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 2428-2 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.



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.

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HTF: MAXIMUM THRUST, EVEN WHEN IN HIGH GEAR



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.

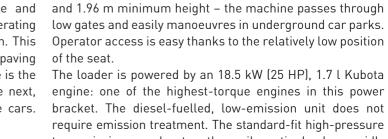
HTF comes into its own when digging into aggregate material - if more thrust is required, the hydraulic motor adapts automatically, without the driver having to interfere manually. This means most of the work can be done in fast gear, increasing driving comfort and speeding up work. The Schäffer 2430, 2430 SLT, 2445 S, 4670 Z and 5470 Z are equipped and delivered with the HTF-drive as standard.

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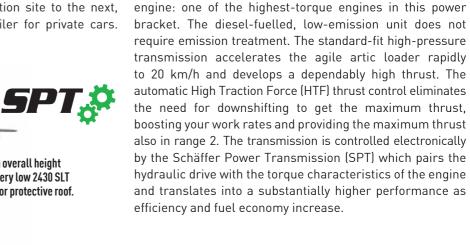
- Very high thrust forces
- No need to manually shift down a gear when going uphill
- Even at high speed the maximum thrust is always
- available, e.g. when digging into aggregate material
- Enhanced driving comfort, faster working

2430 SLT: MAXIMUM IMPACT IN TIGHT SPACE

Superseding the extremely successful 2445 SLT, the Schäffer 2430 SLT is as an enormously versatile and efficient compact wheeled loader that offers an operating weight of 2.4 - 2.6 tonnes depending on specification. This said, the light-weight machine handles pallets of paving stones weighing up to 1.9 tonnes. Another advantage is the ease of transport from one construction site to the next, because all it takes is a regular trailer for private cars.



Thanks to its compact dimensions – 1.02 m minimum width





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THE NEXT GENERATION OF COMPACT LOADERS

In recent years "2445" has developed into a real brand in the market of compact construction machinery. The machine is one of the most popular loaders in our construction machinery range. The successor model 2445 S emits significantly less pollutants. A more powerful engine and the electronically regulated drive provide even more agility and thrust.

The 2445 S is available in full cab or with protective roof. Depending on the ballast weight, it has an operating weight of 2.5 to 2.7 tonnes for easy transportation between construction sites using a regular car trailer. Although compact in size, the machine offers a tipping load of up to 1.9 t, which enables it to handle pallets of paving. With a lift height of 2.50 m, the machine is also suitable for filling and unloading bigger trailers.

The new wheeled loader is powered by a modern 3-cylinder Kubota Diesel engine which develops $37~\mathrm{kW}$ (50 HP) from a 1.8-litre displacement – a 22 % increase over its predecessor. The high torque of up to 151 NM boosts output by 28 % which is developed at a relatively low 1,600 rpm and a noticeably lower noise level. Although the engine is significantly more powerful it is more economical on fuel as consumption has been reduced by 10 % per kilowatt hour.

Stage V compliance is achieved by using a diesel oxidation catalyst (DOC) and diesel particulate filter (DPF), which results in a significant reduction in emissions over the previous model and a nearly complete retention of soot particles in the particulate filter. A low-emission fleet is becoming more important for contracting jobs both from the private and public sector in the future, with more and more city councils requiring the use of Stage V compliant machinery in their tenders.





SCHÄFFER 4670 Z



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 2428-2, 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!



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 generous use of glass delivers perfect visibility for working and manoeuvring. The third control circuit is integrated in the joystick, with no need to change the handle to operate the additional control circuit.









Z-LOADERS FROM SCHÄFFER: POWER IN ACTION

power and ergonomics, ideal for fast and safe handling of works faster and safer thanks to the perfect all-round bulk goods and the transport of heavy loads. These compact visibility. wheel loaders are in their element in narrow operating 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 These again combine compact dimensions with maximum to beat in terms of space and ease of operation. The driver



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, driver-centred design from Schäffer.



