

**ZERO EMISSION –** Good fun. Good atmosphere.

### ZERO EMISSION

Master new challenges	
Solution overview	
Modular battery system	
Battery-powered rammers	
Battery-powered plates	
Electric wheel loader	
Electric mini excavator	
Electric dumper	
Our products in action	
Deployment scenarios	

## YOUR DECLARATION OF INDEPENDENCE.





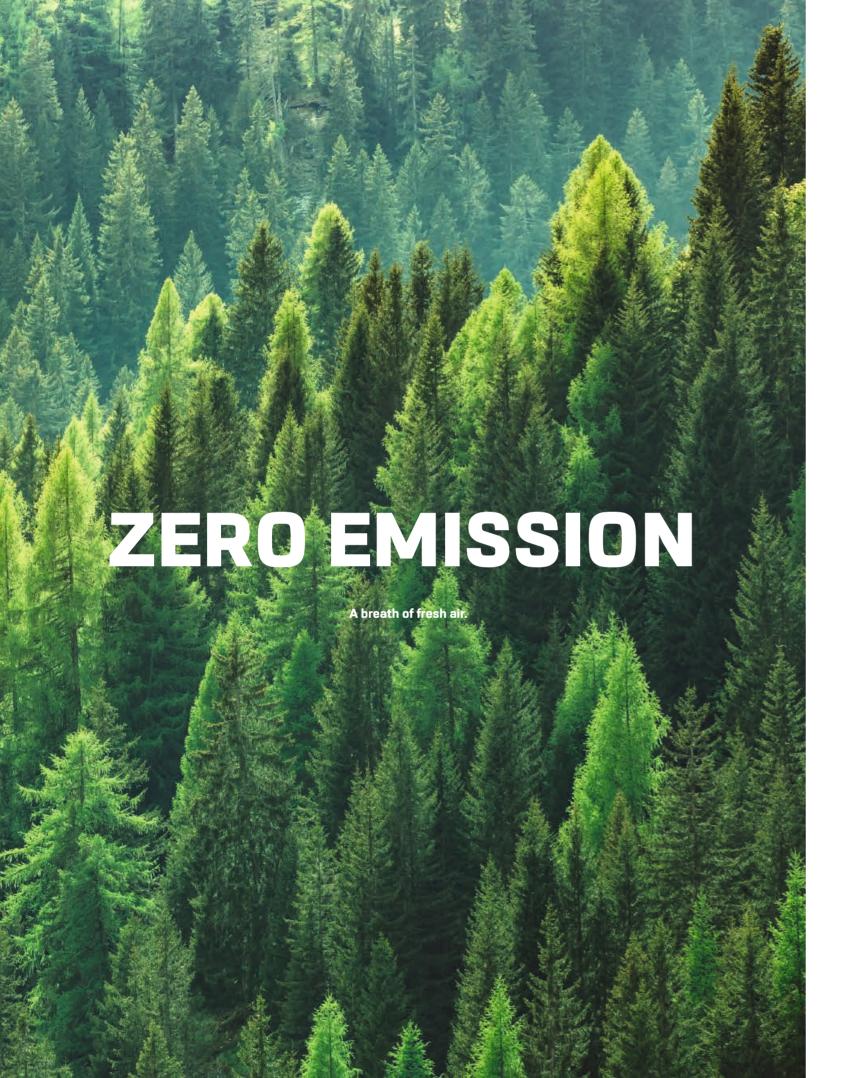
#### Rapidly expanding cities. Rising volumes of traffic with an unmistakable impact on people and the environment.

Increasingly complex emissions standards for vehicles and equipment. Headlines in the news that sounded abstract and far-removed not too long ago are now changing the way we live and work.

There is a tangible sense of uncertainty. How can we help protect the climate and human health yet still work productively? Is there even any point in buying technologies previously considered standard or is there a risk that they will be banned in the near future? If I switch to alternative drive technologies, what kind of adjustments will I have to make? Wacker Neuson has been working on a short, simple

answer to these challenges for several years now. We call it: zero emission. Our concept builds on the idea that you don't need to test for compliance with threshold values if a machine doesn't emit noise or exhaust fumes. We also believe that a technology that does not compromise on productivity or cost is bound to resonate with the market - especially if it delivers real value to users, businesses and the environment.

We have taken a first step in the right direction, developing more than ten zero emission light and compact equipment products. And we will keep expanding our offering, leaving you free to focus on your core business.





Our portfolio of battery-powered light equipment and electric compact equipment is expanding continuously. All of our products are united by our promise to make no compromises.

