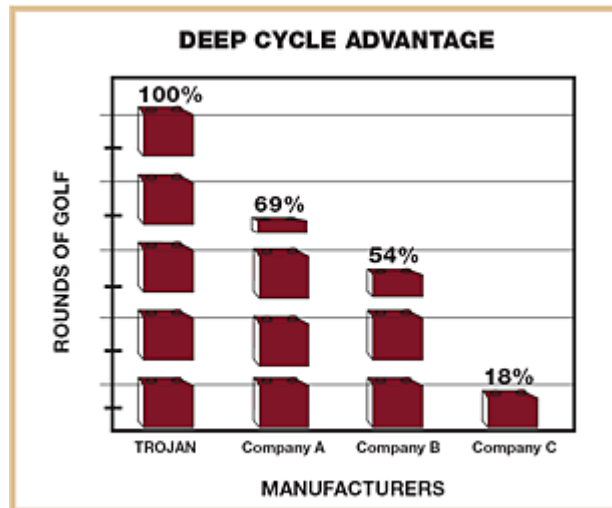
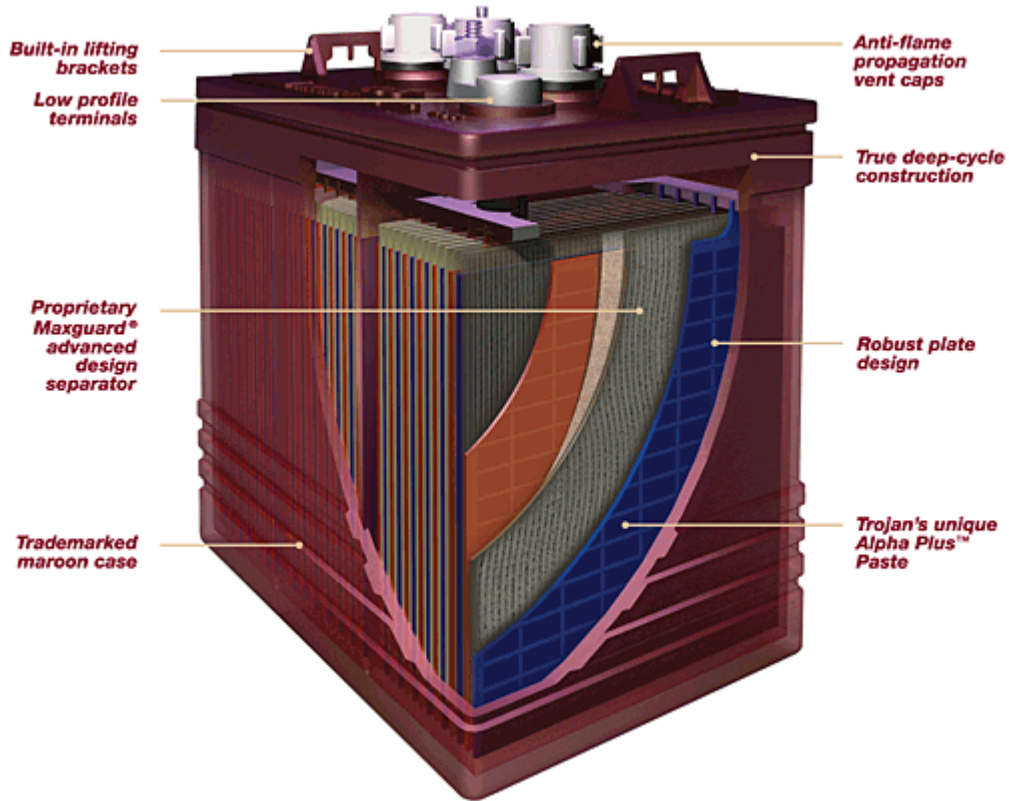


Trojan Technology Information

Inside a Trojan Battery



An Overview of Trojan's Alpha Plus Technology

What is Alpha Plus?

- Alpha Plus crystals are part of Trojan's proprietary, high-density paste formulation.
- Alpha exists as long needle-shaped crystals of lead dioxide (PbO₂), which act together to form an interlocking 3-D structure.
- Alpha Plus crystals possess great strength and low electrical resistance.
- Alpha's strength and structure enhance Trojan's paste formulation, much as steel bars reinforce concrete.

How You Benefit From Alpha Plus Technology!

Its electrical properties and geometric pattern means:

- Improved durability of the positive plate during use, thereby increasing cycle life.
- Greater current flow (lower resistance), thereby increasing the battery's usable capacity (run time).
- Spent particles of active material are trapped, thereby preventing shedding which leads to reduced battery life.

Remember:

- Alpha Plus is the key to long battery life.
- Trojan's proprietary paste formulations and processes produce plates with the industry's highest alpha content.

