

Šulková Petra – diplomová práce – 2006

The diploma theses deal with the determination of optimal parameters for measurement of the kinetics of destruction on basis of force - displacement record. Theoretical part of the work discusses questions of fillers in direct tablet compression. It describes lactose in detail. Besides it describes the methods of evaluation of mechanical resistance of tablets and parameters destructive process. The aim of the experimental work was the evaluation of the destructive process by differential method without zero setting. The minimum value of preloading and cycle rate was to be determined. The tablets of Isosorbit-5-mononitrate were evaluated.

The result of the work was the determination of the optimal parameters for the measurement of mechanical resistance of tablets by means of T1 – FRO 50. Minimum value of preloading is 0.1 N, cycle rate and preloading rate 1.0 mm/s. Simultaneously, it was found out that the decrease in force does not influence destructive force, displacement and energy.