Schäffer

WHEEL LOADERS

Compact power packages in the construction industry







ADDED VALUE AT A GLANCE





THE WORKHORSE FOR EVERY DAY

Schäffer loaders increase productivity and are genuinely fun to drive.

The Schäffer 2428 is suitable for operations of all kinds thanks to its perfect combination of performance, driving comfort and reliability. The hydrostatic traction drive delivers high thrust forces coupled with very low fuel consumption.

The machine is very simple and intuitive. The view of the attachments is excellent. The comfortable seating position guarantees relaxed and productive work at all times for the driver.



stability and safety guaranteed

Schäffer axles are optimised for each model. The force of the hydrostatic drive is converted into endless thrust. The perfect coordination of the complete drive system helps save fuel.

PERFECTLY DESIGNED



The practical toolbox can be used to keep everything in order. Tools such as grease guns are stored safely and are always within reach.



The steering column angle is adjustable.
This is convenient and also makes getting in and out easier.



Electrical fuses can be easily checked and replaced.



The load arm features an elegant and strong design for the toughest of operations.



The optional rotating beacon is located in a protected position.



Additional lamps can be mounted on the overhead guard or cab as required.

 18

SPT.

ELECTRONICALLY REGULATED DRIVE FOR **HIGHER COMFORT**

Our new Kubota motor offers the highest possible torque in its class and is unique in the market of these loaders due to an electronically regulated drive - SPT or 'Schäffer Power Transmission'. The drive is adapted to the torque of the diesel engine for multitude of advantages: operating costs decrease as the diesel fuel consumption is reduced. Hill starts are a lot easier as the start-up assistant helps prevent the vehicle moving backwards.

The optional potentiometer acts as cruise control. The loader keeps a constant speed automatically and independently from the motor speed – especially convenient when working with mulchers or brooms.

Additionally, there are several new safety functions, for example protection from overheating and motor over-revving protection, making working with the loader safer and more reliable. SPT is standard on the Schäffer 2430, 2430 SLT, 2445 S, 4670 Z and 5470 Z.

Benefits:

- Higher efficiency, lower fuel consumption and reduced operating costs
- 'Start up assistant' to make hill starts easier
- Different parameters for different drive characteristics
- Extra safety functions including overheating and over rotation protection to make the loader safer and more reliable
- Optional potentiometer that works to maintain a constant speed regardless of the motor speed. This is particularly useful when working with mulchers or
- Greater agility and more driving fun!

SCHÄFFER 4670 Z



ERGONOMICS AT ITS BEST

Driver comfort was our top priority when designing the cabin of the 4670 Z. A range of features contribute driver can feel fresh, even after long working days. All operating and control instruments are clearly the comfortable seat with impressive legroom. The working and manoeuvring. The third control circuit is integrated in the joystick, with no need to change









HTF, or 'High Traction Force', automatically regulates the thrust so the loader can supply the highest possible thrust even in a high gear. HTF uses a new axial piston-bent axis motor that regulates speed automatically depending on the traction. This is particularly useful in an uphill position as the driver does not have to switch to first gear.

HTF comes into its own when digging into aggregate material - if more thrust is required, the hydraulic motor adapts automatically, without the driver having to interfere manually. This means most of the work can be done in fast gear, increasing driving comfort and speeding up work. The

Schäffer 2430, 2430 SLT, 2445 S, 4670 Z and 5470 Z are equipped and delivered with the HTF-drive as standard.

Benefits:

- Very high thrust forces
- No need to manually shift down a gear when going uphill
- Even at high speed the maximum thrust is always available, e.g. when digging into aggregate material
- Enhanced driving comfort, faster working

ALL-ROUND VISIBILITY

The 5470 Z is a new loader of the 0.8 m³ class. The completely redesigned machine has a revised boom geometry with Z kinematics, giving an optimised view of the attachments such as the earth shovel and pallet fork. A spacious new cab also contributes to better all-round visibility. The 5470 Z, which weighs five tons, meets all the requirements of exhaust emission level Stage V and thus significantly reduces pollutant emissions. The new wheel loader is powered by a Deutz engine with 45 kW (61 HP), and there is also a 55 kW (75 HP) option available. Both power ratings

meet exhaust emission level Stage V through the use of a diesel oxidation catalyst and a diesel particulate filter, giving a significant reduction in soot particles and nitrogen oxides around the machine. The very high working pressure of 510 bar in the drive provides high thrust forces and improved agility, with the benefit of further efficiency and fuel saving

