

BATTERY reENERGISE

What is Battery reEnergising ?

Vast amounts of energy are consumed in the traditional recycling processes of lead acid batteries. Not only that, a by-product of recycling is air pollution. With that in mind, we should be in search of a better solution. Also the source of supply of lead is not unlimited and we can expect demand to double over the next 10 years.

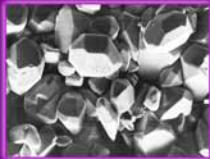
Energenics has developed a process for zero emission regeneration of lead acid batteries. Our innovative process which utilises patented technology will put 80% of what was destined for scrap back into useful reuse, reducing the amount of toxic waste being dumped into the environment. With global warming being a major threat in the coming years, Energenics is opening up more plants in different countries within the next 2 years.

Understanding Lead Acid Batteries



(microscopic view of a new plate)

A new battery starts out with clean lead plates in an electrolyte gel or solution. Chemical reactions between the plates and electrolyte produce electric voltage & current and batteries with clean lead plates will serve that purpose well.



(microscopic view of a sulphated plate)

Sulphate crystals form on a battery's plates whenever it discharges. Over prolonged usage, the sulphate residue builds up on the plates and inhibits the battery's ability to receive and deliver power. This can also result in the premature failure of electrical components.

The reEnergising Solution

Instead of discarding your scrap batteries, Energenics provides a solution to regenerate old batteries by using a patented battery electrolyte together with an extensive Battery reEnergising process.

During the process, the unique battery electrolyte acts to break down the residue on the plates and any associated sediment, thereby stabilising the used batteries, restoring power, and extending their life-span. reEnergised batteries are performance tested before release and the improved battery chemistry continues to work over the longer term to prevent subsequent sulphate build-up.

Environmental Advantages

reEnergising used batteries has many advantages including:

- Conserving resources used in battery fabrication
- Reducing lead acid waste and adverse impact to the environment
- Actioning commitment to environment improvement

Benefits of Battery reEnergise

Batteries are Fully Warranted

Improves Battery Storage

Reduces Charging Times

Reduces Environmental Impact

Reduces Battery Maintenance
& Operational Cost

Optimised Electro-Chemical
Function of Battery

Helps Prevent Premature
Components Damage

Restores Battery Performance
to as Good as New

Reduction in Gassing Volume

BATTERY reENERGISING

Specialized Chargers



Computerized Dischargers



Patented Battery Electrolyte



Breakthrough Process Methodology



reEnergised Batteries

Test Development Programme in UK Hybrid Buses

In UK currently, Energenics is developing and testing the technology with Stagecoach Group PLC on their hybrid bus technology. Whilst the test program is early stage, it is hoped that the process can be optimised, through the work with Stagecoach, to enable hybrid buses to get better performance and increased life from existing battery technology which will be a major benefit to reducing greenhouse gas emissions.

Other Applications for Battery reEnergise

Automobiles

Construction Heavy Machinery

Port Cranes

Forklifts & Lifting Cranes

Golf Carts

Transportation Trucks

Contact us

Energenics Pte Ltd

89B Science Park Drive
#03-06 The Rutherford
Singapore Science Park I
Singapore 118261

Phone: +65 6341 9650
Fax : +65 6341 9610
Email : info@energenics.org

UK Contact

Stuart Anderson

Phone : 01865 880557
Mobile : 07879 641855
stuart.anderson@energenics.org

www.energenics.org