

Profession creates brand



SMH Series Hydraulic Cone Crusher

SINO-GERMAN JV HOLDING

 **YIFAN**



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一研机械

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Semi hydraulic CSS setting

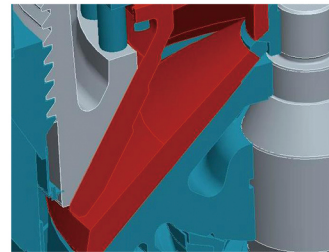


Fully hydraulic CSS setting

SMH series cone crusher is a new type of cone crusher, which is developed by Yifan engineers utilizing the world leading and proven cone crusher technology, and provides the features of high reliability and low operation costs, it is widely applied in the field of mining and aggregate processing industries, and is suitable for crushing hard and mid-hard ore and rock, meanwhile, it can be used for secondary crushing, tertiary crushing and sand making.

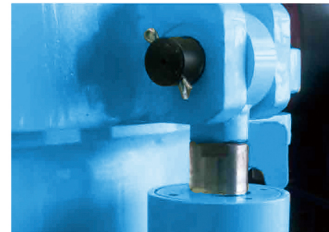
Optimized cavity and higher output

Through much theoretic analysis and practical examination, engineers in Yifan designed this hydraulic cone crusher on the basis of advantages and disadvantages of different kinds of cone crusher. Its output is high and its energy consumption is low. Under the same diameters of mantle, the crushing stroke is longer and the crushing ration is bigger. Laminated crushing function can be fully realized with full load, which can ensure reliable composition and good shape of final sizes.



Minimize the amount of downtime

Yifan cone crusher adopts hydraulic pressure locking, overload protection. When some unbreakable foreign materials enter the crushing cavity, hydraulic system can release the impact force gently to protect the mainframe and the discharge opening will go back to the original place after the foreign materials are discharged. If cone crusher is stopped with load, the whole-new hydraulic cylinder of double functions clears the materials in the cavity, and then the discharge opening goes back to the original place. Compared with the traditional spring cone crusher, the hydraulic cone crusher will be even safer and faster, which will save downtime time.



Discharge setting can be adjusted by hydraulic motor

By hydraulic motor, the discharge setting can be easily and quickly adjusted.



Standard-type Hydraulic Cone Crusher Technical Data:

Model	Max Feed Size (mm)	Discharge Range (mm)	Motor Power (kw)	Capacity(t/h)-open circuit, closed discharge(mm)														
				9	13	16	19	22	26	32	38	51	63	76	89			
SMH120(H)C	160	22-32	75-90						120	130	150							
SMH120(H)M	130	13-26	75-90		65	85	100	120	130									
SMH120(H)F	50	9-19	75-90	40	60	80	90											
SMH250(H)C	260	26-51	185-200						250	290	340	395						
SMH250(H)M	150	16-38	185-200			125	140	165	220	275	330							
SMH250(H)F	80	9-22	185-200	70	90	115	130	150										
SMH350EC	315	38-64	250-280										555	649	766			
SMH350C	230	26-64	250-280						366	430	468	629	657					
SMH350M	205	22-52	250-280					266	299	348	393	451						
SMH350F	180	16-38	250-280			188	212	234	267	305	337							
SMH550EC	450	38-89	400										890	1179	1380	1475	1566	
SMH550C	350	31-76	400										800	850	1100	1288	1398	
SMH550M	320	25-63	400						612	735	815	990	1137					
SMH550F	268	19-52	400					376	412	500	620	725	867					

Short-head-type Hydraulic Cone Crusher Technical Data:

