

**ADVANCED
BATTERY
SOLUTIONS**

**HAWKER
WATER LESS® 20**

THE LOW
MAINTENANCE
POWER PACKAGE



BATTERY MAINTENANCE MADE EASIER

Water Less® 20

BUILDING ON THE
SUCCESS OF THE
HAWKER WATERLESS®
RANGE OF LOW
MAINTENANCE
BATTERIES, ENERSYS®
HAS DEVELOPED
A POWER PACKAGE
PROVIDING EVEN
LONGER INTERVALS
BETWEEN TOPPING UP.

HAWKER WATER LESS® 20

is 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%! Hawker® Water Less® 20 traction batteries provide the level of power and reliability needed for low to heavy duty industrial truck applications.

Hawker Water Less range is at the leading edge of battery technology and brings added efficiency to your business.

A low electrolyte level indicator fitted on the battery informs the user of the battery when water topping up is needed.



CELL CONSTRUCTION

All Hawker® Water Less® cells use proven PzS technology. The positive electrodes are diecast tubular plates (PzS) and advanced components used in their manufacture provide increased efficiency. The negative plates are flat pasted plates. High grade separator of the polyolefine/silica type, constructional specifications like a larger electrolyte capacity, a reduced prism height ensure added value for our customers.



STANDARD EQUIPMENT

WI-IQ® AND MODULAR CHARGER CONNECTIVITY

Wi-iQ® is a small electronic device that collects data from the battery: identity, capacity, temperature, voltage and current. It also gives an indication if the battery develops a voltage imbalance that requires service intervention. When used with our software program Wi-iQ Reporting Suite, a range of management reports are available. Modular chargers (Life iQ™ Modular range) are capable of communication with the battery via the Wi-iQ.



AQUAMATIC™

The Aquamatic water refill system makes it possible to top up all the cells from one central point through an integrated system. Hawker Water Less - Less is More. Less Watering - More Benefits.

BATTERY FLEET MANAGEMENT

EnerSys® offers a solution that makes managing the battery fleet straight forward and affordable. BSI40™ and Lifenetwork iQ™ 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.

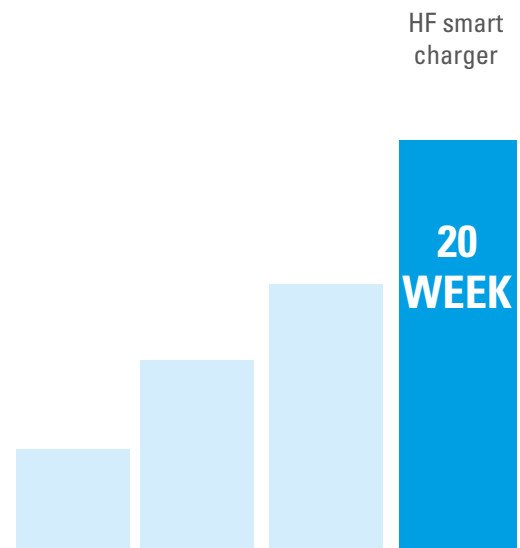
ELECTROLYTE CIRCULATION (EC)

Hawker electrolyte circulation system, using the AirLift principle, consists of a pipe system which is fitted in the cells. A diaphragm pump sends a low rate airflow into the cell which creates a circulating air stream inside the cell box. This system prevents electrolyte stratification and the battery charging is optimised. Electrolyte circulation provides optimum performance, reduces recharge time, helps keep the battery cooler and maximizes battery service life in more arduous operations.

ADVANTAGES (COMPARED TO STANDARD LEAD ACID BATTERIES):

- More Time: longer topping up intervals
- More Flexibility: suitable for 50 Hz and Hawker Modular chargers (with suitable profile)
- More Savings: reduced electricity costs when used with Hawker Modular Chargers
- Lower carbon footprint

TOPPING UP INTERVALS





MORE FLEXIBILITY

Hawker® Water Less® 20 can be supplied as a complete package (battery, Wi-iQ & Modular charger). It can also be supplied as battery & Wi-iQ when the customer has a compatible existing charger – therefore, Water Less 20 is an ideal solution to replace Hawker WF200 batteries that may have reached the end of their service life.

- The topping up interval of 20 weeks (based on 80% DOD C5, 1 cycle per day, 5 days per week) can be achieved when the battery is recharged using a compatible charger equipped with a pump for electrolyte circulation and 1.04 charging factor.
- Contact EnerSys® to check the suitability of your existing charger.
- The 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.

1. Low duty:

single-shift with light operation and discharge lower than 60% C5. Electrolyte T °C about 30°C

2. Normal duty:

single-shift with discharge up to 80% C5. Electrolyte T°C 30°C

3. Heavy duty:

single-shift with discharges of 80% C5 and high discharging currents; opportunity charging to augment the useable capacity; multi-shift operation with or without battery changes; high ambient temperature

1. LOW DUTY	2. NORMAL DUTY	3. HEAVY DUTY
IRONCLAD		
NEXSYS		
HAWKER EVOLUTION		
HAWKER PERFECT PLUS		
HAWKER PERFECT PLUS WITH ELECTROLYTE MIXING		
HAWKER WATER LESS		
HAWKER WATER LESS WITH ELECTROLYTE MIXING		
HAWKER WATER LESS 20		

ABOUT ENERSYS®

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

Motive power batteries and chargers are utilized in electric forklift trucks and other commercial electric powered vehicles.

Reserve power batteries are used in the telecommunication and utility industries, uninterruptible power supplies, and numerous applications requiring stored energy solutions including medical, aerospace and defense systems.

Outdoor equipment enclosure products are utilized in the telecommunication, cable, utility, transportation industries and by government and defense customers.

The company also provides aftermarket and customer support services to its customers from over 100 countries through its sales and manufacturing locations around the world.

**WHEREVER
YOU DO BUSINESS,
ENERSYS
CAN SUPPORT
YOU WITH MOTIVE
POWER ENERGY.**





EnerSys EMEA
EH Europe GmbH
Baarerstrasse 18
6300 Zug
Switzerland
Tel. +41 44 215 74 10
Fax +41 44 215 74 11
www.enersys.com

Enersys Ltd
Oak Court
Clifton Business Park
Wynne Avenue
Swinton
Manchester M27 8FF
Tel. 0161 794 4611
Fax 0161 727 3809

Please refer to the website address for details of your nearest EnerSys office: www.enersys.com

© 2016. All rights reserved. All trademarks and logos are the property of or licensed to EnerSys and its affiliates unless otherwise noted - 11.2016 Subject to revisions without prior notice. E&OE.