

MecALAC

AS16000



MecALAC

A close-up photograph of a grey industrial machine. The word "MECALAC" is embossed in large, white, sans-serif capital letters on the machine's surface. To the right, there are two circular components with red rings. Below the nameplate, a metal latch mechanism is visible. In the background, a yellow hard hat is partially visible, slightly out of focus.

MECALAC

*AS1600*



## OUR TRADITION

For decades, MECALAC has been developing and producing high-quality and innovative wheel loaders at the Büdelsdorf site in Northern Germany.

With our articulated loaders, four-wheel steered front loaders and four-wheel steered swing loaders, we are the only manufacturer to offer all concepts for compact loaders. At MECALAC you can choose the best suitable solution for your application.

MECALAC swing loaders are among the most technologically advanced wheel loaders worldwide. At the same time, they are also the safest wheel loaders: Whatever they can load frontally, can also be transported and 90° swiveled without loss of stability, even with the steering at maximum angle.

# LET'S HAVE A LOOK AT YOUR **+** ADVANTAGES

## **FIRM GRIP ON YOUR WORKSITE WITH POWERFUL SWING LOADER**

MECALAC swing loaders are compact, versatile, comfortable, safe, and extremely powerful. They are characterised by the highest stability paired with maximum agility and efficiency for every worksite. They allow work tasks to be completed faster and, therefore, more productively.

The key to productivity is that you can simultaneously drive, steer and swing while performing your daily loading work.

The AS 1600 is the new flagship in the 11-ton class. It was developed as a professional swing loader to meet the highest demands.

- **AIR CONDITIONING SYSTEM AS SERIES FEATURE**
- **RIGID CHASSIS**
- **LOAD SENSING HYDRAULIC SYSTEM WITH FLOWSHARING**
- **HYDROSTATIC TRACTION DRIVE WITH MDRIVE**
- **FOUR-WHEEL STEERING FOR MAX. STABILITY AND EXCELLENT MANOEUVRABILITY**
- **INTUITIVE OPERATING CONCEPT**
- **SWIVELLING BUCKET ARM WITH POWERFUL Z<sup>PLUS</sup>-KINEMATICS**
- **ELECTRO-HYDRAULIC QUICK-COUPLER**
- **OPTIMAL ACCESS TO ALL SERVICE POINTS**



