

KL12.5

OVERALL HEIGHT*
2,170 mm (standard), 2,020 mm (optional)

OVERALL WIDTH* 1,240 mm - 1,360 mm

ENGINE POWER 18.5 kW

EXHAUST AFTER-TREATMENT

SACKING TIPPING LOAD** 1,189 kg

OPERATING WEIGHT***



KL14.5

OVERALL HEIGHT* 2,170 mm (standard), 2,020 mm

OVERALL WIDTH*

ENGINE POWER

EXHAUST AFTER-TREATMENT DOC + DPF

SACKING TIPPING LOAD**

1,438 kg

OPERATING WEIGHT***







KL21.5L

OVERALL HEIGHT*
2,260 mm (standard), 2,110 mm (optional)

OVERALL WIDTH* 1,320 mm - 1,595 mm

ENGINE POWER

18.5 kW (standard), 33.3 kW (optional)

EXHAUST AFTER-TREATMENT

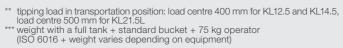
none (standard), DOC + DPF

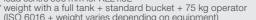
SACKING TIPPING LOAD** 1,987 kg

OPERATING WEIGHT***













ON THE SAFE SIDE **WITH KRAMER**

Alongside the values of passion, skill and high-quality, Kramer first and foremost values safety. We build machines with the highest level of application safety and our customers consistently benefit from their investment. Our promise: Honesty, reliability and value retention.



OPERATING AND POWER RATINGS	KL12.5	KL14.5
Engine output, standard [kW]	18.5	28.5
Engine output, optional [kW]	-	-
Bucket volume [m³]	0.35	0.36
Bucket tipping load [kg]	1,200	1,400
Stacking payload S=1.25 [kg]	750	900
Operating weight [kg]*	1,955 - 2,200	2,095 - 2,400

^{*} weight with a full tank + standard bucket + 75 kg operator (ISO 6,016 + weight varies depending on equipment)

POWER IN COMPACT FORMAT

DISCOVER THE 4-WHEEL DRIVE WHEEL LOADER WITH A BUCKET TIPPING LOAD BETWEEN 1.2 t AND 2.1 t

Compact dimensions, high performance efficiency and a low net weight make the machines an all-rounder within this size class.

Machine highlights Cabin design Loader units Hydraulics	6	Machine structure One-piece vehicle frame Steering modes Comparison of steering sy	8 vstems
Compact design Application examples Dimensions	10	Drive system Wheel hub motors Axle drive	12
Machine components Loader units Smart Attach Hydraulics Engine - operating mode	13	Cab design Cabin options Technical Highlights	20
Accessories Attachments Tyre treads	22	Technical Data Dimensions	24



impact on their resources (money, staff, time).



This is the way to the Kramer

www.kramer.de/dealerlocator

OPERATING AND POWER RATINGS	KL21.5L	
Engine output, standard [kW]	18.5	
Engine output, optional [kW]	33.3	
Bucket volume [m³]	0.45	
Bucket tipping load [kg]	2,115	
Stacking payload S=1.25 [kg]	1,300	
Operating weight [kg]*	2,900 - 3,200	

^{*} weight with a full tank + standard bucket + 75 kg operator (ISO 6,016 + weight varies depending on equipment)



1 QUICKHITCH SYSTEM STANDARD / SMART ATTACH (OPTIONAL) €

The hydraulic quickhitch system is installed as standard on larger wheel loader. As a result, the existing attachment range can be used. The fully hydraulic "Smart Attach" system is available as an option.

KL21.5L

2 QUICKHITCH SYSTEM

The hydraulic quickhitch system with sturdy locating pins is not only compact, but is also designed for hard applications and long working bours.

KL12.5 / KL14.5 / KL21.5L

3 UNIQUE LOADER UNIT

The combination of the lifting force (28.6 kN), tearing force (33.1 kN) and tipping load (2,115 kg) enables the effortless and safe handling of heavy loads, like silage bales.

KL21.5L

4 FLEXIBLE IN APPLICATION

with integrated 3rd control circuit and optional pressure release lever on the loader unit. The performance hydraulics Highflow is optionally available.

KL14.5 / KL21.5L

5 UNBEATABLE PERFORMANCE VALUES

with compact dimensions and low dead weight and stacking tipping loads of up to 1,987 kg for KL21.5L.

KL12.5 / KL14.5 / KL21.5L

6 360° ALL-ROUND VISIBILITY

thanks to the extensive glazing and narrow cabin pillars.

