

AHLMANN

SYSTEM 180

AS 50



> The loader specialist

> Swing Loader 0.5 – 0.8 m³

AS 50

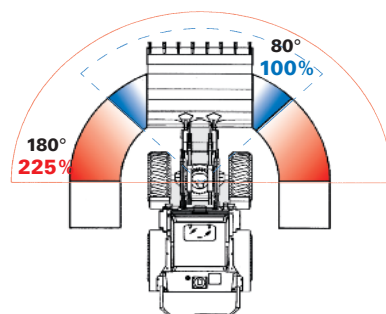
Let's have a look

**29.9 kW / 40 hp
at 2500 min⁻¹**

**max. tipping load
(standard bucket):
2,410 kg**

**maximum swing
of 180° (2x90°)
with all attach-
ments!**

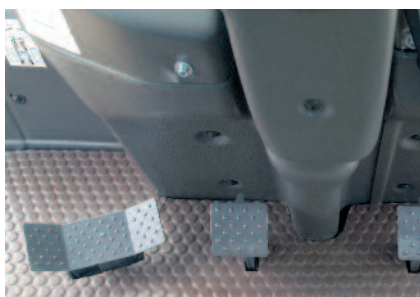
Working area with 4-in-1 bucket



Working area swing shovel loader
≙ 125% advantage
Working area articulated loader



Safe, easy access on both sides



Left foot operated swing pedal
avoids tiredness

Low-maintenance, play-free chain
operated swinging system with
constant turning speed and -power

Self-engaging, automatic
differential lock in front axle
(locking factor 45%)

Hydraulically
operated quick coupler

Powerful P-Kinematics with
precise parallel lifting and
final position cushioning of
the lift cylinders

Wide range of
attachments



AS 50

at your advantages



Easy access to all service points



Comfortable cab with excellent
all-round visibility



High performance
Deutz diesel engine

Hydrostatic
four-wheel steering

Payload dependent
axle support

Rigid single-component
chassis for maximum stability

AS 50

Manoeuvrable and compact



Ahlmann swing shovel loaders are compact, flexible, comfortable, secure and extremely efficient. We have always been at the forefront of innovative design and lead the market in swing shovel technology:

- Short, fast operating cycles for time-saving
- Excellent manoeuvrability particularly in confined areas
- Working in one track and shorter travel distance for minimal traffic obstruction
- Reduced soil compaction due to less operating cycles.



AS 50

Low-maintenance and economical



Multiple operations, easy to maintain and long-lasting components guarantee high profitability and are the brand character of Ahlmann swing shovel loaders:

- Many operations are possible without stabilisers even in confined spaces such as pallet lifting, excavating and materials handling
- Extensive range of attachments for almost every application
- Western European technical components
- Optimal access to all service points
- Long maintenance intervals and low maintenance costs
- The chain operated swing function has no maintenance or wear for the life of the machine. Free-play is taken up automatically.



AS 50

Technical Data

Operating weight: 4,160 kg
 Engine power: 29.9 kW (40 hp)
 Standard bucket: 0.50 m³



- Low-maintenance shovel arm
- Comfortable driver's cab with ROPS safety system
- Joystick controls
- Servo-assisted working hydraulics
- High-performance, power-controlled, hydrostatic four-wheel drive

- Four-wheel steering
- Planetary axles with self-locking differential in front
- P-Kinematics for excellent visibility on all work tools
- Hydraulically controlled quick-coupler
- Wide range of attachments

Engine

Oil/air-cooled Deutz diesel engine
 3 cylinders (emissions acc. to EU 97/68 step III),
 4-stroke, direct fuel injection

Type	D 2011 L03i
Net power at	2500 min ⁻¹
acc. to ISO 9249	(40 hp) 29.9 kW
Max. torque at	1700 min ⁻¹
acc. to ISO 9249	130 Nm
spec. fuel consumption at	
max. torque:	224 g/kWh

Air intake filter: 2 level dry-air filter
 with safety cartridge

Electrical system:	Operating voltage:	12 Volt
	Battery capacity:	66 Ah
Alternator rating:	60 A	840 Watt
Starter rating:	(3.0 hp)	2.2 kW

