

INTO THE FUTURE WITH ELECTRIC DRIVE

The electric wheel loader KL25.5e
sets new standards



KRAMER
on the safe side



ON THE SAFE SIDE



Full freedom from emissions with full power

Discover the first fully electric wheel loader of its size with all-wheel steering

With the electric wheel loader KL25.5e, CO₂ restrictions, soot particle limit values or noise emissions values to be met will in the future no longer play a role in your daily work. The fully electrically operated wheel loader works completely free of emissions, protects the environment and end users – it also knows how to score in terms of efficiency and profitability. And so that the performance is also right, the KL25.5e combines electric mobility with the constant high payload, off-road capability and comfort of the classic Kramer wheel loader.

On the safe side with Kramer

Rich in tradition, the Kramer brand has been established on the market for many years and in particular stands for one value: **safety**. The high quality of the innovative machines is only one aspect of this. As a company, Kramer is a safe choice for customers and dealers, as the experience and power of innovation of the company ensure investment security and future viability. In short – you are always on the safe side with Kramer: **“Kramer – on the safe side!”**

➔ **ON THE SAFE SIDE**

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Information about zero emissions at Kramer can be found here:
kramer.de/zeroemissions



It's all about the technology

Rediscover the future

A total package that can be seen: The advantages of the KL25.5e speak for themselves. For the fully electric wheel loader not only scores with its freedom from emissions, but also with the high performance and efficiency of the classic wheel loader. This provides a maximum degree of effectiveness at low cost.

Kramer emphasises the co-ordination of elements and components to allow precise operation. To achieve this, two electric motors are used: one for the work hydraulics and one for the drive system. Depending on the application, power is automatically provided by the respective motor. This helps to minimise energy consumption. The electric motor is operated via time-tested and proven lead-acid-AGM rechargeable batteries. The battery charger is already integrated here. The standard package includes two charging cables, including plugs from the CEE system (3 and 5-pole) so that you benefit from a significantly more powerful plug connection between the outlet and the coupling on the charging cable, which leads to an optimisation of the charging. With a charging voltage of 230 V (1st phase) and a max. charging current of 16 amps, the charging process is about 7 hours. Depending on the application and utilisation of the wheel loader, a single charge will provide up to five hours of operation.

zero emission

	KL25.5e
Tipping load (kg)	2.500
Operating weight (kg)	4.130
Travel motor engine output (kW)	15
Hydraulic motor engine output (kW)	22



Powerful lead-acid battery for increased performance.

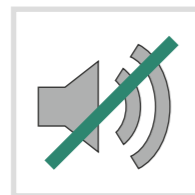
Your advantages at a glance

We distinguish products that are first-rate in terms of economic efficiency and environmental friendliness, but also in terms of sustainability with our ECO seal.



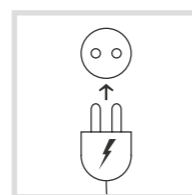
Environmental advantages

- Smaller CO₂ footprint
- No fine dust load for the end user and environment
- Preservation of resources
- Particularly sustainable if your own power is used



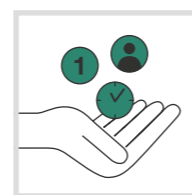
Low noise emissions

- Ideal for noise-sensitive areas, such as stables or holiday homes
- Perfectly suited for winter service (e.g. municipal application)
- Man, animal and environment are protected by the extremely low noise level



No exhaust emissions

- Ideal for indoor work
- Work in stables without exhaust strain on man and animal
- No impairment of air quality for municipal applications due to the complete freedom from emissions
- No emissions load in warehouses and greenhouses.



Economic advantages

- Future-orientated technology
- Low maintenance costs
- Full-value wheel loader with new drive technology
- Costs are saved due to the price advantage of electricity compared to diesel
- Pay-back of added costs after about 2.500 hours of operation
- Up to 5 hours of run time with a completely charged battery.



The KL25.5e is ideal for working indoors.

Certainly innovative

Future-proof and well-thought-out down to the last detail

As the first fully electric wheel loader in its size class, the KL25.5e combines the benefits of electric mobility with the performance parameters of a traditional Kramer wheel loader. A cooperation that convinces across the board.