Z-LOADERS FROM SCHÄFFER: POWER IN ACTION

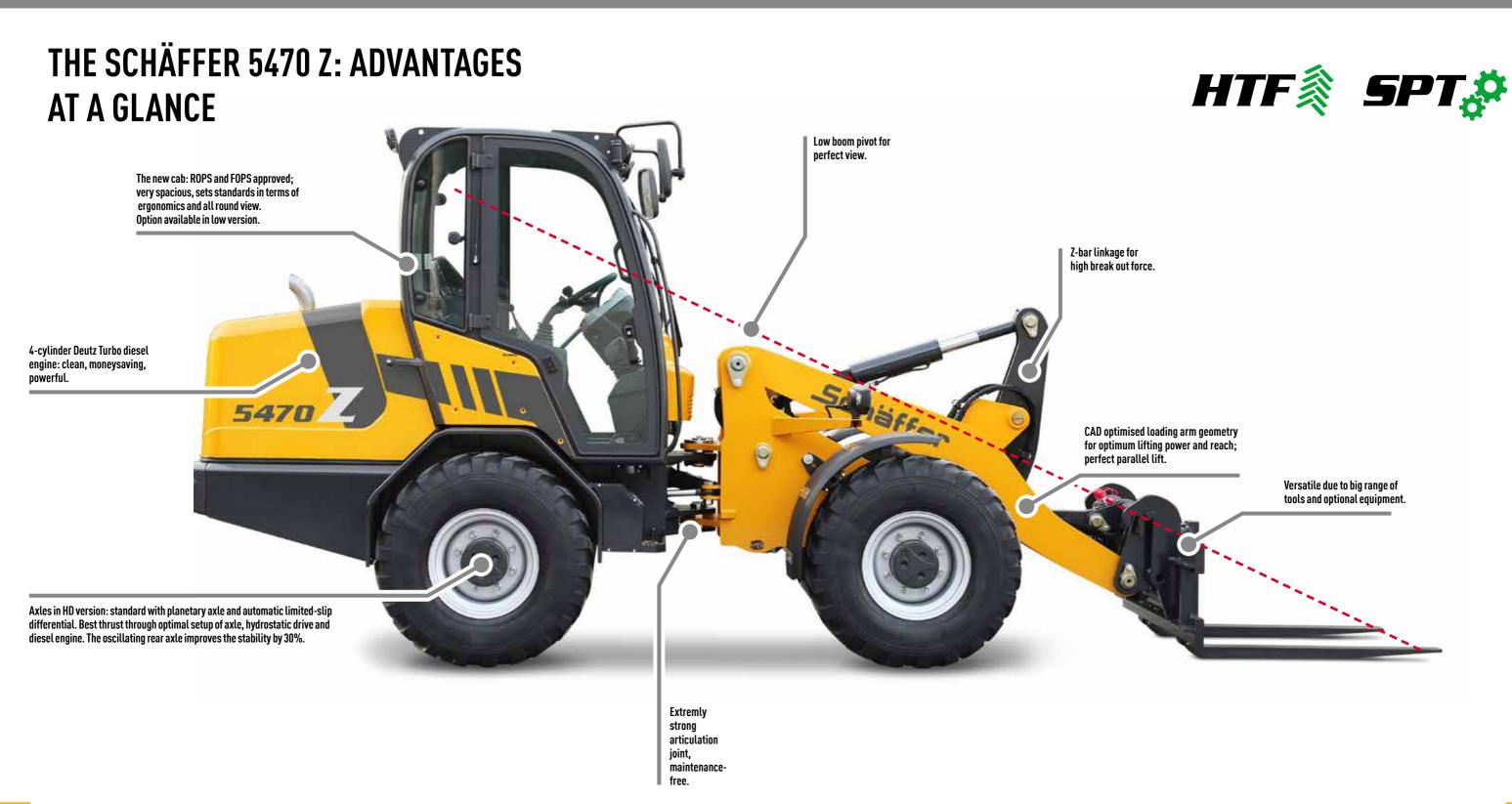
These again combine compact dimensions with maximum to beat in terms of space and ease of operation. The driver power and ergonomics, ideal for fast and safe handling of works faster and safer thanks to the perfect all-round conditions. The Z-kinematics bring power for lifting and tipping loads. The swinging rear axle provides great stability.

