HAZEMAG

MINERALS

HAZEMAG
Roll Crusher | HRC

HAZEMAG

GROUP

Rugged and efficient crushing with protection against tramp metal

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

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 input 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 gab setting
- simple maintenance
- high variety of crushing tools
- cubicle 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 ideally 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 great 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 changing below the feed hopper via easy dismountable hoods.

The drive is assembled on a base frame, which is connected with the roll crusher. The floating roll drive, also supported in pivoting mode, is connected with the floating roll rocker arm by a coupling rod. Thus it is ensured that a constant drive belt tension exists during the retraction movement of the floating roll, and during the adjusting 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 tight 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 standard provided CPU the crushing gap, and thus the product, can be controlled and checked from the switching centre, as well as from the switchgear cabinet on the crusher. 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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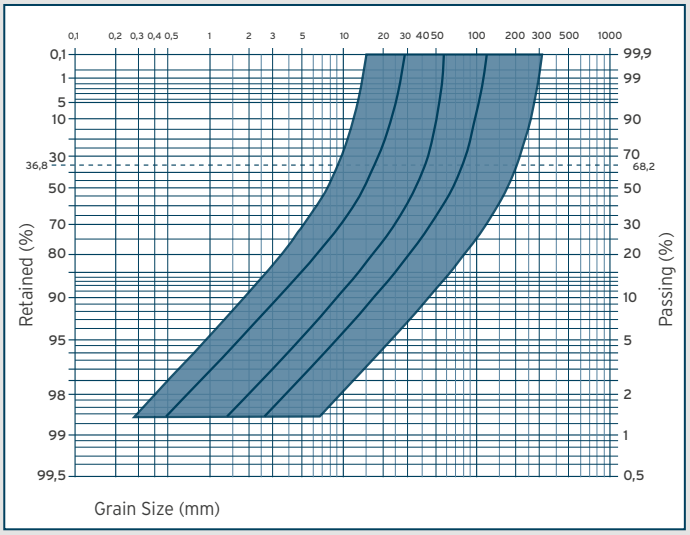
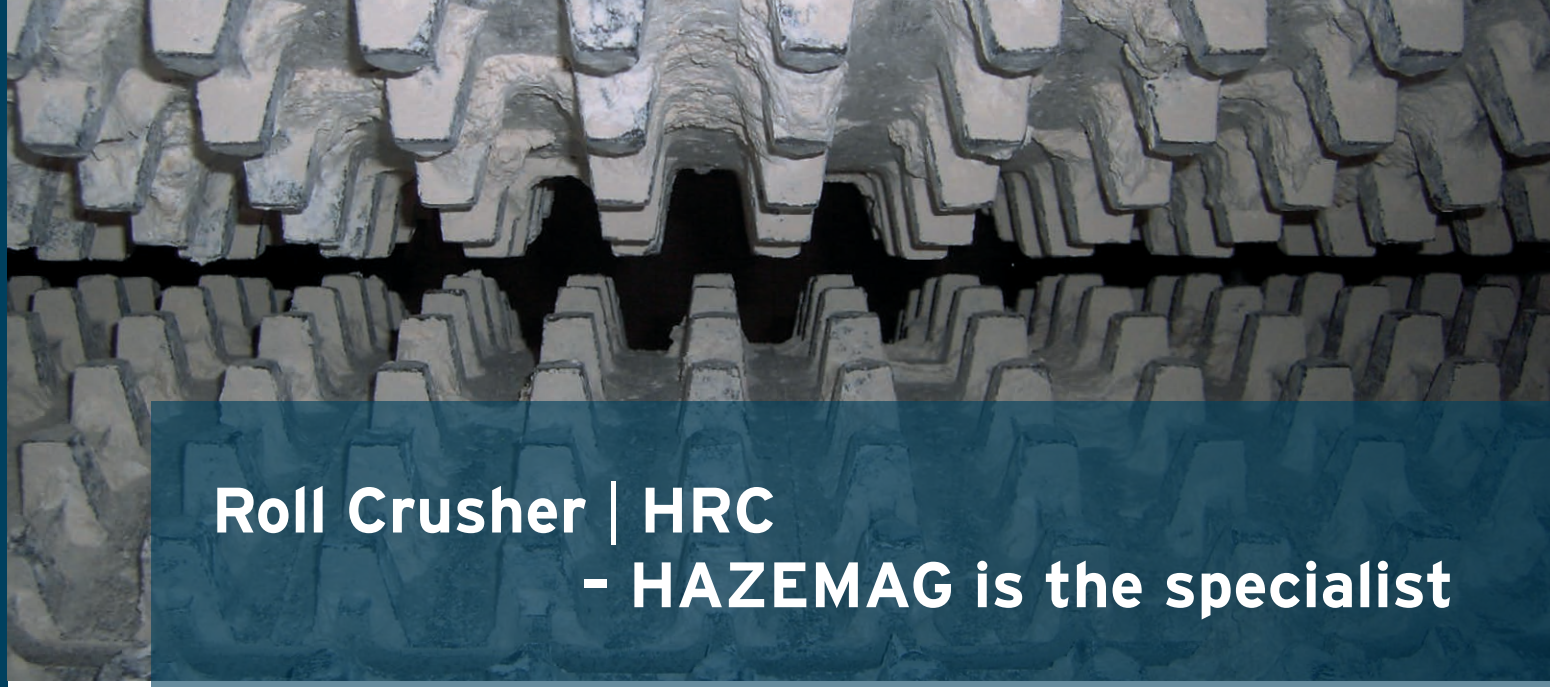


