



HAZEMAG Roll Crusher | HRC





Rugged and efficient crushing with protection against tramp metal

For the industrial beneficiation of primary and secondary raw materials, crushing procedures are vital for the production of certain grain sizes, forms, surfaces or for the outcrop of multi-component materials.

The utilised crusher must meet stringent requirements of today's time when processing rocks, ores and coals. Materials to be crushed become more and more difficult in terms of handling. High throughput capacities are required and the energy consumption is a key focus. Therefore the application of energy-efficient roll crusher with high throughput rates becomes more and more important from the economic and ecologic point of view.

The HAZEMAG roll crusher meets these requirements and is characterized by the following points:

- low specific energy demand
- high to very high throughput rate
- intelligent design with tramp metal protection
- automatic gap setting
- simple maintenance
- high variety of crushing tools
- cubical product with minimal fines
- trouble-free operation with very sticky and moist materials
- applicable for adhesive feed material

The operating principle is based on a continuous generation of pressure between two counter-rotating rolls, so that crushing takes place without interruptions in contrast to the intermittent jaw crushers. During operation, the high rotational energy of the crushing rolls and the drive components reduce the peak loads in an optimal way and uniform power consumption is achieved.

If a non-breakable tramp metal enters the machine, it is essential to open the crushing gap to let the tramp material pass. This is achieved by using the so-called floating roll, which is supported in pivoting rocker arms. The rocker arms are supported by the lower housing via hydraulic cylinders. In order to guarantee parallel retraction of the floating roll, the rocker arms are connected with each other over a torsion shaft. The rotational reaction of the floating roll allows an almost frictionless movement and a large escape path.

Housing and drive bracket of the HAZEMAG Roll Crusher are very sturdy and thus suitable for heavy-duty applications. They are fitted with easy to exchange wear parts. The design of the housing allows a crushing segment service below the feed hopper via easily dismantable hoods.

The drive is assembled on a base frame, which is connected with the roll crusher. HAZEMAG technology ensures that a constant drive belt tension exists during the retraction movement of the floating roll, and during the adjustment of the gap.





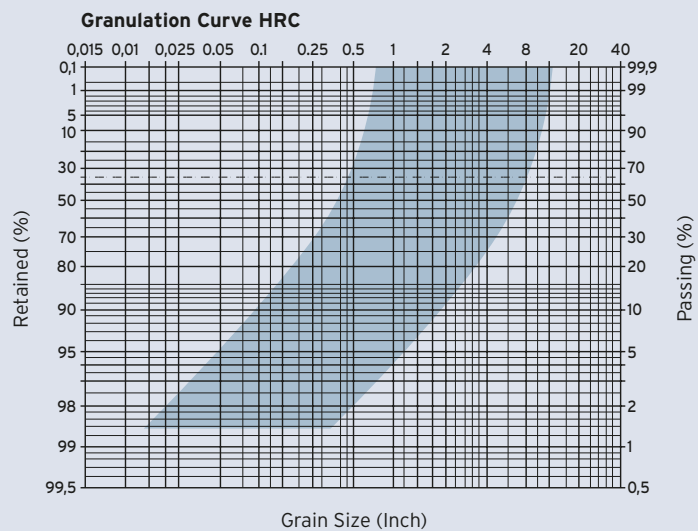
The crushing rolls for primary and secondary crushers are made up of a roll body in polygon design which is equipped with exchangeable crushing segments. As a result of the specific geometry between roll body and crushing segment an optimum form-fit is achieved, thus being able to stand up to the high crushing forces. Depending on the respective task definition, the shape of teeth and their number are selected.

With the local control unit (usually incl. in the scope) the crushing gap, and thus the product, can be controlled from the switching centre, as well as locally. To compensate the wear of the crushing tools, the crushing gap can be reduced very easily - just by a push of a button.

The following typical raw materials are processed with the HAZEMAG Roll Crushers: Limestone, clay, gypsum, coal, coke, phosphate, marl, chalk, salts, quarry material, quicklime, ...



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HRC | Roll Crusher – HAZEMAG is the expert

HAZEMAG HRC						
Type	Installed drive power [HP]	Roll dimensions D x L [Inch]	Weight [lb]	Product size [Inch]	Feed size [Inch]	Feed capacity** [t/h]
HRC 0605	20 – 50	25 x 20	14,000 – 15,900	0.5 – 2.5	3 – 10	100
HRC 0607	20 – 50	25 x 30	17,200 – 18,700	0.5 – 2.5	3 – 10	150
HRC 0610	50 – 75	25 x 40	24,700 – 32,000	0.5 – 2.5	3 – 10	250
HRC 0616	60 – 125	25 x 60	39,900 – 42,500	0.5 – 2.5	3 – 10	350
HRC 0620	60 – 125	25 x 80	48,500 – 54,000	0.5 – 2.5	3 – 10	450
HRC 0810	60 – 125	30 x 40	28,000 – 33,500	1 – 6	5 – 20	600
HRC 0816	125 – 200	30 x 60	56,200 – 64,600	1 – 6	5 – 20	1,000
HRC 0820	125 – 200	30 x 80	68,300 – 77,400	1 – 6	5 – 20	1,200
HRC 1010	75 – 200	40 x 40	43,400 – 55,600	1.5 – 8	6 – 28	800
HRC 1016	100 – 200	40 x 60	72,800 – 83,300	1.5 – 8	6 – 28	1,300
HRC 1020	100 – 200	40 x 80	87,100 – 97,000	1.5 – 8	6 – 28	1,600
HRC 1210	100 – 200	45 x 40	52,500 – 64,200	1.5 – 10	6 – 16	1,000
HRC 1216	200 – 300	45 x 65	94,000 – 110,700	1.5 – 10	6 – 16	1,600
HRC 1220	300 – 400	45 x 80	152,300 – 170,000	1.5 – 10	6 – 16	2,000
HRC 1225	300 – 400	45 x 100	177,500 – 197,300	1.5 – 10	6 – 16	2,500
HRC 1420	350 – 500	45 x 80	173,000 – 197,300	2 – 10	6 – 20	2,100
HRC 1425	350 – 500	45 x 100	190,700 – 202,000	2 – 10	6 – 20	2,600
HRC 2020	350 – 700	80 x 80	249,100 – 285,500	8 – 16	30 – 48	4,800
HRC 2025	340 – 1,200	80 x 100	340,000 – 391,300	8 – 16	30 – 60	6,000
HRC 2030	600 – 1,500	80 x 120	430,000 – 497,100	8 – 16	30 – 80	7,200

* values are variable and can be aligned to the particular requirements

** based on medium hard limestone and typical feed size distribution from 0 - x In and medium product size

Further features of the HAZEMAG Roll Crusher series:

- A speed and slip monitoring of the crushing rolls
- Monitoring of bearing and gear
- Lifting device to move the track roller into the maintenance position
- A quick exchange of the crushing segments even in operating position
- Adjustable scrapers