

Industrial Batteries / Motive Power

Battery XTraction Systems



*»The best in battery power
management from the market leader»*

Battery XTraction Systems

Save on space, save on labour, save on time, safe on the job

GNB Industrial Power has the answer to all your battery changing needs – from fully automated battery change systems incorporating the state-of-the-art 2100.net Battery Management System to the simpler mechanical apparatus. We can offer the widest range of bespoke equipment, tailored to your exact requirements and we offer the greatest breadth of experience.

Our battery XTraction solutions offer greater operator safety, space and labour cost savings and a significant increase in battery changing speed.

All our battery XTraction cars are made by the only UK based, ISO 9001 compliant manufacturer using quality engineering. This ensures spare parts and local support are readily available.



More range, capability and experience in battery changing



Whatever the size of your battery electric fleet we can help you find the best solution for your power management needs by offering total turnkey project management to give you the best fit package. The correct system is an investment in maximising productivity by fully utilising labour resource and enhancing safety as well as saving on space costs and helping to extend the life of your battery fleet.

We will help ensure you conform to the necessary health and safety regulations and we can also offer national maintenance contract options to ensure you get the most out of your electric fleet.

Fully powered or assisted manual changing

The type of system you choose depends on the number and type of vehicles you are operating. It will also depend on the available floor space and the degree of mechanical assistance you require. Battery XTraction systems will help minimise the potential hazards of changing large, heavy motive power batteries as well as maximising the uptime of your fleet and reducing the space taken up by the changing process.

Battery XTraction Systems

Save on running costs and CO₂

Battery XTraction Running Costs

- > The most economical battery XTraction cars on the market
- > Save 50% on running costs
- > Operational savings that cannot be matched
- > Savings of around £15k are possible over the typical life of the car
- > Significant savings on floor space costs



Transfer Car	Av. Time to Change	Pump Motor Rating	Time in Use	Using Av. Cost per KWHr (£0.09)Cost per change	Cost per change per Hour	Cost per change per Day	Cost per change per Year
XTraction - Double Height	5 Mins	5.5Kw	2.5 Mins	0.02	£0.24	£5.57	£2,102.10
A.Nother - Double Height	5 Mins	5.5Kw	5 Mins	0.04	£0.48	£10.14	£4,204.80
CO2 Saving 11,488Kg per year							

Environmentally friendly

- > Our XTraction cars are the greenest and most efficient on the market and will help you minimise the environmental impact on your business
- > Save 50% on carbon emissions using industry approved conversion factors
- > Battery XTraction Solutions that don't cost the earth



Battery XTraction Systems

Single Tier XTraction Car

Single level storage

The single tier XTraction car is ideal where more than 25 vehicles are working 2 or 3 shifts. Typical applications would be distribution centres and medium sized warehouses. Changing can be completed in 2 minutes depending on the operator. This car works with single tier modules.

Main features and benefits

- > Twin roller beds
- > Capable of handling motive power batteries up to 2500kg
- > Operator cab has ergonomic push button controls for ease of operation
- > Laser alignment to improve the accuracy of the pick
- > Fast and efficient process that removes the need for operator input
- > Rollerbeds can be powered as an option



Manual XTraction Car

Simple effective mechanical car for independent use

This car can be designed for compatibility with any of the other XTraction systems, although only at ground level on multi tier systems. It can be used as a back up pending service in the rare event of a breakdown.

Main features and benefits

- > Useful change system for lighter batteries up to 1500kg
- > Forward/reverse motion by pushing
- > Vertical movement by hand operated hydraulic pump
- > Lateral movement by hand operated winch
- > Powered option available



Battery XTraction Systems

Multi Tier XTraction Car

The ultimate space saver

The multi tier transfer car is ideal where up to 50 vehicles are working two or three shifts such as distribution centres and large warehouses. Changing can be completed in under 4 minutes, so productivity is improved. This XTraction car works on a dedicated aisle which is a no go area for pedestrians. The system is suitable for a large mixed fleet and establishes an efficient charging regime.

Main features and benefits

- > Floor space requirements are reduced
- > Financial savings can be made on 2 or 3 tier and above
- > Eliminates damage and improves safety
- > Laser alignment to improve accuracy of pick
- > Twin roller beds which can be powered to speed up operation
- > Able to handle batteries up to 2500kg
- > Powerful electro-magnet arm for ease of moving batteries
- > Simultaneous lift available as an option
- > This XTraction accesses batteries from both sides of the aisle on all levels for ease of operation
- > Operator must have both hands on the selected controls in order for the car to function – an important safety feature
- > Gives increased speed and rotation when used with 2100.net



Battery XTraction Systems

PPT XTraction Attachment

Designed for smaller applications

This option is permanently bolted to the truck chassis and helps to comply with manual handling regulations. The powered pallet truck attachment is capable of handling batteries up to 1200kg. Ideal for operations where up to 5 vehicles are working one or two shifts and typical applications would be distribution centres and small and medium sized warehouses.

