

OSD Academy.

Granulation – from powder to tablet

Come join us for our OSD Academy seminar "Granulation – from powder to tablet" with a bonus day focusing on Continuous manufacturing.

With a focus on granulation, this exclusive workshop will cover various topics related to high shear granulation, fluid bed drying, fluid bed granulation and continuous manufacturing in a combination of theory and practice to further deepen your know-how and to allow you to apply new insights to your everyday business.

PARTICIPATION FEE: € 1.450 (excl. VAT) for three days (€ 700 if you are only joining the Continuous manufacturing part on July 4), 10 % reduction for participants from a previous course (includes lunches and beverages during the seminar and dinner on the first and second day, transfers, and program). As soon as we receive your registration form, we will review your registration and email further instructions, such as banking details and more detailed information on the seminar.

REGISTRATION DEADLINE: June 3, 2024.

CANCELLATION POLICY: For written cancellations received up to 2 weeks prior to the start of the seminar, 20 % of the registration fees are due. For cancellations received up to 1 week prior to the seminar date, 50 % of the registration fees are due. For cancellations received within 1 week prior to the seminar date, 100 % of the registration fees are due. In the case of a non-appearance at the event without prior notification, the full course fees will be invoiced. A substitute participant is always welcome at no extra charge. Should it be necessary to cancel the seminar from our side, a full refund of the seminar fee will be granted.

TERMS OF PAYMENT

Payable in full within 10 days from date of invoice.

WHAT YOU WILL LEARN:

- A deep understanding of different granulation and continuous manufacturing methods and the strengths and limitations of each
- How to select the right process
- The physics of granulation, such as thermodynamics and fluid dynamics
- Learn about critical process parameters, critical product attributes and their impact
- How to trouble-shoot while developing your own granules and tablets
- How the quality of granules effects the quality of the tablets

ACCOMODATION: Hotel Stadt Lörrach

We have secured rooms at the Hotel Stadt Lörrach for all seminar participants., at Syntegon conditions for **125 EUR** per room per night, incl. breakfast. The hotel with its 178 modern rooms and suites is located just a minute's walk from Lörrach's main train station. Transport from the hotel to the seminar venue and back is organized.





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■ 08:45-09:00 AM REGISTRATION □ 09:00-09:30 AM WELCOME & INTRODUCTION TO PHARMA SERVICE ■ 09:30-10:30 AM BASICS OF GRANULATION TECHNOLOGY AND PROCESS SELECTION Basics of the function of the fluid bed and high-shear mixer. Comparisons between fluid bed and high-shear mixer granulation. Advantages and disadvantages of both methods and how to select the right process.

■ 10:30–10:45 AM COFFEE BREAK

■ 11:00–12:00 AM PROCESS PARAMETERS OF HIGH-SHEAR AND **FLUID BED GRANULATORS**

Parameters influencing the granulation process and how to use them

for process control.

12:00 AM-01:00 PM

LUNCH BREAK

□ 01:00-02:00 PM COMPRESSION - BASICS OF TABLETING

Influence of material attributes and process parameters on the compression process and resulting tablet quality.

■ 02:00-04:30 PM PRACTICAL INTRODUCTION INTO GRANULATION

PROCESSES

The participants will be divided into groups and will be introduced into different granulation processes, the analysis and the compres-

sion of the granules.

04:30 PM **TRANSFER**

06:30 PM **EVENING EVENT** Wednesday, July 03, 2024

■ 09:00-10:00 AM EXCIPIENTS FOR OSD

Overview of commonly used excipients, such as fillers, binders,

disintegrants, solubilizers.

■ 10:00–10:15 AM COFFEE BREAK

■ 10:15–11:00 AM PHYSICAL UNDERSTANDING OF GRANULATION -

BASIS FOR SCALE-UP

Parameters used for a successful scale-up and how are they

determined.

■ 11:00–12:00 AM TROUBLESHOOTING OF GRANULATION

Common challenges and mitigation techniques during fluid bed and

high-shear granulation from lab to commercial scale.

LUNCH BREAK 12:00 AM -01:00 PM

01:00-05:00 PM HANDS-ON WORKSHOP FOR DIFFERENT

GRANULATION PROCESSES

All participants will work in small groups on both projects: fluid-bed

granulation and high-shear mixer granulation.

05:00 PM **TRANSFER**

06:30 PM **EVENING EVENT** Thursday, July 04, 2024

Bonus track "Continuous manufacturing Aftermath"

09:00-10:15 AM CONTINUOUS MANUFACTURING - BEST FITS TO

YOUR NEEDS

Introduction to the Syntegon continuous manufacturing platform, its benefits and an overview of its development. Aspects from design, engineering, automation, quality and production as well as data from

trials will be discussed.

■ 10:15–10:30 AM COFFEE BREAK

□ 10:30–11:15 AM INNOVATIONS IN ORAL SOLID DOSAGE (OSD)

DEVELOPMENT

Introduction into automized process development, continuous

manufacturing and data driven services.

■ 11:15–12:00 AM CONTROL STRATEGIES FOR CONTINUOUS

PRODUCTION

From balance to PAT tools - Why simplification is the only

sophistication

12:00 AM -

01:00 PM

LUNCH BREAK

□ 01:00-01:45 PM CASE STUDY: FROM POWDER TO TABLET

From project idea to final production plant: Presentation of case study results with continuous fluid-bed granulation and continuous

direct compression.

02:15-04:30 PM HANDS-ON WORKSHOP FOR DIFFERENT **CONTINUOUS MANUFACTURING PROCESSES**

All participants will work in small groups on continuous fluid-bed

granulation and continuous direct compression.

■ 04:30-04:45 PM WRAP-UP AND END OF SEMINAR

