







Due to the continuous pursuit of procedural, maintenance and user-friendly improvements, a new development emerged in the field of tertiary machines: The HAZEMAG Tertiary Impact Crushers of the HTI series. The new HAZEMAG concept for tertiary crushing unites our know-how of more than 60 years, combined with the practical experience and the requirements of the plant operators.

The HTI series was designed for the economic tertiary crushing of hard rock and is a modular system with the objective of fulfilling every task in the bulk materials industry. The machine's fittings as well as its control may be adapted to the individual requirements and wishes of the operators – even up to a fully automatic mode.

Depending on the properties of the feed material, the crushing ratio and the desired requirements on the product grain.

Hydraulic suspension of the impact apron

The hydraulic suspension of the impact apron offers the comfortable possibility of a simple adjustment of the gap setting and a quick adaptation to the individual procedural conditions.

Housing and wear parts

For service, inspection and maintenance work the machine's housing is fitted with large doors on both sides. The blow bars are laterally inserted into the rotor, so that they can be simply and quickly exchanged. The housing's plating largely consists of handy and easy to exchange wear plates.

Form follows Function

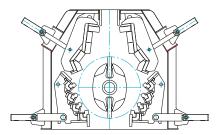
The new design of the HAZEMAG HTI series considers the standardization of the wear parts. An economically interesting exchange of the wear parts is guaranteed. Due to the use of especially wear-resistant blow bar materials and designs with a degree of utilization of more than 50 per cent, the operating and maintenance costs of the HTI series are clearly reduced. Because of the symmetrical design of the HTI Impact Crusher the rotor's direction of rotation may be reversed. This feature has a positive effect on the crushing behavior and the service life of the wear elements. Due to the reversing procedure an automatic regrinding of the blow bars is effected, which entails a constant crushing product and a uniform degree of utilization. The design of the crushing chamber of the HTI series with the comfortably adjustable impact apron gap ensures an optimum crushing result at a favorable energy demand.

Grinding path

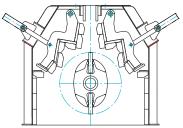
The HTI series may optionally be fitted with a grinding path. The grinding path restricts the amount of oversize and supports the generation of a cubical and stress-free product.



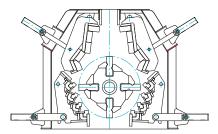




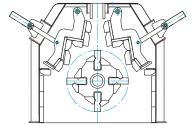
HTI with grinding path and VR2 rotor



HTI without grinding path and VR2 rotor



 $\label{eq:html} \text{HTI with grinding path} \text{ and VR4 rotor}$



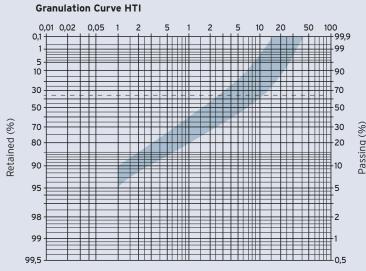
 $\label{eq:html} \mbox{HTI \ensuremath{\mbox{without}}\xspace\ensuremath{\mbox{grinding}}\xspace\ensuremath{\mbox{path}}\xspace\ensuremath{\mbox{and}}\xspace\ensuremath{\mbox{VR4}}\xspace\ensuremath{\mbox{vot}}\xspace\ensuremath{\mbox{and}}\xspace\ensuremath{\mbox{vot}}\xspace\ensuremath{\mbox{vot}}\xspace\ensuremath{\mbox{and}}\xspace\ensuremath{\mbox{vot}}\xspace\ensuremath{\mbox{vot}}\xspace\ensuremath{\mbox{and}}\xspace\ensuremath{\mbox{without}}\xspace\ensuremath{\mbox{grinding}}\xspace\ensuremath{\mbox{out}}\xspace\ensuremath{\mbox{out}}\xspace\ensuremath{\mbox{vot}}\xspace\ensuremath{\mbox{vot}}\xspace\ensuremath{\mbox{out}}\xspace\ensuremath}\xspace\ensuremath{\mbox{out}}\xspace\ensuremath{\mbox{out}}\xspace\ensuremath{\mbox{out}}\xspace\ensuremath{\mbox{out}}\xspace\ensuremath{\mbox{out}}\xspace\ensuremath}\xspace\ensuremath{\mbox{out}}\xspace\ensuremath$

Drive

The drive capacity is transmitted to the rotor by means of the v-belt drive. If the customer wants to influence the fineness of the end product directly and to adjust the machine's optimum working point, the new HTI Impact Crusher may be optionally fitted with a frequency converter and a direct drive. So by varying the rotor speed it is possible to specifically produce a desired grain size distribution from the wide potential range of products. At the same time it is possible to adapt the speed with an advanced wear of the blow bars and hence to keep the product grain curve constant.

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.



Grain Size (mm)



HAZEMAG Tertiary Impact Crusher HTI						
Туре	Rotor dimensions Ø x width [mm]	Capacity* [t/h]	max. edgelength of lump [mm]	Inlet height x width [mm]	Installed Power* [kW]	Weight [kg]
HTI 1005	1,010 x 500 ¹	40 - 60	up to 70 ³	175 x 510	90 - 132	6,900¹
	1,010 x 500 ²	40 - 60	up to 70 ³	260 x 510	110 - 200	7,800 ²
HTI 1010	1,010 x 1,000 ¹	90 - 120	up to 70 ³	175 x 1,020	200 - 250	10,000 ¹
	1,010 x 1,000 ²	90 - 120	up to 1504	260 x 1,020	160 - 31	11,900²
HTI 1014	_	-	_	_	-	_
	1,010 x 1,340 ²	120 – 160	up to 1504	260 x 1,360	200 - 315	13,500 ²

¹ VR2-Rotor, weight **without** grinding path

Rotors

The rotor of the Impact Crusher is generally the most stressed component during the crushing procedure. Depending on the crushing problem to be solved, two types of rotors are available for the HTI series.

VR2-Rotor

- maximum feed size: 70 mm
- ideal for the production of crushed sand
- fitted with two rows of blow bars

VR4-Rotor

- maximum feed size: 150 mm
- lacktriangle ideal for the production of high-quality chippings
- fitted with four rows of blow bars

Special HAZEMAG features

HAZEMAG machines have excellent accessibility to facilitate servicing and maintenance work and thus minimise down time. Moreover, the tools and personnel required for such tasks are reduced to a minimum.

- The crusher housing is lined with handy and easily replaceable wear plates, of which some 97% are interchangeable, thus reducing storage space and costs.
- All impact crushers are fitted with a key transfer system, which prevents unauthorised opening of the housing during operation and prevents motor start-up whilst work is being carried out on the open crusher.
- The modern and generously-equipped fabricating facilities in Dülmen guarantee machines and products of the highest quality
- Installation, repair, modification and assembly work is carried out by highly-trained and experienced personnel, if necessary in shift work around the clock. Of course, as part of the service, HAZEMAG offers contracts for after-sales inspection as well as for the acquisition of spare and wear parts.

² max. feed size to produce sand

³ VR4-Rotor, weight with grinding path

⁴ max. feed size to produce chippings

^{*}Values are variable and can be aligned to the particular requirements.