

Learn Anywhere, Learn Anytime

Catering to meet all your learning needs:

• Face To Face • Live Online Training • On-site & Customised Training



PNEUMATIC CONVEYING FUNDAMENTALS

LIVE ONLINE TRAINING

August 2021

Part 1: 10th August

Part 2: 11th August

Course Parts will commence at **08:00** and end at **12:00 AWST (Perth)**. There will be short breaks during each course Part.

2 Part Series



Our Expert Course Instructors



Corin Holmes

Corin is the Operations Manager for Jenike & Johanson Pty Ltd in Perth, Australia, and is passionate about applying the science of bulk solids handling to help people and organisations succeed, especially those in the resources sector. He received his Master's degree from The University of Greenwich and is a member of AusIMM.



Eric Maynard

Eric joined Jenike & Johanson in 1996 and is now a Vice President and Director of Education. He has published over 50 articles on the storage, flow, and pneumatic transport of bulk solids. He is the principal instructor for the "Flow of solids in bins, hoppers, chutes, and feeders" and "Pneumatic conveying of bulk solids" courses.

Key Learning Objectives

- ▶ Review modes of conveying (dilute and dense phase pneumatic conveying)
- ▶ Examine types of systems (positive pressure, vacuum, pull/push, closed loop)
- ▶ Grasp fundamental science for gas and solids flow through pipelines
- ▶ Learn vital terminology (saltation and pickup velocity, solids loading ratio)
- ▶ How to read a state diagram illustrating system performance
- ▶ Dense phase conveying technology
- ▶ Consider the four primary system components (gas mover, silo/feeder, pipeline/bends, separator)
- ▶ Review the selection of key primary system components, such as elbows and line chargers
- ▶ Discuss features of solids separators (including cyclones, filter/collectors, bag houses)
- ▶ Troubleshoot conveying problems (including wear, attrition, rate limitation, plugging)

PNEUMATIC CONVEYING FUNDAMENTALS

LIVE ONLINE TRAINING

August 2021

Part 1: 10th August

Part 2: 11th August

Course Parts will commence at 08:00 and end at 12:00 AWST (Perth). There will be short breaks during each course Part.

2 Part Series

ABOUT THE COURSE

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

In this course, a review of gas/solids flow fundamentals is presented, including common pneumatic conveying problems, modes of transport in a pipeline, and how scale-model tests can be used to effectively design or evaluate systems that are operating poorly. Conveying line solids feeders are reviewed, as well as a discussion of proven pipeline layout rules and elbow/bend selection criteria.

Specialised topics of dense phase conveying systems and gas/solids separators, such as cyclones, filters, or bag houses are presented. Theory is supplemented with real-life industrial case histories to illustrate the complex concepts taught. Practical exercises are also provided to help increase participant understanding of the course theory and application.

WHO WILL BENEFIT

Those involved with designing, selecting, troubleshooting, maintaining, or purchasing pneumatic conveying equipment. Job titles include, but are not limited to: Plant and project managers

- Operation or process managers
- Project, process, and maintenance engineers
- Unit operators and superintendents
- Personnel new to the field of pneumatic conveying

EXPERT COURSE INSTRUCTORS



Corin Holmes

Corin is the Operations Manager for Jenike & Johanson Pty Ltd in Perth, Australia, and is passionate about applying the science of bulk solids handling to help people and organisations succeed, especially those in the resources sector. He received his Master's degree from The University of Greenwich and is a member of AusIMM.

The flow behaviour of bulk solids is deceptively complex and often treated with contempt during the design stage hence there are plenty of "opportunities for improvement", in almost every industry. As a bulk solids handling engineer with 15 years' experience, he has designed many bulk material handling and systems with a special focus in the mining industry. As such, he gets plenty of opportunity to indulge his passion, which he enjoys sharing with others! This deep practical experience combined with his accomplished and entertaining presentation style ensures that you won't be disappointed!



Eric Maynard

Eric joined Jenike & Johanson in 1996 and is now a Vice President and Director of Education. He has published over 50 articles on the storage, flow, and pneumatic transport of bulk solids. He is the principal instructor for the "Flow of solids in bins, hoppers, chutes, and feeders" and "Pneumatic conveying of bulk solids" courses.

Eric has presented bulk material and pneumatic conveying technology at over 300 training events world-wide. He has designed more than 750 bulk material handling and conveying systems for various powders and bulk solids, with a special focus on the cement, power, and mining industries. Eric is responsible for internal training of engineers at Jenike & Johanson. Eric has particular interest in crushing technologies for minerals, as well as in the safety aspects of dust explosions and powder electrostatics. He has received certified training on dust hazards analysis (DHA; per NFPA 652 chapter 7 requirements) and can perform inspections on the unique hazards with combustible dusts such as foods, plastics, metal powders, and agricultural materials/wood. He is a member of ASME, AIChE, and the National Fire Protection Association (NFPA). Eric received his Bachelor's degree in Mechanical Engineering from Villanova University and a Master's degree in Mechanical Engineering from Worcester Polytechnic Institute.

Learn Anywhere, Learn Anytime

Catering to meet all your learning needs:

- Get **high quality** practical training from our expert instructors
- From **Face To Face**, **Online** and **Blended Learning**, get a superior solution for your learning needs
- Learn **live online** in an interactive environment
- **Invest** in yourself. Invest in your team.

