## KRAMER'S NEW SIZE MOVING THE WORLD

Wheel loaders KL60.8 / KL60.8L





| Operating and performance data*         | Unit | KL60.8    | KL60.8L   |
|---|------|-----------|-----------|
| Engine output (optional)                | kW   | 100 (115) | 100 (115) |
| Bucket capacity                         | m³   | 1,55      | 1,35      |
| Tipping load (bucket)                   | kg   | 5,600     | 5,000     |
| Payload S=1.25 (forks)                  | kg   | 3,900     | 3,650     |
| Operating weight (depending on options) | kg   | 9,150     | 9,800     |

## Why separate what belongs together? Kramer - A unique system

The Kramer brand stands for all-wheel steer loaders, telescopic wheel loaders and telescopic loaders with extreme manoeuvrability, off-road capability and high efficiency. Thanks to the proven undivided chassis, Kramer wheel loaders are ultra stable in all conditions.

Due to this special vehicle construction, there is no shift in the center of gravity due to steering movements. On the basis of the Ackermann steering, only the wheels move during steering. Thus, maximum payload and high stability is maintained even on full lock, and on uneven ground.

### Advantages of the undivided chassis

#### High stability

and safe in operation, even when the going travel and cycle times shortened. gets tough. A high degree of stability - even in rough ground conditions.

## Enormous manoeuvrability

divided frame which prevents changes in cen- of 40 degrees front and back allow a high ter of gravity, even when on full steering lock. degree of manoeuvrability. Thus, many unit from changing. And the result: Constant The vehicles are therefore extremely stable steering manoeuvres can be eliminated and

#### Constant payload

Our wheel loaders are constructed with an un- The all-wheel steering and a steering lock. The undivided chassis prevents the distance between the counterweight and the loader lever ratios that make working in all load situations safe. The payload remains the same regardless of the steering angle.



# **Flexibility in use** The right type of steering for every application

The undivided vehicle frame forms the basis for three different types of steering. The usefulness and application possibilities of a wheel loader are governed by its construction principle. The steering system plays a decisive role.



#### All-wheel steering

- 2 x 40 degree steering lock at front and rear axles ensure fast working cycles
- Optimized travel paths
- Little need for space

#### Front wheel steering

- Safe and familiar road driving at high speed
- Simple guidance of special attachment devices
- Familiar steering system
- Ideal for trailer operation

#### Crab steering

- Manoeuvring in a confined space
- Precise positioning even in the most confined conditions
- Moving of special attachment devices
- Easy drive away from walls and ditches

## This is why Kramer is the right machine! See for yourself

Kramer will expands its wide product portfolio upwards with the KL60.8 / KL60.8L. The wheel loader convinces with outstanding performance data despite its low weight plus a new design, technical innovation and high quality build and components make it something unique. Your problem solver for a wide range of tasks and challenges in agriculture. See for yourself!

The completely re-designed cab concept

with ergonomically arranged operating elements, thanks to its excellent all-round visibility, offers fatigue-free and efficient working. The large LCD display with integrated reverse driving camera, air conditioning and bucket repositioning are only a few features which are part of the standard equipment for the range.

An optional extended loader unit offers lift heights of up to 4.20 m at the same time as a perfect view of the attachment device.

Standard loader unit with PZ kinematics combines high lifting and tearing forces with exact parallel guidance over the entire lifting reach.

Strongly performing load-sensing hydraulics with 150 l/min (optional 180 l/min) for faster working cycles.

Extremely robust hydraulic quickhitch facility for hardest applications with 61.5 mm mounting and 50 mm locking bolts in diameter according to ISO 23727.

> Drive system with Smart Driving -Engine speed reduction at num speed

Unique steering system with three steering modes all-wheel, crab and front wheel steering. This makes the machine extremely manoeuvrable and flexibly equipped for all applications.

Wide range of tyre options for a wide range of application areas

The design principle of the undivided vehicle framework forms the basis for extreme stability, enormous manoeuvrability and constant payload of the machine. Furthermore, the operator is offered a wider and safer entry

Strongly performing and efficient Deutz engines of emission stage IV Standard: TCD 3.6 with 100 kW, Optional: TCD 4.1 with 115 kW.

#### The intelligent air guidance

incl. reversible fan motor ensures high cooling performance with little need for maintenance, since no dust is whirled up through the air duct.

EU-wide tractor approval and trailer hitch with 1 t drawbar load make the loader into an optimal tractor unit.

All common trailer coupling systems are available.

#### Versatile options at the rear

make the loader into a perfect all-rounder: inter-alia various hydraulic control circuits, electrical outlet, DIN signal socket as well as a compressed air and hydraulic brake.

#### Driving force newly defined

Increased performance thanks to the newly developed continuously variable hydrostatic transmission, which combines tremendous propulsive force with sensitivity.

ecospeedPRO (optional) Continuously variable hydrostatic transmission for the speed range up to 40 km/h incl. Smart Driving.