The Schäffer loader 5470 Z completes the Z-Loader range. The loaders are equipped with the 'SCV' cab, which is hard



COMPUTER-OPTIMISED ARM WITH Z KINEMATICS – SIMPLY STRONG

Our Z-Loaders feature a computer-optimised arm, designed by experienced Schäffer engineers using 3D CAD technology. Wide and strong enough to support any tool, yet designed to ensure better visibility – it's another example of smart,



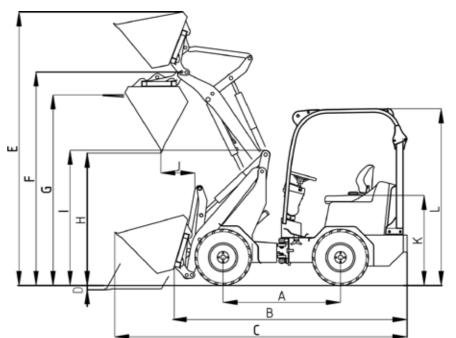
TECHNICAL DATA

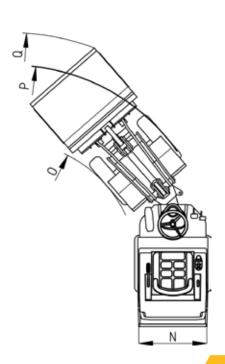
DIMENSIONS

| | 2428 | 2430 | 2445 S |
|---|--|--|--|
| Engine | 3 Cyl. Kubota, 18.5 kW (25 HP) | 3 Cyl. Kubota, 18.5 kW (25 HP) | 3 Cyl. Kubota Turbo, 37 kW (50 HP) |
| Exhaust gas treatment | - | - | DOC, DPF, Stage V |
| Traction hydraulics | Hydrostatic-automotive | Hydrostatic automotive, | HTF (High Traction Force) |
| Tyres | 27x8.50-15 SKD Option I 27x10.5-15 Option II 26x12.00-12 | 10.0/75 - 15.3 MPT/SKD/AS Option I 27x10.5-15 Option II 31x15.5-15 | 10.0/75 - 15.3 MPT / SKD / AS Option I 31x15.5-15 |
| Service braking system | Hydrostatic and mechanical drum brake | Combined brake hydrost | tatic and multi-disc brake |
| Parking brake | Mechanical drum brake | Multi-disc brake | running in oil bath |
| | Delivery rate: from 33 l/min Operating pressure: 200 bar | Delivery rate: 42 l/min Operating pressure: 200 bar | Delivery rate: 51 l/min Operating pressure: 200 bar |
| Steering | | Fully hydraulic articulated/ swivel steering | |
| Operating weight | 1,820 kg | 2,200 kg 2,400 kg with cab | 2,500 kg 2,700 kg with cab |
| Lifting capacity | 1,700 kg | 1,900 kg | 1,900 kg |
| | 1,046 - 1,222 kg 1,218 - 1,354 kg | 1,272 - 1,521 kg 1,530 - 1,740 kg | 1,825 - 2,035 kg 1,905 - 2,250 kg |
| Tipping load, articulated*1 Pallet fork Bucket | 850 kg 1,020 kg | 900 kg 1,180 kg | 1,285 kg 1,575 kg |
| Payload Pallet fork, even ground* ² Pallet fork, uneven ground* ² Bucket* ³ | 510 kg | 720 kg 540 kg 590 kg | 1,028 kg 771 kg 788 kg |
| Axles | Original Schäffer axles, 5-hole rim | Original Schäffer axles, 6-hole rim | |
| Speed | 0 - 15 kph | 0 - 20 kph | 0 - 20 kph in 2 gears switchable under load Option: 0 - 28 kph |
| Electric system | | Operating voltage: 12 V | |
| Fill quantities | Fuel: 23 l Hydraulic oil: 30 l | Fuel: 40 l Hydraulic oil: 30 l | Fuel: 40 l Hydraulic oil: 50 l |
| Specific gravity of material | 1.6 t/m³ | 1.6 t/m³ | 1.6 t/m³ |
| Bucket capacity *4 | 0.32 m³ | 0.42 m³ | 0.50 m³ |
| $Recommended\ bucket\ width$ | 0.8 m | 1.1 m | 1.4 m |
| Sound pressure level LpA | 84 dB(A) | 85 dB(A) | 82 dB(A) |
| Sound power level guaranteed LwA equivalent LwA | 98 dB (A) | 101 dB (A) 101 dB (A) | 101 dB (A) 98 dB (A) |
| Hand/arm vibration*5 | < 2.5 m/s² | < 2.5 m/s² | < 2.5 m/s² |
| Total body vibration *5 | < 0.5 m/s ² | < 0.5 m/s ² | < 0.5 m/s ² |

