

AHLMANN

SYSTEM 180

AS 210



> The loader specialist

> Swing Shovel Loader 2.1 – 3.0 m³

AS 210

Let's have a look

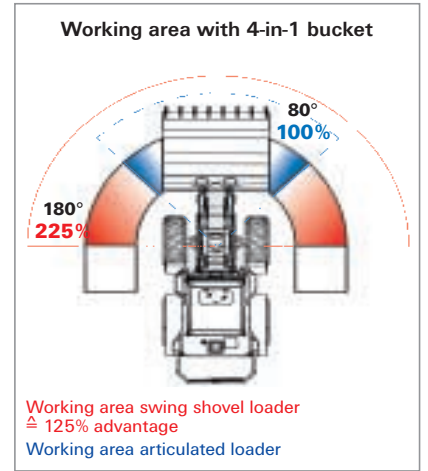
**128 kW / 174 hp
at 2200 min⁻¹**

**dump height
3.42 m**

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



4.90 m turning radius measured over rear end



Left foot operated swing pedal avoids tiredness

Manually switchable differential lock in front axle

Hydraulically operated quick coupler

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

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

Wide range of attachments



AS 210

at your advantages



Safe and easy access



Easy access to all service points



Easy, intuitive handling; nearly all operating functions are integrated in one joystick



Spacious and comfortable cab with excellent all-round visibility



Rigid single-component chassis for maximum stability

High performance Deutz turbo diesel engine

Hydrostatic four-wheel steering

Payload dependent axle support

Low-maintenance wet lamella brakes

AS 210

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 210

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 210

Technical Data

Operation weight: 15,000 kg
 Engine power: 128 kW (174 hp)
 Standard bucket: 2.1 m³



- Comfortable driver's cabin with ROPS safety system
- Joystick controls
- Servo-assisted working hydraulics
- High-performance, power-controlled hydrostatic four-wheel drive
- Four-wheel steering

- Planetary axles with manually switchable differential lock in front axle (locking factor 100 %)
- Low-maintenance wet lamella brakes
- Double-Z-Kinematics with precise parallel lifting
- Hydraulically controlled quick-coupler
- Wide range of attachments

Engine

Water-cooled Deutz turbo diesel engine with intercooler, 6 cylinder (emissions acc. to EU 97/68 step III), 4-stroke, direct fuel injection

Type TCD 2012 L062V
 Net power at 2200 min⁻¹
 acc. to ISO 14396 (174 hp) 128 kW
 Max. torque at 1600 min⁻¹
 acc. to ISO 14396 688 Nm
 spec. fuel consumption at max. torque: 220 g/kWh

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

Electrical system:
 Operating voltage: 24 Volt
 Battery capacity: 2 x 88 Ah
 Alternator rating: 55 A 1540 Watt
 Starter rating: (5.5 hp) 4.0 kW

Drive

Hydrostatic drive with automotive control, 3 stages, 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: manually switchable differential lock in front axle locking factor 100 %

Wheels: tire size: 20,5-25
 optionally: 650/65 R25

Speeds: road gear: 0-20 km/h
 (optionally 35 km/h)
 field gear: 0-11 km/h

Gradability: under load 60%

Oscillation: max. oscillation angle +/- 10°

Brakes

Operating brakes:

1. hydraulically operated wet lamella brake in front and rear axle, acting on all 4 wheels
2. hydrostatic inching brake, acting on all 4 wheels

Parking brake:

Spring-loaded wet lamella brake in rear axle, acting on all 4 wheels

Steering

Hydrostatic four-wheel steering, can be switched to rear axle steering
 max. steering angle +/- 25°
 Turning radius measured over rear end R = 4,985 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 2200 min⁻¹: 112 l/min and 230 bar, max. oil flow for auxiliary hydraulics: 172 l/min.

