



 HAWKER

# Water Less®

BATTERY  
TECHNOLOGIES



# ADVANCED BATTERY SOLUTIONS

HAWKER

## Water Less®

EnerSys® is focused on rapid innovation and our whole team is driven by the desire to build the best energy solutions, working closely with our customers and suppliers to identify development opportunities.

### LESS WATERING — MORE BENEFITS



### WATER LESS® BATTERIES

Water Less® batteries combine the power and reliability of tubular vented technology with the convenience of extended watering intervals. Less frequent topping up means reduced labor costs. These batteries are suitable for multi-shift operations. Water Less® batteries provide a high level of power and reliability for all industrial truck applications; thanks to the extended capacity range. Water Less® batteries are at the leading edge of battery technology and bring added efficiency to your business. A low electrolyte level indicator fitted on the battery informs the user when water topping up is needed.

### WATER LESS® 20 BATTERIES

Water Less® 20 batteries are capable of operating for up to 100 cycles (approx. 20 weeks in normal duty applications) before topping-up is required.

Standard batteries with 50 Hz chargers would normally need topping up on a weekly basis so moving to 20 weeks could reduce your labour costs by as much as 90%. Water Less® 20 traction batteries provide the level of power and reliability needed for low to heavy duty industrial truck applications.

### INTUITIVE DESIGN

All Water Less® batteries (PzM) use proven PzS technology. The positive electrodes are diecast tubular plates (PzS) and provide increased efficiency. Constructional specifications like a larger electrolyte capacity, a reduced prism height and new flip top plugs ensure added value for our customers.



Extremely low maintenance.  
Reduced labour costs for  
water topping.



Integrated plug-and-play power  
systems with compatible  
components from one trusted  
supplier.



System power and performance  
with ownership costs verified  
before purchase and a warranty  
you can count on.



# ENHANCED BATTERY INNOVATIONS

## ADVANTAGES

- Extremely low maintenance, robust and dependable
- Extended watering intervals (4, 8 or 13 weeks)\*
- Up to 75% reduced labour costs with less topping up required\*\*
- Suitable fitment for all truck types (sizes in DIN and BS ranges)
- Warranty: Specific country conditions and customer agreements apply

\*Depending on selected charging technology

\*\*When paired with our high-frequency chargers

## EVEN MORE APPLICATIONS

Water Less® batteries are suitable for use in the following material handling applications:

- Counterbalance trucks
- Reach trucks
- Pallet trucks
- Order pickers
- AGV/LGV

## MORE CHARGING FLEXIBILITY

The charging technology must be tailored for the characteristics of the battery and the application. This is a crucial factor for the economic operation of the batteries. Water Less® batteries are suitable for 50Hz and our high-frequency charging range.

IMPAQ™ and NexSys®+ Chargers adapt automatically to:

- Capacity of the battery
- Voltage of the battery
- Depth of discharge of the battery

The Water Less® 20 charging profile also has 33% lower end-of-charge current (compared to standard regimes) which reduces ventilation requirements and gives opportunities for de-centralised charging of Water Less® 20 batteries.



