RESULTS OF EXPERIMENTAL RESEARCH COMBINED DIELECTRICALLY-AERODYNAMIC SEPARATOR OF SEEDS

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Abstract. The paper presents the results of experimental researches of working process of separation of seeds in an aerodynamic separator with a dielectric material specifications. Graphs of the dependence of the output parameters of the separator from input. When separating the seeds of grain and oilseeds, on the stationary item you plan to use aerodynamic separator with a dielectric material specifications. It is expected that seeds from the hopper feeder is supplied through the pipe entering in the aerodynamic vertical channel with dielectric wrapped.

In the fall of the seeds inside the channel under the action of gravity, toward him absorbed air flow and the electric field generated by the dielectric wrapped, placed on the outer surface of this channel, made of plastic.

Experimental studies have confirmed the results of theoretical investigations of structural and technological parameters of the proposed aerodynamic separator. Defined rational parameters of ventilation separator with a dielectric material specifications, this will enable optimal performance of the separator.

Key words: separation of seeds, aerodynamic separator, air flow, electrostatic separator, electric field, dielectric wrapped, aspiration channel