# Grinding mill



FFGM—1—T FFGM—1—T FFGM—1—PS FFGM—4—PS

 $\boldsymbol{II}$  . Grinding vessel cubage: 50cc/ set

FFGM-50



Grinding vessel:

Tungsten Carbide Chrome-Steel

#### Grinding vessel cubage: 100cc/ set



FFGM series Grinding mill has provided for XRD.

FFGM series Grinding mil uses the suspension fork structure (FFGM-1: 6 pieces press springs, 8 pieces pull springs; FFGM-4: 8 pieces press springs, 8 pieces pull springs.). Causes the Grinding mill to grinding efficiency enhancement, the noise reduces.

Suspension fork structure: Increases the horizontal direction action, enhances the grinding efficiency; reduces the vertical horizontal direction action, reduces the mechanical noise.

Automatically protection: The Grinding mill will stop automatically under following conditions:

① Power supply lack 1-phase, or current overload.

② The cover does not keep in place.

Туре	FFGM—1—T ( Frequency-conversion )	FFGM—1—T (Two-speed)	FFGM—1 —PS ( Single-speed )	FFGM—4—PS ( Single-speed )
Charging granularity	≤ 5mm			
Discharging granularity	≤ 80um			
Fill sample	20~80 gram			
Grinding time	0∼999 s			
Roate speed	1.5kw			
Power supply	AC 380V±10% / 50Hz, 3-phase+earth			
Motor	300~400 r/min	910 / 1400 r/min		1400 r/min
Rated load	1.6kw			
Grinding vessel amount	1 4		4	

#### Grinding vessel cubage: 100cc/ set

Grinding vessel cubage	100cc/ set		
Grinding vessel material	Tungsten Carbide or Chrome-Steel		
Dimension	610×550×890mm	710*810*1080mm	
Weight	280kg	360kg	
Ambient temperature	5~40°C		

### Grinding vessel cubage: 50cc/ set

### <u>FFGM-50</u>



# Indicators

Туре	FFGM-50		
Charging granularity	≤5mm <sup>3</sup>		
Discharging granularity	≤80um		
Power supply	380V		
Rated load	250w		
Motor	1400r/min		
Grinding time	0∼999 S		
Grinding vessel cubage	50cm <sup>3</sup>		
Grinding vessel material	Tungsten Carbide or Chrome-Steel		
Dimension	420x 420 x 450mm		
Weight	60 kg		



- 1. Protection switch
- 2, Fixed handle
- 3 Fixed disk
- 4. Support spring
- 5、 Cover of Vibratory Grinding Mill
- 6、 Time relay
- 7. Emergency stop button
- 8 Start button



- 9、 Grinding case
- 10、 Impact rammer
- 11、 Cover of grinding case
- 12, Sample
- 13、 O-Shaped seal ring

## **Operating Instructions**

### 1. Holding Sample

1.1 Put impact rammer into the grinding case, and then put sample between grinding case and impact rammer.

1.2. Quantity of sample in grinding case shall be  $5\sim$ 15cm3.

In case quantity of sample put into the grinding case is ≤5cm3, it may damage the grinding case.

### 2. Time Setting

2.1. Press two buttons at upper and lower rows on the Time Relay, set the running time, of which the middle digit indicates time units: hour (H), minutes (M), and seconds (S).

2.2. Generally set within 3 minutes for grinding case of tungsten carbide, 10 minutes for that of high chrome.

### 3. Specimen Preparation

3.1. Put the grinding case on the fixed disk of Vibration Grinding Mill, screw the fixed handle. See Fig.2. Fasten down the cover of Vibration Grinding Mill, press green start button of it. Start Vibration Grinding Mill.

3.2. If something unexpected happened, please press red emergency stop button immediately.

Do not open the cover of Vibration Grinding Mill before the machine completely stopped.

3.3. After the machine completely stopped, open the cover of Vibration Grinding Mill, take out the grinding case. Pour sample into filter sieve, particle size of 80% sample should be in  $\leq$ 80um.

3.4. In case the sample after grinded can't reach the requirement described in Item 3.3, take out the grinding case, cool it to less than  $60^{\circ}$ C in room temperature, and work continuously. Find out optimum grinding time.

## Accessories

Grinding vessel:

Tungsten Carbide Chrome-Steel





