



Hidden Costs Of Choosing The Wrong Charger

To be competitive in today's markets, you need a cleaner, "greener," but efficient product. Forklifts are no different. Leading manufacturers are doing more R & D to meet customers' needs for more powerful electric lift trucks that will meet tough application requirements, reduce the carbon footprint and improve productivity. Electric forklifts clearly are more environmentally friendly than their internal combustion counterparts, are becoming equally powerful and can cost thousands less to operate. In fact, compared to a forklift with an internal combustion engine, electric forklifts can be as much as 75% cheaper to own & operate over their useful life.

Selecting the wrong charger and battery combination can quickly shorten battery life, leading to the need to replace batteries more frequently. Multiply a 50% reduction in battery life by the number of batteries in your facility and you will quickly realize the hidden costs of choosing the wrong charger for your batteries and the application in which they will operate.

What are the options for batteries and chargers? It would be easy to simply select the lowest priced available battery or charger, but this can cost your company thousands more dollars in the long-run.

There are many things that can shorten battery life, but by far the two major culprits are:

1. Opportunity charging, or "short cycling" a battery using a standard charger. This short cycling creates heat, which is the main cause of premature battery failure.
2. Lack of water. This lack of water generates more heat, which shortens battery life dramatically.

Combine the lack of watering with opportunity charging, and you have a certain recipe for a dramatic decrease in your battery's productivity and useful life. Batteries traditionally have a standard number of charge/cool/discharge cycles (1500-1800 per battery), and opportunity charging and insufficient watering can reduce cycles by as much as 50%. But if you invest in the right charger up front, you can all but eliminate these problems. The right charger can increase battery life, reduce the number of batteries you need, and improve your overall productivity. Products like Hawker's Lifeplus® and Lifespeed® chargers read current battery discharge and use patented pulsing charge technology to charge the battery quickly and efficiently, without generating excessive heat.

But how do you select the right battery, charger, or combination of each, for your specific applications so that you can maximize results? Our first recommendation is to call a dealership that has a proven history of service and highly trained personnel to diagnose and repair your forklifts, batteries, and chargers all in one place. These dealerships stay on the cutting edge with constant updates to both their products and personnel training, and they are equipped to help you through the maze of choices.

Feature Article

From the authority on complete material handling



At *Cardinal Carryor*, Some things we consider when helping customers select electric material handling equipment include:

- Where are chargers and battery changing stations located throughout your facility?
- What combination of voltages (24, 36, 48, 80V) and corresponding chargers do you operate?
- How many shifts do you operate?
- How many hours is each forklift in operation per shift?
- How often do you add water?
- How long do batteries have to cool down after charging?

By determining how your equipment will be used and how often, we can help you decide if a single standard battery and basic charger will suffice, or would three batteries per forklift help you run three full shifts at maximum capacity. The combination of battery and charger will never be the same at each company. Making the wrong choice for you can lead to some hidden expenses that start almost immediately and compound each month. We have seen this happen too many times, but we can help you make the right choice of battery and charger for your application, reducing your overall costs and increasing your operational efficiency.

The bottom line is that there are many factors that have an impact on your overall efficiency when using battery operated lift trucks, and having a partner like *Cardinal Carryor* can make the difference that helps you optimize battery run-time, life-time, and productivity, all of which contribute directly to your bottom line.

As a representative for Crown Equipment, electric forklifts, batteries and chargers are our focus. We not only sell electric forklifts, batteries and chargers, but we back it up with full-service battery capabilities in our shop and on the road. Most dealers rely on outside battery shops to maintain their batteries and chargers. We have found over the years that customers want to make one call and have one company responsible for all of their electric equipment needs. Cardinal Carryor can meet those needs.

So call us in Louisville at 502.363.6441 or in Bowling Green at 270.793.0808. Consultation is free, and we just may be able to save you thousands on your fleet fuel cell consumption.

Cardinal Carryor has been serving materials handling customers for over sixty years. From [Crown](#) and [Clark](#) forklifts to fully integrated warehouse planning by [Cardinal Integrated Systems](#), [Cardinal Carryor](#) is truly the authority for complete materials handling in the Ohio Valley.

For more information contact us at 502-363-6644, or visit us on the web: www.cardinalcarryor.com