

Abstract

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Tablets are a very expanded dosage form. All new investigation in their technology are worth. While in pharmacopoeial method of measurement of mechanical strength of tablets evaluate by means of the strength at which the tablet breaks. This paper is based on the strength – course record. From this record, it is possible to ascertain other parameters of crushing process, such as the course of crushing, the crushing force and deformation energy. The radial strength, the volume deformation energy and deformation energy related to tablet weight are calculated from them. Tablets prepare from microcrystalline celluloses, hydroxyethylcellulose, powdered lactose monohydrate and substance called PharmDry (maltodextrine) were evaluated by means of these parameters.

Results of this thesis shows descent of tensile strength in this order: microcrystalline cellulose Avicel PH-200, microcrystalline cellulose Avicel PH-102, maltodextrine, hydroxyethylcellulose and powdered lactose monohydrate. Kinetic characteristics of tablets descent in this order: microcrystalline cellulose Avicel PH-102, hydroxyethylcellulose, maltodextrine, microcrystalline cellulose Avicel PH-200 and powdered lactose monohydrate.

Key words: strength – course record, course of crushing, crushing force, deformation energy, microcrystalline cellulose