

## JAW CRUSHER BB 50

The compact benchtop model



**The BB 50 is the smallest model of the RETSCH jaw crusher series and has been specially designed for sample preparation in the laboratory. The compact machine fits on any laboratory bench and offers safe and convenient handling.**

The RETSCH jaw crusher series is available in 8 different sizes. Throughput and final fineness depend on the crusher type, selected gap width and breaking properties of the sample material.

Robust design, simple handling and cleaning are the features of the RETSCH jaw crusher models. Small amounts of sample are processed batchwise; for larger amounts the crushers can be operated continuously.

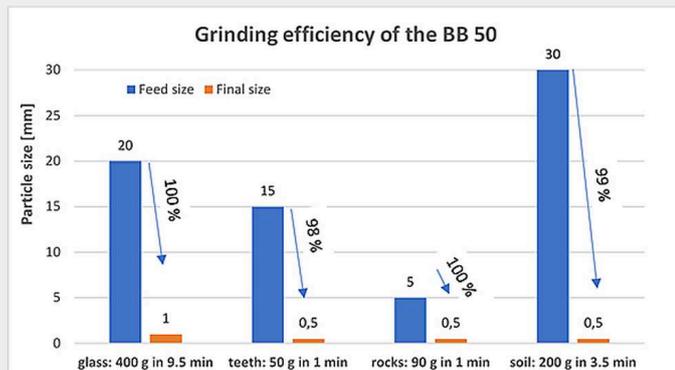


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**Product Video**

## POWERFUL & COMPACT

- High crushing efficiency, feed sizes up to 40 mm can be crushed to 0.5 mm
- Removable jaw for easy cleaning
- Adjustable speed allows adaptation to sample characteristics
- Wear compensation with zero-point adjustment
- Convenient operating keypad with digital display
- Memory for gap width setting



Small, powerful benchtop unit

### JAW CRUSHER BB 50

## SUPERIORITY IN DETAIL

The BB 50 is designed for efficient and convenient size reduction. The variable speed can be set between 550 and 950 min<sup>-1</sup> to adapt the crushing process to sample requirements. The possibility to reverse the rotating direction is helpful if too much sample material has been fed to the crusher causing it to block. The simple push of a button restarts the process. Due to permanently lubricated bearings and its solid design, the BB 50 jaw crusher is virtually maintenance-free.



*Fold-back hopper can be removed for easy access*



*Digital speed setting and display of gap width*

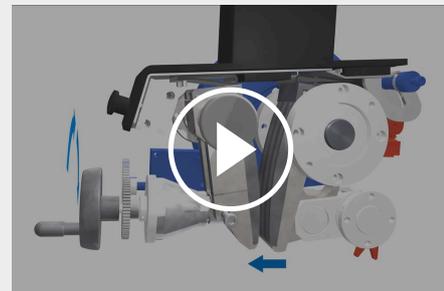


*Large collection receptacle (3 l) with optional lid*

## JAW CRUSHER BB 50

### ZERO POINT ADJUSTMENT

An advantage of the jaw crusher BB 50 is the so-called zero point adjustment. Sooner or later, the breaking jaws will show signs of wear which will affect the reproducibility of the size reduction process. This effect can be compensated by adjusting the zero point. A sign in the display indicates if the jaws need to be replaced altogether, thus helping to avoid damages to the crusher.



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## JAW CRUSHER BB 50

### EASY OPERATION & CLEANING

Working with the BB 50 jaw crusher is easy and safe. The large, clearly structured operating panel allows for digital display of parameters such as gap width and speed. The sample material is conveniently fed to the crusher via the large hopper equipped with splash-back protection.



[Click to view video](#)

For easy cleaning the fold-back hopper and crusher arm can be removed without using tools. The user can also exchange the breaking jaws if the crusher needs to be converted for different applications.

FOR SAFE AND EFFICIENT CRUSHING PROCESSES

## ACCESSORIES FOR THE JAW CRUSHER BB 50

Breaking jaws and wearing plates are available in five different materials to be selected depending on the sample and the analysis to be carried out:

- | manganese steel
- | stainless steel
- | tungsten carbide
- | zirconium oxide
- | steel for heavy-metal free grinding

The optional lid for the collecting receptacle of the jaw crusher ensures that the fine residues from previous samples fall on the lid and not into the receptacle which helps to avoid cross contaminations.



