DOUGH RHEOLOGICAL PROPERTIES OF BROWN FLOUR TYPE 1250 WITH ADDITIVES, STUDIED WITH THE HAUBElt FLOURGRAPH E7 AND BRABENDER EXTENSOGRAPH

— research paper —

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Abstract: We studied the rheological characteristics of brown flour type 1250, from Romanian wheat. We used two apparatus that work based on empirical methods of determination, the Brabender Extensograph and Haubelt Flourgraph E7. We compared the values obtained from the two apparatus and for the same studied and we discussed the correlations established between them. We permuted parameters as: energy [cm²], resistance to extension [BU],[HE], extensibility [mm], maximum resistance[BU];[HE] ratio and maximum ratio. Generally values of all correlation indices were above 0.8, so the two devices may similarly characterize the dough. The energy values were best correlated at 90 minutes (R² = 0.9516), resistance to extension at 45 minutes (R² = 0.9105), and extensibility at 90 minutes (R² = 0.967). We thus demonstrated that the equipment used can give values that similarly characterize the behavior of dough, if the same method of determination is used.

Keywords: dough, rheology, wheat brown flour, Extensograph Brabender, Haubelt Flourgraph E7

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