

iBOS®

INTELLIGENT BATTERY ORGANIZING SYSTEM

A Complete Range of

Battery Room

Management Systems

the
LeanBatteryRoom

The Key to a More Productive Warehouse



Increase warehouse productivity, reduce costs through better battery management

When lead-acid batteries are not properly managed, the productivity of your entire warehouse or DC suffers. Improper battery rotation is the #1 reason for poor battery performance, and lack of information is the primary cause of poor rotation.

Using guesswork instead of data to manage your battery assets results in:

- Shorter battery run times
- Reduced battery life
- More frequent battery failures
- More frequent battery changes
- Less productive operators, higher labor costs
- Money wasted on unneeded batteries

Philadelphia Scientific's iBOS® battery room management system gives you the technology you need to properly rotate batteries and optimize their performance. The mistake-proof, read-and-react system makes battery selection quick and easy. And, Web-based reporting provides the management information you need to right-size your fleet, enabling you to effectively operate with a two batteries to one forklift truck ratio. The result: reduced waste, increased productivity and an improved bottom line.

There's an iBOS system for any size battery room: iBOS Basic or iBOS Lite for small battery fleets and iBOS Plus and iBOS Pro for larger fleets.

Benefits of using **iBOS**

Battery Rotation

Faster Changes

2 to 5 minutes faster

Longer Run Time

30 Minute Increase

Fewer Changes

10 to 20% Less

Longer Life

6 Month Increase

Proper Cool Down

Heat kills batteries!

Right-sizing

Know How Many Batteries to Eliminate

Too many batteries waste capital, increase maintenance costs

Know How Many Batteries to Add

Too few batteries decrease productivity, reduce battery life

Decisions Without Data Is Guesswork

Now purchasing is based on what the data shows is needed

Management Information

Feedback

Identify non-working equipment & problems in the battery room

Accountability

Pick Accuracy & Utilization reports give management overview

Access to Information

Get complete battery room data at

www.ibosworld.com

the Lean Battery Room

The Key to a More Productive Warehouse

Here's how iBOS works

When an operator enters the battery room, the Controller, scrolling display, pick light and/or wireless display indicate the correct battery to select — the one that is fully charged and cooled down the longest. If the wrong battery is selected, the Shouter sounds.

NEW!

iBOS Operations Display

A dedicated, touch screen computer that allows a real-time view of the battery room's status, enabling managers or operation centers to act immediately to address critical battery and charger-related performance issues.

iBOSWorld Web Service

Internet-based service provides complete data on battery availability and utilization. This feedback enables you to right-size your fleet, helping you make decisions on adding or shedding batteries as demand changes. The service also promotes operator accountability.

Charger-Splitter™

With Charger Splitter, you can reduce the chargers you'll need by 50% — eliminating the need for this row of chargers!

Shouter

Signals the mispick with a loud alarm.

Controller

Communicates with and controls the Sentinels; indicates the correct battery to pick and sounds an alarm when the wrong battery is selected; sends data to the iBOSWorld Web Service.

Sentinel

Constantly monitors charger voltage and reports data to the Controller.

