



kramerALLRAD®

Wheel loaders



**Ingenious and compact –
our wheel loaders.**

Great size – great performance.

Evolved from your needs.
Created for hard work.



Unsurpassed concept.
Technology and design fully geared to the future.

350
550
650

Lower operating costs with an optimum power-to-weight ratio and compact dimensions.

Enhanced versatility with the 3rd control circuit for hydraulic attachments and optional **powerflow** high-performance hydraulics.

Minimum fatigue with the spacious and ergonomically designed comfort cab.

Greater operational efficiency with the hydraulic quick-hitch system and loader unit with parallel linkage.

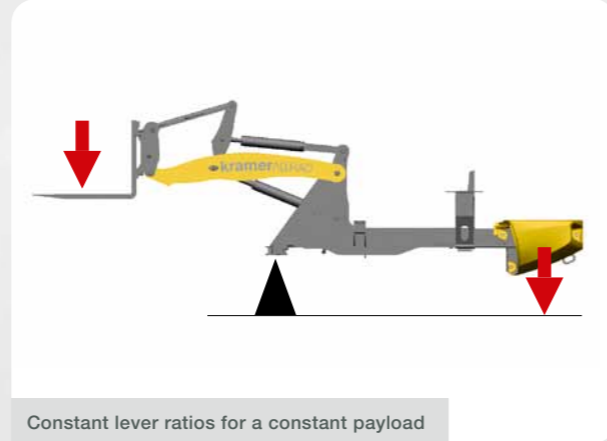
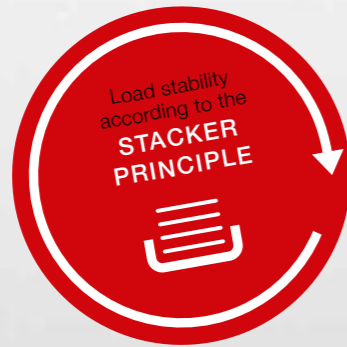
High degree of reliability due to easily accessible maintenance points and track-proven components.

Freedom and efficiency with the optional high speed feature and a wide range of tyre options.

More safety and time due to the one-piece chassis and all-wheel drive for more stability and manoeuvrability.



The heart of the loader.
The principle of success.

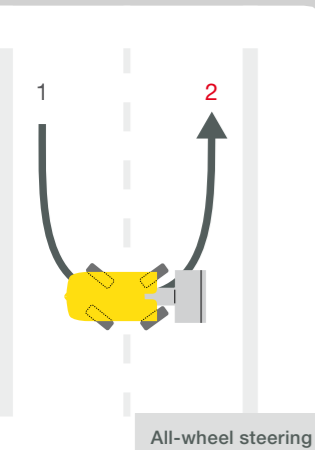


Constant lever ratios for a constant payload

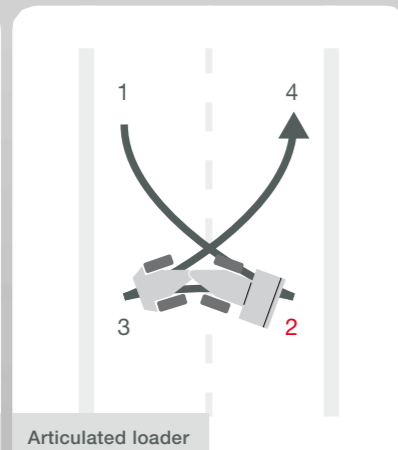


With their one-piece chassis the Kramer wheel loaders are impressively stable.

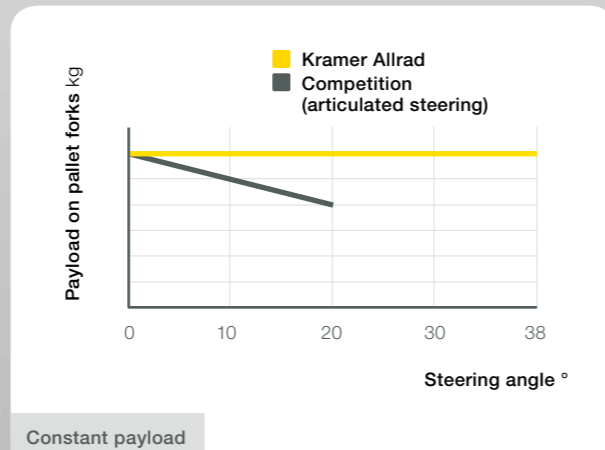
The all-wheel steering means that the centre of gravity is not displaced and there is no risk of tipping, even on tight bends, on uneven terrain and with a maximum payload. The wheel loaders are also as safe as houses on the road, where the 550 and 650 models really show what they can do with their front wheel steering.



