

NuGen Systems™ Introduces High Power, Fast Charge, 24Volt, Lithium Ion Smart Batteries for AGVs and the Material Handling Industry

ATLANTA—March 29, 2018 - NuGen Systems, an Atlanta-based developer of green and clean energy solutions, introduced today their advanced lithium ion (Li-ion) rechargeable battery systems. The NuGen Power 2440 battery, designed for autonomous guided vehicles (AGVs) and other material handling equipment, presents many cost, performance, and environmental improvements over the traditional lead acid batteries that are ubiquitous in the factory setting. NuGen Systems will be exhibiting their battery and related products at the MODEX 2018 Show in Atlanta in booth C2553.

NuGen has partnered with leaders in the automation industry to introduce the NuGen Power 2440 battery into the largest manufacturing environments in the world. Eckhart, a global integrator of Industry 4.0 solutions, has partnered with NuGen to develop lithium ion battery technology for their Autocraft™ AGVs which lead the market in reliability and uptime.

“Powering our Autocraft™ autonomous guided vehicles with NuGen’s Li-ion batteries allows us to deliver more reliable, higher performing, and cost-optimal solutions to our customer base,” said Daniel Burseth, Eckhart’s Vice President of Business Development. “We have subjected NuGen products to some of the harshest production environments and believe that the time is now to embrace lithium ion batteries in the industrial space.”

NuGen developed its 24-volt, 40 Ah advanced Li-ion power battery module as a building block to assemble batteries that meet the application requirements for a wide variety of power supply use cases. A NuGen Li-ion battery offers an 8x reduction in non-value add charge time versus that of a traditional lead acid battery. While lead acid batteries are designed to discharge only 80% of their useful capacity (DOD), NuGen Li-ion batteries discharge 100% of their stored capacity. Additionally, NuGen Li-ion batteries are capable of pulse charging up to 180A for 2-3 minutes in an “opportunity charge” profile and can be used immediately after charging without the rest steps required by traditional lead acid batteries.

The NuGen Power 2440 battery system will be available starting the second quarter of 2018.

“Experts predict that over the next 3-5 years, most industrial material handling equipment, such as AGVs, pallet jacks, and forklifts will transition to Li-ion batteries. It’s a trend we’ve already seen in the consumer electronics space and we see an enormous market opportunity in the industrial space due to the order of magnitude improvement in capability and the total cost of ownership that NuGen Li-ion batteries provide over lead acid batteries,” said Dr. George Thomas, CEO of NuGen Systems. “We are delighted to partner with an industry leader like Eckhart to accelerate the adoption of this technology in the industrial space.”

Some of the advantages of Li-ion batteries over lead acid batteries include:

- Faster recharging (including opportunity charge at, as high as, 180A)

- Longer life cycles (3000 cycles)
- 100% Charge efficiency
- Maintenance-free

“We look forward to meeting with other industry leaders and innovators at MODEX in the interest of establishing long term partnerships with our customers,” said Venus Desai, one of the co-founders, of NuGen Systems. “We see factory automation and material handling as a great beachhead market for our Li-ion technology.”

About Eckhart, Inc.

With over 60 years of experience and based in Warren, Michigan, Eckhart engineers advanced industrial solutions that enhance the quality of life. Eckhart’s proven portfolio of advanced manufacturing technology includes Autocraft™ autonomous guided vehicles (AGVs), collaborative robotic systems, traditional robotics, contract assembly line design & simulation, 3D printing tool development & production, and ergonomic general assembly tooling solutions for the world’s largest manufacturers. Eckhart serves an established and loyal, blue-chip customer base of leading automotive and industrial original equipment manufacturers that include Stryker Medical, General Electric, Boeing, Tesla, PACCAR, John Deere, United Technologies, and Caterpillar. For additional information, please visit www.eckhartusa.com.

About NuGen Systems, Inc.

NuGen Systems, www.NuGenSystems.com has developed advanced Lithium ion rechargeable battery solutions optimized to meet the power, energy, quality, and safety requirements for the material handling equipment market. These batteries can directly replace existing lead acid batteries currently used in most material handling equipment. NuGen Systems, using their battery expertise, also works with customers to create custom solutions for specialty equipment and battery needs. Collectively, NuGen’s founding team has more than 50 patents and 100 years of experience in developing and launching engineering and power solutions with Fortune 50 companies across a variety of consumer and industrial markets. NuGen has also built a network of partners that includes well established cell suppliers, component and contract manufacturers, and in-depth testing organizations to ensure that the product is delivered to meet high quality and stringent reliability standards.

Visit www.NuGenSystems.com for more information.