# MAN LOADER

- Buckets: 450 to 600 litres
- Engine power: 40 hp
- Hydrostatic transmission
- Fixed chassis/swinging arm
- Automatic locking of the rear axle oscillation
- Width 1.65 m



**AS 50** 



## **MANILOADER AS 50 : the compact solution**

## The AS 50 is by far the most compact and manoeuvrable of wheel loaders. Its swinging arm is ideally designed for work in the most restricted urban environments.

## The compact solution

A 'made-to-measure' loader for working in restricted sites.

The exceptional dimensions of the AS 50 (1.65 m wide) together with the manoeuvrability of its four-wheel steering enable it to work in an area of only 16  $m^2$ .







## A loader with a difference

The pivoting arm brings a new dimension of work to this 40 hp loader ! The AS 50 copes perfectly with jobs like picking up bulk materials, loading lorries and delivering to building sites, but it can also be fitted with forks, a road sweeper or any other attachment, thanks to its hydraulic quick-coupling system.

# Comfortable and labour-saving to drive...

The AS 50 cab, accessible from either side, is comfortable and spacious. The major functions : lifting and lowering – tilting and dumping – reversing – choice of working gears or road gears – are all selected on a single joystick to the right of the operator.



#### **ENGINE**

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

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

Air filter aspiration 2 levels (safety cartridge)

Electrics :			
Voltage		12	V
Battery		66	Ah
Alternator output	840 W	60	AT
Starter	(3 HP)	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 : Steering : Oscillation : Differential : Locking value :	automatic self locking differer	planetary axles 4-wheel steering on rear axle ntial in the front axle 45%
Tyres :	standard Option	335/80 R18 15.5/55 R18
Travel speed :	standard Option	0-20 km/h 0-30 Km/h
Working speed :		0-5 km/h
Gradeability : Ground clearance	at differential :	60 % 310 mm

#### DESIGN

Chassis :	<ul> <li>rigid chassis concept (stability guarant high quality steel, welded.</li> <li>Automatic rear axle oscillation locking from 30° of rotation of the arm.</li> <li>Constant arm rotation speed</li> <li>Ring gear wheel with internal cogs</li> <li>P-bar linkage: lifting 100% parallel</li> <li>Bucket automatically returns to the wo</li> </ul>	,
Cab :	comfortable, fully suspended (mounted on 4 silent-blocs)	
Noise level cat Sound level ex	o (dynam.) : t. max. (dynam.) :	78 dB (AT) 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 imm hydraulically on the front wheels by the transmiss	axle and acting on all 4
"Inching" function	on service brake	
Parking brake :	mechanically-controlled distribution gear	orake acting on the
HYDRAULICS	5	
steering (via priori control valves on c	ǵ/lowering, tilting/dumping ty valve) by 4-way hydraulic	distributor with pressure
Flow and pressure At 2.500 rpm :	e max.	40 I /min & 230 bar
2nd circuit : swi pressure controls	inging controls; single hy s on outlets.	draulic distributor with
Flow and pressure At 2.500 rpm :	e max.	20 I /min & 200 bar
Floating position of	on loader arm.	
Cylinders :	2 lift cylinders 1 dumping cylinder 2 swinging cylinders	ø 70 mm ø 70 mm ø 80 mm
Cycle times accor	ding to DIN ISO 7131 : Lifting (with load) Lowering (without load) Dumping 90° Tilting 45° Swinging 90°	5.5 s 3.5 s 3.5 s 2,2 s 3,5 s
FILLING CAP	ACITIES	
Fuel tank Hydraulic circuit ir	ncluding tank	45 I 60 I
PERFORMAN	ICE	
Digging depth (sta	andard bucket)	100 mm

