

# Case Study: Chemical Processing

## Style 204 Expansion Joint for Abrasive Applications



### INDUSTRY

Chemical Processing - Abrasive application

### OBSERVATION

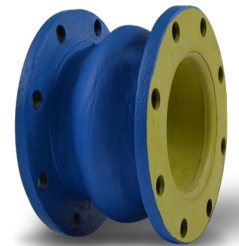
A stainless hosing was used and would continuously fail due to abrasion on the leading edge of the hose. The hosing would last for 3 to 6 months before replacement.

### BACKGROUND

This chemical plant based in Southern United States produces fluid catalytic cracking (FCC) catalysts, co-catalysts and additives used by petroleum refineries to convert crude oil into gasoline, other transportation fuels, heating oil and petrochemical feed stocks. Kaolin based microsphere intermediaries are used to manufacture the FCC catalysts and co-catalysts.

### OPERATING CONDITIONS

1. Size: 4" x 10.5" 204 ABRA-LINE™ Expansion Joints
2. Temperature: 140°F
3. Application: Transfer piping
4. Media: Zeolite based catalysts (42% total solids), pH 13
5. Flow: 200 Grams per minute



### SOLUTION AND BENEFITS

The 204 ABRA-LINE™ was chosen as the best solution, and has now been in service for over 2 years yielding more than 4x the service life of the stainless steel hosing.

### PROPOSITION VALUE

Garlock Expansion Joints offer superior performance, reliability and service life. This results in an improvement in plant safety, an increase in the mechanical integrity of equipment and allows customers to gain a competitive advantage in the market place.

For more information, please visit:  
<http://www.garlock.com>