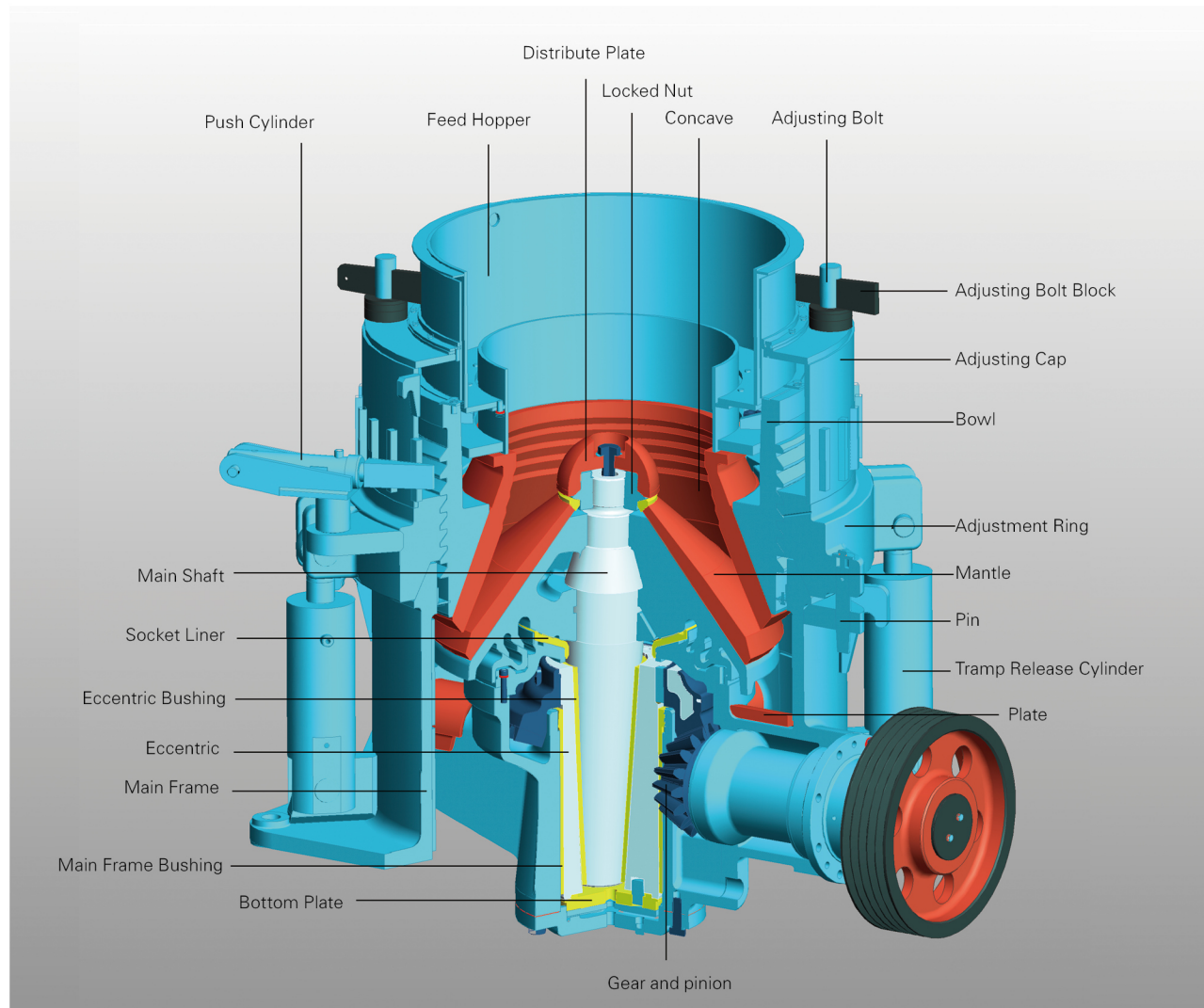
Model	Max Feed Size (mm)	Discharge Range (mm)	Motor Power (kw)	Capacity(t/h)-open circuit, closed discharge(mm)														
				3	5	6	9	13	16	19	22	26	32	38				
SMH120DC	70	6-19	75-90			59	68	96	110	130								
SMH120DM	51	5-16	75-90		45	59	68	96	110									
SMH120DF	35	3-13	75-90	30	45	50	65	90										
SMH250DC	89	9-22	185-200			100	120	145	175	210								
SMH250DM	70	6-16	185-200			82	105	130	160									
SMH250DF	54	5-16	185-200		80	90	110	135	160									
SMH350DEC	133	13-25	250-280				280	310	340	370	390							
SMH350DC	133	10-25	250-280				210	280	310	340	370	390						
SMH350DM	89	6-19	250-280			130	168	215	260	290								
SMH350DF	70	6-13	250-280			130	168	215										
SMH550DEC	203	16-38	400					510	600	630	680	720	750					
SMH550DC	178	13-32	400					455	488	552	600	620	698					
SMH550DM	133	10-19	400					355	420	460	530	545	580					
SMH550DF	105	6-16	400					220	310	375	420	482	497					