| ecommenueu bucket wiutii | U.O III | 1.1 | 1.4 III | 1 | | - CO () | , | |
|---|--|--------------------------|-------------------------|---|---|----------|---|---|
| Sound pressure level LpA | 84 dB(A) | 85 dB(A) | 82 dB(A) | | | | | |
| Sound power level guaranteed LwA equivalent LwA | 101 dB (A) | 101 dB (A) 101 dB (A) | 101 dB (A) 98 dB (A) | | | | | 1 |
| Hand/arm vibration*5 | < 2.5 m/s ² | < 2.5 m/s ² | < 2.5 m/s ² | ш | | · // | \$\hat{\mathred}{n} \ \ \ \ \ \ \ \ \ \ \ \ \ | |
| Total body vibration*5 | < 0.5 m/s ² | < 0.5 m/s ² | < 0.5 m/s² | ட | | ⊸ | M & A_1 | |
| • | EN 474-3 *3 according to ISO 14397-1 *4 according to | • | | | 9 | N 4// | | |
| nensions and additional equipment | can change the operating weight, tipping load and bucket | capacity. | | | | | | |

| | | 2428 | 2430 | 2445 S |
|---|---|-------------|----------------|----------------|
| Α | Wheelbase [mm] | 1,500 | 1,645 | 1,880 |
| В | Chassis length [mm] | 3,000 | 3,140 | 3,445 |
| С | Overall length with standard bucket [mm] | 3,750 | 3,830 | 4,185 |
| D | Digging depth [mm] | 110 | 105 | 105 |
| E | Max. working height [mm] | 2,960 | 3,230 | 3,230 |
| F | Max. bucket pivot point. [mm] | 2,300 | 2,500 | 2,500 |
| G | Loading height with pallet forks [mm] | 2,150 | 2,150 | 2,360 |
| Н | Max. dumping height [mm] | 1,450 | 1,700 | 1,700 |
| I | Front end height [mm] | 1,360 | 1,490 | 1,490 |
| J | Dumping width [mm] | 470 | 260 | 260 |
| K | Seat height [mm] | 1,055 | 1,190 | 1,160 |
| L | Overhead guard height [mm] Cab height [mm] | 2,090 - | 2,220 2,150 | 2,270 2,230 |
| N | Overall width [mm] | 940 - 1,250 | 1,020 - 1,300 | 1,100 - 1,520 |
| 0 | Inner turning radius [mm] | 760 | 960 | 1,000 |
| Р | Outer turning radius [mm] | 1,800 | 2,020 | 2,120 |
| Q | Outer radius with standard bucket [mm] | 2,190 | 2,310 | 2,500 |