2. Circuit (swivelling) single control valve with primary and secondary protection, high pressure bypass line to working hydraulics

Max. operating pressure at 2200 min⁻¹: 60 l/min and 210 bar

Servo-assisted hydraulic controls for 1st circuit, joystick operated

Float position for lifting cylinders

Cylinders:	2 lifting cylinders	110 ø
	2 tilting cylinders	110 ø
	2 swing cylinders	110 ø
Cycle-times:	Lifting (under load)	6.3 s
	Lowering (w/o load)	3.7 s
	Dumping (90°)	1.4 s
	Tilting (45°)	2.1 s
	Swivelling (90°)	3.5 s

Performance data

Digging depth with standard bucket:	90 mm
Bucket position:	Tilting angle 45°
	Dumping angle, top 45°
	Max. dumping angle 100°

Lifting force:	10,600 daN
Breakout force:	13,000 daN
Thrust force:	11,300 daN

Tipping load: quick-coupler cat. V cat. IV (option)

Standard bucket, max. turned, straight	7,800 kg	7,650 kg
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Standard bucket, max. turned, 90°-swivelled	7,450 kg	7,500 kg
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Payload: quick-coupler cat. V cat. IV (option)

on forks, max. turned, frontal, even terrain	5,300 kg	5,450 kg
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on forks, max. turned, max. swivelled, even terrain	4,500 kg	4,700 kg
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on forks, max. turned, frontal, even terrain*	6,400 kg	6,600 kg
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on forks, max. turned, frontal, uneven terrain*	4,800 kg	4,950 kg
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according to ISO 14397

* Transport position 300 mm above ground acc. to ISO 14397 (ISO 8313) with safety margin

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. Double-Z-Kinematics allow exact parallel adjustment, optimized for use with pallet fork. 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.	14.0 l
Fuel tank	approx.	250.0 l
Front axle total	approx.	25.0 l
Rear axle with gearbox	approx.	25.0 l
Hydraulic system with tank	approx.	230.0 l
Distributor gear	approx.	9.5 l

Standard features

Comfortable operator's cabin with ROPS safety feature and 1 lockable door, door opens through 180° with safety restraint on machine, tinted windows, electrical wipers front and rear, front and rear screen washers, 1 internal rear-view mirror and 2 external rear-view mirrors, 1 side window opens through 180°, adjustable steering column and multi-functional lever (joystick), pilot-controlled joystick-operation, multiply adjustable driver's seat, adjusts to driver's weight, hydraulic suspension, safety belt, sun-blinds, heater and fresh air system with external filter, interior lighting, glove-boxes, intuitive modular cockpit with symbolic display components and monitoring LEDs, 24v power outlet, 2 driving lights, 2 working lights mounted on frame of bucket arm, 2 working lights mounted at front of cab roof and 2 at back of cab roof, reversing lights, indicators, rear and brake lights, electrically locking hydraulically operated quick-coupler cat. V, final position cushioning of the lift cylinders, lockable box (120 l), towing coupling, fastening point, auxiliary hydraulics 1st circuit. Color scheme: yellow, operator's cab, axles and wheels grey

Optional equipment

35 km/h version, tires 650/65 R25, 360° warning light, reverse warning system, FOPS protecting roof, bucket protection compliant to road-safety standards, auxiliary hydraulics 2nd circuit, pipe-burst protection system, boom suspension, bio-degradable oil fill for hydraulic system, radio, lift delimiter, pressureless return line, lockable differential in rear axle, disengageable four-wheel drive, air-conditioning system, immobilizer, towing device, road safety kit, particle filter, air-cushioned driver's seat, automatic brake when switch in neutral position, quick-coupler cat. IV, various attachments possible such as pallet fork, load hook, excavator, grab, hydraulic breaker etc.

