

# IRONCLAD<sup>®</sup>

BATTERY  
TECHNOLOGIES



# FLOODED LEAD ACID SOLUTIONS

## IRONCLAD®

These batteries are built for heavy-duty applications and can be opportunity charged to optimize vehicle fleet efficiency which is unparalleled in the industry.

## MORE POWER — LONGER RUN TIME

### ENHANCED FLOODED TECHNOLOGY

IRONCLAD® batteries maintain higher average voltages in forklift applications than conventional batteries. Higher voltages can result in faster drive and lift speeds. Plus, IRONCLAD® batteries have the highest ampere-hour capacity ratings.

IRONCLAD® batteries outperform other conventional batteries with up to 15% more power, particularly at the higher discharge rates demanded by the latest MHE equipment. It is also possible to extract up to 120%\* of the battery capacity per day by means of fast-opportunity charging.

### MAXIMUM RUN TIME

IRONCLAD® batteries have the ability to sustain higher voltages, combined with industry leading capacity ratings which will extend the run time by up to 10% when compared to other conventional lead-acid battery design. Your material handling equipment will run for longer on each charge, therefore, maximizing your productivity.



Boost productivity.  
More surface area,  
means more power.



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.

\*When paired with our high-frequency chargers with advanced charging profiles.

**ENHANCED FLOODED  
TECHNOLOGY**



## **LONGER RUN TIME AND LONGER LIFE**

IRONCLAD® batteries are built for heavy-duty applications and can be opportunity charged to optimize vehicle fleet efficiency which is unparalleled in the industry. IRONCLAD® batteries will help your fleet work longer, harder and ensure your operations are more productive and profitable.

Thanks to their unique square tubular, positive plate design, these batteries can run with higher specific gravities, which not only increases the power and run time but also leads to a longer service life. IRONCLAD® batteries have up to 20% longer life when compared to standard lead acid batteries.

The range of IRONCLAD® batteries is particularly suited to situations where you want to achieve longer truck run times to avoid using spare batteries. IRONCLAD® batteries are available in sizes to fit vehicles from small pallet trucks up to large forklifts. The plate design has now been extended up to 12 positive plates with 4 post configuration for higher capacity, to support higher discharge and recharge currents.

**LOWER  
OPERATING COSTS**

**FLOODED  
LEAD ACID**

**IRONCLAD®**

**MORE POWER —  
LONGER RUN-TIME**

### **IMPROVE PRODUCTIVITY AND REDUCE OPERATING COSTS**

IRONCLAD® batteries not only boost productivity, but also help to cut costs. IRONCLAD® batteries can help decrease expensive truck maintenance because the higher sustained voltage and lower amp draw reduces heat and strain on the truck's electrical components. This means your fleet not only performs better during the shift, but also runs longer before battery change is required.

Fewer battery changes mean more productive time for your equipment. The savings soon add up through fewer spare batteries, fewer chargers and fewer charging racks required to run your operation.



### **IDEAL APPLICATIONS**

- Operations running 1-2 shifts per day, up to 7 days per week- Heavy-duty applications
- Facilities trying to minimise battery changing and spare batteries
- Equipment with attachments, high tonnage trucks, working in heavy-duty applications
- Industries: Construction, Manufacturing, Ports & Terminals