KL12.5 / KL14.5 / KL21.5L

7 TWO CABIN HEIGHTS

for maximum comfort or maximum compactness.

KL12.5 / KL14.5 / KL21.5L

8 POWERFUL ENGINES

with high-power delivery and low noise levels.

KL12.5 / KL14.5 / KL21.5L

9 COMFORTABLE CABIN

through ergonomic layout of operator's controls. The cabin is entered using a wide step and through the door which can be comfortably and safely locked to the back.

KL12.5 / KL14.5 / KL21.5L

10 SMART DRIVING PRO (OPTIONAL)



Three operating modes: PWR, ECO and CSD, selectable at the press of a button, support the operator in their respective applications.

KL14.5 / KL21.5L

11 LOADER UNITS RANGE

with two different kinematic systems: Z-kinematics for the KL12.5 and KL14.5 for maximum lifting and tearing forces and PZ-kinematics for the KL21.5L for a precise parallel guidance with extreme loads.

KL12.5 / KL14.5 / KL21.5L

12 EXCELLENT TRACTION

thanks to the connectible differential lock. Optionally available for the KL12.5 and KL14.5, as standard for KL21.5L.

KL12.5 / KL14.5 / KL21.5L

13 VARIABLE DRIVE SYSTEM

for sensitive work and high pushing power. 30 km/h version optionally available for KL14.5 and KL21.5L.

KL12.5 / KL14.5 / KL21.5L

14 DIVERSE TYRE OPTIONS

for a wide range of application areas, including wide tyres.

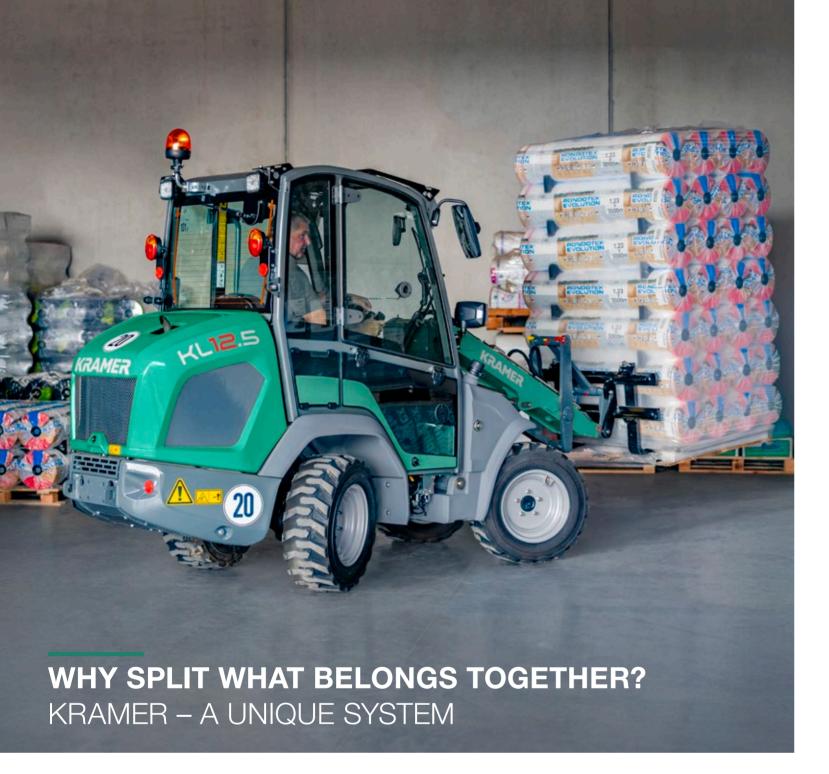
KL12.5 / KL14.5 / KL21.5L

15 THREE TYPES OF STEERING

Unique steering system with allwheel (standard), crab steering (optional) and front-wheel steering (optional).

KL12.5 / KL14.5 / KL21.5L

KL14.5 / KL21.5L



The Kramer brand stands for all wheel steer loaders, telescopic wheel loaders and telehandlers with extreme manoeuvrability, all-terrain mobility and high efficiency. Thanks to the proven one-piece vehicle frame, the wheel loaders are impressive with the following three features:

HIGH LEVEL OF STABILITY

A shift in the centre of gravity is prevented with a full steering lock and also on uneven terrain.

CONSTANT PAYLOAD

Due to the one-piece frame, there is constant leverage that makes working safe in all load situations. In the process, the payload always stays the same, independent of the steering angle.