Register today for our Live Online Training courses and find out how they can help you transform the way you work. Contact one of our training consultants on training@informa.com.au to find out more.

PNEUMATIC CONVEYING FUNDAMENTALS

LIVE ONLINE TRAINING

August 2021

Part 1: 10th August

Part 2: 11th August

Course Parts will commence at **08:00** and end at **12:00 AWST (Perth)**. There will be short breaks during each course Part.

2 Part Series

Course Outline

Review of pneumatic conveying fundamentals

- Review of basic technology and example systems
- Review of modes of conveying (dilute and dense phase)
- Types of systems (positive pressure, vacuum, pull/push, closed loop)

Activity #1 – Workshop/quiz for pneumatic conveying fundamentals

- Fundamental science for gas and solids flow through pipelines
- Terminology review (e.g., solids loading ratio, saltation, choking)
- Reading a state diagram and understanding gas flow and solids rate effects
- Components selection (i.e., gas mover, silo/feeder, pipeline/bends, separator)

Activity #2 – Workshop/quiz for system component selection

- Dense phase conveying technology
- Troubleshooting problems (e.g., wear, attrition, rate limitation, line plugging)

WHAT OUR CLIENTS SAY

"Clear confident presenter with good visual aids. Herman has an excellent ability to relate theory and practices. Very good presentation and communication skills too most enjoyed learning how to confidently approach transfer chute design. Colin is excellent, extremely knowledgeable, expert in the field."

Principal Engineer, Rio Tinto

"Extremely knowledgeable in the area of bulk handling."

Optimisation Engineer, BHP Billiton

Would You Like To Run This Course On-Site?

Informa Corporate Learning: On-site & Customised Training

If you have **8+** interested people, an onsite course can be an ideal solution. Speak with **Anton Long** on **+61 481 995 653** or **Holly Baldwin** on **+61 450 866 597** to discuss your customised learning solution, or email training@informa.com.au



PNEUMATIC CONVEYING FUNDAMENTALS

LIVE ONLINE TRAINING

August 2021

Part 1: 10th August

Part 2: 11th August

Course Parts will commence at **08:00** and end at **12:00 AWST (Perth)**. There will be short breaks during each course Part.

2 Part Series

Easy Ways to Register

1 Web
www.informa.com.au/pneumaticconveying

2 Telephone
+61 (02) 9080 4032

3 Email
training@informa.com.au

Learn Anywhere, Learn Anytime

Catering to meet all your learning needs:

- Get **high quality** practical training from our expert instructors
- From **Face To Face, Online** and **Blended Learning**, get a superior solution for your learning needs
- Learn **live online** in an interactive environment
- **Invest** in yourself. Invest in your team.

Register today for our **Live Online Training** courses and find out how they can help you transform the way you work. Contact one of our training consultants on training@informa.com.au to find out more.

Pneumatic Conveying Fundamentals

Course Code	Location	Course Parts	Month	Standard Price	4+ Dels Discount
P21GE13PEV	Live Online Training	All 2 Parts	August 2021	\$1,695 + \$169.50 GST	\$1,864.50 Great Savings: When you book 4 or more participants! Call us today on +61 (2) 9080 4032 or email training@informa.com.au to take advantage of the discount offer.

Privacy Policy & Updating your Details:

Please visit us online at www.informa.com.au/privacy for a full privacy policy. Database amendments can be sent to database@informa.com.au or phone **+61 (0) 2 9080 4017. ABN: 66 086 268 313**

Informa Corporate Learning – On-site & Customised Training

Informa Corporate Learning has a long-standing track record of delivering very successful customised learning solutions achieving real and measurable value for our clients through our senior training consultants.

If you have 8+ interested people, an on-site course can be the ideal solution – giving you the opportunity to customise our course content to your specific training needs, as well as attracting significant savings compared to public course costs.

Why Choose On-site With Informa Corporate Learning?

- 1. Custom design** – Together, we will identify the best blended learning solution for your culture, your people and your training objectives.
- 2. Quality Assured** – We design market-leading training programs, concepts and methodologies, with a 400+ course portfolio. Our rigorously selected 900+ instructor faculty are recognised experts in their field. Quality of their content and delivery methods is assured through continuous monitoring and evolution.
- 3. On-site training** is a cost effective way to train your people and achieve your defined outcomes.

Our Long Standing Clients Include:

ActewAGL, Ajilon, Ambulance Victoria, ANU, Arrow Energy, Australian Super, Barrick, BHP, Chevron Australia, Coffey International, ConocoPhillips, CSIRO, Dalrymple Bay Coal Terminal, Department of Education, Department of Planning, Electricity Generating Authority of Thailand (EGAT), ENI Australia, EY, Fortescue Metals Group, Health Purchasing Victoria, IBM, IP Australia, Jemena, Litmus Group, Metro Trains, Office of the National Rail Safety Regulator, Origin Energy, Pacific National, PT Freeport, Public Transport Authority – WA, QGC – BG Group, Queensland Rail, Rio Tinto, Romgaz, SA, South Australia Health, Telstra, Transport & Infrastructure, UBS, Woodside and more...

Speak with **Anton Long** on **+61 481 995 653** or **Holly Baldwin** on **+61 450 866 597** to discuss your customised learning solution, or email training@informa.com.au