Note: 1.The capacity is total tons per hour passing through crusher at open circuit when crushing mid-hard material and bulk density with $1.6 \times 10^3 \text{kg/m}^3$. Capacities are relative to physical character and type of feeding, feeding size and composition and so on.
2.The models including(H) are discharging opening of hydraulic locking and hydraulic motor adjustment. The models excluding(H) are standard configuration, which includes discharging opening of wedge locking and pushing rod adjustment. SMH350 and SMH550 standard configuration includes discharging opening of hydraulic locking and hydraulic motor adjustment.

There are two types of discharge setting adjustment for SMH series cone crusher:

Discharge setting can be adjusted by hydraulic cylinder

Main Components



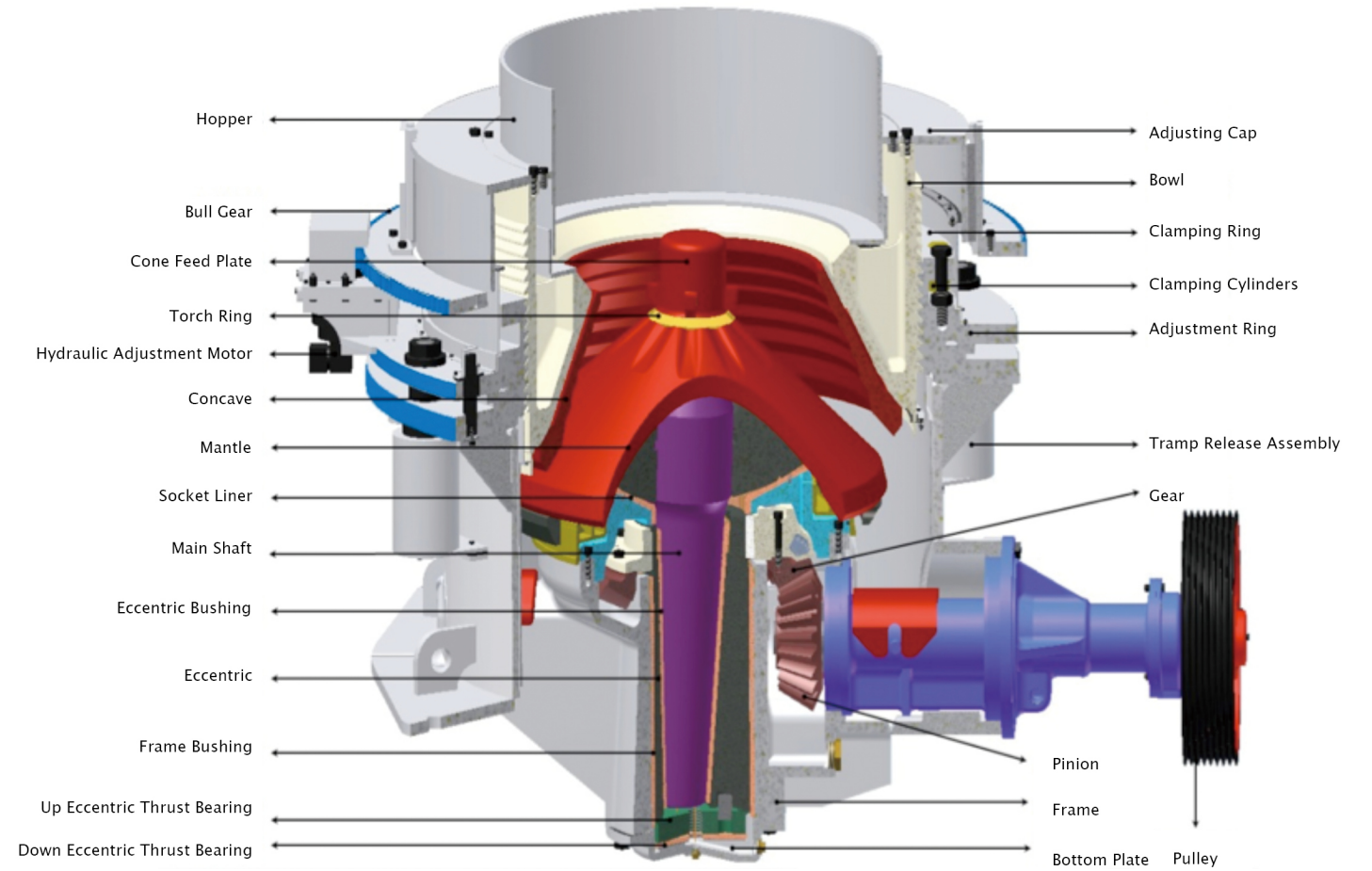
Features and Advantages

- Reasonable structure, advanced crushing principle and technical data, reliable work and low cost.
- Strong crushing ability, high efficiency productivity, high capacity, good product shape.
- Hydraulic system is reliable, provide safe and effective overload protection.
- Types of crushing cavity are for wide range of product size requirement.
- Hydraulic adjustment and hydraulic clean cavity setting, much improved automation.

Discharge setting can be adjusted by hydraulic motor

SMH120/250 – Optional
SMH350/550 – Standard

Main Components



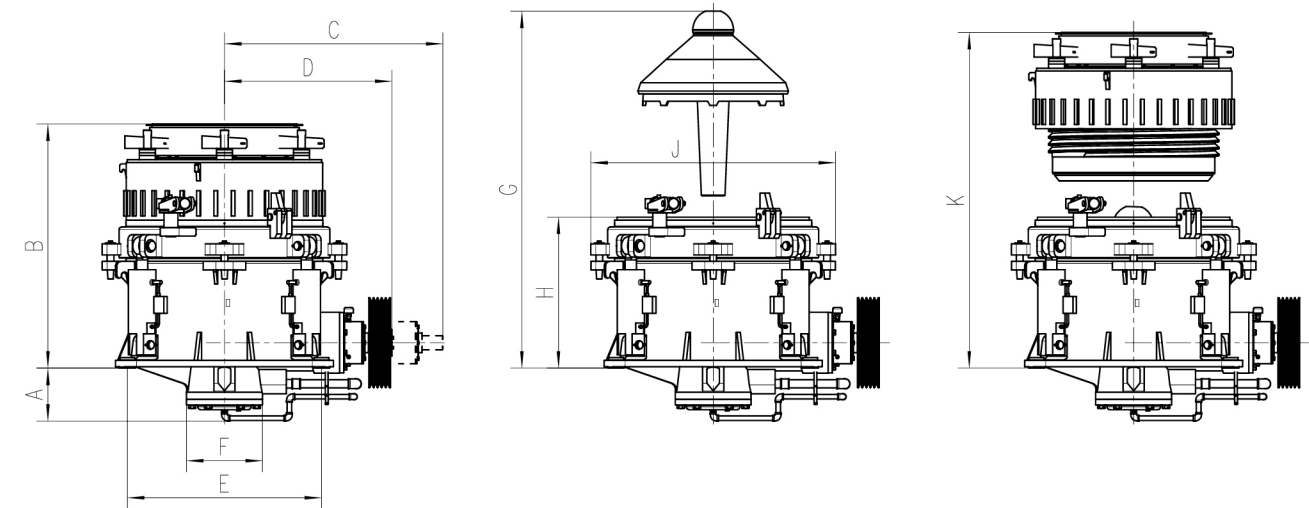
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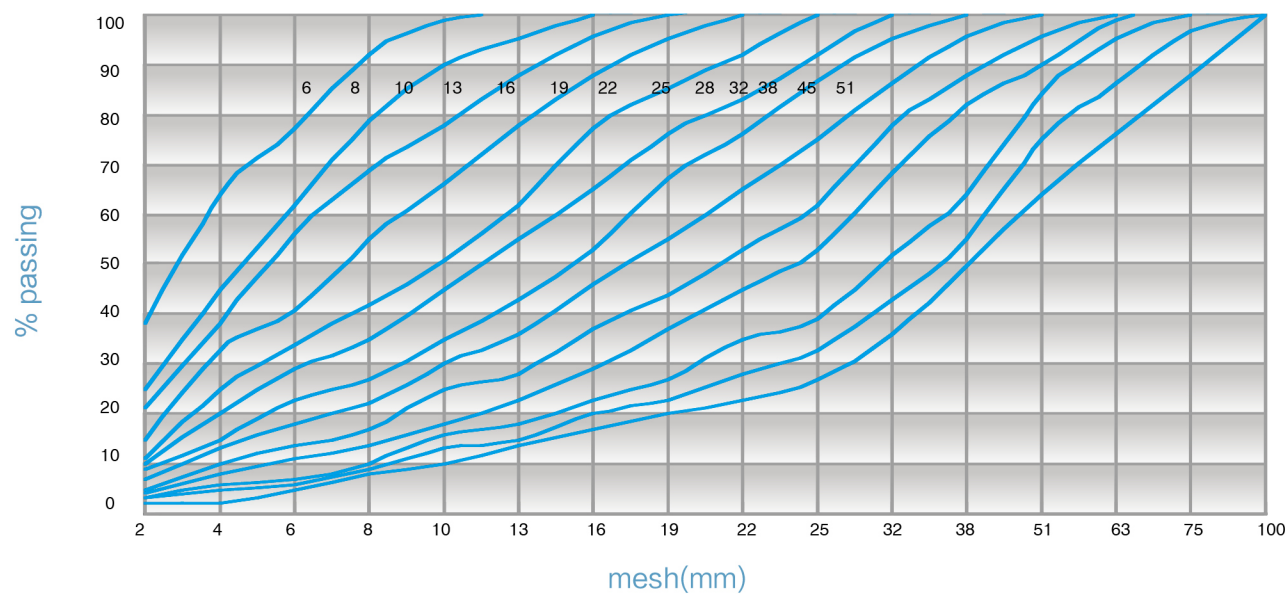
Production Gradation Table(% passing through square mesh depending on the setting)

