Acme NonStop Power for Every Mission



Sealed fiber nickel-cadmium battery and power systems For commercial, military and space systems.

Acme Aerospace NonStop Power

For commercial, military and space systems

It all starts with Acme

- Sealed Fiber Nickel-Cadmium Battery Systems
- Solid State Power Control (SSPC)
- Battery Chargers
- Battery Control Units
- AC/DC and DC/DC Converters

All of your mission-critical systems will start on time, every time with non-stop power from Acme.

Acme's sealed fiber nickel-cadmium battery systems start APU's, avionics and environmental systems aboard Boeing 777's and U.S. Army Apache Longbow attack helicopters.

Built to commercial and military aerospace requirements, certified for worldwide operations by the FAA and JAA, Acme's ultra high reliability power systems are built for the world's toughest climates—and the world's toughest customers.

Acme's sealed FNC batteries and power electronics form the basis of an advanced power system that is the top choice for the world's most demanding aerospace, military, industrial and medical applications.



Power-up your flight ops with Acme NonStop Power Systems

If your mission depends on your aircraft you can depend on zero-maintenance Acme NonStop power systems to deliver reliable starting power and avionics back up—at reduced ownership costs.

You'll find Acme NonStop batteries and power electronics on commercial and general aviation jets, medevac helicopters and military combat aircraft and missiles —anywhere reliability is a must.

Acme's patented sealed Fiber Nickel-Cadmium (FNC) battery is a "nextgeneration" battery that simply lasts longer and requires Zero-Maintenance.





Cost-reducing technology

Acme's next generation technology is the result of a cooperative 14-year development program in partnership with the world renowned Daimler-Benz/ Volkswagen research laboratory.

The result is an innovative plate structure, coupled with advances in materials technology—that radically enhances the efficiency of the charge/ discharge reactions and eliminates the risk of thermal runaway.

Acme's sealed FNC batteries offer NonStop power across every measure of operations performance. In addition, a new pocket cell utilizes FNC technology providing the same benefits at a significantly reduced cost. This technology is especially suited for small amp-hour cells and expands the market for FNC products.

Apache Longbow fleet readiness Up 3% with Acme Battery Systems.

The U.S. Army and Boeing Helicopter issued a formal mandate to greatly improve the reliability of the AH-64D helicopter. As a result, Acme's sealed FNC system was selected to replace the existing system. This single subsystem modification alone produced a 3% improvement in overall aircraft reliability for the entire fleet.



AH-64D Longbow battery and charger. Zero maintenance in the most demanding environment!



Power for the U.S. Army

Javelin Missile Training System

The US Army and the Javelin Joint Venture Company (owned by Raytheon and Lockheed Martin) chose Acme's Fibrous Nickel Cadmium (FNC) Battery and Charger System for the Javelin Anti-Tank Missile System's Field Tactical Trainer.

The FNC Battery and Charger offer a "Zero Maintenance" system with much greater reliability than other systems considered by the Army. The monies returned, as well as projected savings, were originally targeted for maintenance and spares inventory. Traditionally other battery systems require a spare inventory of 25% while the suggested FNC spares inventory is only 2% generating significant savings for the Army over the life of the Javelin system.



Acme; Focused on quality, experienced and efficient

Acme is the only electronics and battery company with fully integrated engineering, production, sales and marketing and customer service in a single facility.

Acme's engineering-focused business structure is coupled with an extensive background of more than forty years in design and production of a wide-range of custom power supplies and battery systems.

Acme not only provides solutions to meet unique power system and power control needs, but it also focuses upon innovations which will deliver long-term reliability and lower system ownership costs.

Javelin charger allows for charging anytime, anywhere.





Long life, low weight, low maintenance systems

Acme's commitment to non-stop power innovation is not limited to batteries.

The design of Acme's line of chargers, battery control units and converters uses sophisticated switch-mode rectifiers, instead of conventional components to reduce weight by 40% and extend service life.

Combined, Acme's sealed FNC batteries and power electronics form the basis of an advanced power system that has been chosen for the Boeing 777, F/A 18 Hornet, Boeing Apache Longbow Attack Helicopter and space vehicles.

For the system operator, Acme's zeromaintenance sealed FNC systems can enhance productivity and free-up manpower that would otherwise be occupied with tedious and expensive maintenance chores.



Acme flies on next generation Boeing 777

The only battery/charger system manufacturer that could meet the powerto-weight ratio requirements of the Boeing 777—was Acme. Boeing chose Acme because the system's sealed, zeromaintenance design eliminated the need for ventilation ducts for explosive gasses, catch trays for corrosive electrolyte spills, and effectively eliminated battery maintenance as a repetitive line service problem.

NonStop power for on-time flight operations

Without reliable starting power—there's no launch—or worse, an unscheduled delay.

That's no way to run a flight line.

Instead, Acme's NonStop battery power will ensure that your APU and avionics systems are up and running when you need them. No matter how hot, cold, wet, or dry the climate.



Boeing 777 maintenance free battery and battery charger. MTBF in excess of 130,000 hours (charger), and 30,000 hours (battery).



Space Vehicle Applications



Acme's sealed FNC battery systems have been selected for use in several classified space programs currently in development. Attributes like high specific energy ratings, long cycle life and consistent output voltage over extended life cycles are reasons why Acme technology is selected for classified applications.

Just think of our experts as an extension of your team. Whether you are working on a new project or retrofitting an existing power system application, Acme engineers can be assigned to concurrent development —helping to cut costs and produce a superior design solution.

Acme's products are modular and comprehensive—featuring an open architecture. So, engineers are able to design a system far superior than those imposed by conventional, multi-vendor battery systems.

Custom power for special missions

For special missions where space requirements, form factor, redundancy or other challenges must be met, Acme will design, test and deliver systems that meet your exact specifications for non-stop power.

Product support and 24 x 7 x 365 AOG customer service

When in-depth problem solving, replacements or parts are needed, Acme's dedicated customer service organization provides professional support with a fully trained, multidisciplinary technical staff.

Our customer service department maintains a FAA-approved repair station coupled with a worldwide service network offering 24-hour AOG support. Acme can assure repair turnaround of ten-days or less for most components we build.





Acme NonStop test and quality control

NonStop power, total quality and reliability in your flight operation is our goal.

And, our commitment to that goal is reflected by the highest quality standards and practices-evidenced by Acme's ISO 9001 and AS 9000 certifications.

Acme is committed to quality throughout its organization-from research and development, design and our state-of-the art manufacturing facility (one of the cleanest and most advanced in the industry).

In fact, Acme designs quality into every process. Acme battery systems, test equipment and electronic assemblies are built to rigid military and commercial specifications and rigorous quality testing. Acme has implemented Boeing's D1-9000 advanced quality program in addition to statistical process control. And, Acme takes quality one-step further by introducing continuous variability reduction.

The result? The most consistent processes and products at the lowest possible manufacturing cost.

Acme has also embarked on a supplier-base reduction program and is implementing supplier-teaming agreements with selected vendors. This program includes required training of all suppliers in advanced statistical techniques as well as on-line data transfer specifications.





FNC battery cells are available in a wide range of sizes and rates.





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