### **EVEN MORE APPLICATIONS**

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

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

\*When paired with our high-frequency chargers

**EnerSys**  
Power/Full Solutions

## AVAILABLE OPTIONS



### **ACTIONABLE INTELLIGENCE & CONNECTIVITY**

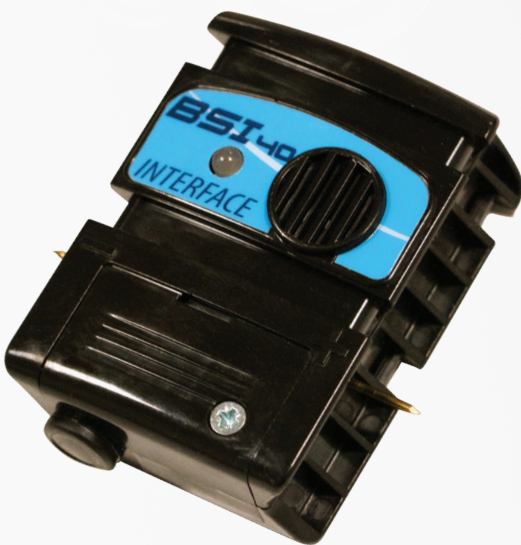
A further option for IRONCLAD® batteries is the Wi-iQ® battery monitoring device range, which precisely manages the state of charge and operating conditions of the battery as well as storing complete data of the battery's service life and provides fleet management reporting.

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.

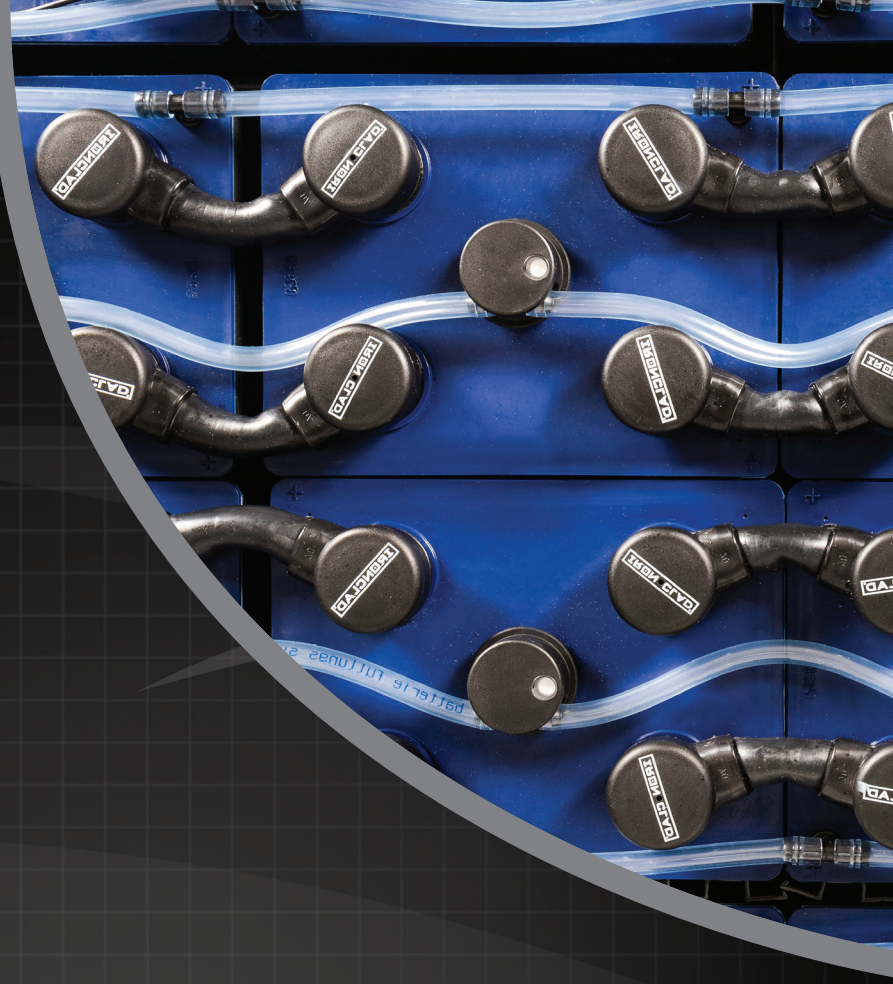
EnerSys® Motive Power solutions form a complete, turnkey power system to make your operations more productive and profitable. Motive Power batteries and chargers are utilized in electric forklift trucks and other industrial electric powered vehicles requiring stored energy solutions.

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.



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.



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



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