No compromises on power. No compromises on runtimes. And definitely no compromises on lifetime. Instead, we focus on harnessing the full potential of new technologies. Outstanding ergonomics, ease of handling and cost efficiency – just some of the highlights of our zero emission line that are bound to impress you.



# POWER THAT GOES THE DISTANCE.

Wacker Neuson's cutting-edge lithium-ion batteries are designed to excel under harsh construction site conditions. These tough, dirt-resistant workhorses unleash full power without losses from the first to the very last minute.

#### One for all.

Rammers, vibratory plates and internal vibrators aren't usually in action at the same time on construction sites. More often than not, they're used one after the other. So why buy more batteries than you actually need? Our modular system lets you use the same battery in all machines. Each battery can be changed in a flash without requiring any tools.

#### Enough power for a full working day.

A single battery charge delivers enough power for a machine to get through a typical day's work. And if you do need extra reserves, you can use the fast charger to recharge equipment during the lunch break, for example. Or you can simply swap the empty battery for another fully-charged battery.

#### Simply safe.

The battery is the most valuable part of an electric machine. To ensure it's well protected, we have developed a dedicated secure box with our partner Sortimo. It allows you to transport two batteries and a charger easily and securely. Under GGV certification, the batteries in the L-BOXX are not classified as hazardous goods.





### CREATED BY THE ORIGINAL PIONEER.

We launched the first-ever vibratory rammer nearly 90 years ago – causing a sensation on construction sites the world over.

Now, we're shaking up the world of surface compaction once again with our latest generation of battery-powered rammers. The maintenance-free electric motor in our three models delivers the same power as

its gasoline-powered brothers – all at the push of a button. The big difference, though, is that our electric models do not produce any emissions – which is a huge benefit, especially for trench work.

Tangled cables? Nowhere to be seen.

Our high-performance battery stands for power and mobility. What's more, it can be replaced without using any tools.

	Unit	A <b>5</b> 30e	AS50e	AS60e
Operating weight	kg	42	70	70
Max. impact rate	[1/min]	820	680	680
Charging time with standard charger	h	4	4	4
Charging time with fast charger	min	80	80	80



#### New technology - same quality.

- · Battery lasts for a full working day.
- 100% free of emissions: Ideal for work in urban areas, areas subject to noise restrictions and in trenches.
- All at the push of a button.
- Same compaction performance as comparable models with combustion engines.



AS30e

AS50e



#### **ENOUGH TO SHAKE** THE SKEPTICS UP.

No exhaust fumes and easy startup: Just some of the reasons why our battery-powered, single-direction vibratory plates in the zero emission range have been stirring the market up for some time now.

Other highlights include outstanding cost efficiency. There's no need for conventional maintenance work on parts like the carbu-

retor or fan belts. Our plates also consume up to 70 percent less energy. And if you're wondering whether these benefits come at the expense of runtime ... think again. One battery charge is enough to complete all jobs over an average working day.

	Unit	AP1840e	AP1850e	AP2560e
Operating weight	kg	107	103	147
Operating width	mm	400	500	600
Compaction performance	m²/h	648	810	756
Charging time with standard charger	h	4	4	4
Charging time with fast charger	min	80	80	80



#### Take a deep breath - no matter how tight the surroundings are.

- · Work more efficiently, even in low-emission zones such as urban areas.
- · Proven, maintenance-free electric motor saves costs.
- All at the push of a button.
- · Excellent compaction performance of 800 m<sup>2</sup> and more on just one charge!





## ENOUGH POWER TO LAST A FULL WORKING DAY.

#### That was the aim that inspired the WL20e.

It was an ambitious design goal. We wanted the WL2Oe to be as powerful as wheel loaders with conventional drive systems and ensure that one battery charge delivers enough power for a full working day. Mission accomplished! This all-rounder is as quiet as it is powerful and – with zero emissions – is a compelling proposition for

today's profesisonal. This is a huge benefit when working in city centers and enclosed spaces. The wheel loader can be recharged overnight, for example, using its integrated on-board charger, which can be plugged into any conventional 230 V household socket. This electric wheel loader is a real economy model throughout its entire lifetime, reducing operating costs and extending maintenance and service intervals. It can reduce costs by up to 40 percent.

	Unit	WL20e
Bucket capacity	m <sup>3</sup>	0.19
Operating weight	kg	2350
Tipping load with bucket, mast horizontal – machine straight	kg	1509
Power for drive system / working hydraulics	kW	6.5/9
Battery runtime	h	Up to 5
Battery charging time	h	6 to 8



#### An all-round favorite.

- Protects operators' health and enhances concentration: No exhaust fumes or engine noise.
- Same performance as diesel-powered wheel loaders.
- Two electric motors one for the drive system and one for working hydraulics – minimize consumption by delivering power only on demand.
- Safe handling thanks to the leak-proof AGM battery.
- Major reduction in maintenance and service costs.



