Electric Digger - Official Technical Overview & Datasheet

EXECUTIVE SUMMARY

The Electric Digger is a revolutionary piece of heavy machinery engineered for the modern job site, offering uncompromising performance with zero tailpipe emissions. Designed for the construction, mining, and agricultural sectors, this machine redefines operational efficiency by eliminating the need for fossil fuels, drastically reducing daily service requirements, and significantly lowering noise pollution . Its primary value proposition lies in its ability to deliver a full day's work on a single charge, enabling operations in urban environments, indoor spaces, and other sensitive areas where diesel engines are restricted or impractical.

Built with the durability expected of an industry leader, the Electric Digger provides instant torque for superior digging performance. By transitioning to an electric powertrain, operators benefit from reduced maintenance costs, the elimination of emissions extraction equipment, and a quieter, more comfortable working environment. This machine is not just an alternative to diesel; it is a superior solution for the future of sustainable and cost-effective heavy construction .

STRUCTURAL INTEGRITY & POWERTRAIN

The Electric Digger chassis is constructed from 100% heavy-duty steel bodywork, ensuring maximum protection against the rigors of the toughest job sites and providing a solid foundation for critical components . The undercarriage, featuring robust track components and reinforced beams, is engineered for longevity and stability even in demanding terrain. This structural design ensures minimal downtime and extended machine life.

The heart of this machine is its state-of-the-art electric powertrain. It utilizes a high-capacity battery pack (up to 19.8 kWh) that powers a highly efficient electric motor . This setup delivers instant torque to the hydraulic system, providing exceptional digging forces—such as 9.1 kN of dipper tearout and 18 kN of bucket tearout — without the lag associated with internal combustion

engines . The hydraulic system is a high-efficiency, load-sensing design, which optimizes power distribution to ensure peak performance is maintained during demanding digging cycles while preserving battery life. The system features an auto-idle function and auto-kick down on track motors for optimal energy management .

KEY FEATURES & OPERATOR COMFORT

- Advanced Electric Powertrain: The zero-emission electric motor provides instant, maximum torque for powerful and efficient digging. The robust battery system supports up to 5 hours of continuous work on a standard application, allowing for a full day's work without the cost and noise of diesel .
- ROPS/FOPS Certified Cab: The operator's cab is certified to ROPS (Roll-Over Protective Structure), TOPS (Tip-Over Protective Structure), and FOGS (Falling Object Guard Structure) standards, ensuring the highest level of safety. Features include a heated cab, toughened glass, and a static fabric seat for enhanced comfort in all conditions .
- Advanced Hydraulic Control: A high-flow, double-acting auxiliary hydraulic system offers precise control for a wide range of attachments. The system is optimized for load-sensing, ensuring power is available where it is needed most, with auto kick-down track motors for increased torque when required .
- Smart Control & Monitoring: The machine is equipped with an intuitive instrument panel featuring a clear battery status gauge and integrated live

telematics for fleet management. An optional immobilizer key and security system (like the CESAR datatag) are available for added peace of mind .

- Enhanced Mobility & Undercarriage: The retractable undercarriage provides excellent stability during operation and allows for a narrow transport width, making it ideal for navigating confined job sites. Heavy-duty rubber tracks ensure a quiet, smooth ride and minimize ground damage .

COMPLIANCE & SAFETY STANDARDS

The Electric Digger is designed and manufactured in full compliance with the most stringent international standards, ensuring safety, quality, and legal conformity. The machine meets all relevant European Union (CE) directives for safety and environmental protection. It adheres to the rigorous safety requirements for operator protection and noise levels. Furthermore, the manufacturing process is certified to ISO 9001 standards for quality management, guaranteeing a reliable and durable product . The machine is also compliant with applicable ANSI/ASSE standards for construction and demolition operations .

TECHNICAL SPECIFICATIONS

The following table outlines the key performance and physical parameters of

the Electric Digger, showcasing its capabilities as a compact and powerful zero-emission excavator .

<table border='1' style='border-collapse: collapse; width: 100%;'><tr><th style='padding: 8px; text-align: left; background-color: #f2f2f2;'>Parameter</th><th style='padding: 8px; text-align: left; background-color: #f2f2f2;'>Specification</th></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Operating Weight</td><td style='padding: 8px; border: 1px solid #ddd;'>~2,037 kg (4,490 lb)</td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Power Source</td><td style='padding: 8px; border: 1px solid #ddd;'>19.8 kWh Lithium-Ion Battery</td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Max Digging Depth</td><td style='padding: 8px; border: 1px solid #ddd;'>2.6 m (8 ft 5 in)</td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Max Digging Reach</td><td style='padding: 8px; border: 1px solid #ddd;'>4.0 m (13 ft 3 in)</td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Max Dump Height</td><td style='padding: 8px; border: 1px solid #ddd;'>2.6 m (8 ft 7 in)</td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Dipper Tearout</td><td style='padding: 8px; border: 1px solid #ddd;'>9.1 kN</td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Bucket Tearout</td><td style='padding: 8px; border: 1px solid #ddd;'>18 kN</td></tr><tr><td style='padding: 8px; border: 1px solid

#ddd;'>Machine Height</td><td style='padding: 8px; border: 1px solid #ddd;'>~2.3 m (7 ft 7 in)</td></tr><tr><td style='padding: 8px; border: 1px solid #ddd;'>Width (Retracted)</td><td style='padding: 8px; border: 1px solid #ddd;'>~980 mm (38.5 in)</td></tr></table>