Drive

Hydrostatic drive with automotive control,
 2 stages for maximum propulsive force,
 gear-engage under load, multifunctional lever
 (joystick) for drive and working hydraulics control

Axles:	planetary axles with four-wheel steering for maximum flexibility, oscillating rear axle
Differential lock:	self-engaging, automatic differential lock in front axle locking factor 45%
Wheels:	tire size: 12,5-18 optionally: 15,5/55 R18
Speeds:	road gear: 0-20 km/h (optionally 30 km/h) field gear: 0-5 km/h
Gradability:	under load 60%
Oscillation:	max. oscillation angle +/- 10°

Brakes

- Operating brakes:
1. hydraulically operated drum brake in front axle, acting on all 4 wheels
 2. hydrostatic inching brake, acting on all 4 wheels

Parking brake:
 Drum brake in front axle, acting on all 4 wheels

Steering

Hydrostatic four-wheel steering,
 can be switched to rear axle steering
 max. steering angle +/- 35°
 Turning radius measured
 over rear end R = 2770 mm

Hydraulic system

Dual-circuit system with gear pumps
 1. working hydraulics circuit (lift/lower, tilt, accessories) and steering (via priority valve); three-fold control valve with primary and secondary protection
 Max. operating pressure at 2500 min⁻¹: 40 l/min and 200 bar
 2. circuit (swivelling) single control valve with primary and secondary protection
 Max. operating pressure at 2500 min⁻¹: 20 l/min and 200 bar
 Float position for lifting cylinders
 Cylinders: 2 lifting cylinders 70 ø
 1 tilting cylinder 70 ø
 2 swing cylinders 80 ø
 Cycle-times: Lifting (under load) 5.5 s
 Lowering (w/o load) 3.5 s
 Dumping (90°) 3.5 s
 Tilting (45°) 2.2 s
 Swivelling (90°) 3.4 s

Performance data

Digging depth with standard bucket:	100 mm
Bucket position:	Tilting angle 45° Dumping angle, top 46° Max. dumping angle 105°
Lifting force:	2,400 daN
Breakout force:	3,500 daN
Thrust force*:	3,000 daN

Tipping load:	
Standard bucket, max. turned, straight*	2,410 kg
Standard bucket, max. turned, 90°-swivelled*	2,065 kg

Payload:	
on forks, max. turned, frontal, even terrain*	1,640 kg
on forks, max. turned, max. swivelled, even terrain*	1,290 kg
on forks, max. turned, frontal, even terrain**	1,770 kg
on forks, max. turned, frontal, uneven terrain**	1,330 kg

Tipping load according to ISO 14397
 Payload according to EN 474-3
 * with counterweight
 ** with counterweight in transport position 150 mm above ground

Chassis

Rigid single-component chassis for maximum stability especially with swivelled bucket attachment. Quality steel construction, robot welded. Sealed articulated/oscillated pivot for long lifetime. Milled seatings for axles and rotating assembly. Swivelling cylinders integrated in the frame ensure constant swivel speed and torque with integrated final cylinder cushioning. Separately driven via second hydraulics circuit. P-Kinematics in shovel arm for excellent visibility on all work tools. Low-maintenance shovel arm. Operator's cab with flexible four-point mountings for maximum driver comfort and minimum noise levels. Smooth power-assisted and accurate joystick controls.

Filling capacities

Engine with filter	approx.	6.0 l
Fuel tank	approx.	45.0 l
Front axle total	approx.	7.0 l
Rear axle with gearbox	approx.	7.5 l
Hydraulic system with tank	approx.	60.0 l

Standard features

Comfortable operator's cab with ROPS safety feature and 2 lockable doors allowing access from both sides of vehicle, doors open through 180° with safety restraint on machine, tinted windows, electrical wipers front and rear, front and rear screen washers, 2 external rear-view mirrors, multiply adjustable driver's seat, adjusts to driver's weight, hydraulic suspension, safety belt, sun-blind, heater and fresh air system with external filter, interior lighting, glove-boxes, intuitive modular cockpit with symbolic display components and monitoring LEDs, 12v power outlet, 2 driving lights at front of cab roof, 2 working lights mounted at back of cab roof, indicators, rear and brake lights, low-maintenance shovel arm, electrically locking hydraulically operated quick-coupler, towing coupling, fastening and lifting points, auxiliary hydraulics 1st circuit.
 Color scheme: yellow,
 operator's cab, axles and wheels grey

