

R&D and Process Support



Leverage our expertise and technologies to tackle your tableting challenges

KORSCH & MEDELPHARM: Your Trusted Partner for Tableting Solutions!

At KORSCH & MEDELPHARM, we serve a diverse range of customer needs, from grams to tons, across every stage of the tableting process.

Whether you're in R&D or full-scale Production, our comprehensive range of machines and expert skills are here to support you.

www.korsch.com

Understand & develop

Material Characterizations
Formulation Development Support



Transfer & optimize

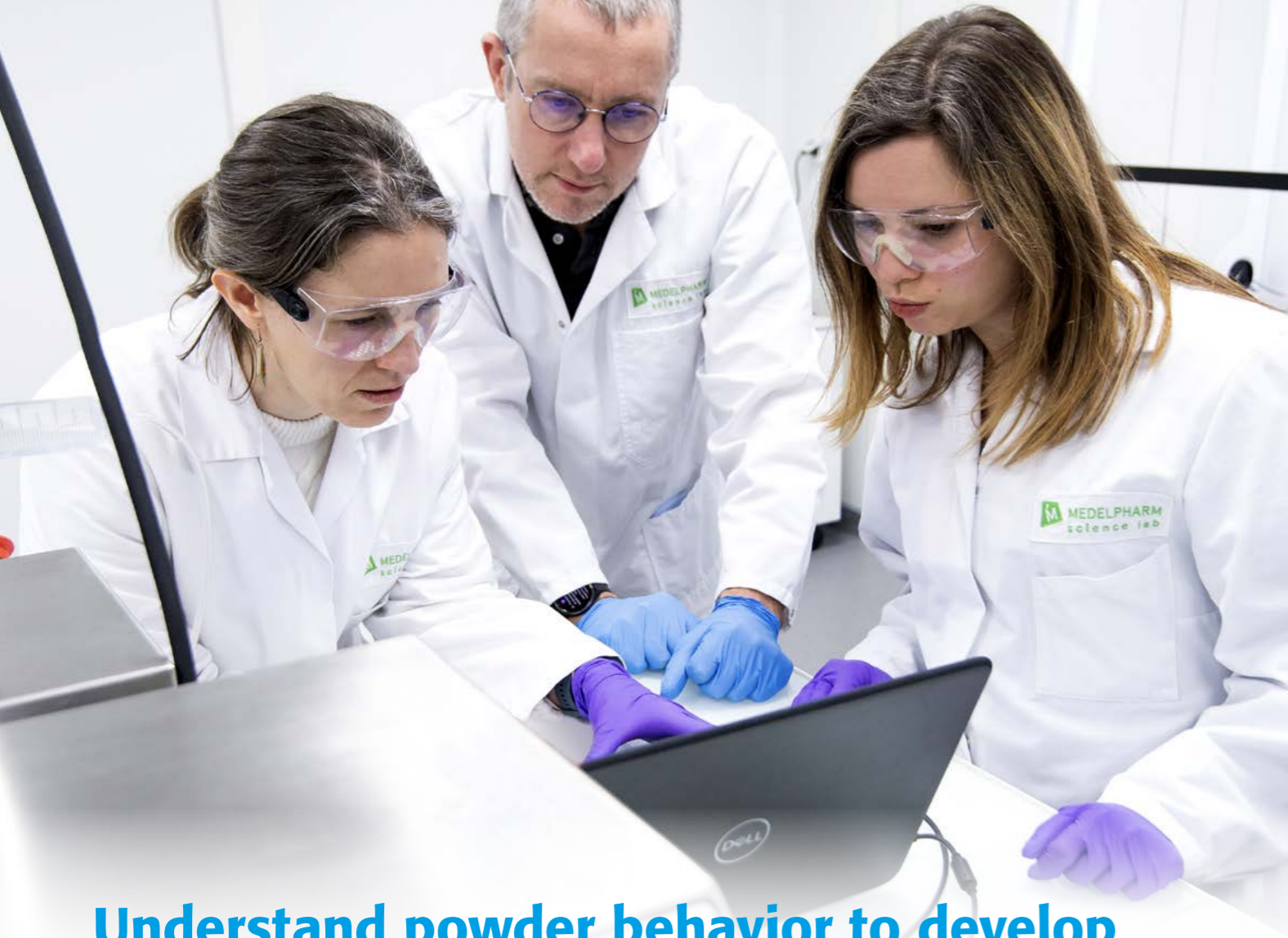
Scale-Up Support
Process Optimization
Process Troubleshooting
Non-Pharma Contract Manufacturing



Build up & maximize

Training Programs
Consulting Services





Understand powder behavior to develop robust formulations

API characterization, excipient selection, and manufacturing process determination are essential in every tablet development to achieve a robust formulation.

