



25. - 27. Apr. 2023

Storage and Discharge of Powders and Bulk Materials

Course – Chatham, United Kingdom

Edited by on 25. Jan. 2023

"A basic course covering the operation, design and specifications of hoppers and silos for reliable discharge."

Hoppers, silos, bins and bunkers are widely used in industry for storing bulk solids materials. However, these facilities can experience operational problems – often because facilities have been designed without knowledge of the flow characteristics of the material to be stored. This intensive course has been specifically designed to help solve problems like these.

This short course covers:

- Basics of hopper and silo design and function
- Dealing with potential problems
- Discharge aids and interfacing to feeders

Course Dates

25 - 26 April - Theory course via presentations

27 April - Practical Workshop

Course Fee

£825 per delegate - Theory element only

£1260 - full course including Workshop

[Discounts](#) are available for group bookings and returning delegates.

Registration

Registration and payment is available via the [on-line shop](#).

Subjects covered

We'll cover the basics in operation, design and specification including an introduction to the storage and flow of bulk solid materials in hoppers, silos, bins and bunkers, feeders and feeding, hopper discharge aids and the prediction of discharge rates.

We will also look closely at ways to determine the correct design for reliable discharge, including determining flow properties of bulk solids, hopper geometry and practical design considerations.

For those wanting a more in-depth look at the Design of Equipment for Storing and Discharging Bulk Materials, an [advanced course](#) has been designed. This is available as an In-Company course

Format

With an emphasis on practical aspects of technology, we'll begin with a comprehensive introduction to give a basic understanding of the operation of hoppers and silos, before moving on to more detailed work.

We'll use case studies throughout to illustrate the presentations, with plenty of discussion periods so that we can analyse any specific problems experienced by attendees.

Practical Workshop

The workshop will allow delegates the opportunity to participate in demonstrations using some of the equipment discussed in the course. For more information on the workshops please see [here](#)

Is this for me?

If you are a plant designer, plant manager or work in maintenance, this course will improve your ability to deal with the design and troubleshooting of plants.

You'll also benefit if you are from operational staff or senior management through a better understanding of what can go wrong and how to make your plant as efficient and trouble-free as possible. The course is ideal for those new to materials handling, those who require an update on the subject, or those who need a working knowledge of a wide variety of materials handling technologies.

Venue

The course will take place at the University of Greenwich Medway campus in Kent ME4 4TB

Course team

The course leader is [Richard Farnish, Consultant Engineer](#), with over twenty years' experience in commercial design work related to materials handling.

Contributions may also be made from the rest of the Team, including [Mike Bradley](#), Professor of Bulk and Particulate Technologies and Director of The Wolfson Centre. He has worked internationally on design and troubleshooting of bulk solids handling as a commercial consultant and research expert for over twenty years;

Dr Baldeep Kaur, whose interests lie in characterisation and transportation of bulk materials;

[Dr Vivek Garg](#), whose interests lie in powder flowability;

[Dr Lucas Massaro Sousa](#), whose interests lie in fluidisation, solid feeding devices and CFD simulation;

[Dr Atul Sharma](#), whose interests lie in pneumatic conveying systems.

Please note that The Wolfson Centre reserves the right to substitute leaders of equal quality should this be dictated by circumstances beyond their control.

