CRUSHING



Crusher ODH 0913-13 in the manufacturing plant

PSP Engineering has been producing and supplying impact crushers both with the horizontal and vertical shafts of the rotor. Impact crushers are used in primary,

Maim operating properties are:

- high operating reliability
- low operating cost
- low maintenance cost
- crushing plates adjustable by hydraulics
- easy access to the crusher and easy and fast exchange of spare parts
- great utilization of crushing parts
- highly wear resistant materials of main crushing parts

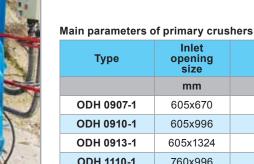
secondary and tertiary stages of crushing and in recycling of building rubble. These crushers are also suitable for the single-stage material preparation in the cement industry.

- high degree of comminution
- outstanding shape index bi3
- output of the crusher in not changed with the wear of crushing parts
- design with two or three crushing plates

The crusher may be equipped with an automatic lubrication system, jig for spare parts handling and possibly the crusher together with a drive may be supplied on the common flexible frame.



Primary impact crushers ODH are used for crushing of medium hard materials such as limestone. They can also be used for crushing of recycling materials. They are noted for their big inlet opening and cast upper crushing



Crusher ODH 0907-12 - dolomite crushing 50t/h

Туре	Inlet opening size	Max. inlet piece		Capacity	El. motor
	mm	m³	mm	t/h	kW
ODH 0907-1	605x670	0,03	500	30 - 70	45 - 75
ODH 0910-1	605x996	0,05	500	60 - 120	75 - 132
ODH 0913-1	605x1324	0,06	600	90 - 160	90 - 160
ODH 1110-1	760x996	0,1	800	110 - 200	110 - 200
ODH 1113-1	760x1324	0,12	800	120 - 250	132 - 250
ODH 1313-1	970x1324	0,24	900	200 - 300	200 - 315
ODH 1316-1	970x1655	0,3	1000	250 - 380	200 - 400



Crusher ODH 1623-13 - limestone crushing



Cut through the primary crusher ODH with two crushing plates



Cut through the primary crusher ODH with three crushing plates

Big primary crushers

Big primary impact crushers ODH are used for crushing of medium hard materials such as limestone. They are especially suitable for the single-stage primary crushing of cement material where vertical mills are then used for

final grinding. Considering the inlet piece size (up to 1.5 m3), they may be equipped with the third – finish crushing plate positioned under the rotor. The finish crushing plate calibrates the outlet size of the product .

Main parameters of primary crushers

Туре	Inlet opening size	Max. inlet piece		Capacity	El. motor
	mm	m³	mm	t/h	kW
ODH 1616-1	1250x1655	0,75	1500	300-550	400-630
ODH 1623-1	1250x2310	0,9	1500	450-800	500-800
ODH 2023-1	1570x2310	1	2000	600-1000	800-1200
ODH 2030-1	1570x2966	1	2000	900-1400	1000-1600
ODH 2530-1	2000x2966	1,5	2500	1000-1800	1200-2250

CRUSHING

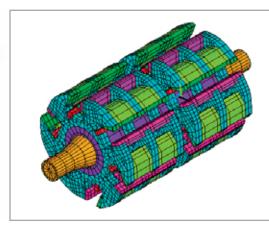
Crusher ODH 2030-13 – limestone crushing 1000t/h



Cut through the big primary crusher ODH with two crushing plates

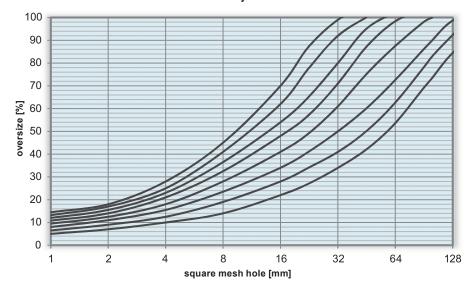


Cut through the big primary crusher ODH with three crushing plates



Stress analysis of the rotor

Grain size composition of the product in primary crushing of stone with different crusher adjustment