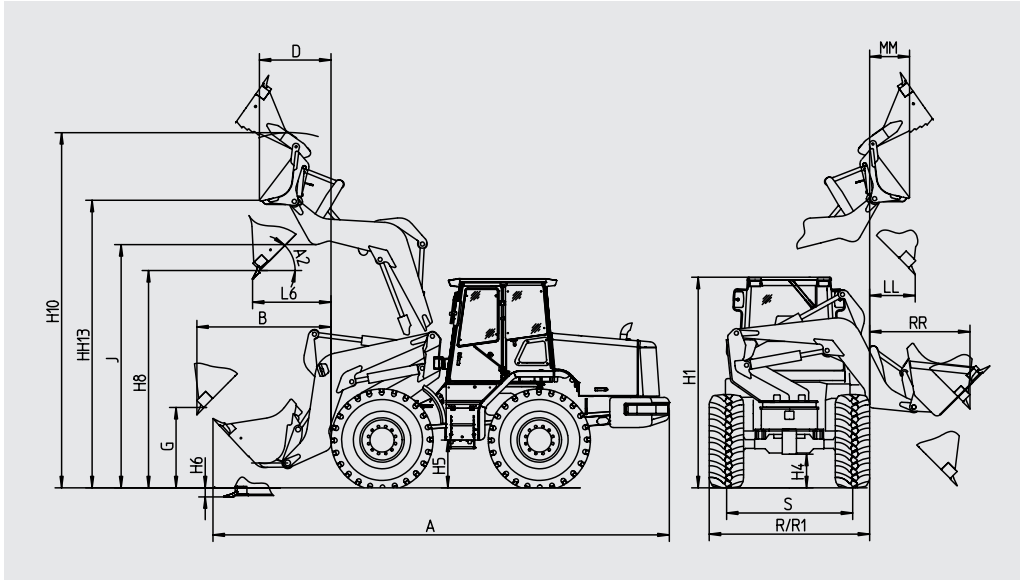
Weight

Machine with quick-coupler and 2.1 m ³ -standard bucket with teeth	15,000 kg
permissible axle load front	7,000 kg
permissible axle load rear	9,000 kg