All-wheel steering



Articulated loader



Constant payload

One-piece chassis and all-wheel steering:

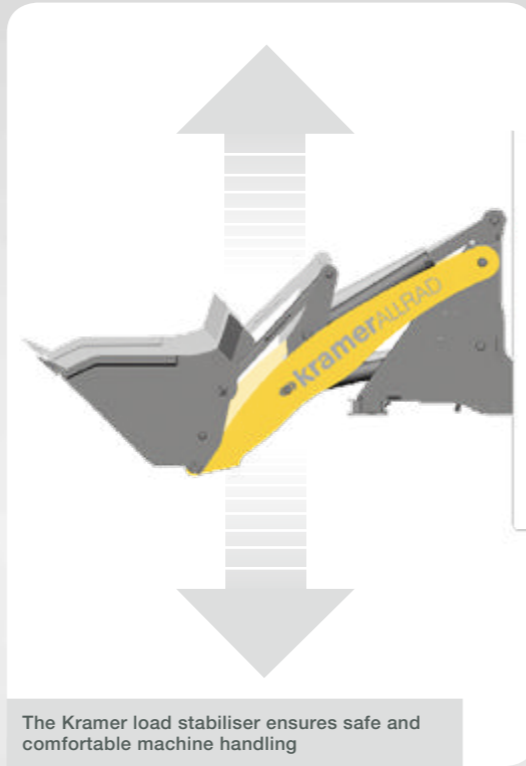
- Outstanding stability, as the centre of gravity is not changed by steering movements
- Excellent manoeuvrability with all-wheel steering
- Constantly high payload, even on bends
- No skid-steer wheels and low operating weight mean no ground damage
- Shorter driving and cycle times due to the 2 x 38° steering angle
- Customary ease of handling and road travel characteristics with optional front wheel steering

- 1 Safe material handling with maximum manoeuvrability
- 2 Manoeuvrability and outstanding stability with the Kramer concept
- 3 Safe handling with front wheel steering, also at high speeds
- 4 All-wheel steering ensures minimum space requirements and short working cycles



Created for routine.
Equipped for special jobs.

B550
B550
B550



The Kramer load stabiliser ensures safe and comfortable machine handling

Hydraulic quick-hitch system and parallel loader unit linkage:

- Attachments changed in a matter of seconds
- High load capacity with four large bolts located in a dirt-protected zone
- Safe and reliable bulk material handling with the optimised bucket geometry
- Safe and simple operation guaranteed with optimum view of attachments and working area



Simply drive up to the attachment, pick it up hydraulically without leaving the cab and lock and unlock it with a lever while maintaining full visual contact.



The parallel loader unit linkage keeps the load balanced perfectly both with bucket and pallet operation



- 1 Simple truck loading with assignment-based loader unit geometry
- 2 The lifting arm is designed so that its full length can be utilised and the hydraulic cylinder is optimally protected



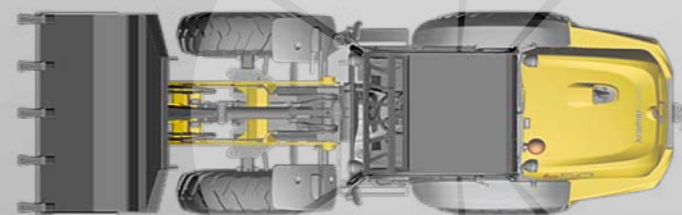
With the parallel loader unit linkage the lifting capacity and load are always fully under control. The high tilt in and tilt out angle ensures that material remains safely in the bucket even when it is full, and it is emptied easily and fully.

The models of the Kramer compact class can be equipped in a flash with a number of attachments for a wide range of jobs, making the wheel loader a fully efficient system.

Work in comfort.
Ergonomic control.



All-round visibility. The 360° panorama cab provides a constant view of the respective attachment and is designed for maximum safety in the working area around the machine.



Spacious cab with perfect all-round visibility:

- Excellent view of the attachment and working area
- Generous interior height and width
- Wide entrance and intuitively positioned handles
- Maximum ease of operation ensured by the multi-function joystick with integrated armrest
- Intuitive two-pedal system for maximum safety
- Fully integrated, powerful heating and ventilation system
- Ventilation windows
- Air conditioning system for working comfort under all conditions



- 1 Ventilation windows with adjustable opening angles for just the right amount of fresh air circulation
- 2 Wide door opening angle and steps designed for safe and convenient cab access
- 3 350 and 550 as canopy version for applications which are not exposed to extreme weather conditions
- 4 Generously dimensioned interior with ergonomically designed controls

The cab has now evolved to a fully-fledged cockpit, and comfort is naturally just as important as the best ergonomic design and functionality.

