



kramerALLRAD



When it matters ...

Kramer loaders for more efficiency in municipalities.

Equipped for every task in municipalities. The multi-functional Kramer loaders.

Kramer loaders are real performers for municipalities. You can recognise this 365 days a year. No matter what the weather. No matter what the job. A Kramer is best equipped for everything. This makes it the ideal machine for municipal use. No matter whether it is tree cutting, mowing public lawns or street cleaning in the summer – as well as snow removal and spreading and loading salt in the winter. When it matters ... That is when municipalities, building yards or authorities can best rely on Kramer's many talents.



One machine for multiple tasks. Everything you need for every application.

Every municipality or administration has its own work focuses. That's why for every job and every application in the municipality, there is an ideal Kramer machine and the perfect attachment. There are more than enough possibilities. You only have to take advantage of them. Flexibility in use and low operating costs are additional advantages of our one machine concept.

Front attachments

- Standard bucket
- Stacker
- Light goods bucket
- Super light goods bucket
- Power grab bucket
- Side swing bucket
- High tip bucket
- Material slide
- Branch and hedge cutters
- Rotary mower
- Front-end mulcher
- Stabiliser mulcher
- Sweeper
- High-pressure spray attachment
- Front-mounted ripper
- Earth auger
- Trencher
- Asphalt milling disc
- Concrete mixing plant
- Snow plough
- Snow blower
- Work platform
- and many more

Rear attachments

- Trailer
 - Overrun braking
 - Compressed air braking
 - Ball joint or tow hitch
 - Tipper hydraulics
- Salt spreader
 - Electric
 - Hydraulic



Practical working platform.

This is how you work safely at the highest level in the municipality.

Kramer loaders are completely in their element with the many different jobs found in building yards and municipalities. Thanks to the working platform, you can complete work at great heights without any problems. No matter whether it's replacing light bulbs in streetlights, hanging and taking down Christmas decorations or repair work on building façades. With a Kramer and the appropriate working platform, your municipality will always be state of the art. Today and tomorrow.



WORKING PLATFORM TECHNICAL DATA

Platform width/depth	1,600 / 1,000 mm
Max. payload	300 kg (250 kg*)
Max. persons	2
Weight	280 kg

MAX. WORKING HEIGHT

TYPE	MAX. WORKING HEIGHT
380/750	5,665 mm
480/580/850	5,850 mm
680/950	5,870 mm
780/1150	6,050 mm
750T	7,260 mm
680T	7,290 mm
880	6,380 mm

* only for 750T

* The regulations and laws of the relevant countries and regions must be met.

Municipal orange and warning stripes. Ensuring your machine is always highly visible when in use.

Even when showing your colours is sometimes tricky, with the Kramer loaders in municipal orange RAL 2011, the machines will always be easy to see when working in public areas. Additional visibility is offered by red/white warning stripes, which also ensure additional safety in traffic in the dark.



Convincing arguments for a Kramer loader:

- Warning stripes according to DIN 30710
- Fulfils the rules and regulations according to §52, para. 4.1, StVZO Road Traffic Licensing Regulations
- Optimal for salting and winter services
- Increased safety for the operator and machine when driving on roads, especially at night



Optimal tyres. That makes a Kramer ready for every municipal terrain.

What has applied in motorsport for years now also applies in the municipal field. The correct selection of tyres has long since become a central success factor. The tyre should ideally be adapted to the area of application, for which a variety of profiles, tyre sizes and types of design are available. The right tyres have a direct effect on the machine's handling and agility and save time.

Pure variety, pure performance:
the variety of tyres.



Multi-purpose profile

- Radial tyres, direction-independent
- Smooth running on the road
- Good traction
- Particularly well-suited in sand and gravel
- Good resistance



Snow chains make a Kramer a real winter warrior:

- Approval according to Ö-Norm 5119 and TÜV
- Reliable fastening system for the most extreme conditions
- Easy tension through lateral chain and tightening lever
- The high number of diamond structure elements ensures a continuous grip



Municipal profile

- Radial tyres, direction-independent
- For uses on and off of the road
- Noise-optimised
- High running performance
- Very good winter serviceability



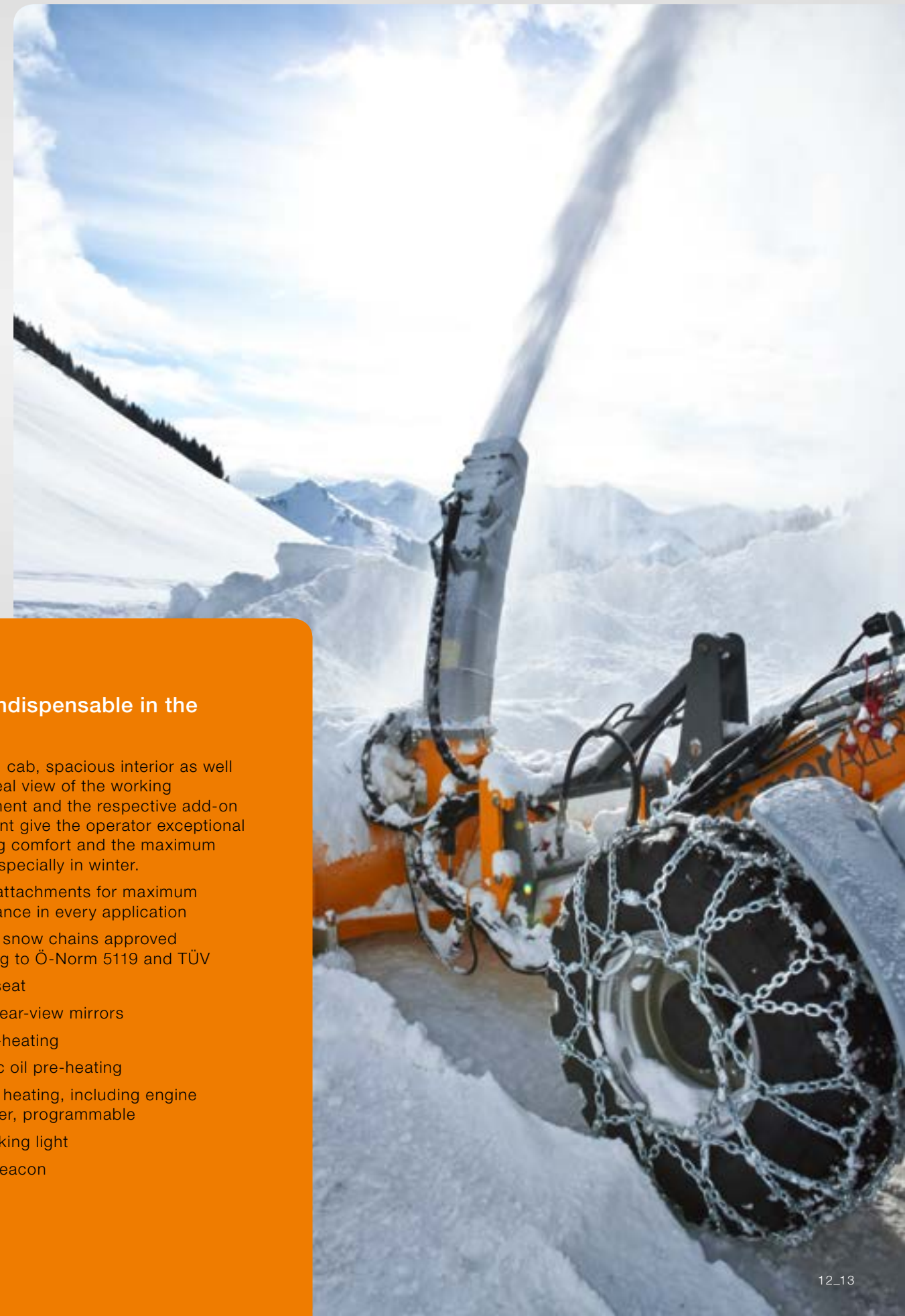
Industrial profile

- Radial tyres with steel belt, direction-independent
- Good traction when working on loose ground
- Good self-cleaning
- Very good lateral stability
- Very high running performance, especially when used on hard and aggressive substrates

Other profiles available on request.

