STRYTEN ENERGY

E-SERIES

Flooded

Tested and proven in the toughest field conditions, Stryten Energy's Flooded line of batteries offer maximum efficiency and reliability for the widest variety of applications including telecommunications, UPS and electric utilities. The flooded design is equipped with a lead calcium grid alloy providing long float life (20 years at 25°C), an exclusive post seal design for superior protection against leaks and a rugged SAN jar & ABS cover (optional flame retardant PVC or polycarbonate available for some models). Stryten Energy also offers a full line of battery racks and spill containment systems to complement these batteries.

THE ENERGY TO CHALLENGE

THOUGHTFULLY DESIGNED, INSIDE AND OUT

1. **Microporous Separators** - Uniform in porosity with deep ribs, separators provide greater electrolyte circulation, maximum current delivery and superior insulation.

2. **Positive Plate** - Engineered for longer life and maximum power delivery. Using Stryten Energy's own developed and blended oxides, it delivers one of the most efficient positive plates in the industry.

3. **Glass Mat Retainer** - In combination with the separator, it provides an electrolyte reservoir for maximum power delivery and supplements insulating qualities, while retaining positive active material.

4. **Positive Plate Support** - Dual supports prevent misalignment of plates and provide uniform multi-point suspension. Also insulates the positive hanging lugs from the negative bus bar.

5. **Positive and Negative Bus Bars** - Engineered to give ultimate mechanical stability and matched to transfer the maximum ampere delivery of the plates to the cell posts.

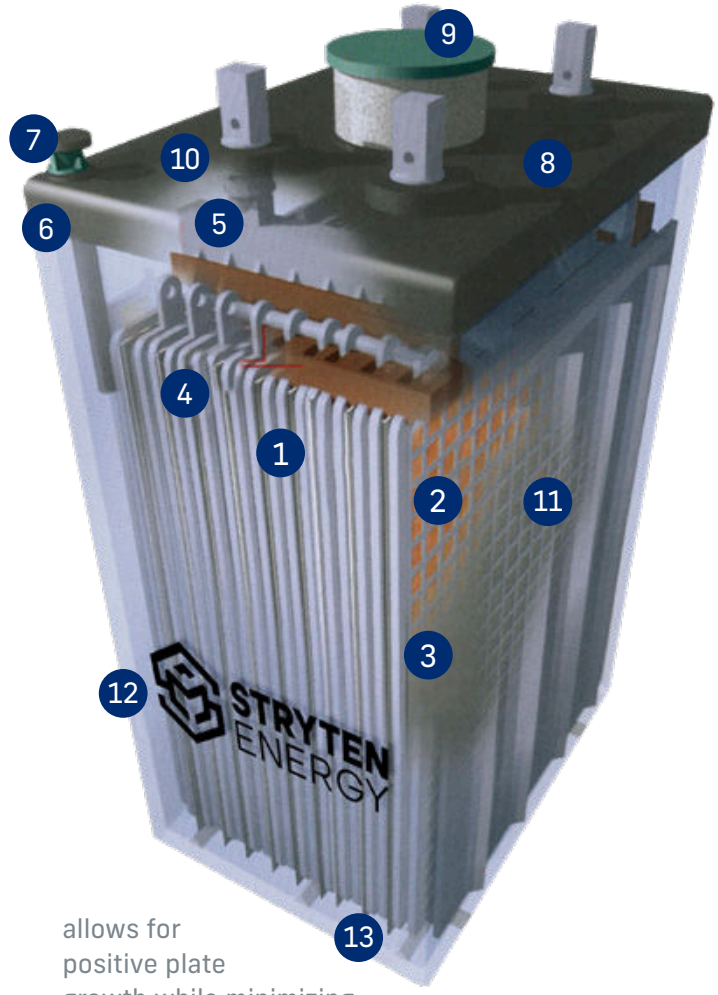
6. **Jar-Cover Seal** - Tongue and groove Jar-Cover Seal provides a full, positive closure all the way around.

7. **Electrolyte Sampling Tube** - Permits more accurate specific gravity readings by reducing effects of electrolyte stratification.

8. **Cover** - Molded 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** - "Pre-Vent" screw-type combination vent and filling funnel helps prevent external sparks or flames from igniting internal cell gases. Its unique design also helps prevent 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 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 Stryten Energy flooded cells virtually impervious to acid creepage. The non-corrosive post seal nut evenly distributes compressive forces throughout the post sealing system. Machined posts provide outstanding accuracy in tolerance and surface finish and thus contribute to a highly reliable seal.

11. **Negative Plate** - Engineered to match positive plate for maximum power and longer life.

12. **Jar** - Tough Styrene-Acrylonitrile (SAN) molded 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.

Electrolyte Level Lines (Not Shown) - Lines are provided on all four jar faces for fast verification that electrolyte level is within recommended limits.

MAXIMUM EFFICIENCY AND RELIABILITY FOR THE WIDEST VARIETY OF APPLICATIONS

Long Duration

For telephone company central offices and other applications requiring constant current or constant power for longer than two hours, Stryten Energy offers flooded batteries from 190 to 4000 amp-hours. Stryten Energy's long duration batteries have optimized grids and separators to combat the effects of normal grid corrosion and growth.

High Rate

Stryten Energy manufactures batteries for applications requiring a large amount of power for relatively short periods of time (e.g. a computer room UPS system). These high rate batteries are available with nominal ratings of 1600 to 4200 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

Stryten Energy's general purpose flooded batteries combine features of long duration and high rate batteries to give excellent one minute rates as well as superior long duration performance (170 to 2600 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

Stryten Energy has flooded batteries designed exclusively for special applications like nuclear power plants.

FLOODED BATTERY SELECTOR GUIDE

APPLICIATION	CAPACITY	TYPE
Long Duration	192 - 480 AH	MCT
Long Duration	2504 - 4000 AH	H1T
High Rate	1609 - 4217 WPC	PDQ
General Purpose	176 - 608 AH	MCX
General Purpose	621 - 2620 AH	NXT
Nuclear	552 - 2552 AH	NCN

E-SERIES	MCX/PDQ/H1T/NXT/MCT/NCN	FLOODED

The Energy to Challenge

Stryten Energy helps solve the world's most pressing energy challenges with a broad range of energy storage solutions and components across the Essential Power, Motive Power, Transportation, Military and Government sectors. Headquartered in Alpharetta, Georgia, we partner with some of the world's most recognized companies to meet the growing demand for reliable and sustainable energy storage capacity. Stryten powers everything from submarines to subcompacts, microgrids, warehouses, distribution centers, cars, trains and trucks. Our stored energy technologies include advanced lead, lithium and vanadium redox flow batteries, intelligent chargers and energy performance management software that keep people on the move and supply chains running.

Learn more at ***www.stryten.com***

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