AHLMANN

SYSTEM TELESKOP AS 90 tele



> The loader specialist

Let's have a look

53.5 kW / 73 hp at 2500 min⁻¹

max. payload on forks: 2.270 kg

max. lifting height: 4.64 m max. reach: 3.50 m



Safe, easy access on both sides



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



Easy access to all service points

High performance Deutz turbo diesel engine

Hydrostatic fourwheel steering

Payload dependent axle support

Low-maintenance wet lamella brake



at your advantages



differential lock in front axle (locking factor 45%)



The telescopic handler with swing



The Ahlmann AS 90 tele combines the advantages of a swing shovel loader and a telescopic handler in one machine. Due to the gained lifting height and reach, the machine is much more economically in usage:

- Enormous lifting height and reach
- 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.



Efficient and agile



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 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.





Technical Data

Operating weight: 7220 kg 53.5 kW (73 hp) Engine output: Standard bucket: 0.9 m³









- · Comfortable driver's cab (ROPS)
- · Servo controls for working hydraulics
- Power-controlled high-performance hydrostatic four-wheel drive
- Four-wheel steering
- · Planetary axles with self-locking front differential
- · Low maintenance wet lamella brake in front and rear axle
- · Telescopic boom with precise parallel guidance
- · Hydraulically controlled quick-coupler
- · Large range of attachments

Engine

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

BF 4L 2011 Type 2500 rpm Net output at acc. to ISO 9249 (73 hp) 53.5 kW Max. torque at 1650 rpm acc. to ISO 9249 220 Nm Spec. fuel consumption

222 g/kWh at maximum torque: Air intake filter: 2-level dry air filter

with safety cartridge

Electrical system: Operating voltage: 12 Volt 88 Ah Battery capacity: Alternator rating: 60 A 840 Watts Starter rating: (ad 0.8) 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: 16/70 - 20 Tyre size:

405/70 R20 Option:

0-20 km/h Speeds: Road gear: (optionally: 30 km/h)

Field gear: 0 - 6 km/h

Hill climbing: under load 60% Oscillation: Max. oscillation angle +/- 10°

Brakes

Operating brake:

- 1. Hydraulically operated, oil-immersed wet lamella brakes in front axle, acting on all 4 wheels
- 2. Hydrostatic inching brake, acting on all 4 wheels

Parking brake:

Mechanically actuated oil-immersed wet lamella brake in front axle, acting on all 4 wheels

Steering

Hydrostatic four-wheel-steering, can be switched

to rear axle steering

+/- 33° maximum steering angle:

Turning radius

measured over rear end R = 4215 mm

Hydraulic system

Dual-circuit system with gear pumps

1. Working hydraulics circuit (lifting, lowering, tilting, telescopic functions, attachments) and steering via priority valve; four-fold control valve with primary and secondary protection; with servo-controlled joystick operation

Max. capacity at 2500 rpm: 117.5 l/min, 200 bar 2. Circuit (swivelling) with single control valve with primary and secondary protection.

Max. capacity at 2500 rpm: 35 l/min, 200 bar Float position for lifting cylinder

i lout position for	inting cylinaci	
Cylinders:	1 x lifting cylinder	110 ø
	1 x tilting cylinder	110 ø
	2 x swivelling cylinders	100 ø
	1 x telescopic cylinder	80 ø
Cycle-times:	Lifting (with load)	5.3 s
	Lowering (w/o load)	2.8 s
	Tilting (45°)	1.5 s
	Dumping (45°)	1.5 s
	Extending telescope	3.4 s
	Reacting telescope	2.1 s
	Swivelling (90°)	49 s

Performance data

Digging depth with standard bucket: 150 mm		
n: Tilting angle	45°	
Dumping angle, top	45°	
Max. dumping angle	105°	
3	400 daN	
: 4	400 daN	
4	4280 daN	
standard bucket, frontal	2950 kg	
and extended	1850 kg	
swivelled	2320 kg	
on fork, frontal,		
even ground	2135 kg	
and extended	1410 kg	
swivelled	1600 kg	
and extended	900 kg	
on fork, frontal,		
uneven ground	1600 kg	
and extended	1055 kg	
swivelled	1195 kg	
and extended	675 kg	
fork in transport position	,	
	n: Tilting angle Dumping angle, top Max. dumping angle 3 standard bucket, frontal and extended swivelled on fork, frontal, even ground and extended swivelled and extended on fork, frontal, uneven ground and extended swivelled and extended swivelled and extended swivelled and extended swivelled and extended	

according to ISO 14397

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

even 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. Z-Kinematics telescopic boom with precise parallel

