



IT Manager's Guide to

Effective Battery Management

for Warehouse Technology

GTS GLOBAL
TECHNOLOGY
SYSTEMS
Powering the Mobile Universe™

Reliable Batteries are Key to Smooth Warehouse Operations

Your warehouse depends on a variety of mobile technologies to run smoothly.

As you know, these integrated devices are critical in enabling your associates' day-to-day tasks. If your team is spending time swapping batteries in-and-out of their devices over the course of a single shift—you're taking major hits to productivity and frustrating your team in the process.

It follows, then, that keeping your handheld computers, barcode scanners, label printers, and other warehouse devices reliably powered is of chief importance. Still, many companies don't have a strategy in place for managing battery state of health. A battery with a suboptimal state of health will not last through a shift even when the battery shows a full state of charge. That's because over time, a battery's ability to hold a charge degrades.



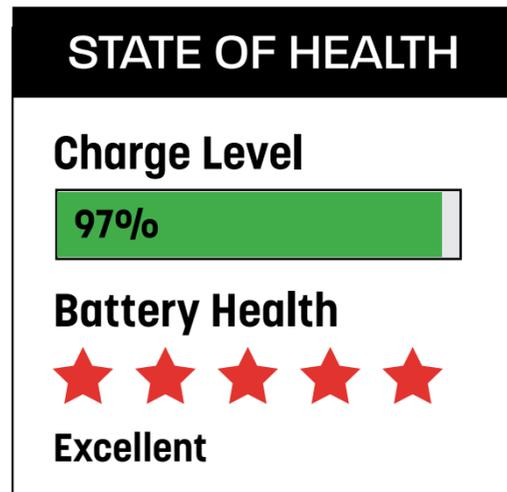
60%

of mobile workers say their batteries “frequently” or “occasionally” do not last the entire shift, according to VDC Research Group.

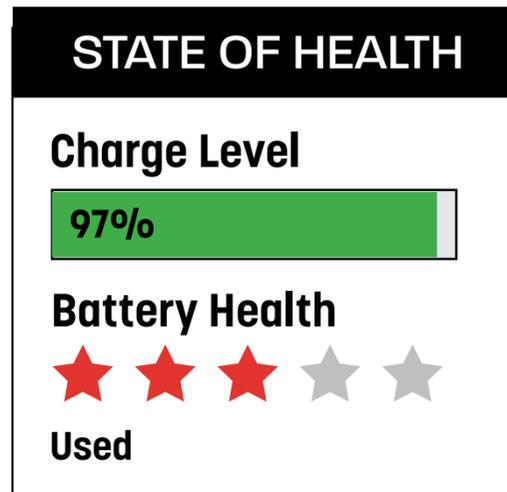
What is Battery State of Health (SoH)?

State of health (SoH) is a figure related to the condition of a battery compared to its ideal conditions. The units of SoH are percent points (100% = the battery's conditions match the battery's specifications).

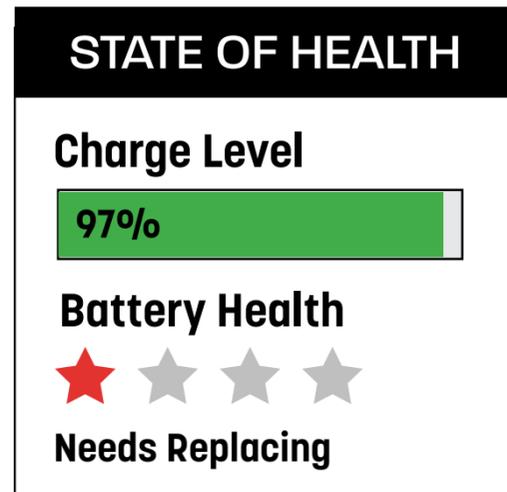
Typically, a battery's SoH will be 100% at the time of manufacture and will decrease over time and use. After 1-2 years of consistent use, most mobile device batteries will need to be replaced because their state of health no longer supports a charge capacity large enough to last a full shift.



Expected to last
9-10 hours*



Expected to last
6-7 hours*



Expected to last
2-3 hours*

* The numbers used in the above diagram are for example purposes only.

The Price of Poor Power Solutions

The cost of using batteries with suboptimal health in your warehouse devices can mean lost revenue and productivity due to too many interruptions, too much downtime, and too much guesswork. Studies have shown that gaining back mere seconds in productivity time can have a big impact on your organization's bottom line.

The Potential Cost of Battery Failure



900

Mobile Devices in Operation

=

108

Mid-Shift Device Failures

(Based on a 12% battery failure rate)

LOST PRODUCTIVITY



20 Minutes

Lost due to battery-swap

=

36 hours

Total productivity lost per day

(20 mins. * 108 failures)

COST



\$540/day

Total unproductive time

(36 hours x \$15/hour)

=

\$194k/year

Total unproductive time

(Based on 360 days)

The above numbers are based on data from VDC Research's 2018 report "Analytics in the Mobile Era."



A 3-Step Process for Effective Battery Management

Unfortunately, battery state of health can't be determined using the eye test. Instead, IT and warehouse managers need a simple system that helps them and their teams delineate between new, used, and need-to-be-replaced batteries. Having this clarity will make you more efficient in purchase management and more productive on the warehouse floor.



1

Test and Replace

You'll receive a device/app that measures the batteries' "state of health" so that you can get rid of all your old, beat-up batteries. This is an inexpensive way for any staff member to quickly identify if a battery is good or bad. For qualified candidates, testers are available at no cost if testing under GTS Batteries replacement service.

2

Inventory Management Tags (IMTs)

Color-coded tags are a simple way to manage your battery fleet. GTS places a small colored tag, or label, on each battery when it's shipped. The color indicates the year in which the battery is put into service, and it also has a number on it that tells you the quarter of the year when the battery is put into service. This way, you'll know which batteries to remove and recycle when ordering replacement batteries.

3

Recycling

Having an easy and environmentally responsible method for disposing of mobile device batteries is important. Having your manufacturer provide recycling boxes directly to your facilities while providing a discount on replacement batteries is just smart. The GTS program pays its customers 50¢ per battery recycled towards a future battery purchase.





Achieve Mobile Power Success with Global Technology Systems' Managed Services

GTS has been an internationally recognized innovator and leader for designing and manufacturing batteries and chargers for mobile devices for more than 20 years. GTS aims to provide more efficient power to the portable devices that modern organizations depend on every day by creating solutions that make mobile power management easier than ever before.

GTS offers:

- Batteries with longer run times, longer life, and longer warranties than the OEM's.
- Superior replacement batteries for most devices in the mobile enterprise including scanners, printers, and voice and data communications.
- Creative charging solutions that can save 50% or more of the space needed for charging.
- Training and technical support
- Extended payment terms and financing

In choosing GTS for your mobile battery needs, you'll receive:

- Support for all GTS solutions from your partner representative with access to GTS engineering mindshare.
- Free samples to validate quality.
- Up to 100 free batteries (for qualifying customers) by initiating a Test & Replace program.

For more information on how GTS can support your operations with their mobile device

Services Action Plan, visit <https://www.gtspower.com/managed-services>