

REFINED, RIGHT DOWN TO THE LAST NUT AND BOLT

The compact telehandlers
1445/1445e/2706



KRAMER
on the safe side



Telehandler for the professional construction industry

Available at your Kramer distributor

With their particularly compact dimensions, Kramer telehandlers open up a wide range of applications within the construction industry, horticulture and landscaping, municipalities and rental parks. Stacking and transport work is fast and easy in even the tightest of spaces. These efficient machines impress with their dynamic all-wheel drive, high payload, unbeatable manoeuvrability and low weight. Alongside its diesel engines, Kramer also has a 100% electric and emission-free version: the 1445e. You can individually choose the right machine for you depending on the application and requirement.



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 also a reliable choice for customers and dealers because the experience and innovative power of the company ensures for investment and future security. In short – you are always on the safe side with Kramer: **“Kramer – on the safe side!”**

➔ ON THE SAFE SIDE

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Kramer telehandlers

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Operating and performance data wheel LOADERS AND TELESCOPIC WHEEL LOADERS	1445	1445e	2706
Engine output (optional) [kW]	18.4 (33.3)	23.2** / 25.2***	55.4
Stacking height [mm]	4,190	4,190	5,730
Payload on pallet forks S=1.25 [kg]	1,450	1,450	2,700
Operating weight [kg]*	3,050 - 3,350	3,050 - 3,250	4,400 - 5,200

* Weight in standard components with full tank + standard bucket + 75 kg operator weight (ISO 6016).

** Drive performance S2 60 min

*** Work hydraulics performance S3 15%

Telehandler with wheel loader properties

Ideally equipped for the construction industry

From the start, the toughest applications were the measure of all things in the development of Kramer telehandlers. The machines were consistently designed for robustness and reliability based on the know-how from the wheel loader development. This can be seen, for example, in the sturdy vehicle frame, which can safely accommodate the payloads of the machine, thanks to its closed design and large material thicknesses.



Flexibility in application

Raise your standards in all areas

With the Kramer telehandlers, you can handle daily work without any problems. The machines not only support you with their impressive performance, but also with standard driver assistance systems and the comfortable cabin designed for maximum ergonomics.



Impressively versatile

The Kramer telehandlers are the perfect helpers, whether stacking or loading material, every job is done quickly with our powerful all-rounders and a large selection of attachments. The telehandlers can also be supplemented with a wide range of additional options. As a result, the machines can be adapted to your requirements and provide maximum versatility.



Impressively sturdy

You can rely on the telehandlers in terms of their robustness and durability. The load stabiliser for the telescopic arm provides a decisive contribution here. The lifting, tilting and telescopic cylinders are equipped with end damping to absorb pressure peaks in the hydraulic system and/or a swaying of the machine. In addition, no torsion forces affect the centrally positioned telescopic boom on the frame. Operator and machine are optimally protected from shocks.




Remarkably compact

The compact telehandlers are characterised by their unique combination of high payload, great lift height, low application weight and powerful engine output. With the all-wheel steering and the ultra-compact dimensions, the efficient machines ensure unbeatable manoeuvrability. Stacking and transport work is quick and easy in even the tightest of spaces. The low overall height makes work, for example in underground car parks, no problem at all.

Flexibility in application

The right type of steering system for any application

The three steering types: all-wheel, front wheel and crab steering are also available for the compact telehandlers, for maximum flexibility in the most diverse applications. No matter whether manoeuvring in the most confined space, driving at speed on the road or guiding special attachments, the right steering type can be selected for each and every application.



All-wheel steering

- 2 x 38 degree steering angle on the front and rear axle ensure quick work processes
- Optimised routes
- Tight turning circle



Front wheel steering

- Safe and familiar road travel at high speed
- Easy guidance of special attachments
- Familiar steering system
- Ideal for trailer operation



Crab steering

- Manoeuvrability in the smallest space
- Precise positioning in the tightest conditions
- Ground protection for sensitive subbase
- Easily move away from walls and trenches





All-wheel steering: particularly manoeuvrable in tight spaces

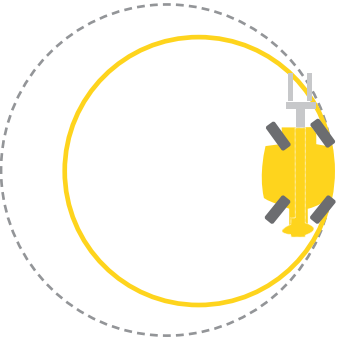
Ultra-compact dimensions ensure unbeatable manoeuvrability

360° turning manoeuvres

The 1445 and 1445e telehandlers are extremely manoeuvrable with a turning radius of just 2,695 mm. This high level of manoeuvrability is achieved, above all, due to its great steering angle of 38° on the front and rear axle, in combination with the compact machine design. As a result, optimised routes and, above all, fast work cycles are now also possible in very tight spaces.


Turning circle outer edge tyres


Turning circle outer edge attachment



Compact dimensions and optimal power to weight ratio

Power in a perfect proportion

The compact telehandlers by Kramer are versatile and powerful machines for the highest demands and flexible applications in the construction industry. The machines are supremely equipped for demanding and precise work in confined spaces as a result of their design and small dimensions. The compact models are characterised by increased comfort due to their driver assistance systems, a wide range of options, as well as a large selection of attachments. The optimal relationship between the application weight and the payload ensures an unaffected viability and efficiency of the Kramer telehandlers.



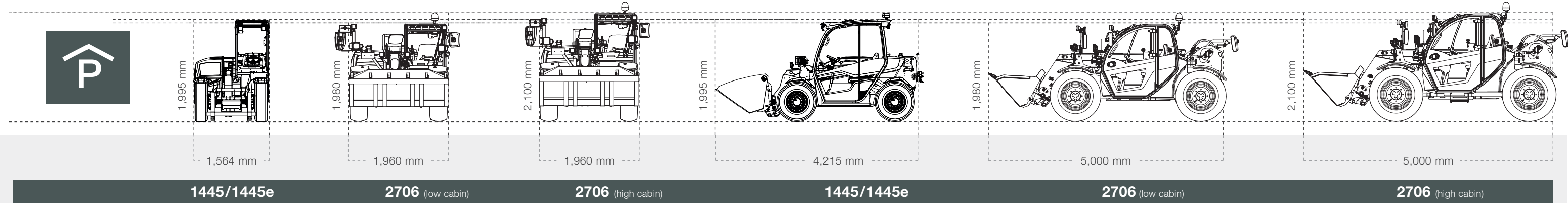
Compact dimensions: Suitable for tight spaces

Top performance of the dimensions and power to weight ratio:

- perfect ratio between payload and operating weight
- unrivalled economy and efficiency
- compact dimensions in the 2x2 metre class



Low overall height of less than 2 m for versatile applications



Driver assistance system - Smart Handling

Everything under control, even in the limit range

Maximum payload, fully extended loader unit system, engine speed at the detent – the Smart Handling overload protection system always has everything under control in any situation. On the one hand, the intelligent driver assistance system prevents loads from reaching the overload area and therefore threatening to overturn the machine in the longitudinal direction. On the other hand, it takes many routine tasks, such as extension and retraction of the telescopic arm, away from the operator so that he can focus on the essential aspects of his work.



The three functional modes explained

Bucket mode



When lowering the loader unit, the telescopic arm is automatically retracted slowly. This keeps the load as close to the vehicle as possible and it does not create critical situations, even with maximum payloads. The bucket mode is ideal for loading bulk materials.

1445 / 1445e / 2706

Stacking mode

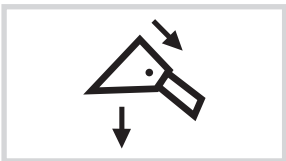


When lifting and lowering the loader unit, the attachment is moved up and down in a vertical line, i.e. the telescopic arm automatically moves in and out and the load is moved up or down in a straight line. Thus, the cargo always remains in the safe range and stacking work at high altitudes is simplified.

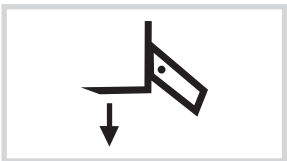
1445 / 1445e / 2706

Smart Handling - simply select

The mode can be switched via the selector switch. To temporarily bypass the overload system, the left push-button must be pressed continuously.