Optimised for winter service. Snow, salt and poor weather leave a Kramer completely cold.

Whether working as a snow plough, salt spreader or material pusher – Kramer machines also offer a variety of solutions for your municipal winter work. Thanks to the all-wheel steering, high manoeuvrability in the smallest spaces is guaranteed even in winter. And perhaps the best thing about Kramer loaders is the ex-works corrosion protection, which increases the service life of the machine and guarantees a high resale value. Kramer loaders do not have a secret nickname for nothing: they're also known as winter warriors!



Simply indispensable in the winter:

- A heated cab, spacious interior as well as an ideal view of the working environment and the respective add-on equipment give the operator exceptional operating comfort and the maximum safety, especially in winter.
- Special attachments for maximum performance in every application
- Optional snow chains approved according to Ö-Norm 5119 and TÜV
- Heated seat
- Heated rear-view mirrors
- Fuel pre-heating
- Hydraulic oil pre-heating
- Auxiliary heating, including engine pre-heater, programmable
- LED working light
- Rotary beacon

Special corrosion protection. This guarantees high value stability for many years.

If you invest in a new municipal machine, you don't want to be thinking about corrosion, just working all year round. Because of this, Kramer offers all loaders with a special double corrosion protection against aggressive materials, such as salt. The first layer serves as temporary corrosion protection. The second layer is chemically resistant and therefore specially developed for use in aggressive media. The insulator sleeve remains elastic even after drying out completely, is not prone to tears and therefore prevents infiltration with water. You can see that a Kramer loader offers high value stability as standard.



Ex-works corrosion protection

Treated components

- Screws in the access areas
- All electrical plug connections, ground contacts and crimps
- Electrical connecting parts of the fuel tank transmitter

Seams of the flange surfaces

- With the flange surfaces (2), the seam edges (1) are treated after assembly with a protective coating



Does not rust, even when it is not used continuously:

- Ex-works double corrosion protection
- Specially designed for use in aggressive materials
- Transparent coating guarantees colour fastness over many years
- Additional heat-resistant engine corrosion protection



Powerflow performance hydraulics. Optimal power application knows no limits.

The operating hydraulics allow for precise work with minimal operating forces and low noise levels in the cab. In addition, the standard third control circuit with continuous function ensures efficient and convenient operation of hydraulically driven attachments. Matching dimensioned cylinders, efficient flow conditions and adapted discharge capacities enable quick work cycles.

The **powerflow** option allows front attachments to be driven with a separate oil engine such as snowblowers, mulchers or asphalt milling machines. The additional volume flow required for this is conveyed directly to the attachments and covers the energy requirement. With powerflow, nothing stands in the way of using powerful attachments.

powerflow 



Variety built in:

- 1 The **powerflow** performance hydraulics for the powerful drive unit of attachments with increased energy requirements. Including double-acting additional hydraulic control circuit for approach manoeuvres. (optional)
- 2 The large dimensioned hydraulic oil cooler is designed for high performance in long-time application.

Volume flows:

- 60 l/min volume flow front (350)
- 75 l/min volume flow front (1245)
- 80 l/min volume flow front (550, 650)
- 115 l/min volume flow front (380, 480, 580)
- 120 l/min volume flow front (680, 680T, 780)
- 140 l/min volume flow front (880)
- 150 l/min volume flow front (4407, 5507, 5509)



Hydraulic quick coupler system (standard)

Improved flexibility with efficient third control circuit (standard)

Trailer coupling with tractor homologation.

With this, Kramer loaders become powerful towing vehicles.

The height adjustable trailer coupling turns the loader into a perfect towing vehicle. Its tractor homologation means that it can be driven on public roads. The advantages are easily summed up: Kramer loaders offer up to 14 tonnes of trailer load*, which means that attachments, machines and materials can be transported together, thus saving costs. This means the trailer coupling pays for itself quickly.



Fold-down forklift arms allow driving on public roads. In this transport position, the permitted dimension of 3,500 mm from the centre of the steering wheel to the leading edge of the vehicle is kept.

The height adjustable trailer coupling makes Kramer loaders flexible and powerful machines in municipalities.

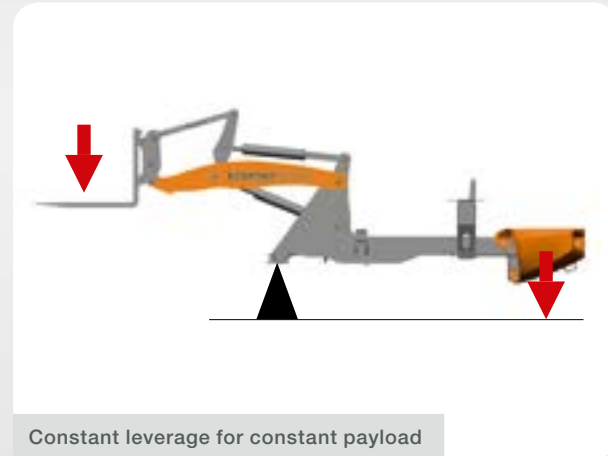
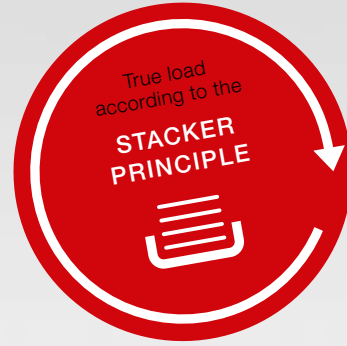
	Coupling Type	Trailer load without brakes kg	Trailer load with brakes kg	Trailer load with air brake system kg
MAXIMUM PERMISSIBLE TRAILER LOADS				
350	Bolt / Ball joint	400	1,750 / 1,750	-
550	Bolt / Ball joint	750	3,500 / 2,500	-
650	Bolt / Ball joint	750	3,500 / 2,500	-
380	Bolt / Ball joint	750	8,000 / 3,500	-
480	Bolt / Ball joint	750	8,000 / 3,500	-
580	Bolt / Ball joint	750	8,000 / 3,500	-
680	Bolt / Ball joint	750	8,000 / 3,500	14,000/-
780	Bolt / Ball joint	750	8,000 / 3,500	-
880	Bolt	750	8,000	13,500
680T	Bolt / Ball joint	750	8,000 / 3,500	14,000/-

* The regulations and laws of the relevant countries and regions must be met.

The core of the loader. The principle of success.

Thanks to an undivided chassis, Kramer loaders have no shift in the centre of gravity, even at full steering angle, and so the payload remains constant.

The standard all-wheel steering also guarantees extremely high manoeuvrability. Even around tight bends and across uneven ground conditions, Kramer loaders keep all four wheels on the ground for maximum traction in the tightest spaces.



