



**MAGNETEK**  
E L E V A T O R

# NEW BEGINNINGS

**REVOLUTIONARY ENERGY  
SAVING SOLUTIONS**  
FOR YOUR ELEVATOR SYSTEMS



# WHY SHOULD YOU MODERNIZE?

Maintaining the highest levels of elevator functionality, safety, and comfort is vital to tenant satisfaction and property value. By giving new life to your elevators through modernization, you can reduce operating expenses and optimize ride performance and traffic flow. Utilizing regenerated energy from upgraded elevators, building owners can potentially qualify for LEED, BREEAM®, and other energy efficiency building credits.

Choosing Magnetek's Elevator Drives for your modernization projects will provide you with superior performance, reliability, and energy savings, **all of which reduces costs for you.**



IMPROVED PERFORMANCE  
ENERGY SAVINGS  
LONGER USEFUL LIFE  
LOWER INSTALLATION COSTS

ENERGY SAVINGS



## 99 HIGH STREET

Boston, Massachusetts

With the installation of eight Quattro® DC Elevator Drives, 99 High Street in Boston's Financial District received a \$38,000 rebate from the local utility and saves over \$23,000 in energy costs a year. Magnetek's revolutionary Quattro DC Elevator Drive can be the green solution to saving both energy and costs.

[WWW.ELEVATORDRIVES.COM](http://WWW.ELEVATORDRIVES.COM)

# WHEN YOU MODERNIZE, THINK MAGNETEK

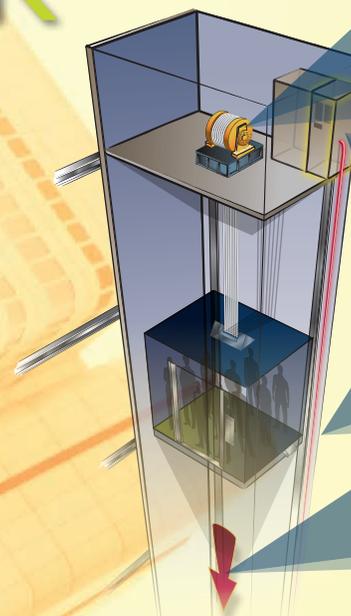
Magnetek is a valued partner for elevator companies worldwide, providing AC and DC elevator motor control solutions that reduce your environmental footprint and associated costs.

Existing DC-powered elevator systems, which likely have already been functioning between 30 and 70 years, can provide decades of additional service if properly maintained. Rather than costly, resource intensive AC motor replacements, retaining DC motors and machines combined with Magnetek's digital Quattro® DC or DSD® Elevator Drives is an investment for the future.

When you utilize Magnetek's regenerative drives, you allow gravity and our high-efficiency drives to help recover and reuse electrical power that would normally be lost during elevator operation.

Elevators consume energy to move a loaded elevator car but then generate energy in the opposite direction as the car stops. Rather than simply losing this energy as heat through resistors, technology incorporated into Magnetek drives captures this energy to return it to the building power grid for use in other key facility processes such as lighting, heating, ventilation, and air conditioning (HVAC), and additional electrical systems.

As energy regeneration occurs, your building's total power consumption slows and savings per elevator cycle increases. In this way, Magnetek regenerative drives provide the potential for energy and cost savings every time an elevator runs.



Under load, an elevator motor consumes electricity as the elevator car is lifted — but actually generates energy as the car descends.

Magnetek's Quattro® elevator motion control system captures the energy generated by the elevator drive and motor and returns it to the utility power grid.

Quattro also minimizes power line "noise," which can interfere with building electronics, such as data processing, lighting, and security systems.

With Magnetek's Quattro, maximum electric power is regenerated to the utility grid, saving building owners thousands of dollars in electricity bills each year.

