

How Super Efficient Deep-Cycle Batteries Can Lower Overall Operating Costs For Fleets

Golf courses and businesses that incorporate a fleet of golf cars, are always looking for ways to lower their operating costs. Because all deep-cycle golf car batteries will eventually run through their life cycles, extending battery life in the fleet plays a major factor in determining quarterly and annual operating costs.

While many golf courses and companies tend to minimize costs by purchasing the least expensive batteries they can find, the results in the long run don't always turn out that way. New formulations in battery plate technology allow some deep-cycle batteries to produce greater total amp-hours in service, longer cycle life, and fewer cycles to reach rated capacity. "Anyone in charge of maintaining a fleet of golf cars needs to look at their battery expenditures in terms of cost-per-cycle, and cost-per-amp hours delivered over the life of the battery," says Fred Wehmeyer, Senior VP Engineering for U.S. Battery Manufacturing. "Comparing battery ratings on the label or published life cycle, doesn't always tell the true story. In addition, purchasing the least expensive batteries you can find, almost always never adds up to a cost savings in the long run."

Wehmeyer suggests the best way to determine the cost-per-cycle and total cost-per-amp hour delivered over the life of the battery, is to first make regular, routine maintenance checks. These include measuring the condition of the batteries on a weekly basis and determining the total service hours you get from a full charge (total amp hours), and noting each time the batteries are charged (number of cycles), before they are no longer useful. Over the course of several months, the average run-time and amp-hours of your batteries become evident, allowing you to compare that information against the battery purchase cost.

Once fleet managers compare the actual operating costs between various battery manufacturers, they can begin to see that not all deep-cycle batteries are

the same, and those that are more efficient, even at a higher initial purchase price, can actually save overall operational costs in the long run.

This is one of the reasons why manufacturers like U.S. Battery, improved the efficiency of its deep-cycle golf car batteries, by reformulating the lead sulfate crystal structures that are used in the company's battery cell plates. The company's XC2™ formulation and Diamond Plate Technology® allow its batteries to reach peak capacity in fewer cycles, providing higher total energy delivery, and extended battery life. "Our batteries with XC2™ formulation reach peak capacity in as few as 25 cycles," says Don Wallace, U.S. Battery CMO/Executive Vice President. "This also increases the battery's rated capacity and service life, creating a longer-lasting, more efficient battery that saves golf car fleet owners time and money."

For comparison, a U.S. Battery with XC2™ was tested against a popular brand. The results show that the more efficient U.S. Battery delivered a 36 percent longer cycle-life and 55 percent more total amp-hours than the nearest competitor. If the purchase price for the batteries are the same, this example translates to a 27 percent reduction in cost-per-cycle and a 65 percent reduction in cost-per-amp hour over the life of the battery. Putting this into hard dollars, if both batteries cost \$100, the more efficient battery offers a 0.148 cent cost-per-cycle compared to 0.200 cent cost-per-cycle on the competitive battery. The U.S. Battery product also costs 0.135 cents per 100 amp hours, versus 0.210 cents per 100 amp-hours on the comparison battery. Multiply those figures by the number of batteries in any fleet, and the savings in operating costs become much clearer. For more information on deep cycle battery maintenance or selecting the right battery for your golf car fleet, contact U.S. Battery Manufacturing, 1675 Sampson Ave., Corona, CA 92879. (800) 695-0945. Visit <http://www.usbattery.com>.