

NAATBatt 2022



Member Update



120+ Employees

3 Business Divisions,
incl 6K ADDITIVE &
6K ENERGY

>\$200M Funding Secured &
Committed via TS

124 Patent Families
Across Portfolio
of Products

300+ MWh PILOT
Capacity in New
Battery Center of
Excellence

150K Sq. ft. of R&D and
State-of-Art
Production Space



6K has a revolutionary, MIT-derived microwave plasma production technology used for high precision production of critical battery materials, with reduced production costs, and true sustainability

Strong Executive Leadership & Board of Directors & Advisors

Seasoned Battery Executives



Sam Trinch
President, 6K ENERGY



Richard Holman, PhD
SVP, Battery Products



Chad McDonald
SVP BD/Strategy,
6K ENERGY



Thanh Nguyen
SVP, Deployment,
6K ENERGY



Mary Cronin
Vice President
Government Affairs



Industry and Policy Leaders on BoD



Dr Aaron Bent
CEO



Joe Kennedy III
DEM



Bob Galyen
CATL



Dr Joe Felter
REP



Ed Liddy
AIG



HEADQUARTERS AND BATTERY CENTER OF EXCELLENCE

BOSTON



▶ UniMelt® Plasma R&D
Center

▶ 6K ENERGY Division /
Battery R&D

▶ 6K Equipment Division

▶ 6K Innovation Team (New
Products)

▶ Sales & Marketing



GLOBAL POWDERS AND ALLOYS PRODUCTION

PITTSBURGH



▶ ISO9001 Certified,
AS9100 2Q22

▶ 24/7 Operation, Started
Production in Q32021

▶ High Volume Titanium
Expertise (2M lb/yr)

▶ 40K sq. ft. State-of-Art
Powder Manufacturing

▶ 45 Acres, Fully Permitted
and Licensed

UniMelt® Plasma System



6K is the first to create a plasma-based system for high throughput synthesis of advanced materials with engineered microstructures

1

Single pass continuous process



Designer particles – high yield



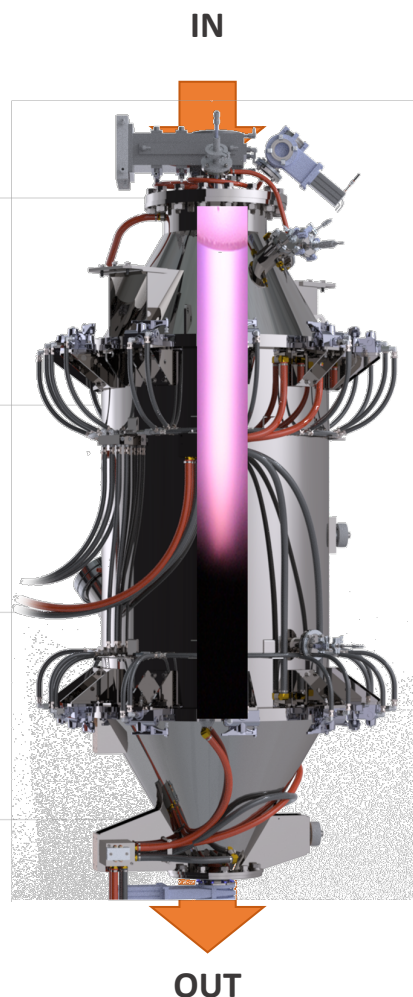
Low / Zero production waste



No moving parts – high uptime



Scalable & highly modular



COMMODITY INPUTS

SET CHEMISTRY

SET PARTICLE SIZE

CARRIER EVAPORATION

SYNTHESIZE PARTICLE

SET MICROSTRUCTURE

DIGITAL IN-LINE QC

ENGINEERED PARTICLE

COMPLETE IN 2 SECONDS

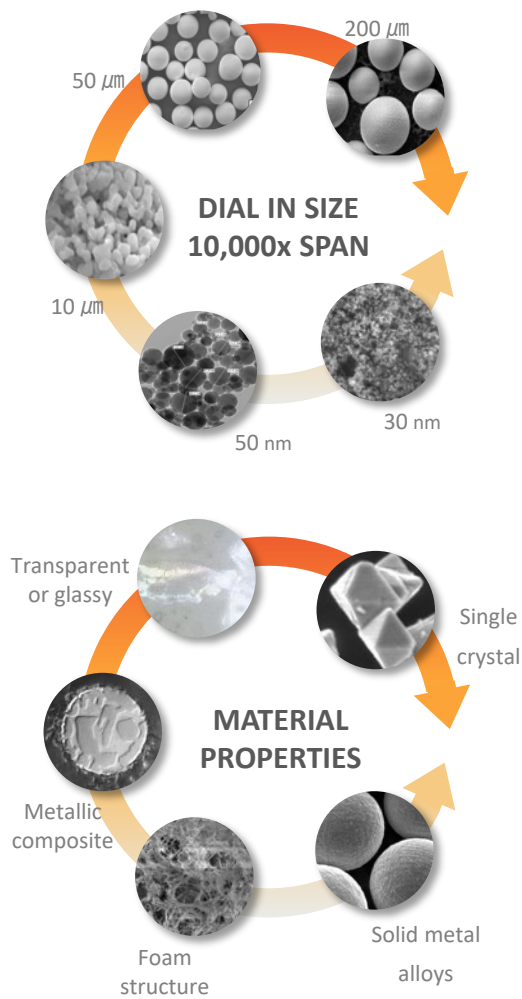
6K can produce virtually any battery chemistry, allowing for the engineering of the optimal combination of energy, power, cost, and lifetime



