



PROCESS

A large agribusiness working in broiler production was facing an issue: chicken litter from their growing farms was making its way into the Chesapeake Bay. To address the issue, the company opened a centralized recycling center to serve the region by processing chicken litter into a marketable fertilizer product.

While the concept was a success, the company encountered issues with the process; because of the method used to agglomerate the litter, the sand mixed in with the chicken litter was causing excessive wear on machines, resulting in elevated maintenance costs. Additionally, because the pellets were of the extruded type, the company was experiencing attrition and dust issues with the end product. The company approached FEECO with their issues.

Work began in our Innovation Center, where batch agglomeration trials were conducted on small samples of the material to determine initial feasibility. After success in batch testing, continuous testing was carried out.

The spherical pellet produced by our granulation technique was exactly what the customer was looking for. The non-pressure granulation method used resulted in reduced wear on machinery. Furthermore, the spherical pellets were dust free, and capable of being blended with other fertilizers to create improved blends.

FEECO then provided assistance in putting together a full-scale granulation pilot plant, allowing them to produce the spherical pellets on their own.

PROJECT SPECS

Customer:

Proprietary

Equipment Supplied:

- Rockwell Control System
- Disc Pelletizer
- Chain Mill

Project Location:

Southeastern USA

Industry:

Agriculture

Material:

Chicken Litter

Project Engineer:

FEECO International, Inc.