

relevance and promise of this technology in ensuring safety and health in critical situations. Further development in this area is necessary to more effectively respond to emergency situations and improve overall safety.

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## **MODERNIZATION OF RAILWAY STATION INTERIORS**

## **МОДЕРНИЗАЦИЯ ИНТЕРЬЕРОВ ЖЕЛЕЗНОДОРОЖНОГО ВОКЗАЛА**

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*Ключевые слова: интерьер, общественное пространство, дизайн-проект, модернизация.*

*Abstract. The main objective of the project is the preservation, reconstruction and modernization of the premises of the Gomel-Passenger station, which do not correspond to the new socio-cultural realities and have practically lost the targeting of their use. The work set the task of creating a design layout for modernizing the premises of the waiting room, VIP-lounge, as well as developing a station for charging a phone.*

*Аннотация. Основной задачей проекта является сохранение, реконструкция и модернизация помещений вокзала станции «Гомель-Пассажирский», которые не соответствуют новым социокультурным реалиям и практически потеряли адресность своего применения. В работе поставлена задача создания дизайн-макета модернизации*

*помещений зала ожидания, вир-зала для отдыха, а также разработка станции для зарядки телефона.*

The premises of the Gomel-Passenger station are of historical value and an operating railway station. The basis of the project should be respect for history, as well as the need to revitalize the function of the premises, taking into account the dynamics of the development of the transport network and new demands of society. Based on this, the purpose of this work is to use architectural, design, artistic means of expression to form an emotionally favorable climate of the environment of the railway station. The following tasks are set in the work: to study the specifics of railway stations in Europe and Belarus, to analyze analogues; to develop a design solution for the public space of the railway station at a high level; to choose a color palette and interior style; to make a functional zoning of the space.

The object of the study is the central and left part of the main building of the Gomel-Passenger railway station, which includes a hall with a main staircase to the second floor, to the right of the stairs – a room with an exit to the pyrone and stairs to the tunnel, ticket offices, on the second floor to the right and left of the stairs – a waiting area and ticket offices. It was decided to allocate part of the spaces for an exhibition area, which will remind of the historical contribution to the culture and economy of the country of railway transport.

A special feature of the designed room was the synthesis of the old and new eras, the preservation of heritage and architecture, taking into account new trends in the field of design.

In the analysis of literary sources, the existing domestic and foreign experience of station design is analyzed, analogs of station complex buildings are studied. The color palette and style of the interior are determined, taking into account all the features of the projected object. Cold and warm shades of beige were chosen as the main colors, white and blue became additional colors. Being contrasting, this color combination causes an increase in tone and performance.

Several scenarios for the placement of lighting devices have been developed. Linear LED lamps on a metal built-in frame are used for artificial lighting of all rooms. In addition – chandeliers and spotlights for certain areas. LED scattering systems are used on the ceiling and walls, as well as for the exhibits of the exhibition area.

To create the interior and embody it in a photorealistic image, the following professional programs were used: «Autodesk 3ds Max», «Chaos Corona», «Adobe Photoshop», «CorelDRAW», «Adobe After Effects». The details, textures, imitating the material are carefully worked out in the model.

The synergy of neoclassical and modern is chosen as the basis of the style solution. Neoclassicism is a modern look at the classical style, a collective image of replicas of a variety of classical trends. Classic interiors never go out of fashion, but even they gradually acquire new details and interpretations.

The formation of a space-planning solution focuses on creating comfortable conditions for people with disabilities. For this purpose, special markings for the visually impaired, ascent and descent systems, separate low-standing ticket offices, elevators, etc. are provided. (fig. 1).



Figure 1 – Room model. Foyer (a) and a room for ticket offices (b). Waiting room (c), exhibition space in the waiting room (d), waiting room and a dock for charging phones (e). Superior comfort room (f-g)

The premises of ticket offices and a tunnel hall that leads to the exits to the platforms have been developed. The percentage of natural light passing through is quite small from a small number of windows and the roof of the platform, which is located on the street and prevents sunlight from entering (fig. 1, a-b).

The premises of the second floor have been developed: a waiting room, an exhibition space, a high-comfort hall (fig. 1, f-g). In the exhibition space, the

lighting should be soft and comfortable, contribute to the consideration of the presented exhibits.

Having abandoned stained glass windows in favor of more light-transmitting windows, special tinted glasses were chosen. They give access to more natural light and at the same time protect from the bright effects of sunlight. Such glasses are used in the foyer of the building.

The author's design of benches with eco-leather upholstery has been developed for waiting areas. It is easy to care for, does not pass dirt and dust, is not subject to stretching and moisture, which will preserve the presentation for a longer period. There is a two- and three-person bench for convenient seating of people with luggage or a wider one for several people. Also, in this zone, the author's projected object for charging gadgets is successfully located. You can leave your device in the safe, close it, get a card and not worry about the safety of the gadget. The station is also suitable for larger equipment, such as laptops and portable speakers. The station can charge multiple devices at the same time without loss of charge speed.

In the course of the work, the functions and roles of the premises were correctly distributed, the main task of the empty rooms on the second floor was solved. Conditions have been created to attract passengers to previously empty zones. The author's objects were designed, which made it functional and comfortable to stay. The practical implementation of the presented project will increase the level of comfort.

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**DEVELOPMENT OF AUTOMATIC  
LABELING SYSTEM  
РАЗРАБОТКА АВТОМАТИЗИРОВАННОЙ  
СИСТЕМЫ МАРКИРОВКИ**

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*Keywords: technical vision, QR code, control (identification) signs, label applicator, production line.*

*Ключевые слова: техническое зрение, QR-код, контрольный (идентификационный) знак, аппликатор этикеток, поточная линия.*

*Abstract. The automated labeling line consists of the camera reader, the label applicator, the frequency converter, and the operator touch panel. A system management program has been developed using the operator panel. The area of possible practical application of the system is shoe manufacturing.*

*Аннотация. Автоматизированная линия маркировки продукции состоит из камеры-считывателя, принтера – аппликатора этикеток, преобразователя частоты, сенсорной панели оператора. Разработана программа управления системой с помощью панели оператора. Областью возможного практического применения системы является обувное производство.*

The labeling of goods in the Republic of Belarus is designed to protect products that are included in the legislative list from forgery and counterfeit. This will reduce the number of illegal and non-certified goods that citizens of the country purchase under the guise of originals. Product labeling in the Republic of Belarus transfers control over this area into the hands of the state, which guarantees the quality of each product or product on the market, provided that it has a code [1].