5. - 6. Dec. 2023

Electrostatics in Powder Handling

Course – Chatham, United Kingdom
Edited by on 25. Jan. 2023
"The cause and effect of electrostatic charging in bulk solids handling"
Electrostatic charges generated during industrial powder handling processes may give rise to unwanted particle cohesion or adhesion, which in turn results in difficulties such as particle agglomeration, segregation, material build-up on equipment and ignition of explosion, etc. Its impact is felt in terms of lower production yields and increased process downtime, or high risks to safety in manufacture.

The charges are most likely generated by tribo-charging, which arises from particle-particle and particle-wall contacts. Its behaviour is erratic and not easy to predict. Nevertheless it is always desirable to characterize the charging tendency of raw materials so that corrective action can be taken prior to full scale manufacture.

Course Dates

5 - 6 December 2023

The course will run online over 2 sessions; each session will start at 09:00 hrs UK time; both sessions need to be attended to complete the course.

Both days provide the opportunity to discuss operational issues with the presenters and other delegates.

Course Fee

£450 per delegate. Discounts are available for group bookings and returning delegates.

Registration

Registration and payment is available via the on-line shop.

A link to join via MS Teams will be sent in the week prior to the course starting.

Course content

This course discusses the causes and effect of electrostatic charge in bulk solids handling, and the hazards caused to product quality control and risk assessment. Principal charge measurement techniques are reviewed and their use in the prediction and solution of problems discussed.

Is this for me?

Plant operators and designers, plant managers and maintenance personnel will all benefit enormously from attending this course, through improving their understanding of the behaviour of powders to learning techniques to overcome the problems encountered.

The course will be of great interest to personnel that are new to materials handling, or require an update on the subject.

Course team

The course leader is Mike Bradley, Professor of Bulk and Particulate Technologies and Director of the Wolfson Centre. He has worked internationally on design and troubleshooting for bulk solids handling as a commercial consultant and research expert for over twenty years.

Contributions may also be made from the rest of the Team, including
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.