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.	10.5 I
Fuel tank	approx.	75.0 I
Front axle total	approx.	7.8 I
Rear axle with gear box	approx.	9.61
Hydraulic system with tank	approx.	130.0 I
<u>o</u>		

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, tinted sun-roof, adjustable steering column, multi-functional lever (joystick) and lever for auxiliary hydraulics, 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 vehicle roof, 2 working lights mounted on rear of cab roof, reversing lights, indicators, rear and brake lights, 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, tyres 405/70 R20, 360° warning light, internal rear-view mirror, reverse warning system, FOPS protecting roof, bucket protection compliant to road-safety standards, auxilliary hydraulics 2nd circuit, pipe-burst protection system, bio-degradable oil fill for hydraulic system, radio, lift delimiter, boom suspension, pressureless return line, lockable differential on rear axle, air-conditioning system. immobilizer, working platform, towing device, various attachments possible such as pallet fork, load hook, grab, hydraulic breaker etc.

Weight

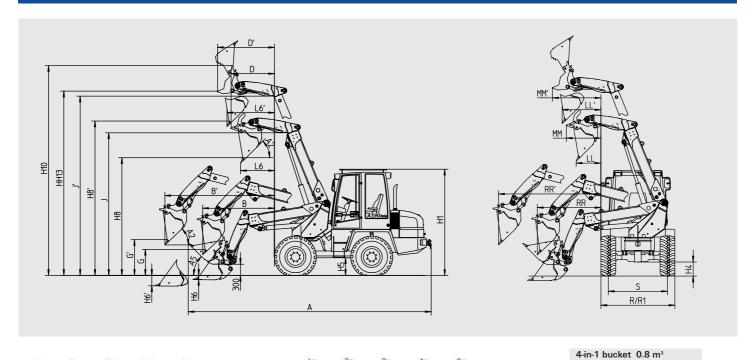
2270 kg

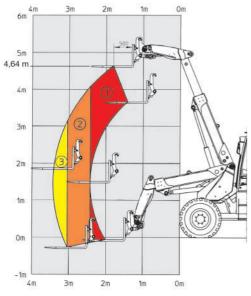
Basic machine with quick-coupler and 0.9 m3 standard bucket with teeth 7220 kg 3400 kg Permissible axle load front Permissible axle load rear 3820 kg

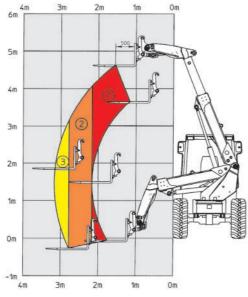


Technical Data

Measurements







Payload (%	-Tipping-load)
even ground	uneven ground
80%	60%
frontal	

1	2135 kg	1600 kg	
2	1550 kg	1165 kg	
3	1410 kg	1055 kg	

Payload (%	ó-Tipping-load)
even ground	uneven ground
80%	60%
90° swivelled	

(1)	1600 kg	1195 kg	
2	1015 kg	760 kg	
3	900 kg	675 kg	

A	6520 mm
A2	45°
A5	45°
В	1925 mm
B'	2945 mm
D	1210 mm
D'	1515 mm
G	700 mm
G′	960 mm
H1	2770 mm
H4	395 mm
H5	500 mm
H6	150 mm
H6′	280 mm
H8	3160 mm
H8′	4150 mm
H10	5630 mm
HH13	4950 mm
J	3835 mm
J'	4830 mm
L6	915 mm
L6′	1285 mm
LL	780 mm
LĽ	1140 mm
MM	915 mm
MM'	1260 mm
RR	1630 mm
RR'	2640 mm
R	2030 mm
R1	2085 mm
S	1680 mm
m. = retracted, D	

Dim. = retracted, Dim. '= extende



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.

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