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## **Improvement of grain processing in croup After hydrothermal treatment**

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Hydrothermal processing of the original grain is used in the production of cereals, some varieties of flour and mixed fodders and allows you to purchase the best quality products for the initial product. For example, when hydrothermal processing grain cereals, the outer seed coat of the grains weakened the connection with the core of the grain. After dehydration and drying grain is exposed processing in grain with the help the roller of machines. At the same time the intensity of the squeezing influence of working bodies therefore decreases energy expenses decreases.

Disadvantages of hydrothermal treatment: big consumption of water, big costs of energy of a water warming up, on some substrata possible strong remoistening (cotton tows) or loss of structural properties (buckwheat pod), it is unsuitable for large volumes of production.

On the existing technology processes on grain processing the croup of cultures in traditional grain, for example rice, the buckwheat, is carried out almost without preliminary hydrothermal treatment because of imperfection of a design of processing equipment. The existing processing equipment the roller machine of machines working with are executed by the squeezing, using up and shifting impact on the processed grain in a look. At pointed simultaneous influence of working bodies of the car with the corresponding efforts of a grain, having a semi-soft kernel after hydrothermal treatment is exposed to destruction therefore a grain exit decreases.

By results of the carried-out analysis and according to a goal the following tasks have been defined:

- to conduct the croup researches on the choice of major factors influencing technological efficiency of process of processing of grain the of cultures, theoretical prerequisites;
- choice of a rational design of working bodies of the technological equipment; the description of nature of impact of forces on grain when processing grain in croup ;
- the description of nature of influence of kinematic, geometrical and technological parameters on efficiency of processing of grain in croup;

- development of the outline engineering design of working bodies of a prototype of processing equipment.

Further carrying out a research on this direction it will be connected with improvement process of hydrothermal treatment of grain the croupier of cultures with ensuring uniform distribution of the working agent in the processed weight.

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