Maximum Productivity...
Worry Free Operation

Today facilities maintenance management teams face a multitude of challenges. From maintenance backlogs, and balancing maintenance budgets to limited staff, lack of time to complete work and increasing environmental regulations... the last thing you need to worry about is the performance of the battery in your floor machines. At Trojan battery we understand the challenges you face and that is why for over 85 years we have focused our experience and expertise in deep-cycle technology on manufacturing the highest quality, lead acid batteries available in the industry. If there’s one thing we’ve learned over the years it is that a truly outstanding battery must provide rugged durability, long life and consistent performance day in and day out. As the world’s leading supplier of deep-cycle batteries, we understand the importance of these performance features in your daily operations and that is why we offer the broadest portfolio of high-quality, deep-cycle flooded, gel and AGM products available for floor machine applications.
Deep-Cycle Flooded Batteries...

Rugged Durability and Long Life

Trojan’s deep-cycle flooded batteries are the flagship of Trojan’s product portfolio. Engineered to provide rugged durability, outstanding performance and long life, Trojan’s deep-cycle flooded batteries are perfectly suited for use in a variety of floor machines. An all-around power house, the deep-cycle flooded batteries feature Trojan’s historically-proven engineering with T2 Technology™, an advanced battery technology for maximum sustained performance, longer life and increased total energy.

1 Alpha Plus® Paste with T2 Technology™
Maximum Operating Performance

Trojan’s Alpha Plus Paste is a proprietary, high density paste formulation engineered to deliver outstanding battery performance. It optimizes porosity development in the active material utilizing the active material more effectively resulting in sustained battery performance over a longer period of time. Trojan’s T2 Technology introduces a patent-pending T2 metal agent into Alpha Plus Paste strengthening its electrochemical processing capabilities. Alpha Plus Paste with T2 Technology increase both sustained capacity and total overall ampere-hours resulting in more operating power. It’s a key reason why Trojan batteries consistently outperform the competition.

2 Trojan Grid Technology
Reduced Downtime

Trojan’s grid technology is a lead antimony alloy grid mixture formulated specifically for use with Trojan’s Alpha Plus Paste with T2 Technology. The grid formulation provides exceptional structural adhesion between the Alpha Plus Paste and the grid frame. Thick grids reinforce the strength of the frame and reduce overall corrosion. The grid configuration is optimized to enhance current flow through the grid network providing exceptional battery performance, reducing downtime and lowering overall maintenance costs.

3 Maxguard® T2 Separator
Longer Battery Life

Exclusively available in Trojan batteries is our Maxguard T2 advanced separator. Its multi-rib geometry design keeps acid channels open longer enhancing electrochemical processing while reducing the risk of stratification. Maxguard’s proprietary rubber-based material formulation inhibits antimony transfer between the positive grids and negative plates; a protection not available in many other competitor batteries. A newly fortified, thick back web provides even greater separator strength resulting in a more robust battery with increased protection against failures caused by separator degradation. Trojan’s Maxguard T2 advanced separator sustains performance, provides longer battery life and significantly lowers operating costs.
HydroLink™ Watering System

Battery Watering Made Easy
Proper maintenance and periodic watering are important factors in maximizing the performance and life of Trojan deep-cycle, flooded batteries. Battery maintenance can be a costly, time-consuming and messy job. With Trojan’s HydroLink™ advanced, single-point watering system, precise battery watering is made easy saving valuable time and money.

Convenient Installation
Trojan’s HydroLink watering system is specifically designed to work with Trojan’s 6-volt, 8-volt and 12-volt flooded batteries* and takes the guesswork out of properly watering flooded batteries. In addition, the design of the HydroLink watering system prevents direct access to a battery’s electrolyte and reduces acid splash, enhancing safety during the battery watering process. With a simple installation of the HydroLink manifolds and tubing, the system is ready for use. Once installed, a complete set of batteries can be filled in less than 30 seconds.

HydroLink™ Vent Assembly
The HydroLink™ vent assembly is unique and features an independent water level indicator, valve shut off and dual flame arrestors.

Independent Water Level Indicator
Maintaining the proper electrolyte level can extend the performance and life of Trojan flooded batteries. However, determining the correct level can be a challenge. Trojan’s HydroLink vent features an independent water level indicator that accurately displays whether a battery needs watering. A white indicator signals that the battery needs water. A black indicator signals that the battery has enough water…it’s that simple.

Valve Shut Off
The valve shut off accurately controls cell electrolyte levels. Using a balanced valve design, the shut off valves automatically cut the water flow into the individual cells eliminating the potential of overflow or acid splash caused by overfilling. HydroLink’s valve shut off works in conjunction with the hose end assembly and flow indicator to provide precise battery watering.

Dual Flame Arrestors
The HydroLink system is equipped with dual flame arrestors, an important safety feature not standard on many other watering systems. The internal flame arrestors prevent internal sparks from passing through the watering system to neighboring cells while the external flame arrestor prevents external sparks from entering the Trojan battery.