Bucket mode



Stacking mode



Manual mode

Manual mode



In manual mode, the machine does not perform any automatic movements of the loader unit. The overload protection is of course still active and stops the loader unit as soon as the overload limit is reached. At this point, only retracting, lifting the loader unit and dumping out the attachment are possible.

1445e / 2706

Joystick handling



You have the whole machine under control with the ergonomic joystick. With up to 17 functions, the most important tasks can be done without letting go of the joystick or changing your grip. The joystick is fixed to the console on the right-hand side of the cab.

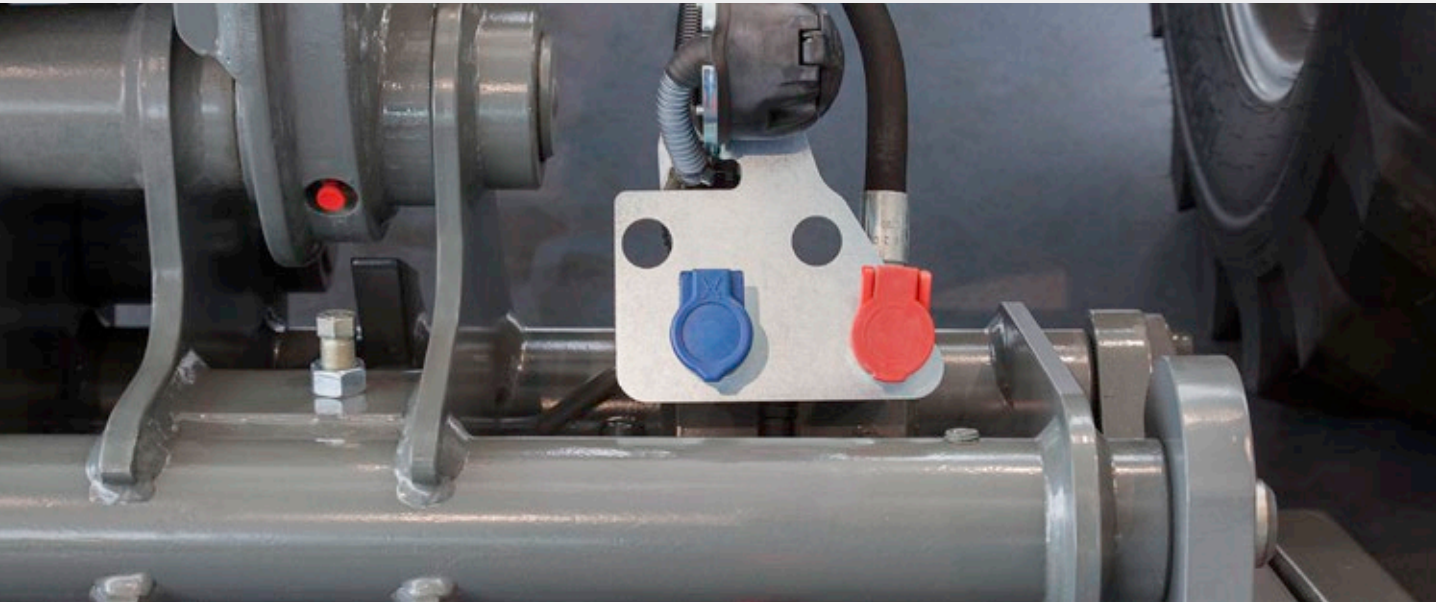
Powerful hydraulics

For sensitively controlling the machine

Connect and disconnect different attachments, sensitive control, quick working cycles and all of this with a low noise level in the cab: The technology behind the work hydraulics makes this possible.

The work hydraulics are powered by powerful gear pumps, which ensure quick working cycles of the loader unit and allow for the operation of special attachments via the 3rd control circuit, if necessary with continuous function.

Pressure release of 3rd control circuit:
Easily couple and uncouple attachments with hydraulic additional function



Powerflow

The optionally available Powerflow high-performance hydraulics have been developed especially for demanding applications and special attachments with a constant and high oil requirement, like, for example, snow blowers or mulching devices.

The attachment supply is via a separate pressure line and a depressurised return directly connected to the hydraulic oil tank ensures a high usable power, without unnecessarily warming the oil.



Concept solution for system bearer	1445	1445e	2706
Discharge volume (optional) [l/min]*	36.4 (42)	42	103
Powerflow performance hydraulics [l/min]*	70	-	-

* Values for the engine's rated rpm

- not available

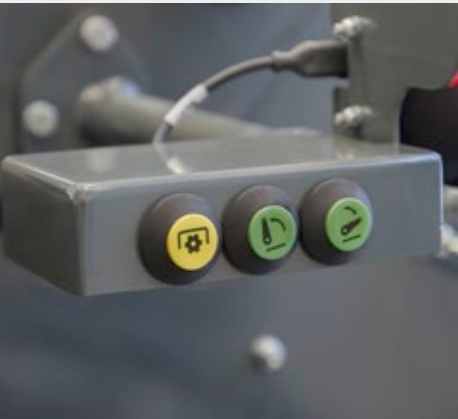
Multifunctional rear attachment area

Maximum versatility for all tasks

The Kramer telehandlers are not only characterised by the various quickhitch systems and numerous hydraulic options in the front. The telehandler's rear attachment area also fulfils all of the important requirements.

Depending on the model, there are various attachment couplings available for the attachment operation. For the 2706, a hydraulic attachment brake system is also available for large attachment loads. For maximum flexibility, the machine be optionally equipped with a three-point lifting gear and a rear PTO. Hydraulic auxiliary control circuits are available at the rear for all models, for example for the use of a tipper.

External operating elements (2706)
for the rear power lift and the PTO shaft.



Powerful engines

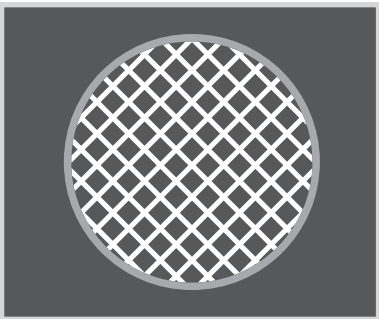
Efficient fuel consumption

For maximum drive performance with minimum fuel consumption, the right engine is selected for the respective model. You are also well-prepared for strict exhaust standards with the engines of the Kramer telehandlers. All engines comply with the current exhaust emission Stage V.

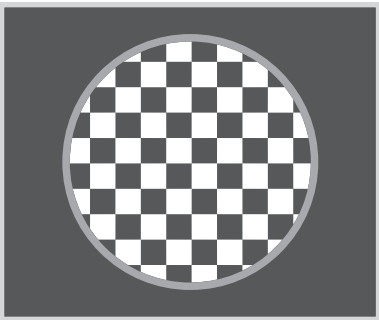
The 1445 is powered by an 18.4 kW Yanmar engine without exhaust emissions after-treatment. For this model, a more powerful engine with 33.3 kW is optionally available. Here, the exhaust emissions are treated with DOC, DPF and SCR. A 55.4 kW Kohler engine is installed in the 2706. Here, the exhaust emissions are treated with DOC and DPF.

	1445	1445	2706
Overview of engines	Standard	Option	Standard
Engine manufacturer	Yanmar	Yanmar	Kohler
Output [kw/hp]	18.4 / 25	33.3 / 45	55.4 / 75
Exhaust after-treatment system	-	DOC + DPF	DOC + DPF
Exhaust emissions stage (EU exhaust emissions standard)	Stage V	Stage V	Stage V

Exhaust emission after-treatment systems



Diesel oxidation catalytic converter (DOC)
Catalytic converters are used these days to reduce emissions in many cars and lorries. The diesel oxidation catalytic converter has the same functionality. Without the movement of mechanical parts, it triggers chemical reaction, which reduce emissions.