JAW CRUSHER BB 50

## TYPICAL SAMPLE MATERIALS

RETSCH's powerful jaw crushers are ideally suited for preliminary crushing of construction materials, ores, granite, oxide ceramics, quartz, slag, silicon, coal, tungsten alloys, cement clinker, etc.



*concrete*



*jade*



*glass*



*coal*

To find the best solution for your sample preparation task, visit our application database.

JAW CRUSHER BB 50

## TECHNICAL DATA

<b>Applications</b>	coarse and pre-crushing
<b>Field of application</b>	agriculture, biology, construction materials, geology / metallurgy, glass / ceramics, medicine / pharmaceuticals
<b>Feed material</b>	medium-hard, hard, brittle, tough
<b>Size reduction principle</b>	pressure
<b>Material feed size*</b>	< 40 mm
<b>Final fineness*</b>	< 0.5 mm
<b>Throughput*</b>	3 l/batch
<b>Material of grinding tools</b>	manganese steel, stainless steel, tungsten carbide, zirconium oxide, steel 1.1750 (for heavy-metal free grinding)
<b>Jaw width</b>	45 x 59 mm
<b>Gap width setting</b>	0 - 11 mm in increments 0.1 mm
<b>Gap width display</b>	digital
<b>Zero point adjustment</b>	yes
<b>Reverse rotating direction</b>	yes
<b>Hinged hopper</b>	yes
<b>Dust extraction unit</b>	already dust-tight
<b>Central lubrication</b>	lifetime lubrication by manufacturer
<b>Process line version</b>	process line use is possible by removing drawer
<b>Collector capacity</b>	3 l
<b>Drive</b>	3-phase motor with frequency converter
<b>Drive power</b>	1.1 kW
<b>Electrical supply data</b>	different voltages
<b>Power connection</b>	1-phase
<b>Protection code</b>	IP 20 / IP 00 at ventilation slots
<b>W x H x D closed</b>	420 x 460 x 560 mm
<b>Net weight</b>	~ 79 kg
<b>Standards</b>	CE

\*depending on feed material and instrument configuration/settings

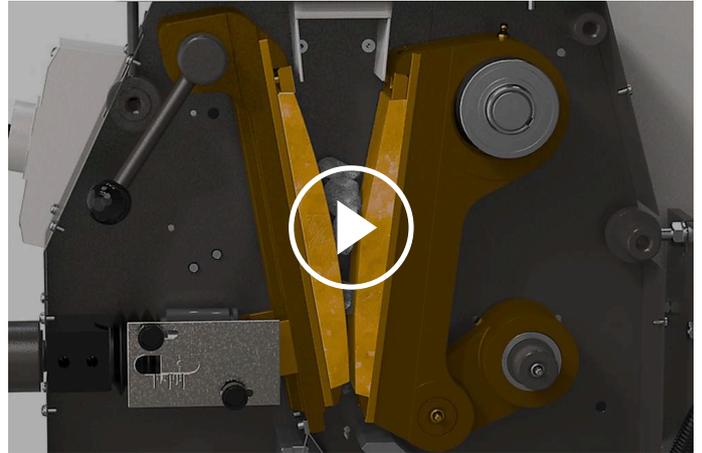
## JAW CRUSHER BB 50

# FUNCTIONAL PRINCIPLE

The Jaw Crusher BB 50 is a robust and powerful forced-feed crusher. The feed material passes through the no-rebound hopper and enters the crushing chamber.

Size reduction in the Jaw Crusher takes place in the wedged area between the fixed crushing arm and one moved by an eccentric drive shaft. The elliptical motion crushes the sample which then falls under gravity.

As soon as the sample is smaller than the discharge gap width, it falls into a removable collector. The continuous gap width setting with digital display ensure optimal size reduction in accordance with the set gap width value.



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[www.retsch.com/bb50](http://www.retsch.com/bb50)