ENORMOUS MANOEUVRABILITY

The all-wheel steering and the steering angle of 38° on the front and rear axle provide a high degree of manoeuvrability. Some steering manoeuvres therefore become unnecessary, resulting in shorter cycle times.

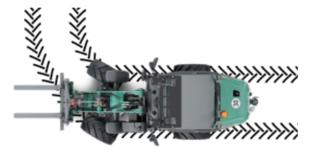
FLEXIBILITY IN USE

THE RIGHT STEERING TYPE FOR EACH AND EVERY APPLICATION



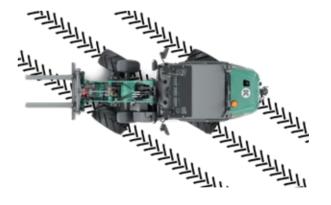
ALL-WHEEL STEERING (STANDARD)

- 2 x 38° steering angle on the front and rear axle ensure quick work processes
- Optimised routes
- Maximum manoeuvrability



FRONT WHEEL STEERING (OPTION)

- Safe and familiar road travel up to 30 km/h*
- Familiar steering system
- Ideal for trailer operation



CRAB STEERING (OPTION)

- Manoeuvrability in the smallest space
- Precise positioning in the tightest conditions
- Easily move away from walls and trenches

A COMPARISON OF ALL-WHEEL AND ARTICULATED STEERING IN A COMPARISON

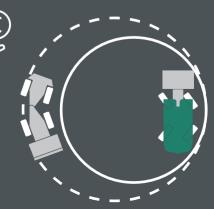
With the all-wheel steering, the turning circle is much smaller compared to the articulated steering. This is achieved by the steering lock on the front and rear axle, while only the front and rear carriage moves with the articulated steering.



ALL-WHEEL STEERING



ARTICULATED STEERING (competition)



 $^{^{\}ast}$ for the models 5040 and 5045



The compact wheel loaders by Kramer are among the most versatile machines within the everyday working life and are irreplaceable companions. Due to their narrow and low design, the machines are also in demand where large machines cannot fit.



LOW CLEARANCE HEIGHTS

- Stables
- Old buildings
- Shelters



NARROW CLEARANCE WIDTHS

- Stables
- Feed alley
- Hay and straw storage



SHORT VEHICLE LENGTH

- Stables and boxes
- Hay and straw storage
- Small farms



KL12.5: 4,050 mm

KL14.5: 4,090 mm

KL21.5L: 4,680 mm



TOTAL HEIGHT**

KL12.5: 2,170 mm (standard) 2,020 mm (optional)

KL14.5: 2,170 mm (standard) 2,020 mm (optional)

KL21.5L: 2,260 mm (standard) 2,110 mm (optional)



OVERALL WIDTH***

KL12.5: 1,240 mm – 1,360 mm

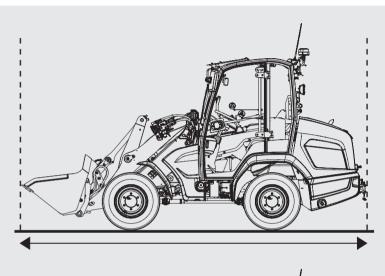
KL14.5: 1,240 mm – 1,360 mm

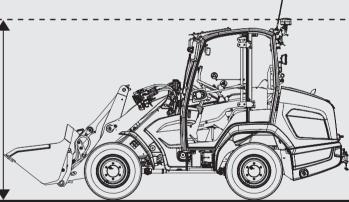
KL21.5L: 1,320 mm – 1,595 mm

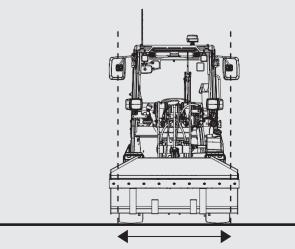
- * with standard attachment

 ** two cabin heights, dependent on the tyres

 *** dependent on the tyres







ON THE ROAD FROM A TO B VARIABLY ECONOMICAL



The drive system with its four-wheel hub motors makes the KL12.5 and KL14.5 unique. A central drive system with a cardan shaft is installed on the KL21.5L. Both drive systems ensure a powerful and stepless driving behaviour with a travel speed of 0-20 km/h. The KL14.5 and KL21.5L wheel loaders can be optionally equipped with the 30 km/h versions.



