



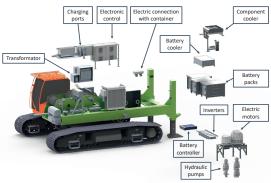
# WHAT?

- **ZERO-EMISSION**
- **DRILLING RIG**
- **FIRST IN ITS CLASS**

### HOW?

- 200 + 1000 MWH BATTERY
- 2 PM-MOTORS
- **ELECTRIC-HYDRAULIC POWERMANAGEMENT**
- **HIGHEST SAFETY STANDARD**







# The Woltman 90DRe is the first zero-emission Drilling Rig in its class for building sites with themost stringent emission regulations.

This drilling rig was developed after intensive market research and a unique starting point here is electrification based on capacity demand. The varying energy requirements have been optimized using two electric PM-motors, in combination with two battery units. As a result, the Woltman 90DRe is energy efficient and extremely powerful when needed.

## **ABOUT THE RIG**

With a focus on Dieseko Group's strategy of supplying zero emission equipment and in consultation with users and market-leading parties, Woltman developed an electric drive, control and power supply for its first electric powered Drilling Rig. The 90DRe is 100% electrically powered. With its electric-hydraulic power management this 613kW Drilling Rig is 100% emission-free.

#### **BATTERY CAPACITY**

Woltman investigated the required capacity based on logged data at construction sites. The result is a profile with 600kW power and 1.200kWh battery capacity. This capacity is sufficient for a full working day. Grid connection is only necessary during the heaviest working conditions for charging in idle time and to supply peak power. Overnight charging is sufficient for a full working day.

# **FEATURES**

- Heavy duty, multi-functional Drilling Rig with very low noise levels
- 1200kWh (200kWh + 1000kWh) battery capacity for a full working day
- Charging time >90% ca. 10hrs
- Energy savings due to two-motor electric/hydraulic power system
- Simultaneous charging/discharging > distribution between batteries
- Working temperature -10°C +40°C
- Highest standard in safety, components and certification (TüV, Aboma)
- · Load/unload and leader-erection without external battery/grid
- Saves about 80 tons of CO2 emission per year
- · Based on the proven and robust 90DR





<b>SPECIFICATIONS</b>			
Recommended rotary head RH:	40-45-50	500	Weights:
Max. torque on leader	500	kNM	Transport weight excl. rotary head 90 tonnes
Leader length standard (max.)	30/33/36	m	Transport weight without battery pack 75 tonnes
Max. drill depth	26/29/32	m	Weight without tracks & battery pack 57 tonnes
Max. diameter	1500	mm	Weight per track drive 9 tonnes
Pull-up force	100	tonnes	Weight battery pack 15 tonnes
Pull-down force	30	tonnes	Total weight 102 tonnes
Auxiliary winch	12	tonnes	Electric specifications:
Max. oil flow	800	l/min	Total battery capacity 1200 kWh
Max pressure	350	bar	Electrical power 613 kW
Engine	2x PM-motor		Battery life time (estimated) 20 years

