

Powering the Future with Salgenx and Infinity Turbine: Revolutionary Solutions for AI Data Centers

Salgenx and Infinity Turbine Introduce Waste Heat to Power and Saltwater Battery Storage Solutions for AI Data Centers for Power and Water Savings

MADISON, WI, UNITED STATES,
September 19, 2024 /

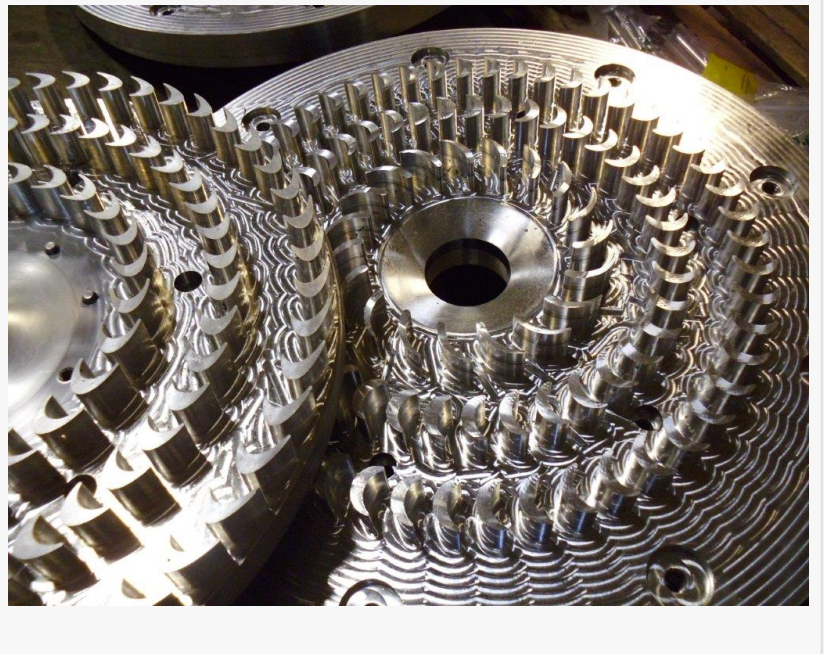
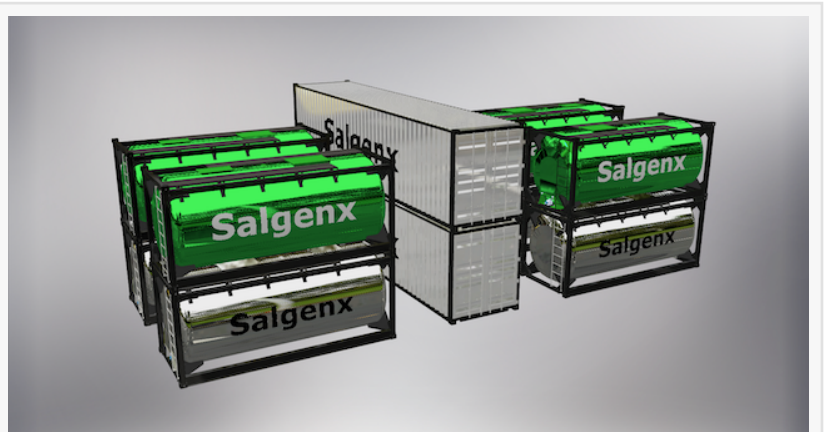
EINPresswire.com/ -- As the world shifts towards more advanced artificial intelligence (AI) applications and data-intensive computing, the demands on data centers are growing exponentially.

In this era of rising power consumption, two groundbreaking solutions have emerged to revolutionize how data centers meet their energy needs: the [Salgenx Saltwater S3000 Battery](#) and the [Infinity Turbine Cluster Mesh Power Generation](#) system.

Together, these innovative technologies offer a sustainable and cost-effective approach for powering high-demand AI data centers while significantly reducing the environmental impact and operational costs.