The Kramer Allrad compact wheel loader cabs are luxuriously spacious and with their interior design make sure that fatigue is minimised during everyday work. Ergonomically configured controls ensure that both professional and occasional drivers have the machine fully under control at all times.



Track-proven drive.
Safe transit.



Very versatile due to tractor approval

Efficient drive and low operating costs:

- Practical and efficient drive with a high thrust
- Easy to change direction with joystick
- Low noise level and lower consumption due to requirement-based engine design
- Traction on all ground ensured with a choice of tyres and the differential lock



Engine with pump unit

All models of the Kramer compact class have an engine which is geared to requirements as well as stageless power transmission due to state-of-the-art hydrostatic technology.

The dynamics of the Kramer 350

with its four wheel hub motors are unsurpassed. The centre of gravity is also lower for greater stability.



Wheel hub motor 350



Drive train 550/650

The Kramer 550 / 650

has a powerful axial piston high-pressure drive with a high thrust and stageless power transmission (hydrostatic). As a result it reaches a top speed of 30 kph with the high speed option.

With its tractor approval it can also show its strengths on the road while towing a load or a trailer.

350 550 650

Versatility comes naturally.
Equipped for all tasks.

- 1 Simple and safe connection of attachments
- 2 Mulcher with **powerflow** high-performance hydraulics
- 3 Rotary broom with efficient 3rd control circuit (standard feature)



powerflow 
powerflow high-performance hydraulics



The work hydraulics permits sensitive operation with minimum forces and a low noise level in the cab. The standard feature 3rd control circuit with continuous function guarantees efficient and convenient operation of hydraulically powered attachments. Suitably dimensioned cylinders, efficient flow ratios and coordinated outputs ensure fast work cycles. The optional **powerflow** enables high-performance actuation of hydraulic attachments.

Maximum versatility with 3rd control circuit and **powerflow**:

- Hydraulic quick-hitch system as standard feature
- Enhanced flexibility with efficient 3rd control circuit
- Up to 24 kW additionally available for powerful actuation of hydraulic attachments requiring extra capacity with **powerflow**
- Large-dimensioned hydraulic cooler for continuous power operation

System carrier concept solution

	350	550	650
POWERFUL HYDRAULICS			
3rd control circuit* l/min / bar	20 / 180	52 / 190	52 / 190
Additional control circuit l/min / bar	40 / 160	-	-
powerflow high-performance hydraulics* l/min / bar	55 / 160	80 / 180	80 / 180
EQUIPMENT OPTIONS			
Front socket	●	●	●
Non-pressurised reflux	●	●	●
Manual throttle	●	●	●
Low-speed control	●	●	●

* optimum operating point

Born for reliability.
In operation for generations.



**SERVICE-ORIENTED
COMPONENT ARRANGEMENT**

Air filter

Hydraulic oil level

Engine oil level

Maintenance and service:

- Wide engine bonnet opening angle ensures easier maintenance
- Easy access for regular servicing and inspection work
- Easy-fill diesel tank and fuel prefilter as standard feature
- Low-maintenance, easy-clean disc brake system
- Customer-oriented service and fast spare parts availability



1



2



3

- 1 Maintenance indicator for monitoring service intervals
- 2 Ergonomic component configuration for regular inspection work
- 3 Easy-access lubrication points ensure convenient machine servicing

With the longitudinal engine installation, Kramer shows that it is possible to combine compact dimensions with simple maintenance access.

For this reason all components requiring regular checks (e. g. air filter, hydraulic fluid level etc.) are installed under the bonnet for exemplary access. All necessary inspection, maintenance and service work can be easily carried out.

In summary not only the reliability of the Kramer compact class wheel loaders is impressive - they are also pioneering when it comes to the costs of ownership.

Committed to efficiency.
Superior economy.



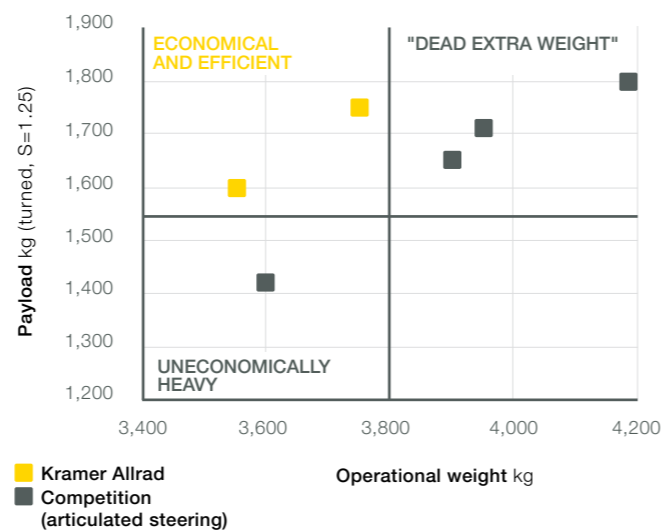
- 1 Max. manoeuvrability with a full payload
- 2 Low passage height and low operating weight
- 3 Low height for versatile applications
- 4 Simple transport with compact dimensions



Sufficiently lightweight for low-cost transport, small enough for outstanding manoeuvrability. The slim compact class Kramer wheel loaders are agile movers and dynamic performers. Their tight tail swing provides even more freedom of movement.

