

MINELLI
CARICATORI OLEODINAMICI

New!



M20E



50+28 kW



9,3 m



24,5 t

E-Mission Zero

EN

Born from the evolution of Minelli's M20, **M20E is a fully electric loader**, ideal for **no stop handling** (with an **autonomy of 6 to 10 hours**, with three different working modes: ECO, MEDIUM, or FAST) in indoor environments and anywhere combustion-related emissions are not permitted.

BATTERIES

The machine is equipped with **two in series-batteries**, with an output voltage of **120 Vdc with a total capacity of 1860 Ah/5h**.

The machine is equipped with a battery charger, useful to charge the battery packs "in machine" or "on the ground". Battery housing boxes can be removed and replaced during recharging.

ELECTRIC MOTOR & PUMP

The machine is equipped with two water-cooled electric motors.

The main electric motor, with a power of 50 kW, drives a variable-displacement axial-piston pump (HPR series); the oil delivered by the pump, managed by a distributor, powers the machine's essential functions (travel, booms, cab, stabilizer legs, and blade).

A second 28 kW electric motor is dedicated to turret rotation and allows energy recovery during braking.

ELECTRONIC BOX

The "Electronics Box," properly insulated from external agents, houses two water-cooled inverters, one for each electric motor. These convert the battery voltage from 120 VDC to 80 VAC, which is required to power the motors. Coupled with the Officine Minelli management software, and depending on the operating mode selected by the operator (ECO, MEDIUM, FAST), they control the torque, speed, and power absorbed by the motors, optimizing performance and energy consumption.

HYDRAULIC MANIFOLD AND SYSTEM

The oil delivered by the pump powers the machine's hydraulic circuit through a modular proportional Load Sensing distributor, with enlarged lines for the primary and secondary booms.

Linde Load Sensing system allows synchronized operations independent of load and free from any interference; **it allows control, comfort, and provides significant energy savings**.

