

SECURITY OF PRODUCTION OF MEDIUM AND SMALL BUSINESS

**Mezentseva I. O., ass. prof., Vambol S. O., prof.,
Yevtushenko N. S., ass. prof., Mezentsev S. M., postgraduate**

National Technical University Kharkiv Polytechnic Institute, Kharkiv
mezencevaia@ukr.net

Occupational health and safety issues require not only the use of standard approaches. It is necessary to improve the existing methods of prevention of labor safety violations.

Understanding the importance and necessity of constant monitoring of the technological process and compliance with labor safety rules became the basis for the development and implementation of the Technological Safety System. Under the leadership of one of the authors of this publication (postgraduate student and master's graduate of the National Technical University Kharkiv Polytechnic Institute), this system was developed and implemented at one of the production facilities of a medium-sized business.

"Newton-Promservice" limited liability company occupies is one of the leading positions in the market of domestic manufacturers of paint aerosols. Limited liability company "Newton-Promservice" produces a wide range of automotive enamels and paints in aerosol packaging.

It is known that completely safe productions do not exist, and the production of paint coatings is a complex and dangerous process [1]. It is important to carry out systematic control over the performance of work at this production in order to prevent industrial injuries.

In general, the basis of this system consists of interconnected subsystems: control, decision-making, and preventive measures. Technically, the first subsystem includes video surveillance and data transmission and storage (Figura 1). The next subsystem involves the management of the first subsystem, recording of violations and operational actions. Based on the results of the previous subsystems, the last subsystem provides for the implementation of preventive measures of both an educational nature (instructions, training, video lectures, etc.) and an organizational and technical nature (restriction of access to dangerous places of production, regulation of breaks, etc.). It should be noted that the work of the entire system is cyclical with constant monitoring of the results of all stages. So, for example, the results of the training (subsystem of preventive measures) will already be directly monitored at the factory.

Of course, the criterion of truth is practice. As an example, fixing one of the most frequent types of violations - moving and lifting cargo without insurance. After the video recording was made public and all participants were instructed in the technological process, this type of violation decreased by 5 times.

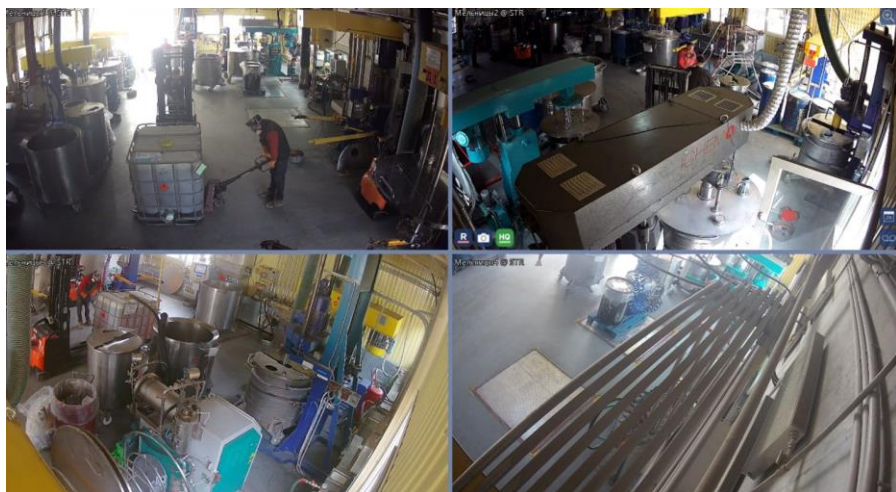


Figure 1 – Video element of the first system

The implementation of such a project at a medium-sized business allows detection of occupational safety violations directly during the execution of works. This means of monitoring labor protection violations allows you to determine which violations occur most often, at which sectors and with which employees. Further elimination of the identified violations will reduce industrial injuries at the enterprise. It is the students' awareness of occupational safety that forms a system of safe attitudes towards production technology and their health and life [2].

The methodology of making such management decisions was proposed to be introduced into the educational process, both at the bachelor's and master's level of the educational and professional program "Occupational safety" specialty 263 "Civil security". Master's level students are the future leaders of the respective departments and they should form a strategy for improving the conditions and level of safe work.

Reference

1. Мезенцева І. О., Мезенцев С. М. Особливості виготовлення та безпека праці при виробництві фарб / І. О. Мезенцева, С. М. Мезенцев // Матеріали XII-ї міжнародної науково-методичної конференції НТУ «ХП» «Безпека людини у сучасних умовах», Харків, 1-3 грудня 2022. – с.99.

2. Vambol S. O. Educational component as a way of improving status of labor safety of mechanical building industry of Ukraine / S. O. Vambol, I. O. Mezentseva, Liu Yujun // Молодь і технічний прогрес в АПВ : матеріали Міжнар. наук.-практ. конф., 23-24 листопада 2023 р. / гол. ред. О. В. Нанка. – Харків: ДБУ, 2023. – С. 380-381.

ПЕРСПЕКТИВИ ІННОВАЦІЙНОГО ПІДХОДУ ДО