TECHNICAL DATA

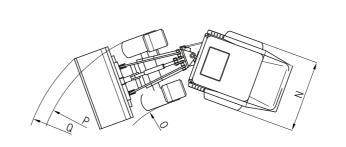
DIMENSIONS

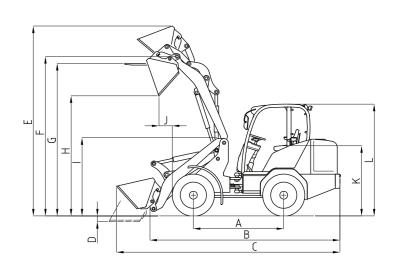
| | 2428 SLT | 2430 SLT |
|---|--|---|
| Engine | 3 Cyl. Kubota, 18.5 kW (25 HP) | 3 Cyl. Kubota, 18.5 kW (25 HP) |
| Traction hydraulics | Hydrostatic-automotive | Hydrostatic automotive, HTF (High Traction Force) |
| Tyres | 27x8.50-15 SKD Option I 27x10.5-15 Option II 26x12.00-12 | 10.0/75 - 15.3 MPT / SKD / AS Option I 27x10.5-15 Option II 31x15.5-15 |
| Service braking system | Hydrostatic and mechanical drum brake | Combined brake hydrostatic and multi-disc brake |
| Parking brake | Mechanical drum brake | Multi-disc brake running in oil bath |
| Working hydraulics Output/pressure | Delivery rate: from 33 l/min Operating pressure: 200 bar | Delivery rate: 42 L/min Operating pressure: 200 bar |
| Steering | Fully hydraulic artic | culated/swivel steering |
| Operating weight | 1,860 kg 1,960 kg with cab | 2,480 kg 2,555 kg with cab |
| Lifting capacity | 1,700 kg | 1,900 kg |
| | 1,185 - 1,311 kg 1,550 - 1,663 kg | 1,733 - 1,954 kg 1,820 - 2,135 kg |
| Tipping load, articulated ^{*1} Pallet fork Bucket | 880 kg 1,170 kg | 1,325 kg 1,550 kg |
| Payload Pallet fork, even ground* ² Pallet fork, uneven ground* ² Bucket* ³ | 528 kg | 1,160 kg 795 kg 775 kg |
| Axles | Original Schäffer axles, 5-hole rim | Original Schäffer axles, 6-hole rim; Option: automatic slip-control differential |
| Speed | 0 - 15 kph | 0 - 20 kph |
| Electric system | Operating | voltage: 12 V |
| Fill quantities | Fuel: 23 l Hydraulic oil: 30 l | Fuel: 40 l Hydraulic oil: 30 l |
| Specific gravity of material | 1.6 t/m³ | 1.6 t/m³ |
| Bucket capacity *4 | 0.37 m³ | 0.50 m³ |
| Recommended bucket width | 1.0 m | 1.3 m |
| Sound pressure level LpA | 83 dB(A) | 85 dB(A) |
| Sound power level guaranteed LwA equivalent LwA | 98 dB (A) | 101 dB (A) 101 dB (A) |
| Hand/arm vibration*5 | | < 2.5 m/s² |
| Total body vibration *5 | < 0.5 m/s ² | < 0.5 m/s² |

¹ according to ISO 8313 ² according to EN 474-3 ³ according to ISO 14397-1 ⁴ according to ISO 7546 ⁵ according to ISO 8041

Tyre dimensions and additional equipment can change the operating weight, tipping load and bucket capacity.

| _ | | | |
|---|---|--------------------------|--------------------------|
| | | 2428 SLT | 2430 SLT |
| A | Wheelbase [mm] | 1,700 | 1,815 |
| В | Chassis length [mm] | 3,200 | 3,400 |
| С | Overall length with standard bucket [mm] | 3,950 | 4,200 |
| D | Digging depth [mm] | 110 | 105 |
| E | Max. working height [mm] | 2,960 | 3,230 |
| F | Max. bucket pivot point. [mm] | 2,300 | 2,500 |
| G | Loading height with pallet forks [mm] | 2,150 | 2,360 |
| Н | Max. dumping height [mm] | 1,450 | 1,700 |
| I | Front end height [mm] | 1,360 | 1,480 |
| J | Dumping width [mm] | 470 | 260 |
| K | Seat height [mm] | 910 | 995 |
| L | Overhead guard height [mm] Cab height [mm] | from 1,890 from 1,890 | from 1,950 from 1,950 |
| N | Overall width [mm] | 940 - 1,250 | 1,020 - 1,300 |
| 0 | Inner turning radius [mm] | 850 | 1,050 |
| Р | Outer turning radius [mm] | 1,900 | 2,170 |
| Q | Outer radius with standard bucket [mm] | 2,510 | 2,550 |





