Čámský Václav – Rigorózní práce – 2006

This work deals with energy balance of tablet destruction. The characterization of individual groups of tablets and characterization of two fillers - lactose and microcrystalline cellulose- for direct compression is mentioned in the theoretical part. The aim of the work is to find out the influence of the type of a dry filler on the punch displacement and to describe the dependence between the parameter of the compression process E_2 and parameter of the destructive process D_E. The determination was carried out with the tablets of Avicel PH 102, Flowlac 100 and lactose anhydride using T1 – FRO 50 device.

It follows from the results that destruction displacement of microcrystalline cellulose is substantially longer than in the case of lactoses. Microcrystalline cellulose compared to lactoses consumes significantly less amount of energy. The cycle rate 0.1 mm/s was used for measurement of mechanical resistance.