

selection types of grinding process

The first thing to consider when selecting a grinding wheel specification is **what** are we grinding? What is the material, and how hard is it? Is it easy to grind or difficult? By reviewing these elements, we can select the correct abrasive type, the grain's attributes, the appropriate grit size, and bond type.

TYPES OF GRINDING WHEELS PROCESS

- Surface grinding.
- Cylindrical grinding.
- Internal grinding.
- Centerless grinding.
- Contour grinding.
- Gear grinding.
- Thread grinding

cylindrical grinding

The **cylindrical grinder** is a type of [grinding machine](#) used to shape the outside of an object. The cylindrical grinder can work on a variety of shapes, however the object must have a central axis of rotation. This includes but is not limited to such shapes as a [cylinder](#), an [ellipse](#), a [cam](#), or a [crankshaft](#)

A cylindrical grinder.

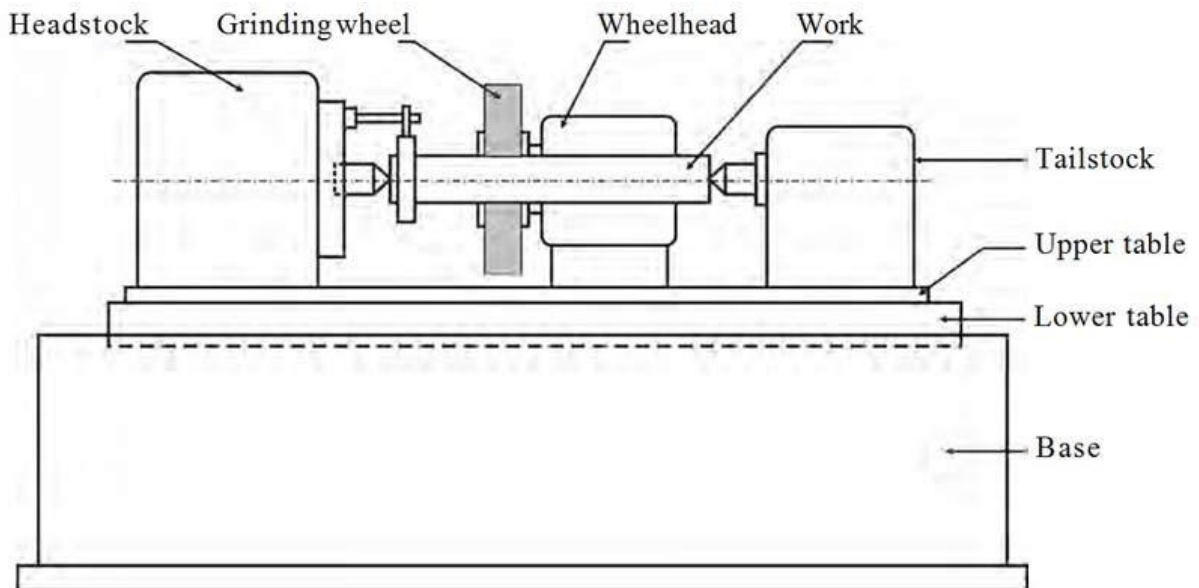
Cylindrical grinding is defined as having four essential actions:

1. The work (object) must be constantly rotating
2. The grinding wheel must be constantly rotating
3. The grinding wheel is fed towards and away from the work
4. Either the work or the grinding wheel is transversed with respect to the other.

While the majority of cylindrical grinders employ all four movements, there are grinders that only employ three of the four actions.

There are five different types of cylindrical grinding:

1. Outside diameter grinding.
2. Inside diameter grinding.
3. Plunge grinding.
4. Creep feed grinding.
5. Centerless grinding.



Cylindrical Grinding Machine

Cylindrical grinder machines can be subdivided into two basic categories, which is the **center** and the **centerless type**. There might be multiple grinding wheels for removing the materials, the metal parts are fed into the machines, passing through the wheels to form the unique profiles.