



inch	±1/2		±5/8	±3/4	7/8	±1	±1¼	±1½	±2		2½		±3	±3½	±4		110
mm	13	15	17	20		25	30	40	50	60		70	80	90	100		110

To define the optimal grinding media for your mill, our experts analyze a set of critical factors. They use our proprietary databases, simulation tools, laboratory testing results, field trial results and many more items to technically segment your application.

## Key elements for grinding media selection are:

### 1 Identification and evaluation of the different wear mechanisms:

Abrasion	Impact	Corrosion
High	High	High
Medium	Medium	Medium
Low	Low	Low

### Main factors to consider for a correct segmentation:

Ore & pulp characteristics	Mill characteristics	Operating parameters
Mineralogy	Type of mill	Grinding media size
Granulometry	Type of discharge	% filling degree
Water quality	Mill dimension	Speed of rotation
	Liner design	

More than 100 alloys are available to fit all your requirements! Magotteaux keeps innovating and creates new solutions for you. Our cast high chromium grinding media is offered in 2 different qualities:

**Magotteaux**   
 mining grinding media  
 One cast high chromium

**Magotteaux**   
 mining grinding media  
 + cast high chromium

**Magotteaux**  
 mining grinding media  
 cast high chromium



Process optimization services and products for abrasive and impact applications

### 2 Evaluation on the downstream processing

Further to the choice of high chromium grinding media based on wear mechanisms (see left), its choice can also have a profound impact on the pulp chemistry. This can affect the recovery process and lead to a reduction in reagent consumption and an increased metallurgical performance (grade/recovery).

### Magotteaux mining

process optimization solutions

is our unique holistic approach. It helps you to maximize the return from your concentrator.

### Grinding ball range

Nominal DIA* (inch)	Nominal DIA* (mm)	Weight (g)	Surface (cm <sup>2</sup> )
± 1/2	13	8	5.31
	15	13	7.07
± 5/8	17	19	9.08
	20	32	12.57
7/8		43	15.51
	± 1	25	62
± 1¼	30	128	31.67
	± 1½	40	256
± 2	50	500	78.54
	60	864	113.10
2½		1 048	126.68
	70	1 372	153.94
± 3	80	2 048	201.06
± 3½	90	2 916	254.47
± 4	100	4 000	314.16
	110	5 325	380.13

\* from 20 mm and above, balls are staggered

### Packaging options

Bulk, drum or bag for road, rail or sea transport



The information and data in this data sheet are accurate to the best of our knowledge. They are intended for general information only. Applications as suggested are described only to help readers make their own assessment. They are neither guarantees nor to be construed as express or implied warranties of suitability for these or other applications.