Influence of Train Loads and Natural Factors on the Work of the Roadbed

Islomov Akbar Sadulloyevich
Tashkent State transport University

Annotation. This article examines the loads from the train to the operation of the Earth polotnos, one of the complex elements of the railway, and the influence of natural factors.

Key words: Earth polotnos, railway, deformation, load, bottom device, grunt.

According to its stability, strength and technical condition, the ground floor should ensure that trains move safely and evenly with the greatest structural speed set for all types of wagons and locomotives running on railways.

The technical speed of the movement of trains and the content in the movement fall from the wheel pairs to the rails, the permissible static load also largely depends on the position of the ground floor. The implementation of Transportation plans and the safety of train traffic also directly depend on the reliability of the ground floor.

Ensuring reliability, stability and durability, as well as safety, duration and continuity of train traffic at any time of the year, regardless of unfavorable seasonal weather conditions, the properties of individual grunts, climatic and hydrogeological conditions, is the main operating (use) requirement for the Earth's chamber. It must not change due to factors such as running and standing water, wind, temperature changes and humidity in the atmosphere [2].

Under the influence of train loads and environmental factors, including human economic activity, physical and chemical processes occur in the Earth's polotnos, which change the properties of the main material of lifts and carvings-grunts. The effect of these processes on grunts can be both positive (increased strength due to compaction, increased interconnection due to reduced humidity) and negative, that is, lead to a decrease in its construction characteristics (changes in structure under the influence of Pulse loading, a decrease in strength during seasonal freezing and melting periods, interruptions due to subsidence and saturation). Processes that negatively affect the properties of grunts can lead to damage to certain elements of the Earth's polotnos, or the entire structure, or even to a breakdown. Typically, physico-chemical processes develop gradually, and their negative consequences can be manifested after a long use of the road, therefore, in the construction of new lines, it will be necessary to take into account the experience of improving the structures of the Earth's chamber, which has been used for many years [3].

It is the dream of railwaymen to create an “umribakiy” ground floor that does not deform, but from an economic point of view it is impossible to achieve this.

The earth floor should be designed, built and maintained in such a way that its stability should be sufficient at any time of the year, including when the grunts it is built have long-term rains, rapid melting of snow, whether water accumulates in front of the otcos, spring waters pass and are exposed to the extremely unpleasant effects of other natural phenomena.

The defects of the Earth's polotnos associated with its incorrect design, construction, good current storage, untimely repair have led to the limitation of the speed of movement of doimopoiesis, a

decrease in the possibility of transferring lines, the occurrence of large breaks, even the occurrence of accidents, the loss of many people and the fact that trains that caused material damage.

Of particular importance is the clear and smooth operation of railway transport. Accidents and crashes of trains cannot be allowed due to a decrease in speeds, the appearance of breaks in movement, especially due to the poor technical condition of the Earth's polotnos. It is required to fight against the appearance of unexpectedly serious defects of the Earth's polotnos, and it should not be forgotten that such cases may appear on old high elevations, lifts laid in rivers and swamps.

The ground floor is one of the most complex structures of railway transport. It is built from grunt and relies on grunt. Therefore, the problems associated with it go back to grunt, the main material of the Earth's polotnos. Depending on this, it differs in the seasonal and perennial variation of the state of any object of the Earth's polotnos. The time – dependent change of this state, describing it using a certain integral description, is expressed by a random function, and in practice by a random process, since many parameters on which the indicators of the state of the grunt depend are itself a random value, and their change in time-dependent is a random function (for example, the moisture content of the upper layers

This should be taken into account when designing, building and using the Earth's chamber, and any object that forms it should be considered an open dynamic (variable) system.

The most important task of the road farm workers-servants to whom the work of maintaining the ground floor is entrusted is to use it technically correctly and carry out current storage and repair work in such a way as to ensure its reliable, smooth operation and prevent the appearance of stagnant areas.

List of used literature

1. Kakharov, Z. V., & Islomov, A. S. (2022). WORLD TRENDS IN THE DEVELOPMENT OF MODERN ENERGY EFFICIENT ARCHITECTURE. Deutsche Internationale Zeitschrift für zeitgenössische Wissenschaft , (27), 7-9.
2. Islomov, A. S. (2022). ER POLOTNOSIGA KOYILADIGAN ASOSIY TALABLAR. PEDAGOGS jurnali , 7 (1), 229-233.
3. Akbar Sadulloyevich, I., & Daler Daniyor oglu, R. (2022, October). IN SECONDARY ROADS AND COMPLEX NATURAL CONDITIONS: ORGANIZATION OF EARTH PLATE CONSTRUCTION IN AREAS OF MOVEABLE SAND DISTRIBUTION, MOUNTAINOUS CONDITIONS AND DONE LAND. In INTERNATIONAL CONFERENCE DEDICATED TO THE ROLE AND IMPORTANCE OF INNOVATIVE EDUCATION IN THE 21ST CENTURY (Vol. 1, No. 5, pp. 47-50).
4. Mamurova F. I., oglu Amirkulov A. F. COORDINATE AND HEIGHT SYSTEMS USED IN GEODESY //Conferencious Online. – 2021. – С. 19-20.
5. MAMUROVA F. I. FACTORS OF FORMATION OF PROFESSIONAL COMPETENCE IN THE CONTEXT OF INFORMATION EDUCATION //THEORETICAL & APPLIED SCIENCE Учредители: Теоретическая и прикладная наука. – 2021. – №. 9. – С. 538-541.
6. Islamovna, M. F. I. F., & Akhmadzhonovich, M. B. (2021, January). ARCHITECTURAL DESIGN TECHNIQUE. In *Euro-Asia Conferences* (Vol. 1, No. 1, pp. 310-312).
7. Мамурова Ф. И. ЭФФЕКТИВНОСТЬ ФОРМИРОВАНИЯ ПРОФЕССИОНАЛЬНОЙ КОМПЕТЕНТНОСТИ БУДУЩИХ ИНЖЕНЕРОВ-СТРОИТЕЛЕЙ В СОВРЕМЕННЫХ УСЛОВИЯХ //Наука и образование сегодня. – 2021. – №. 4 (63). – С. 92-93.

8. Lesov, K. S., Kuznetsov, I. I., Samandarov, X. O., & Kenjaliev, M. K. (2020). Assessment of integral indicators of the surface skating of the rail head in sections of speed and high speed train traffic. *International Journal of Psychosocial Rehabilitation*, *24*(4), 3858-3863.
9. Makhmudov, A. A., and A. M. Khudayberganov. "Creative Lesson on the General Course of Physics on the Topic" Photoelectric Effect"." *Pioneer: Journal of Advanced Research and Scientific Progress* 1.6 (2022): 56-59.
10. Махмудов, А. А. "ОЛИЙ ЎҚУВ ЮРТЛАРИНИНГ АТОМ ФИЗИКА КУРСИДАГИ “ТАШҚИ ФОТОЭФФЕКТ” МАВЗУСИНИ ИННОВАЦИОН ТЕХНОЛОГИЯЛАРДАН ФОЙДАЛАНИБ ЎҚИТИШ МЕТОДИКАСИ." *Журнал Физико-математические науки* 2.1 (2021).
11. Makhmudov, A. A., & Khudayberganov, A. M. (2023). METHODS OF THEORETICAL TEACHING THE TOPIC" COMPTON EFFECT" OF THE SECTION" ATOMIC PHYSICS" OF THE COURSE OF GENERAL PHYSICS IN HIGHER EDUCATIONAL INSTITUTIONS. *Finland International Scientific Journal of Education, Social Science & Humanities*, *11*(1), 123-131.