

Explore the world of Vacuum Conveying and Powder Handling

PRACTICE-ORIENTATED SEMINAR FOR PROCESS ENGINEERS (1 DAY SEMINAR)

VACUUM CONVEYING & POWDER HANDLING

Date: Tuesday, 3rd December 2024
Place: Soest / Germany

Optional: 2 days combi
Can be combined with the „Hands-On“-Seminar
Optimisation of Vacuum Conveying Systems
(then a discount of 100,- € would apply on the total)

ASPIRATION, CONVEYING AND FEEDING OF ALL KIND OF BULK MATERIALS AND POWDERS

During the last decades Vacuum Conveyors have become of a much wider use in all kinds of industries. Therefore, more and more knowledge is required to fully understand the function, applications and optimisation of these Powder-Transfer-Systems. After having done this seminar for so many years in German language, it is time for a full English version. Parts of this seminar has been done in the form of webinars already, but this cannot replace a full practical seminar in presence with many „hands-on“ demonstrations at Volkman's headquarter in Soest, Germany.

The deep understanding of Vacuum Conveying technology in conjunction with the overall process chain and material flow throughout the various types of production plants, leads always to new ideas. Therefore, practical application knowledge will be transmitted and can directly be used to optimise existing or new production processes.





„For me it was a very interesting seminar, which was clearly structured and very practically orientated. I found the intensive dialogue during the coffee breaks and at the various demonstration machines very good. The friendly staff and lecturers, as well as the good catering, made the overall impression of a well-rounded event. Thank you again from my side, I had lot's of fun.“

Björn Förster, Grünenthal GmbH

Starting with a deep introduction into the main components of a Powder-Transfer-System and their function, an overview of typical applications is given. The different types of conveying methods are not only shown in the presentation but also practically demonstrated in the test room at an operating system.

Another lecture covers the integration into the material flow and gives lot's of examples of customized, special solutions for demanding powder handling tasks covering industries like food, pharma, chemical, battery, additive, ceramic, paint, animal feed, metal and 3D-printing.

Bag dumping stations, feeding hoppers, Big-Bag unloading stations, Weighing & Dosing devices, lump breakers and their smart combination with Vacuum Conveying completes the powder supply chain. High demands into the hygienic design, WIP- and CIP- solutions and the avoidance of cross-contamination and segregation are typical discussion points. Containment is an issue, either to protect the operators from the potentially toxic powders or to protect the precious and hygienic materials from environmental influences.

The low speed dense-phase Vacuum Conveyors offers a very gentle transport even for fragile materials like tablets, capsules,

explosive propellants, or glass fibers. Also examples of typical energy consumptions are given and a method to calculate them up-front.

Since most powders and bulk materials are more or less combustible, Explosion Protection, ATEX and electrostatics are covered too, as far as Vacuum Conveyors are concerned. Hence, reasons enough to share the over decades collected Know-How in form of a practical seminar in the technology and production center of Volkmann in Soest / Germany.

This practical seminar is therefore aimed at production managers, process engineers, plant engineers, planners, plant foremen and users from all branches of industry, including plant construction and EPC (Engineering, Procurement, Commissioning).

We look forward to welcoming you to our development and production site here in Soest.

