

Schäffer



ELECTRIC LOADERS

Emission-free, powered by lithium-ion technology

14e



14E: THE COMPACT E-LOADER

The 14e has been designed especially for use in areas where space is limited and shows its true colours where zero emissions are sought. Loaders with conventional drive systems disturb the peace in parks or cemeteries – the noise and exhaust fumes are also harmful to people, animals and the climate. Machines without a combustion engine also offer numerous advantages when operating in indoor areas.

The electric multifunctional loader 14e is intended for these applications. It boasts an extremely compact design, weighing only 1,345 kg and featuring a minimum width of 0.89 m and an overall height of just 1.99 m. This allows it to fit easily through narrow and low entryways. It is therefore a universal partner for maintaining large green spaces, leisure parks, zoos and cemeteries, for use in the tourism sector and confined gardening and landscaping areas, as well as for indoor demolition

companies. While additional flexibility is provided by the extensive range of attachments.

The 14e is equipped with energy-efficient LED lights and LED working headlights. A 9.6 kW electric motor powers the hydrostatic traction drive and the working hydraulics. The motor, in turn, is powered by a 48 V Li-Ion battery pack. With a capacity of 12.2 kWh, it enables operating times of up to 2.5 hours for medium-duty loading activities where no hydraulic attachments are used.

The battery pack can be charged either from commercially available wallboxes with a Type 2 plug or from 230 V power outlets. With both variants, charging the battery pack to 80 per cent capacity takes around 2.5 hours.

ADVANTAGES AT A GLANCE



Extremely compact dimensions:
1.99 m high, min. 0.89 m wide

LED driving and working
headlights

Spherical plain bearings instead
of bearing sleeves for significant-
ly improved long-term quality

Universal application
thanks to a wide range of
attachments

12.2 kWh Li-Ion battery
pack, 48 V, charging via a
wallbox Type 2 socket or
from a 230 V power outlet

A powerful and robust
9.6 kW electric motor
drives the hydraulic
pump, hydraulic
performance: 28 l/min

Original Schäffer axles,
hydrostatic four wheel drive with
automotive control and change of direction
on the joystick, optionally with foot pedal
control and electronic hand throttle

Standard equipment 14e

- Electric motor 9,6 kW
- Hydrostatic four wheel drive with automotive control
- Li-Ion battery pack, 48 V / 12,2 kWh
- On-board charger with Type 2 connector enables charging at a 230V power outlet or a wallbox
- Charging cable type 2 / CEE 16 A, 4 m
- Battery management system
- Energy recuperation
- Eco mode to extend the operating time
- Tyres 23x8.50-12 SKD, offset +60
- Genuine Schäffer axle, 5 hole
- Hydraulic oil cooler
- Drum brake as parking brake
- Maintenance free articulated pendulum joint
- Restraining system for protection roof
- LED working headlight: 2 x front, 1 x rear
- Parallel lift
- Mechanically operated additional controller
- Silence gear pump, especially quiet
- Working hydraulics: 28 l/min
- Adjustable steering column
- Hour meter and charging status display
- Tool Box
- Driver-on-board switch
- Quick-change frame SWH with hydraulic tool lock

