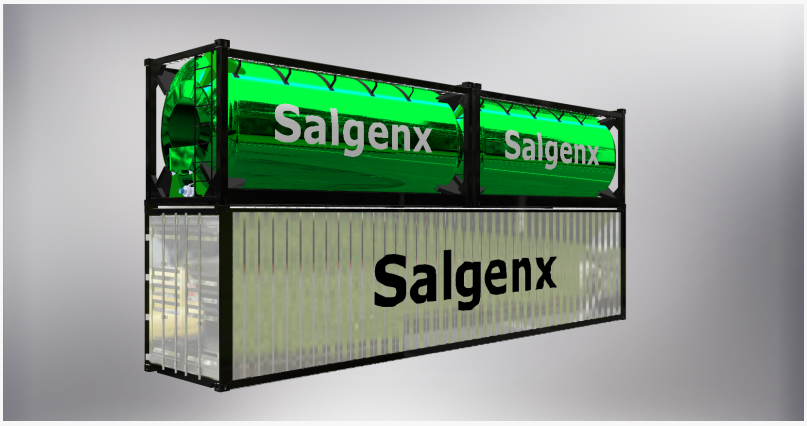
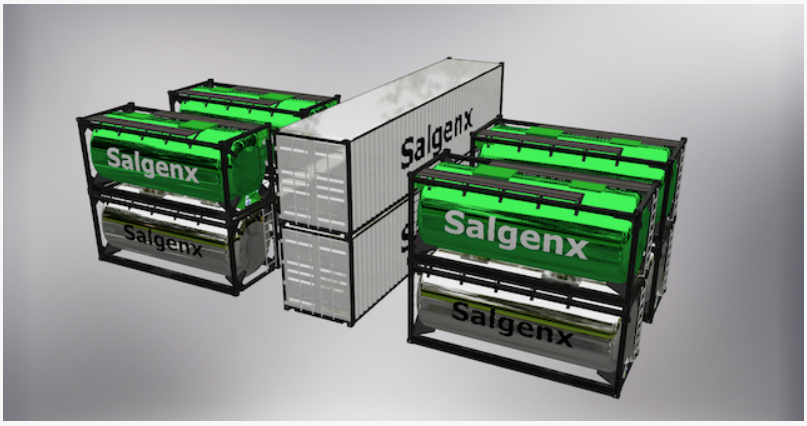
Saltwater Flow Battery Offers Alternative to Lithium Based Grid-Scale Storage Batteries

Saltwater Flow Battery Offers Alternative to Lithium Based Grid-Scale Storage Batteries Including Additional Functions of Desalination and Thermal Storage



Salgenx S3000 Salt Water Battery Energy System



Salgenx S12MW 12,000 kWh Grid Scale Energy Storage Battery

MADISON, WI, USA, March 13, 2024 /EINPresswire.com/ -- In a remarkable advancement for the renewable energy sector, a new saltwater battery technology has emerged as a game-changing alternative to conventional lithium-based storage solutions. Designed to meet the needs of grid-scale applications, this innovative technology boasts a plethora of advantages that significantly outperform existing battery systems. With its unique combination of safety, efficiency, and environmental benefits, the saltwater battery is set to redefine energy storage.

Unparalleled Advantages of Saltwater Battery Technology:

• No Membrane Required: Unlike Vanadium and Bromine batteries, saltwater batteries eliminate the need for expensive rare metal membranes, drastically reducing costs and environmental impact.
• Dual-Function Desalination: This groundbreaking technology not only stores energy but also has the capability to desalinate saltwater, providing a vital source of fresh water in addition to energy storage.
• Thermal Storage Capability: Beyond its primary function, the liquid saltwater electrolyte can simultaneously offer thermal storage, maintaining temperature (cold or hot) for additional energy efficiency benefits. In concert with a heat pump, the system can store thermal energy

from grid-based power to be used to reduced higher on-peak demand costs.
• Inherent Safety: Saltwater batteries are devoid of the fire hazards associated with lithium batteries, making them a safer choice for large-scale installations.
• Simplified Construction and Rapid Deployment: Designed for ease of assembly and speed to market, these batteries can be housed in standard modular shipping containers, facilitating scalability and flexibility.
• Eco-friendly Recycling: Compared to Lithium, Vanadium, or Bromine batteries, the recycling process for saltwater batteries is simpler and more environmentally friendly, underscoring the sustainability of the technology.
• Long-term Energy Storage: The separation of liquid electrolytes enables long-duration energy storage without performance degradation, ensuring reliability over extended periods.
• Scalable Capacity: Starting at 3,000 kWh (3 MWh), the capacity of saltwater grid-scale batteries can be expanded indefinitely to meet any size requirement, offering unparalleled flexibility.
• Reduced Complexity and Maintenance: Compared to thousands of connections of lithium systems, saltwater batteries reduce the potential for failures and maintenance.
• Ideal for Renewable Power Generation Integration: The charging characteristics of saltwater batteries align perfectly with the generation patterns of solar PV and wind energy, requiring 4-6 hours of charging time and facilitating seamless renewable integration.

About Salgenx and Infinity Turbine LLC

Salgenx, in strategic collaboration with Infinity Turbine LLC, stands at the cutting edge of transformative solutions, showcasing a commitment to excellence and innovation through grid-scale saltwater battery energy storage, destined to set unparalleled standards in manufacturing and battery technology.

Contact: Greg Giese | CEO | Infinity Turbine LLC | greg@infinityturbine.com | greg@salgenx.com

Saltwater Battery Website: https://salgenx.com
Infinity Turbine Website: https://www.infinityturbine.com

Gregory Giese
Infinity Turbine LLC
+1 608-238-6001
email us here
