

OBJECTIVE

Grinding comes under the unit operation of Size reduction under Mechanical operations. This is a popular chemical engineering unit operation which finds applications even in food processing. Unit operation is an operation which cannot be reduced further into any sub-operations, in a given over all process. For example, making coffee extract (decoction) involves several unit operations such as harvesting beans, fermenting, drying, grinding and extraction to obtain decoction.

Let us study the following aspects of Grinding.

1. Definition.
2. Objectives of Grinding
3. Types of actions involved in Grinding
4. Factors affecting Grinding efficiency
5. Equivalent diameter – Sphericity
6. Energy laws governing Grinding
7. Equipment for Grinding
and finally
8. Applications in Food Processing