

# KTEG

# POWERTREE

# MOBILE FAST CHARGING STATION

**2 FAST CHARGING POINTS  
WITH CCS TYPE 2**

**2 CEE CHARGING POINTS**  
1 X 32 A 400 V  
1 X 16 A 230 V

**OPERATING WEIGHT:**  
4,500 KG

**BATTERY CAPACITY:**  
LITHIUM-ION BATTERIES  
WITH 126 KWH TOTAL

**VOLTAGE:**  
800 V TECHNOLOGY



Special Challenges – Special Solutions

## Well thought out: electromobility in construction

### CONTINUOUSLY WORK WITH ELECTRICITY

Zero emissions is becoming the ticket to winning orders in Europe's urban centres. But emission-free construction sites are only as good as their infrastructure. Machinery must be available on demand, according to construction progress - without charging periods of several hours. Needs-based, fast and easy charging is required to ensure continuous construction site operation.

### MOBILE ENERGY STORAGE

The Powertree is a practical fast charging infrastructure for construction sites. Packaged in a robust, 10-foot container, this fast charging station was created for the heavy-duty everyday routine on construction sites. Always on board: a buffer battery that can be scaled according to needs and is recharged on a construction site power connection. Construction machines and even electric cars and tools can be charged via powerful charging points.

#### CHARGE FASTER

2 fast charging points with CCS type 2 charging plugs ensure smooth construction site operation. In no time at all, electric machines and devices are recharged.



#### SUSTAINED WITH CONSTRUCTION SITE POWER

If construction site power is available, it can be used to continuously and conveniently recharge the buffer storage battery of the Powertree.

#### PLUG & PLAY

No qualified electrical technicians required. Suitably instructed staff can commission the fast charging station in 10 minutes. Electric vehicles, machines and devices are charged & connected intuitively.



## FIT FOR ANY CONSTRUCTION SITE

The Powertree is very easy to handle and comes securely packed in a 10-foot freight container. With air-conditioning. Well protected against wind and weather, dust and impacts.



## POWERFUL

Powerful buffer batteries can be scaled as needed. As a result, you always have exactly the energy output you need on the construction site.



## WORLDWIDE SERVICE NETWORK

The Powertree is a joint project of Deutz AG and KTEG GmbH designed to provide concentrated know-how. And the worldwide service network of the two partners.





## Power or full power

### NEEDS-BASED POWER

The Powertree always provides you with exactly the amount of power that you need. Irrespective of whether you want to supply an electric excavator, electric car or electric tools with power.

### RELAX AND RECHARGE

You don't need your electric excavator immediately? Or are waiting until tomorrow to use it again? In 3.5 hours, your KTEG ZE85 electric excavator can be fully recharged at the 400 V/32 A output, for example. With this charge, it will run in regular operation for an average of 5.5 hours without a break.

### FASTER PIT STOP

Are long breaks impossible right now? The ZE85 only requires a lunch break. After only 30 minutes, it will have drawn 80% of the power it requires from the CCS2 fast charge output with up to 150 kW and after 45 minutes, it will be at 100%. This will easily keep it going until the shift ends.

## Self-sufficient or connected

### UNINTERRUPTIBLE

Your construction site can be set up in any number of ways, but the current must keep flowing. The Powertree will adapt flexibly to the situation on your site.

### CONNECTED IN ON-GRID MODE

Is power available on the site? Very good. Now simply connect the Powertree charging point to the CEE input of the construction site power distributor. This establishes sustained electricity for you.

### SELF-SUFFICIENT IN OFF-GRID MODE

There is no power on the site? The Powertree has an elegant solution: it uses the reserves in its buffer storage. Even in the standard version with a 126 kWh battery, the buffer can supply a KTEG ZE85 electric excavator with power for 1 to 2 days, for example.



Independent from a fixed power supply. The robust Powertree will adapt to the infrastructure of any construction site.



# ON- & OFF-ROAD

## Starting grid

### EVERYTHING WELL PACKED

Securely packaged in a 10-foot freight container, the Powertree, its buffer storage and CCS2 fast charging station are a safe complete package ready for fast transport.

### SITE-TO-SITE MOBILITY

Pick up. Transport. Put down. The Powertree is designed to adapt to changing sites. With a loading crane, you can pick up the 10-foot container by the anchorage points and transport it to the site. If you are using a suitable low loader, there will be enough room on the bed to add a KTEG ZE85 electric excavator.

### TRANSPORT WITH SIMPLE LIFTING GEAR

Once at the construction site, you only require a forklift or wheel loader with a minimum lifting power of 4.5 tonnes. In only a few minutes, you can use it to unload the Powertree.