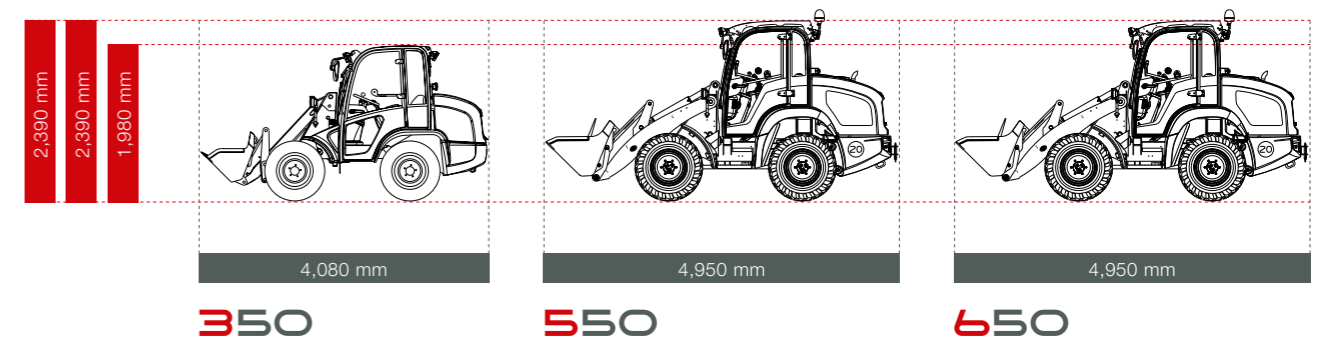
With its optimised power-to-weight ratio, low transport weight and constantly high payload, the efficiency calculation of this model range definitely benefits the user. It goes without saying that this also true of profitability.

Economical weight ratio



Perfect BMI: Excellent power-to-weight ratio, compact dimensions, low height

Body mass index

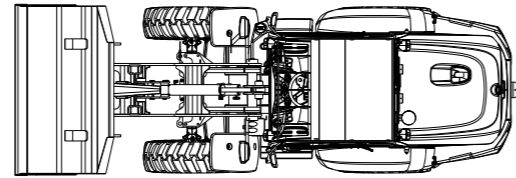


BMI DATA

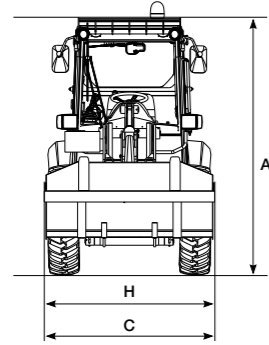
	350	550	650
Payload S = 1.25 kg	750	1,600	1,750
Operational weight kg	1,670 / 1,720*	3,450 / 3,600*	3,800
Bucket capacity m³	0.35 - 0.55	0.55 - 1.1	0.65 - 1.1

* CAB

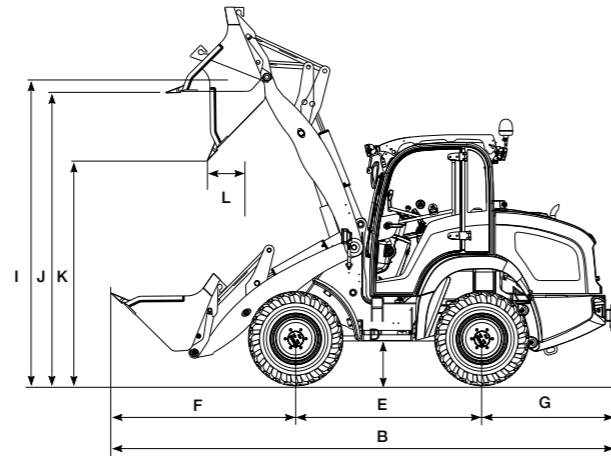
Technical Data.