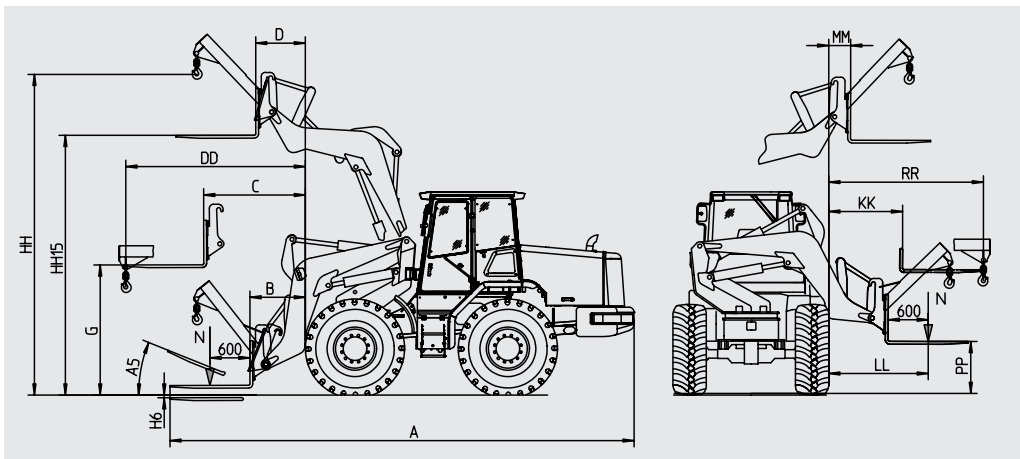
AS 210

Technical Data

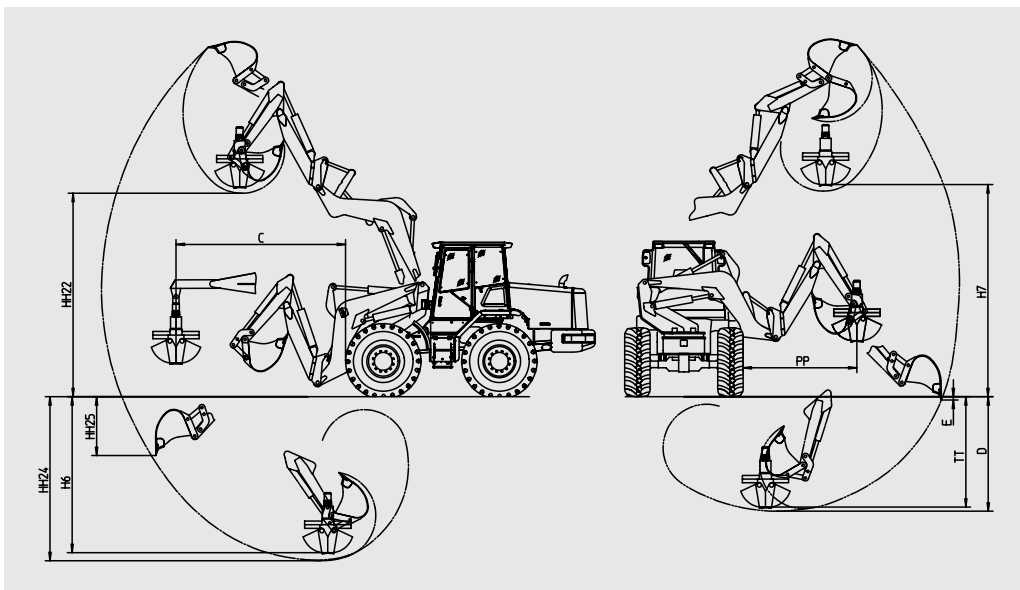
Measurements



Buckets (Standard = Stand.)				
	Cat. V		Cat. IV (option)	
	Stand. 2,1 m ³	4-in-1 1,8 m ³	Stand. 2,1 m ³	4-in-1 1,8 m ³
A	7155	7145	6850	6840
A2	45°	45°	50°	50°
B	2190	2360	2100	2170
D	-	1170	-	1010
G	1350	1285	1200	1135
H1	3155	3155	3155	3155
H4	500	500	500	500
H5	600	600	600	600
H6	90	90	70	70
H8	3420	3355	3120	3055
H10	5600	5575	5450	5425
HH13	-	4120	-	3965
J	3660	3660	3660	3660
LL	890	985	1010	1100
L6	1335	1425	1465	1555
MM	-	720	-	560
RR	1740	1910	1650	1720
S	2080	2080	2080	2080
R	2700	2700	2700	2700
R1	2605	2605	2605	2605



	Forks		Load hook	
	Cat. V		Cat. IV (option)	
A	7950	7385	7600	7085
A5	25°	-	25°	-
B	1095	-	900	-
C	1810	-	1560	-
D	950	-	820	-
DD	-	3480	-	3235
G	2000	-	1855	-
HH	-	5425	-	5225
H6	100	-	110	-
HH15	4100	-	3830	-
KK	1390	-	1110	-
LL	1750	-	1500	-
MM	500	-	370	-
PP	750	-	780	-
RR	-	3030	-	2785



	Excavator	Grab	Excavator	Grab
	Cat. V		Cat. IV (option)	
C	-	4065	-	3820
D	2650	-	2750	-
E	100	-	100	-
H6	-	3270	-	3350
H7	-	4100	-	3815
HH22	3900	-	3640	-
HH24	3420	-	3520	-
HH25	1420	-	1450	-
PP	-	3460	-	3370
TT	-	2500	-	2580

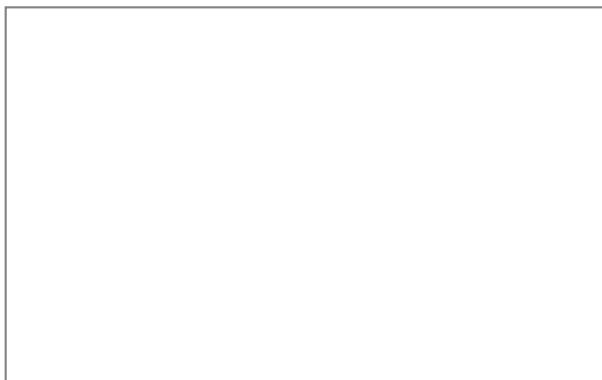
All data based on standard tyres.
 Technical data are non-committal and are subject to constructional modifications!



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