



OI POWTEQ\*

## ♦ Disc Mill DP100

DP100 is firm and durable, applicable to pre-grinding and fine grinding for medium hard, hard and brittle solid materials. It can grind samples into  $100\,\mu$  m particles very quickly.



## Applications

Concrete, building debris, granite, basalt, silicate, gypsum, dry soil samples, depositional sludge, quartz, coal, coke, lime mud, refractory clay, glass and ceramics for dentistry and so on.



## Working principle

The samples are grinded via the pressure and frictional force generated between a rotating disc and another fixed disc. After the sample enters into grinding chamber, the progressively arranged teeth of the grinding disc first subject the sample to preliminary crushing, centrifugal force then moves it to the outer regions of the grinding discs where fine grinding takes place. The ground sample falls into the sample receiver via the gap of the grinding discs.



You can use a frame to combine the disc mill DP100 and jaw crusher JC5 to realize one-step milling from 90mm-100  $\mu$  m, which can greatly improve the efficiency.

# ♦ Features and advantages

- O Simple operation, easy cleaning.
- O The sample feed size up to 20mm.
- O Large processing capacity of samples.
- O The gap of grinding discs can be adjusted continuously.
- O Efficient sample treatment, extreme size reduction can be reached in a short time.
- O Grinding discs made of various materials are available for selection and wear-resistant.
- O Dust discharge connector design can prevent sample powders from polluting environment.







### Information on material of grinding discs

Material	Main components	Wear-resisting property	Sample characteristic
Hardened steel	Cr,Fe	good	Hard, brittle
Manganese steel	Mn,Fe	good	Extremely hard, brittle
Tungsten carbide	WC 96%,Co4%	Extremely good	Extremely hard, easy to grind samples
Zirconium oxide	ZrO <sub>2</sub> 99%	good	Medium-hard,brittle,heavy-metal -free
Heavy-metal free steel	Cr,Fe	good	hard,brittle

<sup>\*</sup>Two grinding discs shall be made of the same material and their hardness must be higher than the grinded samples. In addition, the cross contamination between the disc material and the elements to be tested shall be considered.

#### Technical data

Feed size		
Final fineness	<100 <b>µm</b>	
Speed		
The gap setting		
Collector capacity		
Rated power	1.5KW	
Power supply		
Instrument size	410*880*420mm	
Package size	620*1200*660mm	
Net weight	136kg	