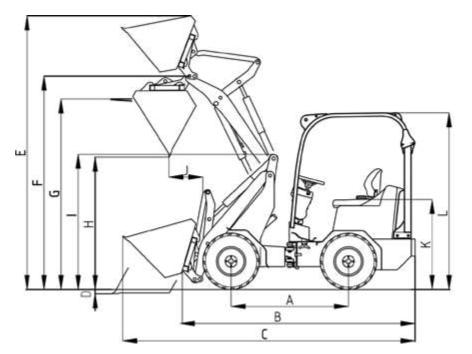
TECHNICAL DATA

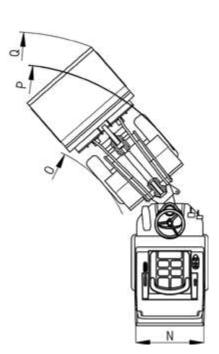
DIMENSIONS

	2428-2	2430	2445 S	
Engine	3-cyl. diesel engine Kubota D1105, 18.5 kW (25 HP)	3-cyl. diesel engine Kubota D1703-M-Di, 18.5 kW (25 HP)	3-cyl. diesel engine Kubota D1803-CR-T, 37 kW (50 HP)	
Exhaust gas treatment / emission level		-/V		
Traction hydraulics	Hydrostatic-automotive	Hydrostatic automotive,	HTF (High Traction Force)	
Tyres	27x8.50-15 SKD 10.0/75 - Tyres Option I 27x10.5-15 Option II 26x12.00-12 Option II		10.0/75 - 15.3 MPT / SKD / AS Option I 31x15.5-15	
Service braking system	Hydrostatic and mechanical drum brake	Combined brake hydros	atic and multi-disc brake	
Parking brake	Mechanical drum brake	Multi-disc brake	running in oil bath	
Working hydraulics Output/pressure		Delivery rate: 42 l/min Operating pressure: 200 bar	Delivery rate: from 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	1,830 - 1,950 kg 2,420 - 2,570 kg	
Tipping load, articulated ^{*1} Pallet fork Bucket	850 kg 1,020 kg	900 kg 1,180 kg	1,360 kg 1,740 kg	
Payload Pallet fork, even ground* ² Pallet fork, uneven ground* ² Bucket* ³	510 kg	720 kg 540 kg 590 kg	1,088 kg 816 kg 870 kg	
Axles	Original Schäffer axles, 5-hole rim	Original Schäffer axles, 6-hole rim	Original Schäffer axles, 6-hole rim; Option: automatic slip-control different	
Speed	0 - 15 km/h	0 - 20 km/h	0 - 20 km/h in 2 gears switchable under load Option: 0 - 30 km/h	
Electric system		Operating voltage: 12 V		
Fill quantities	Fuel: 23 l Hydraulic oil: 30 l	Fuel: 40 l Hydraulic oil: 30 l	Fuel: 50 l Hydraulic oil: 48 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		101 dB (A) 101 dB (A)	101 dB (A) 98 dB (A)	
Hand/arm vibration*5	< 2.5 m/s²			
Total body vibration *5		< 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

		2428-2	2430	2445 S
Α	Wheelbase [mm]	1,530	1,645	1,880
В	Chassis length [mm]	3,030	3,140	3,445
С	Overall length with standard bucket [mm]	3,780	3,830	4,185
D	Digging depth [mm]	110	105	105
Ε	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]	2,100 -	2,190 2,140	2,230 2,150
N	Overall width [mm]	940 - 1,250	1,020 - 1,300	1,100 - 1,520
0	Inner turning radius [mm]	860	1,170	1,230
Р	Outer turning radius [mm]	1,755	2,190	2,330
Q	Outer radius with standard bucket [mm]	2,105	2,480	2,710





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

TECHNICAL DATA

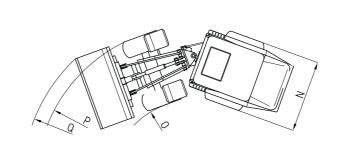
DIMENSIONS

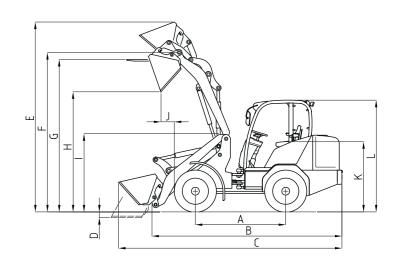
	2428 SLT	2430 SLT		
Engine	3-cyl. diesel engine Kubota D1105, 18.5 kW (25 HP)	3-cyl. diesel engine Kubota D1703-M-Di, 18.5 kW (25 HP)		
Exhaust gas treatment / emission level	-/V			
Traction hydraulics	Hydrostatic-automotive	Hydrostatic automotive, HTF (High Traction Force)		
Tyres	27x8.50-15 SKD Option 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		
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: 42 l/min Operating pressure: 200 bar		
Steering	Fully hydraulic arti	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 allet fork, uneven ground* ² Bucket* ³	528 kg	1,060 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 km/h	0 - 20 km/h		
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		
ecommended 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	1.5 m/s²		

