

JOURNAL OF TRANSPORT



ISSUE 1, 2024 Vol. 1
ISSN: 2181-2438



RESEARCH, INNOVATION, RESULTS



**TOSHKENT DAVLAT
TRANSPORT UNIVERSITETI**

Tashkent state
transport university



JOURNAL OF TRANSPORT

RESEARCH, INNOVATION, RESULTS

ISSN 2181-2438

VOLUME 1, ISSUE 1

MARCH, 2024



journals.tstu.uz

TASHKENT STATE TRANSPORT UNIVERSITY

JOURNAL OF TRANSPORT

SCIENTIFIC-TECHNICAL AND SCIENTIFIC INNOVATION JOURNAL

VOLUME 1, ISSUE 1 MARCH, 2024

EDITOR-IN-CHIEF

SAID S. SHAUMAROV

Professor, Doctor of Sciences in Technics, Tashkent State Transport University

Deputy Chief Editor

Miraziz M. Talipov

Doctor of Philosophy in Technical Sciences, Tashkent State Transport University

Founder of the scientific and technical journal “Journal of Transport” – Tashkent State Transport University, 100167, Republic of Uzbekistan, Tashkent, Temiryo‘lchilar str., 1, office: 465, tel. +998977189944; e-mail: publication@tstu.uz.

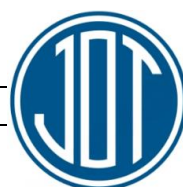
The “Journal of Transport” publishes the most significant results of scientific and applied research carried out in universities of transport profile, as well as other higher educational institutions, research institutes, and centers of the Republic of Uzbekistan and foreign countries.

The journal is published 4 times a year and contains publications in the following main areas:

- Business and Management;
- Economics of Transport;
- Organization of the Transportation Process and Transport Logistics;
- Rolling Stock and Train Traction;
- Infrastructure;
- Research, Design, and Construction of Railways, Highways, and Airfields;
- Technology and Organization of Construction, Management Problems;
- Water Supply, Sewerage, Construction Systems for Water Protection;
- Technosphere Safety;
- Power Supply, Electric Rolling Stock, Automation and Telemechanics, Radio Engineering and Communications, Electrical Engineering;
- Materials Science and Technology of New Materials;
- Technological Machines and Equipment;
- Geodesy and Geoinformatics;
- Car Service;
- Information Technology and Information Security;
- Air Traffic Control;
- Aircraft Maintenance;
- Traffic Organization;
- Operation of Railways and Roads;

Tashkent State Transport University had the opportunity to publish the scientific-technical and scientific innovation publication “Journal of Transport” based on the Certificate No. 1150 of the Information and Mass Communications Agency under the Administration of the President of the Republic of Uzbekistan. Articles in the journal are published in Uzbek, Russian and English languages.

F.E. Abdukadirov, T.M. Khasanov <i>Basic requirements for road passengers and function parameters.....</i>	9
U.T. Berdiyev, U.B. Sulaymonov, N.R. Amanlikova <i>Energy-efficient composite materials for electrical engineering.....</i>	13
A.P. Akhmedov, S.B. Khudoyberganov <i>Reuse of wastewater in urban conditions for technical purposes.....</i>	17
M.X. Miralimov, Sh.U. Normurodov, B.F. Anvarov <i>Investigation of tunnel seismic resistance according to various loading schemes of the theory of seismic resistance of underground structures.....</i>	21
D.I. Ilesaliev, F.K. Azimov, J.A. Shihnazarov <i>Technical and economic indicators of grain cargo transportation in wagons and container- platform.....</i>	31
S.A. Uktamov, G.D. Talipova <i>Main approaches to strategic planning of the activities of a higher educational institution.....</i>	34



Technical and economic indicators of grain cargo transportation in wagons and container-platforms

D.I. Ilesaliev¹, F.K. Azimov¹, J.A. Shihnazarov¹

¹Tashkent state transport university, Tashkent, Uzbekistan

Abstract: This scientific article examines the technical and economic indicators of grain cargo transportation between the consignor and the consignee on container-platforms and platform wagons. It is an effective method of cargo transportation, i.e. it is aimed at providing short delivery time, low transportation cost and high security. In the research work, the costs of transportation of goods in wagons and container-platforms depending on the distance were calculated.