Constant leverage for constant payload



One-piece frame and all-wheel steering:

- Outstanding stability: steering movements do not shift the centre of gravity
- Greatest safety on uneven ground conditions
- Constantly high payload at full steering angle
- All-wheel steering means outstanding manoeuvrability
- Large steering angle means shorter traversing and cycle times
- For safe driving on roads with optional front axle drum steering
- Gentle on the ground with freely moving wheels and low operating weight



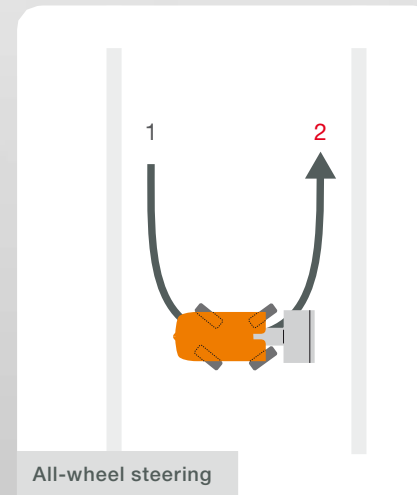
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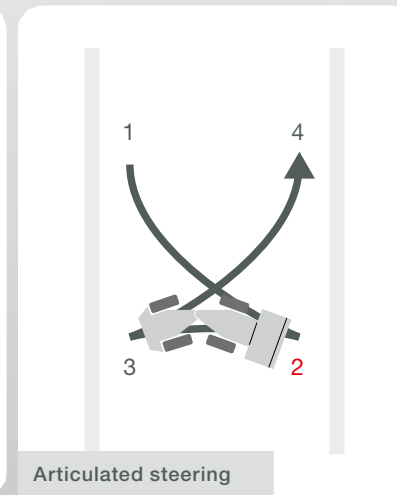
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3



All-wheel steering



Articulated steering



Constant load

Three steering types for performance from the best position:

1 All-wheel steering by Kramer: Maximum agility and power in the smallest of areas.

2 Front axle steering: Tractor feeling and maximum safety.

3 Crab steering: Precision steering for confined spaces.

	All-wheel steering	Front axle steering	Crab steering
350	●	–	–
550	●	○	–
650	●	○	–
750 / 850	●	–	–
950 / 1150	●	–	–
380 / 480 / 580	●	○	○
680 / 780	●	○	○
880	●	●	○
680T	●	○	○
750T	●	–	–

● Standard ○ Optional

	All-wheel steering	Front axle steering	Crab steering
1245	●	–	–
2506	●	○	○
3007	●	●	●
3507	●	●	●
4407	●	●	●
5507	●	●	●
5509	●	●	●

● Standard ○ Optional

Work applications without limits. Deciding on a Kramer becomes child play.

Nowadays, municipal authorities do not always have it easy, suiting the wishes of their citizens with strained budgets and producing the same services in the municipality as before. It is now more important than ever to make the right decisions when it comes to acquiring new machines. Kramer wheeled loaders make these decisions easy with their many features. Kramer wheeled loaders will convince even with regards to maintenance, service and service life. Your municipality will lead the way with Kramer wheeled loaders. We promise you.



"Stands out – doesn't tip over".

Kramer wheel loaders prove their stability with their tried and tested undivided chassis and all-wheel steering.

This ensures more safety and constant payload, irrespective of steering movements.

Its efficiency meets the municipal budget: reduced operating costs through optimum performance weight and compact dimensions.

One of the best work places in the municipality: fatigue-free work thanks to the spacious and ergonomic comfort cabin.

More flexibility due to the third control circuit for hydraulic attachments and optional **powerflow** performance hydraulics.

Simply work faster: thanks to the hydraulic quick-change system and parallel-controlled loading system.



Driving pleasure without limits: thanks to the EC tractor licence, on the roads with a load or trailer. Without any additional red tape.

Firm arguments: safety and time savings through an undivided chassis and all-wheel steering for greater stability and manoeuvrability.

Efficient performance improvement. That's also easy on your municipal budget.

Work performance up, costs down. Kramer also offers telescopic wheeled loaders which convince with high performance potential – above all thanks to their extreme lift heights and compact design. In this way, transport vehicles with high loading sills can also be easily loaded or goods and freight easily stacked.

Sturdy build for any municipal job: Kramer tele-wheeled loaders are all-in-one machines: wheeled loader, multi-function machine and work platform.

Achieve huge amounts in the municipality: a big plus for reach, stacking and layer thickness, for instance when loading a truck.

Ready for any challenge: the practical Kramer quick-change system saves time and effort. Attachments from our old series can also be used without any problem.



Nothing challenges a Kramer: Undivided chassis for constant payload and stability, all-wheel steering for the best manoeuvrability.

* The regulations and laws of the relevant countries and regions must be met.

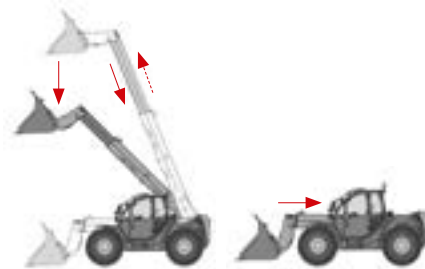


Bring the municipality up to full throttle.

Everything under control. Thanks to a high performance hydraulically precontrolled Joystick you can react in the most sensitive way. With a maximum overload height of 4 metres, the load is placed safely and with pinpoint accuracy.

New work prospects. A new era of efficiency is beginning with Kramer telehandlers.

Kramer telehandlers bring about lasting change for everyday municipal work perspectives: smart handling, dynamic all-wheel drive unit, compact dimensions, powerful hydraulics, unbeatable agility and off-road mobility, low charge weight and, last but not least, pleasurable driving. These machines mark a new era in building yard management. And not only there.



Advantages:

- Smart handling automatically carries out two work steps that increase the efficiency of the loading cycle and makes life easier for the operator.
- The workflow is never interrupted by a shutdown of the hydraulic functions.
- Maximal protection for the operator and machine as the T-arm is always completely retracted when sliding in material.



Advantages:

- The exact positioning of pallets is possible.
- The workflow is never interrupted by a shutdown of the hydraulic functions.
- Maximum protection for the driver and telescopic handler, even at high lifting heights.

1. Bucket mode*

When lowering the loading system, it is automatically retracted. It is designed so that the machine does not enter into the overload range, even under maximum payload. The retraction can be overridden with the joystick until reaching the overload limit.

* For details, see the operator's manual of the vehicle

2. Stacking mode

For the 2506, the automatic function is restricted on the "lowering" function. This means the material can be transported to the desired position more quickly and safely.

Quickly ready for the next municipal job: the optional hydraulic quick-change system saves time, increases safety and improves the workflow.

Safe and efficient: the smart handling driver-assistance system does more than comply with safety standard EN 15000 (protection against tipping of the machine in a longitudinal direction). The automatic execution of the hydraulic functions actively supports the operator.

Keeping the future in sight: low operating weight, ergonomic joystick controls and a comfort cab with 360° panoramic views.

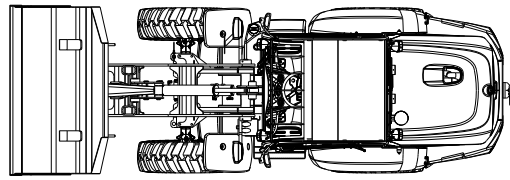


Three steering modes and a high level of manoeuvrability. Best in class manoeuvrability – and always working from the ideal position ensures maximum productivity.

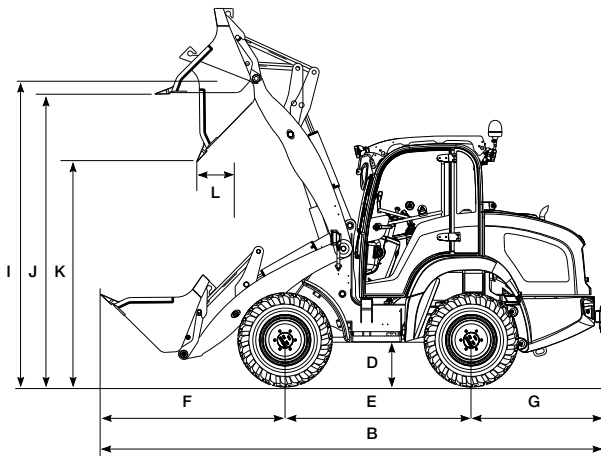
The municipal drive unit to high performance: the hydrostatic all-wheel drive unit with inching brake pedal gives maximum power, and with its great ground clearance and off-road mobility, it can be employed wherever it is needed.