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

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

		2/22 51 T	2/20 CLT
		2428 SLT	2430 SLT
Α	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
Е	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]	1,920 1,920	1,960 1,960
N	Overall width [mm]	940 - 1,250	1,020 - 1,300
0	Inner turning radius [mm]	1,795	1,560
Р	Outer turning radius [mm]	2,735	2,580
Q	Outer radius with standard bucket [mm]	3,345	2,960





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TECHNICAL DATA

DIMENSIONS

	4670 Z	5470 Z	
Engine	4-cyl. diesel engine Kubota V2403-CR(-T), 37.4 kW (51 HP) / 48.6 kW (66 HP)	4-cyl. diesel engine Deutz TD 2.9, 45 kW (61 HP) / 55 kW (75 HP)	
Exhaust gas treatment/ emission level	DOC, DPF/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 hydrost	atic and multi-disc brake	
Parking brake	Multi-disc brake	running in oil bath	
	Delivery rate: 76 l/min Operating pressure: 200 - 210 bar	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	5,220 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 limite slip brake, oscilating rear axle	
Speed	0 - 20 km/h, 2 speeds gear switching under load possible, Option: 0 - 30 km/h	0 - 20 km/h, 2 speeds gear switching under load possible, Option: 0 - 30 km/h	
Electric system	Operating v	roltage: 12 V	
Fill quantities	Fuel: 90 l Hydraulic oil: 60 l	Fuel: 82 l Hydraulic oil: 81 l	
Specific gravity of material	1.6 t/m³	1.6 t/m³	
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/s²		
Total body vibration *5	< 0.5	i m/s²	

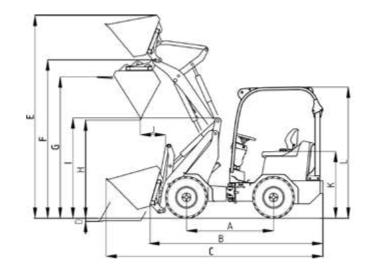
¹¹ according to ISO 8313 12 according to EN 474-3 13 according to ISO 14397-1 14 according to ISO 7546 15 according to ISO 8041 Tyre dimensions and additional equipment can change the operating weight, tipping load and bucket capacity.

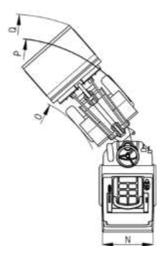
Availability of Schäffer efficiency systems

	2428-2	2428 SLT	2430	2430 SLT	2445 S	4670 Z	5470 Z
<i>HTF</i>	-	-	Х	Х	Х	Х	Х
SPT.	-	-	Х	Х	Х	Х	Х
MHF	-	-	-	-	0	-	-

		4670 Z	5470 Z
Α	Wheelbase [mm]	2,000	2,050
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	- 2,570 / 2,450°
N	Overall width [mm]	1,420 - 1,730	1,740 - 1,820
0	Inner turning radius [mm]	1,425	1,560
Р	Outer turning radius [mm]	2,845	3,300
Q	Outer radius with standard bucket [mm]	3,175	3,470

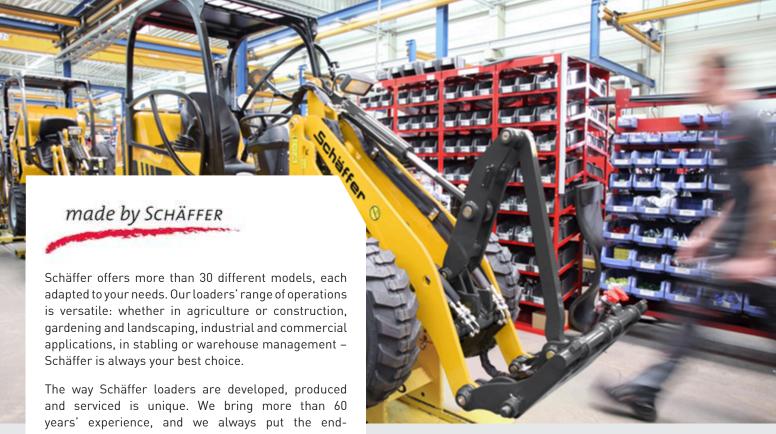
* Option: low cabin





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 technical data correspond to the state of the art at the time of printing and are non-binding. We reserve changes in the field of construction, equipment, optics 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 the ones set out in our General Terms and Conditions is excluded.

X = as standard, O = optional



The way Schäffer loaders are developed, produced and serviced is unique. We bring more than 60 years' experience, and we always put the enduser first, working to make your job safer, more comfortable and more profitable. Additionally, at our Erwitte location in Germany we use state-of-the-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 long-term 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

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