#### Feel free.

- Always at the ready: Diesel- and emissions-free electro-hydraulic drive technology.
- Unstoppable: Unlimited runtime in electric mode.
- Seamless transition between modes:
   Same performance, same weight, same handling in both working modes.
- Both drive technologies offer unlimited radius of action, allowing the machine to be rotated 360 degrees.

# E-DRIVE SYSTEMS THAT GO THE EXTRA MILE: THE BEST OF BOTH WORLDS.

#### The diesel machine that also does electric. Hybrid technology at its most powerful.

The 803 dual power mini excavator leaves you spoiled for choice. Thanks to its integrated diesel engine, it can be used independently of a power source. But when it comes to working indoors, all you have to do is connect it to the electro-hydraulic HPU8 power unit. Simply

attach the connecting line to the undercarriage, and you're good to go. You get the same power levels but none of the emissions, even with the breaker attachment. Thanks to its intelligent design, this track excavator offers outstanding maneuverability of 360 degrees, even in electric mode. It doesn't get any better than this.

	Unit	803dual power
Transport weight	kg	955 to 1,015
Power	kW/HP	9.6/13



Top tip

Unleash the same breaker power for indoor demolition work – regardless of whether you are using the conventional drive or HPU.

#### **SNEAK PEEK.**

#### zero emission technology is not just a trend for us. It is something we really believe in.

We are working hard to expand our zero emission portfolio in all product areas, spurred on by strong demand from customers. Here's a sneak peek at two of our zero emission excavators that will be ready for series production in the near future.

really only applies to its dimensions. When

it comes to power and runtime, the EZ17e

#### Smart charging management.

Our latest generation of excavators can be used for even longer periods of time. All thanks to our flexible power supply concept. The innovative system enables operators to run both machines from their batteries or connect them to the mains – allowing them to charge while in use. The new excavators can be connected to a household socket for standard charging or a high-voltage current for fast charging.



# A FIRST EVER IN THE COM-PACT CLASS.



Not yet available in series

EZ26e

Powerful and easy to maintain.

The EZ26e zero tail mini excavator can do everything its peers can do – except emit exhaust fumes and engine noise. It also requires minimum maintenance.

#### OFF-ROAD HAS NEVER BEEN SO SILENT.

In environments where noise is an issue, construction machines are not always welcome due to the noise and fumes they emit. But not anymore.

Our electric dumper makes emissions a thing of the past. The new dumper is a big hit with workers and a real powerhouse for every project.

Equipped with all-wheel drive and a payload of up to 1.5 tons, the electric DW15e wheel dumper is the perfect choice for transporting material – even over rough terrain and steep ramps. It features two separate elec-

tric motors for the drive system and working hydraulics, which help minimize energy consumption. In addition to this, cutting-edge recovery technology feeds energy generated by braking and driving downhill back to the battery, enabling one charge to last a full working day. Smart, ergonomic details and the articulated design turn confined spaces into veritable playgrounds for the DW15e, also clearly showing that we only channel the best ideas from over 20 years' experience in the development of conventional dumpers into our zero emission range.

	Unit	DW15e
Max. payload	kg	1,500
Rated capacitance / power	Ah/kWh	300/14.4
Battery runtime	h	6.5
Battery charging time	h	8



#### Here to stay.

- · A full charge lasts an entire working day.
- Easy to charge at any conventional household socket using the integrated charger.
- Easy maintenance: Extended maintenance intervals, rapid access for servicing, no engine oil or coolant changes.
- Cost efficient: Lower energy and maintenance costs than conventional dumpers.

#### **ALWAYS WELCOME.**

Exhaust fumes and noise emissions are a real problem for indoor spaces on construction sites and noise-sensitive areas outdoors. Machines – if they are permitted at all – can only be used for limited periods and are subject to certain restrictions.

Unless, of course, you are using our DT10e track dumper, which doesn't produce any emissions at all.

Three electric motors (one for each track and another for the working hydraulics) can take on the work of several employees. But that's not all that this innovative technology has to offer:

The two battery packs are integrated deep inside the machine to provide extra stability when working on inclines. The batteries deliver up to nine hours of power before they need to be recharged using a conventional household socket and the integrated charger. All in all, a powerful package that translates into a host of benefits. Including huge productivity gains compared with manual labor and a sharp reduction in operating and maintenance costs. These are just some of the compelling reasons why more and more customers are choosing this dumper model.

