

PKCell's ISO Certification: A Milestone in Delivering High-Quality Rechargeable NI-MH AA Batteries



Shenzhen, Guangdong Jan 6, 2026 (IssueWire.com) - A Significant Achievement in Quality Management

Shenzhen PKCELL Battery Co., Ltd. today announced a significant milestone for the company: achieving the ISO Quality Management System Certification. Reaching this internationally recognized standard serves as a testament to PKCELL's unwavering commitment to consistency, efficiency, and continuous improvement across all its operations. This achievement is especially significant for its line of **high-quality rechargeable Ni-MH AA batteries**.

The ISO certification is a major milestone, as it validates the strict quality protocols PKCELL has implemented within its 3,000-square-meter professional production facility. This certification provides independent assurance to consumers and B2B customers—who rely on portable power—that PKCELL's manufacturing processes meet global benchmarks. This is particularly relevant for PKCELL's versatile Nickel-Metal Hydride (Ni-MH) chemistry.

Rechargeable Ni-MH AA batteries are a cornerstone of modern portable electronics, representing a perfect synergy of high energy density and environmental sustainability. Unlike traditional disposables, Nickel-Metal Hydride (Ni-MH) technology offers a high cycle life, allowing users to recharge and reuse a single cell hundreds of times. They are valued for their superior energy density compared to traditional Ni-Cd cells, their longer cycle life, and their eco-friendly, cadmium-free composition. PKCELL focuses on these attributes through ISO-verified process controls to ensure that its AA batteries deliver the reliability and performance required in demanding applications, such as GPS modems and Bluetooth keyboards.

The Technological Foundation of Precision Engineering in Ni-MH Production

PKCELL's reputation is built on its commitment to research, technological development, and the application of advanced manufacturing techniques. The ISO certification validates the quality of its Ni-

MH batteries, which is a result of engineering excellence throughout the battery lifecycle—from raw material selection to final assembly.

Advanced Cell Design and Material Control

PKCELL rechargeable batteries offer superior performance due to their proprietary materials and structural design. The Ni-MH chemical reaction relies on two primary components: the Nickel Oxyhydroxide (NiOOH) positive electrode and a hydrogen-absorbing alloy negative electrode. PKCELL utilizes high-purity, stable materials to ensure minimal self-discharge and maximum charge retention.

Key technological factors contributing to the quality of the final product include:

Hydrogen Storage Alloy Optimization: Both the capacity and cycle life of a Ni-MH cell depend on the composition of the hydrogen-storage alloy (such as \$AB_5\$ or \$AB_2\$ types). PKCELL employs advanced alloying techniques that enhance the alloy's ability to reversibly absorb and release hydrogen, directly translating into higher energy density and a longer service life.

High-Quality Separator Material: Preventing internal short circuits while allowing rapid ion transport is critical. PKCELL uses an extremely porous, non-woven separator to ensure low internal resistance, promoting faster charging and efficient energy delivery in high-drain situations.

Controlled Electrolyte Formulation: The concentration and purity of the alkaline (KOH) electrolyte are strictly monitored. This allows for optimal ionic conduction and reduces parasitic reactions that can cause cell degradation over time.

By strictly controlling the production environment and implementing continuous process monitoring—hallmarks of an ISO-compliant system—PKCELL mitigates manufacturing defects. This results in cells that exhibit outstanding uniformity, a critical factor for use in multi-cell battery packs found in automotive electronics, portable medical devices, and high-end toys.

Global Compliance and Comprehensive Assurance

PKCELL maintains a large portfolio of product certifications, providing consumers and partners with irrefutable proof of safety and compliance with international standards. PKCELL's commitment to professional power solutions requires strict adherence to global benchmarks.

Safety and Performance Compliance

PKCELL has received several certifications that demonstrate its market-readiness across its Ni-MH, Ni-Cd, Ni-Zn, and Lithium rechargeable battery lines:

IEC 62133: This is the premier safety standard for secondary cells and batteries containing alkaline or non-acid electrolytes for use in portable applications. PKCELL batteries complying with IEC 62133 have been tested for thermal abuse, short circuits, and mechanical stress, ensuring they are safe for use in GPS devices, GSM modems, and barcode scanners.

CE Marking: Signifies that PKCELL's products meet the health, safety, and environmental protection standards established by European Union directives, which is essential for distribution throughout the European Economic Area.

SGS Certification: As a world leader in inspection and verification, SGS provides independent proof of compliance. PKCELL's SGS certification adds an extra layer of trustworthiness to its products.

UN38.3: While primarily required for the global transport of lithium batteries, PKCELL subjects its rechargeable products to similarly high standards regarding pressure, temperature, and vibration resistance to ensure safety during transit.

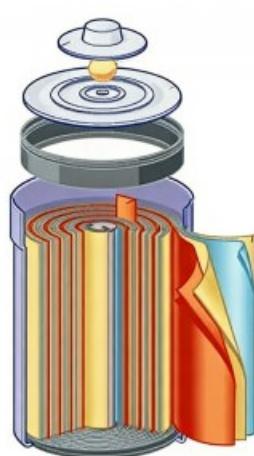
Combining ISO process certification with these product-specific safety certificates (IEC, CE, UN38.3) provides a complete picture of quality. This ensures that PKCELL batteries are manufactured under a world-class management system and independently tested for use in everything from POS terminals and medical devices to advanced security systems.

The Future of Quality and Innovation

With a dedicated workforce of 520 skilled employees and a robust monthly production capacity of 500,000 units, Shenzhen PKCELL Battery Co., Ltd. is strategically positioned to address the escalating global demand for reliable portable power. For PKCELL, achieving ISO certification is not merely a final destination or a badge of compliance; rather, it serves as a crucial stepping stone in an unending journey toward operational excellence and continuous improvement.

This commitment reinforces PKCELL's core mission: to engineer robust, safe, and high-performance power solutions that empower modern technology. By leveraging deep-seated technical expertise and heavy investment in R&D, the company is actively driving future innovations in battery chemistry and sustainable energy storage. As an industry leader, PKCELL remains dedicated to setting new benchmarks for quality while delivering cutting-edge products to international markets.

For more information about PKCELL's ISO-certified operations and its full range of advanced rechargeable solutions, please visit: <https://www.batterypkcell.com/>



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