Snake™ or Clampless Tubing
The HydroLink system offers a patented Snake™ tubing assembly. This one-piece unit eliminates the need for multi connections resulting in fewer parts and quicker watering. HydroLink is also available with clampless tubing for customizable configurations.

Warranty
HydroLink™ watering system comes with a four-year, limited warranty.

* HydroLink is not compatible with all batteries. See warranty for details: www.trojanbattery.com/products/hydrolink-watering-system/
Sealed Maintenance-Free Batteries...

Outstanding Performance and Reliability

For public facilities such as hospitals, schools, airports and other facilities impacted by indoor environmental quality and other health, safety and environmental regulations, sealed maintenance free batteries provide an ideal solution for battery operated floor machines. Trojan offers a full-line of non-spillable, sealed deep cycle gel and AGM products engineered for optimum performance in environmentally regulated floor machine applications.

Deep-Cycle AGM Batteries

Trojan’s deep cycle absorbent glass mat (AGM) sealed, maintenance free batteries feature a number of design elements to provide optimum performance. Robust plates extend the life cycle of Trojan’s deep cycle AGM batteries. A separator of glass fibers serves to isolate the positive and negative plates while acting as a blotter to absorb the electrolyte. The separator is maintained under compression between plates to assure contact with plate surfaces. A computer-generated grid design is optimized for high power density. Low calcium grid alloy reduces gas emissions and a flame arresting, one-way pressure relief vent prevent buildup of excessive pressure. Trojan’s deep cycle AGM batteries are low temperature tolerant, shock and vibration resistant and have a low internal resistance for higher discharge current and higher charging efficiency.

Deep-Cycle Gel Batteries

Trojan deep cycle gel batteries are sealed, maintenance free batteries that deliver superior power in demanding floor machines applications. Engineered for rugged durability, outstanding performance and long battery life, Trojan’s deep cycle gel batteries feature a number of important design characteristics that provide significant advantages over competing gel products. The gelled electrolyte is a proprietary formulation containing sulfuric acid, fumed silica, pure demineralized, deionized water and a phosphoric acid additive. This exclusive formulation produces a homogenous gel that delivers consistent performance and dramatically long cycle life. The heavy duty thick grids lock active material onto the grid network to efficiently deliver more concentrated energy to the terminals. Premium grade, double-insulated separators allow maximum charge flow between the plates for optimum performance.
# Product Specification Guide

<table>
<thead>
<tr>
<th>BCI Group Size</th>
<th>Type</th>
<th>Capacity * Minutes</th>
<th>Capacity * Amp-Hours (AH)</th>
<th>Energy (KWh)</th>
<th>Terminal Type</th>
<th>Dimensions * Inches (mm)</th>
<th>Weight lbs. (kg)</th>
<th>HydroLink or Single-Point Watering Kit</th>
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## 6 Volt Deep-Cycle Batteries - with T2 Technology™

### 12 Volt Deep-Cycle Batteries - with T2 Technology™

### 36 Volt Deep-Cycle Batteries
### Product Specification Guide

<table>
<thead>
<tr>
<th>BCI GROUP SIZE</th>
<th>TYPE</th>
<th>CAPACITY a Minutes</th>
<th>CRANKING Performance</th>
<th>CAPACITY b Amp-Hours (AH)</th>
<th>ENERGY (kWh)</th>
<th>DIMENSIONS c Inches (mm)</th>
<th>WEIGHT lbs. (kg)</th>
<th>HydroLink™ or Single-Point Watering Kit d</th>
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<td>-</td>
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<td>31 31-AGM</td>
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<td>600</td>
<td>77 92 100</td>
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* Polyon™ Case

** Unavailable with T2 Technology

- Also available at 30-1/4
- TE35-GEL and S3HP-GEL are not UN2800 certified

### 6 Volt Deep-Cycle Gel Batteries

<table>
<thead>
<tr>
<th>BCI GROUP SIZE</th>
<th>TYPE</th>
<th>CAPACITY a Minutes</th>
<th>CRANKING Performance</th>
<th>CAPACITY b Amp-Hours (AH)</th>
<th>ENERGY (kWh)</th>
<th>TERMINAL Type e</th>
<th>DIMENSIONS c Inches (mm)</th>
<th>WEIGHT lbs. (kg)</th>
<th>HydroLink™ or Single-Point Watering Kit d</th>
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<tr>
<td></td>
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<td>DIN TE35-GEL</td>
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### 12 Volt Deep-Cycle AGM Batteries