	Unit	DT10e
Max. payload	kg	1,000
Dimensions (width)	mm	790
Battery capacity	kWh	11.5
Battery runtime	h	Up to 9
Battery charging time	h	7.5



#### Easy way to get the job done.

- Optimum access: The width of the dumper is designed to fit standard door dimensions.
- Extremely smooth handling as the rollers adapt to every surface.
- Easy maintenance and hassle-free charging: Rapid access for servicing, integrated charger.
- Cost efficient: Lower energy and maintenance costs than conventional dumpers.

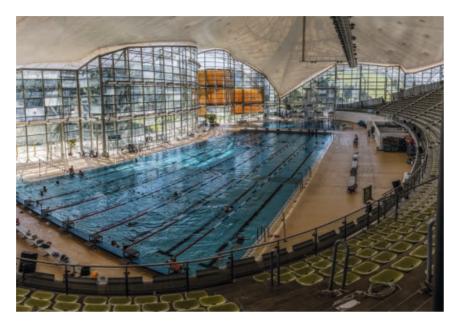


#### **OLYMPIA AQUATICS CENTER IN MUNICH. OPEN FOR BUSINESS DURING REFURBISH-**MENT.

An architectural landmark in Munich, the Olympic swimming pool was constructed for the 1972 summer Olympics. Today the building is protected under a preservation order. The company KARL-Bau faced a number of challenges when it was commissioned to refurbish the site. All of the work was to be carried out indoors, which meant that conventional equipment could not be used due to emissions legislation. The construction project was due to last several years and so the center had to remain open while the work was being carried out. This also meant that noise and dust had to be kept to a minimum right from the word go.

"Our employees are really pleased with the battery-powered and electric equipment, which made life much easier for us."

Tamara Zettl | Project Manager, KARL-Bau GmbH







#### When muscle power is not enough ...

In order to comply with emissions regulations, Project Manager Tamara Zettl started looking for alternatives to gasoline-powered equipment such as loaders and sledgehammers. After all, she also had a tight schedule to meet. She found what she was looking for with Wacker Neuson's zero emission range.

#### No emissions. No engine noise. And no compromises on performance.

The 803 dual power track excavator proved the perfect choice for drilling and smaller demolition jobs as it could be powered electrically using the electro-hydraulic HPU8 unit. The company used the WL20e electric wheel loader to remove the debris. In fact, this particular machine was put to the test right from the start of the project: Due to

space restrictions, the ramp leading up out of the pool had to be extremely steep. "It would have been almost impossible for someone with a wheelbarrow to navigate," explains the project manager. However, it proved to be child's play for the electric wheel loader. Tamara Zettl was even more surprised to discover that the WL20e wasn't just capable of delivering the same power as a conventional model. She was also impressed by the machine's ability to operate continuously for five hours every day.

"Our employees are very pleased with the equipment, which made life much easier for us." The easy, overnight charging process undoubtedly helped fuel this enthusiasm. However, the lack of exhaust fumes and the almost silent engines were much more important factors here. They also made for a calmer working atmosphere.

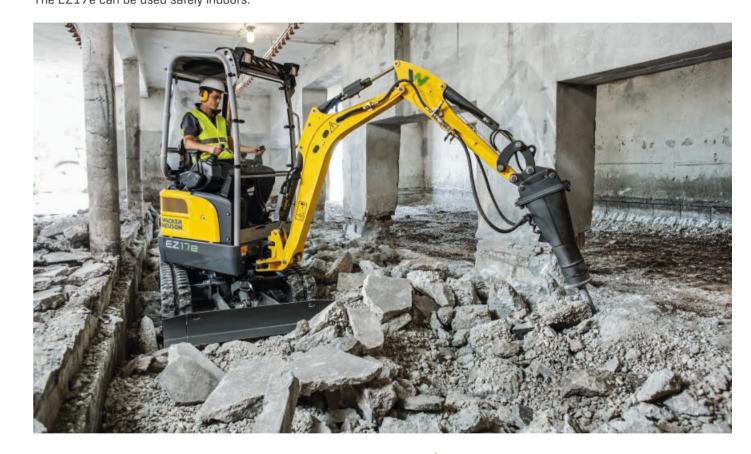


**Typical deployment scenario: Noise-sensitive areas** The efficient transporter: DT10e



Typical deployment scenario: Work in trenches
Trenches usually trap exhaust fumes. The AS50e lets
operators breathe easy.

#### **Typical deployment scenario: Indoor spaces**The EZ17e can be used safely indoors.



NO COMPRO-MISES ON PER-FORMANCE.

#### **OUR PORTFOLIO.**