Wheel loader with standard bucket and standard tyres
(Top view)



Wheel loader with standard bucket and standard tyres
(front view)



Wheel loader with standard bucket and standard tyres
(side view)

	350	550	650
A Height mm	1,990	2,380	2,390
B Length mm	4,080	4,950	4,950
C Width mm	1,200	1,590	1,595
D Ground clearance mm	230	270	280
E Wheelbase mm	1,525	1,850	1,850
F Centre of front axle to tip mm	1,360	1,780	1,780
G Centre of rear axle to end of machine mm	1,195	1,320	1,320
H Bucket width mm	1,250	1,650	1,650
I Bucket pivot mm	2,800	3,040	3,050
J Load-over height mm	2,690	2,890	2,900
K Dump height mm	2,260	2,320	2,330
L Dump width mm	165	300	300
Stacking height mm	2,680	2,820	2,830
Turning radius, tyres mm	1,950	2,700	2,700
Turning radius, bucket mm	2,700	3,550	3,550
Turning radius, pallet forks mm	2,950	3,820	3,820

DIMENSIONS

A Height mm
B Length mm
C Width mm
D Ground clearance mm
E Wheelbase mm
F Centre of front axle to tip mm
G Centre of rear axle to end of machine mm
H Bucket width mm
I Bucket pivot mm
J Load-over height mm
K Dump height mm
L Dump width mm
Stacking height mm
Turning radius, tyres mm
Turning radius, bucket mm
Turning radius, pallet forks mm

We reserve the right to make modifications without notice. No responsibility is taken for the accuracy of this information.
The provisions of the contractual agreement shall be considered definitive.

More than the essential.
With an eye for detail.

The Kramer Allrad compact wheel loaders actually already speak for themselves. Their benefits are also enhanced by a great eye for detail.

These details are sometimes only visible when you take a second look – but are then even more appreciated. Welcome to the detailed world of Kramer Allrad.



Offset steps for safe cab access

Large windscreen wiper at the front
mounted on the left for improved view

Practical location of maintenance
auxiliaries directly at the entrance

350 550 650

OPERATIONAL DATA

Bucket capacity m ³	0.35–0.55	0.55–1.1	0.65–1.1
Weight kg	1,670/1,720*	3,450/3,600*	3,800
Quick-hitch system	Hydraulic	Hydraulic	Hydraulic

ENGINE

Manufacturer	Yanmar	Yanmar	Yanmar
Type/Model	3TNV88/3TNV84T	4TNV88	4TNV88
Output kW/HP (option)	23/31 (27/37)	35/48	35/48
Max. torque Nm at rpm	107 at 1,560 124 at 1,560 (option)	136.3 at 1,680	136.3 at 1,680
Engine displacement cm ³	1,642 / 1,496 (option)	2,190	2,190
Emission cm ³	Tested and certified in compliance with 97/68/EC * 2004/26/EC		

POWER TRANSMISSION

Drive	Continuously variable hydrostatic axial piston gearbox		
Speed kph	0–20	0–20, 0–30	0–20, 0–30
Axles	Cross member made of cast steel with wheel hub motors	Planetary steering axle	Planetary steering axle
Total oscillation angle °	±7	±8	±8
Differential lock	Differential gear mechanism	100% (option)	100%
Service brake	Hydrostatic	Hydraulic disc brake	Hydraulic disc brake
Parking brake	Electro-hydraulically actuated spring-operated multidisc	Mechanical disc brake	Mechanical disc brake
Standard tyres	28x9.00-15	10.5-18	12.0-18

STEERING AND WORK HYDRAULICS

Mode of operation	Hydrostatic all-wheel steering	Hydrostatic all-wheel steering with front axle steering emergency feature (option)	
Steering pump	Hydraulic pump via priority valve		
Steering rams	Dual-action, with automatic synchronisation in end position		
Max. steering angle °	2 x 38°	2 x 38°	2 x 38°
Work pump	Gear pump		
Flow rate l/min	20, 40 (option), 60 (option)	56, 90 (option)	56, 90 (option)
Pressure bar	240	235	235

KINEMATICS

Model	Z-kinematics with optimised parallel motion	Parallel kinematics	Parallel kinematics
Lifting capacity / tear-out force kN	12.9/13.1	32.5/28	32.5/28
Raising / lowering lift ram sec	6.0/4.3	4.8/3.2	4.8/3.2
Tilting in / tilting out sec	2.4/1.5	2.1/2.0	2.1/2.0
Tilt in / tilt out angle °	40/45	45/42	45/42
Tipping load (standard bucket) kg	1,250	1,980	2,340
Payload S = 1.25 (pallets) kg	750	1,600	1,750
Payload S = 1.67 (pallets) kg	560	1,200	1,310
Payload in transport position S = 1.25 (pallets) kg	970	1,850	2,000
Scraping depth mm	40	65	55

CAPACITIES

Fuel tank / hydraulic fluid tank l	30/40	60/58	60/58
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NOISE EMISSIONS

Compliant with 2000/14/EC

ELECTRIC SYSTEM

Operating voltage V	12	12	12
Battery / alternator Ah/A	72/55	74/55	74/55
Starter kW	2.3	2.3	2.3

* CAB

STANDARD EQUIPMENT

Canopy / cab

350: Generously dimensioned canopy with rear screen for weather protection, ROPS and FOPS certification. **Driver's seat.** Mechanically sprung driver's seat (ISO 7096) with automatic seat belt; weight, backrest and horizontal adjustment.

