

## **How Lithium Battery Forklifts Save You Money & Increase Productivity over LPG Battery Forklifts**

High productivity and efficiency are key in the material handling business. Whether you have one forklift or many **forklifts in your fleet**, your forks must be able to provide consistent outcomes if you want to keep your costs down and productivity up. Our IFE lithium battery forklifts are the ideal forklifts to accomplish the best ROI.

Integrating innovative energy solutions, notably lithium-ion batteries (LiBs), is one method to set you apart from your competitors. Lithium-ion batteries, with their supercharging speed and reduced maintenance requirements, can propel your business to the next level. **IFE Forklifts** has a complete range of lithium battery forklifts solutions.

### **Benefits of Lithium Battery for Forklifts**

#### **Cost-Effective**

LPG on average costs \$4.60 per hour to run a forklift. Lithium batteries cost 60cents per hour (less if you have solar fitted to the building). Based on a 38 week, the fuel cost saving is around \$39K. Also, based on the hours of the 2.5 Ton gas machine currently onsite being 1075 hours, the difference in gas cost would be \$4,945.00 to \$645.00 using the same capacity Lithium machine.

#### **Affordable Forklift Service**

The cost of servicing an LPG is higher (around 38% more) than either lead acid or Lithium powered forklifts.

#### **Money-Saving Forklift Repairs**

Breakdowns are more frequent with LPG over lead acid or Lithium powered forklifts. LPG is not as combustible as petrol; therefore batteries, spark plugs, starter motors, and ring gear are often replacement parts on LPG machines.

## **Less Noise Pollution**

LPG forklifts produce emissions and are noisy whereas battery-powered forklifts are quiet without emissions.

## **Long Hours of Usage**

Lithium batteries are more efficient than lead-acid i.e., Lead-acid needs 8 hours off the charger for 5 hours usage. Lithium batteries need 2 hours of charge for 9-10 hours of usage.

## **Faster Charging**

Opportunity charging is a no-no for lead-acid batteries (i.e., shorter than the complete cycle). Lithium machines can be opportunity charged for any time under the 2-hour complete cycle.

## **Capacity**

The volume of a battery is a measurement of how much power it can hold (and finally discharge). While volume numbers differ among battery technologies and suppliers, lithium-ion batteries have been shown to offer a better power density than lead-acid. This means that a lithium-ion battery can carry more power in the same physical environment.

Lithium-ion technology makes it easy to store greater energy and recharge it faster, allowing you to run more devices for longer durations.

## **Doesn't Need Water**

Lithium doesn't use acid and water. This is a safer option for the operator and eliminates the issues with operators forgetting to fill the battery with water after each charge cycle.

## **Longer Life Expectancy**

Lead-acid batteries have an expected life span of 1500 cycles (one cycle = one charge and one discharge). Lithium batteries at 4000 cycles will still have 80% capacity.

## **Light**

Lithium batteries have more power and are often half the size of lead-acid batteries, eliminating worries about battery weight. Lithium delivers similar or slightly higher energy than other battery types while being half the form factor. This means you'll have more options and it'll be easier to install!

## **Fast and Reliable**

Lithium has a high rate of charging and discharging process, allowing it to be used in a wide range of applications. Rapid charging cuts down on interruption, and lithium's high incidence of discharging is ideal for a power surge.

Lead-acid batteries require more time to charge and function inefficiently during heavy discharge periods, making them less adaptable than lithium-ion batteries.

The efficiency of lithium is unrivaled, especially in high-stress conditions. Temperature fluctuations and energy depletion do not affect lithium's power supply, unlike lead-acid batteries. Lithium is the obvious option for businesses that will deplete the batteries or operate in harsh conditions.

## **When is it better to use a lead-acid battery over a lithium-ion battery?**

Lead-acid and lithium-ion batteries are both viable solutions for a battery charging system. However, considering the many benefits of lithium-ion technology, such as long lifespan, increased performance, and higher strength, installing a lithium-ion battery is usually the best choice. Lithium-ion batteries are generally highly valued than lead-acid batteries, regardless of their actual initial costs.