### FIT FOR OFF-ROAD

At ground level. Solid, dry substrate. Those are the only requirements the Powertree places on its location. As soon as it is upright, it is ready to use. It can even withstand oppressive heat or freezing cold. After all, its buffer storage is air conditioned, which gives the Powertree all-weather capability.

## Running start

### IN OPERATION IN 10 MINUTES

The Powertree does not require an electrician. The mobile fast charging station can be commissioned by any suitably trained person. To do so, you only need to connect the 63 A/400 V charging point of the station to the power on the site and then anchor the earthing rod in the ground. Start up the system. Get to work. It will take less than 10 minutes. If the station only provides current from its buffer storage, it will take even less time.

### RECHARGE INTUITIVELY

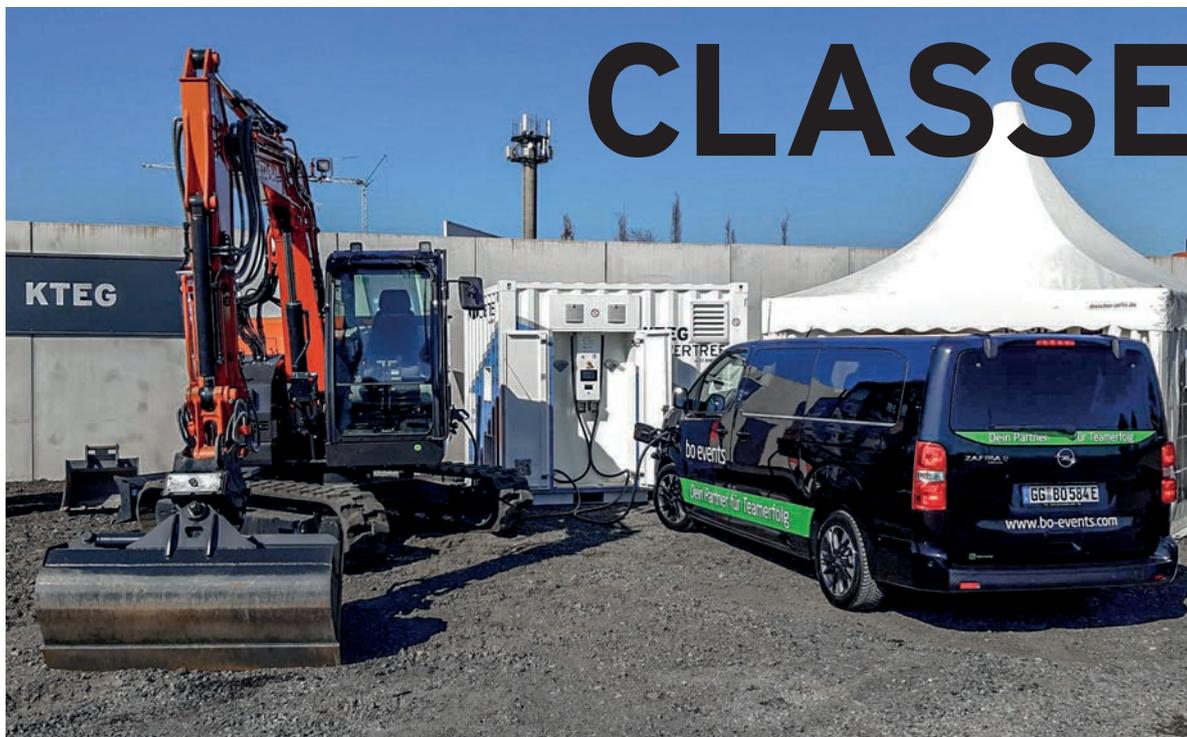
Plug in. Switch on. Charge. It is as easy as plugging in the toaster at home. Vehicles, machines and devices with electric drives can recharge at the four charging points of the Powertree. The 2 integrated CCS2 fast charging points ensure that an electric excavator can recharge during the lunch break and have enough power to make it through the rest of the day.

Everything is easily accessible. At the left, the 63 A CEE input. Right next to it, the 32 A and 16 A CEE outputs.

