

EXAMPLES OF COMMINUTION EQUIPMENT

Prepared by Laboratory Methods and Services Committee, Laboratory Sampling Working Group

This table is created to provide examples of the various types of comminution equipment that is discussed in *GOOD Test Portions* <http://www.aafco.org/Publications/GOODTestPortions>

The table is not all inclusive of all of the brands and models of comminution equipment on the market. The listing of brand names and models is provided only as examples and does not constitute an endorsement of a product. The brands and models listed as those known to the authors of this document.

Type of Comminution Method	Equipment Type	Examples
Crushing	Jaw Crusher	Retsch models BB50, BB100, BB200 & BB300; Fritsch P-1
Crushing	Ball Mill	US Stoneware; Retsch Emax
Crushing	Disk Mill	Romer mill; Foss Cemotec; Fritsch P-13; Retsch DM400; Straub 4E
Crushing	Impact Mill, Hammermill	Foss Hammertec; Fritsch Valmetal
Crushing	Planetary Mill	Retsch PM400; Fritsch P-5, P-6 & P-7; Spex Geno/Grinder®
Crushing	Mortar Mill	Retsch RM200; Fritsch P2
Crushing	Vibrating Cup Mill or Ring and Puck Mill	Fritsch P-9; Retsch RS200; Bico; Gtek
Crushing, Cutting	Cross Beater Mill	Retsch SK300; Glen Mills; Fritsch P-16
Crushing	Cryogenic Mill	Spex freezer mill; Retsch Cryomill; Spex Geno/Grinder®
Crushing	Tissue Grinder	Fisher; Wheaton; Polytron
Crushing	Hand Tools	Mortar & pestle; hammer, mallet, chisel
Crushing	Paddle or Peristaltic or Bag Blender	Seward Stomacher®; bioMérieux, Inc Smasher®
Cutting	Cutting Mill	Thomas Wiley; Fritsch P-15 & P-19; Retsch SM100, SM300 & SM2000
Cutting, Crushing	Centrifugal or Rotor Mill	Retsch ZM100 & ZM200; Fritsch P-14
Cutting, Crushing	Cyclone Mill	Udy mill; Foss Cyclotec; Retsch Twister

Examples of Laboratory Comminution Equipment

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Cutting	Knife Chopper having a plate with holes	Household and commercial meat choppers
Cutting	Knife Chopper having a cutting block	Hege 44 sample forage chopper; paper cutter
Cutting	Bowl Chopper	Robot Coupe®; Hobart; other household and commercial food processors; Retsch Grindomix; Foss Knifetec; Foss Homogenizer
Cutting	Stationary Blender	Waring® blender; Omni-Mixer; other household and commercial blenders
Cutting	Immersion Blenders	Polytron homogenizer; Virtis homogenizer
Cutting	Hand Tools	Scissors; clippers; pruning shears; knives; salad choppers; paper cutter

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