



KORSCH



R&D PROCESS SUPPORT

STREAMLINE PRODUCT
DEVELOPMENT AND
PROCESS OPTIMIZATION

KORSCH

Your Trusted Partner for Tableting Solutions!

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

From R&D to scale-up, to full scale production, our comprehensive range of machines and tablet compression expertise are here to support you.



www.korsch.com



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.





Understand Powder Behavior to Develop Robust Formulations

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 recompactibility with minimal amount of material.

Design the process to maximize production output, control cost, and ensure superior quality. Compaction simulators are essential to predict potential tablet defects and solve them during the development stage. For example, sticking can be related to temperature or tooling surface which can be evaluated with our formulators prior to 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.

Will your formulation withstand high compression speed?

What will be your maximum production output?

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.





Transfer R&D Findings to Production or Optimize Existing Processes

Leverage our process specialists' know-how and experience to define your optimal process parameters enabling high-quality-production and yield increase. Our facilities also offer non-GMP tablet contract manufacturing.

Process Troubleshooting

Adjusting process parameters (compression speed, edge thickness, precompression ratio) on production tablet presses can be challenging and might require a great number of iterations to succeed.

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.

Enhance your Skills and Maximize the Performance of your Tableting Equipment

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.





Enhance your Skills and Maximize the Performance 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.

Non-GMP Contract Manufacturing

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

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.

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:

- Very large formats
- Special shapes
- Aggressive or abrasive materials
- Sticky materials
- Materials with poor flowability
- Natural products
- Requirement for heavy tonnage
- Requirement for deep filling depths
- Multi-layer up to five-layers
- Containment



Tableting Solutions for all Industries

The KORSCH Group welcomes challenges.

We continuously undertake product development work together with our customers in our state-of-the-art INNOVATION CENTERS.

Our experts boast unparalleled competence in both standard and specialized solutions, enabling the development of new designs inspired by cross-industry innovations.

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



Global Presence for Local R&D and Process Support

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