

GeoGauge Use in Chemical Soil Stabilization Projects

Todd Hawkins

SPR-2 (212) GeoGauge Pool Fund Meeting

TFHRC, McLean, VA

Midwest Industrial Supply, Inc. Today

- **Premier Supplier of Chemical Dust & Erosion Control, Soil Stabilization, Remediation, and Anti- Icing Strategies for the 21st Century**
 - Product Excellence & Reliability
 - Application Design
 - Customization
 - Turn-key Service
 - Innovation

BUSINESS SECTORS

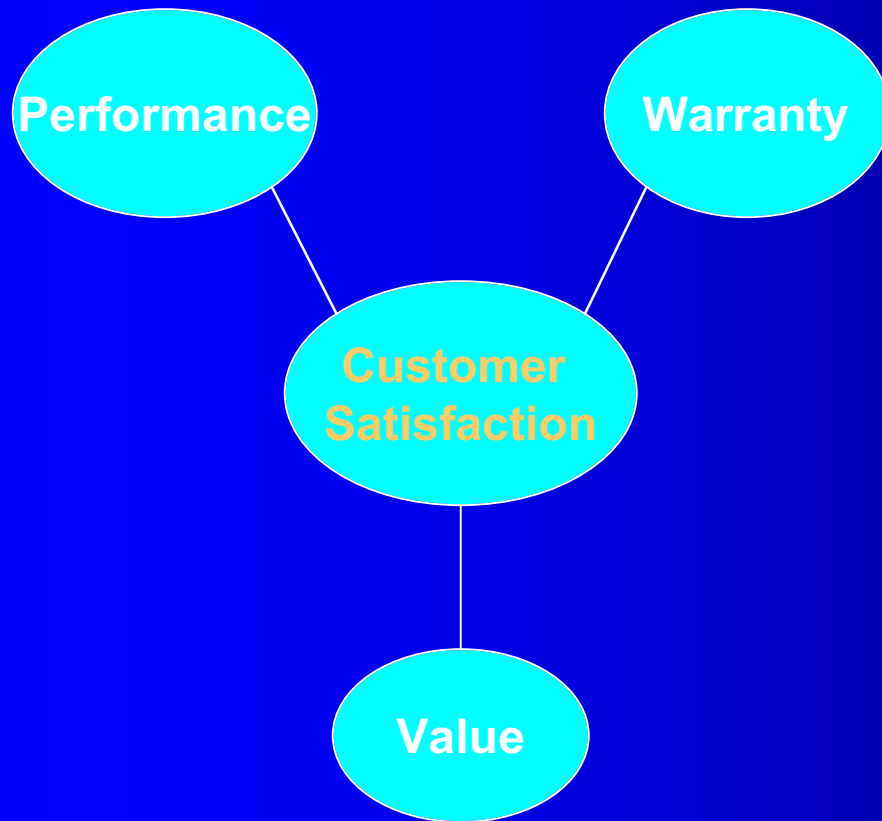
- **Dust Control & Soil Stabilization**
- **Process Dust Control**
- **Soil Engineering & Testing**
- **Equestrian**
- **Anti-icing / Deicing**
- **International**

Midwest's Objectives for Adopting the GeoGauge

- Design Integrity
- Installation Integrity
- Quality Control

- Marketing Advantage

Customer Needs



- GeoGauge integral in support of customer requirements
- Performance
- Warranty
- Value

Meeting the Needs at Nellis, AFB

- Performance Specification
 - 25% minimum CBR increase
 - Lab
 - Field
- Warranty
 - 2 years
- Value
 - Safety
 - Reduction in maintenance
 - Infield
 - Aircraft



Meeting the Needs Elsewhere

- South African unpaved clay roads
- Arctic & Sub-arctic gravel runways
- South Pacific crushed coral runways
- Kaho'olawe Island, Hawaii
- New Product Development



Performance

- Optimization of Installation Design
 - Correlate with laboratory soil testing & analysis
 - CBR, UCS, etc.
- Installation Control
 - In-process inspection
 - Prep, compaction, cure
- Final Inspection



Warranty

- Design & Process Controls facilitate ability to warranty our product and validate performance claims
- Reduction of Failures

Value

- Demonstrated Improvements to Load Factor calculations and Rolling Resistance
 - Decrease in Travel Time
 - Fuel Savings
 - Tire Savings
 - Lube, Oil, Filter Savings
 - Labor Savings
 - Savings in Lost Production
- Example- 2% reduction in Rolling Resistance translates to \$1,800,000 annual savings at Mississippi coal mine.

GeoGauge Benefits

- Supports Midwest Objectives
 - Design Integrity
 - Installation Integrity
 - Quality Control
- Supports Customer Requirements
 - Performance
 - Warranty
 - Value
- EASE OF USE & Transport to remote locations



Next Steps

- Develop laboratory techniques & correlations that translate directly to field operations for precise process controls & predictions
- Develop soil & product specific data for use in installation design practices
- Create ASTM/AASHTO specification for field evaluation of chemically stabilized soil?

Contact Information

Todd Hawkins

Midwest Industrial Supply, Inc.

Phone: 330-456-3121

Fax: 330-456-3247

E-mail: todd@midwestind.com