Main features and benefits

- > Tiller guided with powered forward/reverse handling and vertical lift facilities
- > Unique booster unit to increase power of magnet by 200%
- > Adjustable reach on magnet for flexible handling
- > Larger capacity is available as an option to handle up to 2000kg



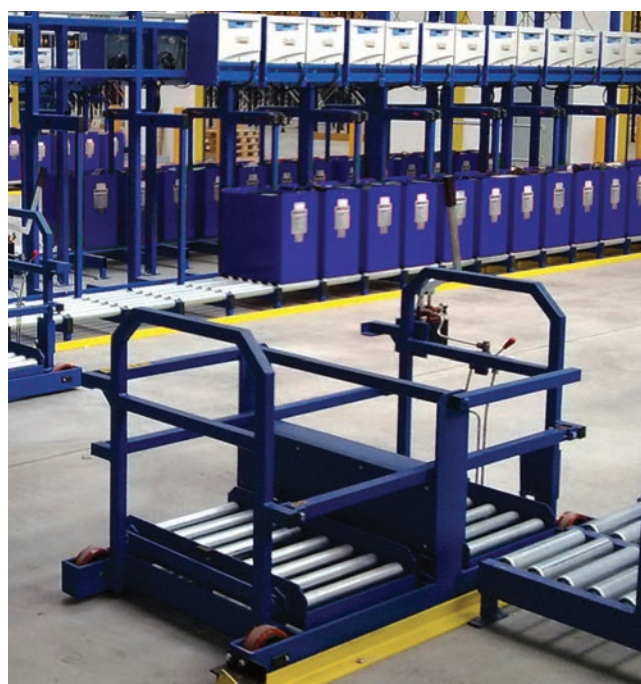
Bridge Trolley

Manual battery changer

The Bridge Trolley is designed for use with low level order pickers and pallet trucks

Main features and benefits

- > Rail guided for ease of operation
- > Capable of handling 2 batteries up to a total weight of 800kg, when used in compliance with manual handling regulations



Battery XTraction Systems

Battery Charger Modules

Modular design to give you complete flexibility

This modular design with a wide choice of handling equipment permits flexibility and extensibility of battery XTraction systems. Once modules are bolted to the floor, a guide rail is positioned on one side for the battery XTraction car.

Main features and benefits

- > Robust construction with modules firmly bolted to the floor
- > Modules can be matched to any colour specification
- > Full 200kg roller support beneath width and length of battery
- > Insulated shelving
- > Integral battery and charger unit – single or two tier shelving
- > Modules can be single or twin rollerbeds with a fully adjustable back stop
- > Slotted rollers are standard for ease of maintenance, cleaning and ease of repair
- > Optional low level switching for top tier chargers
- > Designated location of charger and plug - support arms act as cable management



Battery XTraction Systems

Electrical options

Full electrical installation

A full electrical installation can be provided including the provision and fitting of a modular busbar system.

Main features and benefits

- > Fitting is by NIC approved electricians
- > Power calculation data sheets provided
- > Power construction and recharge costs analysis
- > Optional extras include:
 - > Fitting of DB plugs
 - > Low level switching for top tier chargers
 - > 110 volt supplies for portable equipment



Ventilation Systems

Each ventilation system is unique to the individual battery changing area and is a bespoke design.

Main features and benefits

- > Individually designed
- > Unique to charger rooms
- > Design based on in-house hydrogen evolution and ventilation calculations according to BS EN 50272-3-2002
- > Can be integrated into XTraction system to extract gassing at source
- > Hydrogen deflective shelf fitted as standard
- > Minimises internal damage to chargers by elimination of acid mist



Battery XTraction Systems

Watering Options

Aqua range of watering technology options

Header tanks can be installed to provide continuous water supply and the Aqua range of watering technology options will greatly accelerate watering procedures, improve their accuracy, avoid acid and water spillage as well as saving on costs. All watering options are installed by a fully qualified plumber.

Main features and benefits

- > Options include Aquajet – 120 times faster than average watering systems – reduces watering to only 3 minutes a year
- > Improves accuracy
- > Avoids acid and water spillage
- > Saves on costs
- > Aquajet can be integrated into the XTraction cars for ease of operation – operator can remain in the car
- > Also available are Aquapure de-ionisers to purify up to 2700 litres of water per cartridge at a lower cost than distilled water



