

# Nitric Acid Plant Training

Customized with focus on Operational Performance Monitoring to Maximize Production & Reliability

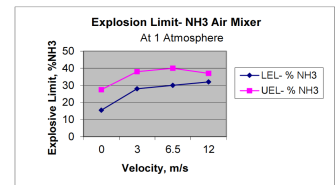
CUSTOMIZED TRAINING WITH SIMULATION OF NITRIC ACID PLANT CONFIGURATION

SINCE 2005

## Nitric Acid Plant Training

by VK Arora, Kinetics Process Improvements

KPI is an independent Process Technology consulting and Engineering group specializing in Ammonia, Methanol & Petrochemicals Plants troubleshooting, Performance Improvements and Training since 2006. Houston & Bahrain offices.



### Resources & Expertise

- Provided Training since 2006
- Trained >200 Personnel
- Troubleshooting and Design experience in all Nitric Acid Plant Configurations/Sizes

### Objectives & Key Benefits

- To enhance process knowledge & understanding of plant operations to improve Reliability & Efficiency
- Target group to include Process, Operating/Maintenance and Engineering personnel

### References

- MHI-1, MHI-2

### Brief Course Outline

- Nitric Acid Technology Updates
- Nitric Acid Market brief
- Reaction Chemistry Oxidation
- Reaction Chemistry- Absorption
- Ammonia Quality Considerations
- Ammonia Vaporization & Filtration
- Air Preheat & NH3: Air Mixing
- NH3: Air mix Safety Considerations
- Oxidation Reactor Configurations
- Oxidation Catalyst Considerations
- Pt loss & Recovery systems
- Start-up Burner issues
- Reactor Effluent cooling
- Absorption & Bleach operations
- Metallurgy & Corrosion Issues
- NOx Abatement
- Weak NA Pumping issues
- NA Storage considerations
- Steam System
- S/Up & S/Down Considerations
- Performance Monitoring-Equipment
- Simulation Model demo- Full Plant

### Kinetics Process Improvements

16000 Park Ten Pl.,  
Suite#903  
Houston- 77084 (USA)  
Phone: 281 773 1629  
Fax: 832 565 9360  
Email: [info@kpieng.com](mailto:info@kpieng.com)  
Web: [kpieng.com](http://kpieng.com), [kpieng.net](http://kpieng.net)