Technical data.

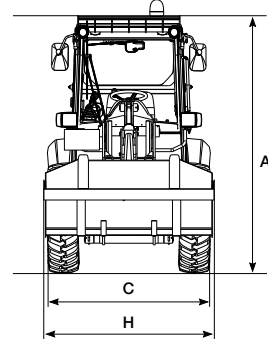
350 550 650



Wheeled loaders with standard bucket and standard tyres (top view)



Wheeled loaders with standard bucket and standard tyres (side view)



Wheeled loaders with standard bucket and standard tyres (front view)

350 550 650

DIMENSIONS	
A	Height mm
B	Length mm
C	Width* mm
D	Ground clearance mm
E	Distance between rear wheels mm
F	Middle of front axle to tip tooth mm
G	Middle of front axle to tip tooth mm
H	Bucket width mm
I	Bucket pivotal point mm
J	Overload loading height mm
K	Dump height mm
L	Dump reach mm
	Stacking height mm
	Turning radius of tyres mm

1,980	2,380	2,390
4,080	4,950	4,950
1,177	1,566	1,595
240	270	280
1,525	1,850	1,850
1,360	1,780	1,780
1,195	1,320	1,320
1,250	1,650	1,650
2,800	3,040	3,050
2,690	2,890	2,900
2,260	2,320	2,330
165	300	300
2,690	2,820	2,830
1,950	2,700	2,700

* with standard tyres

Subject to change without notice. Errors and omissions are reserved. The contractual agreement is expressly decisive.

OPERATING DATA	
Bucket capacity m ³	0.35–0.55
Weight kg	1,670/1,720*
Quick-change system	Hydraulic
ENGINE	
Make	Yanmar
Type/Design system	3TNV88/3TNV84T
Power output kW/hp (optional)	23/31 (27/37)
Max. torque Nm at rpm	107 at 1,560 124 at 1,560 (optional)
Emission cm ³	1,642 at 1,496 (optional)
Emission cm ³	Tested and certified according to 97/68EC * 2004/26 EC
POWER TRANSMISSION	
Drive unit	Variable, hydrostatic Drive unit
Drive unit speed km/h	0–20
Axles	StackingCast steel axle carrier made with wheel hub engine
Overall oscillating angle °	14
Differential lock	Hydraulic differential (Option)
Service brake	Hydrostatic
Parking brake	Spring-loaded multi-plate braking system, electro-hydraulically controlled
Standard tyres	28x9+00+-15
STEERING AND WORK HYDRAULICS	
Functionality	Hydrostatic all-wheel steering with emergency steering properties
Steering pump	Hydraulic pump via priority valve
Steering cylinder	Double-acting with independent final position synchronisation
Max. steering angle °	2 x 38
Work pump	Gear pump
Flow rate l/min	20, 40 (optional), 60 (optional)
Pressure bar	240
KINEMATICS	
Design system	Z-kinematics with optimised parallel motion
Lifting force/shearing force kN	12.9/13.1
Raising/lowering lifting cylinder sec	6.0/4.3
Fill shovel/empty shovel sec	2.4/1.5
Tip back/tip forward angle °	40/45
Tipping load (standard bucket) kg	1,250
Payload S = 1.25 (stack) kg	750
Payload S = 1.67 (stack) kg	560
Digging depth mm	40
FILLING VOLUMES	
Fuel/Hydraulic fluid tank l	30/40
EMITTED NOISE	
	according to 2000/14/EU
ELECTRIC SYSTEM	
Operating voltage V	12
Battery/alternator Ah/A	72/55
Starter kW	2.3

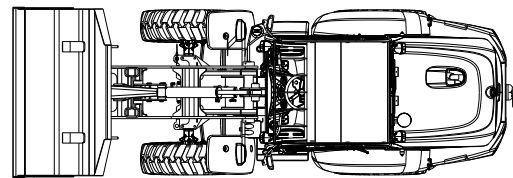
* Cab

For standard equipment and options, please contact our Kramer sales partners.

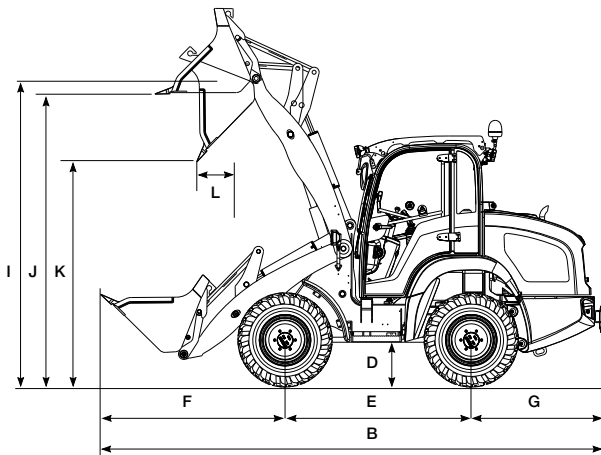
	350	550	650
Bucket capacity m ³	0.35–0.55	0.55–1.10	0.65–1.10
Weight kg	1,670/1,720*	3,450/3,600*	3,800
Quick-change system	Hydraulic	Hydraulic	Hydraulic
Make	Yanmar	Yanmar	Yanmar
Type/Design system	3TNV88/3TNV84T	4TNV88	4TNV88
Power output kW/hp (optional)	23/31 (27/37)	35/48	35/48
Max. torque Nm at rpm	107 at 1,560 124 at 1,560 (optional)	136.3 at 1,680	136.3 at 1,680
Emission cm ³	1,642 at 1,496 (optional)	2,190	2,190
Emission cm ³	Tested and certified according to 97/68EC * 2004/26 EC		
Drive unit	Variable, hydrostatic Drive unit		
Drive unit speed km/h	0–20	0–20, (0–30 optional)	0–20, (0–30 optional)
Axles	StackingCast steel axle carrier made with wheel hub engine	Planetary steering axle	Planetary steering axle
Overall oscillating angle °	14	16	± 8
Differential lock	Hydraulic differential (Option)	100 % (Option)	100 % limited-slip connectible
Service brake	Hydrostatic	Hydr. disc brake	Hydr. disc brake
Parking brake	Spring-loaded multi-plate braking system, electro-hydraulically controlled	Mech. disc brake	Mech. disc brake
Standard tyres	28x9+00+-15	10.5-18	12.0/-18
Functionality	Hydrostatic all-wheel steering with emergency steering properties		Front drum steering (optional)
Steering pump	Hydraulic pump via priority valve		
Steering cylinder	Double-acting with independent final position synchronisation		
Max. steering angle °	2 x 38	2 x 38	2 x 38
Work pump	Gear pump	Gear pump	Gear pump
Flow rate l/min	20, 40 (optional), 60 (optional)	56, 90 (optional)	56, 90 (optional)
Pressure bar	240	235	235
Design system	Z-kinematics with optimised parallel motion	Parallel kinematics	Parallel kinematics
Lifting force/shearing force kN	12.9/13.1	32.5/28	32.5/28
Raising/lowering lifting cylinder sec	6.0/4.3	4.8/3.2	4.8/3.2
Fill shovel/empty shovel sec	2.4/1.5	2.1/2.0	2.1/2.0
Tip back/tip forward angle °	40/45	45/42	45/42
Tipping load (standard bucket) kg	1,250	1,980	2,340
Payload S = 1.25 (stack) kg	750	1,600	1,750
Payload S = 1.67 (stack) kg	560	1,200	1,310
Digging depth mm	40	65	55
Fuel/Hydraulic fluid tank l	30/40	60/58	60/58
	according to 2000/14/EU		
Operating voltage V	12	12	12
Battery/alternator Ah/A	72/55	72/55	74/55
Starter kW	2.3	2.3	2.3

Technical data.