The Salgenx Saltwater S3000 Battery: A 24-Hour Backup Power Solution

The Salgenx Saltwater S3000 Battery delivers reliable energy storage with an impressive 3,000 kWh of capacity per module.



For high-demand data centers like Tesla's next-generation AI data center, which could consume up to 100 MW of power per hour, the scalability of the Salgenx system provides peace of mind with 800 modules required for 24-hour backup power.

With an increasing focus on renewable energy and reducing dependence on fossil fuels, the Salgenx Saltwater battery offers a sustainable, non-toxic, and long-lasting energy storage solution that ensures uninterrupted operations during power outages.

Infinity Turbine Cluster Mesh: Harnessing Waste Heat for Power Generation for Huge Data Centers

Complementing the Salgenx solution is the Infinity Turbine Cluster Mesh Power Generation system, which efficiently converts waste heat from data centers into usable power. With the capacity to utilize up to one Gigawatt of waste heat per day from larger data centers, the Infinity system could generate about 60 MW of power, contributing directly to data center power needs.

At the heart of this system is its 6% efficiency rate by using [supercritical CO2](#), allowing data centers to repurpose the traditionally unusable low-grade heat (80-120 F) that would otherwise be wasted by evaporating water to the air, into valuable electrical power. This results in substantial energy savings, translating to significant cost reductions for large-scale AI operations from both water usage, and electrical demand.

Savings and Environmental Benefits

With power costs averaging \$0.10 per kWh, the Infinity Turbine's Cluster Mesh Power Generation could generate up to \$2.19 million per year.

In comparison to traditional cooling methods like evaporative water cooling, which can consume large amounts of water, the Infinity Turbine's heat recovery system eliminates the need for additional water resources. This not only reduces operational costs but also conserves precious water, contributing to a more sustainable energy landscape.

For example, typical evaporative cooling systems for AI data centers can consume hundreds of thousands of gallons of water per day. By switching to the Infinity Turbine Cluster Mesh Power Generation system, data centers can completely eliminate this water consumption, leading to water savings equivalent to thousands of dollars per day depending on local water rates and consumption levels.

In tandem with the Salgenx Saltwater battery system, the integration of Infinity Turbine's waste heat power generation can reduce dependence on external energy grids, providing a reliable, independent, and eco-friendly power solution for even the most energy-intensive AI data

centers.

Waste Heat Electrical Cooling Costs per 1 GW Waste Heat per Day (grid power @ \$.10 per kwh) for a Huge Data Center:

Air Cooling (.2 kW per ton of cooling): 1,364,833 kWh per day of power for \$136,000 per day or \$50 million per year.

Chiller-Based Cooling (.7 kW per ton cooling): 4,776,916 kWh per day of power for \$478,000 per day or \$174.3 million per year.

Evaporative Water Cooling (.05 kW per ton cooling): 341,208 kWh per day of power for \$34,000 per day or \$12 million per year.

A Vision for the Future of AI Data Centers

As data centers continue to play a critical role in advancing AI technology, the collaboration between Salgenx and Infinity Turbine represents a new frontier in sustainable energy solutions. With the combined power of the Salgenx Saltwater S3000 Battery and the Infinity Turbine Cluster Mesh Power Generation, AI data centers can not only meet their massive power demands but also reduce their environmental footprint while achieving substantial cost savings.

This game-changing technology positions both Salgenx and Infinity Turbine as leaders in the future of green energy for the data center industry, setting a precedent for how large-scale power systems can be both profitable and sustainable.

About Salgenx

Salgenx is a leader in innovative grid-scale energy storage solutions, providing sustainable and scalable saltwater battery systems for a wide range of industrial applications. With a focus on renewable energy and long-term reliability, Salgenx is committed to delivering eco-friendly energy solutions for a greener future.

About Infinity Turbine

Infinity Turbine specializes in cutting-edge power generation technology that transforms waste heat into valuable electricity. With a focus on efficiency and sustainability, Infinity Turbine helps industries harness the full potential of their energy resources while reducing their carbon footprint.

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