550: Generously dimensioned canopy with rear screen for weather protection, ROPS and FOPS certification. **Driver's seat.** Mechanically sprung driver's seat (ISO 7096) with automatic seat belt; weight, backrest and horizontal adjustment.

650: Soundproofed, vibration-insulated, 4-point suspension **cab** with large, curved, tinted glazing with ROPS and FOPS certification. Large number of storage options. **Driver's seat.** Mechanically sprung comfort seat with automatic seat belt; weight, backrest and horizontal adjustment. **Heating, ventilation.** Easy-to-operate, powerful three-stage heating and ventilation. **Sun visor, windscreen wipers.** Front and rear. **Rear-view mirror.** Large outside mirrors on both sides, can be folded to notched positions. **Floor mat.** The special floor mat is flush with the frame. **Cab lights. Side window** can be opened and locked either in the fully open position or for ventilation / communication. **Door.** Fully-glazed, can be locked in 180° open position. **Glazing.** Large, tinted windows.

Joystick console

Ergonomic driver's control console. Mechanical servo-controlled joystick for raising/lowering the loader unit and tilting in/out, with a toggle switch for selecting the driving direction. Mechanical servo-controlled 3rd control circuit for locking/unlocking the quick-hitch facility and the operation of hydraulic implements, including lock position for continuous operation

Instrument panel

Neatly designed instrument panel with illuminated controls and ergonomically arranged tip switches

Power supply

12 V socket

Lights

Rear light, brake light, indicators, two front headlights with main beam and side light

Bonnet

Opens wide for optimum maintenance access

Engine air supply

Through cyclone air filter with integrated safety cartridge

Key system

One-key system for doors, bonnet and tank

OPTIONS

Cab

Sound-proofed, vibration insulated, four-point suspension **cab** with large, curved, tinted glazing with ROPS and FOPS certification. Large number of storage options. **Driver's seat.** Mechanically sprung comfort seat with automatic seat belt; weight, backrest and horizontal adjustment. **Heating, ventilation.** Easy-to-operate, three-stage heating and ventilation. **Sun visor. Windscreen wiper.** Front and rear. **Rear view mirror.** Large outside mirrors on both sides, can be folded to notched positions. **Cab lights. Side window** can be opened and locked either in fully open position or for ventilation / communication. **Door.** Fully glazed, can be locked in 180° open position. **Glazing.** Large, tinted windows.

550: Including floor mat. The special floor mat is flush with the frame.

Cab options

Rear windscreen heating, comfort driver's seat, air-sprung driver's seat, rotating beacon, two front working lights, document box

FOPS II protective grille, radio system, 1 additional working light at rear, air-sprung driver's seat, rotating beacon, 2 front working lights, air conditioning system, document box

Performance options

Floating position, low-speed control and manual throttle, non-pressurised reflux with overflow oil line, load stabiliser, trailer towing system, electric socket for front and rear attachments, high-performance engine (350), hydraulic auxiliary control unit, **powerflow** high-performance hydraulics

Preheating

Fuel, engine and hydraulic fluid

Tyres

Lawn tyres, farm tractor profile, tyres for industrial applications, puncture protection

Wide-base tyres (direction-independent), farm tractor profile, tyres for municipal applications and industrial applications, puncture protection, foam-filled tyres

Safety

Hose burst valves for lift and tilt rams, shielding of rotating engine components, tool kit, engine immobiliser, reversing warning system, protection against aggressive media, fire extinguisher, warning stripes compliant with DIN 30710, rotating beacon. **350:** Underbody protection