Pick Light

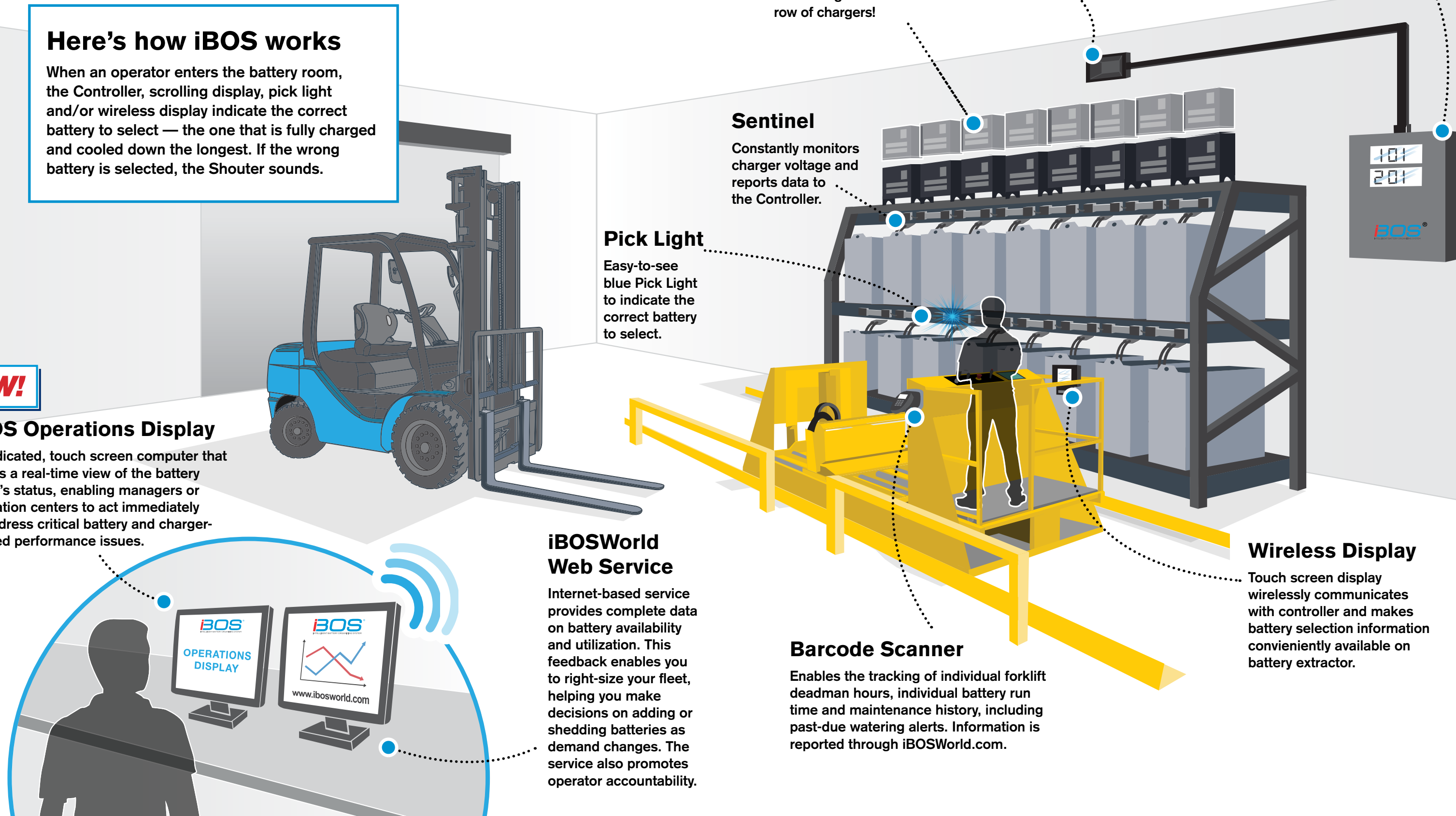
Easy-to-see blue Pick Light to indicate the correct battery to select.

Wireless Display

Touch screen display wirelessly communicates with controller and makes battery selection information conveniently available on battery extractor.

Barcode Scanner

Enables the tracking of individual forklift deadman hours, individual battery run time and maintenance history, including past-due watering alerts. Information is reported through iBOSWorld.com.

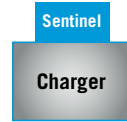


No matter the size of your warehouse, there's an **iBOS**® that's right for you



50 Chargers
1 Battery Pool

The entry level iBOS system manages up to 50 chargers in a single pool on a single-level rack. Easy-to-see pick lights provide clear direction on which charged battery to select.



Compatible with All Chargers
Blue "Pick Light" to Indicate Correct Battery
Universal Voltage Sentinel
Daisy Chain Wiring with Cable Included



50 Chargers
1 Battery Pool

Perfect for smaller battery rooms with up to 50 chargers in a single pool on a single-level rack. The system brings cost-effective battery rotation to the small battery room and can be easily upgraded to iBOS Plus or iBOS Pro.

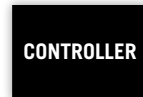
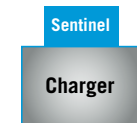


Compatible with All Chargers
Blue "Pick Light" to Indicate Correct Battery
Universal Voltage Sentinel
Daisy Chain Wiring with Cable Included
Built-in Audio Alarm



100 Chargers
9 Battery Pools

Ideal for mid-sized battery rooms, capable of managing up to 100 chargers in up to 9 battery pools. Offers many of the benefits of our top-line iBOS Pro system, including connection to the iBOSWorld Web Service via the Internet.



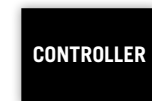
Includes all iBOS Lite features, plus...

Built-in Touch Screen
Built-in Shouter
7 Days On-Site Data
Optional Web-Based Reporting
Optional 3G Modem for Web Connectivity
Optional Barcode Scanner
Optional Operations Display
Optional Charger-Splitter™



350 Chargers
9 Battery Pools

The most powerful and configurable iBOS system for larger battery rooms, capable of managing up to 350 chargers in up to 9 battery pools on multiple-level battery racks. iBOS Pro allows Internet connection to iBOSWorld Web Service.



Includes all iBOS Plus features, plus...

Built-In UPS
Optional Wireless Display
Optional Remote Shouter
Optional Scrolling Displays
Optional Barcode Scanner
Optional Operations Display
Optional Charger-Splitter™



Oficinas Comerciales:

Gral. Pacheco 966 (B1611BUN) Don Torcuato,
Buenos Aires, Argentina. Tel.: +54 11 4736-8200 (rot.)
info@kernium.com.ar / www.kernium.com.ar