

### Reach new height with KEFID

# **B** series VSI crusher





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## **Brief Introduction:**

B Series VSI crusher is a newly researched equipment, with international advanced level. Technology and modern processing equipment make it a leading role in this industry. B Series VSI

crusher is widely used for artificial sand, in metal and non-metal ores, cement, refractory material, bauxite, silicon carbide, glass material, building material.





### **Features**:

1. Advanced double-pump oil lubrication system guarantee shaft bearing lower temperature increase, longer life time, more reliable operation.

2. Main shaft is equipped with imported precision rolling bearing. It makes main shaft work stable, lengthen maintenance cycle, increases productivity.

3. Hydraulic lifting mechanism of upper cover can move away the cover easily, which saves man power during maintenance.

4. Over-vibration device is equipped. There will be alarm when vibration surpasses a stipulated figure. It will stop the machine, in order to protect it.

5. Special dust-proof design for main shaft bearing fully avoid dust entering bearing lubrication part, which make sure the machine work normally.

6. Special feed opening structure makes it possible that center feeding and ring feeding comes together, in order to meet requirement of different stones. In addition, this equipment can not only crush stone, but also iron.

7. Shape of material-through device is better designed, which improve the utilization ratio.

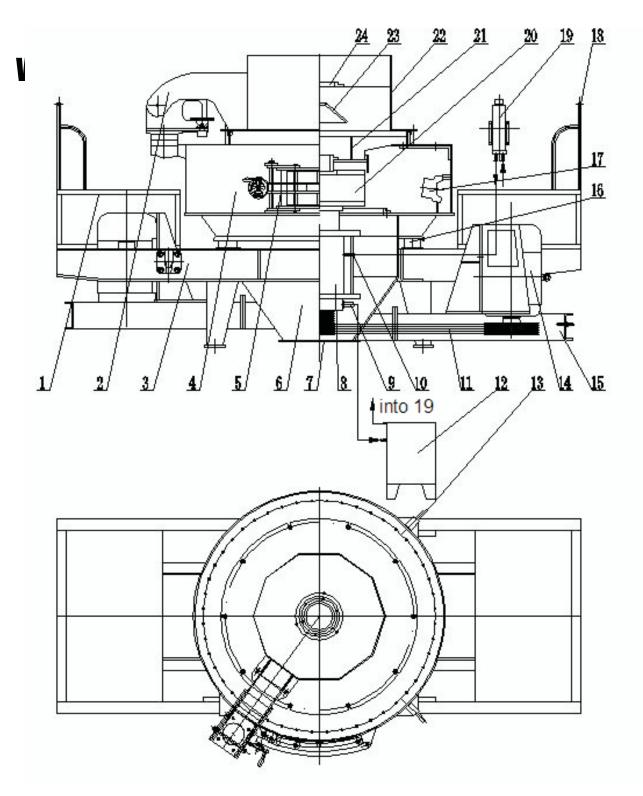








Kefid Machinery Co., Ltd is a leading company specially involved in the manufacture and sales of large-scale



1:Checking platform 2:cap-turning device 3:support 4:crushing chamber 5:inspection door 6:lower-part shell

9:oil return pipe 7: outlet 8: main shaft assembly

12:thin oil lubrication station 10:oil feed pipe 11:driving belt

13:vibrating sensor 14:Main motor 15:Motor seat 16:vibration damper 17:guard plates/liners 18:guardrail

19:top oil tank 21:materials distribution tray 20:impeller device

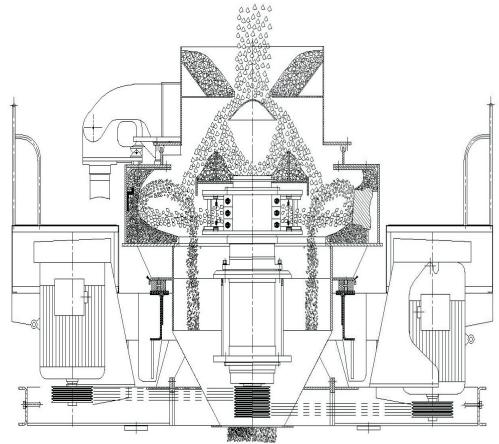
22:feed hopper 23:materials distribution cone 24:feed inlet



### **Operating principle:**

To crush stone into pieces by impaction in material's own high-speed movement and friction between materials is the main principle of this machine. The B Series VSI crusher not only can crush stones, but also can reshape final products.

According to the feeding method, there are two working forms: completely central feeding and central feeding with ring feeding; according to the crushing resistance and corrosiveness of the materials, there are two working forms: crushing between materials and crushing between materials and liners. So totally there are four kinds of the working forms.