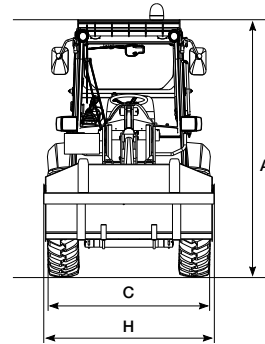
750
850
950
1150



Wheel loader with standard bucket and standard tires (top view)



Wheeled loaders with standard bucket and standard tyres (side view)



Wheeled loaders with standard bucket and standard tyres (front view)

	750	850	950	1150
DIMENSIONS				
A Height mm	2,480	2,510	2,650	2,700
B Length mm	4,840	5,040	5,360	5,800
C Width* mm	1,720	1,720	1,890	1,890
D Ground clearance mm	300	300	325	375
E Distance between wheels mm	1,920	1,920	2,050	2,150
F Middle of front axle to tip tooth mm	1,570	1,770	1,880	2,170
G Middle of front axle to tip tooth mm	1,350	1,350	1,430	1,480
H Bucket width mm	1,750	1,850	1,950	2,150
I Bucket pivotal point mm	3,065	3,250	3,270	3,500
J Overload loading height mm	2,915	3,100	3,120	3,285
K Dump height mm	2,400	2,500	2,520	2,720
L Dump reach mm	750	660	750	660
Stacking height mm	2,800	3,000	3,010	3,330
Turning radius of tyres mm	2,550	2,550	2,780	2,850

* with standard tyres

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OPERATING DATA

Bucket capacity m ³	0.75–1.15	0.85–1.30	0.95–1.60	1.15–1.80
Weight* kg	4,200	4,500	4,700	5,900
Quick-change system	Hydraulic	Hydraulic	Hydraulic	Hydraulic

ENGINE

Make	Deutz	Deutz	Deutz	Deutz
Type/Design system	D 2011 L04 W 4-cylinder in-line engine, water-cooled	D 2011 L04 W 4-cylinder in-line engine, water-cooled	D 2011 L04 W 4-cylinder in-line engine, water-cooled	D 2011 L04 W 4-cylinder in-line engine, water-cooled
Power output kW/hp (optional)	45/61	45/61	55/75	55/75
Max. torque Nm at rpm	210 at 1 700	210 at 1 700	257 at 1.6 0 0	257 at 1.6 0 0
Emission cm ³	3,620	3,620	3,619	3,619
Emission cm ³	Tested and certified according to 97/68EC * 2004/26 EC			

POWER TRANSMISSION

Drive unit	Continuously variable hydrostatic axial-piston gearbox, all-wheel drive, brake/inching pedal			
Drive unit speed km/h	0–20 (0–30 Option)	0–20 (0–30 Option)	0–20 (0–30 Option)	0–20, (0–30 optional)
Axles	Planet joint axle	Planet joint axle	Planet joint axle	Planet joint axle
Overall oscillating angle °	22	22	22	22
Differential lock	45% limited-slip connectible	45% limited-slip connectible	100% limited-slip connectible	100% limited-slip connectible
Service brake	Hydr. disc brake	Hydr. disc brake	Hydr. disc brake	Hydr. disc brake
Parking brake	Mech. disc brake	Mech. disc brake	Mech. disc brake	Mech. disc brake
Standard tyres	12.5/-18	12.5/-20	14.5 - 20	405 / 70-24

STEERING AND WORK HYDRAULICS

Functionality	Hydrostatic all-wheel steering			
Steering pump	Work pump via priority valve			
Steering cylinder	Double-acting with independent final position synchronisation			
Max. steering angle °	2 x 40	2 x 40	2 x 40	2 x 40
Work pump	Gear pump	Gear pump	Gear pump	Gear pump
Flow rate l/min	50	71	71	84
Pressure bar	210	210	210	250

KINEMATICS

Design system	Parallel kinematics	Parallel kinematics	Parallel kinematics	Parallel kinematics
Lifting force/shearing force kN	31 / 29	40 / 35	40.6 / 38.9	48.4 / 43.7
Lifting cylinder raising/lowering sec	5.5 / 3.0	5.5 / 3.7	6.1 / 4.5	5.8 / 4.4
Tilting in/tilting out sec	2.7 / 3.3	2.8 / 3.3	2.7 / 3.3	2.6 / 2.8
Tilt-in/tilt-out angle °	50 / 45	50 / 45	50 / 45	50 / 45
Tipping load (standard bucket) kg	3,000	3,200	3,420	4,140
Payload S = 1.25 (stack) kg	1,900	2,000	2,100	2,900
Payload S = 1.67 (stack) kg	1,430	1,500	1,550	2,170
Digging depth mm	50	60	53	50

FILLING VOLUMES

Fuel/hydraulic tank l	60 / 64	60 / 64	60 / 64	60 / 64
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EMITTED NOISE

	according to 2000/14/EU			
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ELECTRIC SYSTEM

Operating voltage V	12	12	12	12
Battery/alternator Ah/A	72 / 95	72 / 95	72 / 95	72 / 95
Starter kW	2.3	2.3	2.3	2.3

*Vehicle weight of basic model with standard bucket

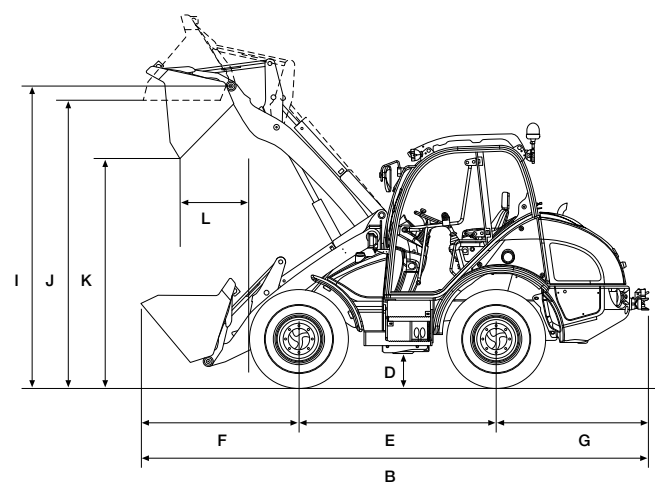
For standard equipment and options, please contact our Kramer sales partners.

Technical data.

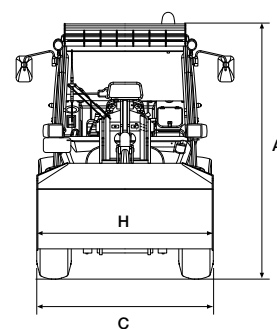
380 680

480 780

580 880



With standard bucket and standard tyres



With standard bucket and standard tyres (front view)

	380	480	580	680	780	880
DIMENSIONS						
A Height mm	2,450	2,480	2,480	2,640	2,680	2,950
B Length mm	5,080	5,280	5,410	5,710	5,800	6,550
C Width* mm	1,720	1,780	1,780	1,920	1,970	2,240
D Ground clearance mm	300	330	330	350	390	450
E Distance between wheels mm	2,020	2,020	2,020	2,150	2,150	2,300
F Middle of front axle to tip tooth mm	1,570	1,710	1,900	1,940	2,030	2,500
G Middle of front axle to tip tooth mm	1,490	1,490	1,490	1,620	1,620	1,750
H Bucket width mm	1,750	1,850	1,950	2,050	2,150	2,300
I Bucket pin point mm	3,065	3,250	3,250	3,285	3,450	3,780
J Overload loading height mm	2,915	3,100	3,050	3,050	3,200	3,530
K Dump height mm	2,400	2,500	2,500	2,500	2,650	2,900
L Dump reach mm	650	660	650	750	660	820
Stacking height mm	2,800	3,000	3,000	3,000	3,200	3,470
Turning radius of tyres mm	2,900	2,900	2,900	2,950	2,950	3,450

