



## Industrial Batteries

# From the World Leader in Battery Technology

## Classic- The Preferred Choice

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GNB has been manufacturing economical, long-lasting flooded batteries for over a century. Tested and proven in the toughest field conditions, GNB Flooded Classic batteries offer maximum efficiency and reliability for the widest variety of applications.

## Application Ready

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### Long Duration

For telephone company central offices and other applications requiring constant current or constant power for longer than two hours, GNB offers flooded batteries from 190 to 3700 amp-hours.

GNB's long duration batteries have extra thick grids and separators to combat the effects of normal grid corrosion and growth.

### High Rate

GNB manufactures batteries for applications requiring a large amount of power for relatively short periods of time (e.g. a computer room UPS system). GNB's high rate batteries are available with nominal ratings of 1845 to 4370 watts per cell.

The grids and separators in the high rate batteries are design-optimized to allow current to flow out of the battery as quickly as possible. Solid copper terminal posts also improve high rate performance while increasing connection integrity.

### General Purpose

GNB's general purpose type flooded batteries combine features of long duration and high rate batteries to give excellent one minute rates as well as superior long duration performance (175 to 2550 amp-hours).

These batteries are the right choice for utility switchgear and control applications that typically have complex duty cycles (e.g. high inrush currents at the start of a discharge followed by lower steady-state rates).



### Special Purpose

GNB has flooded batteries designed exclusively for special applications like nuclear power plants and submarines.

### Simply the Best

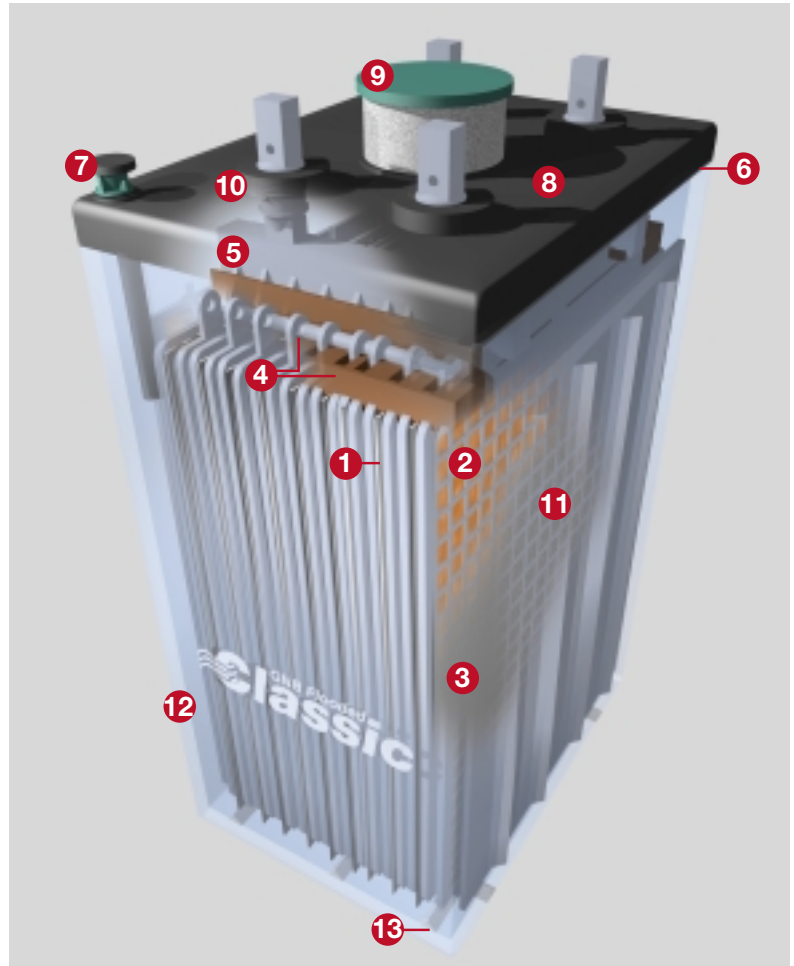
Whatever your application, GNB's extensive product offering makes it easy to select the flooded battery that meets your needs.

Flooded Battery Selector Guide

Application	Capacity	Type
Long Duration	190-480 AH	MCT
Long Duration	550-2550 AH	NAT/NCT
Long Duration	2240-3700 AH	HAT/HCT
High Rate	1845-4370 WPC	PDQ
General Purpose	175-605 AH	MCX
General Purpose	550-2550 AH	NAX/NCX
Nuclear	550-2550 AH	NAN/NCN

