



FEEDING SOLUTIONS

# PHARMA



**brabender**  
TECHNOLOGIE

# FLEXI

## CUSTOMIZED WITH SAFETY IN MIND

Given the need to comply with product safety requirements and statutory regulations, the pharmaceuticals sector is an industry that demands high production as well as R&D plant and equipment standards. And that certainly includes feeding technology. In addition to absolute precision and ease of cleaning, flexibility is called for especially when formulations have to be adapted and ingredients have to be modified. The bulk ingredients used can vary between powders, powder mixes, pellets

and liquids – each exhibiting different flow characteristics from free-flowing to bridging. Brabender Technologie meets these challenges by providing specially tailored feeders.

Poor flowing powders or fluid ingredients – Brabender Technologie's versatile feeders can master any challenge. Our 'Hygienic Design' equipment also complies with GMP Standards (EU) and FDA Guidelines (USA) that apply to the pharmaceuticals industry.

INNOVATION

SAFETY

GUIDELINES

STANDARDS

BILITY

CLEANLINESS

PROCESS RELIABILITY

HYGIENIC

GMP

DESIGN

PURITY

DUST

FLOW CHARACTERISTICS

EASE OF HANDLING

FDA

REPRODUCIBILITY

POWDER

RAPID  
DISMANTLING

Ingredients for pharmaceuticals are often of premium quality and expensive. Feed precision is therefore a key cost factor. Brabender Technologie provides equipment and accessories specially designed to deliver precision feeding, especially where small quantities are involved.

# > PRACTICAL FOCUS





Be it in the laboratory or on the production line: Brabender Technologie meets the pharmaceutical industry's requirements.

## VARYING REQUIREMENTS – VERSATILE SOLUTIONS

R&D or production: Brabender Technologie provides a selection of loss-in-weight and other feeders for tests involving new ingredients or for different feeding methods, for instance split-feed processes.

Consistently reliable and precise feeding is and remains the name of the game in the pharmaceuticals industry. Precision and consistent feeding, right down to  $\mu\text{g}$  detail, is what

matters most, especially as far as the manufacturing of pharmaceuticals with delayed therapeutic effects or containing highly potent active ingredients is concerned. Higher degrees of feeding precision may also be required in other segments, e.g. the mass production of medical and anti-bacterial plastics. Here Brabender's feeders feature feed rates between 20 grams and several hundred kilograms per hour.



DDSR 20 Hygienic Design

## > MAXIMUM PRECISION

Large quantities or mini batches: you can rely on obtaining absolute precision when you use Brabender feeders. All feeders and components are the result of premium workmanship and comply with the relevant standards, guidelines and recommendations of relevant organizations like the FDA.

Our feeders are extremely easy to clean and are manufactured to avoid contamination. This includes smooth stainless steel surfaces, non-porous, full-penetration and polished weld seams and radiused edges. Cavities are also eliminated and components that come into product contact are only made using FDA-conform materials like premium stainless steel. Screws and screw tubes feature quick-release fasteners. All 'Hygienic Design' feeders are easy to dismantle. That saves time and money.



## HYGIENICALLY CLEAN



Sanitary wiring



Smooth stainless steel surfaces, rounded edges and polished weld seams



Pharmaceutical industry version of a twin screw feeder incorporating FDA-conform materials



Quick-release fasteners for simple, clean dismantling/removal

Twin screw loss-in-weight feeder

Stirring agitator

MiniTwin

Congrav® operator interface

Rectangular hopper

TC 2020 twin concave screw

# MULTI-HERCULEAN-TASKING

Brabender Technologie has everything you need: digital and analog feed technology, hygienically designed finishes right down to the last detail. Our versatile range of products is well able to manage the herculean task of delivering the optimum feeder for every type of bulk ingredient used in the pharmaceutical industry.



Safety grate

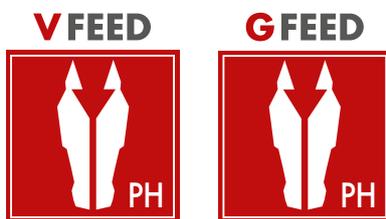
Trough divider

Round hopper

TC 2011 twin  
concave screw

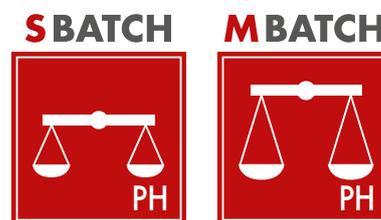
# > DIVERSITY NECESSITATES GUIDANCE

Feeding, weighing, discharging and control are our core skills. To provide you with optimum guidance to the wide range of options we offer in various segments, we have branded our equipment in accordance with these segments. This enables you as a customer to identify all Brabender Technologie equipment straightaway and to categorize it according to requirements.



## PREMIUM-FINISH FEEDERS

Our V-FEED and G-FEED brands provide you with a range of different volumetric and gravimetric feeders (according to volume or weight) to handle your bulk ingredients. Thanks to state-of-the-art technology and premium workmanship, these machines deliver maximum-accuracy results. All machines can be custom-enhanced at any time and adapted to meet modified production circumstances.