MULTIFUNCTIONAL LOADER FULL OF ACTION

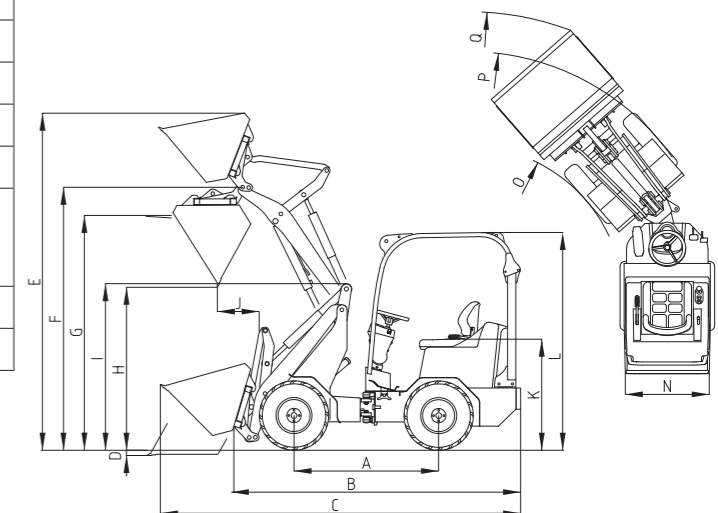


14e Technical data, dimensions

14e	
Engines	Electric motor 9.6 kW
Drive unit	hydrostatic-automotiv
Battery	Li-Ion battery pack, 48 V / 12.2 kWh
Charging system	On-board charger with Type 2 connector enables charging at a 230V power outlet or a wallbox
Tyres	23 x 8.5 -12 SKD Option I 23 x 8.5 -12 AS/MultiTrac Option II 23 x 10.5 -12 AS/MultiTrac
Service braking system	hydrostatic
Parking brake	mechanical drum brake
Working hydraulics Output/pressure	Delivery rate: 28 l/min Operating pressure: 200 bar
Steering	Fully hydraulic articulated/swivel steering
Operating weight	1,345 kg
Lifting capacity	810 kg
Tipping load, straight* ¹	
Pallet fork	630 kg
Bucket	850 kg
Tipping load, articulated* ¹	
Pallet fork	430 kg
Bucket	550 kg
Payload	
Pallet fork, even ground* ²	344 kg
Pallet fork, uneven ground* ²	258 kg
Bucket* ³	275 kg
Axles	Original Schaefer axles, 5 wheel nut rim
Speed	16 kph
Electric system	Operating voltage: 12 V
Fill quantities	Hydraulic oil: 22 l
Sound pressure level LpA	71 dB(A)
Sound power level guaranteed LwA	99 db(A)
equivalent LwA	90 db(A)
Hand/arm vibration* ⁴	< 2.5 m/s ²
Total body vibration* ⁴	< 0.5 m/s ²

*¹ nach ISO 8313 *² nach EN 474-3 *³ nach ISO 14397-1 *⁴ nach ISO 8041
Reifendimension und Zusatzausrüstungen verändern Betriebsgewicht, Kipplast und Nutzlast.

14e		
A	Wheelbase [mm]	1,345
B	Chassis length [mm]	2,450
C	Overall length with standard bucket [mm]	3,050
D	Digging depth [mm]	80
E	Max. working height [mm]	2,635
F	Max. bucket pivot point [mm]	2,230
G	Loading height with pallet forks [mm]	2,020
H	Max. dumping height [mm]	1,510
I	Front end height [mm]	1,390
J	Dumping width [mm]	195
K	Seat height [mm]	1,010
L	Overhead guard height [mm]	1,990
N	Overall width [mm]	890 / 1,060
O	Inner turning radius [mm]	970
P	Outer turning radius [mm]	1,875
Q	Outer radius with standard bucket [mm]	2,222



All technical specifications in this prospectus 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. 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.



24e, 24e T



24e, 24e T

EMISSION-FREE OPERATION: WITHOUT LOUD NOISE OR EXHAUST FUMES – EVERYWHERE AND ANYTIME

Schäffer electric loaders guarantee emission-free operation: Noise and exhaust fumes are now things of the past – a significant advantage in emission-sensitive areas.

The electric loaders provide the ideal conditions for nearly silent operation in residential areas, city centres, zoos, parks and cemeteries, as well as in high tourism regions – whether early in the morning, late in the evening or at lunchtime.

When performing indoor demolition work or working in underground car parks or greenhouses, drivers and all other employees benefit from clean air – despite using a powerful wheel loader. Talking of clean air: Electric loaders also give you a competitive edge in securing contracts that require machines without combustion engines.

The output of the 24e corresponds to that of a 50 HP diesel loader belonging to the 0.5 m³ class. Thanks to its minimum operating weight of 2,290 kg, the electric loader can be easily transported from one site to the next on the back of a car trailer. The 24e T delivers a much greater range thanks to its telescopic arm and can lift loads to a height of 3.72 m.

These loaders reach a top speed of 20 kph and feature the rapid acceleration characteristic of an electric vehicle. This makes them a pleasure to drive while enhancing work efficiency.

Further, existing tools can of course be used on the electric loaders (hydraulically driven tools require separate oil cooling on the tool).

