

NAATBatt Update

February 2025



Powered by Prussian Blue



Who Is Natron Energy?

Sodium-ion Batteries Powered by Prussian Blue

Company:

- Founded in 2012 as a Stanford spin out
- 180+ employees
 - Headquarters Santa Clara, CA.
 - Manufacturing Plant Holland, MI
 - Future Gigafactory #1 Edgecombe County, NC

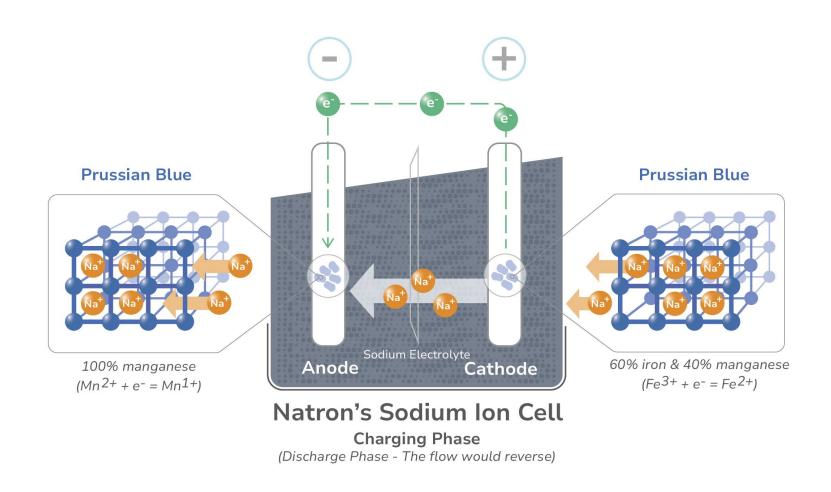
Products:

- High power, safe, sustainable batteries having <u>no risk</u> of thermal runaway or fire
- Based on new chemistry supported by more than 40 patents
- Commercial production



Cell Chemistry Basics





The Safest Battery Ever Made!



- No fire or explosion after puncture, pressure, heat, or electrical faults
- We are the only battery manufacturer to publish our unredacted UL test report



High speed projectile test

Natron



Click to view Natron's safety video on YouTube

Cleaner and more sustainable than other chemistries



Natron eliminates the "blood" minerals

- No lithium, cobalt, nickel, copper, or zinc
- Check others' MSDS declarations!

Natron eliminates lead, the source of a global public health crisis

Uncontrolled emissions from lead smelting and recycling

Locally sourced materials



Cobalt mining, Congo



Lead acid recycling, Indonesia

Qualified for BABA and other Buy American Acts









Michigan Production Facility



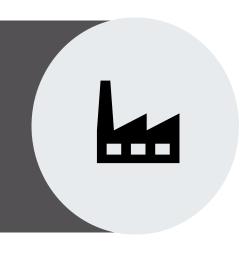




Holland, Michigan Production Facility Details



The Holland plant enables Natron to establish markets and secure giga-scale demand



- Plant has already proven the scalability of our process technology
 - Materials: >1,000,000x scale-up complete
 - Current 500-ton/yr capacity ready to scale to >10 kton
 - Electrodes: coating ~11.5km per shift
 - Cell assembly operational shipping COTS Cells, Battery Packs, and Cabinets



Automated Cell Stacking



Tab Welding

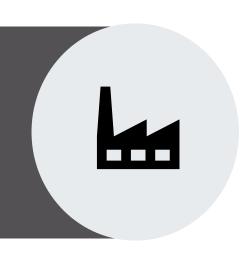


Cell Testing Towers

Future Gigafactory Site - Edgecombe County, NC



August 15, 2024 Natron Energy announced first Gigafactory will be in Edgecombe County, NC



Plans include

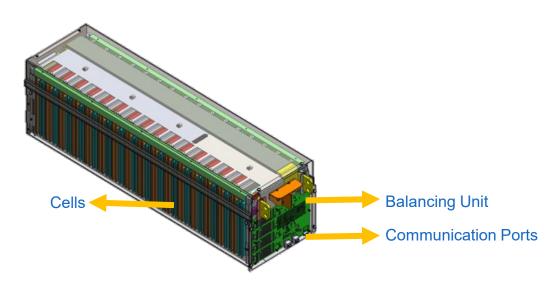
- 1.2 million square foot facility
- Investment of \$1.4 Billion USD
- Will produce 24GW of batteries annually
- Represents 40x scale-up of current production capabilities
- Will support 1,000 jobs



BluePackTM 25kW, 48VDC Battery Shipping Now



- Modular 25kW, 48VDC packs can be serialized for power systems from 96 to > 1,000VDC
- Operating Voltage range of 58 to 32 volts for max power/energy delivery
- 800 Amp discharge & charge capable
- Class-leading charge and discharge
 - 1- 5 minute optimal discharge
 - Recharges in 10 minutes or less







BlueRack[™] Battery Cabinets Shipping Now



- High Peak Power capacity eliminates need for N+1
- Higher power cabinets enable 2+ MVA UPS power blocks
 - Fewer strings
 - Higher per cabinet standard power
 - Significantly higher Peak Power capacity
- 250 kW per cabinet nominal at a 2-minute discharge
- 400 kW+ peak at <1 minute discharge rating
- >500 kW AI / DEWS peak load profiles
- Can be combined to make larger systems
- Other voltages available > 1,000 VDC





Natron V 7.x Cells – The Power Within



- Al and DEWS workload ready!
- Demonstrated >10M high power, bi-directional cycles

Cell voltage stable – test duty cycle provides equal discharge and recharge

Cell energy stable – no performance degradation

Full details available under NDA



Next Gen Threats require Next Gen COTS Cells





Thank You

https://natron.energy

Jack Pouchet jack@natron.energy