AN OVERVIEW OF THE BENEFITS OF THE DRIVE SYSTEM

- stepless power transfer
- sensitive positioning of the machine with pallet handling
- high level of productivity, as there is no need to stop to change speed levels
- quick implementation of the machine with the 30 km/h option



The compact KL12.5 and KL14.5-wheel loaders are equipped with Z-kinematics, which provide great lifting and tearing forces. Thanks to this technology, wheel loaders can both remove heavy materials, like manure, and perform precision works, like bale handling. This increases the wide range of application options. The loader unit, consisting of a torsion-resistant box section, provides extraordinary stability for the most challenging work applications, while enabling optimal visibility of the attachment and the working environment.

KL12.5 / KL14.5



- great tear strength for removing material
- high tipping load with tipping movement quick tilting in and out
- high lifting height with compact dimensions
- compact design for optimal visibility
- torsion-resistant box section for the most challenging work applications





PZ - KINEMATICS

KL21.5L

UNITES HIGH LIFTING AND TEARING FORCES WITH PRECISE PARALLEL GUIDANCE

The PZ-kinematics of the KL21.5L is specially developed for agriculture; it combines the parallel and Z-kinematics into one system. It provides impressive lifting and tearing forces, as well as precise parallel guidance across the whole lift range. Other strengths are the large crowd back angle for maximum bucket filling, huge tearing forces for safe bale handling, and the high lifting height and range of the loader unit. The link point of the loader unit, positioned far to the rear, guarantees excellent stability while the protected arrangement of kinematics effectively protects against damage.





- huge payload with compact design
- high tear-out forces for the reliable breaking up of material
- large crowd back angle no loss of material
- large tilt-out angle bucket is emptied without residue
- high lifting height for efficient bale handling or loading of a tipper
- narrow loader unit for optimal visibility

SMART ATTACH





The KL12.5 and KL14.5 are equipped with the hydraulic Kramer guickhitch plate as standard. The hydraulic guickhitch plate of the wheel loader model of the next size up is installed in the KL21.5L as standard. As a result, existing attachments of larger models can be used without any restrictions. The fully hydraulic quickhitch system Smart Attach is available as an option. This system guarantees the operator even more safety because it makes the need to enter and exit the vehicle to couple hydraulic attachments unnecessary. In addition to this, costs are reduced with every coupling procedure because the attachment changeover is faster. Another great benefit is that it is possible to couple attachments of larger machines from within the Kramer wheel loader range.



SIMPLE OPERATION

Hydraulic attachments are comfortably and safely coupled from the cabin without needing to enter and exit.

FAST CHANGEOVER

without manual coupling process for hoses for hydraulic attachments.

CONSTANT **PERFORMANCE**

for loading, stacking and dumping heights, as well as stacking payload and bucket tipping load.

FUNCTIONAL SAFETY

Problem-free coupling of attachments, which have got warm in the sun and are under severe pressure.

CE-COMPLIANCE

for the machine and attachments.

ENVIRONMENTAL PROTECTION

thanks to the prevention of oil leaks when coupling hydraulic attachments.

EXAMPLE CALCULATION

Every attachment changeover with Smart Attach saves 2.5 minutes when compared with a standard Kramer quickhitch system.

10 coupling procedures / day 2.5 minutes

220 working days

€2,750 / year

SEARCH NOW

You can find additional nformation here www.kramer.de/smartattach





AN OVERVIEW OF THE BENEFITS OF WORK HYDRAULICS

- Convenient operation of attachments, even with several hydraulic functions via the joystick
- Pressure release of 3rd control circuit
- Fully hydraulic quickhitch plate Smart Attach (only KL21.5L)
- More power to the drive system from hydraulically activated attachments through Highflow
- Reversing valve of 3rd control circuit in the tail (KL21.5L)



PRESSURE RELEASE OF 3RD CONTROL CIRCUIT



The button for optional pressure release of the 3rd control circuit is centrally fitted to the loader unit. As a result, hydraulic attachments can also be quickly and efficiently changed without the need to switch off the engine.



LOAD STABILISER

The load stabiliser dampens oscillations of the loader unit, providing optimal comfort for man and machine. The speed at which the load stabiliser activates or deactivates is 7 km/h. In addition, it is possible to continuously enable or disable the load stabiliser for certain applications.

HIGHFLOW

KL14.5 / KL21.5L

CONCEPT SOLUTION FOR SYSTEM BEARER	KL12.5	KL14.5	KL21.5L
Flow rate on 3 rd control circuit [l/min]*	20	30	39
Rear control circuit [l/min]*	-	-	39
Highflow performance hydraulics [I/min]*	-	60	69

^{*} max. pump values

Highflow is made for attachments with an increased need for hydraulic performance, like snow blower protection or a mulcher. The hydraulic connections are in a compact design on the left-hand side of the loader unit and ensure a perfect view of the attachment. Highflow is only available for the KL21.5L with the 33.3 kW engine.