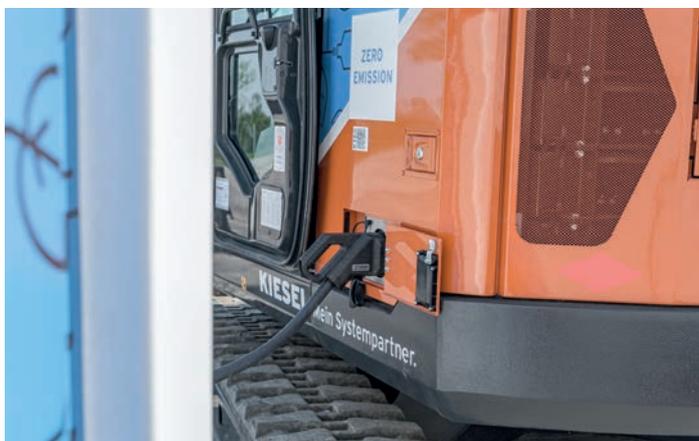


At the 2 CCS2 fast charging points with 75 kW each (or 1 with 150 kW), your electric machines can quickly slake their thirst for energy.

# ALL CLASSES



Even electric vehicles can recharge at the Powertree.



## Simply more opportunities

### CHARGE VEHICLES AND MACHINES FAST

Up to 2 vehicles or machines can recharge at the same time at the Powertree in fast charging mode. To leverage this feature, you only require a CCS2 fast charging interface and system voltage of 400 to 800 V. The higher the operating voltage, the higher the charging performance.

### CHARGE ELECTRIC TOOLS

Where do you get the power for angle grinders, circular saws and drills on the construction site? The Powertree has also taken care of that. Two AC output with 32 V/400 A or 16 A/230 V are ready for operating electric tools.



## Simply expect more

### INTELLIGENT PREMIUM PRODUCT

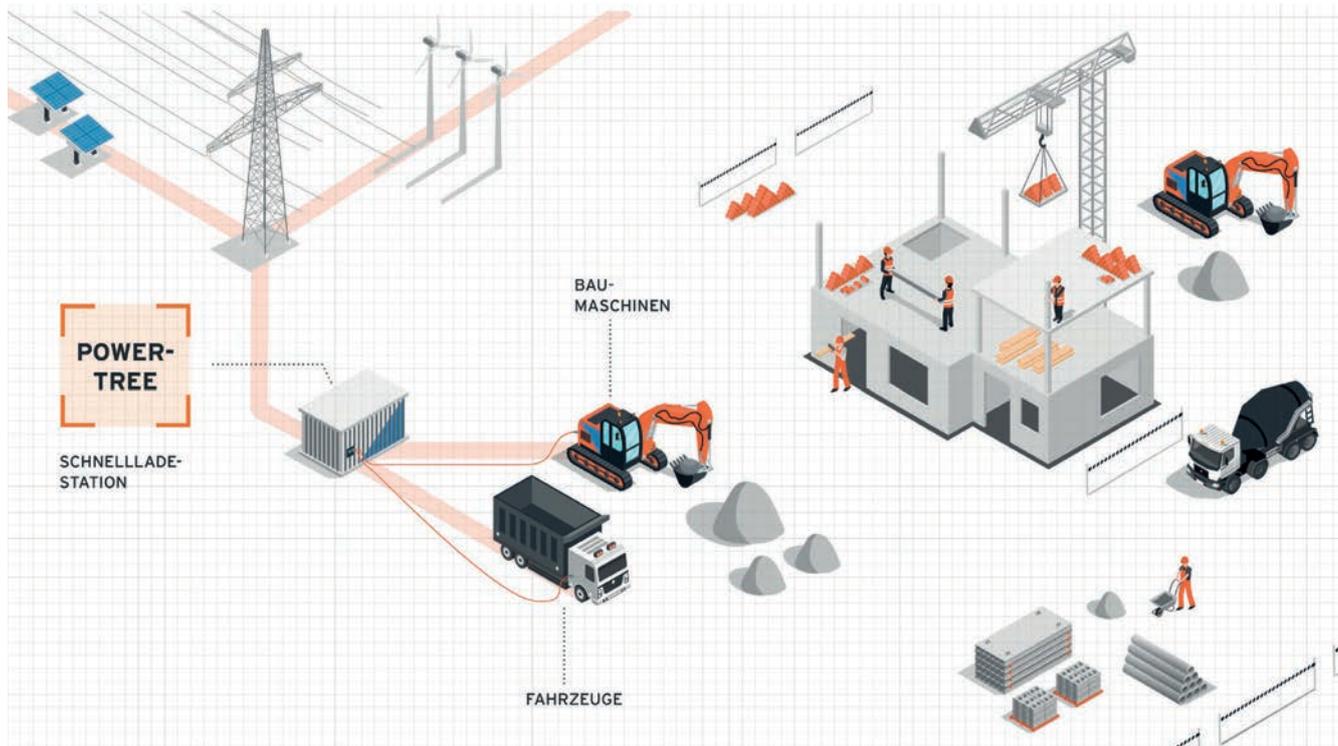
KTEG GmbH is one of Europe's leading innovators for key construction site machinery and technologies. The Powertree was developed in partnership with Deutz AG.

