

# THE WORLD'S FIRST **ELECTRIC** PILE DRIVING RIG



Junttan takes one step ahead in the pursuit of a sustainable future with the world's first fully battery powered electric pile driving rig, raising the bar to yet another level. Built as the same reliable and strong Junttan rig, but this time having a modern electric soul.

**Same robust structure and unbeatable stability, but with no CO<sup>2</sup> emissions.**

Same working speed and reliability, but less consumed energy. Even more power but with less noise pollution.

When we at Junttan set out to design more sustainable innovations, we understood that a new Junttan model needed to tick all the same boxes from the very beginning as its predecessors. That's why we decided to combine the best of both worlds; tested and optimized Junttan hydraulics merged with modern batteries and electric motor technology.

The result is the world's first fully battery-powered electric pile driving rig that is ready to meet the same challenges at the work site as its predecessors. Instead of a diesel engine, we are now powering the hydraulic system with a modern electric motor that generates its power from a battery pack at the rear of the rig where the counterweight used to be. In this way, we were able to build a solution that is reliable, easy to operate, and as effective as normal diesel-powered Junttan rigs. To make everyday life at the worksite possible, we chose a solution where the rig is powered by two separate 396 kWh battery packs that can be replaced during the day if needed. By choosing a detachable two battery system instead of one bigger fixed, charging can be done with a normal 63A mains outlet and both batteries are ready the next morning. With the state-of-the-art CCS DC-DC quick charging the battery packs can be charged with up to 250 kW to enable even more flexibility and extended range for future worksites also with a single battery pack.



## JUNTAN PMx2e PILING RIG

- ✓ No CO<sup>2</sup> emissions
- ✓ Less consumed energy per pile
- ✓ Less noise pollution
- ✓ Up to 6,5 h working time with one battery pack
- ✓ More power and instant torque
- ✓ Same robust structure and usability as Junttan PMx22



**WITH JUNTAN PMx2e – GOING ELECTRIC DOES NOT MEAN COMPROMISING THE EFFICIENCY AND POWER OF THE MACHINE.**

## TECHNICAL DATA

### HAMMER

RECOMMENDED HAMMER SIZE 4-6 ton

### LEADER

(All same leader configurations as standard Junttan PMx22)

SIDE OR TOP CATHEAD

HYDRAULIC PILE ARMS ON LEADER

VERTICAL MOVEMENT UP / DOWN 1 000 / 500 mm

HORIZONTAL MOVEMENT 1 500 mm

LEADER CAPACITY 16 000 kg

TELESCOPE MOVEMENT 4 m

INCLINATIONS ACCORDING TO A SEPARATE CAPACITY TABLES  
CALCULATED FOR CHOSEN SETUP

### UNDERCARRIAGE

TRACK PADS 900 mm WIDE

CRAWLER LENGTH 5 100 mm

MIN. WIDTH WITH 900 mm TRACKS 3 200 mm

MAX. WORKING WIDTH 4 700 mm

### UPPERCARRIAGE

#### WINCHES

HAMMER WINCH BB7 12 000 kg

PILE WINCH BB7 10 000 kg

#### ELECTRIC POWER UNIT AND INVERTER

DANFOSS EM-PMI375-T1100 SERIES MOTOR, ABB HES880-SERIES INVERTER

POWER: 266 kW CONTINUOUS

TORQUE: 1 060 Nm CONTINUOUS

### BATTERY UNIT

CAPACITY: 396KWH, USABLE NET CAPACITY ~320 kWh

UP TO 6,5 H WORKING TIME WITH A SINGLE CHARGE \*

2 H CHARGING TIME WITH DC-BASED QUICK CHARGING WITH UP TO 250 KW POWER

8 H CHARGING TIME WITH DC-BASED CHARGING UTILIZING A STANDARD 63A MAINS OUTLET

INDEPENDENT SWAPPABLE MODULE DESIGN

INTERNAL HEATING AND COOLING CIRCUIT

TOUCH SCREEN FOR BATTERY UNIT INFORMATION

CCS2 CHARGING PORT FOR DC-BASED CHARGING

EXTERNAL KEMPOWER T800 DC-CHARGING STATION

### HYDRAULICS

MAX. OIL FLOW 2 X 160 + 80 l / min

HYDRAULIC TANK VOLUME 750 l

MAX. WORKING PRESSURE 350 bar

HYDRAULIC OILS ACCORDING TO CUSTOMER CHOICE

REAR LEGS 2 pcs

### CABINE

AIR CONDITIONING

FOOT BOARDS SIDE OF THE CABINE

RADIO / CD PLAYER

SAFETY CABINE (FOPS TESTED)

WINDOW COVERS FOR THE CABINE WITH LOCKS

IPILER READINESS

ELECTRIC POWERTRAIN AND BATTERY PACK CAPACITY INFORMATION DISPLAY

\* Medium load working cycle

### FOR FURTHER INFORMATION, PLEASE CONTACT:

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