Optional equipment

30 km/h version, tires 15,5/55 R18, 360° warning light, internal rear-view mirror, reverse warning system, bucket protection compliant to road-safety standards, auxiliary hydraulics 2nd circuit, pipe-burst protection system, boom suspension, counterweight, bio-degradable oil fill for hydraulic system, radio, pressureless return line, immobilizer, various attachments possible such as pallet fork, load hook, hydraulic breaker etc.

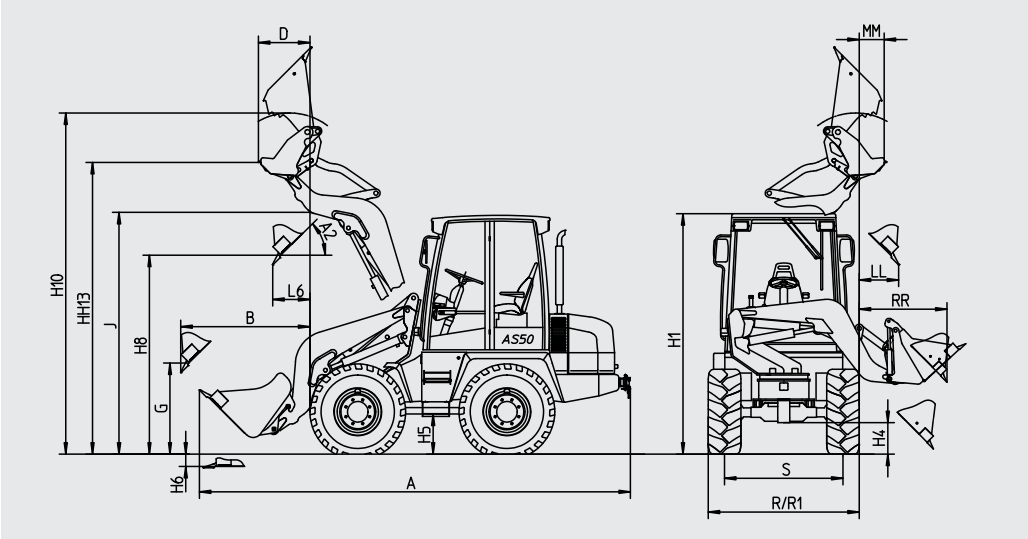
Weight

Machine with quick-coupler and 0.5 m³-standard bucket with teeth	4,160 kg
permissible axle load front	3,000 kg
permissible axle load rear	3,000 kg

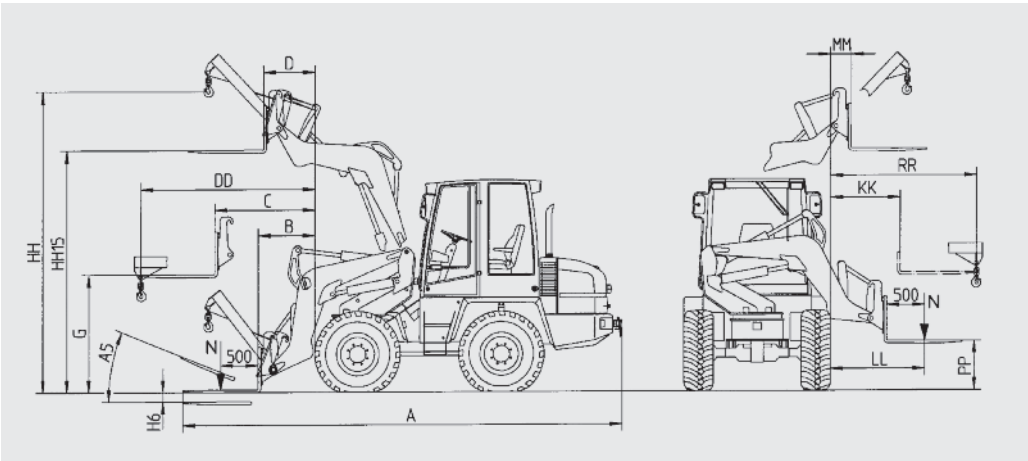
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Technical Data