Keywords: wagon, container-platform, cost, distance, safety, cargo, logistics, transport.

Donali yuklarni vagon va konteyner-platformalarda tashishning texnik-iqtisodiy ko'rsatkichlari

Ilesaliev D.I. ¹, Azimov F.K. ¹, Shihnazarov J.A. ¹

¹Toshkent davlat transport universiteti, Toshkent, O'zbekiston

Annotatsiya Ushbu ilmiy maqolada yuk jo'natuvchi va yuk qabul qiluvchi orasida tashishga taqdim etilgan donali yuklarni konteyner-platformalarda va platformada tashishning texnik-iqtisodiy ko'rsatkichlari ko'rib chiqilgan. Yuklarni tashishning samarali usuli, ya'ni yuklarni yetkazib berish muddatining qisqaligi, tashish xarajatining kamligi va yuqori havfsizlikning ta'minlashga qaratilgan. Tadqiqot ishida yuklarni vagon va konteyner-platformalarda tashishni masofaga bog'liq holda tashish xarajatlari hisoblangan.

Keywords: vagon, konteyner-platforma, xarajat, masofa, xavfsizlik, yuk, logistika, transport.

1. Kirish

Zamonaviy dunyoda logistika jarayonlarining samaradorligi, tashishni optimallashtirish sanoat va savdoni rivojlantirishda asosiy rol o'ynaydi. Bu, ayniqsa, ta'minot zanjirining har bir elementi umumiy unumdorlikka va mahsulotning yakuniy tannarxiga ta'sir qiladigan birliklarni tashish sharoitida juda muhimdir [1, 2]. Tovarlarni vagon va konteyner-platformalarida tashish o'rtasidagi masofani inobatga olgan holda tanlovning texnik-iqtisodiy taqqoslash ko'plab transport korxonalar uchun asos hisoblanadi. Yuklarni tashishda transport xarajatlari, yetkazib berish tezligi, yuklarni butligini saqlash darajasi va xalqaro logistika tizimlariga integratsiyalashuv imkoniyati kabi iqtisodiy omillar keltiriladi [4]. Ushbu maqolada biz ikkala muqobil variantning texnik-iqtisodiy jihatlarini, logistika tizimlarining samaradorligi va raqobatbardoshligiga tashish masofasining ta'siri tahlil qilingan [3, 5, 6]. Bunday tahlil yuk jo'natuvchi transport korxonalar o'z yuklarini vagonlar va konteyner-platformalarida donali yuklarni tashishning afzalliklari va kamchiliklarini aniqlash hamda tashishning optimal yechimni aniqlashga imkon beradi.

2. Tadqiqot metodikasi

Quyida keltirilgan tadqiqot metodikasi yuk jo'natuvchilar o'z yuklarini tashishga taqdim etishda masofaga qarab yuklarni temir yo'l transportining oddiy platformasida va konteyner-platformada tashishning texnik-iqtisodiy ko'rsatkichlarini aniqlashga imkon beradi. Tashish jarayoni uchun maqsad funksiya sifatida F va bog'liq parametrlar yuk massasi (m), tashish masofasi (L), ortish-tushirish xarajatlari (q), platforma va konteyner-platformaning turi, inventar va shaxsiy transport birligini inobatga olgan holda hisoblanadi [7-9].

$$F = f(m, L, q) \rightarrow \min \quad (1.1)$$

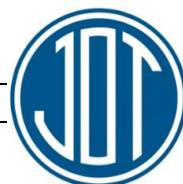
Bortli va bortsiz temir yo'l platformalarda turli nomenklaturadagi yuklarni tashishga mo'ljallangan, konteyner-platformalarda, asosan, donali yuklarni tashishga mo'ljallangan. Konteyner-platformalar yuk bilan birgaligida temir yo'l platformalarga ortiladi [11, 13, 14].

