

TABLETING 101

Summary

This course focusses on giving a thorough introduction about the tableting process in an interactive manner. During this course, the basic aspects of the tableting equipment, tablet formulation, tablet quality, tableting process and compaction mechanisms and models will be clearly explained from a theoretical point-of-view. Furthermore, hands-on sessions will allow the trainee to get a feel with the tableting process and how this process can be influenced by divergent factors.

This course is divided into two separate modules::

- 1) **Module 1: Basic course: Introduction to tableting (1-day)**
- 2) **Module 2: Specialized courses (1-day)**

MODULE 1: BASIC COURSE

Theoretical

- 1) *Introduction to tableting*
 - a. Basic fundamentals
 - b. What is a tablet formulation?
- 2) *What encompasses the tableting process?*
 - a. What is die filling?
 - b. Which compaction mechanism/models exist?
- 3) *What are the types of tableting equipment?*
 - a. Compaction simulator
 - b. Rotary tablet press

Practical

- 1) *Hands-on use of a compaction simulator*
- 2) *Hands-on tablet production using a rotary tablet press*

MODULE 2: SPECIALIZED COURSES

- 1) *Use-case 1: Lubrication*
 - a. What is the impact of lubrication?
 - b. What is the difference between internal and external lubrication?
- 2) *Use-case 2: Sticking*
 - a. Which types of sticking do exist?
 - b. How do they impact the process?
 - c. How can you measure and avoid it?
- 3) *Use-case 3: Die filling*
 - a. How is die filling impacted by the raw materials and process?
 - b. How to improve processability?
- 4) *Use-case 4: Compaction models*
 - a. What is the added benefit of the different compaction models?
- 5) *Use-case 5: Upscaling*
 - a. How to scale up from lab-scale to pilot-scale on a rotary tablet press?
 - b. What do you need to keep in mind during upscaling?