Granulation Curve **HRC**



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– HAZEMAG is the specialist

Type	Drive	Dimensions		Performance Data*		
	Installed power [KW]	Roll D x L; [mm]	Weight [Kg]	Product Size [mm]	Feed Size [mm]	Feed Capacity** [t / h]
HRC 0605	15 - 37	600 x 510	6.350 - 7.200	15 - 60	75 - 250	105
HRC 0607	15 - 37	600 x 700	7.800 - 8.500	15 - 60	75 - 250	150
HRC 0610	37 - 55	600 x 1.020	11.200 - 14.500	15 - 60	75 - 250	210
HRC 0616	45 - 90	600 x 1.530	18.100 - 19.300	15 - 60	75 - 250	335
HRC 0620	45 - 90	600 x 2.040	22.000 - 24.500	15 - 60	75 - 250	420
HRC 0810	45 - 90	800 x 1.020	12.700 - 15.200	25 - 150	125 - 500	565
HRC 0816	90 - 160	800 x 1.530	25.500 - 29.300	25 - 150	125 - 500	900
HRC 0820	90 - 160	800 x 2.040	31.000 - 35.100	25 - 150	125 - 500	1100
HRC 1010	55 - 160	1.000 x 1.020	19.700 - 25.200	30 - 200	150 - 700	740
HRC 1016	90 - 160	1.000 x 1.530	33.000 - 37800	30 - 200	150 - 700	1180
HRC 1020	90 - 160	1.000 x 2.040	39.500 - 44.000	30 - 200	150 - 700	1480
HRC 1210	75 - 160	1.200 x 1.050	23.800 - 29.100	30 - 250	150 - 400	900
HRC 1216	132 - 200	1.200 x 1.650	42.600 - 50.200	30 - 250	150 - 400	1440
HRC 1220	200 - 315	1.200 x 2.050	69.100 - 77.100	30 - 250	150 - 400	1800
HRC 1225	200 - 315	1.200 x 2.550	80.500 - 89.500	30 - 250	150 - 400	2250
HRC 1420	250 - 355	1.400 x 2.050	78.500 - 89.500	50 - 250	150 - 500	1935
HRC 1425	250 - 355	1.400 x 2.550	86.500 - 91.500	50 - 250	150 - 500	2400
HRC 2020	250 - 500	2.000 x 2.050	113.000 - 129.500	200 - 400	800 - 1.200	4350
HRC 2025	250 - 800	2.000 x 2.550	154.000 - 177.500	200 - 400	800 - 1.500	5450
HRC 2030	450 - 1000	2.000 x 3.050	195.000 - 225.500	200 - 400	800 - 2.000	6500

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

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

Further features of the HAZEMAG Roll Crusher series:

- A rotary and slip monitoring of the crushing rolls
- Monitoring of bearing and gear
- Track roller lifting device for displacing in maintenance positions
- A quick exchange of the crushing segments even in operating position
- Adjustable scrapers

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