



PROCESS

FEECO was commissioned by a company specializing in biological farming products in partnership with a large-scale dairy farm to develop an on-farm [manure granulation plant](#) that would process digested dairy manure into a specialty fertilizer.

[Batch and pilot testing](#) in the FEECO Innovation Center was crucial to developing a process that incorporated the farm's unique source of manure with a multitude of additional components to create the custom, all-in-one fertilizer granule they were looking for. We then scaled up this process and engineered and fabricated the equipment to provide a complete system integrating granulation/mixing, drying, cooling, screening, recycle, gas handling, process controls, and all necessary material handling equipment.

In addition to our role in process design and equipment manufacturing, we also provided a variety of systems engineering services, including but not limited to plant general arrangement drawings, vendor interface, bid evaluation and analysis, P&IDs, control system interface, electric plant device drawing development, project management, start-up assistance, and more.

FEECO worked with vendors and engineering firms to integrate the granulation plant as part of a complete manure processing line with pre-treatment, storage, blending, and other necessary support systems to serve as a commercial-scale fertilizer production facility.

FEECO continues to serve the project through remote support capabilities facilitated by Rockwell Automation and Allen-Bradley controls integration.

PROJECT SPECS

Customer:
Proprietary

What Was Supplied:

- Batch and pilot testing for process and product development of a specialty fertilizer product combining both organic and inorganic components along with primary and secondary macronutrients as well as micronutrients
- System engineering and complete granulation plant utilizing pug mill, rotary dryer, rotary cooler, screening, recycle, gas handling, process controls, material handling, and ancillary equipment

Project Location:
Proprietary

Industry:
Dairy & Fertilizer

Material:
Digested Dairy Manure & Mineral Blends

Project Engineer:
FEECO International, Inc.