Brabender® CWB

- Precise
- Adjustable
- Sturdy

Break Mill SM 3

Laboratory mill to prepare samples
for the moisture determination

… where quality is measured.

Break Mill SM 3

The **Brabender® Break Mill SM 3** 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.

Type approved under German law

The **Brabender® Break Mill SM 3** is due to its technical properties suitable for the sample preparation of officially verfied applications of grains.
The approval was carried out through the physical-technical federal institute (Physikalisch-Technische Bundesanstalt), in Braunschweig, Germany.

The approval is valid for use of different models of the well known Brabender Moisture Tester. The grains wheat, barley, rye, oats, triticale, and corn have to be ground prior to the drying test. The adjustment of the grinding scale should be between 1 and 1.5.

Principle

The milling system consists of a removable, fixed block with three reversible cutting plates and a motor driven, rotating block with another four reversible cutting plates. The rotating block 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 are made of special steel and 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.

The material to be ground is filled into the hopper of the **SM 3** 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 with reversible cutting plates acting against each other, instead of conventional cutting knives or milling rolls combined with a sieve or sifter, prevents heating of the grinding stock and loss of moisture during processing.

This makes the **Brabender® Break Mill SM 3** the optimum instrument for the preparation of grain samples for moisture, protein, or fat analyses.

Determinaton 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
- No loss of moisture during milling
- Closed system

Break Mill SM 3	
Throughput	50 g / 10 sec. depending on the particle size
Mains connection	1x 230 V; 50/60 Hz + N + PE; 1.85 A 115 V; 50/60 Hz + PE; 3.5 A
Dimensions (W x H x D)	200 x 470 x 260 mm
Weight	approx. 7 kg net

Made in Germany

C.W. Brabender® Instruments, Inc.
50 E Wesley St., South Hackensack, NJ 07606
Phone: 201.343.8425 • Fax: 201.343.0608
foodsales@cwbrabender.com • www.cwbrabender.com

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