

**FEATURES OF PHYSIOLOGICAL CHANGES
AT WORKERS OF PRODUCTION ON PRODUCT OF PLASTIC OUTPUTS
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Abstract: work of founders of plastic proceeds in the conditions of impact on an organism of a combination of the adverse production professional factors exerting the direct or mediated impact on an organism and is followed by depression of working capacity, development of a production fatigue. For prophylaxis of a production fatigue the whole complex of actions which has to reduce as much as possible an adverse effect of production factors has to be recommended and increase value of a rational work-rest schedule of work.

Keywords: occupational health, physiology of work, production of plastic products, workers, functional condition of an organism, exhaustion, improving actions.

**ОСОБЕННОСТИ ФИЗИОЛОГИЧЕСКИХ ИЗМЕНЕНИЙ У РАБОЧИХ
ПРОИЗВОДСТВА ПО ВЫПУСКУ ПЛАСТМАССОВЫХ ИЗДЕЛИЙ
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Аннотация: труд литейщиков пластмасс протекает в условиях воздействия на организм сочетания неблагоприятных производственно-профессиональных факторов, оказывающих прямое или опосредованное влияние на организм, и сопровождается снижением работоспособности, развитием производственного утомления. Для профилактики производственного утомления должен быть рекомендован целый комплекс мероприятий, который должен максимально снизить неблагоприятное воздействие производственных факторов и повысить значение рационального режима труда и отдыха в процессе трудовой деятельности.

Ключевые слова: гигиена труда, физиология труда, производство пластмассовых изделий, рабочие, функциональное состояние организма, утомление, оздоровительные мероприятия.

Production of plastic products is the enterprise which technological process assumes such types of productions as cold stamping, thermal production and painting productions [1, p. 24; 3]. The purpose of our research was studying of functional shifts in an organism working in dynamics of the working day.

Researches were conducted at the enterprise for release of plastic products. For carrying out physiological researches 10 almost healthy working - founders of plastic, aged from 30 to 40, with length of service of 8-15 years were selected. Observations were made within 2 weeks, at the beginning of work, before a break and to the work extremity during the warm period of year. At the same time the functional condition of cardiovascular system including measurement of pulse rate, determination of arterial and pulse blood pressure was studied. Studying of indicators of the central nervous system was carried out by definition of the latent period of visual and acoustical motor reaction reaction. Quantitative assessment of muscular working capacity was carried out on endurance of muscles to the dosed statistical load by means of a dynamograph.

Work of founders of plastic proceeds in the conditions of impact on an organism of a combination of adverse production and professional factors: harmful substances in air of a working zone, adverse microclimate, insufficient physical activity, long maintenance by the compelled worker of a pose [2, p. 15]. In the course of work the working studied shops had changes of a functional condition of cardiovascular system during the working day which were enlarged to the extremity of the first and second semi-change. Changes were characterized: an acceleration of pulse up to $83 \pm 1,51$ beats per minute, augmentation pulse (on average from

42±0,54 to 50±1,08 mm Hg.) and the maximum pressure, depression of the minimum arterial blood pressure throughout the working day.

Even more essential shifts are noted in functional a condition of the central nervous system. In particular, rate of visual and acoustical motor reaction at the end of work was authentically enlarged that demonstrates depression of functional mobility of the central nervous system and is bound to a strain of an organ of vision. So, time of visual motor reaction to the extremity of the working day increased at welders for 30%, at mechanics – for 25%. The latent period of time of acoustical motor reaction was extended to the work extremity at collectors for 26% of background indicators. The lack of restoration of indicators of visual motor and acoustical motor reaction during a lunch break was feature of the taped shifts.

As for a functional condition of a motor analyzer, the level of force of muscles of a brush at founders authentically decreased to the shift extremity by 28%. The physiological shifts from the highest departments of the central nervous system and a motor analyzer characterizing development of a fatigue in workers in the course of day of work are most expressed.

Thus, for prophylaxis of a production fatigue the whole complex of actions which, on the one hand, has to reduce as much as possible an adverse effect of production factors has to be recommended, and on the other hand - to raise a role of the actions referred on the organization of rest working, especially in the course of work.

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