6K Can Produce Virtually Any Battery Chemistry With “Digital Tunability”



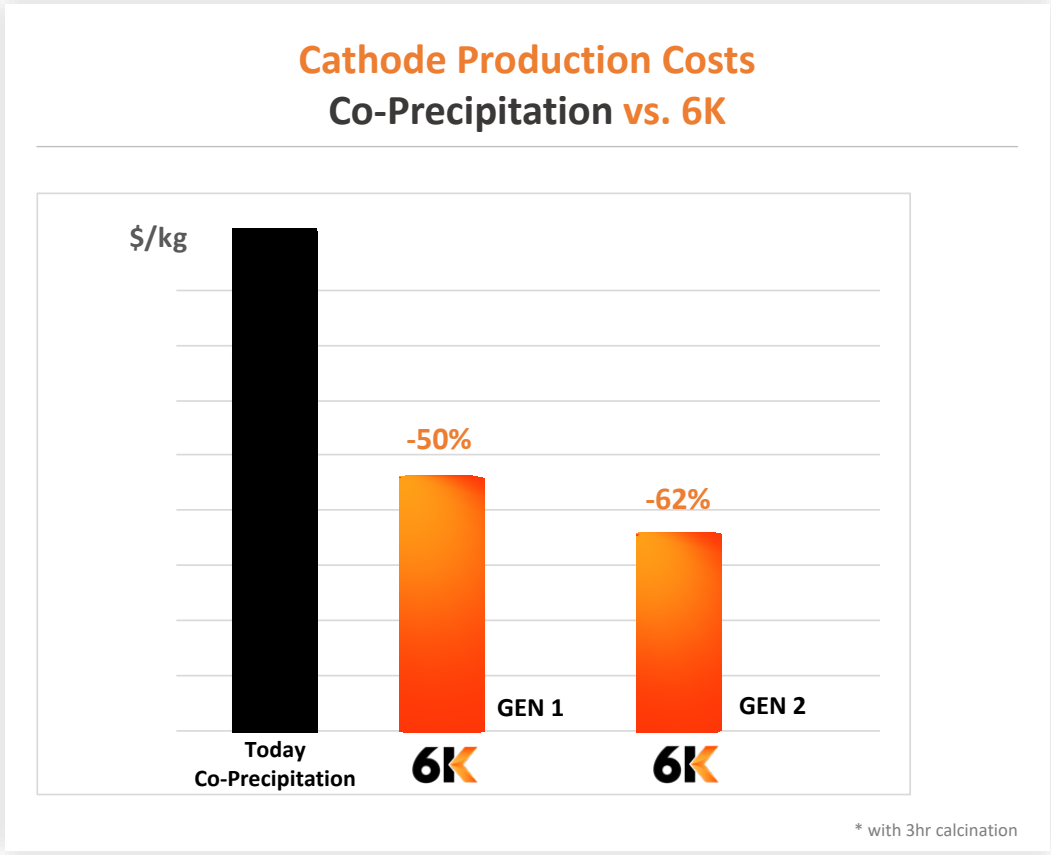
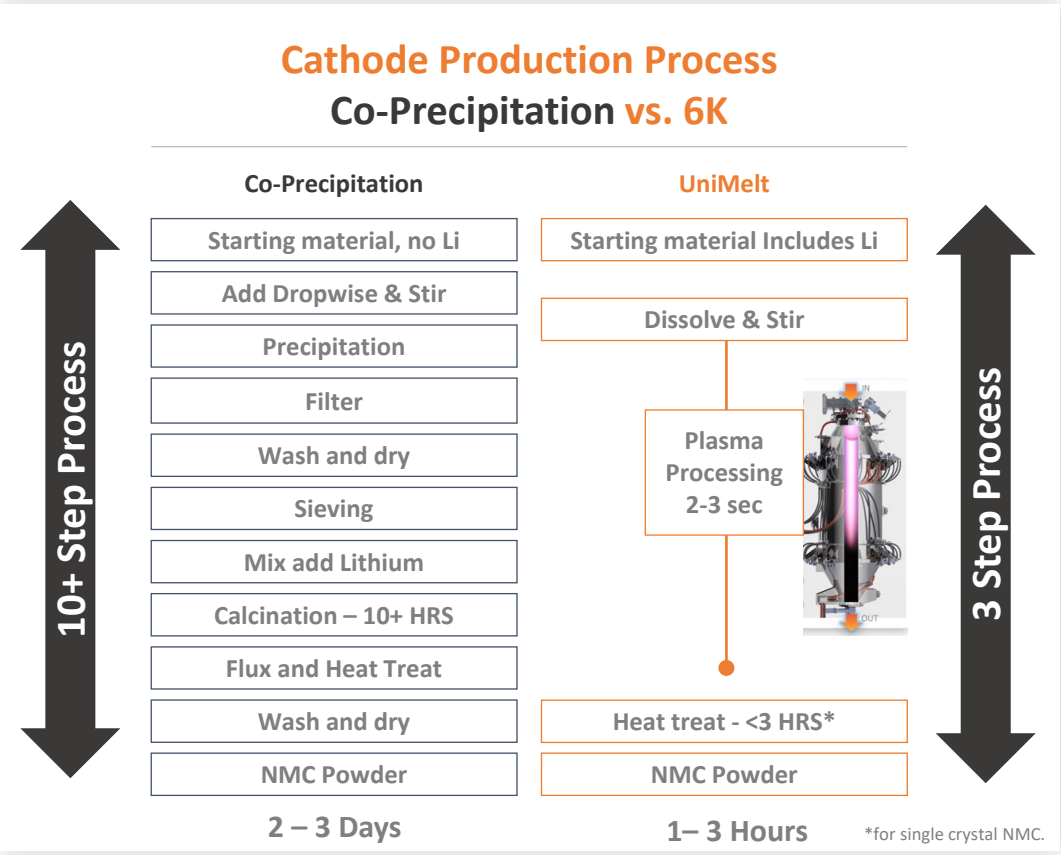
The **UniMelt®** process provides digital “tunability”, to flexibly produce nanomaterials of highly engineered characteristics.