SMART DRIVING PRO



KL14.5 / KL21.5L

The right operational setting can be selected for every application. No matter whether driving on the road, working with the sweeper or material handling; the operating modes provide the operator with the option to actively influence how the machine should drive. The application can therefore be performed in the best-possible way, cost-effectively and efficiently.



POWER

- load-independent operation
- full engine power
- universal usage
- for application in bucket operation

ECO

- low performance requirements
- noise reduction for the operator
- fuel saving
- for road travel with reduced rpm
- for easy stacking and handling works

CSD

- low-speed control and hand throttle
- rpm and travel speed can be set independently of one another
- optimal coordination between machine and attachment
- simple and comfortable operation
- fatigue-free work during longer working
- for working with sweepers, snow blowers and mulchers



The KL12.5 and KL21.5L are driven by a Yanmar 18.5 kW engine without an exhaust emission after-treatment. The KL14.5 is equipped with a Yanmar 28.5 kW engine. The KL21.5L is also optionally available with a Yanmar 33.3 kW engine. The exhaust emission after-treatments of both engines are using DOC and DPF.

MAINTENANCE AND MONITORING







EASILY AND FREELY ACCESSIBLE

- for daily monitoring and maintenance works
- no disassembly of components required

WIDE-OPENING BONNET

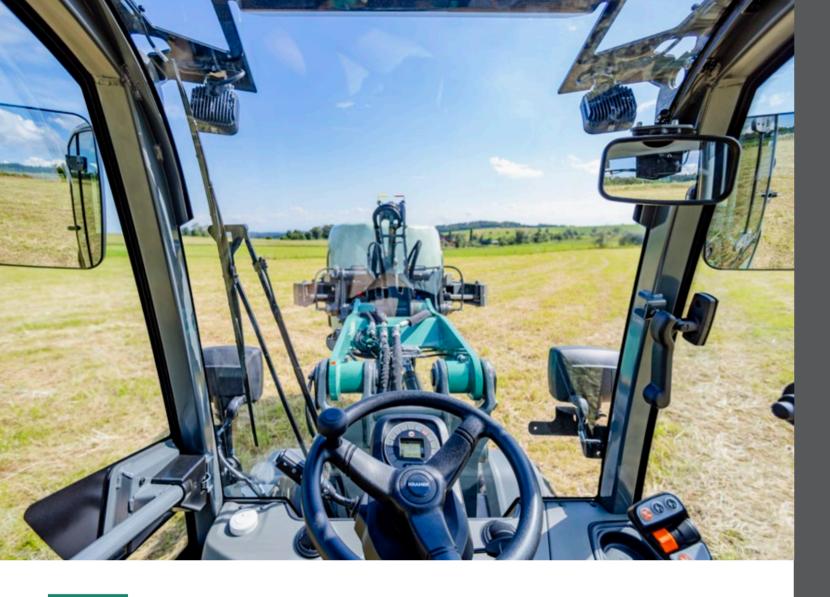
- for familiar Kramer comfort
- tilting of operator platform not required
- easily accessible from four sides (top, rear, right and left)

EQUIPCARE - TELEMATICS

The EquipCare telematics module is installed as standard on all Kramer vehicles. The module provides data and facts about your machine, which you can easily view via the Manager or an app.



additional information here



EVERYTHING UNDER CONTROL INSIDE

EVERYTHING IN VIEW OUTSIDE

The innovative cabin design provides added value in terms of comfort and operator-friendliness. Large glazed areas in combination with narrow cabin pillars ensure excellent all-round visibility. The low cabin and comfort cabin are optionally available. A canopy version is also available for the KL12.5 and KL14.5.

TWO CABIN OPTIONS

for maximum compactness or maximum comfort.

360° ALL-ROUND VISIBILITY

Narrow cabin pillars and large glazed areas provide an excellent view of the attachment and the work area from both cabins.



