3500	3500	3500	3500
Permitted load - rear axle	kg	4000	4000	4000	4000
Crowding angle	°	49	49	49	49
Dumping angle at max. height	°	49	49	46	49
Operating weight with bucket	kg	4960	4940	5110	5060



	AL 85 T
A1	5455
B	610
C	1145
D	320
E	15°
F	10
HH15	3190
Lifting jib	
DD	2150
EE	965
HH	4030
R1	3800
R2	1900
R3	4050
R4	3900

		AL 85 T
Payload on pallet forks according to ISO 8313 (in front position)	Level ground	2185 kg
	Uneven ground	1640 kg
Payload on pallet forks according to ISO 8313 (in articulated position)	Level ground	1825 kg
	Uneven ground	1365 kg
Payload on pallet forks according to ISO 8313 (in front position)*	Level ground	2775 kg
	Uneven ground	2080 kg
Payload on pallet forks according to ISO 8313 (in articulated position)*	Level ground	2325 kg
	Uneven ground	1745 kg

* Forks 150 mm from ground level

STANDARD EQUIPMENT

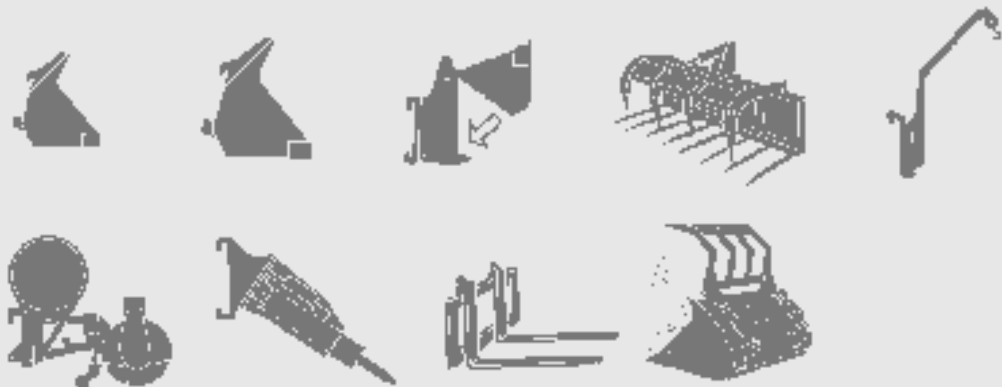
Comfortable 2-door ROPS cab - Tinted windows - Windscreen wiper / washer front and rear - Sun visor - Sun roof - Heated rear window - Cut-off switch in the cab - Joystick and lever for hydraulic attachments - Modular dashboard - Warning display lights - Safety belt - Storage rack - Interior light - 3-position heater/air conditioning (exterior air filter) - Mug holder - Radio installation facility - 1 interior rear mirror + 2 exterior - 12V electrical socket in the cab - 2 driving lights mounted at the front and 2 working lights mounted at the rear of the cab - Rotating beacon - Reversing lights, indicators and stop lights - Reverse alarm - Tool kit - Auxiliary hydraulic circuit - Bucket position indicator - Towing facility - Hydraulic attachment locking system - Electrical locking switch.

LIST OF OPTIONS

30 km/h Version - 405/70 R20 Tyres - 375/75 R20 Tyres - Radio - 2 working lights on the arm - Loader arm suspension - Anti-theft system (transponder or digicode) - Direct return line - Permanent power to the attachments circuit for road sweeper - Safety valves on lifting and crowding cylinders.

ATTACHMENTS

- Bucket
- Multipurpose bucket
- Grab fork
- Lifting jib
- Road sweeper
- Hydraulic hammer
- Forks
- etc. ...



This publication in no way constitutes an offer and the company reserves the right to alter specification without prior notice. The MANITOU models presented in this brochure can be supplied complete with optional equipment attachments



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