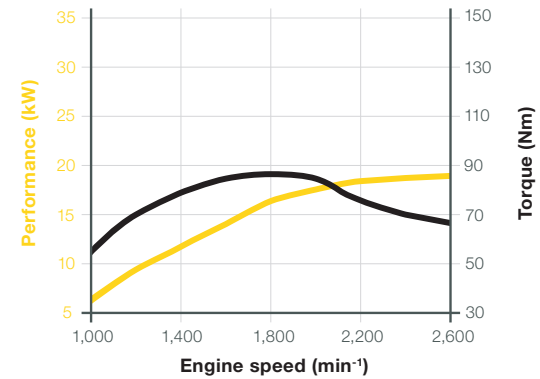


Diesel particle filter (DPF)
The diesel particulate filter is used in connection with an oxidation catalytic converter to remove most of the nitrogen oxides, soot particles and non-combusted hydrocarbons from the combusted diesel fuel. The diesel particulate filter contains a porous honeycomb structure that catches the soot when it passes through. When the soot has accumulated to a certain extent, the machine's electronic system triggers fuel injections, which brings the non-combusted fuel into the oxidation catalytic converter, which is located before the filter. There it triggers an exothermic reaction that heats the exhaust fumes so much that the soot in the diesel particulate filter is combusted. This process is also known as regeneration.

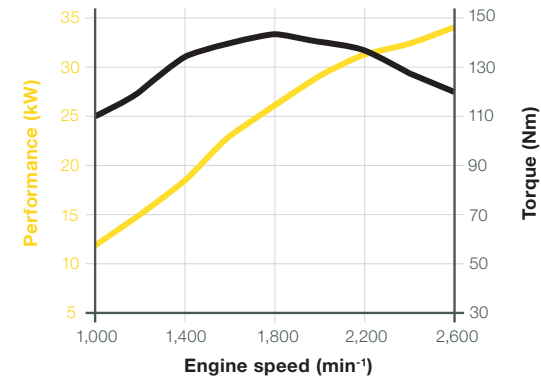


Optimised running smoothness: Economical and powerful engines in all Kramer models.

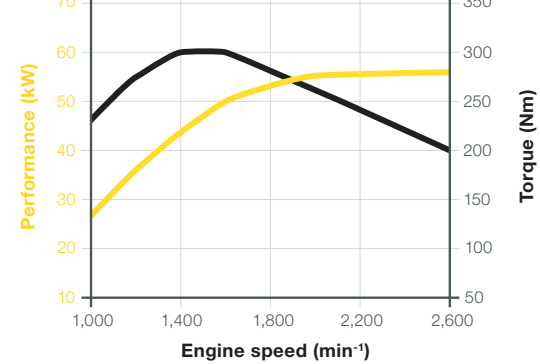
Performance curve of Yanmar 3TNV82A-B; 18.5 kW; stage V (standard)



Performance curve of Yanmar 3TNV86CHT; 33.3 kW; stage V (option)



Performance curve of Kohler KDI 2504 TCR; 55.4 kW; stage V (standard)



Top performance of the engines:

- high-torque and economical engines
- the latest exhaust emissions after-treatment with DOC + DPF
- the latest engine technology for maximum performance

Everything under control inside

Everything in view outside

The innovative cabin design ensures even more spaciousness in the cab, which has been designed according to findings in safety technology and ergonomics. From the operator's seat through to the steering wheel, every detail is adjusted to the operator's needs.

The operator's central seat position and the cab's full glazing with deep-drawn panes in combination with narrow cabin pillars, ensure excellent all-round visibility of the entire work area all of the time. All of the operating elements are within reach and the most important machine information is always within the operator's view via the optimally positioned display. A working environment that motivates and fully supports the operators.



Generous cabin with a wide-opening door for comfortable entry.

Technical highlights

Simple operation – Innovative cabin design

Switch concept



The respective functional group is very quick and easy to identify due to the colour-coded switches. Red = safety, green = hydraulics, blue = travel and grey = electrical system. This ensures the operator a convenient and safe operation without the risk of being confused. The result is increased working efficiency.

Steering column



The steering column and wheel can be adjusted according to the operator's requirements, both in terms of height and incline. The operator therefore also has more spatial freedom when entering and exiting. Furthermore, the steering wheel is made of a high-quality and non-slip material.

Armrest



The Kramer 1445's armrest is not only for additional comfort: Under the hinged armrest there is a practical storage area with a USB charging socket in which you could, for example, store a smartphone, while simultaneously charging it.

Control lever



It is possible to switch between the steering types using the operating lever on the instrument panel. Whether all-wheel, front axle or crab steering, there is an appropriate steering type for every application.

Continental radio



A continental radio with USB connection and Bluetooth hands-free system is available as an option. Even when working, you can have a good telephone connection via the Bluetooth hands-free system.

Other cabin features



The heating and ventilation system with fans and well-placed air nozzles ensures a comfortable working environment. We recommend using the optional air-conditioning system in particularly warm environments. Furthermore, the vehicle is equipped with an adjustable sun-blind for glare-free working.

Four driving modes

Even more flexibility in use

With the electronically controlled drive system and the accompanying four driving modes, machines can be optimally set to the respective working conditions.

Here, the auto mode ensures the usual 100% performance of the machine. In the eco mode, the rpm is reduced to 2,200 rpm for effective fuel-saving and noise reduction after achieving the desired travel speed. Furthermore, the travel speed can be finely tuned in the attachment mode. This guarantees a constant feed for the attachment. With the M-drive mode, the Y-load cycles can be optimally executed by determining the engine speed via the hand throttle and controlling the travel speed with the drive pedal. With this, inching is superfluous.



1445



Top-performance telehandler 1445:

- very small turning radius due to the compact design
- electronically controlled drive system with different operating modes
- perfect performance values of 18.5 kW (standard) or 33.3 kW (option)
- increased safety as a result of hill-hold function



Electric parking brake

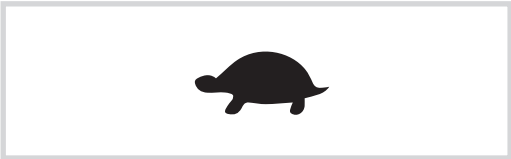
The new electrical hand brake provides a Hill-Hold function. The brake automatically activates if the machine stands still, the direction of travels is set to neutral or the operator leaves the seat.

The electrical hand brake is automatically released if the machine is put into gear using the accelerator. Naturally, the hand-brake can likewise be manually activated and deactivated by operating a switch. A real comfort and safety plus-point for the operator.



Two selectable speed levels

The speed levels can be easily changed while driving. The change is done conveniently via two touch controls on the joystick and is immediately shown on the display with the corresponding symbol (see below). In addition to the two freely selectable driving speeds, different driving modes can optionally be implemented: **Driving in auto mode, driving in eco mode, driving in attachment mode and driving in M-drive mode.**



Turtle: 0 - 7 km/h

For work in which the speed needs to be finely controlled.



Hare: 0 - 20 km/h (0 - 30 km/h)

For long transport drives in which constant, swift speeds are an advantage.

1445 machine highlights

The compact genius among telehandlers



zero emission

Innovation and sustainability are focal points and driving factors for the development of new machines at Kramer. In this context, there has been an ongoing search, for a number of years now, for alternative energy sources and drive technology in order to develop more sustainable, environmentally-friendly, yet simultaneously powerful machines.

Electric mobility is playing an ever more important role within the construction industry. The 1445e is best suited for noise-sensitive work, like for example, in sensitive environments, like residential areas, inner cities, car parks, zoos and at cemeteries, as well as in regions with a high share of tourism. The machine is very quiet in operation and is entirely free from CO₂ emissions. It is even possible to work in underground car parks, indoors and in glasshouses without any restrictions. The output of the 1445e is comparable to that of the diesel telehandler of the same size class and does not lack in anything.



Into the future with electric drive Its benefits at a glance

With the fully-electric 1445e telehandler CO₂ restrictions, soot-limits and noise emission values no longer play a role in daily work. The fully electric telehandler works completely free of emissions, protects the environment and the end user, and scores high when it comes to efficiency and economy.