Thomas Ramme
Dipl.-Ing. B.Eng.(Hons.)
Director Technical Sales



- from 08:30 am Registration and reception at Volkmann in Soest, coffee & tea
- 09:00 – 10:30 Start of seminar:
Part I.: **Lectures of the seminar:**
Introductory lecture: „Pneumatic vacuum conveying of solids“
Bulk material transport, comparison with other conveying systems, functional principle, main components, ignition source-free vacuum generation, application examples.
- 10:30 – 11:00 **Practical demonstration of dilute-, dense-phase- and plug flow- conveying**
- 11:00 – 11:15 Coffee break and discussion
- 11:15 – 12:15 **Integration into the material flow and hygienic design aspects**
Customization of Vacuum Conveying system with project examples covering the feeding of materials out of Drums, Sacks, Big-Bags, Containers including lump breaking and dust aspiration. Special extensions like Weighing, Dosing, Cleaning/Washing in Place, Containment and sieving, drying and mixing in the Additive Industries.
- 12:15 – 12:30 Coffee break and discussion
- 12:30 – 13:00 **Energy consumption for „Pneumatic conveying with vacuum“** Case studies, compressed air for intermittent vacuum generation, system comparison: Vacuum generation with multi-stage gas jet pumps versus electromechanical vacuum pumps.
- 13:00 – 14:00 **Vacuum Conveying in Explosive Areas** (Powder- & Gas- EX zones) Application of the ATEX regulations, ignition source analysis, basic scheme of electrostatics and forms of discharge, assessment for Vacuum Conveyors, conveying of combustible powders, certifications, requirements for conveying hoses, use in gas-EX areas, hybrid mixtures, INEX Vacuum Conveyors, reactor feeding (feeding of solids into gas-EX-areas).
- 14:00 – 14:45 Lunch break
- 14:45 – 16:30 Part II.: **Practical demonstrations, tests and trials** (in small groups)
- a. test center area: typical trial performance example, Big-Bag unloading station, Dust extraction on sack emptying station, lump-breaker in action, high-capacity conveying, electrical vacuum pumps, clean rooms visit.
 - b. show room area: explanation & demonstration of exhibits
 - c. manufacturing area: production process and steps, final assembly area
- around 16:30 Open end with final and individual discussions within the small groups.

„Motivated speakers who presented the topic in a factual, informative and interesting presentation with direct practical relevance in the neighbouring production halls. In short, a very successful event in a pleasant atmosphere.“

Sonja Spohr, Boehringer Ingelheim Pharma GmbH & Co. KG

INVITATION - Get-together at the evening before the event (18:00):

We would like to invite you to a city walk through the historical town center of Soest which would end at 18:30 at the „Brauhaus (brew-house) Zwiebel“ where we would like to invite you for dinner (all details after application).



APPLICATION / REGISTRATION

FOR THE ONE-DAY SEMINAR



VOLKMANN

IDEAS AHEAD

VACUUM CONVEYING & POWDER HANDLING

- Date: Tuesday, 3rd of December 2024 (one-day seminar in Soest/Germany)**
- Unfortunately I cannot come. Please keep me informed about future events.**
- The handling of powders and bulk materials is not / no longer part of my field of activity.
Please remove me from your mailing list.**

Venue: VOLKMANN GmbH, Schloitweg 17, D-59494 Soest / Germany

Costs: EUR 485.-- plus VAT(if applicable), incl. drinks, lunch, Get-together and Documents Folder for participants.
Payable before the event takes place after receipt of invoice.

Participant:

Company:

Phone/Fax:

E-Mail:

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Date, Signature, Stamp

REGISTRATION please by fax (++ 49 (0) 29 21 / 96 04 - 900) or e-mail (mail@volkmann.info)

Limited number of participants for optimum learning success and exchange of experience. Please register in good time.

Once we have received your registration, you will receive a confirmation of registration, invoice (payable before the start of the seminar), directions and a list of hotels. Of course we can help you with the room reservation. For cancellations up to 7 days before the start of the event, we charge a processing fee of EUR 100.-- plus VAT(if applicable). After this deadline, the full participation fee must be paid in accordance with the invoice. A substitute participant may be named. If an event has to be cancelled for unforeseeable reasons, the participant will be notified immediately. In this case, there is only an obligation to refund the participation fee already paid. Optionally, an alternative date may be proposed.

Note: Photos will be taken during the event for documentation and marketing purposes.

Organiser: VOLKMANN GmbH, Schloitweg 17, D-59494 Soest, Tel.: ++ 49 (0) 29 21 / 96 04 - 0, E-Mail: mail@volkmann.info