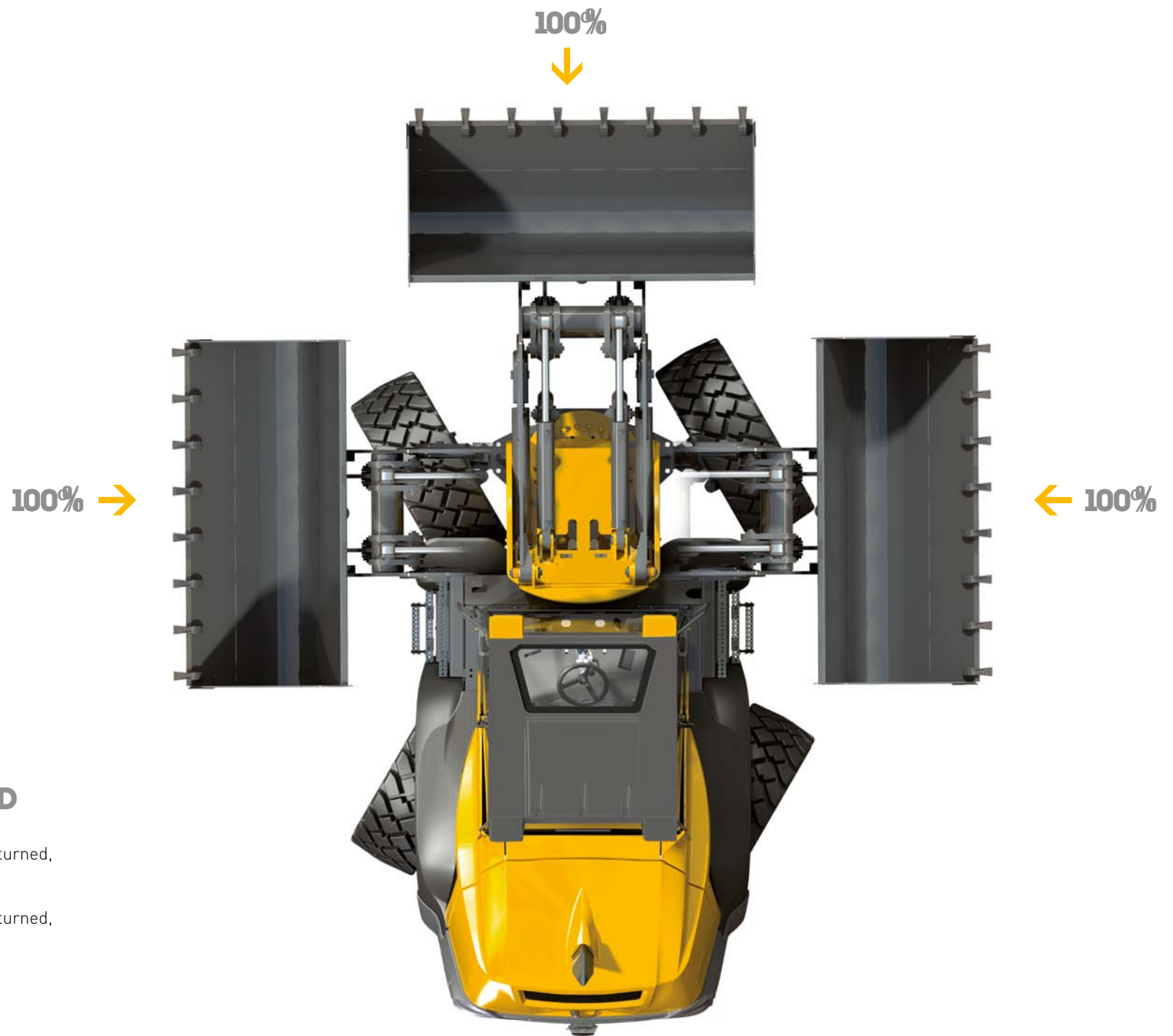




**SWING RANGE  
OF 180° WITHOUT  
TIPPING LOAD LOSS**



*AS1600*



→ **TIPPING LOAD**

Standard bucket, max. turned,  
straight: 6,000 kg

Standard bucket, max. turned,  
90°-swivelled: 6,010 kg

**AS 1600**

OPERATING WEIGHT: 10920 KG  
 ENGINE POWER: 100 KW / 136 HP  
 BUCKET CAPACITY: 1.6 – 2.5 m<sup>3</sup>

- 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 AXLE
- LOW-MAINTENANCE WET LAMELLA BRAKES IN FRONT AND REAR AXLE
- Z<sup>PLUS</sup>-KINEMATICS WITH PRECISE PARALLEL LIFTING
- ELECTRO-HYDRAULIC QUICK-COUPLER
- WIDE RANGE OF ATTACHMENTS

**ENGINE**

Low-noise, water-cooled Deutz TCD 3,6 L4 turbo diesel engine with intercooler. Common Rail injection system, cooled external exhaust gas recirculation, diesel oxidation catalyst (DOC) and selective catalytic reduction. No regeneration necessary.