Ecological advantages

- Lower CO₂ footprint
- No particulate pollution for the end user and the environment
- Protection of resources



No exhaust gas emissions

- Effortless work inside
- Possible to work in tunnels without expensive extraction systems
- No impairment of air quality in urban applications because of complete zero emissions
- No emission burden on zoological gardens or park areas



Low noise emissions

- Ideal for noise-sensitive areas such as city centres, cemeteries, hotel facilities, parks, and recreation areas
- Perfectly suited to winter service (e.g. hotel and municipal application)
- Less noise for (new) construction areas



Economic advantages

- Future-oriented technology
- Low maintenance costs
- Operation up to 4 hours without interim charging*

* Data is dependent on machine equipment, application and environmental factors, and can deviate.

Overview of cabin design

For greatest performance

At first glance the cabin reveals what it's about: the operator and its tasks. The spacious cabin provides a comfortable and low-noise working space with plenty of head and leg-room, which contributes to fatigue-free working.

The operator's requirements are individual, the 1445e therefore has different seating options available for selection. The most frequently used control elements are arranged at the front of the cabin on the right side panel and are easy to reach. The switches are coloured according to their function group, which ensures a high degree of clarity and user-friendliness. All the important information for the machine is presented on the display. Furthermore, there is a generous amount of storage space available to the operator for tools, in addition to their water bottles and other equipment.



Quick-to-reach emergency button, so that the machine can be immediately brought into a safe state in case of emergency.



A modern design cabin with an ergonomically shaped dashboard.

Technical highlights

Simple operation – Innovative cabin design

Cabin entry



The spacious and clear cabin, despite the compact vehicle dimensions, can comfortably be reached without any additional steps. The ergonomically affixed handles, in combination with the large door, ensure a safe entry and exit. The spacious cabin guarantees an excellent feeling of space.

All-round visibility



Narrow cabin struts and panoramic glazing offer an excellent view on all sides. The panoramic front windscreen contributes to the good overview and improves operator comfort. The flat battery cover ensures optimal visibility to the right side, onto the right rear wheel and the mudguard.

Operator mode



There are two operator modes to choose from: Eco and Auto (PWR). In the Auto mode the full engine output and travel speed are available without any limitations. In the Eco mode the engine output and travel speed are limited. This way you can save energy and gain running time.

Joystick



With the multi-functional joystick, the operator has everything in hand at any time. Alongside the main functions of lifting and lowering, as well as tilting in and out, all the important functions, i.e. selection of direction of travel, are available on the joystick. In addition, the control elements of the joystick are backlit at night, which guarantees safe operation of the machine, even in the dark.

Heating



The machine is equipped with heated cabin windscreens as standard. So that a potentially high level of energy efficiency is achieved for the whole heating system, the cabin can be equipped with an additional panel heating system for normal air heating. This is located in the cabin's roof and provides a targeted heat. The normal air heating can also be used as standard heating.

Other cabin features



The FOPS screen (Falling Object Protective Structure) has been mounted inside to keep the vehicle height as low as possible. As a result of the FOPS screen design an optimal view of the lifted loading system is provided. Furthermore, a radio with USB connection, Bluetooth playback, DAB+ and hands-free system are optionally available.

Power for a working day

Productive running times supported by regeneration

The electric running time varies depending on many factors, like the driving style, type of application, machine equipment and the environmental conditions. It is possible to work up to 4 hours without interim charging.

Through the regeneration – energy recovery – it is possible to extend the running time. As soon as the operator takes their foot off the accelerator, the drive system switches to regeneration. This means that the motion energy of the telehandler is converted into electric energy and therefore recovered.



Everything at a glance

All the important information is presented via the display. Included herein, among other things, is the machine's remaining running time, regeneration, travel speed and even the battery's charge status. This is displayed as a percentage. If the battery is being charged, a lightning bolt appears on the battery icon and the charging performance is displayed.



Top performance fully-electric telehandler 1445e:

- No exhaust emissions and clearly reduced noise level
- Powerful and high-quality lithium-ion battery with 18 kWh or 28 kWh
- Low maintenance costs when compared with the diesel machine
- Maximum flexibility when charging as a result of different charging plugs
- Easy access to the charging plug

Innovative battery technology

Modern and flexible charging procedure

The 1445e is equipped with a lithium-ion battery with a capacity of 18 kWh, as standard. Optionally available is a lithium-ion battery with 28 kWh. Both have a guaranteed battery service life of min. 5 years or 2,000 charge-cycles. After this time, it is guaranteed that the battery exhibits a remaining capacity of min. 80%.

The lithium-ion battery is monitored via a so-called battery management system (BMS). A battery heater is also integrated into the battery and this ensures an optimal operating temperature. Furthermore, the machine has a 3 kW AC on-board charger which can also be optionally ordered with 6 kW. The on-board battery charger is installed into the machine. The battery can therefore be charged at any standard socket. It is likewise possible to charge the machine at a wallbox or at a public charging station.







Charge cable

There are four charging plug options available for charging the machine. The charging output is restricted by the type of charging plug and charging output of the on-board charger. In the case of the 6 kW on-board charger, full charging output can only be achieved with the type 2 and CEE 5-pole plugs.

- Schuko mains plug 230V/16A
- CEE, 3-pole 230V/16A (blue)
- CEE, 5-pole 400V/16A (red)
- Type 2 (IEC 62196)

Simple charging procedure

The charging panel is located in the rear of the machine. It is possible to charge the battery up to 80% in approx. 3 hours.

Connect charging cable	Start charging procedure	End charging procedure	Remove charging cable
			
Open the charging panel and connect the charging cable to the machine.	Activate the key switch* to start the charging procedure. The charge status display on the rear of the machine will start to flash.	The charge status display will illuminate continuously as soon as the charging procedure is automatically ended.	Activate key switch* and remove charging cable. Then close the charging panel.

* Key switch optionally available. A pressure switch is installed as standard.

Machine highlights 1445e

Future-oriented and thought-out down to the last detail



Compact dimensions
thanks to a vehicle width below 1.60 m
and a vehicle height below 2 m.

Perfect all-round visibility
thanks to the deep-drawn windows.
The very gently sloping bonnet
ensure optimal visibility
to the right and of the right, rear wheel.

Innovative battery technology
with a 96 V lithium-ion battery
and a capacity of 18 kWh or 28 kWh.

Easy charging procedure
without opening the bonnet.
The socket and the battery
charge indicator are
easily accessible at the rear.

Digital colour display
to monitor and set all
of the machine's important functions.

Driver assistance system - Smart Handling
supports work through a partially automated
telescoping movement during demanding
applications.

Electric parking brake
with Hill-Hold function for more
comfort and safety.

Fast charge
as a result of an integrated on-board charger with up to
3 kW or with up to 6 kW charging capacity. Different
charger cables and adapters are available.

BMS - Battery Management System
monitors, for example, the battery's temperature.
Efficiency and safety of the battery are increased
and deep discharges are excluded.

Electric drive system
is 15 km/h as standard, a maximum end
travel speed of 20 km/h or 25 km/h is
optionally possible.

Low operating costs:
and low maintenance works
when compared with
a conventional diesel drive.

Comfortable working area

Thought out down to the last detail

The 2706's cabin design has been tailored to the operator's needs. Functionality, ergonomics and ride comfort were always the focus of the development. The large glass surfaces provide the operator an unobstructed view of the attachment at all times.

From the inside, the cabin impresses with its first-class space provision, outstanding all-round visibility and many other details, such as the deep-drawn and ergonomically shaped instrument panel, tilt-and-height adjustable steering column, storage or the radio with DAB+ and Bluetooth hands-free kit. Additional options, such as the optional air-conditioning system and air-sprung operator's seat, complete the provision.



Good visibility to the right due to the large dimension, right window and low position of the telescopic boom.

Technical highlights

Simple operation – Innovative cabin design

7-inch display



The optional 7-inch display provides the operator with an overview of the current machine information in any situation. It also provides many additional functions, like the adjustable joystick sensitivity, activation speed of the load stabiliser, adjustable time intervals for the reverse fan and the oil volume adjustment for the auxiliary control circuit.

Operator mode Pedal/CSD



With the operator mode Pedal/CSD, the machine's and attachment's optimal rpm can be set, as well as the correct working speed. Both values can be subsequently adapted to the work situation using the touch switches or sliders. This enables constant and simultaneously comfortable work applications.