Standard equipment 24e

- Electric motor drive: 21 kW; electric motor working hydraulics: 9,7 kW
- Low version front carriage for best lifting force
- Electric four wheel drive with cardan shaft
- Li-Ion battery pack, 260 V / 15.65 kWh (31.3 kWh on option)
- On-board charger with Type 2 connector enables charging at a 230V power outlet (3 kW) or a wallbox (11 kW)
- Charging cable type 2 / CEE 16 A, 4 m
- Battery management system
- Energy recuperation
- Hill-Hold funktion: 'start up assistant' to make hill starts easier
- Tyres 10.0/75-15.3 MPT, offset +40
- 20 kph
- Eco mode to extend the operating time
- Genuine Schäffer axle, 6 hole
- Water cooling of electric motors
- Multiple disk brake, maintenance free; service and parking brake
- Maintenance free articulated pendulum joint
- Restraining system for protection roof
- LED working headlights: 2 x front, 1 x rear
- LED lighting system without ABE (General approval certificate) according to ordinance StVZO
- Acoustic reverse warning signal (can be switched off)
- Parallel lift
- Electronically operated additional controller
- SilencePlus gear pump, especially quiet
- Working hydraulics: 42 l/min
- Adjustable steering column
- Hour meter and charging status display
- Counter weight 100 kg mounted under rear chassis
- Rear weight end plate
- Main battery switch
- Tool Box
- Driver-on-board switch
- Quick-change frame SWH with hydraulic tool lock

24E, 24E T: THE INNOVATIVE ELECTRIC LOADER

- **100 % emission-free:** no exhaust fumes, no noise
- **Efficient high-voltage technology,** hydraulics and drive each powered by their own electric motor
- **Power battery system with a capacity of 15.65 kWh or 31.3 kWh:** hours of normal use, maintenance-free.
- **On-board charger with Type 2 charging socket** for charging from a 230 V socket (3 kW) or a wallbox (11 kW). 80% battery charge with the wallbox in just 2.2 hours (31.3 kWh battery) or 1.1 hours (15.65 kWh battery).
- **Battery life warranty:** 5,000 operating hours or 5 years, whichever comes first
- **Energy recuperation:** automatic charging of the battery, e. g. during braking processes
- **Significant savings:** reduced maintenance costs and lower operating costs compared to diesel machine or other battery concepts, due to better efficiency
- **No memory effect:** recharging possible at any time
- **Safe temperature regulation:** reliable water cooling of the entire system
- **20 kph:** the only battery-powered wheel loader with a top speed of 20 kph
- **Hill-Hold function:** 'start up assistant' to make hill starts easier

24e, 24e T



24e

Technical data, dimensions

MAXIMUM EFFICIENCY – MINIMUM CHARGING TIMES THANKS TO INNOVATIVE LITHIUM-ION TECHNOLOGY

When developing the 24e electric loader, achieving maximum energy efficiency alongside emission-free operation was of real importance.

All components of the drive system are perfectly matched to the electric drive. Together with the lithium-ion battery, the loader achieves an efficiency about three times as high as that of a comparable diesel engine. This means that only one third as much energy is needed to operate the machine. Maintenance of the electric motors and battery takes considerably less effort too, which further reduces the costs per operating hour.

The use of lithium-ion technology makes the 24e a real innovation. The customer receives a guarantee of 5,000 operating hours or five years of use, whichever comes first.

With the help of the standard type 2 plug and an 11 kW wallbox, the large battery pack can be charged to 80 % in just 2.2 hours. With the small package, this time is halved. Alternatively, it can also be charged using 230 V / 3 kW household power.

The battery can be charged at any time without affecting the battery lifetime – another advantage of lithium-ion technology.

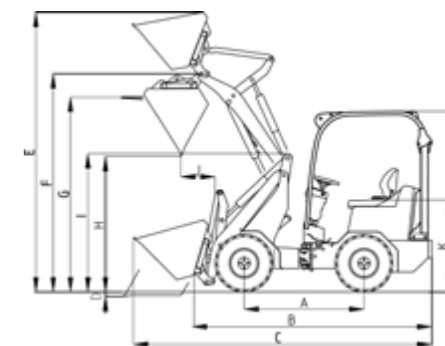


		24e
Engines	Drive: 21 kW Working hydraulics: 9.7 kW	
Drive unit	4-wheel-drive, fully electric	
Battery	Lithium-Ion, 240 V; 15.65 kWh or 31.3 kWh	
Charging system	On board charger, 3 kW/230 V/16 A Option: wallbox, 11 kW	
Tyres	10.0/75 - 15.3 MPT / AS Option I 27x10.5-15 Option II 31x15.5-15	
Service braking system	Multi-disc brake running in oil bath	
Parking brake		
Working hydraulics	Delivery rate: 42 l/min	
Output/pressure	Operating pressure: 180 bar	
Steering	Fully hydraulic articulated/swivel steering	
Operating weight	2,290 / 2,355 kg with cabin	
Lifting capacity	1,900 kg	
Tipping load, straight ¹		
Pallet fork	1,610 - 1,749 kg	
Bucket	1,690 - 1,935 kg	
Tipping load, articulated ¹		
Pallet fork	1,140 kg	
Bucket	1,470 kg	
Payload		
Pallet fork, even ground ²	912 kg	
Pallet fork, uneven ground ²	684 kg	
Bucket ³	735 kg	
Axles	Original Schaffer axles, 6 wheel nut rim	
Speed	20 kph	
Electric system	Operating voltage: 12 V	
Fill quantities	Hydraulic oil: 15 l	
Specific gravity of material	1.6 t/m ³	
Bucket capacity ⁴	0.45 m ³	
Recommended bucket width	1.3 m	
Sound pressure level LpA	64 dB(A)	
Sound power level guaranteed LwA	99 dB(A)	
equivalent LwA	90 dB(A)	
Hand/arm vibration ⁵	< 2.5 m/s ²	
Total body vibration ⁵	< 0.5 m/s ²	

