



JENIKE
& JOHANSON
SCIENCE ENGINEERING DESIGN

May 18-19, 2017 - Curitiba, Paraná
Course runs from 8 – 5:00 pm

FLOW OF BULK SOLIDS IN BINS, HOPPERS, FEEDERS, AND CHUTES

Training by Jenike & Johanson

Organized by Mondelēz – Curitiba facility





ABOUT THE LECTURERS

Rogério is responsible for the day-to-day operations of the Brazil office, and he routinely visits clients' sites to review bulk material handling problems or discuss new solids handling applications. He has worked on a variety of material handling projects, from transfer chute re-design, to plastic powder handling, to increasing capacity in gravity reclaim stockpiles.



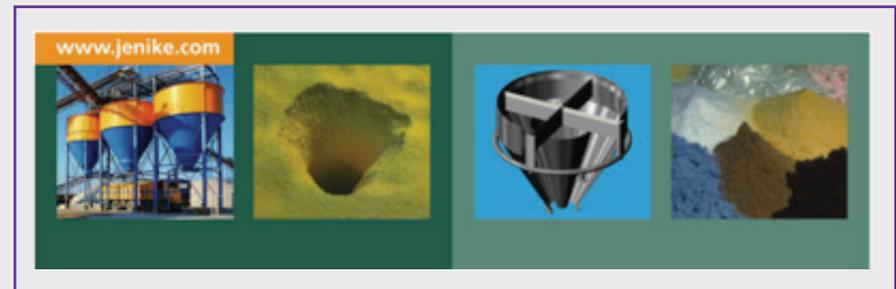
Eric Maynard is a Senior Consultant and the Director of Education for J&J. During his 20 years at J&J, Eric has designed over 750 handling systems for bulk solids including agricultural products, resin pellets and powder, specialty chemicals, catalysts, cement, minerals, food products, and pharmaceuticals. He has extensive experience with dust explosivity and powder electrostatic applications. Eric is a mechanical engineer.



ABOUT THE COMPANY

Jenike & Johanson is a specialized engineering firm focusing on providing a means for clients to obtain reliable bulk solids flow. We strive to find the most economical, efficient and innovative ways to eliminate or reduce bulk solids flow problems in existing facilities, and to prevent such problems from occurring in new facilities. We provide a range of services, including consulting, testing, detail design, and equipment supply, all in the area of bulk solids flow technology.

Since our beginning in 1966, we have provided service to thousands of clients worldwide. We have tested over 13,000 bulk solids used in industries such as pharmaceuticals, chemical processing, plastics, power/utilities, metals, mining, solid waste, glass, pulp and paper, foods/food processing, and consumer products from detergents to eye shadow. Collectively, our engineers have over 750 person-years of bulk solids handling experience. Our international corporate headquarters are in Tyngsboro, Massachusetts. In addition we have full service engineering offices and laboratories in San Luis Obispo, California; Toronto, Canada; Viña del Mar, Chile, and Perth, Australia. We also have satellite offices in Houston, Texas and Vinhedo, Brazil.



Two-day intensive course on bulk material flow principles

LEARN HOW TO EFFECTIVELY DESIGN SILOS, BINS, HOPPERS, CHUTES, AND FEEDERS



Two-days of intensive and practical training for effective design and troubleshooting principles for handling bulk solids in silos, bins, and feeders.

Strategies for alleviating costly flow problems are presented, as well as proven techniques to design storage and feeding equipment so that it operates efficiently, safely, and reliably from the start.



Handling or processing powders and bulk solids can be fraught with problems, whether you are dealing with chemicals, plastics, pharmaceuticals, foods, cement, minerals, or metals. This in-depth, two-day course will provide solid insights into common flow problems that arise when powders and solids are put into silos and hoppers.

Cost-effective, valuable training for your business

DETAILED COURSE DESCRIPTION

This course provides delegates with a fundamental grounding in the key areas of bulk solids handling equipment selection, design, and troubleshooting. Strategies for alleviating costly flow problems in silos, bins, and feeders are presented, as well as proven techniques to design solids handling equipment so that it operates efficiently, safely, and reliably from the start.

In the first day of the course, a review of bulk material flow fundamentals is presented, including common flow problems, types of flow patterns in

equipment, and how flow properties of bulk solids are measured. Feeder design and troubleshooting techniques are discussed. Focus will be upon screw, belt and rotary valve feeders.

In the second day of the course, the delegate will learn why transfer chutes commonly experience material plugging, spillage, and generate dusting and belt-off tracking.

A step-by-step method for a proven silo design process will be presented, along with highlights upon key decision points for the design process.

DETAILED COURSE OUTLINE

DAY ONE

- Typical bulk solids flow problems
- Hopper flow patterns (funnel and mass flow)
- Flow properties characterization
- Design of volumetric and gravimetric feeders
- Transfer chute design

DAY TWO

- Fine powder flow phenomena and fluidization
- Example Flow Properties Test Report
- Step-by-step silo design example
- Segregation mechanisms and solutions
- Flow aid devices



KEY LEARNINGS

- Review Common Flow Problems
- Understand Silo Flow Patterns
- Discuss Bulk Flow Properties
- Select, Troubleshoot Feeders
- Understand Conveying Issues
- Review Cargill Case Histories



BENEFITS OF TRAINING

Training helps to foster greater awareness of operating efficiency, safety, and process improvement.



REGISTRATION

Contact Rogério Ruiz or Leonardo Nakazome at +55 (19) 3886-1179 or info-brasil@jenike.com

Included in the course:
- Notes, breakfast, lunch, snacks



Dress: business casual

TESTIMONIAL

"The Jenike & Johanson course leader is among the best professors I've ever had! Nice work! Good presentations; practical but with enough theory. Provided usable skills." - Stephen Galante, Elf Atochem

Investment R\$1.900 per person