Steering column



The steering column can be adapted to the operator's requirements in terms of incline and height. The steering wheel can be tilted back and forth by pressing the lever down. Pulling the lever effects the steering wheel adjustment in terms of height. Furthermore, the steering wheel is covered in a high-quality and non-slip material.

Joystick



The electronically controlled joystick enables extremely sensitive and precise work, as well as the integration of the driver assistance system, like Smart Handling, which supports the operator even more. In the innovative night design, the different touch buttons and wheels light up in colour.

Pedals



The suspended pedals with the combined brake-inch pedal allow for sensitive manoeuvring, even at a high rpm. Furthermore, the cabin floor can be easily removed and cleaned.

Other cabin features



A continental radio with DAB+ and Bluetooth hands-free system is available as an option. Furthermore, the optional air-conditioning system ensures a comfortable climate, even on warmer days. A view camera with a terminal screen supports the all-round visibility and increases the operator's productivity.

Stacking at its best

Maximum flexibility in everyday work

The work hydraulics are supplied by powerful hydraulic pump, which ensures quick working cycles of the loader unit and enables the operation of special attachments via the 3rd control circuit, if necessary with continuous function. So that the machine is in a safe position at any time, the 2706 is equipped as standard with the driver assist system Smart Handling.



Top-performance telehandler 2706:

- Two cabin heights (1.98 m / 2.10 m) for maximum compactness or maximum all-round visibility and comfort
- Perfect performance values of 55.4 kW
- Fast implementation of the machine with 40 km/h travel speed
- rpm reduction as standard
- LUDV-work hydraulics for the simultaneous execution of several hydraulic functions
- Innovative cabin design for maximum comfort

Work hydraulics with load-independent flow distribution (LUDV)

ensure equal distribution of the hydraulic oil to the individual control circuits. Thus several functions can be simultaneously performed independent of the load, e.g. lifting and extending the telescopic boom.



Two cabin heights

The compact telehandler 2706 belongs to the 2x2 metre class, which means that the vehicle width and height are within the 2 m limit.

It is possible to freely select between two cabin heights. The low cabin with a height of 1.98 m ensures the vehicle's maximum compactness. The high cabin at 2.10 m provides even better all-round visibility and maximum comfort. The low cabin is accessed directly and the higher cabin is accessed via a step.

Smart Attach

The optional, fully-hydraulic quickhitch system, Smart Attach, provides more safety for the operator as it is no longer necessary to exit and enter the machine to couple hydraulic attachments. In addition to this, money is saved with every coupling procedure because the attachment changeover is faster.

Every attachment change with Smart Attach
saves 2.5 minutes when compared with the "standard" Kramer quickhitch system.

EXAMPLE CALCULATION

10 coupling procedures / day	
x	2.5 minutes
x	220 working days
x	€30/h

=	€2,750 / year
---	----------------------



2706 machine highlights

Refined, right down to the last nut and bolt

Work hydraulics
with combined motion sequences
thanks to LUDV technology.

Compact dimensions
due to vehicle width and height of less than 2 m.
Suitable for application in confined spaces.

7-inch LCD display
is optionally available and provides a variety of
application options, like joystick sensitivity and
angle display. A variety of operating information
can likewise be viewed.

Numerous options in the rear
make the machine the perfect all-rounder:
among others, the three-point housing in rear,
depressurised return flow with overflow oil line, etc.

Approval as a tractor (EC tractor)
With the optional tractor approval, you can transport
work machines, tools, materials and attachments to
the site of application – even on public roads.

Powerful engine
by Kohler as standard with 55.4 kW / 75 hp
with DOC + DPF (exhaust emission stage V).

Driver assistance system - Smart Handling
Overload protection paired with higher productivity
enables a smooth working process.

Two cabin heights (1.98 m / 2.10 m)
for maximum compactness or maximum comfort.

Comfortable cabin
with large dimensioned right window and
ergonomically arranged control elements.

40 km/h travel speed
is optionally available and ensures a quick
changeover of the machine during the working day.

Wide range of tire options
for a wide range of application areas.
A large selection of the most diverse
tyres are available.

Three steering types
support maximum manoeuvrability and flexibility
(all-wheel, front-wheel and crab steering).

More efficiency
through hydraulic and fully-hydraulic
quickhitch system (Smart Attach) as
well as a sturdy telescopic boom.

A variety of tasks


Always the right attachments

Regardless of what challenges your application holds for you: With the different attachments, you will always have a handle on the situation. Thanks to the hydraulic quickhitch system, you can adapt your Kramer wheel loader to any situation in no time. Standard attachments can even be changed in less than 10 seconds.

The attachment is based on your needs. You can find out more about our attachments at: www.kramer.de/Anbaugeraete



Product range of attachments

			
Pallet fork	Pallet forks, hydraulic parallel adjustment	Standard bucket with rip-out teeth	Standard bucket without rip-out teeth with screwed-on blade
			
Power grab bucket with rip-out teeth	Power grab bucket without rip-out teeth	Bulk material bucket	Load hook

Exact specifications and availabilities of attachments vary by model and country. Your competent Kramer dealer will be happy to help you.



Hydraulic quick-change system (optional) - The Kramer quickhitch system: Approach the attachment, pick up the attachment hydraulically from the operator's seat and lock it using the touch slide on the joystick. The locking cylinder is located outside of the contamination area.

Tyre product range



- Good self-cleaning
- Large contact area
- Ground-protecting driving on sensitive substrates

RP tread



- Good track guiding
- High level of driving safety
- Good self-cleaning
- High level of traction

AS tread



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

EM tread



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

MPT tread



- High level of traction
- Well-suited in sand and gravel
- Good resistance

Multi-use tread



- High lift capacity
- High level of traction
- Excellent stability and improved operator comfort
- High level of running smoothness

Bibload tread



- Good resistance
- Smooth running on the road
- High level of traction
- For applications on and off the road

Duraforce



- Good winter serviceability
- Noise-optimised
- For applications on and off the road

SureTrax tread

Choosing the right tyres is crucial when it comes to using your wheel loader. Exact tyre specifications and availabilities vary by model and country. Your competent Kramer dealer will be happy to help you.



EquipCare - Telematics

All the information at a glance

Always a step ahead, because EquipCare provides data, facts and answers to questions: Where is my machine right now and when is it economically worthwhile and necessary to perform maintenance and repairs? This helps you to avoid downtime and to extend the service life of your machine.

How does it work?

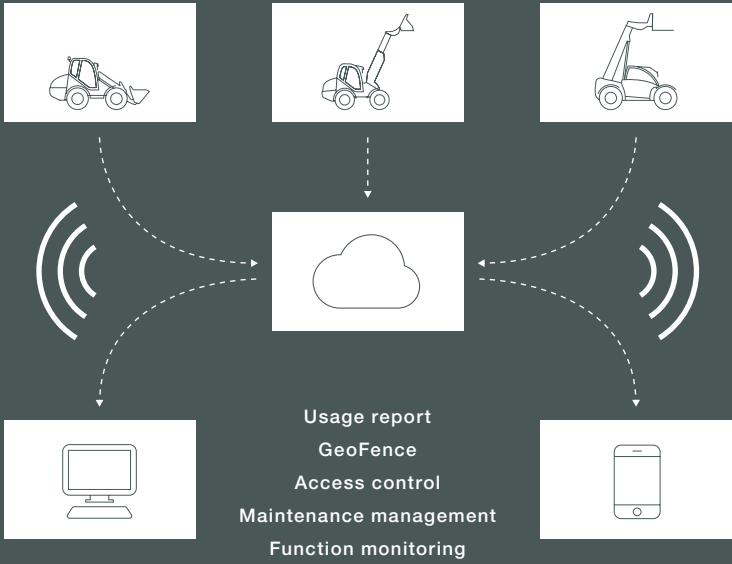
EquipCare is installed as standard on all Kramer vehicles. It contains a telematics module, which collects data from the machines and sends it to the manager or app via a cloud. Here, as the Equipcare user, you can view and assess the data.

EquipCare Manager is the main portal for the telematics data of your vehicles and is controlled via the computer. The app is for mobile access and keeps you informed about everything immediately, no matter where you are.

