



FIGURE 8.10 Tablet thickness gauge. (Courtesy of Eli Lilly and Company.)

tablet. Multifunctional automated equipment can determine weight, hardness, thickness, and diameter of the tablet.

A tablet's durability may be determined through the use of a *friabilator* (Fig. 8.14). This apparatus determines the tablet's *friability*, or tendency to crumble, by allowing it to roll and fall within the drum. The tablets are weighed before and after a specified number of rotations, and any weight loss is determined. Resistance to loss of weight indicates the tablet's ability to withstand abrasion in handling, packaging, and shipment. A

maximum weight loss of not more than 1% generally is considered acceptable for most products.

Tablet Disintegration

For the medicinal agent in a tablet to become fully available for absorption, the tablet must first disintegrate and discharge the drug to the body fluids for dissolution. Tablet



FIGURE 8.11 Tablet diameter testing instrument. (Courtesy of Shionogi Qualicaps.)



FIGURE 8.12 Automatic weight, hardness, thickness, and tablet diameter test instrument for quality control. Using a microprocessor and monitor for visualization, the instrument can test up to 20 samples at a time. (Courtesy of JB Pharmatron.)