

Mill(Grinding)

A grinding mill is a unit operation designed to break a solid material into smaller pieces. There are many different types of grinding mills and many types of materials processed in them. Historically mills were powered by hand (mortar and pestle), working animal, wind (windmill) or water (watermill). Today they are also powered by electricity.

The grinding of solid matters occurs under exposure of mechanical forces that trench the structure by overcoming of the interior bonding forces. After the grinding the state of the solid is changed: the grain size, the grain size disposition and the grain shape.

Grinding may serve the following purposes in engineering:

magnification of the surface area of a solid manufacturing of a solid with a desired grain size pulping of resources