C.S.S mesh	6	8	10	13	16	19	22	25	28	32	38	45	51
2	38	25	21	15	11	10	9	7	5	4	3	3	2
4	64	45	38	33	25	20	15	13	10	8	6	5	2
6	77	62	56	41	34	29	23	18	14	11	7	6	5
8	92	79	69	55	42	35	27	22	17	14	10	9	8
10	99	90	78	66	51	45	35	30	25	18	16	13	10
13	100	95	88	78	62	55	43	36	28	23	18	15	14
16		100	96	88	77	65	53	46	37	29	23	20	17
19			100	95	85	76	67	55	44	37	27	23	20
22				100	92	83	76	65	53	45	35	28	23
25					100	92	87	75	62	53	39	33	27
32						100	95	86	78	68	52	43	36
38							100	96	88	82	64	55	50
51								100	96	90	84	75	64
63									100	99	95	86	76
75										100	100	97	88
100												100	100

Clearance Dimensions and Weight



Gradation Curves



Note: The gradation shown depend on the feed gradation, the crushing chamber, the material density, the material mud content, its moisture and its crushability

clearance dimensions and weight	Unit	Crusher specifications				
		SMH120	SMH250	SMH350	SMH550	
Distance between rack bottom and oil pipeline at the bottom	A	mm	377	593	850	1020
Distance between rack bottom and hopper top	B	mm	1737/1766	2119/2070	2496	3290
Horizontal space at the time of drive shaft disassembling	C	mm	1773/1800	2396/2700	3510	4420
Distance between centre line of crusher and outside end surface of drive shaft	D	mm	1191/1200	1566/1582	2465	2968
Size of bolt position	E X E	mm	1380	1766	2260	2490
Diameter of bottom cap	F	mm	540	686	800	927
Vertical space at the time of main axis disassembling	G	mm	2538/2600	3353/3250	4065	5860
Distance between rack bottom and top of supporting ring	H	mm	1074/1167	1324/1445	1705	2431
Max diameter of supporting ring	I	mm	1740/2177	2258/2926	3620	3721
Vertical space at the time of adjustment set disassembling	J	mm	2387/2150	2937/2850	3755	4576
Total weight	K	kg	12500	24200	45850	86700

Note: 1.The date after the "/" refers to oversize of the crusher which discharge setting is sadjusted by hydraulic motor.