

Article posvyaschena Study of influence on the process solodoraschenyya Changing CONTENT sugars raznyh ovsa varieties.

Plenochnyy, holozernyy, grain, malt, solodoraschenye, fermenty, Sugar, starch.

The paper is devoted to study of mpact of the malting process on sugar content changes of different varieties of oats.

Filmy, bare-grained, grain, malt, malting, enzymes, sugars, starch.

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PROBLEMS USING HUMAN RESOURCES

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This paper examines the current state and trends of ergonomics in developed countries

Ergonomics, human factor, ergonomic performance.

Problem. The social orientation of the economy calls attention to ergonomic problems whose solution is a prerequisite for development. The transition to a post-industrial society to be analyzed for its impact on people, their role and prospects of the economy and the world. Humanization economy manifested "in uniting the objective needs of the economy with those rights, the development of creative activity."

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In response to the contradictions of social development trends for the humanization of the economy are becoming more widely reflected in the fundamental economics late XX - early XXI century. However, they did not find adequate coverage of applied economics such as ergonomics. This is due to the relevance and performed the study.

Ergonomics is a property of an object or process to be functional and comfortable for human life. It stands compatibility criteria things, services or process of the human body, and expresses the degree of

suitability for realization of human needs and improve human welfare. The essence of ergonomics as a factor in the quality of life is adaptability way, service or process to human nature.

Analysis of recent research. An analysis of the literature [1, 2], in particular, according to the American scientist John. Ryan [1], among the causes of accidents and injuries in 80% of them during the operation of production equipment is the most basic human error. Similar is the data research the causes of occupational injuries in agriculture [3]. At the initiative of the international trade union movement developed an international program to improve working conditions and the working environment, the implementation of which is one of the main directions of the International Labour Organization, which must implement a comprehensive approach to the complex and diverse issues health of workers at work.

Research results. More on the verge of 80-ies American ergonomists concluded that a key factor affecting the production and management is the use of human resources.

The high level of production, which provides comprehensive automation of the entire production process from Japan, forcing the US and other countries look for ways to better use of human resources as a factor of labor.

According to incomplete data ILO in the world every year 100 thousand industrial workers die from industrial diseases caused by the effects of noise, vibration, dust and various aerosols. Even more dangerous is toxic, mutagenic, carcinogenic and radiological impacts of the production environment.

Considering the above mentioned, it can be argued that the possibility of ergonomics increasing use of scientific and technological progress to the needs of individuals and society. Entrepreneurs interested in quantity and quality; workers, however, are interested in the factors that focuses on people, health, safety and comfortable conditions of work.

To reduce this contradiction, health professionals and ergonomists have to solve the problem of health worker depending on the nature of production and working conditions. There is a need to involve professional knowledge workers operators (ergonomics participation), development of a data bank on ergonomics and an automated system ergonomic design (the participation of experts in developing a data bank of arrays of information, its technical implementation).

In the UK, the National Institute of Agricultural Technology developed ergonomic modeling complex, which allows us to study and optimize all the parameters of the workplace that affect safety. This model of workplace life-size, which can simulate working conditions

(effect of noise, vibration, etc.), to investigate working postures human situations close to production, play, vibration and oscillatory displacement along three directions: longitudinal, transverse and vertical.

The developed complex allows to pass one parameter to study the workplace and to identify its optimal levels as a new approach to the study of the system "man-tractor."

It was found that operators control the mechanisms of hearing and knowingly violate the seal of the cab. Reactions to operator sound effects are inadequate and often late. Full cabin glazing requires mandatory use of air conditioners, otherwise there is a greenhouse effect.

Research precision control tractor at different speeds showed that the increased sensitivity and speed control cause the operator to focus on moving the unit, and the control is not enough time, thus increasing the probability of loss (during harvest - up to 13%) and accidents. Therefore, it is necessary to develop control systems that meet the real features of the tractor work. That is, cab tractors (combine) must be capable of easy location and operator controls to prevent adverse effects on service factor production environment.