TECHNICAL DATA

DIMENSIONS

| | 4670 Z | 5470 Z |
|---|---|---|
| Engine | 4 Cyl. Kubota, 37.4 kW (51 HP) / 48.6 kW (66 HP) | 4 Cyl. Deutz Turbo, 45 kW (61 HP) / 55 kW (75 HP) |
| Exhaust gas treatment | DOC, DP | F, Stage V |
| Traction hydraulics | Hydrostatic automotive, | HTF (High Traction Force) |
| Tyres | 11.5/80 - 15.3 AS Option I 15.0/55-17 Option II 425/55-17 | 400/70R18 A608 |
| Service braking system | Combined brake hydros | tatic and multi-disc brake |
| Parking brake | Multi-disc brake | running in oil bath |
| Working hydraulics Output/pressure | | Delivery rate: from 64 l/min Operating pressure: 220 bar |
| Steering | Fully hydraulic articulated/swivel steering | Hydraulic articulated pendulum steering |
| Operating weight | 3,400 kg / 3,520 kg with cab | 5,020 kg with cab |
| Lifting capacity | 2,400 kg | 3,600 kg |
| | 1,823 - 2,149 kg 2,120 - 2,428 kg | 2,660 kg 3,300 kg |
| Tipping load, articulated*1 Pallet fork Bucket | 1,700 kg 1,950 kg | 2,033 kg 2,611 kg |
| Payload Pallet fork, even ground ^{*2} Pallet fork, uneven ground ^{*2} Bucket ^{*3} | 852 kg | 1,626 kg 1,220 kg 1,306 kg |
| Axles | Original Schäffer axles, 6 wheel nut rim; planetary axle and automatic limited slip brake | ZF-axles, 8 wheel nut rim; planetary axle and automatic limi slip brake, oscilating rear axle |
| Speed | 0 - 20 kph, 2 speeds gear switching under load possible, Option: 0 - 28 kph | 0 - 20 kph, 2 speeds gear switching under load possible, Option: 0 - 30 kph |
| Electric system | Operating v | voltage: 12 V |
| Fill quantities | Fuel: 90 l Hydraulic oil: 60 l | Fuel: 92 l Hydraulic oil: 83 l |
| Specific gravity of material | 1.6 t/m³ | 1.6 t/m ³ |
| Bucket capacity *4 | 0.55 m³ | 0.80 m³ |
| Recommended bucket width | 1.3 m | 1.8 m |
| Sound pressure level LpA | 85 dB (A) | 74 dB(A) |
| Sound power level guaranteed LwA equivalent LwA | | 101 dB (A) 101 dB (A) |
| Hand/arm vibration *5 | <2.5 m/s ² | < 2.5 m/s ² |
| Total body vibration *5 | <0.5 m/s ² | < 0.5 m/s ² |

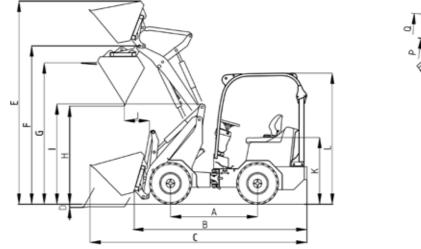
^{*1} according to ISO 8313 ^{*2} according to EN 474-3 ^{*3} according to ISO 14397-1 ^{*4} according to ISO 7546 ^{*5} according to ISO 8041

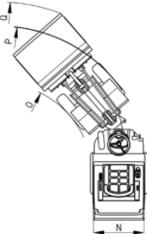
Availability of Schäffer efficiency systems

| | 2428 | 2428 SLT | 2430 | 2430 SLT | 2445 S | 4670 Z | 5470 Z |
|------|------|----------|------|----------|--------|--------|--------|
| HTF | - | - | X | X | X | X | X |
| SPT. | - | - | x | X | X | X | X |