Net power at	2200 rpm
acc. to ISO 14396	136 hp / 100 kW
Max. torque at	1600 rpm
acc. to ISO 14396	500 Nm
Air intake filter:	2-level dry-air filter with safety cartridge
Electrical system:	
Operating voltage:	24 Volt
Battery capacity:	2 x 95 Ah
Alternator rating:	120 A

**DRIVE**

Hydrostatic drive with automotive control including MDRIVE (hand throttle and inching speed can be coupled to the pedal), 3 stages (jolt-free), multi-functional lever (joystick) for drive and working hydraulics control

Axes:	
planetary axles with four-wheel steering for maximum flexibility, oscillating rear axle	
Differential lock:	
Automatic self-locking differential in front axle	
Wheels: tire size:	17,5-25
optionally:	17,5 R25
optionally:	550/65 R25
Speeds: road gear:	0-20 km/h
field gear:	00-15 km/h
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 4-wheel steering with automatic alignment

(4 steering modes: 4-wheel, front wheel, crab and reduced crab steering)

max. steering angle

+/- 35°

Turning radius measured over rear end

R = 4350 mm

**HYDRAULIC SYSTEM**

Dual-circuit system

1. Load sensing working hydraulics circuit (lift/lower, tilt, accessories), and swivel function (via priority valve); four-fold control valve with primary and secondary protection; with servo-controlled joystick operation

Max. operating pressure at 2200 min<sup>-1</sup>:

max. oil flow for auxiliary hydraulics

138 l/min and 235 bar

2. Circuit constant pump (swivelling), single control valve with primary and secondary protection

Float position for lifting cylinders

Boom suspension



**PERFORMANCE DATA**

Bucket position:	
Tilting angle	45°
Dumping angle, top	53°
Lifting force:	6900 daN
Breakout force:	8000 daN
Thrust force:	9000 daN
Tipping load:	
Standard bucket, max. turned, straight	6000 kg
Standard bucket, max. turned, 90°-swivelled	6010 kg
Payload:	
on forks, max. turned, frontal, even terrain	4125 kg
on forks, max. turned, max. swivelled, even terrain	3945 kg

Tipping load according to ISO 14397, payload according to EN 474-3;

**FILLING CAPACITIES**

Engine with filter	approx. 8.0 l
Fuel tank	approx. 150.0 l
AdBlue ®-tank	approx. 10.0 l
Front axle	approx. 21.0 l
Rear axle	approx. 18.5 l
Hydraulic system with tank	approx. 160.0 l
Distributor gear	approx. 3.4 l

**CHASSIS**

Rigid single-frame chassis with rear axle support for maximum stability, especially when working in swivelled position	•
Sealed articulated/oscillated pivot with play-free, chain operated swinging system with constant turning speed and power	•
Swing boom system with Z <sup>PLUS</sup> kinematics with precise parallel lifting	•
Operator's cab with flexible four-point mountings for maximum driver comfort and minimum noise levels	•
The servo-assisted joystick controls are smooth, accurate and long lasting	•

**STANDARD FEATURES**

Amplly dimensioned ROPS panoramic comfort cabin.	
The driver's door, which can be opened by 150 °, and the large, wide-opening side windows can be locked within the machine contours.	•
Air-conditioning system	•
Single piece floor mat for easy cleaning	•
Tinted windows	•
Parallel guided windscreen wiper	•
Rear wiper	•
Front and rear screen washing device	•
Heated rear window	•
2 large fold away outside mirrors	•
Roof hatch	•
3-Step drive selector switch	•
Intuitive modular control panel with onboard computer for machine monitoring and machine settings like :	•
* Flow volume of auxiliary hydraulic function	
* Selection of the speed in the low gear	
Speedometer	•
Steering column is adjustable in height and inclination	•
Ergonomically adjustable joystick	•
Multiply adjustable driver's seat	•
Safety belt	•
Sun visor	•
Heating and ventilation system with recirculation air function	•
Main battery switch	•
Interior light	•
Socket	24 V
Coat hook	•
Storage pockets in the cabin	•
Lockable storage compartment at the chassis	•
2 driving lights on cabin roof	•
2 working lights rear	•
2 working lights at monoboom	•
Single key system	•
Hydraulic quick coupler with electric safety device	•
Towing coupling	•
Fastening and lifting points	•
Proportional 1st and 2nd auxiliary hydraulics circuit is integrated in the joystick	•
Color scheme:	yellow
Operator's cabin, axles and wheels:	grey