Drive

– High speed 0–30 kph

Customised paint options

Yes Yes

Biodegradable oil

PANOLIN HLP Synth46 PANOLIN HLP Synth46

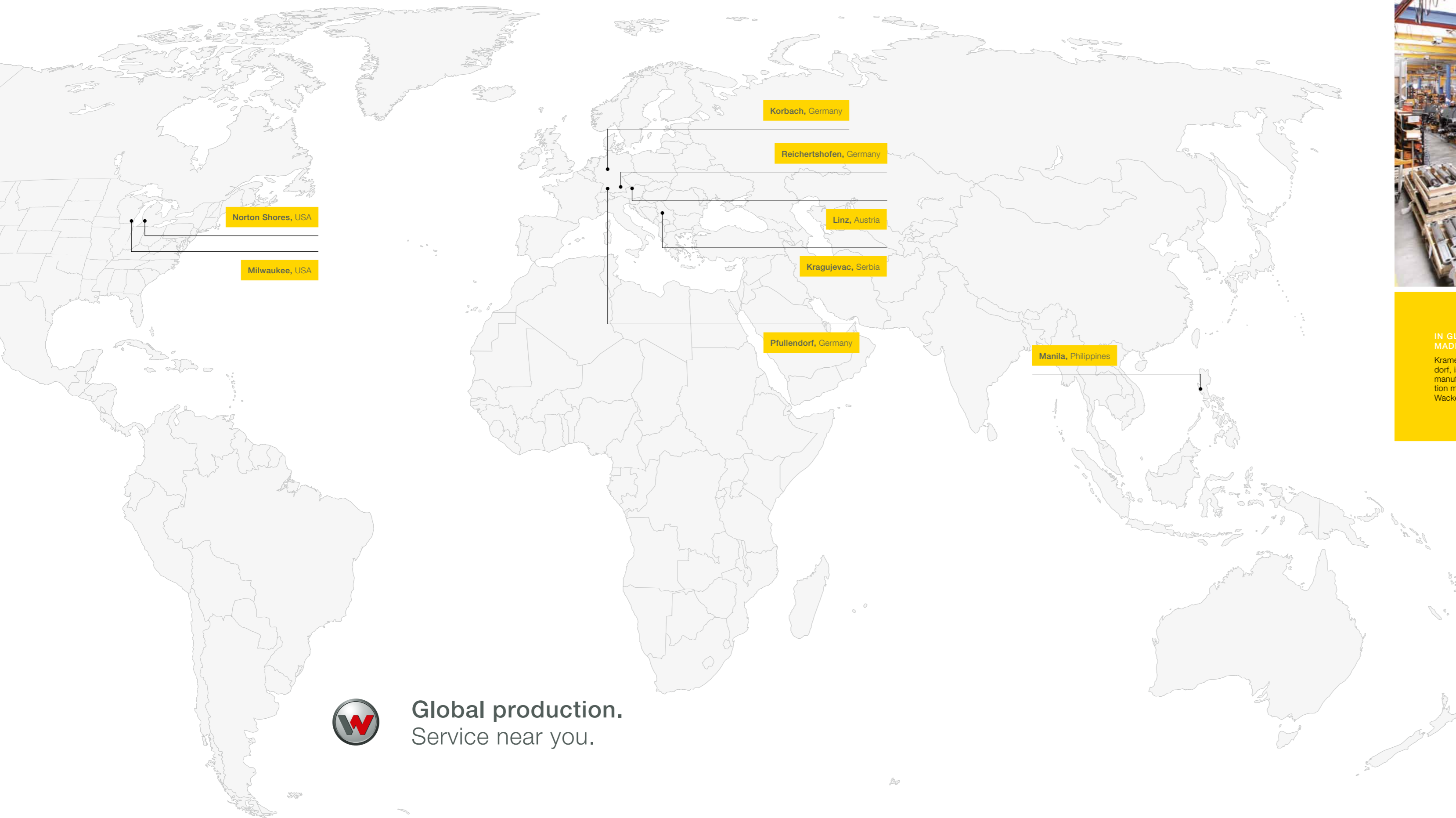
Extended warranty

Yes Yes

ATTACHMENTS

Attachments

Pallet forks, standard bucket, grab bucket, lightweight materials bucket, super-lightweight materials bucket, high tilt bucket, bulk materials bucket, side-swing bucket, snow blade, road sweeper, front ripper. Additional attachments available upon request.



Norton Shores, USA

Milwaukee, USA

Korbach, Germany

Reichertshofen, Germany

Linz, Austria

Kragujevac, Serbia

Pfullendorf, Germany

Manila, Philippines



Global production.
Service near you.



**IN GLOBAL DEMAND –
MADE IN PFULLENDORF.**
Kramer-Werke, based in Pfullendorf, is an international, pioneering manufacturer of compact construction machines and a member of the Wacker Neuson Group.



**PRODUCTION FACILITIES OF
THE WACKER NEUSON GROUP**

- 1 Korbach, Germany
- 2 Linz, Austria
- 3 Milwaukee, USA
- 4 Manila, Philippines
- 5 Norton Shores, USA
- 6 Pfullendorf, Germany
- 7 Reichertshofen, Germany
- 8 Kragujevac, Serbia

Machine models.