TECHNICAL HIGHLIGHTS SIMPLE OPERATION – INNOVATIVE CABIN DESIGN



EASY CABIN ENTRY

The wide entry with the step and handles ensures the operator enters and exits the vehicle comfortably and safely:

- cabin door can be locked 180 degrees
- comfortable entry with maximum steering angle
- two handles and large step
- sufficient free space via the central tunnel
- spacious foot well
- and much more

ADJUSTABLE STEERING COLUMN

The optional incline-adjustable steering column can be adapted to the operator's needs:

- adjustable to the size of the operator
- comfortable and fatigue-free working
- incline-adjustable display
- and much more





ERGONOMIC OPERATING ELEMENTS

The most important operating elements and switches are ergonomically arranged and colour labelled. All important switches are located within easy reach of the right hand:

- joystick
- operator modes
- steering mode adjustment
- heater and ventilation
- and much more

CLEANING FLAP

The cleaning flap is on the right side of the cabin and is fixed with a dampener:

- easy cleaning of the cab floor
- easy access to the cabin air filter and main control unit
- and much more

PRODUCT RANGE OF ATTACHMENTS

PALLET FORK

STANDARD BUCKET

with screwed-on blade

without rip-out teeth,

BALE SPIKE

fold-down

PALLET FORK

STANDARD BUCKET

without rip-out teeth



without rip-out teeth

POWER GRAB BUCKET



MULTIFUNCTIONAL FORK



SNOWPLOUGH MODEL A



SALT SPREADER



MULTI-SERVICE BUCKET

PALLET FORK

hydraulic parallel adjustment



STANDARD BUCKET

with rip-out teeth



BULK MATERIAL BUCKET POWER GRAB BUCKET

with rip-out teeth

ROUND BALE FORK

ROTARY SWEEPER



BALE SPIKE

fold-down



LOAD HOOK

attachable



TYRE PRODUCT RANGE

UNIVERSAL TREAD

MUNICIPAL TREAD

TRACTION TREAD



- Good self-cleaning
- Good flank protection
- High running performance



- Good winter serviceability
- High running performance
- Noise-optimised
- for uses on and off of the road



- Good track guiding
- High level of driving safety
- Good self-cleaning
- High running performance

CONSTRUCTION MACHINE TREAD

INDUSTRIAL TREAD



- High running performance
- High level of traction
- Good mobility on soft ground
- Good self-cleaning



- Good self-cleaning
- Good lateral stability
- High running performance, especially when used on hard and aggressive substrates
- High level of traction

TECHNICAL DATA

WEIGHT	KL12.5	KL14.5	KL21.5L
Operating weight [kg]*	1,955 - 2,200	2,095 - 2,400	2,900 - 3,200
Transport weight [kg]**	1,700	1,900	2,650
Permissible trailer load [kg]***	750 / 1,750	750 / 1,750	750 / 3,500

ENGINE			
Make	Yanmar	Yanmar	Yanmar
Type/model standard	3TNV82A	3TNV86CT	3TNV82A
Type/model optional	-	-	3TNV86CHT
Standard output [kW]	18.5	28.5 (DOC + DPF)	18.5
Option output [kW]	-	-	33.3 (DOC + DPF)
Max. torque standard [Nm at rpm]	85.5 at 1,500	132.2 at 1,690	85.5 at 1,500
Max. torque optional [Nm at rpm]	-	-	148 at 1,690
Standard displacement [cm ³]	1,331	1,568	1,331
Option displacement [cm³]	-	-	1,568
Exhaust emission stage	EU stage V	EU stage V	EU stage V

POWER TRANSMISSION			
Drive		Variably controlled axial piston pumps	
Max. speed, standard [km/h]	20	20	20
Maximum speed, option [km/h]	-	30	30
Axles	Axle carrier made of cast	steel with wheel hub motors	Planetary steering axle
Total oscillating angle [°]	±7	±7	±6
Differential lock, standard [%]	-	-	100% front axle
Differential lock, option [%]	Compensation di	ferential hydraulic	-
Service brake	Hydrostatically	Hydrostatically	Hydraulic disc brake
Parking brake	Spring-loaded multi-plate braking system, electro-hydraulically Mechanical disc brake controlled to HA		
Standard tyres	27x10.5-15	27x10.5-15	10.0/75-15.3

STEERING AND WORK HYDRAULIC	s				
Steering system functionality	Hydrostatic a	Hydrostatic all-wheel steering with emergency steering properties			
Functioning of work hydraulics		Gear pump			
Steering cylinder	One steering cyline	der per axle carrier	One steering cylinder per axle		
Max. steering angle [°]	38	38	38		
Flow rate on 3 rd control circuit, standard [l/min]	20	30	39		
Highflow performance hydraulics, option [I/min]	-	56	69		
Max. pressure [bar]	240	240	240		
Quickhitch system	Kramer HV/WL - S	Kramer HV/WL - S	Kramer HV/WL - C		
Pilot operation		Mechanical			
Pilot control of 3rd control circuit		Electro-hydraulic			