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

Tyre dimensions and additional equipment can change the deployment weight, tilting load and bucket capacity.

		24e
A	Wheelbase [mm]	1,755
B	Chassis length [mm]	3,320
C	Overall length with standard bucket [mm]	4,045
D	Digging depth [mm]	105
E	Max. working height [mm]	3,230
F	Max. bucket pivot point [mm]	2,500
G	Loading height with pallet forks [mm]	2,360
H	Max. dumping height [mm]	1,700
I	Front end height [mm]	1,490
J	Dumping width [mm]	260
K	Seat height [mm]	1,160
L	Overhead guard height [mm]	2,190
	Height with cabin [mm]	2,140
N	Overall width [mm]	1,020 - 1,570
O	Inner turning radius [mm]	1,310
P	Outer turning radius [mm]	2,330
Q	Outer radius with standard bucket [mm]	2,710



24e T



24E T: THE ELECTRIC TELESCOPIC WHEEL LOADER FOR THAT EXTRA RANGE

Schäffer unveiled its first conventionally powered telescopic wheel loader in 1994. Over the following decades, Schäffer evolved into the leading supplier of articulated telescopic wheel loaders, offering a diverse range with operating weights from 2.8 t to 13 t.

With the 24e T, Schäffer introduced the world's first fully electric telescopic wheel loader, further enhancing its expertise in this area. From a technical perspective, the 24e T is

based on the 24e wheel loader. Thanks to its telescopic arm, the 24e T has a lifting height of 3.72 m, is available with either an overhead guard or cab and offers a tipping load with pallet fork of 1.3 t at a weight of 2.8 t. The articulated joint makes the machine particularly agile; the inner turning radius is just 1.15 m. Depending on the tyres, the 24e T measures between 1.41 m and 1.59 m in width with an overall height of 2.19 m with an overhead guard or 2.14 m with a cab.

Standard equipment 24e T

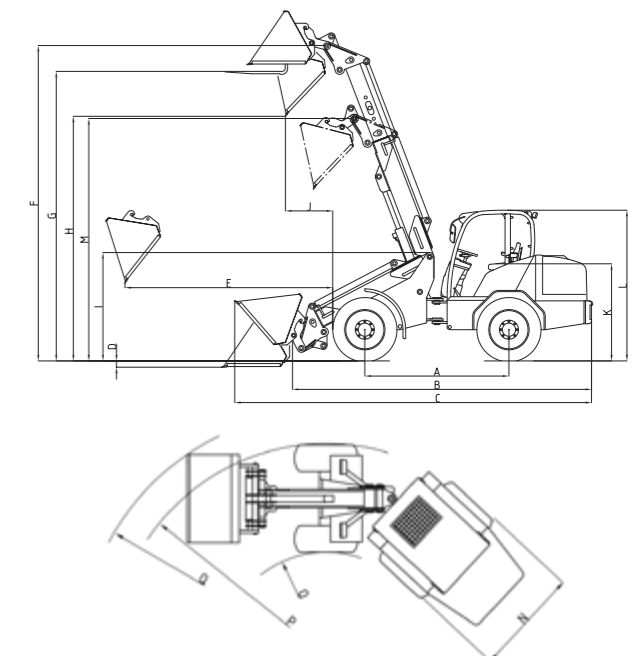
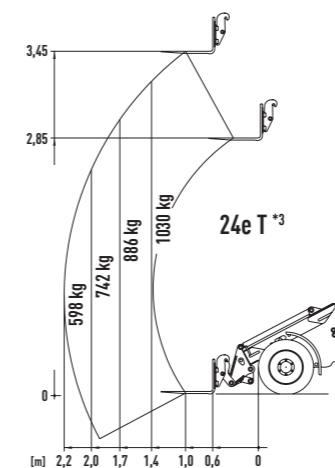
- Electric motor drive: 21 kW; electric motor working hydraulics: 9,7 kW
- Electric four wheel drive with cardan shaft
- Li-Ion battery pack, 240 V / 31.3 kWh
- On-board charger with Type 2 connector enables charging at a 230 V power outlet (3 kW) or a wallbox (11 kW)
- Charging cable type 2 / CEE 16 A, 4 m
- Battery management system
- Energy recuperation
- Hill-Hold funktion: 'start up assistant' to make hill starts easier
- Tyres 31x15.5-15 SKD, offset 0
- 20 kph
- Eco mode to extend the operating time
- Genuine Schäffer axle, wide design, 6 hole
- Ferro-form sliding elements in the telescop arm
- Tool cylinder in the telescop arm
- Electric pressure relief of hydraulic couplings (on the steering tower and telescopic arm)
- Water cooling of electric motors
- Multiple disk brake, maintenance free; service and parking brake
- Maintenance free articulated pendulum joint
- Restraining system for protection roof
- LED working headlights: 2 x front, 1 x rear
- LED lighting system without ABE (General approval certificate) according to ordinance StVZO
- Acoustic reverse warning signal (can be switched off)
- Z-bar boom with parallel lift
- Electronically operated additional controller
- Working hydraulics: 42 l/min
- Adjustable steering column
- Hour meter and charging status display
- Counter weight 100 kg mounted under rear chassis
- Rear weight end plate and towing hitch
- Main battery switch
- Wide chassis with wider fender
- Tool Box
- Driver-on-board switch
- Quick-change frame SWH with hydraulic tool lock