LIFE EXPECTANCY

**100 YEARS** vs **15-20 YEARS**  
EXISTING DC MOTOR | NEW AC MOTOR

COST SAVINGS

## DC MACHINE REPLACEMENT\*

**\$20,000-\$85,000**

Dependent upon ability to remove or tear down existing machine, size of compatible AC/PM replacement, hoisting requirements, and other building work

## DC MACHINE REFURBISHMENT

**\$8,000-\$10,000**

Dependent upon required cleaning and potential refurbishment of commutator, brushes, and windings

Reworking an existing system and modernizing with Magnetek will significantly decrease your upfront costs and reduce ongoing expenses for the duration of an elevator's life, all with much less disruption to your building. A well-maintained DC motor can last for more than 100 years, while AC Permanent Magnet motors will effectively function for the industry standard of 15 to 20 years.



\* Disruption of service to building not included in this cost estimate and is another consideration.

[WWW.ELEVATORDRIVES.COM](http://WWW.ELEVATORDRIVES.COM)

# REGENERATION TECHNOLOGY

In addition to employing sustainable regenerative energy, when you modernize existing DC elevator systems with Magnetek drives instead of replacing an entire system, you eliminate expensive equipment removal and costs associated with producing, shipping, and installing a new system, and you improve ride performance and control. Installation of Magnetek regenerative drives may also qualify for LEED or BREEAM® credits and ENERGY STAR points.

## **Combining a DC motor with one of our Quattro® DC Elevator Drives provides**

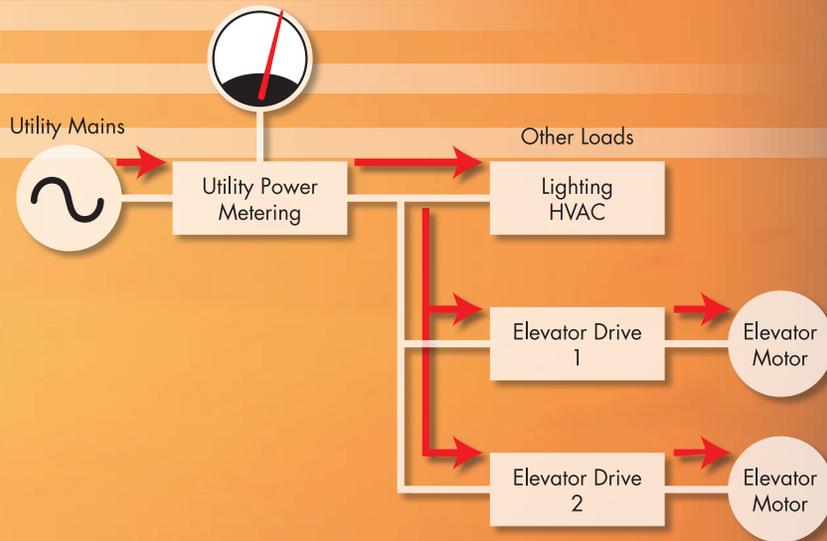
- Within 3% of the same power savings as an AC drive with regeneration capabilities
- Reduced peak and average power demand and clean harmonics
- Near unity power factor so there is no need to replace costly power wiring or breakers

## **Complement your PM AC gearless system with Magnetek Quattro® AC or RegenAC™ technology**

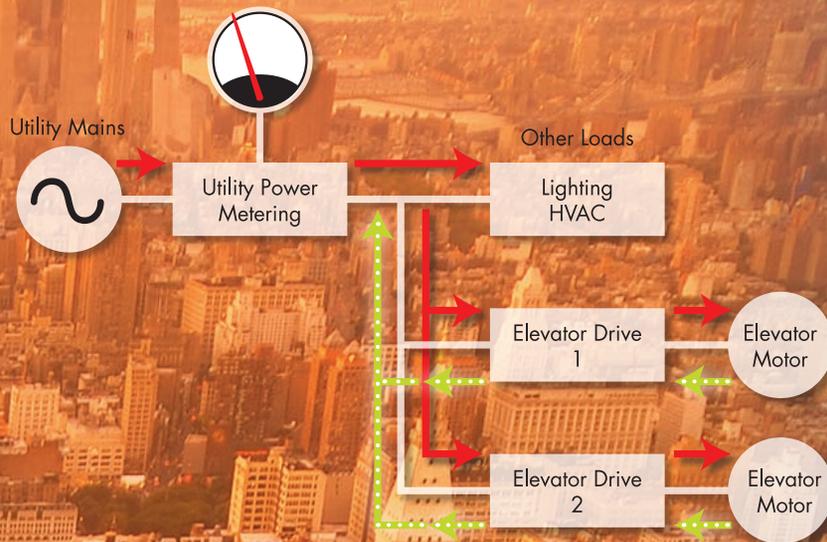
Regenerative energy can also be harnessed in an AC gearless traction modernization. If you choose to modernize a permanent magnet AC gearless elevator, Magnetek Quattro AC Elevator Drives can be utilized to achieve the same energy savings, low harmonics, and unity power factor benefits.