TECHNICAL DATA

KINEMATICS	KL12.5	KL14.5	KL <mark>21</mark> .5L	
Design system	Z-kinematics	Z-kinematics	PZ-kinematics	
Lifting force calculation according to ISO 1,4397-2 hydraulic [kN]	11.5	15.8	28.6	
Lifting force calculation according to ISO 1,4397-2 hydraulic [kN]	12.2	13.3	33.1	
Lift/lower lift cylinder [s]	6.0 / 4.5	6.0 / 4.5	6.1 / 3.4	
Tilt in/tilt out tilt cylinder (upper position of the loader unit) [s]	2.4 / 3.3	2.2 / 2.4	2.7 / 1.5	
Tilt-in/tilt-out angle [°]	43 / 40	43 / 40	50 / 45	
Bucket tipping load [kg]	1,200	1,400	2,115	
Stacking payload S=1.25 [kg]	750	900	1,300	
CAPACITIES				
Fuel tank, standard [I]	48	48	56	
Hydraulic oil tank [l]	40	40	19	
ELECTRICAL SYSTEM				
Operating voltage [V]	12	12	12	
Battery / alternator standard engine [Ah/A]	74 / 55	74 / 55	74 / 55	
Battery / alternator optional engine [Ah/A]	-	-	74 / 80	
Starter motor, standard [kW]	1.7	1.7	1.7	
NOISE EMISSIONS****				
Measured value standard engine [dB(A)]	99	99	96.9	
Measured value optional engine [dB(A)]	-	-	99.1	
Guaranteed value standard engine [dB(A)]	101	101	101	
Guaranteed value optional engine [dB(A)]	-		101	
Noise level at the operator's ear standard engine [dB(A)]	80	80	76	
Noise level at the operator's ear optional engine [dB(A)]	-	-	77	
VIBRATIONS****				
Vibration total value of the upper body extremity [m/s²]	< 2.5 m/s ² (< 8.2 feet/s ²)			
Highest effective weighted acceleration value for the body [m/s²]		< 0.5 m/s² (< 1.64 feet/s²)***** 1.28 m/s² (4.19 feet/s²)******		

25

Weight with a full tank + standard bucket + 75 kg operator weight (ISO 6016 + weight varies depending on equipment)

Basic configuration without attachment, without operator, full tank (weight varies depending on equipment)

Maximum trailer load. Can deviate depending on trailer coupling and trailer

Information: The measurement occurs as per the requirements of the standard EN 474 and the directive 2000/14/EC. Measuring station: Paved surface.

Uncertainty of measurement such as stated in ISO/TR 25398:2006. Please instruct or inform the operator of possible dangers caused by vibrations.

On flat and solid ground with the corresponding driving style

^{*******} Application in extraction under harsh environmental conditions

TECHNICAL DATA

KL12.5 STANDARD LOADER UNIT	STANDARD	BULK MATERIAL	BULK MATERIAL	GRAB
	with rip-out teeth			with rip-out teeth
Bucket capacity [m³]	0.35	0.45	0.50	0.23
Material density [t/m³]	1.80	1.20	1.00	1.80
Overall length of attachment [mm]	780	840	880	677
Overall length with attachment (transport position) [mm]	4,050	4,100	4,120	4,090
Bucket width [mm]	1,250	1,250	1,400	1,400
Bucket pin point [mm]	2,800	2,800	2,800	2,800
Load-over height [mm]	2,680	2,680	2,670	2,600
Dumping height [mm]	2,290	2,190	2,170	2,240
Dumping range [mm]	260	370	380	200
Digging depth [mm]	60	60	70	140
Attachment weight [kg]	113	129	153	189

KL14.5 STANDARD LOADER UNIT	STANDARD	BULK MATERIAL	BULK MATERIAL	GRAB
	with rip-out teeth			with rip-out teeth
Bucket capacity [m³]	0.36	0.45	0.50	0.23
Material density [t/m³]	1.80	1.40	1.20	1.80
Overall length of attachment [mm]	829	840	880	677
Overall length with attachment (transport position) [mm]	4,090	4,100	4,120	4,090
Bucket width [mm]	1,400	1,250	1,400	1,400
Bucket pin point [mm]	2,800	2,800	2,800	2,800
Load-over height [mm]	2,680	2,680	2,670	2,600
Dumping height [mm]	2,260	2,190	2,170	2,240
Dumping range [mm]	290	370	380	200
Digging depth [mm]	60	60	70	140
Attachment weight [kg]	129	129	153	189

