



## Break Mill SM 4

Laboratory mill to prepare samples  
for the moisture determination



... where quality is measured.

# Break Mill SM 4



The Brabender Break Mill SM 4 is a small, sturdy laboratory mill for all sorts of grain like wheat, rye, oats, barley, or rice. Even bigger kernels like corn or large and thin materials such as hulls or chaff are broken reliably without any problems.

For more application examples please see the SM 4 application manual.



Green peas / grinding gap 9



Coffee beans / grinding gap 9



Pasta / grinding gap 9

## Principle

The milling system consists of a removable, fixed block with three reversible cutting plates and a rotating block with another four reversible cutting plates. The latter is mounted below the fixed one so that the lower, rotating cutting plates act against the upper, fixed ones with an adjustable gap in-between.

The reversible cutting plates have sharp 90° cutting edges. The gap between the fixed and the rotating reversible cutting plates can be adjusted continuously by means of an adjusting thread with a scaled ring at the top of the mill.

## Application

The material to be ground is filled into the hopper of the SM 4 and falls directly down into the milling system. The sharp cutting edges running against each other break the material until it is fine enough to be centrifuged through the adjustable gap into a discharge tube to which a collector bottle can be mounted.

The special construction of the milling system prevents heating of the grinding stock and loss of moisture during processing.

This makes the Brabender Break Mill SM 4 the optimum instrument for the preparation of grain samples for moisture, protein and fat analysis as well as gluten quality analysis with the Brabender GlutoPeak.

## Determination of the throughput (grinding wheat)

Sample weight [g]	Adjustment of the scale-ring	Running time [s]
50	7	11
50	5	16
50	3	22
50	1	30
50	0,5	33
Dependent from kind and structure of the test material		

## Advantages

The precisely adjustable milling system offers several process-technical advantages:

- Infinitely variable milling gap/ fineness
- Reproducible milling to the desired fineness
- No heating of the grinding stock
- Reduced loss of moisture during milling
- Closed system



## Break Mill SM 4

<b>Throughput</b>	50 g / 10 sec. depending on the particle size
<b>Mains connection</b>	1 x 230 V; 50 Hz + N + PE; 1.9 A 1 x 115 V; 60 Hz + PE; 3.1 A
<b>Dimensions (W x H x D)</b>	148 x 517 x 230 mm (with feed hopper)
<b>Weight</b>	approx. 7 kg net



## Brabender® GmbH & Co. KG

Kulturstr. 49-55 · 47055 Duisburg · Germany  
Phone: +49 203 7788-0  
food-sales@brabender.com  
www.brabender.com



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