## Classic- Better from the Inside Out

- 1** **Microporous Separators** - Uniform in porosity with deep ribs, separators provide greater electrolyte circulation, maximum current delivery, and superior insulation.
- 2** **Positive Plate** - Designed and engineered to provide longer life and maximum power delivery. When combined with GNB developed oxides which are automatically blended and applied, it represents one of the most efficient positive plates in the industry.
- 3** **Glass Mat Retainer** - Combined with the separator to retain positive active material. Provides electrolyte reservoir for maximum power delivery and supplements insulating qualities of microporous separator. All separators are supported by the bridge; no pins required.
- 4** **Positive Plate Support** - Support evenly distributes positive group weight by use of dual supports and prevents misalignment of plates. Each positive plate is supported by the adjacent negative plate to provide uniform multi-point suspension of the positive plate group. While supporting the weight of the positive plate group, the plate support also insulates the positive hanging lugs from the negative bus bar.
- 5** **Positive and Negative Bus Bars** - Bus bars are engineered to give ultimate mechanical stability and matched to transfer the maximum ampere delivery of the plates to the cell posts.
- 6** **Jar-Cover Seal** - Tongue and groove Jar-Cover Seal provides a full, positive closure all the way around.
- 7** **Electrolyte Sampling Tube** - Tubes are used to permit more accurate specific gravity readings by reducing effects of electrolyte stratification.
- 8** **Cover** - Molded of ABS plastic, cover provides a shock-resistant, non-staining cell closure. Some cell types are available in optional PVC or polycarbonate.
- 9** **Combined Vent/Filling Funnel** - Patented "Pre-Vent" screw-type combination vent and filling funnel prevents external sparks or flames from igniting internal cell gases. Its unique design also prevents damage of internal cell components when using hydrometers or thermometers, and permits easy temperature and specific gravity readings.
- 10** **Exclusive Post Seal and Nut** - Field proven dual post seal design provides a superior seal through the combined use of both a free floating O-Ring and a flat gasket. A flat gasket is used to provide the primary seal for preventing acid creepage up the post. As a secondary measure, the O-ring ensures there is an airtight seal between the cover and post, and allows for positive plate growth while minimizing any associated stress on the cover. This double post seal design with its added flat gasket makes



GNB Network Power cells virtually impervious to acid creepage. The non-corrosive post seal nut evenly distributes compressive forces throughout the post sealing system. Machined posts provide unparalleled accuracy in tolerance and surface finish and thus contribute to a highly reliable seal.

- 11** **Negative Plate** - Plates are engineered to match positive plate for maximum power and longer life.
- 12** **Jar** - Molded of tough Styrene-Acrylonitrile (SAN) Plastic; available in optional PVC or polycarbonate for some cell types.
- 13** **Element Support System** - The entire weight of the element rests on an independent bridge in the bottom of the jar, distributing weight uniformly.
- 14** **Electrolyte Level Lines** (Not shown) - Lines are provided on all four jar faces for fast verification that electrolyte level is within recommended limits.

## GLOBAL OPERATIONS

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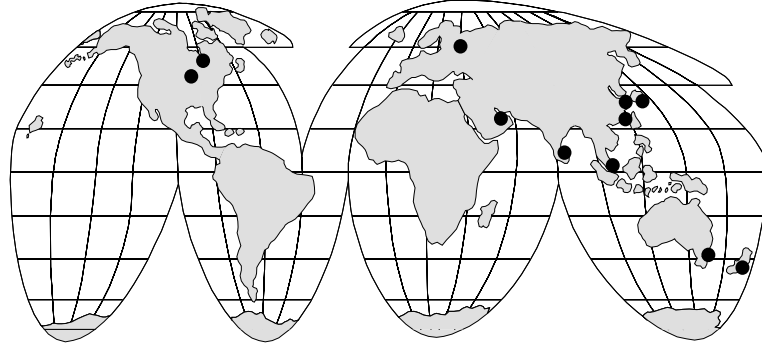
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## Industry Leader in Network Power...



The Network Power Division of Exide Technologies is *the* global leader in stored electrical energy solutions for all major critical reserve power applications and needs. Such network power applications include communication/data networks, UPS systems for computers and control systems, and electrical power generation and distribution systems. With a strong manufacturing base in both North America and Europe and a truly global reach (operations in greater than 80 countries) in sales and service, the Network Power Division has all of the tools necessary to satisfy your power needs.

## Global Brands...

**ABSOLYTE**

**MARATHON**



GNB Flooded  
**Classic**



Based on over 100 years of technological innovation, the Network Power Division continues to lead the industry with such recognized global brands as Absolyte, Sonnenschein, Marathon, Sprinter, and Flooded Classic. These products and brands are synonymous with quality, reliability, performance and excellence in all markets served.

## Total Battery Management...



In addition to being the leader in delivering premium products to the market, Exide Technologies takes pride in its commitment to the environment. As part of a complete approach to manufacturing, distributing, and recycling lead acid batteries, the Total Battery Management program has been developed to ensure a safe and responsible life cycle for all of our products.

**GNB**

**INDUSTRIAL POWER**

A Division of **EXIDE** Technologies