Your benefits:

Thanks to EquipCare, we always know where your machine is located currently. If the machine leaves a previously defined geo-zone, you will receive a notification on your smartphone or your computer. All events are shown here in details, from the error message to the maintenance performed. All unnecessary downtime is avoided and the operating duration is precisely recorded.

The machine has detected a problem? The system automatically notifies your dealer on-site and they can perform initial remote diagnostics to prevent any downtime. Thanks to the proactive communication of your machine, you will be promptly informed about everything.



You can find more information at:
www.kramer.de/equipcare

SCAN NOW!



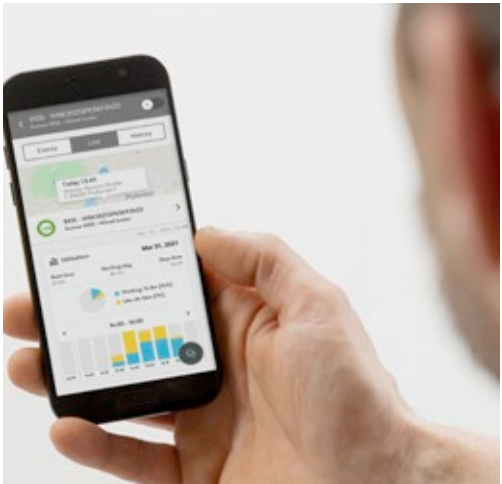
EQUIPCARE

The telematics portals are accessible for you around the clock:



EquipCare Manager: The precise position or the GPS data of your machines can be viewed at any time in your password-protected area.

www.kramer.de/equipcarelogin



App: The app provides you with a number of functions to access your machine data and information while on the go. Simply download and install the app from the Google Play Store or the Apple App Store.

◀ Go to the app

Top Performance

Dimensions and power to weight ratio

- perfect ratio between payload and operating weight
- unmatched economy and efficiency
- compact dimensions in the 2x2 metre class

Engines

- high-torque and economical engines
- the latest exhaust emissions after-treatment with DOC + DPF
- newest engine technology for maximum performance

Telehandler 1445

- very small turning radius due to compact design
- electronically controlled drive system with different operator modes
- perfect performance values of 18.5 kW (standard) or 33.3 kW (option)
- increased safety due to hill-hold function

Fully-electric telehandler 1445e

- no exhaust emissions and clearly reduced noise level
- powerful and high-quality lithium-ion battery with 18 km/h or 28 km/h
- low maintenance costs when compared with a diesel machine
- maximum flexibility when charging due to different charging plug types
- easy access to charging plug

Telehandler 2706

- two cabin heights (1.98 m / 2.10 m) for maximum compactness or maximum all-round visibility and comfort
- perfect performance values of 55.4 kW
- quick implementation of the machine with 40 km/h travel speed
- rpm reduction as standard
- LUDV work hydraulics for simultaneous execution of several hydraulic functions
- innovative cabin design for maximum comfort

Technical Data

Operating and power ratings		Unit	1445	2706
Max. payload (LSP 500 mm)	kg		1,450	2,700
Max. stacking height	mm		4,190	5,730
Payload at max. stacking height	kg		1,450	1,800
Payload at max. coverage	kg		725	1,000
Stacking height at max. payload	mm		4,301	4,700
Reach at max. payload	mm		1,100	1,400
Max. reach	mm		2,333	3,156
Turning radius via tyres	mm		2,695	3,670
Operating weight*	kg		3,050 - 3,350	4,400 - 5,200
Engine		Unit		
Make	–		Yanmar	Kohler
Type/Model	–		8TNV80FT (standard) 3TNV86CHT (option)	KDI 2504 TCR
Output	kW/hp		18.4 / 25 (standard) 33.3 / 45 (option)	55.4 / 75
Max. torque	Nm		85 (standard) 142 (option)	300
Displacement	cm³		1,267 (standard) 1,568 (option)	2,482
Exhaust emission stage	–		Stage V	Stage V
Exhaust emissions after-treatment	–		- (standard) DOC + DPF (option)	DOC + DPF
Power transmission		Unit		
Drive	–		Hydrostat	Hydrostat
Max. speed	km/h		20 (standard) 30 (option)	30 (option) 40 (option)
Total oscillating angle on the rear axle	°		14	20
Differential lock	–		100% (option)	100% in the front axle
Service brake	–		Foot-activated hydraulic disc brake	Foot-activated hydraulic disc brake
Parking brake	–		Electrically operated with Hill-Hold function	Hand-operated mechanical disc brake
Standard tyres (AS tread)	l/min		255/75-15.3	340/80-18
Work hydraulics		Unit		
Work pump	–		Gear pump	Gear pump with LUDV
Max. flow rate (pump)	l/min		36.4 (standard) 42 (option)	103
Max. pressure	bar		220	260

Technical Data

Kinematics		Unit	1445	2706
Bucket capacity	m³		0.50 - 1.03	0.85 - 1.8
Total swing angle of tool carrier	°		148	132 (standard) 150 (option)
Lift cylinder raising/lowering	s		7.8 / 5.3 (standard) 5.7 / 4.3 (option)	6.6 / 4.3
Extend/retract push-out cylinder	s		6.6 / 3.8 (standard) 4.6 / 2.7 (option)	5.5 / 3.5
Tilt out/in tipping cylinder	s		3.9 / 3 (standard) 2.7 / 2 (option)	2.9 / 2.8
Capacities		Unit		
Fuel tank	l		33	105
Hydraulic oil tank	l		36	100
Hydraulic system (total)	l		60	130
Noise emissions**		Unit		
Measured value	dB(A)		99.5 (standard) 101.2 (option)	102
Guaranteed value	dB(A)		101 (standard) 102 (option)	104
Noise level at the operator's ear	dB(A)		84 (standard) 85 (option)	77
Vibrations***		Unit		
Vibration total value of the upper body extremity	–		< 2.5 m/s² (< 8.2 feet/s²)	
Highest effective value of weighted acceleration for the body	–		< 0.5 m/s² (< 1.64 feet/s²)**** < 1.28 m/s² (< 4.19 feet/s²)*****	

* Weight in standard components with full tank + standard bucket + 75 kg operator weight (ISO 6016).

** Information: The measurement occurs as per the requirements of the standard EN 1459 and the directive 2000/14/EC. Measuring station: Paved surface.

*** Uncertainties of measurement as specified 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

Battery (standard)		Unit	1445e
Battery technology	-		Lithium-ion battery
Battery voltage class	V		96
Guaranteed battery service life*	Years / cycles		5 / 2,000
Battery capacity	kWh		18
On-board charging output**	kW		3 (standard) 6 (option)
Charging time 230 V / 16 A Schuko 0 - 100%	h		8
Charging time 230 V / 16 A CEE (blue, 3-pole) 0 - 100%	h		7.5 (standard) 5 (option)
Charging time 400 V / 16 A CEE (red, three-phase current, 5-pole) 0 - 100%	h		7.5 (standard) 3.75 (option)
Charging time 400 V / 16 A (Type 2 plug Wallbox, IEC 62196) 0 - 100%	h		7.5 (standard) 3.75 (option)
Running time up to	h		2.5 hours without interim charging
Battery (option)		Unit	
Battery technology	-		Lithium-ion battery
Battery voltage class	V		96
Guaranteed battery service life*	Years / cycles		5 / 2,000
Battery capacity	kWh		28
On-board charging output**	kW		3 (standard) 6 (option)
Charging time 230 V / 16 A Schuko 0 - 100%	h		12
Charging time 230 V / 16 A CEE (blue, 3-pole) 0 - 100%	h		11.5 (standard) 8 (option)
Charging time 400 V / 16 A CEE (red, three-phase current, 5-pole) 0 - 100%	h		11.5 (standard) 5.75 (option)
Charging time 400 V / 16 A (Type 2 plug Wallbox, IEC 62196) 0 - 100%	h		11.5 (standard) 5.75 (option)
Running time up to	h		4 hours without interim charging
Electric motor		Unit	
Drive system output S2 60 min***	kW		23.2
Work hydraulics output S3 15%***	kW		25.2

* After this time it is guaranteed that the battery will exhibit a remaining capacity of at least 80%. The battery can still be used afterwards.