Battery XTraction Systems

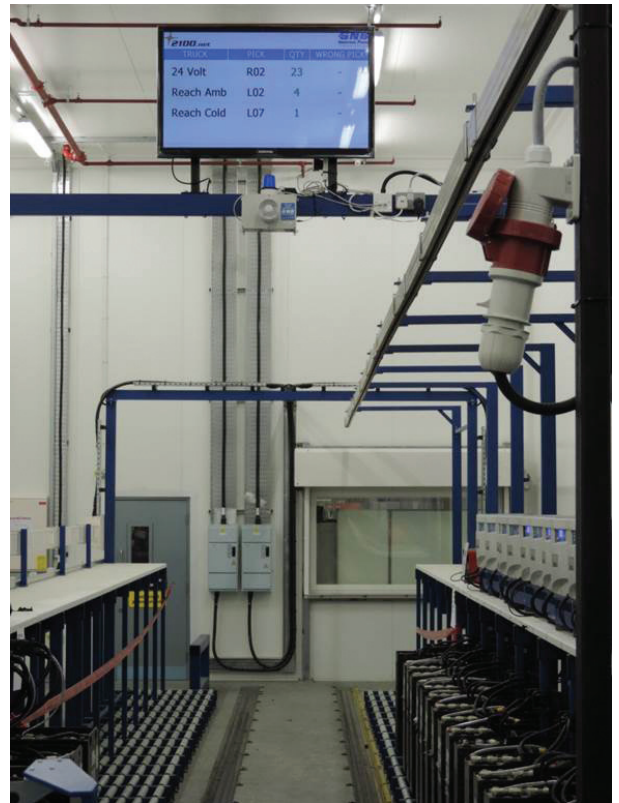
2100.net

Charger room management system

The ultimate in remote customised computerised fleet management to ensure optimum utilisation of both fleet and time.

Main features and benefits

- > Remote monitoring of up to 500 chargers from a central PC to give maximum control and labour savings
- > Alarm sounds when incorrect battery is taken
- > Optional “Battery Pick Logic” software can be integrated on the XTraction cars to disable the magnet arm so incorrect battery cannot be picked
- > Prioritised rotation control ensures full and correct utilisation of your fleet which can help to prolong battery life
- > Real cost savings can be made



NET DATA

Zone: Zone1
Sector: Order Picker
Name: OP-03
Net ID: 70

CHARGER DATA

Model: HFAB
Type: 24V060A
Profile:
SerialNo: 0B0100451

VPC: 2.338 VPC
Current: 60.0A
Ah: 60
Chg Time: 01h00m

Status: CHARGING
Error: NONE

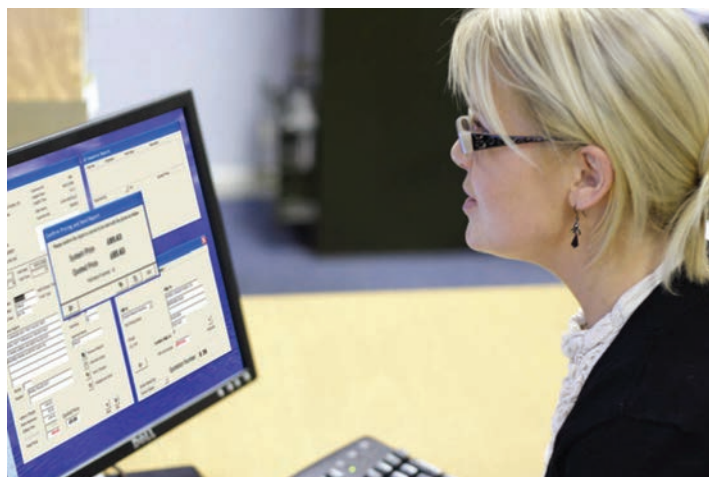
Battery XTraction Systems

XTraction Service

A complete battery room management and service package can help to extend the life of your battery and charger fleet as well as reducing your energy costs and extending the life of your battery handling equipment.

National service coverage

- > Service contracts can be tailored to your exact needs
- > 4 hour response time
- > Out of hours service
- > Experienced qualified engineers
- > 98% first time fix rate
- > Parts readily available - 96% are carried in engineer's vans



For Battery XTraction Service Support call 08000 321345

Battery XTraction Solutions

GNB Industrial Power will provide you with the ideal solution for all your battery changing needs giving you the competitive advantage.

The very best in battery power management from the market leader

- > Safer handling
- > Higher productivity from lower operating and maintenance costs
- > Significant savings on space and time costs
- > Higher truck utilisation due to lower fleet wear
- > Full compliance with manual handling regulations
- > Environmentally friendly





Exide Technologies, with operations in more than **80 countries**, is one of the world's largest producers and recyclers of lead-acid batteries. Exide Technologies provides a comprehensive and customized range of stored electrical energy solutions. Based on **over 100 years of experience** in the development of innovative technologies, Exide Technologies is an esteemed partner of OEMs and serves the spare parts market for industrial and transportation applications.

GNB[®] INDUSTRIAL POWER – A division of Exide Technologies – offers an **extensive range of storage products and services**, including solutions for telecommunication systems, railway applications, mining, photovoltaic (solar energy), uninterrupted power supply (UPS), electrical power generation and distribution, fork lifts and electric vehicles.

Exide Technologies takes pride in its commitment to a better **environment**. Its Total Battery Management programme, (an integrated approach to manufacturing, distributing and recycling of lead-acid batteries), has been developed to ensure a safe and responsible life cycle for all of its products.

GNB Industrial Power (UK) Limited

Customer Services
 Mansell House,
 Aspinall Close,
 Middlebrook,
 Horwich, Bolton
 BL6 6QQ,
 United Kingdom.
www.gnb.com

Sales and Service
Tel: 0845 606 4111
Fax: 0845 606 4112
E-mail: sales-uk@eu.exide.com
service-uk@eu.exide.com



»The **next Level** of
Energy Management«

GNB[®] INDUSTRIAL POWER provides long lasting energy concepts that combine efficiency with flexibility.