Equally important are the following ergonomic performance indicators mechanized agriculture work:

- usability and convenience is working posture mechanics, rationality switchgear layout, size and orientation of work effort;
- ease of perception of information;
- effectiveness of auditory, visual and other information, alarm processing scales, ergonomic color validity according to psycho-physiological requirements;
- ease of maintenance;
- ease prevention support unit efficiency (comfort and safety services, compliance with technical care);
- comfortable stay in the workplace;
- the favorable conditions of machine (convenient location devices and controls, efficiency of ventilation, lighting, low noise and vibration, etc.).

To assess compliance with machine design human physiological characteristics set out in engineering and psychological demands, requirements and general psychology of work psychology who present the design of agricultural machinery, use indexes according perception and machine capabilities pereroblyannya Information: fixed line machines and formed habits person (including ease and speed of their formation).

Ergonomics issues related to its development as a science, which took place in three stages. The first of these was the adjustment phase, which involved organizing approach "from machine to man." Then ergonomics task performed human adaptation to technology, has made

recommendations to rationalize the labor process. In the second, the project, stage of development began to focus on ergonomics approach "person-to-machine", trying to take into account during design of human production parameters. Third, current, phase evolution of ergonomics as a science is complementary "symbiosis of man and machine in a certain environment." It involves optimizing the interaction of all factors of production process, requiring a consideration of the characteristics and needs of the person in the development of new techniques and avoid potential risks in the production system, and minimizing changes in the manufacturing environment.

Trends in the third stage of ergonomics now just emerged, that is only declared its innovative perspective. She has not got to the context of the science and not transformed it with the proper establishment of the theory of ergonomics social and environmental principles. First, despite the existence of social aspects in contemporary visual ergonomics is a priority market stereotypical economism. Second, human interaction with the environment as a new challenge to the modern ergonomics is its raw content.

Therefore, the concept of ergonomics available epistemologically limiting real practical requirements of ergonomics to social production short term continuing cycle of products and medium run their design and ergonomics research outcomes not all production. It does not take human needs in terms of social economic reproduction in the long run. Thus, the current state of research of ergonomics makes it necessary to solve the actual problem ergonomics social economy in general.

Further ergonomic research to be directed not only at the local regulation of working conditions in the factories, but also in the regulation of public employment rights for the global environment conditions. Because entropy production and environmental consequences of its variable (unstable) state acquires a special role as a dynamic factor in modeling ergonomic relationship. Therefore, the aim of modern ergonomic developments must be strategic sourcing process of social security economic reproduction. Ergonomics applied research lacks this aspect of the problem. Its content is currently obsessed with endogenous conditions of the company and does not consider its relationship with the exogenous environment.

Conclusions

The content of modern ergonomics research must be presented three dynamic equilibrium of organic components - production ergonomics (modern traditional ergonomics), environmental and production entropiynosti.

These categories are separately as independent. However, to reflect the entire socio-economic and natural range of definitions

ergonomic relations should systematically combine these elements in korelyuvalni system ergonomics. The synthesis of these categories need to justify their values synergy that is good value for a broad understanding of the meaning of modern ergonomics and comprehensive knowledge about human adaptation to production conditions (ergonomics production), manufacturing transformation of nature (entropiynist) and coordination of the production needs of reproduction of the environment (environmental).

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In Article pryvodytsya sovremennoho STATUS analysis and development trends ʔrhonomyky razvytyh countries in the world.

ʔrhonomyka, chelovecheskyy factor, ergonomic indicators.

In paper the analysis of current state and tendencies of development of ergonomics in developed countries of world is resulted.

Ergonomics, human factor, ergonomic indexes.

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TEMPERATURE STATE LONOSOLOMY TAPES SPREAD OUT WHILE COOKING ROSHENTSEVOYI TRUSTS

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Highlighted Us temperatures in the ground and spread out lonosolomy tapes while cooking roshentsevoyi trusts. Investigated the temperature difference on the surface and under the belts to fit them in light density and night periods of the day.

Flax straw, tape density, roshentseva trusts, cooking temperature.

Problem. With flax straw treatments known cold-mochinnya, aerobic and anaerobic and aerobic-anaerobic combined enzymatic and