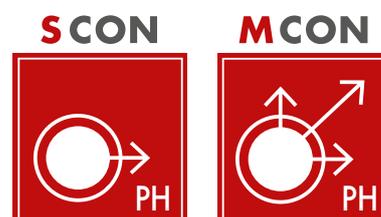
## PRECISION WEIGH-BATCHING

Brabender Technologie offers a range of different solutions branded S-BATCH und M-BATCH for the automatic and accurate weigh-batching of bulk ingredient quantities. These facilitate single or multiple ingredient weigh-batching in accordance with the "loss-in-weight" or "gain-in-weight" principle.



## RELIABLE DISCHARGE

D-CHARGE is the Brabender Technologie brand that covers a range of products for discharging your bulk ingredients. Be it bagged ingredients or ingredients from bulk bags, silos or other types of bin – our discharge aids enable you to discharge any kind of bulk ingredient with no hassle.



## CONTROL SYSTEMS USING SMART SOFTWARE

The S-CON and M-CON brands are the control system solutions of Brabender Technologie. Be it single feeder or multiple feeder control systems, feeder-integrated or control cabinet-installed, thanks to our smart systems up to 16 feeders in a single process line can be controlled if required.



The MiniTwin is particularly suitable for feeding small and mini quantities.



If necessary the hopper can also be reduced in size.



All individual parts can easily be dismantled.



Various add-on hoppers are available for the MiniTwin feeder.

# TECHNOLOGY OVERVIEW



MiniTwin twin screw feeder



DDSR20 twin screw feeder

## WELL-THOUGHT-OUT DOWN TO THE MINUTEST DETAIL



A special design with internal wiring protects against contamination.

Brabender Technologie is well aware of pharmaceutical industry regulations and requirements. That is the reason why we have matched our equipment right down to the last detail to R&D circumstances and to production requirements. In addition to supreme quality and specific cleanliness and safety features, we can also offer you a range of accessories to provide a customized solution for any application.



A safety grate provides the necessary operator protection when bulk ingredients are being manually added to the process.



An additional downsizing kit enables the size of the feeder hopper to be reduced – particularly important if premium, expensive ingredients are involved.



A range of different hoppers sized 0.5, 0.6, 1 and 1.5 dm<sup>3</sup> are available for our pharmaceutical industry feeders.



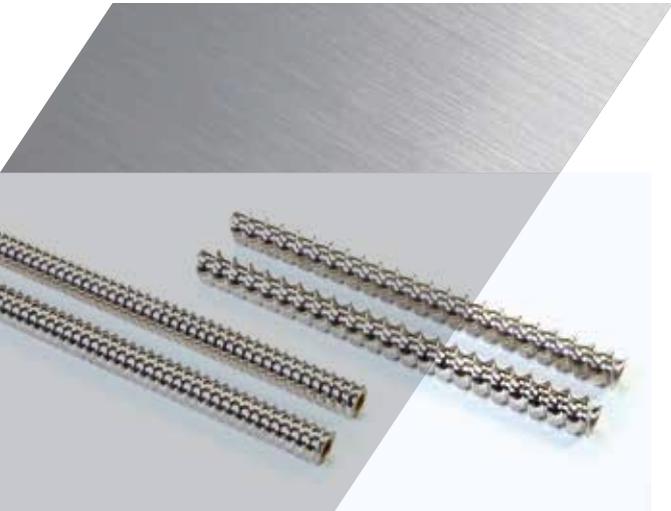
For maximum feed rate performance: specially designed screws ensure efficient handling of particularly light, poor flowing and fluidizing powders.

# > CLIENT-PLUS



Why not get in touch with us – we would be delighted to provide you with the advice you require. We help you to identify your specific needs and recommend the right equipment. You can test out how our feeders handle different bulk ingredients at our Technical Centers. To enable you to use our equipment effectively at your production facilities, we train your staff on how to operate the machinery properly. Our maintenance agreements enable us to provide you with a practical, no-risk solution for long-term reliable use. If your production parameters change, we can help you search for a suitable solution.

# SERVICE



Twin screws



Premium stainless steel components



Sanitary wiring solution



Retrofitting controls or control upgrade



Remote maintenance and troubleshooting



Professional service

## IN GOOD HANDS – FAST AND UNCOMPLICATED

You first become acquainted with our after-sales service, which we provide to you and your Brabender equipment when the machinery is commissioned. We will always provide you with a professional service, ranging from our Hotline via remote maintenance through service engineers visiting your premises. Our branches and service partners around the world enable us to offer you an extensive

customer service and stocking of all spare parts and consumable worldwide. Personal attendance by one of our service engineers to diagnose and eliminate a fault with one of your gravimetric feeders is not always necessary. In certain cases we can conveniently remote-access your microcomputer control system using the "TeamViewer" program, check the system and eliminate any faults or errors.



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Keep the Flow