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## MECHANICAL ACTIVATION OF CLAYS AND ITS INFLUENCE ON PROCESS OF DRYING AND FINAL PROPERTIES OF MASONRY UNITS

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This paper contains the comparative review of experimentally determined results of raw material /clay/ properties prepared following both classical procedures of processing and mechanical activation. Classical procedure of raw material processing was carried out by milling in perforated rolls and milling on differential rollers up to grain size not exceeding 1 mm. Mechanical activation of the same raw material was carried out in lab mill "Pulverisette 6" (Fritsch, Germany) over the time periods of 30, 60, 90 and 120 minutes. Both inactivated and mechanically activated samples were subjected to testing of technological features relevant for process of forming, drying and firing heavy clay products. The drying process of the samples made from activated and inactivated clay was examined with the help of multi factorial experimental design technique. The dependency of critical moisture against temperature, relative humidity and the velocity of the drying medium – mathematical model was set up. Obtained outputs indicate essential change of activated samples features in comparison to sample prepared following classical procedure.

**Keywords:** mechanical activation, technological investigations, masonry product.

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