6K’s UniMelt® can produce powders for all key material sets now, and in the future

| LTO Anode | Silicon Anode Nano-structured | NMC-XXX Cathode | LLZO Solid-state Electrolyte | LFP/LMO Cathode | Cathode Recycling |
|---------------------------------|----------------------------------|--------------------------|---------------------------------|---------------------|----------------------|
| | | | | | |
| 10 μm LTO Xalt/USABC | Intermetallic composite | NMC-622 | Nano-scale LLZO | 95% phase pure LFP | "healed" NMC-532 |
| | | | | | |
| | Nano-foam SiOx | NMC-811 single crystal | Micron-scale LLZO | LMO single crystal | |
| | | | | | |
| | | NMC-9.5.5 single crystal | | LNMO single crystal | |

6K Transformational Technology Delivers Significant Production Cost Reduction



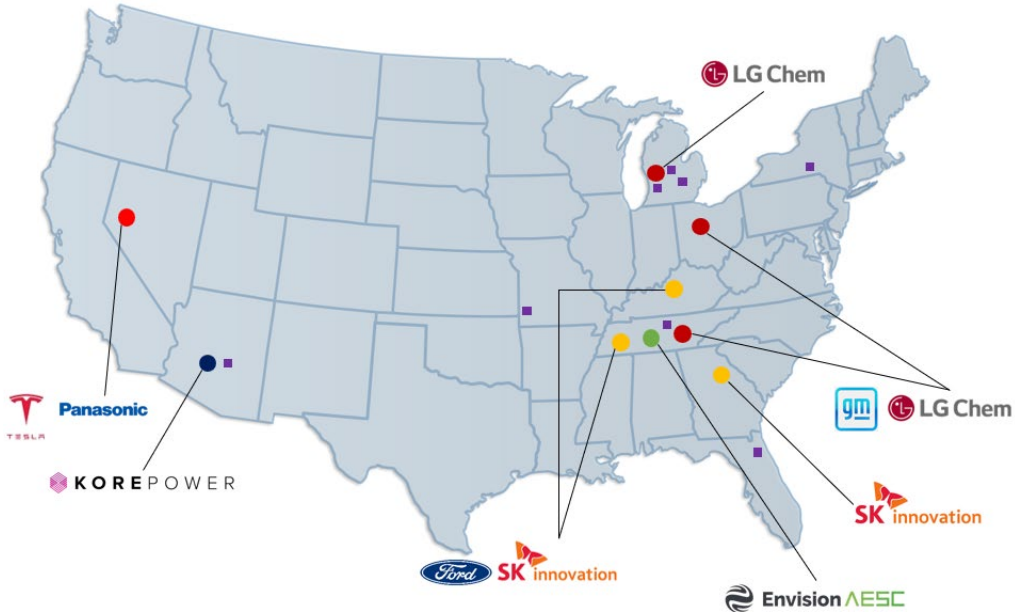
Simplified production process resulting in a 50%-60% reduction in conversion cost