** Depedning on the respective power source (available sockets and charging cables)

*** acc. to EN 60034-1

Technical Data

Operating and power ratings		Unit	1445e
Max. payload (LSP 500 mm)	kg		1,450
Max. stacking height	mm		4,190
Payload at max. stacking height	kg		1,450
Payload at max. coverage	kg		725
Stacking height at max. payload	mm		4,301
Reach at max. payload	mm		1,100
Max. reach	mm		2,333
Turning radius via tyres	mm		2,695
Operating weight*	kg		3,050 - 3,250
Power transmission		Unit	
Max. speed	km/h		15 (standard) 20 (option) 25 (option)
Total oscillating angle on the rear axle	°		14
Differential lock	–		100% (option)
Service brake	–		Foot-activated hydraulic disc brake
Parking brake	–		Electrically operated with Hill-Hold function
Standard tyres (AS tread)	l/min		255/75-15.3
Work hydraulics		Unit	
Work pump	–		Gear pump
Max. flow rate (pump)	l/min		42
Max. pressure	bar		220
Kinematics		Unit	
Bucket capacity	m³		0.50 - 1.03
Total swing angle of tool carrier	°		148
Lift cylinder raising/lowering	s		6.4 / 6.5
Extend/retract push-out cylinder	s		5 / 5.5
Tilt out/in tipping cylinder	s		3.8 / 4.1
Capacities		Unit	
Hydraulic oil tank	l		36
Hydraulic system (total)	l		50
Noise emissions**		Unit	
Measured value	dB(A)		85.7
Guaranteed value	dB(A)		87
Noise level at the operator's ear	dB(A)		73
Vibrations***		Unit	
Vibration total value of the upper body extremity	–		< 2.5 m/s² (< 8.2 feet/s²)
Highest effective value of weighted acceleration for the body	–		< 0.5 m/s² (< 1.64 feet/s²)**** < 1.28 m/s² (< 4.19 feet/s²)*****

* Weight in standard components with full tank + standard bucket + 75 kg operator weight (ISO 6016).

** Uncertainties of measurement as specified 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

*** acc. to EN 60034-1

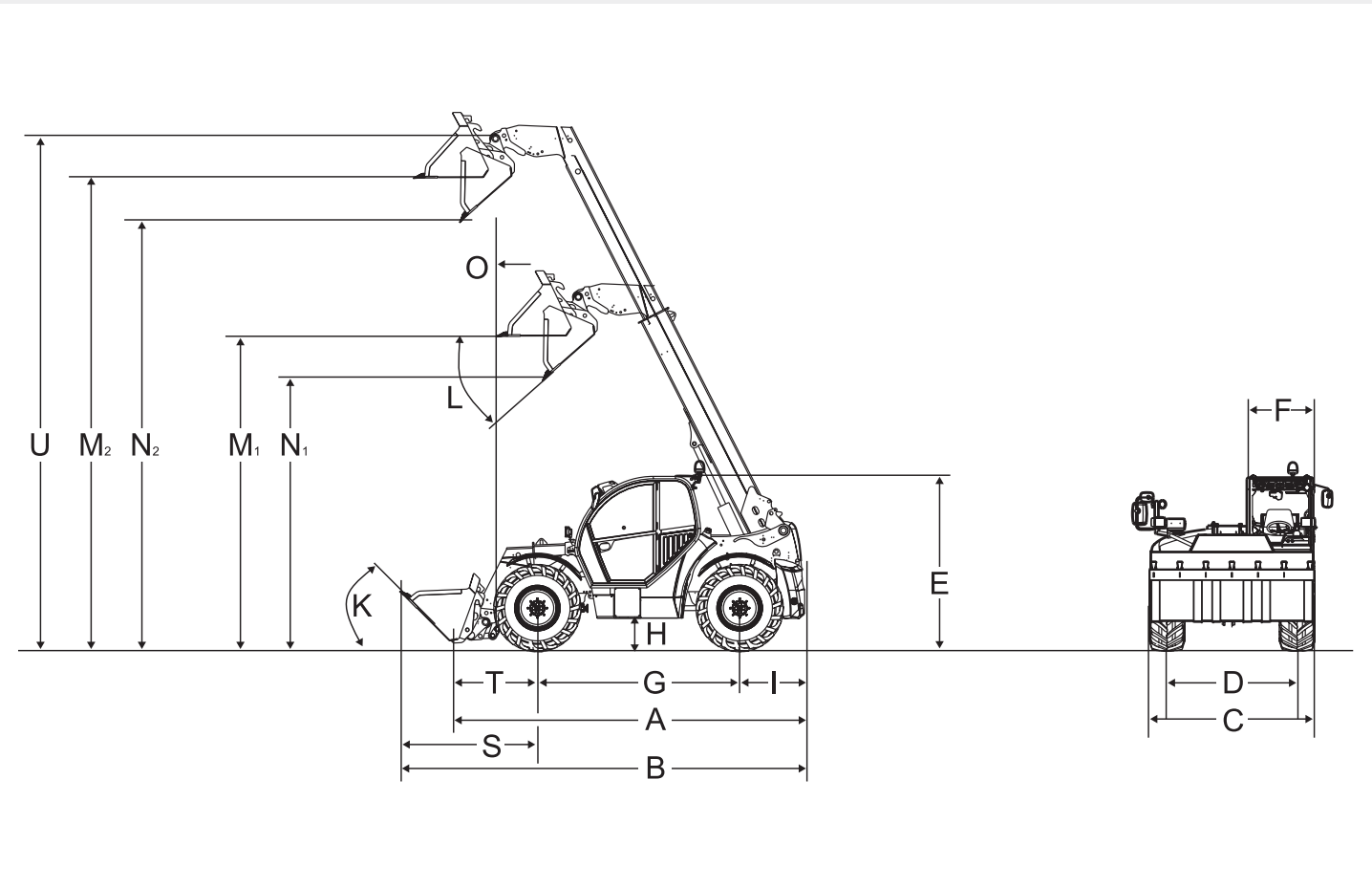
**** Information: The measurement occurs as per the requirements of the standard EN 1459 and the directive 2000/14/EC. Measuring station: Paved surface.

Dimensions

Dimensions		Unit	1445	1445e	2706
A	Total length	mm	3,092	3,092	4,400
B	Total length with bucket ¹	mm	4,215	4,215	5,000
C	Total width without bucket ²	mm	1,564	1,554	1,960
D	Track front/rear	mm	1,245	1,245	1,660
E	Total height ³	mm	1,995	1,995	1,980 (standard) 2,100 (option)
F	Cabin width	mm	702	704	825
G	Wheelbase, middle	mm	1,922	1922	2,650
H	Ground clearance ³ below axle and transmission, fording depth	mm	294	233	300
I	Distance from centre of rear wheel to the tail	mm	427	498	730
K	Tipping angle ¹	°	44	52	45 / 45
L	Dumping angle ¹	°	36	36	22 / 40
M	Load-over height ³ M1 retracted M2 extended	mm	2,949 4,163	2,949 4,163	3,730 5,600
N	Dumping height ³ N1 retracted N2 extended	mm	2,352 3,566	2,352 3,566	3,450 5,280
O	Dumping width extended	mm	476	476	680
S	Distance from centre front wheel to blade leading edge	mm	1,595	1,595	1,030
T	Distance from centre front wheel bearing to the quick coupler system seatings	mm	450	450	1,030
U	Bucket pivot point extended ³	mm	4,537	4,537	6,080
-	Turning circle outer edge tyres	mm	2,695	2,695	3,670
-	Turning radius bucket, outside edge	mm	3,550	3,550	4,500
-	Entry height ³ cabin floor	mm	420	420	360