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<tr>
<th>BCI GROUP SIZE</th>
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<th>CAPACITY b Amp-Hours (AH)</th>
<th>ENERGY (kWh)</th>
<th>TERMINAL Type e</th>
<th>DIMENSIONS c Inches (mm)</th>
<th>WEIGHT lbs. (kg)</th>
<th>HydroLink™ or Single-Point Watering Kit d</th>
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<tr>
<td></td>
<td>GC2 12-AMG</td>
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<td>79 -</td>
<td>280</td>
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<td>77 92 100</td>
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<td>6.80 (173)</td>
<td>9.16 (233)</td>
<td>69 (31)</td>
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</table>

### Terminal Configurations

1. ELPT Embedded Low Profile Terminal
2. EHPT Embedded High Profile Terminal
3. EAP Embedded Automotive Post Terminal
4. EUT Embedded Universal Terminal
5. LT L-Terminal
6. DT Automotive Post & Stud Terminal
7. UT Universal Terminal
8. AP Automotive Post Terminal
9. WNT Wingnut Terminal
10. DWNT Dual Wingnut Terminal
11. ST Stud Terminal
12. Cable & Plug

A. The number of minutes a battery can deliver when discharged at a constant rate at 80°F (27°C) and maintain a voltage above 1.75 V/cell. Capacities are based on peak performance.

B. The amount of amp-hours (AH) a battery can deliver when discharged at a constant rate at 80°F (27°C) for the 20-Hour and 80°F (30°C) for the 5-Hour rate and maintain a voltage above 1.75 V/cell. Capacities are based on peak performance.

C. Dimensions are based on nominal size. Dimensions may vary depending on type of handle or terminal. Batteries to be mounted with 5 inches (12.7mm) spacing minimum.

D. C.C.A. (Cold Cranking Amps) - the discharge load in amperes which a new, fully charged battery can maintain for 30 seconds at 0°F at a voltage above 1.2 V/cell.

E. C.A. (Cranking Amps) - the discharge load in amperes which a new, fully charged battery can maintain for 30 seconds at 0°F at a voltage above 1.2 V/cell. This is sometimes referred to as marine cranking amps (M.C.A.) @ 0°F or M.C.A. @ 0°F.

F. Dimensions taken from bottoms of the battery to the highest point on the battery. Heights may vary depending on type of terminal.

G. Terminal images are representative only.

H. N/A = Not Available. For more information on the Single-Point Watering Kit (SPWK), please contact your Trojan Battery representative.

Trojan’s battery testing procedures adhere to both BCI and IEC test standards.

Note: GC2 and DIN types are not available with T2 Technology.
Leadership

Founded in 1925 by co-founders George Godber and Carl Speer, Trojan Battery Company is the world’s leading manufacturer of deep-cycle batteries. From deep-cycle flooded batteries to deep-cycle AGM and gel batteries, Trojan has shaped the world of deep-cycle battery technology with over 85 years of battery manufacturing experience. With the invention of the golf car battery for the Autoette vehicle in 1952, Trojan pioneered the development of deep-cycle battery technology for the golf industry; successfully introducing mobilization to the game of golf. For Trojan, this began a legacy of leadership and innovation that prevails today in the global, deep-cycle markets spanning applications for aerial work platforms, transportation, renewable energy, golf, floor machines, marine and recreational vehicles. Today, Trojan batteries are available worldwide through our global network of master distributors.

Headquartered in Santa Fe Springs, CA, Trojan’s operations include ISO 9001:2008 certified manufacturing plants in California and Georgia, two advanced research and development centers dedicated exclusively to deep-cycle battery technologies and international offices located in Europe, UAE and Asia. Trojan is a proud member of the Battery Council International (BCI) and a technical research partner with the Bulgarian Academy of Sciences.

Research and Development

Quality and innovation are the cornerstones of our product development. Engineering teams, backed by over 200 years of deep-cycle development expertise, work together to innovate and bring to market advanced battery technologies that exceed our customers’ expectations for outstanding battery performance.

To ensure the quality and superior performance of our batteries, Trojan applies the most rigorous testing procedures in the industry to test for cycle life, capacity, charger algorithms and both physical and mechanical integrity. Trojan’s battery testing procedures adhere to both BCI and IEC test standards. Trojan’s state-of-the-art R&D facilities include charger characterization and analytical labs, battery prototype and evaluation labs and battery autopsy centers all dedicated to providing you with a superior battery that you can rely on.

Environmental Stewardship

At Trojan Battery, when we say, “Clean energy for life™,” we mean every word. As proactive supporters of environmental sustainability, our environmental stewardship focuses on clean energy initiatives and recycling programs.

- Trojan batteries are 97% recyclable. The container plastic, battery lead and electrolyte from old deep-cycle batteries can be recycled to produce new Deep-Cycle batteries.
- Through its partnership with Southern California Edison (SCE) Trojan saves over 8 million kilowatt hours and cuts CO2 emissions by over 12 million pounds significantly reducing our annual energy consumption and carbon foot print.

For more information, call 800.423.6569 or +1.562.236.3000 or visit www.trojanbattery.com

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