6K Cost and Environmental Benefits Profound for US Electrification



Virtually 100% waste elimination and more cost effective than China

Environmental and cost benefits with 6K technology



Possible Max Benefit Scenario

Announced Installed Capacity: ~400GWh/year

Cathode Powder: Most expensive component (~\$3K/vehicle)*

Cost Savings

\$500
per vehicle*

\$10B
over five years

*Assumes avg battery pack: 100kWh



135,000 Olympic Pools

100% reduction

worth of hazardous waste eliminated in this 5-year period
(338B liters of hazardous wastewater eliminated)



122,000 Olympic Pools

90% reduction

worth of water saved over 5-year period due to reduced water usage
(304B liters of water saved)



~30M Tons of CO2 Eliminated

70% reduction

Reduced power usage eliminates the equivalent CO2 emissions

Reduction over conventional cathode production

6K's Solution: Leapfrog Legacy Cathode Production

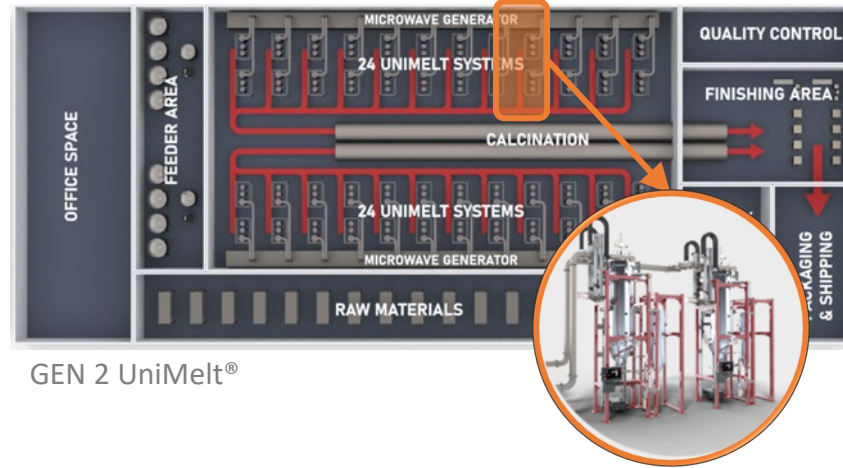


6K's clean, scalable production deployment supports co-location of CAM near partner

50% Factory Footprint Reduction



Modular & Scalable Building Blocks



Redeploy CapEx Effortlessly



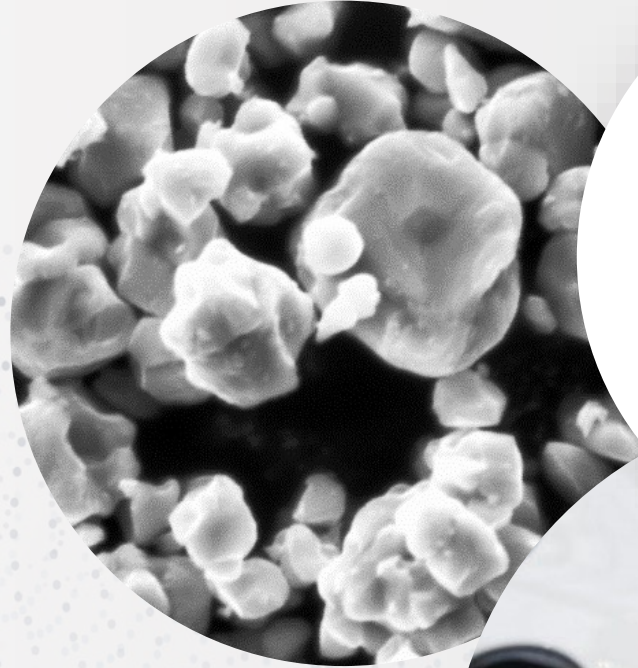
6K Environmental Impact

- Zero** Hazardous waste (*solid/liquid*)
- 90%** Reduction in water usage
- 70%** Reduction in power usage & CO₂ emissions

6K Economic Impact

- 50%** Smaller production plant footprint
- >20%** Lower production plant CapEx
- 50%** Lower production conversion cost

Thank You



6K

