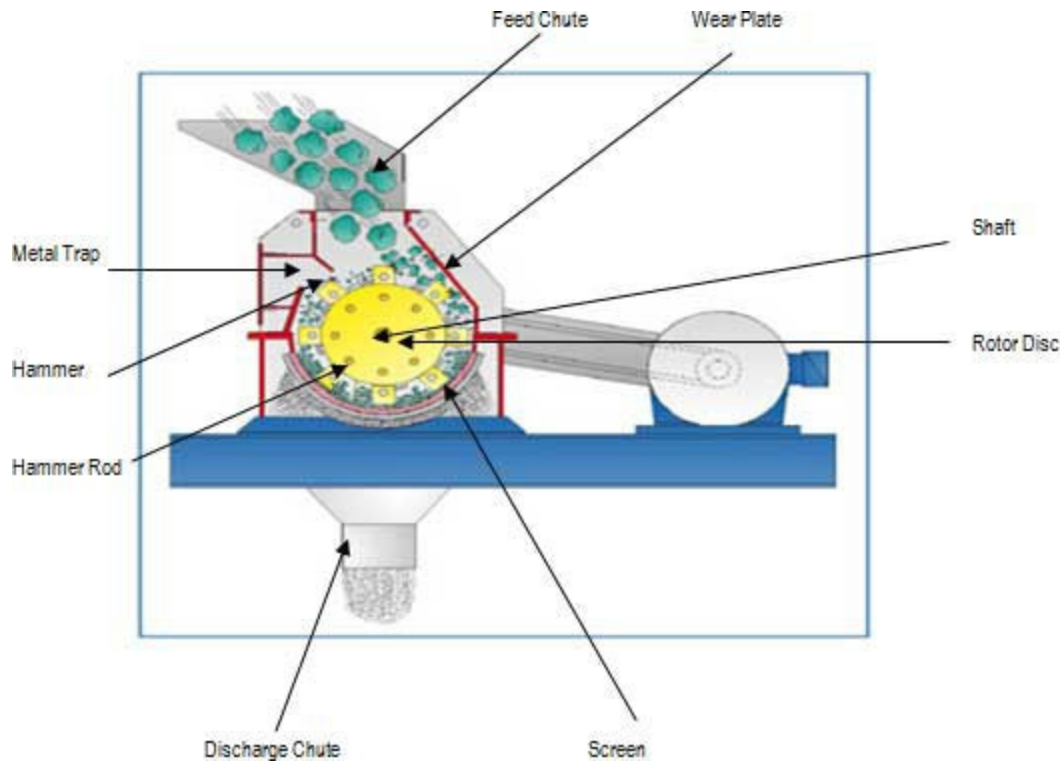


HOW DOES A HAMMER MILL WORK?

Hammer mills work on the principle that most materials will crush, shatter, or pulverize upon impact using a simple four step operation:



1. Material is fed into the mill's chamber typically by gravity.
2. The material is struck by ganged hammers (generally rectangular pieces of hardened steel) which are attached to a shaft which rotates at a high speed inside the chamber. The material is crushed or shattered by the repeated hammer impacts, collisions with the walls of the grinding chamber as well as particle on particle impacts.
3. Perforated metal screens, or bar grates covering the discharge opening of the mill retain coarse materials for further grinding while allowing properly sized materials to pass as finished product.
4. Hard, heavy materials such as glass, stone or metals exit the mill via gravity. Pneumatic suction is used to assist in the discharge of lighter materials such as wood, paper or other low bulk density products.

Varying the screen size, shaft speed or hammer configuration can dramatically alter the finished size of the product being ground. For example, faster speed, a smaller screen, and more hammers result in a finer end product. Each component can be changed individually or in any combination to produce the precise grind required. All of this is determined by taking advantage of our free test grinding service.