

Commissioning - Industrial Hero/Beech-Nut Infant Food Manufacturing Facility Florida, New York

Program

NYSERDA New Construction Program

Scope of Services

- Project Scoping
- Design Assistance
- DOE-2.1E Whole Building Modeling
- Green Building Services
- EEM/Sustainable Design Coordination
- Cost Benefit Analysis
- Incentive Calculation & Reporting
- LEED Optimize Energy Performance
- LEED Fundamental Commissioning
- LEED Enhanced Commissioning

Level of Involvement

NCP Technical Assistance Provider
LEED Commissioning Authority

Facility Size

575,000 sq. ft.

Facility Type

Infant Food Manufacturing/Office

Project Goals

Achieved LEED-NC v2.2 Certification

Hero/Beech-Nut constructed this new manufacturing and office facility located on a 120-acre property in Florida, NY. The new facility will replace its existing more-than-century-old Canajoharie plant. The facility is a state-of-the-art infant food manufacturing plant with approximately 575,000 gross square foot including a two-story office area and a one-story high-bay manufacturing and storage area. The office area makes up approximately 67,000 square feet and the remaining areas comprise the manufacturing and storage areas.

The HVAC system included packaged variable air volume rooftop units in the office area and gas-fired rooftop units for heating in the manufacturing area. The lighting system used high efficiency fixtures equipped with fluorescent lamps and



New Infant Food Manufacturing Plant

ballasts and automated controls The Hero/Beech-Nut manufacturing facility was constructed through a design-build project delivery method. Design-build projects differ from design-bid-build projects, as the design-build firm is both the general contractor and the design professional. As a result, design documentation is developed and issued as the facility is being constructed. This presents a challenge when integrating energy efficiency and sustainable features into the design; however, through due diligence and effective coordination,

EME was able to increase the facility's overall sustainability and energy efficiency, most noticeably by recommending installation of NEMA premium efficiency motors identified during our commissioning design review. While reviewing the specification, we discovered that EPC 1992 compliant motors had been specified for the approximately 5,000 combined horsepower of process and HVAC-related motors. Since many of these motors have run-times in excess of 18 hours per day, EME provided an economic summary that illustrated annual energy and cost savings of 1,364 MWh and \$62,779 resulting in a 2.8-year payback. Based on our analysis, the project team elected to install NEMA premium efficiency motors for all process and HVAC-related motors. Based on the use of premium efficiency motors and other energy efficiency measures including high efficiency lighting, heat recovery, high performance glazing and lighting controls.