Flexible application due to the 3rd control circuit, pressure-free return with leak-free oil line and front plug receptacle.

The hydraulic quickhitch facility makes the KL25.5e an all-rounder in seconds from the operator's seat.

Long loader unit for more flexibility.

Safer and faster transport of materials thanks to the automatic vibration dampening.

Fatigue-free work thanks to the spacious and ergonomic comfort cabin.

Reduced operating costs due to efficient engines and the use of electrical energy.

Two electric motors provide a high degree of effectiveness and maximum performance.

The charge time is between six and seven hours – and interim charge is always possible too.

Electric motors do not require an air filter, which makes the machine less susceptible to damage when in dusty applications.

Nothing gets our wheel loader off track

“When designing and developing the KL25.5e, our top priority was to offer the end user the usual efficiency output of the traditional wheel loader in addition to the fully electric drive. Whether lift capacity, traction or operating comfort – we successfully ensured that the user does not have to make any compromises.”

Martin Eppinger | Technical managing director | Kramer-Werke GmbH

Front wheel steering and all-wheel steering – continuous drive system with two types of steering.

The right tyres for every application and excellent traction due to the 100% connectable differential lock.

The future needs a past.

New technology, time-tested and proven quality.

With the fully electric drive of the KL25.5e, you work completely free of emissions. At the same time, you benefit from the time-tested and proven efficiency output, stability and constant payload of a Kramer wheel loader. Because you can always rely on the high quality of our machines.

High level of stability

Our wheel loaders are designed with an undivided chassis that prevents shifts in the centre of gravity, even on full steering lock. This ensures Kramer machines have a high degree of stability – even when operating in poor ground conditions.

Tremendous manoeuvrability

The all-wheel steering and the steering locks of 38 degrees on each axle allow a high degree of manoeuvrability. Some steering manoeuvres therefore become unnecessary, resulting in shorter cycle times.

Constant payload

The undivided chassis prevents the clearance between the counterweight and loader unit from changing. The result: constant leverage, which makes working safe in all load situations. In the process, the payload always stays the same, whatever the steering angle.

Undivided chassis for a high level of stability...

...without a shift in the centre of gravity.

Turning made easy with all-wheel steering...

...instead of time-consuming manoeuvring with an articulated joint.

Constant leverage for constant payload

Steering angle (°)	Kramer (kg)	competition (articulated) (kg)
0	~1000	~1000
10	~1000	~900
20	~1000	~800
30	~1000	~700
40	~1000	~600

■ Kramer
■ competition (articulated)

Flexible in application

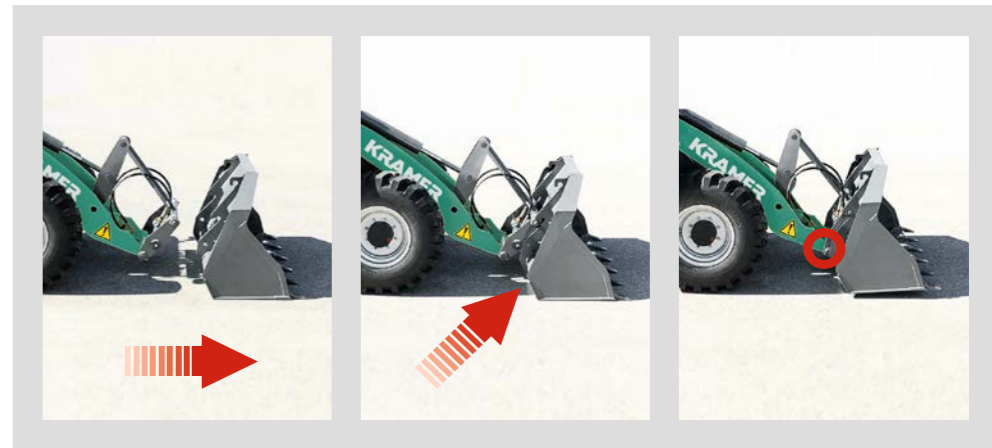
Quickly ready for use.

No matter what challenge your application holds: You have the situation under control with our attachments. Thanks to the hydraulic quick hitch system, you can adapt your KL25.5e to any situation in an instant. You decide which attachment you need, entirely according to your needs.



Work precisely with the right attachment.