Magnetek's RegenAC technology can be added to most existing non-regenerative AC machines to maximize energy savings.

## POWER CONSUMPTION UNDER **NORMAL DRIVE OPERATION**



## POWER CONSUMPTION UNDER **REGENERATIVE OPERATION\***



**\*Reduction in Annual Kilowatt Hour Consumption**

ENERGY SAVINGS

### EMILY MORGAN HOTEL San Antonio, Texas

Magnetek installed the first regenerative Quattro® DC Elevator Drives in North America into the historic Emily Morgan Hotel. Quattro DC Drives improved the energy efficiency and performance of the hotel's 1920s era elevators, delivering \$16,000 in commercial energy rebates. Actual before-and-after energy consumption measurements taken in a side-by-side 17-day operating period during the modernization demonstrated a 45% reduction in watt-hours, a 78% reduction in volt-amp hours, and a 31% reduction in peak-demand charges with the Magnetek Quattro drives in place.

[WWW.ELEVATORDRIVES.COM](http://WWW.ELEVATORDRIVES.COM)





# SEE THE SAVINGS FOR YOUR BUILDING MODERNIZATION

Magnetek's online Energy Savings Calculator estimates the electrical consumption of existing elevator equipment and immediately compares results to that of other motor and motor drive combinations. Based on the operating characteristics of the elevators in your building, a quantitative comparison can then be drawn to determine how energy savings apply to your project.

Many utility companies offer energy saving rebate programs for reduced peak and average power demand and for clean harmonics. Contact Magnetek's Elevator Drive experts today for a personalized consultation to evaluate the savings for your elevator modernization projects.

CALCULATE SAVINGS

# SIGN UP FOR THE ENERGY SAVINGS CALCULATOR

and demonstrate potential energy savings with Magnetek's elevator-specific solutions.

[www.elevatordrives.com/modernize](http://www.elevatordrives.com/modernize)

## QUATTRO DC SAVES ENERGY

**25% OVER** DC-SCR DRIVES

**45% OVER** MOTOR GENERATOR (MG) SETS

## QUATTRO AC SAVES ENERGY

**42% OVER** NON-REGENERATIVE AC DRIVES

(GEARLESS APPLICATION)

## MAGNETEK RegenAC™ OPTION SAVES ENERGY

**42% OVER** NON-REGENERATIVE AC DRIVES

(GEARLESS APPLICATION)

Magnetek has developed a tool for our Elevator consultants to allow them to estimate the use and need of Magnetek products within their building environment. In order to gain access this tool, you must have an 'Energy Savings Calculator' account. If you would like to sign up for one, fill out the form below. If you already have an account:

[Login](#)

**Registration for an Energy Savings Calculator Account**

First Name:

Last Name:

Company:

Address:

City:

State:

Zip/Postal Code:

Country:

Email Address:

Phone:

You will receive an e-mail granting access within 1-2 business days. Thank you for your interest in Magnetek.

\*\* Required Fields

Contact Elevator Support at [energycalculator@magnetek.com](mailto:energycalculator@magnetek.com) or 800.236.1705, option 2 with any problems or questions.



# POWER YOUR ELEVATORS WITH MAGNETEK'S FULL LINE OF PRODUCTS

High quality products with attention-to-detail service are cornerstones of Magnetek's mission. Our goal is to help you save energy and money while improving reliability with our energy regenerative controls for new installations and elevator modernizations. Magnetek Elevator Drives will help transform your building into a facility that measures up to modern edifices in functionality and comfort.

Our full line of high-efficiency DC and AC Elevator Drives are proven solutions for enabling the most successful building modernizations. We specialize in designing and manufacturing highly integrated drive systems that will maintain superior levels of functionality, safety, and comfort.

