



Custom ducting connector

### PROCESS

As the preferred provider for fertilizer production equipment, FEECO was commissioned to engineer and manufacture a stainless steel [rotary dryer](#) with combustion chamber for use in the [production of Ammonium Sulfate](#) (AS) fertilizer.

The 8' (2.4m) diameter x 40' (12.2m) long dryer included flights (material lifters) and was designed to provide optimum drying efficiency and offer a reliable, long-term industrial drying solution in a demanding setting.

This project presented a challenge in terms of limited available space for the dryer; FEECO had to engineer a system that would fit perfectly into the allotted space, while still providing maximum drying impact.

As a result of the space limitations, the [combustion chamber](#) for the dryer was located on a different floor. FEECO engineered a custom duct (shown above left) to connect the dryer and combustion chamber.

The specially designed, stainless steel combustion chamber prevents the burner flame from coming into direct contact with the product, avoiding product breakdown, providing uniform drying, and lowering the overall drying cost due to a more complete combustion of the fuel.

### PROJECT SPECS

**Customer:**  
Proprietary

**Equipment Supplied:**  
Rotary Dryer with Combustion Chamber

**Project Location:**  
Virginia, USA

**Industry:**  
Fertilizer

**Material:**  
Ammonium Sulfate

**Project Engineer:**  
FEECO International, Inc.