# Working principle for central feeding with ring feeding and crushing between materials

The materials enter the machine from the feed hopper (22), and fall into the material distribution tray (21) through the material distribution cone(20), and be divided into two parts. One part of material enter the high speed rotated rotor through the center of the distribution tray and are accelerated quickly inside the rotor, and then are thrown out through flowing chute of the rotor at high speed, firstly are crushed by impaction with another parts of the materials falling from the distribution tray, and then together they are impacted to the material lining of the crushing chamber(4), after that they are rebounded from the material lining up to the top of the crushing chamber, and then change the moving direction from upwards to downwards and formed continuous material screen. In this way, one piece of the materials depart from the crushing chamber under the gravity action and fall into the lower-part shell(6) and are discharged by the discharge hopper. Upper and lower impact protecting pieces are installed on the wall of the crushing chamber to protect the body shell from wearing. Its characteristic is that the materials are accelerated by the impeller, and half of the materials are thrown out by the energy got from the impeller and then crushed, impacted, grinded with the materials lining or the materials crushed by their own high speed rotated impact, which is called "crushing between materials"

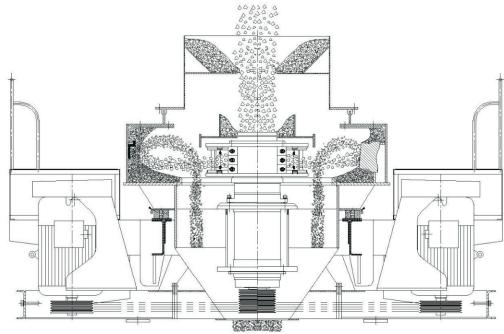


## Central feeding with ring feeding and crushing between materials and liners

Main working principle is the same as central feeding with ring feeding and crushing between materials. The difference is when crushing between materials, impact protecting pieces are installed in the crushing chamber, and the materials are formed lining around it and the materials are impacted into the lining and then crushed, however when crushing between materials and liners, the lower impact protecting pieces are changed with the guard plates/liners (17), and the materials are directly impacted to the liners and crushed then.

#### Completely central feeding and crushing between materials

Main working principle is the same as central feeding with ring feeding and crushing between materials. The difference is when completely central feeding, the distribution cone will be taken off, and the materials fall into the distribution tray directly from the feed inlet and then come into the rotor through the center of the distribution tray.



Working principle of completely central feeding and crushing between materials and liners Main principle is the same as the central feeding with rotor feeding and crushing between materials and liners; however the feeding way is completely central feeding.

Crushing between materials is suitable for the materials with medium and above hardness and high corrosiveness such as basalt, etc. During the process, the materials thrown out from the impeller impact with the material lining, while not impact with the metal of equipment directly. It can reduce the wastage and accordingly can reduce the time for maintenance and serving. The shape of the final products during this process is good and the content of small particle is a little more.

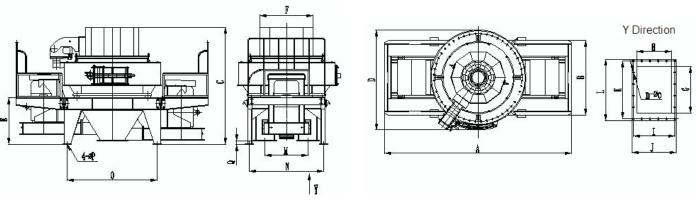
Crushing between materials and liners are suitable for the materials with hardness below medium level and low corrosiveness such as limestone, etc. And during the process, the ratio of crushing is high but the cost for the replacement of worn guard plate/liners (17) is high too, and the shape of final products is not as good as the above process.



	Basic Data	B-7611	B-8518	B-9526	B-1140					
Capacity	Center and Ring feeding	120-180	200-260	300-380	450-520					
	Center feeding	60-90	100-130	150-190	225-260					
Max Feed Size ( <b>mm</b> )	Soft material	<35	<40	<45	<50					
	Hard material	<30	<35	<40	<45					
Rotatio	n speed ( <b>r/min</b> )	1700-1890	1520-1690	1360-1510	1180-1310					
Power for d	ouble motor (Kw)	110-150	180-220	264-320	400-440					
	nension L×W×H mm)	3700×2250 ×2100	4140×2280 ×2425	4560×2450 ×2778	5000×2690 ×3300					
We	eight ( <b>t</b> )	7.8	10.3	16	25.6					
Vibrat	ting Sensor	Inspect scope: 0.1-20mm/s adjusted continuously								
	Power for double oil pump	2×0.31KW								
Lubrication hydraulic pressure station	Safety	To make sure the supply of the oil with double oil pump; stop working without oil or hydraulic pressure; temperature falls when the water cools; start the motor by heating it in winter.								
	Power for oil box heater									

Note: Any change of B series VSI crusher technical data shall not be advised additionally.

#### Dimension



Type	Overall dimension					Size of inlet and outlet								Installation dimension				
	A	B	C	D	E	F	G	H	I	J	K	L	N	М	N	0	P	Q
B-7611	4100	1640	2285	2250	830	1160	500	360	150×3	490	128×5	680	16	830	1600	1750	26	54
B-8518	4140	1760	2425	2280	870	1230	530	410	100×5	540	110×6	700	22	940	1720	2000	33	20
B-9526	4560	1840	2780	2450	1100	1260	575	415	101×5	545	142×5	750	20	1015	1800	2140	40	83
B-1140	5100	2020	3200	2690	1200	1300	600	465	109×5	595	146×5	780	20	1145	1980	2200	44	97



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