24e T

Technical data, dimensions

24e T	
Engines	Drive: 21 kW Working hydraulics: 9.7 kW
Drive unit	4-wheel-drive, fully electric
Battery	Lithium-Ion, 240 V; 31.3 kWh
Charging system	On board charger: 3 kW / 230 V / 16 A, Wallbox: 11 kW
Tyres	31x15.5-15 SKD Option: 31x15.5-15 AS
Service braking system	Multi-disc brake running in oil bath
Parking brake	
Working hydraulics Output/pressure	Delivery rate: 42 l/min Operat. pressure: 180 bar
Steering	Fully hydraulic articulated/swivel steering
Operating weight	2,750 / 2,815 kg with cabin
Lifting capacity	1,600 kg
Tipping load, straight ¹	1,275 kg
Axles	Original Schäffer axles, 6 wheel nut rim
Speed	20 kph
Electric system	Operating voltage: 12 V
Fill quantities	Hydraulic oil: 30 l
Sound pressure level LpA	64 dB(A)
Sound power level guaranteed LWA equivalent LWA	99 db(A) 90 db(A)
Hand/arm vibration ²	< 2.5 m/s ²
Total body vibration ²	< 0.5 m/s ²

24e T		
A	Wheelbase [mm]	1,870
B	Chassis length [mm]	3,900
C	Overall length with standard bucket [mm]	4,700
D	Digging depth [mm]	90
E	Max. working height [mm]	1,570
F	Max. bucket pivot point [mm]	3,720
G	Loading height with pallet forks [mm]	3,470
H	Max. dumping height [mm]	3,010
I	Front end height [mm]	1,580
J	Dumping width [mm]	820
K	Seat height [mm]	1,160
L	Overhead guard height [mm] Height with cabin [mm]	2,190 2,140
M	Swivelling point, telescopic arm retracted [mm]	3,100
N	Overall width [mm]	1,410 - 1,590
O	Inner turning radius [mm]	1,150
P	Outer turning radius [mm]	2,650
Q	Outer radius with standard bucket [mm]	2,950



¹ acc. to ISO 8313 ² acc. to ISO 8041

Tyre dimensions and additional equipment can change the deployment weight, tilting load and bucket capacity.



MADE BY
Schäffer

Schäffer offers a programme with more than 30 different models, each adapted to your needs. Our loaders' range of operations is versatile: whether in agriculture or construction, gardening and landscaping, industrial and commercial applications, in stabling or warehouse management – Schäffer is always your best choice.

The way Schäffer loaders are developed, produced and serviced is unique. The real difference is our experience of more than 60 years. We think of the end user first, because we seek to make your job safer, more comfortable and more profitable. Additionally, at our Erwitte location in Germany we rely on 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 optimal service that we guarantee both in Germany, Europe and around the globe.

YOUR DEALER:

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.



0.5/04.25/ND. Technical changes reserved. Dimensions are approximate. In some cases, illustrations show models with custom designs.