| | | 4670 Z | 5470 Z |
|---|---|----------------|---------------|
| _ | Wheelbase [mm] | 2,000 | 2,050 |
| Α | wheetbase [mm] | 2,000 | 2,000 |
| В | Chassis length [mm] | 4,080 | 4,700 |
| С | Overall length with standard bucket [mm] | 4,760 | 5,250 |
| D | Digging depth [mm] | 120 | 80 |
| Ε | Max. working height [mm] | 4,060 | 3,900 |
| F | Max. bucket pivot point. [mm] | 3,260 | 3,250 |
| G | Loading height with pallet forks [mm] | 3,050 | 3,120 |
| Н | Max. dumping height [mm] | 2,500 | 2,500 |
| I | Front end height [mm] | 1,570 | 1,530 |
| J | Dumping width [mm] | 640 | 420 |
| K | Seat height [mm] | 1,270 | 1,340 |
| L | Overhead guard height [mm] Cab height [mm] | 2,270 2,270 | - 2,580 |
| N | Overall width [mm] | 1,420 - 1,730 | 1,742 - 1,842 |
| 0 | Inner turning radius [mm] | 1,450 | 1,580 |
| P | Outer turning radius [mm] | 2,680 | 3,380 |
| Q | Outer radius with standard bucket [mm] | 3,010 | 3,550 |

^{*} Option: Low cabin

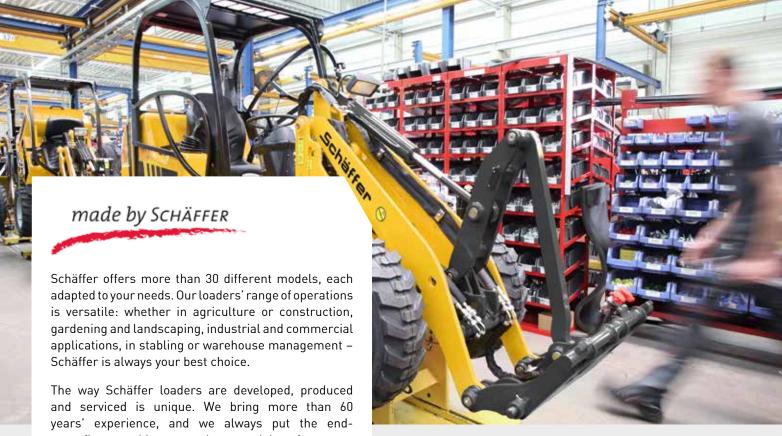




All technical specifications in this brochure refer to serial models and describe their standard functions. The equipment components and their functions as well as the accessories depend on the individual model and the product options and also on the country and customer specific requirements (the maximum values for tipping loads and payloads can only be reached with additional ballasting). Images may contain products or equipment components which are not mentioned or cannot be obtained as a standard. The descriptions, measurements, images, weight specifications and technology without prior notice, due to the continuous development of the products. In case of doubts concerning the performance or the mode of operation of our products due to special circumstances, we recommend the execution of work samples under controlled conditions. We cannot exclude deviations from images or measurements, calculation errors, printing errors or incompleteness in the prospectus despite all due care. We do therefore not accept any liability for the correctness and completeness of the specifications in this prospectus. We do guarantee the proper functioning of our products within the scope of our General Terms and Conditions. Any guarantees that go beyond these are on principle not provided. Any liability beyond

20

Tyre dimensions and additional equipment can change the operating weight, tipping load and bucket capacity.



user first, working to make your job safer, more comfortable and more profitable. Additionally, at our Erwitte location in Germany we use state-ofthe-art development and production technologies. Ultimately, it is our employees who continuously develop new solutions, in close contact with the end user. Years of company service together with an enduring spirit form the basis for the special competence and for our global success.

The Schäffer name does not just mean unique product quality. It also stands for safety and the optimal service that we guarantee in Germany, Europe and around the globe.

Purchasing a Schäffer loader is the beginning of a longterm relationship. Your machine will only remain a 100% genuine Schäffer if you use original replacement parts. Only then will it guarantee the reliability you need, and have the right to expect. We offer you and our service partners a 24 hour delivery service -7 days a week, 365 days a year.



YOUR DEALER:

Schäffer

Schäffer Maschinenfabrik GmbH

Auf den Thränen D-59597 Erwitte

fon +49 (0)2943 9709-0 fax +49 (0)2943 9709-50

info@schaeffer.de



D/07.20/WD. Technical changes reserved. Dimensions are approximate. In some cases, illustrations show models with custom designs