

AS 45

- Buckets : 450 to 600 litres
- Engine power : 40 HP
- Hydrostatic transmission
- Monobloc chassis / swinging arm
- 4-wheel-steering
- Automatic locking of the rear axle oscillation
- Hydraulic attachment quick-coupling device
- Width : 1,65 m

Swinging arm 180°



MANITOU LOADER



MANITOU

MANI LOADER

ENGINE

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

Type	F 3L	1011F
Power at 2,500 rpm according to ISO 9249	29	kW (40 HP)
Max. torque at 1,900 rpm according to ISO 9249	118	Nm
Fuel consumption at max. torque	226	g/kWh
	166	g/HPH

Air filter aspiration 2 levels (safety cartridge)

Electrics :		
Voltage	12	V
Battery	66	Ah
Alternator output	840 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
4-wheel steering.
Multifunction joystick and forward/reverse lever.

Axles :		planetary axles
Steering :		4-wheel steering
Oscillation :		on rear axle
Differential :	limited slip differential in the front axle	
Limited slip differential front :		45%

Tyres :	standard	335/80 R18
	Option	15.5/55 R18

Travel speed :	standard	0-20 km/h
	Option	0-30 Km/h

Working speed :		0-6 km/h
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Gradeability :		60 %
Ground clearance at differential :		310 mm
Ground clearance centre of vehicle :		410 mm

DESIGN

- Chassis :**
- Rigid chassis concept (stability guaranteed) in high-quality steel, welded.
 - Automatic blocking of the rear axle oscillation from 30° of rotation of the arm.
 - Constant speed of rotation of the arm
 - Crown-wheel with internal cogs
 - "Z" bar linkage : 100% parallel lift.
 - Automatic return of the bucket to working position

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

Noise level cab (dynam.) :	78 dB (AT)
Sound level ext. max. (dynam.) :	96 dB (AT)

STEERING

Oscillation angle	2 x 10°
Steering angle	35°
Outside turning radius	R = 2770 mm

BREAKING 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 : mechanically-controlled brake acting on all 4 wheels by the transmission.

HYDRAULICS

Double hydraulic system :

First circuit : Lifting / lowering / crowding / dumping / attachment controls ; and steering (via priority valve) ; 3-way hydraulic distributor with pressure controls on outlets.

Flow and pressure max.
At 2,500 rpm : 40 l /min & 230 bar

2nd circuit : swinging controls; single hydraulic distributor with pressure controls on outlets.

Flow and pressure max.
At 2,500 rpm : 20 l /min & 200 bar

Floating position on loader arm.

Cylinders :	2 lift cylinders	ø 70 mm
	1 tilt cylinder	ø 70 mm
	2 swinging cylinders	ø 80 mm

Cycle times according to DIN ISO 7131 :		
	Lifting (with load)	5,5 s
	Lowering (without load)	3,5 s
	Dumping 90°	1,4 s
	Crowding 45°	2,2 s
	Swinging 90°	3,5 s