	,	
Tilting angle Dumping high Dumping max.		45° 46° 105°

#### **TECHNICAL CHARACTERISTICS**

CHARACTERISTICS WITH 15.5/55 R18 TYRES		STANDARD BUCKET	4-IN-1 Bucket	LIGHT MATERIALS BUCKET
Volume according to DIN ISO 7546	m³	0,5	0,45	0,6
Density according ISO 8313	t/m³	1,55	1,8	1,25
Tipping load in line according to ISO 8313	kg	2020	2000	1980
Tipping load in swinged position according to ISO 8313	kg	1620	1640	1570
Max. lifting force according to ISO 8313	daN	2400	2400	2400
Pushing force	kN	25	25	25
Breakout force according to ISO 8313	daN	3500	3720	3030
Width of the bucket	mm	1650	1650	1650
Dumping height under bucket (H8)	mm	2490	2470	2460
Reach at max. height (L6)	mm	385	330	405
Maximum reach (B)	mm	1355	1305	1375
Permitted load – front axle	kg	2200	2200	2200
Permitted load – rear axle	kg	3000	3000	3000
Tilting angle	0	45	45	45
Dumping angle at max. height	0	46	46	46
Operating weight with standard bucket	kg	3830	3970	3840

#### DIAGRAMS



Dimensions of machine (in mm)	AS 50
Height	2550
Width to tyres	1620
Width to standard bucket	1650
Wheelbase	1600
Length with standard bucket	4865
Width to tyres Width to standard bucket Wheelbase	1620 1650 1600

### An EXCLUSIVE concept : 180° swinging arm

The rigid solid bloc chassis in high quality steel gives the AS 50 exemplary stability in all configurations. The turret is fixed on the front of the chassis on an internally-toothed gear wheel.

A double chain driven by two swinging cylinders rotates the turret on the front of the chassis at constant speed





The rotating turret allows the arm of the loader to be swinged through  $90^{\circ}$  left or right.

Synchronised swinging cylinders give exceptional speed of execution, and guarantee precise rotatory movement.

The pivoting is powered by a dedicated hydraulic pump, which means that movements can be carried out simultaneously, improving cycle times.

### **Complete safety**

The rotation is performed in complete safety for the operator and for the load. The rear axle is fitted with cylinders to prevent oscillation.

For an angle of rotation of 30° or more, the oscillation of the rear axle is locked automatically, to ensure stability.

The chain that drives the pivoting turret is held under constant tension

by the pump's booster pressure to prevent any play in the turret.





## AS 50 : swing to win !



		AS 50
Payload on forks according to ISO 8313 (in front position)	Flat terrain Uneven terrain	1400 kg 1050 kg
Payload on forks according to ISO 8313 (in swinged position)**	Flat terrain Uneven terrain	1060 kg 800 kg
Payload on forks according to ISO 8313 (in swinged position)*	Flat terrain Uneven terrain	1600 kg 1200 kg

\* Fork 150 mm from the ground

\*\* With handling kit

#### **STANDARD EQUIPMENT**

Comfortable ROPS cab with 2 doors - Adjustable driver's seat - Tinted windows - Front and rear windscreen wipers / washers - Sun visor - Rear windscreen de-icer - Cut-off switch in the cab - Modular dashboard - Servo controlled joystick operation + hydraulically operated and electrically secured quick change device - Floating position of the arm - Warning lights - Seat belt - Storage net - Lighting - 3-position heating/air conditioning (external air filter) – Mug holder – Radio installation facility – 1 interior rear-view mirror + 2 exterior – 12V socket in the cab – 2 driving lights mounted on the front and 2 working lights mounted on the rear of the cab - rotating beacon - Reversing lights, indicators and stop lights - reverse alarm - Tool kit - Auxiliary hydraulic circuit - Bucket position indicator - Towing device.

#### **LIST OF OPTIONS**

30 kph version – 15.5/55 R18 tyres – Radio – Anti-theft system (transponder or digicode) – Direct return line – Loader arm suspension – Permanent power to the attachment circuit for road sweeper - Safety valves on lifting and crowding cylinders - 2 working lights on the arm.

#### **ATTACHMENTS**

- Buckets •
- . 4-in-1 buckets
- Grab fork •
- Lifting jib •
- Road sweeper .
- Hydraulic hammer •
- Forks .
- Grab bucket •
- etc.





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