MARINE BATTERY TYPES

There are 4 major types of batteries in the marine world today, each based on a different chemistry: Flooded Lead Acid, AGM, Gel, and Lithium. Each boat battery chemistry has different applications/designs depending on your boating needs. Below are brief descriptions of the options available when shopping for a boat battery.

Flooded Lead Acid / Wet Batteries

Traditional flooded lead acid batteries, also known as wet batteries, come in 3 different designs today: Starting, Dual Purpose, and Deep Cycle.

- Starting batteries are designed with thinner plates to deliver a short, high powered boost of power, and then immediately begin to recharge off the alternator/generator.
- Deep Cycle batteries are designed with few, thicker plates to handle
 a constant, slow discharge and then recharge. These are used strictly
 for house/DC power, but do have limited cranking ability.



 Dual Purpose batteries are a hybrid design between Starting and Deep Cycle. While not ideal for starting or cycling, the Dual Purpose battery can do some of both. It is designed for applications in which one or two batteries are used to start an engine and running limited electronics while the engine is off.



AGM (Absorbed Glass Mat) Batteries

AGM Batteries are designed as a sealed, maintenance-free battery that can tackle most of today's marine applications. Built to handle dual purpose marine applications, these batteries can deliver high cranking power, and also cycle for trolling motors or house power. They are ideal for boaters who want high cranking power and still enjoy dependable power for more electronic accessories. Ideal for heavy deep cycle demands with moderate starting power. Provides advanced protection against the typical deep discharge of extended trolling use.

Pure Lead AGM

Pure lead AGM batteries are an AGM battery on steroids. With more lead packed tightly in each case, this type of battery delivers higher cranking power while still providing high amp hour ratings to cycle off of. Pure lead is designed to tackle the most unforgiving applications. They can handle the constant pounding of a trip across the water and deliver the deep discharge demand required by today's luxury boats and RVs.

Marine Battery Types

Gel Batteries

Gel batteries are built to withstand the heavy multiple charging and recharging service demanded by heavy house power or extended trolling needs. These evolutionary maintenance-free batteries deliver dependable performance cycle after cycle while providing longer battery life, even under the toughest marine conditions. Their spill proof design and minimized gassing makes them safe to use on or around sensitive electronic equipment.





Lithium Batteries

Lithium batteries represent the latest in marine battery technology. They are much lighter than other options, hold a charge better, and can accommodate more charge / discharge cycles than traditional boat batteries can. Because these batteries can store so much power they need to be monitored for temperature and equalization between cells. It is not recommended that this type of battery be used with an ordinary marine battery charger. Instead, battery management systems are highly recommended and some manufacturers provide Bluetooth technology for monitoring.