



HAZEMAG Primary Impactors | HPI





Cost-effective primary crushing with patented blow bars

Application

This series of primary impact crushers is used in the cement, aggregate and recycling industries.

- for aggregate production and recycling industry, the HPI impact crusher is used in the pre-crushing role without a grinding path.
- the single rotor primary impact crusher of the HPI series is used in the cement industry with grinding path, for the production of a raw material with an ideal grain size distribution for further grinding in vertical roller mills.

Equipment

The rotor can handle feed material up to 3 m³. The HPI crusher has two impact aprons and can additionally be equipped with a grinding path. The gap settings of the impact aprons grinding path can be varied by means of spindles or via hydraulic cylinder, thus allowing for optimum control of the end product granulometry. The grinding path restricts the amount of oversize.

Rotor

The rotor is the key component in the crushing process. Its body together with shaft and bearings forms the »heart« of the impact crusher.

GSK - Rotor

This patent rotor is HAZEMAG's own design and is a cast and welded steel construction, with individually cast rotor discs welded to the rotor body to accommodate the proprietary blow bars as primary crushing implements. The blow bars are locked in position in the holders by means of wedges, which can be easily removed for blow bar changing.

QB - Rotor

The rotor discs are welded together with rugged holding beams to provide the backbone for the blow bars. The blow bars themselves are secured to the holding beams by means of wedges, which are easily removed for blow bar changing.

Retracting mechanism

For the protection of the rotor body and blow bars, the impact aprons retract under excessive load. Two versions are available:

■ *Mechanical system*

The impact apron is held in position by means of a thrust device with pressure springs. The spindle adjustment is assisted by auxiliary hydraulics.

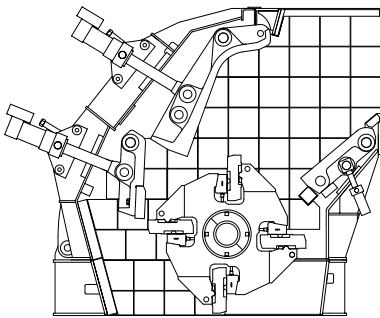
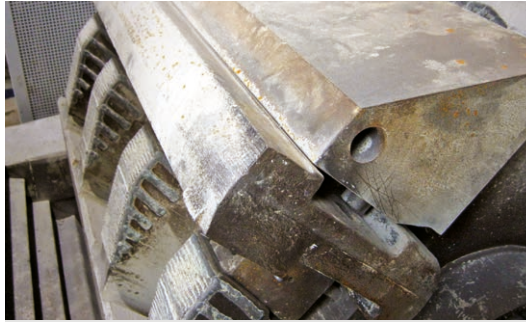
■ *Hydraulic system*

The impact aprons are retained in position by hydraulic cylinder, allowing adjustment and securing at the touch of a button. The instant a pre-set limiting value is overstepped in the crushing chamber, the impact apron retracts in a controlled manner. As soon as the load value returns to normal, the impact apron resumes its pre-set position, and operation continues without interruption.

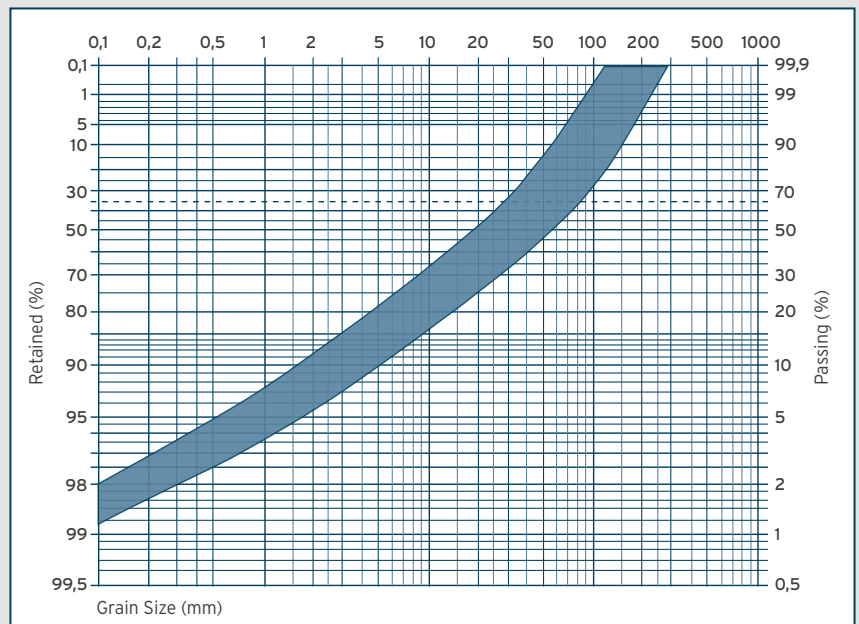
Grinding path

The HPI series may optionally be fitted with a grinding path which ensures an oversize limitation. Adjusting the grinding path is effected hydraulically. Hence the product grain size may be optimally adjusted at the HAZEMAG HPI series.