Trojan is the brand you can trust for performance and value!

Deep Cycle Lead Acid Manufacturing Techniques

A Quality Process from Beginning to End

- Trojan's dominance in deep cycle products is not an accident, but rather the result of years of R & D investment, continuous product testing and adherence to strict manufacturing procedures.
- Unlike high volume battery manufacturers, Trojan has not gone into high speed plate production techniques; nor have we sacrificed the quality of our product by using other shortcuts.
- Rather, we still produce CAST grids with heavy WIRE and FRAME design.
- To each grid, Trojan applies its specially formulated Alpha Plus paste formulation. Its the optimized paste density of this proprietary formula which provides our products with their superior cycle life.
- Another Trojan exclusive is its curing process. Once the grids are pasted, they are placed in specially constructed curing rooms which are temperature and humidity controlled.
- Then they are slowly cured. This provides Trojan deep cycle plates with the most tenacious active material.
- Once the plates are cured, they are then hand assembled, sealed and formed.

Each step is completed under rigorous quality control standards to insure greater cycle time and battery life.

A Reputation Built Upon Performance

- Trojan deep cycle batteries have consistently delivered a greater number of cycles over the competition.
- The lower end-of-charge current acceptance by Trojan deep cycle batteries means reduced:
 - Battery heat
 - Water consumption
 - Recharge cost
 - Gassing
 - Damage to active material

In summary, Trojan Deep Cycle batteries provide:

Features

- Proprietary Alpha Plus Paste Formulation
- Maxguard® Advanced Design Separator

Longer cycle life

- Lower end-of-charge current
- Reduced water consumption

Benefits

- Maximum run time
- Greater cycle life
- Lower electricity costs
- Less battery maintenance

Trojan: Blending Technology and Markets

Why Deep Cycle Lead Acid?

Deep cycle lead acid technology is recognized worldwide as being very suitable and successful in serving the electric vehicle marketplace. It is durable, efficient, economical and recyclable.

Markets Served

Trojan's deep cycle lead acid batteries can be found in the following applications:

Golf Cars

Floor Machines

Construction Equipment

Aerial Work Platforms

Material Handling Equipment

Marine/RV

Renewable Energy/Solar Photovoltaic

Trojan envisions new electric vehicle energy requirements to capitalise on and benefit from Trojan battery's years of experience, know-how and commitment to the future.

Technology, A Continuing Focus

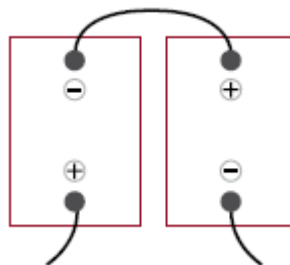
As an industry leader, Trojan has introduced numerous innovations. Of prime importance is their Maxguard® Advanced Design Separator. This patented separator significantly improves battery cycle life and is used exclusively by Trojan in our deep cycle products. In addition, Trojan's proprietary Alpha Plus paste formula generates an active (Alpha) material far superior to any in the industry today. The Alpha component is the key to longer battery life.

Due to demanding performance requirements, all Trojan deep cycle products are produced with the same "craftsmanship and attention to detail" which built their reputation. Today, Trojan remains committed to advancing the spectrum of deep cycle battery technology. The company maintains a state-of-the-art technology centre at its Santa Fe Springs, California headquarters. Battery applications in the electric vehicle arena and advanced valve regulated batteries are prime examples of its research focus.

Connections Diagrams

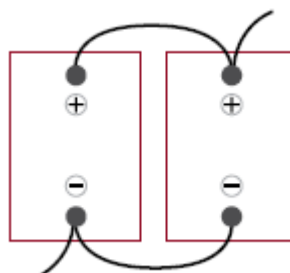
Connecting batteries in series does not increase the capacity of the batteries; it simply increases the overall voltage to meet your system requirements. Once your voltage requirements are met, if space allows you can double the batteries in a parallel connection- thereby doubling your battery capacity.

Series Connect



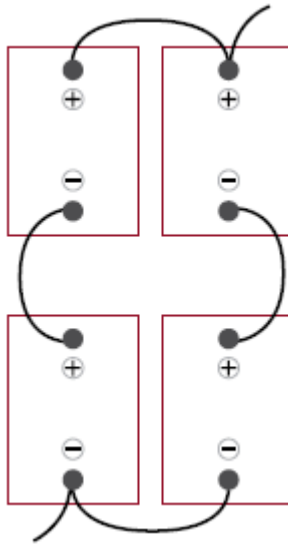
**To increase voltage,
connect batteries in series.**

Parallel Connect



**To increase amp-hour capacity,
connect batteries in parallel.**

Series/Parallel Connect



To increase both voltage and amp-hour capacity, connect batteries in series/parallel.