

Ball mill power demand

The approximate power demand of a ball mill can be obtained by the formula of Blanc.

$$P = \frac{c \cdot G \cdot \sqrt{D}}{1,3596} \text{ (KW)}$$

- P** mill power demand KW
- c** index relating to grinding balls and mill charge
- G** total grinding ball load (metric t)
- D** inside mill diameter (m)

Index c-values (Blanc's formular)

Grinding media	Degree of grinding media load				
	0.1	0.2	0.3	0.4	0.5
Large steel balls (> 60 mm)	11.9	11.0	9.9	8.5	7.0
Small steel balls (< 60 mm)	11.5	10.6	9.5	8.2	6.8
Cylpebs	11.1	10.2	9.2	8.0	6.0
Steel grinding media average	11.5	10.6	9.53	8.23	6.8

As a link to our Homepage we provide a Grinding Media Enquiry Sheet. By completing the details and transmitting to us, we will calculate the correct media size for your mills.