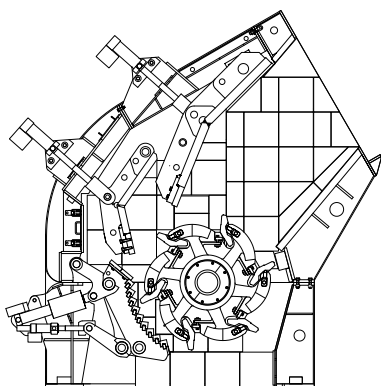




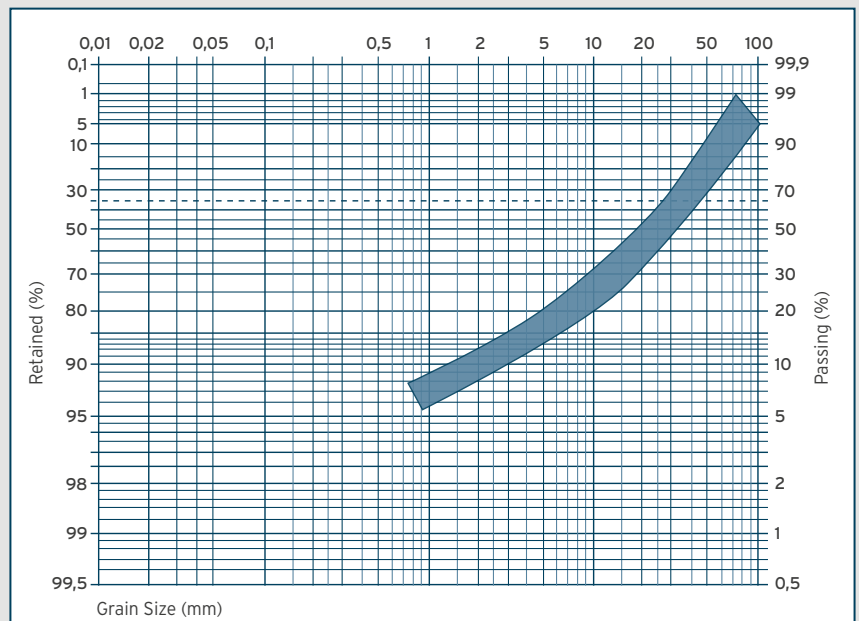
HPI **without** grinding path



Granulation Curve HPI **without** grinding path



HPI **with** retractable grinding path



Granulation Curve HPI **with** grinding path



Primary Impactors - HAZEMAG is the specialist.

Retractable grinding path

In the cement industry the grinding path is the decisive assembly group for reducing the oversize in the field of primary crushing. The grinding path of the HAZEMAG HPI series has been significantly improved: a technically mature system of hydraulics and mechanics permits the retraction in case of an overload. This patented solution increases the operational safety and availability and potential damages due to foreign particles and resulting downtimes are reduced. With this HAZEMAG once more demonstrates its distinct market competence.

HAZtronic

With the HAZtronic system, the crusher can be controlled and adjusted from the main control panel. All the settings which determine the end product can be input and called up at the touch of a button without interrupting operation. This means that immediate reaction and adjustment to varying operating conditions can be effected at all times to ensure optimum productivity.

| Type | Rotor Dimensions | | Capacity* | Feed Lump Volume | Edge-Length of Lump | Inlet | with Grinding Path | | without Grinding Path | |
|----------|------------------|-----------|--------------------|------------------|---------------------|---------------------|-----------------------|-------------|-----------------------|-------------|
| | Φ x Width [kW] | Type [mm] | 95% < 150 mm [t/h] | max. [m³] | max. [mm] | Height x Width [mm] | installed Power* [kW] | Weight [kg] | installed Power* [kW] | Weight [kg] |
| HPI 1010 | 1.030 x 1.000 | QB | 100-150 | 0,3 | 800 | 815 x 1.020 | - | - | 110-160 | 1.1200 |
| HPI 1214 | 1.200 x 1.340 | QB | 150-200 | 0,4 | 1.000 | 950 x 1.360 | 200-250 | 17.000 | 160-200 | 15.900 |
| HPI 1414 | 1.340 x 1.340 | QB | 200-300 | 0,5 | 1.000 | 1.025 x 1.360 | 250-355 | 19.200 | 200-315 | 17.800 |
| HPI 1615 | 1.640 x 1.500 | QB, GSK | 350-450 | 1,3 | 1.200 | 1.295 x 1.520 | 400-560 | 45.000 | 315-500 | 44.000 |
| HPI 1618 | 1.640 x 1.800 | QB, GSK | 450-550 | 1,4 | 1.200 | 1.295 x 1.820 | 500-710 | 56.000 | 400-560 | 55.000 |
| HPI 1622 | 1.640 x 2.250 | QB, GSK | 550-700 | 1,4 | 1.200 | 1.295 x 2.270 | 560-900 | 66.000 | 500-710 | 65.000 |
| HPI 1822 | 1.800 x 2.250 | GSK | 850-1.000 | 2 | 1.500 | 1.600 x 2.270 | 900-1.200 | 78.000 | 710-1.000 | 76.000 |
| HPI 2022 | 2.000 x 2.250 | GSK | 1.150-1.250 | 2,2 | 1.600 | 1.830 x 2.270 | 1.250-1.500 | 96.000 | 1.100-1.250 | 94.500 |
| HPI 2025 | 2.000 x 2.500 | GSK | 1.300-1.400 | 2,3 | 1.600 | 1.830 x 2.520 | 1.450-1.700 | 104.000 | 1.250-1.400 | 102.500 |
| HPI 2030 | 2.000 x 3.000 | GSK | 1.750-1.850 | 2,4 | 1.600 | 1.830 x 3.020 | 2.000-2.250 | 120.000 | 1.700-1.900 | 119.000 |
| HPI 2225 | 2.200 x 2.500 | GSK | 1.400-1.500 | 2,4 | 1.600 | 1.980 x 2.520 | 1.600-1.800 | 118.000 | 1.300-1.500 | 117.000 |
| HPI 2230 | 2.200 x 3.000 | GSK | 1.850-1.950 | 2,5 | 1.700 | 1.980 x 3.020 | 2.000-2.400 | 130.000 | 1.750-2.000 | 129.000 |
| HPI 2530 | 2.500 x 3.000 | GSK | 2.150-2.250 | 3 | 1.900 | 2.130 x 3.020 | 2.400-2.700 | 164.000 | 1.900-2.250 | 162.500 |

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