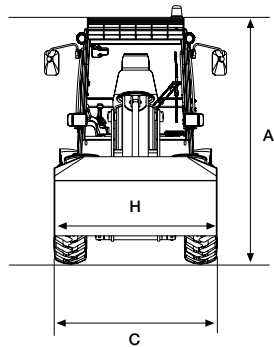
* with standard tyres

	380	480	580	680	780	880
OPERATING DATA						
Bucket capacity m ³	0.75–1.15	0.85–1.30	0.95–1.50	1.05–1.60	1.15–1.80	1.50–2.50
Weight kg	4,300	4,900	4,920	5,650	6,100	8,400
Quick-change system	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
ENGINE						
Make	Deutz	Deutz	Deutz	Deutz	Deutz	Deutz
Type/Design system	D 2011 L04 series motor	D 2011 L04 series motor	D 2011 L04 series motor	D 2011 L04 series motor	D 2011 L04 series motor	TCD 2012 L04 2V 4-cylinder turbocharged engine
Performance kW/hp (optional)	45/61	45/61	55/75	55/75	55/75	88/120
Max. torque Nm at rpm	210 at 1,700	210 at 1,700 257 at 1,600 (optional)	257 at 1,600	257 at 1,600	257 at 1,600	420 at 1,500
Emission cm ³	3,620	3,620	3,619	3,619	3,619	4,038
Emission cm ³	Tested and certified according to 97/68EC * 2004/26 EC					
POWER TRANSMISSION						
Drive unit	Continuously variable hydrostatic axial-piston gearbox, all-wheel drive unit, brake/inching pedal					
Drive unit speed km/h	0–20 (0–30, 0–35)	0–20 (0–30, 0–40)	0–20 (0–30, 0–40)	0–20 (0–30, 0–40)	0–20 (0–30, 0–35)	0–20 (0–30, 0–35)
Axes	Planet joint axle Front axle fixed, screwed fast to frame, rear axle oscillating					
Overall oscillating angle °	22	22	22	22	22	18
Differential lock	Self-locking differential	Self-locking differential	Self-locking differential	100% limited-slip connectible	100% limited-slip connectible	100% limited-slip connectible
Service brake	Foot-activated hydraulic disc brake					Hydraulic multi-disc brake
Parking brake	Hand-operated mechanical disc brake					Multi-disc brake with spring accumulator
Standard tyres	12.5-18	12.5-20	12.5-20	12.5-4.0	405/70-24	15.5-25
STEERING AND WORK HYDRAULICS						
Functionality	Hydrostatic all-wheel steering with emergency steering properties					
Steering pump	Hydraulic pump, steering unit with priority valve					Separate steering pump
Steering cylinder	Double-acting with independent final position synchronization					Double-acting with independent final position synchronization
Max. steering angle °	2 x 40	2 x 40	2 x 40	2 x 40	2 x 40	2 x 35
Work pump	Gear pump	Gear pump	Gear pump	Gear pump	Gear pump	Variable Emission axial piston pump
Flow rate l/min	50	70	70	84	84	140
Pressure bar	240	240	240	240	240	270
KINEMATICS						
Design system	Parallel kinematics	Parallel kinematics	Parallel kinematics	Parallel kinematics	Parallel kinematics	Z-kinematics
Lifting force/shearing force kN	34/31.8	43/8/40.7	43.6/39.4	4/4.5/40.0	46.5/41.9	66/64
Lifting cylinder raising/lowering sec	5.0/4.7	6.0/4.0	6.0/4.0	5.2/3.8	6.2/4.8	4.8/2.5
Tilting in/tilting out sec	2.5/3.3	2.4/2.4	2.4/2.4	2528	2.3/2.9	1.2/1.0
Tilt-in/tilt-out angle °	50/45	50/45	50/45	50/45	50/45	45/45
Tippling load (standard bucket) kg	3,507	3,650	3,750	4,100*	4,300	5,400
Payload S = 1.25 (stack) kg	2,000	2,150	2,300	2,500	2,900	3,500
Payload S = 1.67 (stack) kg	1,500	1,600	1,700	1,850	2,170	2,620
Digging depth mm	50	60	60	60	55	100
FILLING VOLUMES						
Fuel/hydraulic tank l	85/50	85/50	85/50	120/64	120/64	125/135
EMITTED NOISE						
according to 2000/14/EU						
ELECTRIC SYSTEM						
Operating voltage V	12	12	12	12	12	12
Battery/alternator Ah/A	88/95	88/95	88/95	88/95	88/95	88/95
Starter kW	2.3	2.3	2.3	2.3	2.3	3.0

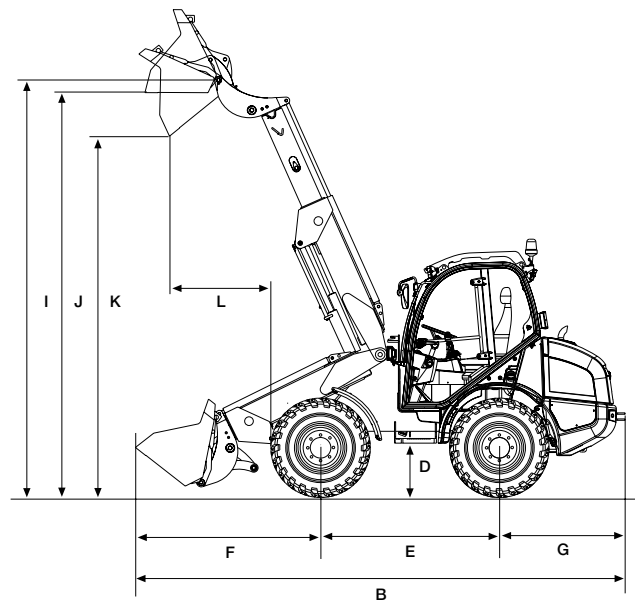
For standard equipment and options, please contact our Kramer sales partners.

Technical data.

750T 680T



With standard bucket and standard tyres
(front view)



With standard bucket and standard tyres

	750T	680T
DIMENSIONS		
A Height mm	2,580	2,750
B Length mm	5,500	6,040
C Width* mm	1,720	1,920
D Ground clearance mm	300	350
E Distance between wheels mm	1,920	2,150
F Middle of front axle to tip tooth mm	2,230	2,270
G Middle of front axle to tip tooth mm	1,350	1,620
H Bucket width mm	1,750	1,950
I Bucket pivotal point mm	3,585 / 4,660**	3,630 / 4,680**
J Overload loading height mm	3,435 / 4,510**	3,400 / 4,450**
K Dump height mm	3,000 / 4,000**	2,930 / 3,980**
L Dump reach mm	760 / 1,230**	640 / 1,100**
Stacking height mm	3,360 / 4,440**	3,460 / 4,500**
Turning radius of tyres mm	2,550	2,950