**OPTIONAL EQUIPMENT**

Version	40 km/h
Wide tires	0
Beacon light	0
Interior mirror	0
Acoustic back up alarm	0
FOPS grid for cabin roof	0
Permanent function for auxiliary hydraulics	0
Safety valves	0
Bio-degradable oil fill for hydraulic system	0
Pressureless return line	0
Left joystick	0
Lockable differential on rear axle	0
Air suspended driver's seat	0
Radio	0
Immobilizer	0
Special corrosion protection for salt applications	0
Attachments as per separate list as pallet fork, load hook etc.	0

**EMISSIONS**

Engine	Emissions according to stage IV - EU-RL 97/68
Noise emission	
Sound power level LWA <sup>1</sup>	102 dB(A)
Acoustic power level LpA <sup>2</sup>	76 dB(A)
Vibrations	
Vibration total value [3]:	< 2,5 m/s <sup>2</sup>
Effective vibration level [4]:	< 0,5 m/s <sup>2</sup>
(1) According to 2000/14/EG	
(2) According to ISO 6396	
(3) According to ISO/TR 253980	
(4) According to ISO/TR 25398	

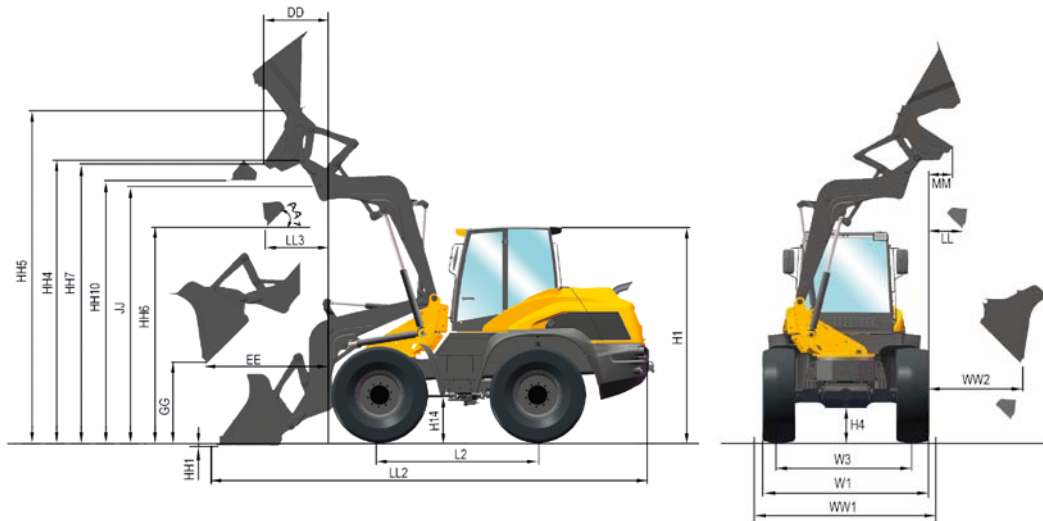
All data based on standard tires.

All data are non-binding.

Changes are reserved without notice.

The order confirmation is exclusively decisive.

# ↓ TECHNICAL DATA



BUCKETS	STANDARD 1.6 m <sup>3</sup>	4x1 1.5 m <sup>3</sup>
AA1	53°	53°
DD		790
EE	1915	1995
GG	1100	1035
H1	3100	3100
H4	440	440
H14	500	500
HH1	110	110
HH4	3985	3985
HH5	4975	4950
HH6	3100	3010
HH7		3910
HH10	3750	3750
JJ	3390	3390
L2	2280	2280
LL	550	610
LL2	6580	6570
LL3	1070	1140
MM		370
W1	2460	2460
W3	1980	1980
WW1	2480	2480
WW2	1495	1555



	LOAD HOOK	FORKS
AA3		25°
BB		940
CC		1535
DD		680
FF	3255	
GG		1750
HH	5145	
HH1		60
HH9		3735
KK		1110
LL		1415
LL2	6515	7015
MM		305
PP		780
RR	2845	



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