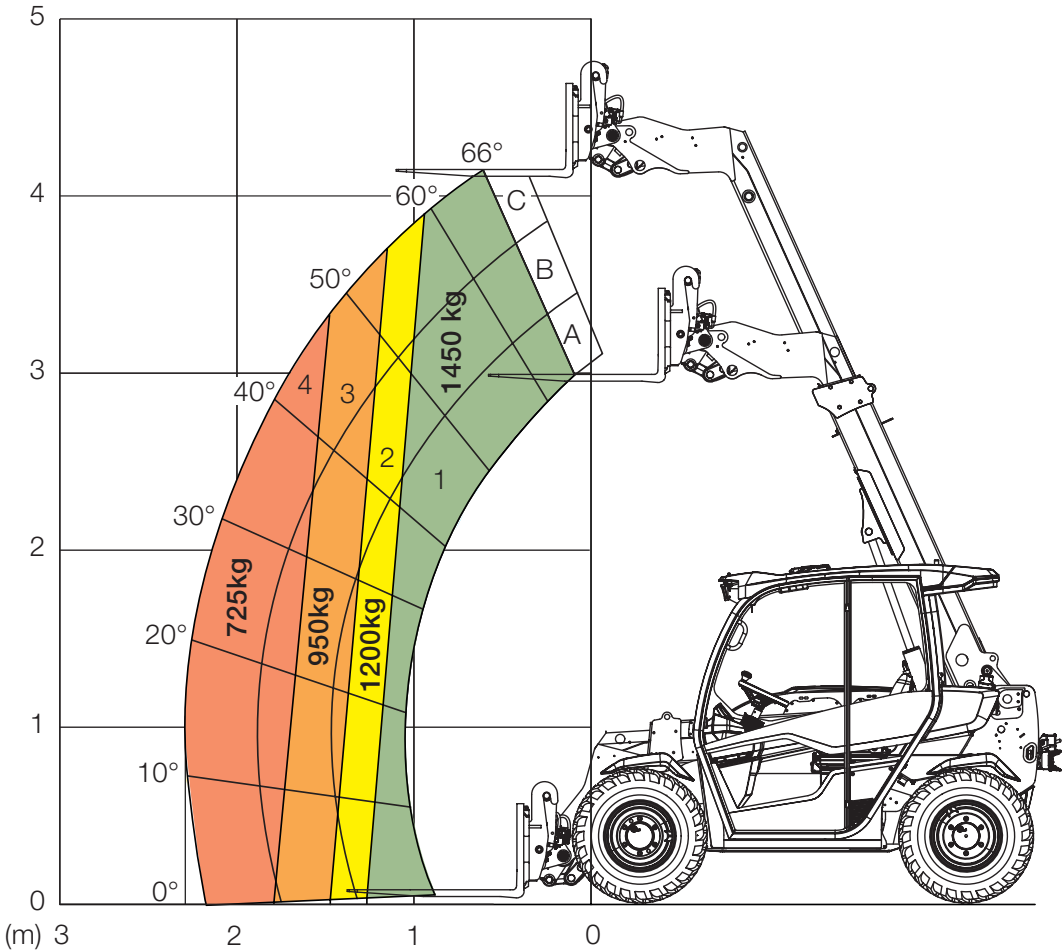
¹ with standard bucket
² dependent on tyres, with mirrors folded in
³ machine dimensions may vary depending on tyres

Dimensions

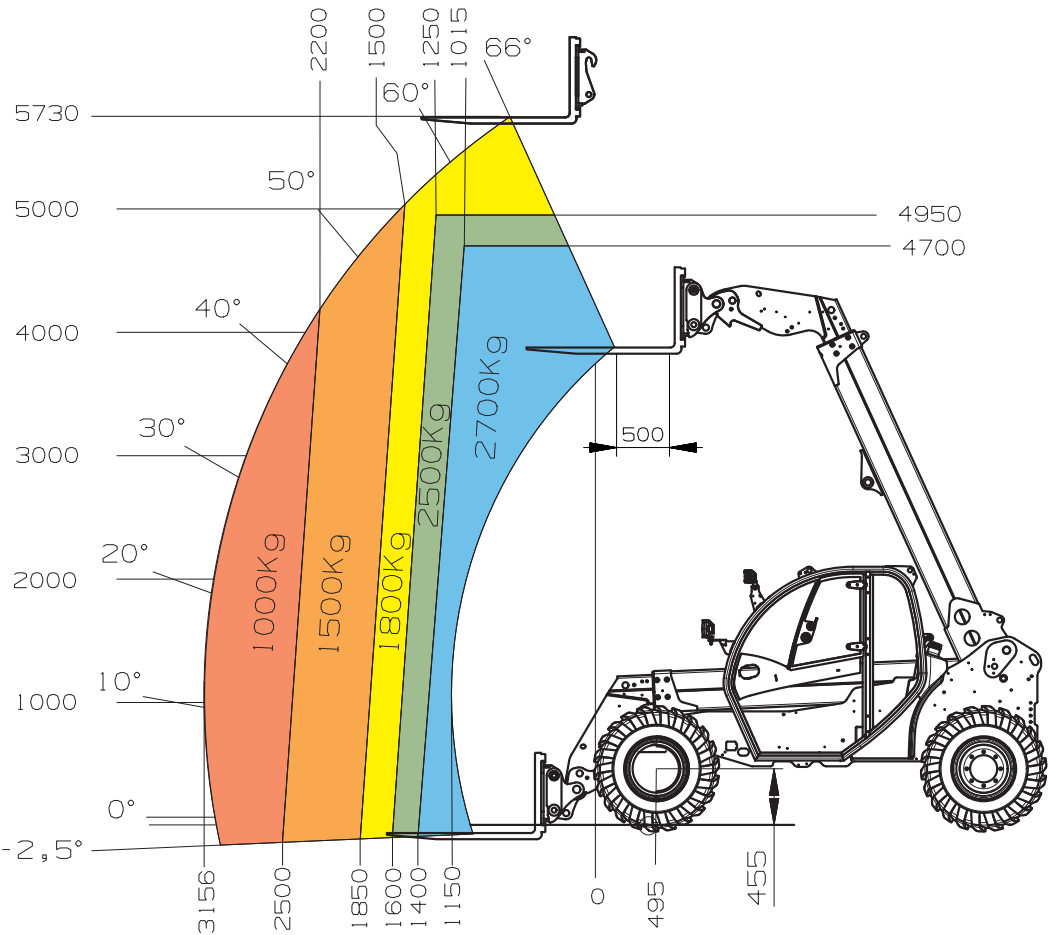


Load-bearing capacity diagrams

1445 / 1445e Load-bearing capacity diagram (with LSP 500 mm)



2706 Load-bearing capacity diagram (with LSP 500 mm)





Service and spare parts

Are you looking for appropriate spare parts or operating instructions for your Kramer machine? With Kramer maintenance and repair packages, there is a tailor-made spare part ready at hand for each machine. You will receive all of the required spare parts or operating instruction from our Kramer dealers. With our Kramer Dealer Locator, you can find your local dealer. Simply enter the sector, post code or residence.

You can find more information at:
www.kramer.de/service

Maintenance, diagnosis and repair

The certified technician at your distributor will ensure that your machine is in use again as quickly as possible. You can find more information about the repair and servicing of Kramer machines on our website.

 **MAINTENANCE**

Original Spare Parts

All spare parts that you can source from your Kramer dealer meet the strict requirements of our component manufacturers. Dimensional accuracy, performance, fit and availability can largely only be provided by the original part.

 **GENUINE PARTS**

Warranty and safety

Security 24 / Security 36 / Security 48 / Security 60: With the warranty extendible to 24, 36, 48 or even 60 months, our customers can increase their carefree period. They are protected against all eventualities by tailor-made insurance coverage. Get advice from your dealer.

 **INSURANCE**

Training sessions

The Kramer Academy is the modern training centre for the service technicians of the Kramer distributors. Here the mechanics learn everything they need to know to maintain Kramer machines and learn constantly about the operating principles of new technical systems.

 **ACADEMY**



Wheel loader

Bucket capacity: 0.35 - 1.80 m³



Telescopic wheel loaders

Bucket capacity: 0.65 - 1.45 m³



Telehandler

Payload: 1,450 - 5,500 kg

Service that can be seen

Focus on your daily activities – with our comprehensive services, we take care of the rest. We are there when you need us: capable, fast, and directly on site if necessary.



Repair & maintenance



Academy



Telematics



Insurance



Spare parts



Financial Solutions

Go to Kramer
dealer search:
SCAN HERE!



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