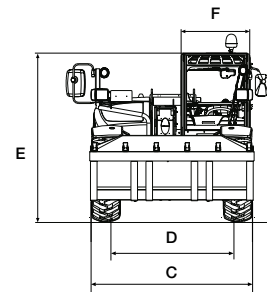
*with standard tyres **extended

	750T	680T
OPERATING DATA		
Bucket capacity m ³	0.75 – 1.15	0.95 – 1.50
Weight kg	5,100	5,750
Quick-change system	Hydraulic	Hydraulic
ENGINE		
Make	Deutz	Deutz
Type/Design system	D 2011 L04 series motor	D 2011 L04 series motor
Performance kW/hp (optional)	45/61	55/75
Max. torque Nm at rpm	210 at 1,700	257 at 1,600
Emission cm ³	3,620	3,619
Emission cm ³	Tested and certified according to 97/68EC * 2004/26 EC	
POWER TRANSMISSION		
Drive unit	Continuously variable hydrostatic axial-piston gearbox, all-wheel drive unit, brake/inching pedal	
Drive unit speed km/h	0–20 (0–30 Option)	0–20 (0–30, 0–35 Option)
Axles	Planet joint axle	Planet joint axle
Overall oscillating angle °	22	22
Differential lock	Self-locking differential	100% limited-slip connectible
Service brake	Foot-activated hydraulic disc brake	
Parking brake	Manually-controlled mechanical disc brake	
Standard tyres	12.5-18	14.5-20
STEERING AND WORK HYDRAULICS		
Functionality	Hydrostatic all-wheel steering with emergency steering properties	
Steering pump	Hydraulic pump via priority valve	
Steering cylinder	Double-acting with independent final position synchronization	
Max. steering angle °	2 x 40°	2 x 40°
Work pump	Gear pump	Gear pump
Flow rate l/min	71	84
Pressure bar	210	240
KINEMATICS		
Design system	Telescoping loading system with Z-kinematics	
Lifting force/shearing force kN	30/49	31/46
Lifting cylinder raising/lowering sec	6.2/4.8	5.0/3.5
Tilting in/tilting out sec	2.3/2.9	2.5/2.5
Tilt-in/tilt-out angle °	40/40	40/40
Tipping load (standard bucket) kg	2,700	3,500
Payload S = 1.25 (stack) kg	1,730	2,300
Payload S = 1.67 (stack) kg	1,290	1,720
Digging depth mm	80	50
FILLING VOLUMES		
Fuel/hydraulic tank l	60/50	120/50
EMITTED NOISE		
according to 2000/14/EC		
ELECTRIC SYSTEM		
Operating voltage V	12	12
Battery/alternator Ah/A	75/95	88/95
Starter kW	2.3	2.3

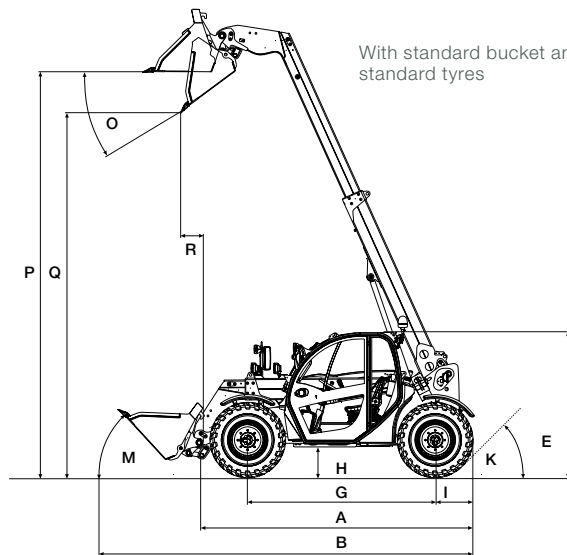
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Technical data.

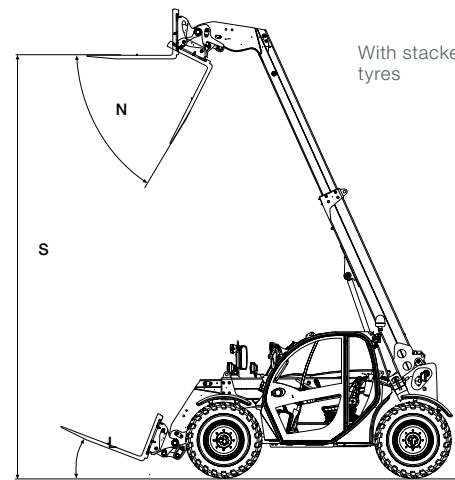
1245 2506 3007 3507



With standard bucket and standard tyres (front view)



With standard bucket and standard tyres



With stackers and standard tyres

1245 2506 3007 3507

DIMENSIONS

A Length, incl. tool frame mm	2,916	4,300	4,880	4,880
B Length with standard bucket mm	3,879	4,958	5,600	5,600
C Width* mm	1,560	1,960	2,280	2,280
D Track width mm	1,296	1,660	1,880	1,880
E Height to cab roof mm	1,940	1,980	2,310	2,310
F Interior width of cab mm	662	825	990	990
G Distance between wheels mm	1,920	2,650	2,850	2,850
H Ground clearance mm	290	302	415	415
I Distance centre of rear wheel to tail mm	391	620	830	830
K Rear actuating angle °	80	80	45	45
L Tilt angle pallet fork lowered °	8	21/21	22	22
M Tilt angle standard bucket lowered °	44	45/45	49	49
N Tilt-out angle pallet fork raised °	66	45/63	68	68
O Tilt-out angle standard bucket up °	31	22/40	41	41
P Overhead loading height with standard bucket mm	4,130	5,600	6,820	6,820
Q Dump height with standard bucket mm	3,600	5,280	-	-
R Dump reach with standard bucket mm	543	680	110	110
S Pallet height mm	4,310	5,730	7,000	7,000
Turning radius of tyres mm	2,607	3,670	3,840	3,840
Turning radius of the tyres standard bucket mm	3,398	4,500	5,000	5,000

* with standard tyres

OPERATING DATA

Bucket capacity m³	0.40–1.03	0.85–1.80	1.0–2.5	1.0–2.5
Weight kg	2,650/2,700 (2,450/2,500)	4,730	6,700	6,950
Total swing angle of tool tray °	148	132/150**	155	155

ENGINE

Make	Yanmar	Deutz	Deutz	Deutz
Type/Design system	3TNV82A-BDWM (3TNV84T-BKWM)** water-cooled	TD 2009 L04 water-cooled	TCD 3.6 L4	TCD 3.6 L4
Power output kW/hp (optional)	22/30 (29/40) **	50/68	90/122	90/122
Max. torque Nm at rpm	82 at 1.400 (119 at 1.400 optional) **	200 at 1,800	480	480
Emission cm³	1,331 (1,496)**	2,290	3,621	3,621
Emission cm³	Tested and certified according to 97/68EC * 2004/26 EC		Level IIIB	Level IIIB

POWER TRANSMISSION

Drive unit	Continuously variable hydrostatic axial-piston gearbox, all-wheel drive unit, brake/inching pedal	Automotive continuously variable, hydrostatic axial piston drive, all-wheel drive		
Drive unit speed km/h	0–7, 0–20	0–7 (0–20, 0–30)**	0–20 (0–30, 0–40)	0–20 (0–30, 0–40)
Axes	Planet joint axle	Planet joint axle	Planetary drive axle	Planetary drive axle
Overall oscillating angle °	14	20	20	20
Differential lock	100% limited-slip connectible	100% limited-slip connectible	Self-locking differential 45%	Self-locking differential 45%
Driving brake/parking brake	Disc brake on the front axle	Disc brake on the rear axle	Foot-activated hydraulic disc brake / manually-controlled mechanical disc brake	
Standard tyres	10.0-16.5 TR15EM	12.5-18 MPT04	405/70R20	405/70R20

STEERING AND WORK HYDRAULICS

Functionality	hydrostatic all-wheel steering with final position synchronisation	All-wheel and front drum steering	All-wheel and front drum steering
Max. steering angle °	2 x 38°	2 x 38°	2 x 40°
Work pump	Gear pump	Gear pump	Gear pump with LUVU
Flow rate l/min	42/75**	89	100
Pressure bar	220	235	260
			Load-sensing axial piston pump
			140
			260

KINEMATICS

Max. payload (LSP 500mm) kg	1,200	2,500	3,000	3,500
Max. payload (LSP 600 mm) kg	4,310	-	-	-
Max. lift height mm	44	5,730	7,000	7,000
Tilt-in angle (bucket) °	31	45/45**	49	49
Tilt-out angle (bucket) °	1,200	22/40**	41	41
Payload at max. lift height kg	440	1,800	2,000	2,200
Payload with max. coverage kg	4,310	800	1,000	1,200
Lift height at maximum load mm	960	4,500	5,500	5,220
Coverage at maximum load mm	2,290	1,260	1,780	1,680
Max. reach (stack) mm		3,156	3,760	3,760