The well-designed system combines premium batteries that have proven their value at renowned manufacturers in the automotive industry with thermal conditioning. All technical components are protected by a high-quality container with intelligently taught input and output points.



### WORLDWIDE FIRST-CLASS SERVICE

As the Powertree was developed by two renowned companies, you will have more than KTEG service in the familiar quality available. You also benefit from the established, worldwide Deutz service network.



## The first solution for your construction site

### PARIS CLIMATE PROTECTION AGREEMENT

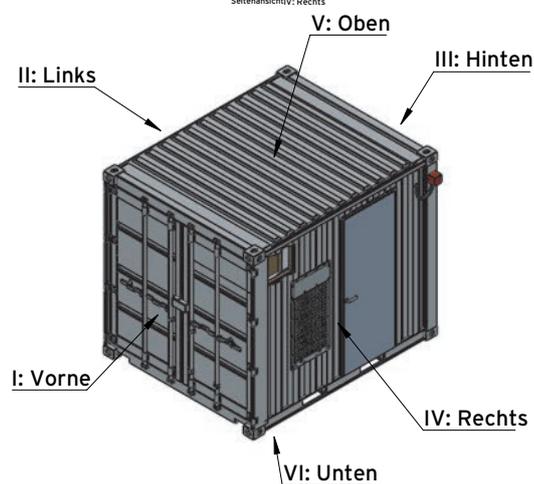
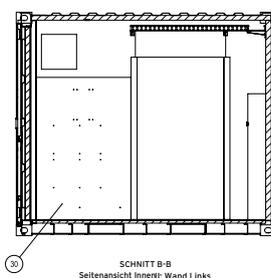
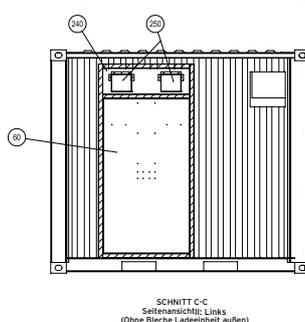
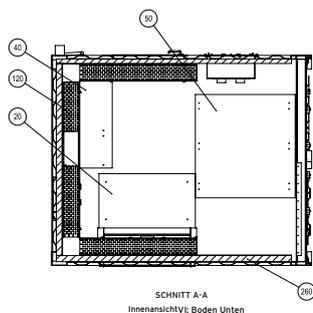
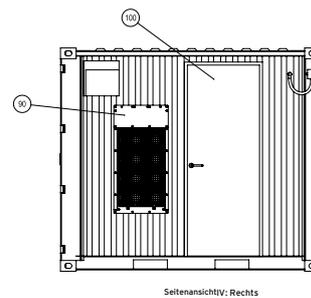
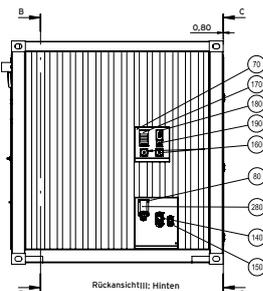
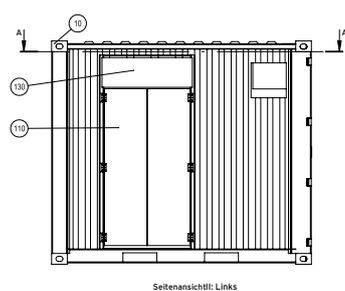
One consequence of the environmental policy developments of recent years is that carbon emissions must be reduced in all areas of life. On construction sites as well. Today, various European cities have deadlines past which the operation of construction machines with combustion engines will be prohibited.

### WELL THOUGHT OUT: ELECTROMOBILITY

The Powertree is the answer. It is the missing link between today's construction sites and those of tomorrow. The mobile power source for a variety of electrically driven loads. Intuitive handling. Long service life. Needs-based. With it, the emission-free construction site is closer at hand.

## Technical data

### SPECIFICATIONS



Specifications	
Battery/storage capacity	126 kWh*
DC fast-charge charging points	2 x CCS2
charging points (AC auxiliary current supply)	400 V/32 A (22 kW) output 230 V/16 A (6 kW) output
Charging connection opposite grid supply	400 V/63 A (44 kW) input
Dimensions (L x W x H)	3,000 x 2,450 x 2,600 mm
Weight (depends on number of batteries)	4,500 kg (for 126 kWh)
Service life	10 years

\*Modular, can be expanded by 42 kWh battery elements



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