TECHNICAL DATA

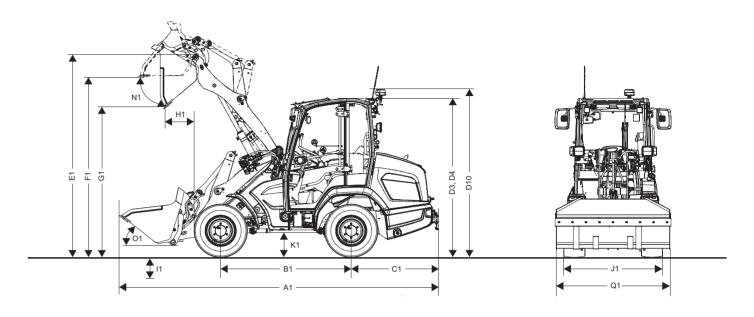
KL21.5L STANDARD LOADER UNIT	STANDARD	BULK MATERIAL	BULK MATERIAL	GRAB
	with rip-out teeth			with rip-out teeth
Bucket capacity [m³]	0.45	0.55	0.80	0.35
Material density [t/m³]	1.80	1.60	1.00	1.80
Overall length of attachment [mm]	947 / 897*	808	969	876 / 820*
Overall length with attachment (transport position) [mm]	4,680 / 4,640*	4,590	4,690	4,650 / 4,640*
Bucket width [mm]	1,350 / 1,650*	1,650	1,850	1,350 / 1,650*
Bucket pin point [mm]	2,913	2,913	2,913	2,913
Load-over height [mm]	2,620	2,610	2,610	2,620
Dumping height [mm]	2,120 / 2,150*	2,090	1,970	2,120 / 2,220*
Dumping range [mm]	470 / 430*	470	590	460 / 350*
Digging depth [mm]	55	70	70	55
Attachment weight [kg]	201 / 215*	236	292	285 / 315*

^{*} Bucket width 1,650 mm

TECHNICAL DATA

PALLET FORK	KL12.5	KL14.5	KL <mark>21</mark> .5L
		H	
Load centre [mm]	400	400	500
Width of the fork carriage [mm]	1,000	1,000	1,200
Length of the fork tines [mm]	800	800	1,000
Stacking device tipping load [kg]	930	1,125	1,625
Stacking payload S=1.25 [kg]	750	900	1,300
Stacking payload S=1.67 [kg]	560	670	970
Stacking height [mm]	2,630	2,630	2,720
Lift height, mast horizontal [mm]	1,290	1,290	1,280
Digging depth [mm]	100	100	0
Reach on ground [mm]*	480	480	510
Reach, mast horizontal [mm]*	960	960	980
Reach at max. height [mm]*	10	10	320

TECHNICAL DATA



DIME	ENSIONS	KL12.5	KL14.5	KL <mark>21</mark> .5L
A1	Total length with standard attachment [mm]	4,050	4,090	4,680
B1	Wheelbase, middle [mm]	1,525	1,525	1,860
C1	Rear overhang [mm]	1,140	1,140	1,215
D3	Height with cab [mm]*	2,170	2,170	2,260
D4	Height with cab low [mm]*	2,020	2,020	2,110
D10	Total height with rotating beacon [mm]*	2,490	2,490	2,390
E1	Bucket pin point [mm]	2,800	2,800	2,913
F1	Load-over height [mm]	2,680	2,680	2,620
G1	Dumping height [mm]	2,290	2,260	2,120
H1	Dumping range [mm]	2,060	2,090	470
l1	Digging depth [mm]	60	60	55
J1	Total width [mm]*	1,240 - 1,360	1,240 - 1,360	1,320 - 1,595
K1	Ground clearance [mm]	220	220	230
L1	Turning radius of outer edge of wheels [mm]	2,000	2,000	2,430
N1	Tipping angle with max. lift height [°]	40	40	45
01	Tipping angle to the ground [°]	43	43	50
Q1	Bucket width [mm]	1,250	1,250	1,350
R1	Stacking height [mm]	2,630	2,630	2,720

29

* depending on the type of tyre

^{*} In relation to back of fork













WHEEL LOADERS Bucket capacity: 0.35 - 1.80 m³



TELESCOPIC WHEEL LOADERS

Bucket capacity: 0.65 - 1.45 m³



Payload: 1,450 - 5,500 kg

Kramer-Werke GmbH

Wacker Neuson Straße 1 88630 Pfullendorf Germany Phone: +49 (0) 7552 92 88 0

Fax: +49 (0) 7552 92 88 234

info@kramer.de www.kramer.de





