

CUSTOMER CASE STUDY

# Nutrien AHF Plant Gasket Replacement

Mid-Atlantic (NC)

**FERGUSON**  
INDUSTRIAL

**Nutrien**<sup>™</sup>



## PROJECT OVERVIEW

**CUSTOMER:**  
Nutrien

**PRODUCTS USED:**  
Garlock GYLON® 3545

**LOCATION:**  
Mid-Atlantic (NC)

### CHALLENGE:

New media in an anhydrous hydrogen fluoride plant revealed incompatibility between the HFSA chemical and an off-specification gasket just before start-up.

### SOLUTION:

Expedited fabrication and delivery of Garlock GYLON® 3545 gaskets.

### OUR ADVANTAGE:

- Immediate and effective technical and commercial response
- Short lead time on replacement
- Large selection of fluid-sealing solutions
- No work stoppage
- Avoidance of potential safety hazard and product release

## PROJECT SUMMARY

As Nutrien neared the start-up of their new anhydrous fluoride (AHF) plant, a site engineer identified that the Garlock GYLON 3504 gaskets installed by the contractor were not the gaskets originally specified in the plant build. The 3504 gaskets, while compatible in other areas of the plant, would not be compatible with the HFSA chemical in the system due to the gaskets' silica content.

When the situation was discovered, the Nutrien site engineers made a single call: Ferguson Industrial. Our representative leveraged our manufacturer partnership with Garlock to arrange an emergency, after-hours meeting with all involved parties. The application and chemical compatibilities were reviewed, and the team discerned Garlock GYLON 3545 as the proper replacement product.

The next morning, Ferguson Industrial mobilized the gasket fabrication shop in Hampton, Virginia, to begin cutting new gaskets with in-stock product. The variety and quantity of available inventory at the Hampton location enabled the team to fabricate and deliver enough gaskets for the site engineers to begin replacing the off-specification product within 48 hours.

Given the scope of the replacement, additional material was needed to complete the project. Our strong relationship with the manufacturer significantly reduced the lead time for the remaining materials, which were fabricated and delivered as soon as possible to avoid any work stoppages.

The emergency collaborative effort on behalf of the Nutrien site engineers, Garlock applications engineer and Ferguson Industrial associates allowed work to continue through the plant's final phase of commissioning. The plant's operations went live as scheduled the following week with full confidence in the system's integrity. The product, provided as a result of a commitment to quality people, products and processes, averted a potentially severe safety hazard and costly media release.

## CUSTOMER PROFILE

Nutrien produces and distributes over 27 million tons of potash, nitrogen and phosphate products for agricultural, industrial and feed customers worldwide. Combined with a leading agriculture retail network that services over 500,000 grower accounts, Nutrien is well positioned to meet the needs of a growing world and create value for their stakeholders.

