

## Award Winning Drumming Facility

*Lubrizol Painesville Township facility project received an Ohio Chemistry Technology Council Award in 2018. Nexus helped the award-winning project improve safety and optimize product logistics.*



*Lubrizol Painesville, OH*

The Vision Project was designed to improve the overall safety of Lubrizol employees while optimizing product drumming and packaging. This project started with an assessment of

product movement, drumming, and packaging options to meet business requirements. The selected option was planned and executed to both deliver future business benefits while minimizing the impact on current operations. The plan included a multi-phase sequence approach to first relocate parking and other existing facilities creating space for the new centralized drumming facility and associated systems.

### challenge

The challenge was to improve safety, maintain existing operations, and deliver a state of the art facility and systems to effectively move and package more than 400 existing and future products from multiple production units. Adding to the challenge is the wide range of product viscosities, temperatures, and purity requirements to be maintained in the system design. The distances between existing production units and the new drumming area presented a classic distribution optimization challenge to determine the optimum mix of new piping headers and a closed-loop pigging system.

### solution

Working closely with business, operations, and maintenance personnel, the product distribution and sequencing options were identified. Potential solutions were based on current and future volumes and individual viscosity, processing temperatures, and purity requirements. The resulting design includes a piping and pigging system that moves 85% of Lubrizol products to a new automated drumming facility while maintaining product purity requirements. The remaining products will be packaged near their production units.

### result

The new drumming facility provided Lubrizol with the ability to concentrate handling of all drums and totes in each local production area. As a result, the new facility reduced truck and tow motor traffic within the production facilities.

### client name

Lubrizol

### location

Painesville, OH

### services provided

- Project Management
- Project Services
- Process, Mechanical, Piping
- Structural, Electrical, I&C
- Specifications for Equipment
- 3D Modeling & Laser Scanning

### specifications

- 30,000 Total Square Feet
- Plant capacity 450 employees
- Design phase – 15 months
- Build phase – 18 months
- Improved Safety while Optimizing Drumming

### results

The new Lubrizol facility is progressing towards meeting business and safety requirements.

Associated with this project was a new warehouse storage facility for all Lubrizol products. Space within the production plant used for storage was reduced. In addition, truck traffic was moved outside of the production plants.