

# **POWERHIVE**

AUTOMATED FORKLIFT BATTERY MANAGEMENT

## **POWERHIVE® ADDRESSES KEY FACILITY CHALLENGES:**



### ***LABOR SHORTAGES, RETENTION & JOB SATISFACTION***

Forklift battery maintenance is hard, and can require extra labor. It places stress on forklift drivers, maintenance and distribution center leaders alike.



### ***FACILITY PRODUCTION & CONTROLLING COSTS***

Facility leadership's main job is to make and move product with finite resources. Downtime slows operations and leads to more unplanned maintenance costs.



### ***SAFETY & SUSTAINABILITY***

Managing forklifts and forklift batteries is dangerous. They're also a top facility spend next to rent and labor with significant sustainability impacts.



**SEE HOW**

** **POWERHIVE****

**MAKES YOUR FACILITY A  
MORE ENJOYABLE PLACE TO WORK.**



OPERATOR PARKS FORKLIFT



OPERATOR PRESSES RELOAD BUTTON



ROBOTIC ARM SELECTS BATTERY FROM CABINET



ENHANCED SAFETY

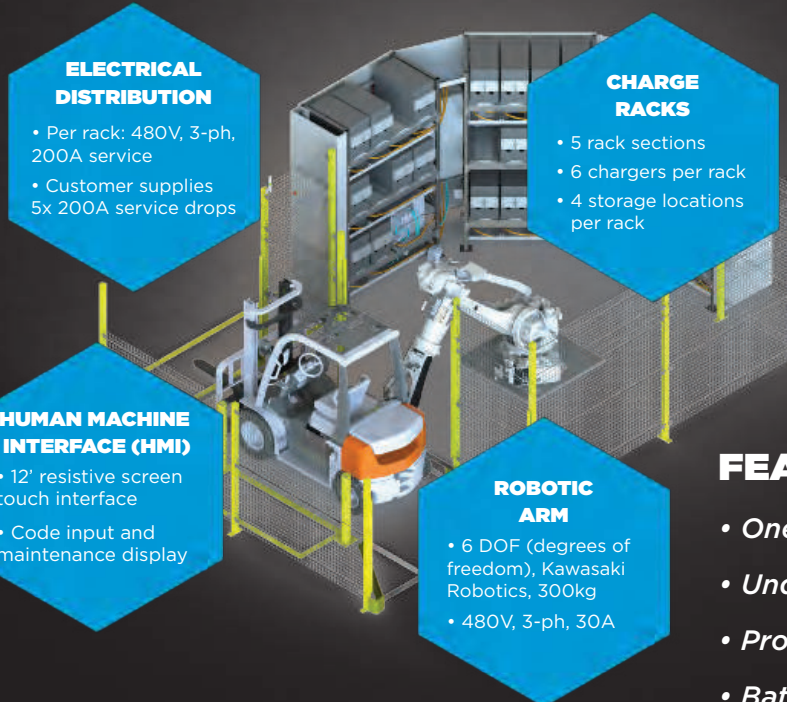
Powerhive means zero human handling of batteries. Red laser line projectors surround the forklift to ensure safety.



SENSORS ENABLE ARM TO POSITION ITSELF IN FRONT OF BATTERY CRADLE



ARM INSERTS BATTERY INTO FORKLIFT



ELECTRICAL DISTRIBUTION

- Per rack: 480V, 3-ph, 200A service
- Customer supplies 5x 200A service drops

CHARGE RACKS

- 5 rack sections
- 6 chargers per rack
- 4 storage locations per rack

HUMAN MACHINE INTERFACE (HMI)

- 12' resistive screen touch interface
- Code input and maintenance display

ROBOTIC ARM

- 6 DOF (degrees of freedom), Kawasaki Robotics, 300kg
- 480V, 3-ph, 30A

FEATURES:

- One lithium battery size
- Under 3-minute battery reload
- Proven robotic arm technology
- Battery cradle & counterweight
- Automated FIFO (first-in-first out) system
- Lower peak power & energy consumption
- Eliminates watering & washing
- Operators no longer need to plug up
- Scalable for all equipment needs