	MAX. ENGINE OUTPUT	BUCKET CAPACITY	PAYLOAD S = 1.25	DEAD WEIGHT	TURNING RADIUS (tyres)	MAX. SPEED	MAX. LOAD-OVER HEIGHT
MINI-LOADERS							
350 Canopy	27 kW / 37 HP	0.35–0.55 m ³	750 kg	1,670 kg	1,950 mm	0–20 kph	2,680 mm
350 CAB	27 kW / 37 HP	0.35–0.55 m ³	750 kg	1,720 kg	1,950 mm	0–20 kph	2,680 mm
280 Canopy	28 kW / 40 HP	0.65–1.1 m ³	1,600 kg	3,220 kg	2,430 mm	0–20 kph	2,820 mm
280 CAB	28 kW / 40 HP	0.65–1.1 m ³	1,600 kg	3,300 kg	2,430 mm	0–20 kph	2,820 mm
550 Canopy	35 kW / 48 HP	0.55–1.1 m ³	1,600 kg	3,450 kg	2,700 mm	0–30 kph	2,890 mm
550 CAB	35 kW / 48 HP	0.55–1.1 m ³	1,600 kg	3,600 kg	2,700 mm	0–30 kph	2,890 mm
650	35 kW / 48 HP	0.65–1.1 m ³	1,750 kg	3,800 kg	2,700 mm	0–30 kph	2,900 mm
WHEEL LOADERS							
750	45 kW / 61 HP	0.75–1.15 m ³	1,900 kg	4,200 kg	2,550 mm	0–30 kph	2,915 mm
850	45 kW / 61 HP	0.85–1.3 m ³	2,000 kg	4,500 kg	2,550 mm	0–30 kph	3,100 mm
950	55 kW / 75 HP	0.95–1.6 m ³	2,100 kg	4,700 kg	2,780 mm	0–30 kph	3,120 mm
1150	55 kW / 75 HP	1.15–1.8 m ³	2,900 kg	5,900 kg	2,850 mm	0–30 kph	3,235 mm
380	45 kW / 61 HP	0.75–1.15 m ³	2,000 kg	4,300 kg	2,900 mm	0–35 kph	2,915 mm
480	55 kW / 75 HP	0.85–1.3 m ³	2,150 kg	4,900 kg	2,900 mm	0–40 kph	3,100 mm
580	55 kW / 75 HP	0.95–1.5 m ³	2,300 kg	4,920 kg	2,900 mm	0–40 kph	3,050 mm
680	55 kW / 75 HP	1.05–1.6 m ³	2,500 kg	5,650 kg	2,950 mm	0–40 kph	3,050 mm
780	55 kW / 75 HP	1.15–1.8 m ³	2,900 kg	6,100 kg	2,950 mm	0–35 kph	3,200 mm
880	88 kW / 120 HP	1.5–2.5 m ³	3,500 kg	8,400 kg	3,450 mm	0–35 kph	3,530 mm
TELE WHEEL LOADERS							
750T	45 kW / 61 HP	0.75–1.15 m ³	1,730 kg	5,100 kg	2,550 mm	0–30 kph	4,510 mm
680T	55 kW / 75 HP	0.95–1.5 m ³	2,300 kg	5,950 kg	3,110 mm	0–35 kph	4,450 mm
COMPACT TELEHANDLERS							
1245	23 kW / 31 HP	0.4–1.03 m ³	1,200 kg	2,530 kg	2,607 mm	0–20 kph	4,130 mm
2506	50 kW / 68 HP	0.85–1.8 m ³	2,500 kg	4,730 kg	3,670 mm	0–30 kph	5,600 mm
TELEHANDLERS							
3307	88 kW / 120 HP	1.2–2.5 m ³	3,300 kg	7,200 kg	3,600 mm	0–40 kph	7,050 mm
4507	88 kW / 120 HP	1.2–3.0 m ³	4,400 kg	8,100 kg	3,600 mm	0–40 kph	7,050 mm
4009	88 kW / 120 HP	1.2–3.0 m ³	4,000 kg	8,600 kg	3,650 mm	0–40 kph	8,825 mm



Our wheel of values:
We centre our operations on the success of our customers.



Our family business is a publicly-traded medium-sized company which is proud of its solid and sound values which are effectively combined with the strength and competence of an organisation with global operations. Our workforce is made up of people who stand behind our principles and bring them to life every day with their ideas and creativity.

We believe in quality, innovation, an outstanding performance and character - and the long-term success of our customers, which is ultimately the driving force behind our work.

www.kramer.de