Crusher ODH 2530-13 – limestone crushing 1400t/h

CRUSHING



Crusher ODH 1110-23 in the manufacturing plant



Crusher ODH 1616-23 – serpentine crushing 300t/h



Crusher ODH 1616-22 – limestone crushing 500t/h

Secondary crushers

Secondary crushers ODH are used in the second or third stages of crushing for medium hard and hard materials. Considering crushing

of hard material, crushers ODH are equipped with rotors with a strong fixing of bars.

Main parameters of secondary crushers

Туре	Size of inlet opening	Max. inlet piece (undersize on the square mesh)	Capacity	El. motor
	mm	mm	t/h	kW
ODH 0907-2	380x670	200	30-70	45-75
ODH 0910-2	380x996	200	60-120	75-110
ODH 0913-2	380x1324	200	90-160	90-160
ODH 1110-2	550x1000	250	110-200	110-200
ODH 1113-2	550x1324	250	120-250	110-250
ODH 1116-2	550x1655	250	190-280	160-315
ODH 1313-2	705x1324	250	200-300	200-315
ODH 1316-2	705x1655	250	250-380	200-400
ODH 1320-2	705x1980	250	300-480	250-500
ODH 1616-2	850x1655	300	350-550	315-500
ODH 1623-2	850x2310	300	450-700	400-630

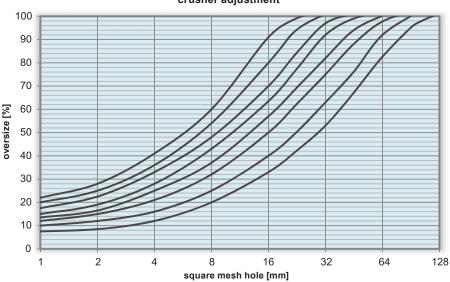


Cut through the crusher ODH 1113-22 with two crushing plates



Cut through the crusher ODH 1113-23 with three crushing plates

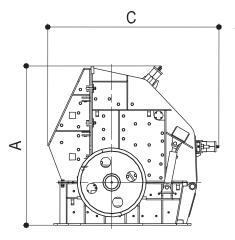
Grain size composition of the product in secondary crushing of stone with different crusher adjustment

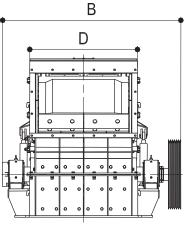


The product size and capacity of crushers ODH depend on mechanical properties of crushed material, inlet piece size, number

of crushing plates (2 or 3) and adjustment of crushing plates, rotor speed and other factors.

Main dimensions of crushers ODH





CRUSHING

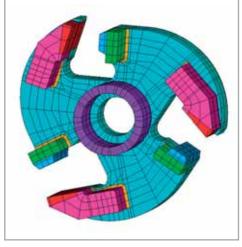


Crusher ODH 1110-23 – limestone crushing 120t/h

Туре	A	В	С	D
	mm	mm	mm	mm
ODH 0907	1860	1600	2150	900
ODH 0910	1860	1940	2150	1230
ODH 0913	1860	2250	2150	1560
ODH 1110	2290	1960	2480	1230
ODH 1113	2290	2284	2480	1560
ODH 1116	2290	2650	2480	1900
ODH 1313	2860	2350	3000	1580
ODH 1316	2860	3000	3000	1940
ODH 1320	2860	3230	3000	2250
ODH 1616	3690	3462	3760	2000
ODH 1623	3690	4102	3760	2660
ODH 2023	4740	4750	4730	2670
ODH 2030	4740	5411	4730	3326
ODN 2530	5790	5800	5970	3350



Crushing area of the crusher ODH 1110-23



Stress analysis of a crusher rotor disc



Crushers ODH 1110-23 and ODH 1616-22 - limestone crushing