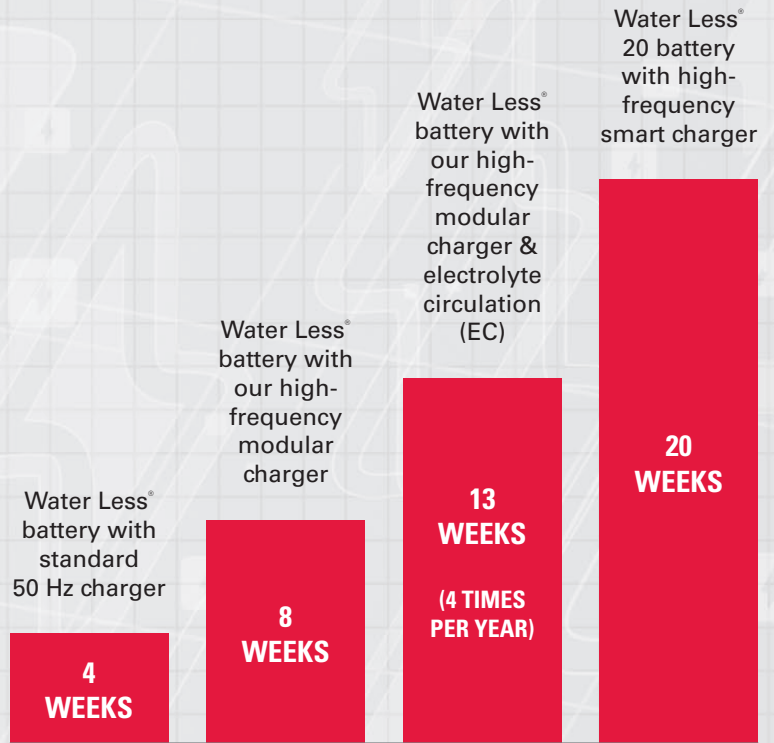
# TOPPING UP INTERVALS

THE TOPPING UP INTERVALS CAN  
BE ACHIEVED AS FOLLOWS\*

 **HAWKER**

# Water Less®

MORE OPERATING TIME —  
LONGER TOPPING UP  
INTERVALS



**+/- 1 week in the most common applications at 20°C**

\*Based on 80% DoD C5, 1 cycle per day, 5 days per week

## IDEAL APPLICATIONS

- Operations running 1-2 shifts per day, up to 5-6 days per week - Low to normal-duty applications
- Multi-shift operation with battery changes, 3 shifts per day, up to 7 days per week - Heavy-duty applications
- Operations looking to reduce maintenance and water topping intervals
- Ideal Industries: Automotive, Logistics, Retail & e-Commerce, Construction, Manufacturing



## AVAILABLE OPTIONS



### EASY TOPPING UP

The Aquamatic water refill system makes it possible to top up all the cells from one central point through an easy, integrated system.

### ACHIEVE OPTIMUM PERFORMANCE

The Electrolyte Circulation (EC) system consists of a pipe system which is fitted in the cells. Electrolyte circulation provides optimum performance, reduces recharge time, helps keep the battery cooler and maximizes battery service life in more arduous operations.



### ACTIONABLE INTELLIGENCE & CONNECTIVITY

A further option for Water Less® batteries is the Wi-iQ® battery monitoring device range, which precisely manages the state of charge and operating conditions of the battery as well as storing complete data of the battery's service life and provides fleet management reporting.

The Wi-iQ® battery monitoring device communicates with NexSys®+ Chargers, enabling battery temperature control, making it possible to work in colder environments.

Available free for Android™ and iOS® operating systems, the E Connect™ mobile app allows users to see and share a range of real time battery and charger operating data on smartphones or tablet devices.



## LIFE Network™



### BATTERY MONITORING

EnerSys® offers solutions that make managing your battery fleet straight forward and affordable. BSI40™, EZ Select™ and LifeNetwork™ are the spearheads of battery fleet management, enabling charging room management and communication with state of charge monitoring. Totally customizable to your needs, these solutions will make your energy and facility management easy and efficient.



## OPTIMIZE YOUR POWER SOLUTION WITH THE LOWEST TCO

Before EnSite™ modeling software, finding the most efficient power solution for your material handling equipment meant relying on hand calculations and guesswork. But with EnSite™ modeling software, we use your application data to determine which battery and charger combination will be optimal for your operation's needs and goals.

We work with you to collect a range of data about your application. Then we use your data in our EnSite™ modeling software to find a solution that meets your requirements for the lowest TCO for your operation.

- Tailors solutions to meet application demands
- Compares battery and charger combinations
- Predicts overall application performance
- Estimates greenhouse gas reductions
- Calculates TCO reductions and overall ROI



**OUR SOLUTIONS PUT TOTAL POWER IN MOTION FOR YOUR BUSINESS**



EnerSys® is the global leader in stored energy solutions for industrial applications and designs, manufactures, and distributes energy systems solutions and motive power batteries, specialty batteries, battery chargers, power equipment, battery accessories and outdoor equipment enclosure solutions to customers worldwide.

EnerSys® Motive Power solutions form a complete, turnkey power system to make your operations more productive and profitable. Motive Power batteries and chargers are utilized in electric forklift trucks and other industrial electric powered vehicles requiring stored energy solutions.

EnerSys® also provides aftermarket and customer support services to its customers in over 100 countries through its sales and manufacturing locations around the world.

Wherever you are in the Asia-Pacific region, EnerSys® is within reach and ready to support your fleet with 40+ Service locations.

- 24/7 coverage\* from 200+ authorized service technicians
- Tailored service contracts to your requirements
- Proactive cloud-based\* monitoring and real-time service scheduling
- Comprehensive maintenance reporting and monitoring plans

\*It varies depending on the country.



**SERVICE AND  
SUPPORT**

Our battery support services range from system design, installation and certification to testing, maintenance and repair.



Our comprehensive recycling support program accepts lead acid batteries of all sizes, from all manufacturers.



**BATTERY  
MONITORING**

Our advanced tools and technologies deliver actionable intelligence to optimize battery maintenance and operation.



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