## **Technical data\***

| Engine  | Unit            | KL60.8 KL60.8L  |  |
|---|-----------------|---|--|
| Make  | -               | Deutz   |  |
| Model/design system (optional)                | -               | TCD 3.6 L4 (TCD 4.1 L4)   |  |
| Performance (optional)                        | kW              | 100 (115)   |  |
| Torque max. (optional engine)                 | Nm at rpm       | 500 Nm at 1600 rpm (609 Nm at 1600 rpm)   |  |
| Displacement (optional)                       | cm <sup>3</sup> | 3621 (4038)   |  |
| Exhaust emissions stage                       | -               | EU Stage IV / US EPA Tier 4   |  |
| Exhaust gas after-treatment (optional engine) | -               | DOC + SCR (DOC/DPF + SCR)   |  |
| Power transmission                            | Unit            |   |  |
| Drive system                                  | -               | continuously variable, hydrostatic axial piston transmission  |  |
| Speed (optional)                              | km/h            | 0 - 20 (0 - 30/0 - 40)  |  |
| Axles   | -               | Planetary steering axles  |  |
| Total oscillation angle                       | 0               | 24  |  |
| Differential lock                             | %               | 100 % FA + 100 % RA   |  |
| Service brake                                 | -               | 20 km/h: Service-supported 1-circuit brake (FA, lamellas), also acting on the RA via the universal joint shaft. 30 + 40 km/h: Hydraulic 2-circuit power brake (FA + RA, lamellas) |  |
| Parking brake                                 | -               | 20, 30, 40 km/h: Electro-hydraulic disc brakes with spring suspension in the front axle, also acting on the rear axle via the articulated universal joint shaft.                  |  |
| Standard tyres                                | -               | 500/70R24 Michelin BIBLOAD  |  |
| Steering and work hydraulics                  | Unit            |   |  |
| Functionality                                 | -               | Hydrostatic all-wheel steering with emergency steering characteristics, front wheel steering, crab steering   |  |
| Steering pump                                 | -               | Gear pump above priority valve  |  |
| Steering cylinder                             | -               | 1 steering cylinder per axle / electrical synchronization   |  |
| Steering lock max.                            | 0               | 40  |  |
| Work pump                                     | -               | Variable displacement pump (Load sensing)   |  |
| Max. capacity pump                            | I/min           | 150 l/min   |  |
| Max. capacity of the option pump              | I/min           | 180 l/min   |  |
| Max. pressure                                 | bar             | 250 bar   |  |
| Quickhitch system                             | -               | Hydraulic quickhitch facility according to ISO 23727  |  |

## **Technical data\***

| Kinematics  | Unit  | KL60.8                   | KL60.8L                |  |
|---|-------|--------------------------|------------------------|--|
| Design system   | -     | PZ-kinematics            | P-kinematics           |  |
| Lift capacity   | kN    | 83                       | 83                     |  |
| Tearout force   | kN    | 54,7                     | 58,6                   |  |
| Lifting cylinder/lowering lift ram  | S     | 6.5 / 4.6                | 6.0 / 4.1              |  |
| Fill bucket (upper/lower position loader unit) //<br>emty bucket (upper/lower position loader unit)<br>tipping cylinder | s     | 2,4 / 2,8 // 1,78 / 2,18 | 2,1 / 3,7 // 2,6 / 4,3 |  |
| Tilt-in and tilt-out angle  | 0     | 45 / 45                  | 46 / 45                |  |
| Tipping load (bucket)   | kg    | 5.600                    | 5.000                  |  |
| Filling levels  | Unit  |                          |                        |  |
| Fuel/hydraulic/DEF tank   | I     | 140 / 12                 | 25 / 12                |  |
| Electrical system   | Unit  |                          |                        |  |
| Operating voltage   | V     | 12                       | 2                      |  |
| Battery/alternator Series TCD 3.6 L4  | Ah/A  | 185 / 120                |                        |  |
| Battery/alternator<br>with optional engine TCD 4.1 L4   | Ah/A  | 185 / 150                |                        |  |
| Starter Series TCD 3.6 L4   | kW    | 3.2                      |                        |  |
| Starter with optional engine TCD 4.1 L4   | kW    | 4.0                      | 0                      |  |
| Noise emissions **  | Unit  |                          |                        |  |
| Measured value  | dB(A) | 10                       | 3                      |  |
| Guaranteed value  | dB(A) | 104                      |                        |  |
| Noise level in the driver's cab   | dB(A) | 77                       |                        |  |
| Vibrations ***  | Unit  |                          |                        |  |
| Total vibration value of the upper body armature  | m/s²  | < 2                      | ,5                     |  |
| Maximum effective value of the weighted acceleration for the body   | m/s²  | < 0                      | ,5                     |  |

\* provisional

\*\* information: The measurement is carried out according to the requirements of the DIN EN 474-1 standard and Directive 2000/14 /EC. Measuring place: Asphalted surface.