Learn more about our attachments here: www.kramer.de



Any change can be made in seconds thanks to the hydraulic quick hitch facility as standard.

Dimensions and options

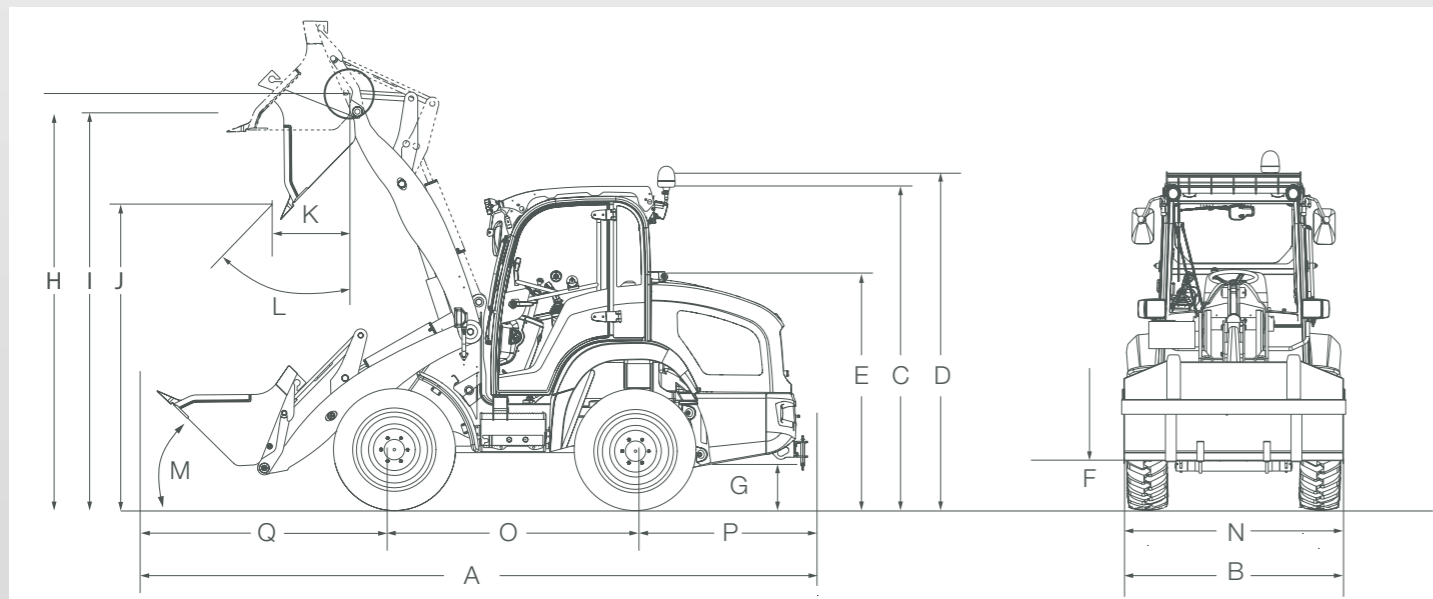
Electric wheel loader KL25.5e			
Dimensions	Unit	S = standard loader unit	L = extended loader unit ⁶
A Total length ^{1,2}	mm	4,950	5,140
B Total width ¹	mm	1,650	1,650
C Overall height with cabin ^{3,4,5}	mm	2,390	2,390
D Overall height with FOPS protective grating ^{3,5}	mm	2,470	2,470
E Overall height of upper edge of engine hood ^{3,5}	mm	1,700	1,700
F Ground clearance in transport position of the loader unit	mm	250	250
G Ground clearance ^{3,5}	mm	280	280
H Bucket pivot point ^{3,5}	mm	3,050	3,300
I Load over height ^{3,5}	mm	2,880	3,280
J Dumping height ^{3,5}	mm	2,350	2,620
K Dumping width ¹	mm	320	410
L Bucket empty angle ¹	°	42	42
M Bucket fill angle ¹	°	48	51
N Track ³ front/rear	mm	1,262	1,262
O Wheel base (front/rear axle middle)	mm	1,850	1,850
P Distance from centre of rear axle to the rear	mm	1,320	1,320
Q Distance from centre of front axle to the front edge of the bucket	mm	1,780	1,970
- Stacking height	mm	2,830	3,050
Turning radius:			
- Outer radius of the wheel ³	mm	2,700	2,700
Outer edge of the bucket ¹	mm	3,550	3,780

BATTERY		
	Unit	Lead-acid Fleece**
Mains voltage of the battery charger	V	CEE system (3 and 5-pole)
Battery voltage	V	80
Rated capacitance	Ah	416
Battery weight	kg	1,340
Charging time	h	6-7
Running time* during long-time application	h	3
Running time* during normal activities (uninterrupted)	h	5

* Determined via Kramer test cycle.