FILLING CAPACITIES

Fuel tank	45 l
Hydraulic circuit including tank	70 l

PERFORMANCE

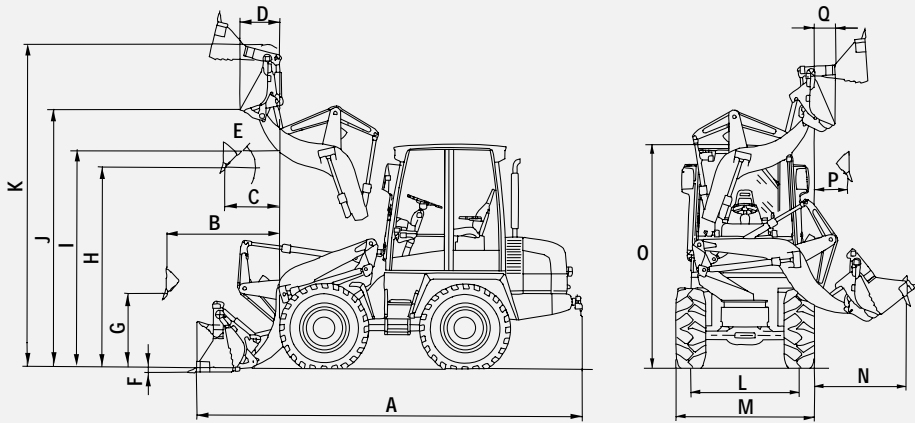
Digging depth (standard bucket) 70 mm

Crowding angle	45°
Dumping high	46°
Dumping max.	100°

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DIAGRAMS

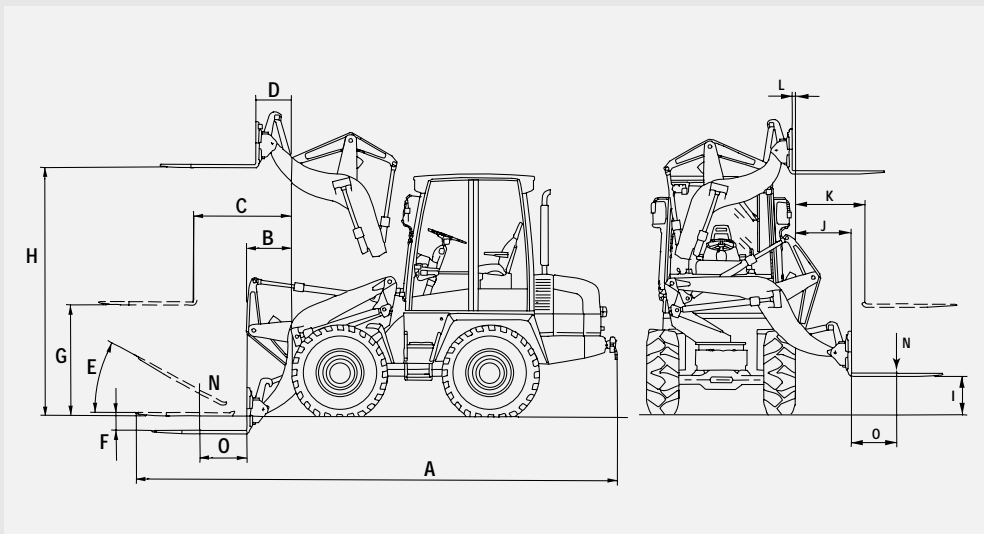


	Standard	Multipurpose
Volume :	0,5 m ³	0,45 m ³
A	4840	4820
B	1270	1220
C	490	435
E	45°	45°
F	70	85
G	810	825
H	2375	2365
I	2760	2760
D		445
J		3065
K		3780
L	1270	1270
M	1620	1620
N	965	915
O	2570	2570
P	190	135
Q		140

Dimensions of machine	Dimensions in mm
	AS 45
Height	2570
Width over tyres	1620
Width over standard bucket	1650
Wheelbase	1600
Length with standard bucket	4840

TECHNICAL CHARACTERISTICS

CHARACTERISTICS WITH 335/80 R18 TYRES		STANDARD BUCKET	MULTIPURPOSE BUCKET	LIGHT-DUTY BUCKET
Volume according to DIN ISO 7546	m ³	0,5	0,45	0,6
Density according to ISO 8313	t/m ³	1,55	1,8	1,25
Tipping load at max. reach in line acc. to ISO 8313	kg	1900	1880	1860
Tipping load at max. reach swung acc. to ISO 8313	kg	1540	1560	1490
Lifting force according to ISO 8313	daN	2400	2400	2400
Tractive force	kN	25	25	25
Breakout force according to ISO 8313	daN	3500	3720	3030
Width of the bucket	mm	1650	1650	1650
Outside turning radius	mm	2770	2770	2770
Dumping height under bucket	mm	2375	2365	2355
Reach at max. height	mm	490	435	510
Maximum reach	mm	1270	1220	1290
Permitted load - front axle	kg	2200	2200	2200
Permitted load - rear axle	kg	3000	3000	3000
Crowding angle	°	45	45	45
Dumping angle at max. height	°	46	46	46
Operating weight with bucket	kg	3830	3970	3840



	AS 45
A	5015
B	510
C	1035
D	250
E	21°
F	85
G	1260
H	2820
I	570
J	630
K	765
L	50
O	500

		AS 45
Payload on pallet forks according to ISO 8313 (in front position)	Level ground	1330 kg
	Uneven ground	1000 kg
Payload on pallet forks according to ISO 8313 (in swung position)**	Level ground	1010 kg
	Uneven ground	760 kg
Payload on pallet forks according to ISO 8313 (in front position)*	Level ground	1660 kg
	Uneven ground	1240 kg

* Forks at 150 mm from ground level

** with handling kit

STANDARD EQUIPMENT

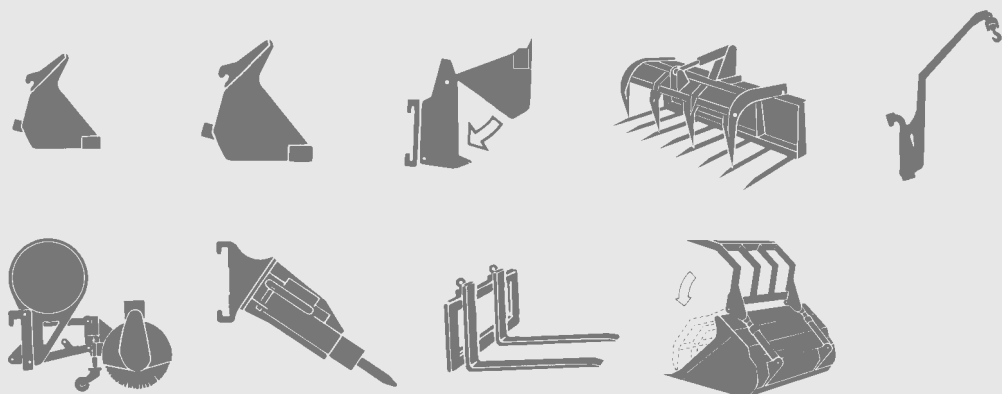
Comfortable 2-door ROPS cab - Adjustable driver's seat - Adjustable steering column - Tinted windows - Windscreen wiper / washer front and rear - Sun visor Sun roof - Heater rear window - Cut-off switch in the cab - Joysticks and lever for hydraulic attachments - Modular dashboard - Floating position on loader arm - 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 - Electrical socket 12V 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 - Hydraulic attachment locking system - Towing facility.

LIST OF OPTIONS

30 km/h Version - 15.55 R18 Tyres - Radio - Anti-theft system (transponder or digicode) - 2 working lights on the arm - Direct return line - Loader arm suspension - Safety valves on lifting and crowding cylinders - Permanent power to the attachment circuit for road sweeper.

ATTACHMENTS

- Buckets
- 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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