\*\*\* Measurement uncertainty of the vibration measurement according to the requirements of the DIN EN 474-1standard and EN 12096. Please train or inform the operator about possible dangers caused by vibrations.

\* provisional

## **Technical data\***

| Standard loader unit | Unit | Standard       |                           | Light goods |       |
|----------------------|------|----------------|---------------------------|-------------|-------|
|                      |      | And the second | Constanting of the second |             |       |
| Bucket capacity      | m³   | 1.55           | 1.55                      | 2.35        | 3.25  |
| Material density     | t/m³ | 1.8            | 1.8                       | 1.3         | 0.9   |
| Overall length       | mm   | 6,699          | 6,557                     | 6,920       | 7,210 |
| Bucket width         | mm   | 2,500          | 2,500                     | 2,500       | 2,500 |
| Bucket pivot point   | mm   | 3,765          | 3,765                     | 3,765       | 3,765 |
| Load-over height     | mm   | 3,525          | 3,495                     | 3,516       | 3,516 |
| Dumping height       | mm   | 2,685          | 2,785                     | 2,530       | 2,320 |
| Dump reach           | mm   | 1,068          | 968                       | 1,225       | 1,430 |
| Dig depth            | mm   | 151            | 181                       | 160         | 160   |

# **Technical data\***

Extended loader unit KL60.8L



| Extended loader unit | Unit | Standard  |       | Light goods |
|----------------------|------|-----------|-------|-------------|
|                      |      | Contra to |       |             |
| Bucket capacity      | m³   | 1.35      | 1.35  | 2.75        |
| Material density     | t/m³ | 1.8       | 1.8   | 0.9         |
| Overall length       | mm   | 7,310     | 7,170 | 7,670       |
| Bucket width         | mm   | 2,500     | 2,500 | 2,500       |
| Bucket pivot point   | mm   | 4,200     | 4,200 | 4,200       |
| Load-over height     | mm   | 3,955     | 3,925 | 3,945       |
| Dumping height       | mm   | 3,170     | 3,270 | 2,915       |
| Dump reach           | mm   | 1,270     | 1,170 | 1,524       |
| Dig depth            | mm   | 140       | 170   | 150         |
| 0                    |      |           |       |             |

| Pallet forks | (Load center 500 mm)             | Unit |
|--------------|----------------------------------|------|
|              |                                  |      |
| -            | Fork carriage width              | mm   |
| -            | Length of tines                  | mm   |
| -            | Tipping load (forks)             | kg   |
| -            | Payload S=1.25                   | kg   |
| -            | Payload S=1.67                   | kg   |
| А            | Stacking height                  | mm   |
| В            | Lift height, horizontal position | mm   |
| С            | Below ground level               | mm   |
| D            | Reach at ground level            | mm   |
| E            | Reach at arms horizontal         | mm   |
| F            | Reach at max. height             | mm   |

\* provisional

| Standard | loader | unit |
|----------|--------|------|
| otanuara | louuuu | unit |

#### Extended loader unit



| 1,500 |       |  |  |  |
|-------|-------|--|--|--|
| 1,200 | 1,200 |  |  |  |
| 4,900 | 4,580 |  |  |  |
| 3,900 | 3,650 |  |  |  |
| 2,930 | 2,730 |  |  |  |
| 3,605 | 4,055 |  |  |  |
| 1,745 | 1,745 |  |  |  |
| 56    | 56    |  |  |  |
| 772   | 1,465 |  |  |  |
| 1,580 | 2,090 |  |  |  |
| 707   | 955   |  |  |  |
|       |       |  |  |  |

## **Dimensions\***



Extended loader unit KL60.8L



## **Dimensions\***

Front view KL60.8

# 

|   |                                       | Unit | KL60.8 | KL60.8L |  |
|---|---------------------------------------|------|--------|---------|--|
| А | Height                                | mm   | 3,060  |         |  |
| В | Length                                | mm   | 6,3    | 35      |  |
| С | Width                                 | mm   | 2,5    | 00      |  |
| D | Ground clearance                      | mm   | 420    |         |  |
| E | Wheel base                            | mm   | 2,620  |         |  |
| F | Center of rear axle to end of vehicle | mm   | 1,575  |         |  |
| G | Bucket width                          | mm   | 2,500  |         |  |
| Н | Bucket pivot point                    | mm   | 3,765  | 4,200   |  |
| I | Load-over height                      | mm   | 3,525  | 3,955   |  |
| J | Dumping height                        | mm   | 2,685  | 3,170   |  |
| К | Dump reach                            | mm   | 1,068  | 1,270   |  |
| L | Tip-out angle                         | 0    | 45     | 45      |  |
| М | Tipping angle                         | 0    | 45     | 46      |  |



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Wheel loaders Tipping load: 1,000 - 5,600 kg



Tele-Wheel loaders Tipping load: 2,500 - 3,500 kg



**Telehandlers** Payload: 2,700 - 5,500 kg

#### Service that you can see

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





Academy



Telematics



Insurance



Spare parts



Finance