FILLING VOLUMES

Fuel/hydraulic tank l	25/40	100/75	120/100	120/100
Hydraulics system l	45	130	150	150
Lift cylinder raising/lowering sec	6.2/5.1	6.0/4.2	7.4/5.5	5.2/4.2
Extension cylinder extension/retraction sec	5.1/3.9	5.6/3.8	8.0/6.0	5.0/4.4
Tilting in/tilting out sec	2.6/2.4	3.0/2.5	4.1/4.1	3.3/3.2

EMITTED NOISE

according to 2000/14/EU

ELECTRIC SYSTEM

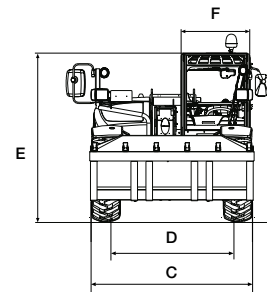
Operating voltage V	12	12	12	12
Battery/alternator Ah/A	77/55	74/80	135/150	135/150
Starter kW	1.7	2.0	3.0	3.0

* Cab ** Option

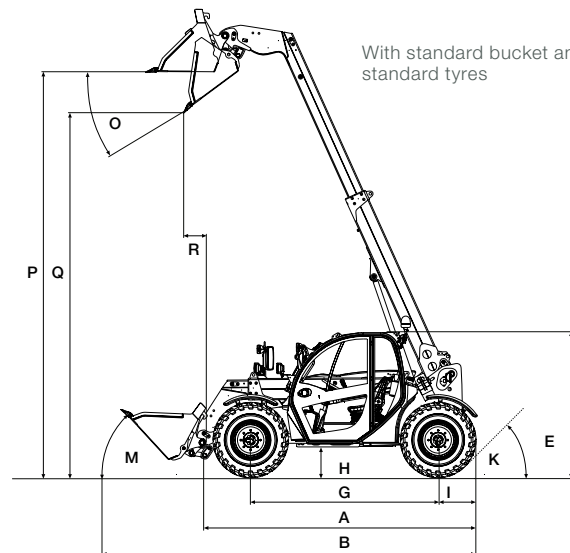
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Technical data.

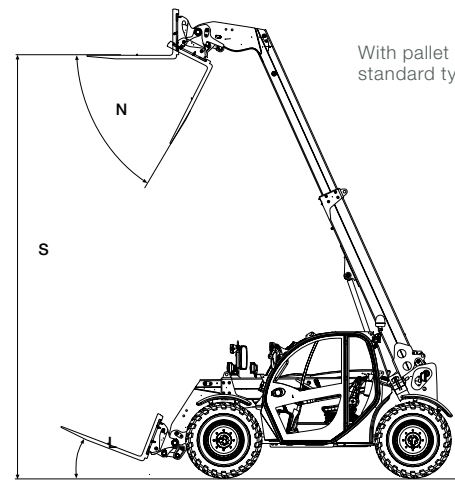
4407 5507 5509



With standard bucket and standard tyres
(front view)



With standard bucket and standard tyres



With pallet forks and standard tyres

4407 5507 5509

DIMENSIONS

A Length, incl. tool frame mm	4,985	4,985	5,690
B Length with standard bucket mm	Up to 6,160	Up to 6,160	Up to 6,690
C Width* mm	2,500	2,500	2,500
D Track width mm	1,995	1,995	1,995
E Height to cab roof mm	2,460	2,460	2,460
F Interior width of cab mm	990	990	990
G Distance between rear wheels mm	2,950	2,950	3,150
H Ground clearance mm	418	418	412
I Distance centre of wheel to tail mm	950	950	1,140
K Rear actuating angle °	36.5	36.5	32
L Tilt angle pallet fork lowered°	20	20	19
M Tilt angle standard bucket lowered°	45	45	45
N Tilt-in angle pallet fork raised°	67	67	65
O Tilt-out angle standard bucket raised°	41	41	41
P Overhead loading height with standard bucket mm	6,835	6,835	8,498
Q Dump height with standard bucket mm	-	-	-
R Dump reach with standard bucket mm	495	495	63
S Stacking height mm	7,017	7,017	8,750
Turning radius of tyres mm	3,755	3,755	4,350
Turning radius of the tyres standard bucket mm	5,000	5,000	6,200

* with standard tyres

4407

5507

5509

OPERATING DATA

Bucket capacity m³	1.2–3.0	1.6–4.0	1.6–4.0
Weight kg	7,900	9,200	10,620
Total swing angle of tool tray °	150	150	154

ENGINE

Make	Deutz	Deutz	Deutz
Type/Design system	TCD 3.6 L4	TCD 4.1 L4	TCD 4.1 L4
Power output kW/hp (optional)	90/122	115/156	115/156
Max. torque Nm at rpm	480	609	609
Emission cm³	3,621	4,038	4,038
Emission cm³	Level IIIB	Level IIIB	Level IIIB

POWER TRANSMISSION

Drive unit	Automotive continuously variable, hydrostatic axial piston drive, ECOSPEED	Automotive continuously variable, hydrostatic axial piston drive, ECOSPEED PLUS	Automotive continuously variable, hydrostatic axial piston drive, ECOSPEED PLUS
Drive unit speed km/ h	0–20 (0–30, 0–40)	0–20 (0–30, 0–40)	0–20 (0–30, 0–40)
Axes	Planetary drive axle	Planetary drive axle	Planetary drive axle
Overall oscillating angle °	20	20	20
Differential lock	100 % connectable	100 % connectable	100 % connectable
Driving brake/parking brake	Foot-activated hydraulic 2-circuit power brake (lamellas in both axles)/ electro-hydraulic lamella power brake	Foot-activated hydraulic 2-circuit power brake (lamellas in both axles)/ electro-hydraulic lamella power brake	Foot-activated hydraulic 2-circuit power brake (lamellas in both axles)/ electro-hydraulic lamella power brake
Standard tyres	460/70R24	460/70R24	460/70R24

STEERING AND WORK HYDRAULICS

Functionality	All-wheel and front drum steering	All-wheel and front drum steering	All-wheel and front drum steering
Max. steering lock °	2 x 40°	2 x 40°	2 x 40°
Work pump	Load-sensing axial piston pump	Load-sensing axial piston pump	Load-sensing axial piston pump
Flow rate l/min	140	187	187
Pressure bar	260	260	260

KINEMATICS

Max. payload (LSP 500mm) kg	4,300	(5,500)	(5,500)
Max. payload (LSP 600 mm) kg	-	4,990	4,990
Max. lift height mm	7,017	7,017	8,750
Tilt-in angle (bucket) °	45	45	45
Tilt-out angle (bucket) °	41	41	41
Payload at max. lift height kg	3,300	4,000	1,300–4,990*
Payload with max. coverage kg	1,500	2,000	2,200
Lift height at maximum load mm	5,200	5,500	5,000–8,750*
Coverage at maximum load mm	1,600	1,890	2,400
Max. coverage (stack) mm	3,790	3,900	4,790

FILLING VOLUMES

Fuel/hydraulic tank l	235/100	235/100	235/100
Hydraulics system l	190	190	190
Lifting cylinder raising/lowering sec	6.4/5.0	6.8/5.6	9.4/6.9
Extension cylinder extension/retraction sec	5.7/5.8	5.9/5.8	6.9/7.0
Tilting in/tilting out sec	3.1/3.2	3.1/3.2	3.4/3.5

EMITTED NOISE

according to 2000/14/EU

ELECTRIC SYSTEM

Operating voltage V	12	12	12
Battery/alternator Ah/A	135/150	135/150	135/150
Starter kW	3.0	3.0	3.0

* with hydraulic levelling and oscillating axle lock

For standard equipment and options, please contact our Kramer sales partners.

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