Measurements

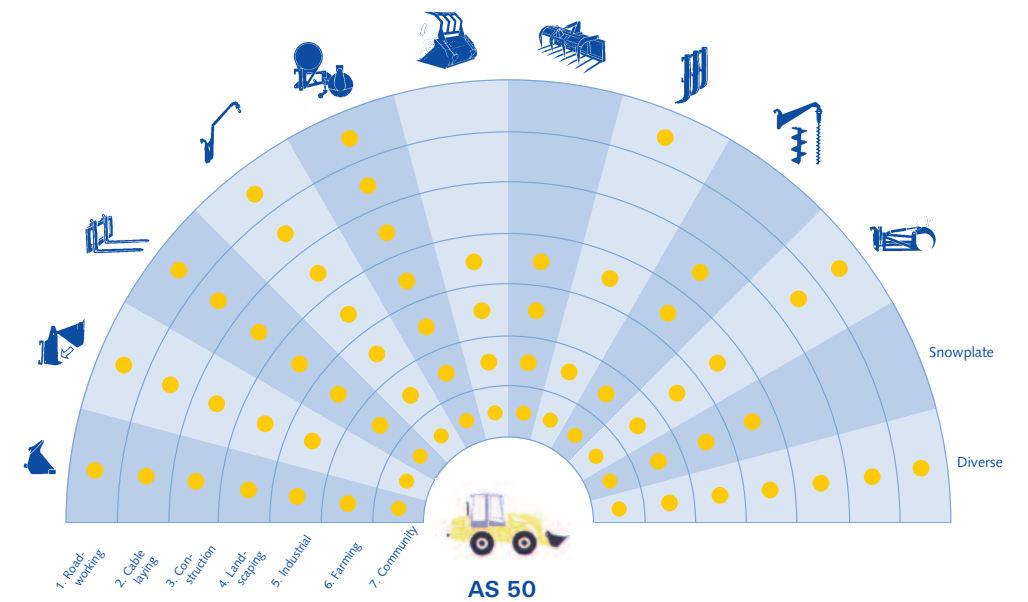


Buckets		
Standard	0.50m³	4-in-1 0.45m³
A	4865	4820
A2	46°	46°
B	1420	1370
D		340
G	810	825
H1	2550	2550
H4	320	320
H5	400	400
H6	100	85
H8	2490	2470
H10	3775	3615
HH13		3200
J	3030	3030
LL	275	205
L6	460	410
MM		140
RR	1070	1020
S	1290	1290
R	1650	1650
R1	1620	1620



	Load hook	Forks
A	4310	5280
A5		21°
B		705
C		1155
D		160
DD	1770	
G		1265
HH	3510	
H6		85
HH15		2940
KK		815
LL		1155
MM		115
PP		510
RR	1410	

Attachments

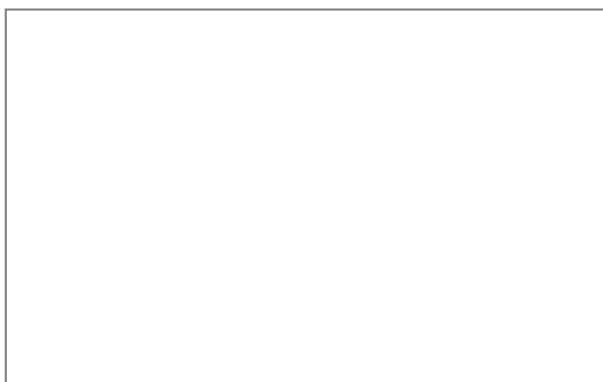




Our mission is to design, develop, manufacture and distribute quality products. Our innovative machines perform many varied and demanding tasks within your environment.

Customers are the heart of our company. We provide them with our knowledge, experience and the team spirit that drives Ahlmann.

Your Local Dealer



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