

**HAZEMAG**  
**Compound Crusher | HPC**





# Two - stage crushing with optimum productivity

## Application

The Compound Crusher HPC is used as a primary crusher in the cement industry. This double-rotor crusher generates a material suitable as feed material for ball mills in raw cement meal production.

## Equipment

Two-stage crushing within a single housing by two co-rotating rotors operating in tandem. The 1<sup>st</sup> rotor crushes the feed rocks of up to 3 m<sup>3</sup> in volume; the 2<sup>nd</sup> rotor, which runs at a higher speed, reduces the feed material to product size. The HPC crusher has 2 or 3 impact aprons and a grinding path; the settings are controlled either by spindles and/or hydraulics, therefore 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.

## 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.

## 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 accommo-

date 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.

## 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.

## 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 HPC 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





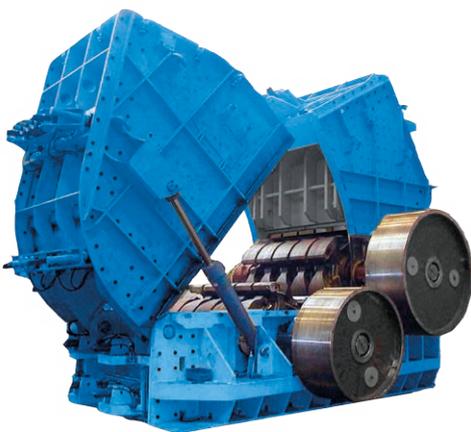
safety and availability and potential damages due to foreign particles and resulting downtimes are reduced. With this HAZEMAG once more demonstrates its distinct market competence.

#### **Grinding Path**

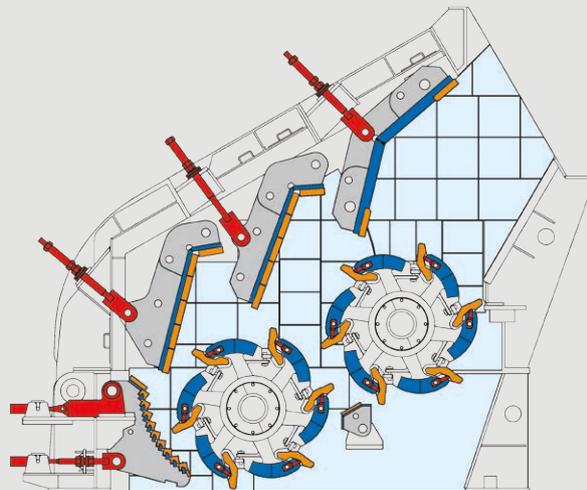
The HPC series may optionally be fitted with a grinding path which ensures an oversize limitation. Adjusting the grinding path is effected hydraulically. Hence the product grain size may be optimally adjusted at the HAZEMAG HPC series.

#### **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.



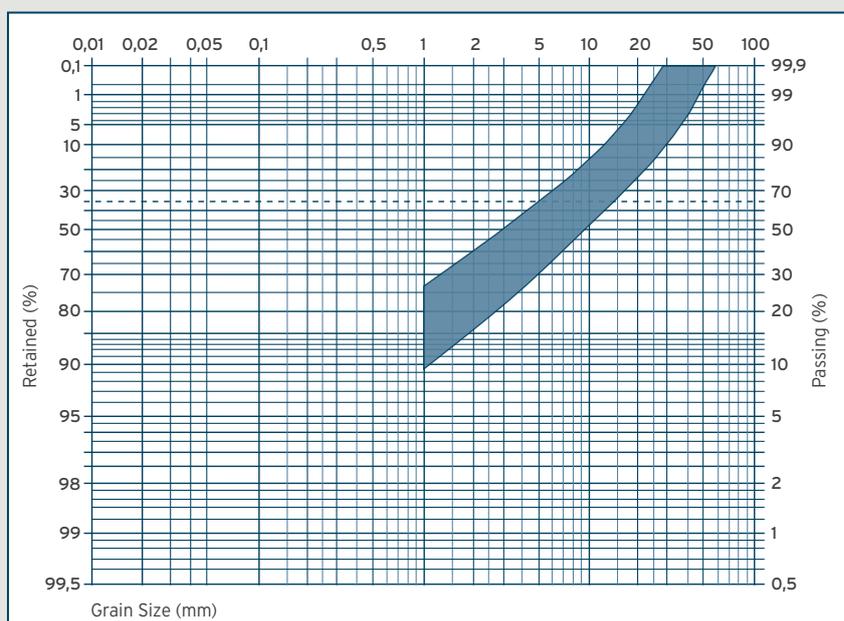
Compound Crusher **HPC**



# Compound Crusher - HAZEMAG is the specialist

| type     | rotor dimensions | throughput*       | feed size                   | edge length        | inlet opening       | installed power* |               | weight       |
|----------|------------------|-------------------|-----------------------------|--------------------|---------------------|------------------|---------------|--------------|
|          | D x L [mm]       | 92% < 25 mm [t/h] | max. size [m <sup>3</sup> ] | one direction [mm] | height x width [mm] | rotor 1 [kW]     | rotor 2 [kW]  | machine [kg] |
| HPC 1414 | 1.340 x 1.340    | 130 - 230         | 0,5                         | 1.000              | 950 x 1.420         | 110 - 250        | 132 - 315     | 28.000       |
| HPC 1615 | 1.640 x 1.500    | 300 - 400         | 1,3                         | 1.200              | 1.410 x 1.520       | 250 - 400        | 315 - 500     | 62.000       |
| HPC 1618 | 1.640 x 1.800    | 370 - 470         | 1,4                         | 1.300              | 1.410 x 1.820       | 315 - 500        | 400 - 560     | 70.500       |
| HPC 1622 | 1.640 x 2.250    | 450 - 550         | 1,5                         | 1.500              | 1.410 x 2.270       | 400 - 560        | 500 - 710     | 92.000       |
| HPC 1822 | 1.800 x 2.250    | 750 - 850         | 2,0                         | 1.500              | 1.500 x 2.270       | 710 - 900        | 800 - 1.000   | 101.000      |
| HPC 2022 | 2.000 x 2.250    | 1.050 - 1.150     | 2,2                         | 1.500              | 1.770 x 2.270       | 900 - 1.200      | 1.100 - 1.400 | 131.000      |
| HPC 2025 | 2.000 x 2.500    | 1.225 - 1.325     | 2,3                         | 1.600              | 1.770 x 2.520       | 1.100 - 1.300    | 1.300 - 1.600 | 160.000      |
| HPC 2030 | 2.000 x 3.000    | 1.550 - 1.650     | 2,4                         | 1.700              | 1.770 x 3.020       | 1.450 - 1.650    | 1.750 - 2.000 | 180.000      |

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



Granulation Curve **HPC**