Material Characterization

Fingerprint your API with our scientists by assessing flowability, particle morphology, compactibility, strain rate sensitivity, and ejection stress which are amongst potential Critical Material Attributes (CMAs).

Consider batch-to-batch consistency and raw material second source approval early in the development stage to secure production efficiency.

Our pharmacists and formulation experts provide insights based on experiments and data to define the best combination of excipients and processes to target optimal quality attributes.

Tablet Formulation Development

Study formulation blends and manufacturing processes following USP <1062> guidelines with our pharmacists to meet tablet Critical Quality Attributes (CQAs) such as dissolution, disintegration, or tensile strength. As an example, assess the impact of dry granulation process on flowability and re-compactibility with minimal amount of material.

Maximize production output, control cost, and keep quality in mind. Compaction simulators are essential to foresee potential tablet defects and solve them during development stage. For example, sticking can be related to temperature or tooling surface which can be evaluated with our formulators prior scale-up.



Transfer R&D findings to production or optimize existing processes

Successful scale-up, troubleshooting, and process optimization are key for tablet manufacturing efficiency.

Leverage our process engineers' know-how and experience to define your optimal process parameters enabling high-

quality production and yield increase. Our facilities also offer non-pharma tablet contract manufacturing.

Scale-up Support

De-risk scale up by transferring Process Parameters (PPs) determined by compaction simulators to high-speed rotary tablet presses or production-scale roller compactors.

Process Optimization

Optimize your production process parameters with our engineers to achieve consistent filling, optimal output, and minimal product loss.

Process Troubleshooting

Replicate tablet defects on compaction simulators using your tooling and your powder sample.

Find root cause and optimize rotary tablet press setup with our technology and our expertise.

On-site-support from our experienced technical team to tackle your production issues.

Non-GMP Contract Manufacturing

Use our complete product range and facility for the production of tablets from small volume to high volume batch.



Build up skills and maximize your tableting equipment usage

Continuing education on Oral Solid Dosage (OSD) formulation development and production processes contributes to shortened time-to-market and enhanced manufacturing efficiency.

Transferring knowledge and know-how is part of our DNA. Our formulation scientists and process engineers provide in-house and on-site trainings to maintain your team skills and make the most of your tableting equipment.

Training Programs

Keep building the skills of your team of formulation scientists and production operators by integrating our various theoretical and practical training on compression, equipment, data analysis, or maintenance.

Consulting Services

Take advantage of our experience and expertise to successfully develop your formulation or optimize your production.



Tableting Solutions for all Industries



KORSCH delivers solutions for a broad spectrum of products across various industries. Tablets are frequently used in the food and dietary supplement sector, in confectionery as well as in the chemicals and technology sectors, in the sintered metal, ceramics and electrical industries.

- Very large formats
- Special shapes
- Aggressive or abrasive materials
- Sticky materials
- Materials with poor flowability

The KORSCH Group welcomes these challenges. We continuously undertake product development work together with our customers in our state-of-the-art INNOVATION CENTERS and Science Lab. Our experts boast unparalleled competence in both standard and specialized solutions, enabling the development of new designs inspired by cross-industry innovations.

Some of these solutions are built to operate in the most demanding environments, they must be productive, robust, efficient and extremely reliable. These are some of the challenges:

- Natural Products
- Requirement for heavy tonnage
- Requirement for deep filling depths
- Multi-layer up to five-layers,
- Containment

Our objective is also to help your company identify future potential that can be leveraged with our specialist's know-how. The sky seems to be the limit, and the term "tablet" can be redefined to cover almost any application.

Global presence for local R&D and Process support



- **KORSCH America Inc. Innovation Center Boston**
 Phone: +1-(508) 238-9080
 service@korschamerica.com
- **MAQUIDREX Innovation Center Sao Paulo**
 Phone: +353 0 1 2982633
 mike@maquidrex.com.br
- **Medelpharm Science Lab Lyon**
 Phone : + 33 04 78 97 62 10
 sciencelab@medelpharm.com
- **L. B. Bohle Technology Center Ennigerloh**
 Phone: +49 25 24 93 23-0
 info@lbbohle.de
- **KORSCH AG Innovation Center Berlin**
 Phone: +49 30 43576-300
 service@korsch.de
- **Tema Innovation Center Istanbul**
 Phone: +90 542 227 17 60
 tema@temacons.com
- **KORSCH / L. B. Bohle Innovation Center Hyderabad**
 Phone :+91 98 1900 4298
 Pravin.gawas@korschindia.com
- **Rieckermann Innovation Center Shanghai**
 Phone: +86 21 64728743
 leckie.z@rieckermann.com
- **Winckler & Co. Ltd. Innovation Center Nagoya**
 Phone: +81 78 384 2323
 k.sawai@winckler.co.jp

www.mattheis-berlin.de