# RELIABILITY

Be sure to ask for Magnetek's line of AC Elevator Drive products if you are looking to complete an AC modernization or upgrade existing installations. Our state-of-the-art Quattro® AC, HPV® 900 Series 2, M1000, and RegenAC™ products all contribute to greener, more efficient elevator operations.



# MAGNETEK'S EXPERTISE & EXPERT SERVICE

Magnetek's proven track record, technical expertise, and superior customer service make us the worldwide source for high-performance, built-to-last elevator drives. Recognized as the absolute leader in DC Elevator Drives and the premier AC Drives supplier for low- to high-rise elevators, we have earned the prestigious status of being "the" drive supplier to the elevator industry.

With over 35 years of innovation and more than 100,000 Magnetek Elevator Drives installed across six continents, we are uniquely qualified to provide energy saving modernization solutions. Customers trust our green regenerative drives to operate elevators in many of the most famous buildings around the world.

We are dedicated to designing, building, selling, and supporting high-quality Elevator Drives that efficiently deliver motion-control power along with unmatched ride smoothness, reduced installation time, and long-term reliability.

Magnetek will work with you to determine the best solution when you decide to modernize your DC or AC elevator systems. With the assistance of our Energy Savings Calculator, we can help you choose which products will most efficiently regenerate energy and generate savings for your building, providing elevator drive options for complete modernizations or component upgrades.





EXPERTISE

MORE THAN

**100,000** ELEVATOR DRIVES

INSTALLED ACROSS SIX CONTINENTS

MAGNETEK'S REGENERATIVE DRIVES POWER THE ELEVATORS  
IN THE UNITED NATIONS HEADQUARTERS, NEW YORK CITY

## APOLLO HOUSE

Croydon, United Kingdom

Due to ever increasing maintenance required to sustain system operation, Apollo House determined that modernizing their six elevators would be the most appropriate, energy efficient solution. Utilizing six Magnetek Quattro® DC Elevator Drives provided energy savings of approximately 25% when compared to the previous DC-SCR solution.

[WWW.ELEVATORDRIVES.COM](http://WWW.ELEVATORDRIVES.COM)

# MODERNIZE WITH MAGNETEK

To optimize ride performance, reduce expenses, improve reliability, and implement energy-saving solutions for your next modernization project, explore [www.elevatordrives.com/modernize](http://www.elevatordrives.com/modernize).





# ENHANCING THE SUCCESS OF YOUR MODERNIZATION

# MODERNIZE

## THE ECONOMIST BUILDING

London, United Kingdom

Existing DC Motor Generator controlled elevator systems in the Economist Building encountered frequent breakdowns, resulting in greater inefficiency and requiring higher levels of maintenance support. Three 85A Quattro® AC Elevator Drives configured in permanent magnet motor control operating mode were installed to improve quality and operations. Fitting the Economist Building with Quattro AC drives resulted in energy savings of 66% compared to the previous solution, a power usage reduction of 43kWh/day, and projected cost savings of nearly \$2000 per year per elevator.

[WWW.ELEVATORDRIVES.COM](http://WWW.ELEVATORDRIVES.COM)



**MAGNETEK**  
E L E V A T O R

[WWW.ELEVATORDRIVES.COM](http://WWW.ELEVATORDRIVES.COM)

**MAGNETEK ELEVATOR (US)**  
[info@elevatordrives.com](mailto:info@elevatordrives.com)

N50 W13605 Overview Drive  
Menomonee Falls, WI 53051

Toll-Free Phone 800.236.1705  
Phone 262.252.6999  
Fax 262.790.4142

**MAGNETEK LTD. (UK)**  
[eurosales@magnetek.com](mailto:eurosales@magnetek.com)

Unit 3, Bedford Business Centre  
Mile Road  
Bedford MK42 9TW UK

Phone +44(0) 1234 349191  
Fax +44(0) 1234 268955

**MAGNETEK ASIA-PACIFIC**  
[asiasales@magnetek.com](mailto:asiasales@magnetek.com)

No. 2, Jurong East Street 21  
#04-31J, IMM Building  
Singapore 609601

Phone +65 6567 2166