** With integrated battery charger.

¹ With standard bucket 1000260472 (S) or 1000275101 (L)₂
² With towing device
³ With tyres 12.0-18
⁴ With rotating beacon + 200 mm (+7.9 in)
⁵ With tyres 325/70 R18 (-10 mm) (-0.39 in) with tyres 365/70 R18 (+10 mm) (+0.39 in)/
 With tyres 335/80 R18 (+30 mm) (+1.18 in) with tyres 340/80 R 18 (+25 mm) (+0.98 in)
⁶ Payload divergent



Technical data

Operating and performance data		Unit
Bucket content (standard bucket)	m ³	0.65
Operating weight (standard equipment)	kg	4,150
Quick hitch system	-	hydraulic
Engines		Unit
Make of drive/work hydraulics	-	JULI/Jungheinrich
Type/Model	-	asynchronous
Power of drive/work hydraulics	kW	15 kW 22 kW
Max. torque Nm	rpm	220 Nm (0-1200 rpm)
Exhaust emissions stage	-	Emission-free
Power transmission		Unit
Drive system	-	Continuously controllable electric drive system
Travel speed	km/h	0-16
Axes	-	Planetary steering axes
Total oscillating angle on the rear axle	°	16
Differential lock	-	100% VA
Service brake	-	Hydraulic disc brake
Parking brake	-	Electrically triggered spring brake
Standard tyres	-	12.0-18
Steering and work hydraulics		Unit
Functionality	-	Hydrostatic all-wheel steering with emergency steering properties Front wheel steering (option)
Steering pump	-	Gear pump via priority valve
Steering cylinder	-	Double-acting with independent final position synchronisation
Max. steering lock	°	2x38
Work pump	-	Gear pump
Max. flow rate (pump)	l/min	54
Max. pressure	bar	235

Kinematics		Unit
Design system	-	P-kinematics
Lift capacity/tearout force	kN	30.4/28
Raising/lowering lift cylinder	s	5.0/3.2
Fill bucket/empty shovel tipping cylinder	s	2.8/3.2
Tipping load (standard bucket)	kg	2,500
Tipping load (pallet forks)	kg	2,250
Payload S=1.25 (pallet forks)	kg	1,750
Payload S=1.67 (pallet forks)	kg	1,300
Payload in transport position	kg	2,000
Filling volume		Unit
Hydraulic tank	L	40
Electric system		Unit
Operating voltage	V	80 V DC/48 V AC drive system and 43 V AC hydraulic motor
Battery	Ah/A	416 Ah AGM
Noise emissions**	Unit	
Guaranteed sound power level	dB(A)	82
Vibrations***		Unit
Vibration total value of the upper body extremity	-	< 2.5 m/s ² (< 8.2 feet/s ²)
Highest effective value of weighted acceleration for the body	-	< 0.5 m/s ² (< 1.64 feet/s ²)

** Information: The measuring took place according to the requirements of the standard DIN EN 474-1 and the directive 2000/14/EC. Place of measurement: Asphalted surface.

*** The uncertainty of measurement of the vibration measurement according to the requirements of the standard DIN EN 474-1 and EN 12096. Please instruct or inform the operator of the possible dangers from vibrations.



Wheel loaders

Tipping load: 1.000 - 6.000 kg



Tele-Wheel loaders

Tipping load: 2.500 - 3.500 kg



Telehandlers

Payload: 2.700 - 5.500 kg

Service that you can see

Focus on your daily activities – with our comprehensive services available, we take care of the rest. Because we are there for you when you need us: competent, quick and directly on site if necessary.



Repair & maintenance



Academy



Telematics



Insurance



Spare parts



Finance



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