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This work deals with the evaluation of viscoelasticity on basis of force - displacement record. Theoretical part of the work characterizes tablets and fillers for direct compression, discusses the theory of destruction of tablets and presents the parameters of mechanical resistance of tablets. The aim of the work was the following of the influence of the type of a dry filler on displacement of the grinding process and to find out the dependence between the compression parameter E_2 and parameter D_E . The microcrystalline cellulose Avicel PH 102, mannitol, and lactose were used as fillers.

It follows from the results that the destructive displacement in the case of microcrystalline cellulose is significantly longer than those of mannitol and lactose. Absolute or differential methods of record do not influence the destructive displacement. Microcrystalline cellulose in comparison with lactose and mannitol consumes less energy at compression and simultaneously has higher D_E . Comparison of mannitol and lactose shows that mannitol consumes more energy at compressions and has also higher value of D_E .