

(i) Course Information

Duration of the course: 2 days

Number of participants: approx. 10

Location of the event: **NETZSCH Vakumix GmbH** in 28844 Weyhe-Dreye, Germany

Course fee includes

- 2 overnight stays with breakfast
- Catering during the event
- Lunch / dinner
- Seminar documents

Seminar Fee

including hotel costs: 1,500 € + VAT



② Our special Service for you

We also offer inhouse application or service seminars according to your specifications. If you are interested, please do not hesitate to contact us.

Organization

Mrs. Kerstin Herbst will be happy to advise you on all questions relating to organization

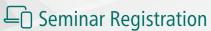
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Seminar Date

10.-11.09.2024



To register, please use our registration form on our website at www.grinding.netzsch. com or scan the following QR code:



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PAHRMASEMINAR | Micronization and Nanoization of Pharmaceutical Substances

The majority of approved pharmaceutical substances exhibit poor solubility in the human body. By reducing the particle size and thereby increasing the surface area of the active ingredient particles, the dissolution rate and thus the bioavailability can be significantly increased. This then means that the same effect can be achieved with smaller amounts of active substance, but with fewer side effects.

In the pharmaceutical industry, terms for comminution such as micronization and nanoization have become established. Agitator bead mills are primarily used for the process of wet grinding.

The costs for the development of a suitable formulation for new products or a production method for generics are primarily driven and determined by the price of the active ingredient itself. A reduction of the development costs can be achieved through a deep understanding of the effect of different process parameters.

In the "Micronization and Nanoization of Pharmaceutical Substances" seminar, the essential operating parameters will be discussed and presented in a logical context. Possible solutions for process optimization will be shown. The process will be considered holistically, from cleaning and sterilization to predispersion and micronization, through to bottling.

It will then be shown how a process developed on a laboratory scale can be transposed to an actual production scale.

We would like to invite you to a Welcome dinner at 7:00 p.m. on the evening before the seminar begins.

We will pick you up at the hotel at 8:00 a.m. on the first day of the seminar. The seminar will begin at 8:30 a.m. at NETZSCH Vakumix GmbH. You will receive all of the seminar documents along with additional information about the seminar.

At the end of the first seminar day, we look forward to a relaxed evening with you and some good food. Of course, catering service will also be provided during the day.

Target Group

Those responsible in the areas of:

- Research and Development
- Process design
- as well as operators of machines already in operation

Content of the Seminar

- Presentation of the Business Unit **NETZSCH Grinding & Dispersing**
- Characterizing the success of the comminution
- Terms and definition
- Overview of the grinding media-free dispersion systems – mixing, wetting and dispersing
- Overview of NETZSCH grinding systems, agitator bead mills
- Effect of different process parameters
- Model of the load energy and the number of impacts
- Effect of the dwell time distribution
- Grinding media selection and scale-up
- Calculation from laboratory to production scale
- Limits of wet grinding
- True comminution and gentle dispersion
- Discussion