Platformaning afzalligi sifatida yuk ko'tarish qobiliyatining yuqoriligi bo'lsa, yuklarni konteyner-platformalarda tashishda eshikdan eshikkacha yetkazib

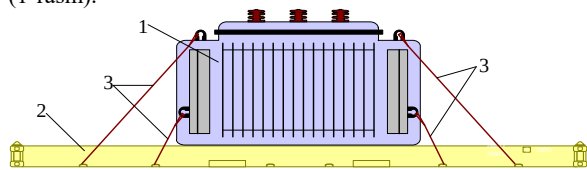
^a <https://orcid.org/0000-0002-1664-2003>

^b <https://orcid.org/0000-0001-7701-4492>

^c <https://orcid.org/0000-0002-4519-3382>

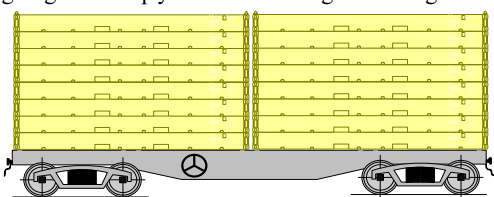


berish imkonini mavjud, bunda konteyner-platformadagi yuk birligini tushurmasdan bir transportdan boshqa transport turiga qayta o'tirish mumkin [10,12]. Taqdiqot metodikasida na'munaviy o'tirilgan va mahkamlangan yuk birligi keltirilgan (1-rasm).



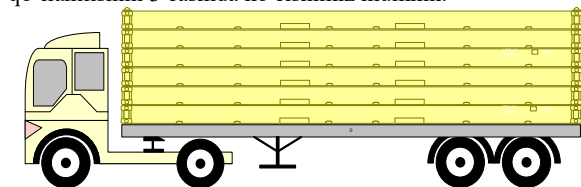
1 -rasm. Konteyner-plafomada yuklarni joylashtirish va mahkamlash: 1 – yuk birligi; 2 – konteyner-plafoma; 3 – tortuv trosslari

Konteyner-platformalarini temir yo'l orqali qaytarish namunasi keltirilgan, rasmda ko'rish mumkinki, konteyner-platformalari va fitting platformaning parametrlariga qarab, vagon tarkibida intermodal transport birligini guruhlab qaytarish mumkinligi ko'rsatilgan 2-rasm.



2-rasm. Bo'sh holatdagi konteyner-plafomani temir yo'l transporti orqali qaytarish

Avtomobil transportida turli xil konteyner va konteyner-platformalarni tashish mumkin. Bir nechta bo'sh holatdagi konteyner-plafomani avtomobil transportida ham qo'llanilishini 3-rasmda ko'rishimiz mumkin.



3-rasm. Bo'sh holatdagi konteyner-plafomani avtomobil transporti orqali qaytarish

Tashish usullarining texnik-iqtisodiy taqqoslash. Temir yo'l transportida yuk tashishda (na'munaviy 25t) yukni 40futli konteyner-plafoma va inventar 13-401 modelli platformada tashishning iqtisodiy ko'rsatkichlari masofaga qarab hisoblangan (1-jadval).

Tashish xarajatlarni aniqlashda mahalliy ta'rif siyosatidan foydalanilgan.

1-jadval

No/k m	10 0 k m	20 0 k m	30 0 k m	50 0 k m	80 0 k m	10 00 k m	12 00 k m	15 00 km	20 00 km
40 fut kont eyne r, mln.	3, 57 3	4, 04 4	4, 52 6	5, 50 2	6, 86 1	7, 81 5	8, 74 6	10, 09 5	12, 47 3

so' m									
Platf orm a 13- 401, mln. so' m	1, 57 3	1, 98 3	2, 38 9	3, 18 9	4, 35 1	5, 15 1	5, 96 2	7,1 68	9,0 75

Yuqoridagi 1-jadvalda temir yo'l transportiga taqdim qilingan yuklarni tashish xarajatlari mahalliy ta'rif siyosatidan foydalanilgan holda hisoblangan.

3. Xulosa

Keltirilgan izlanishlarda temir yo'l transporti orqali tashilayotgan yuklarni samarali tashish usulini tashish masofasiga bog'liq holda tanlash va texnik-iqtisodiy ko'rsatkichlarni asoslashdan iborat. 1-jadval orqali yuklarni 40 futli konteynerlarda va temir yo'l platformalarda tashish narxlarini hisoblangan. Hisob-kitoblar natijasida yuklarni mahalliy tashishlarda temir yo'l platformalarda tashish samarali ekanligi aniqlangan.

Foydalanilgan adabiyotlar / References

[1] “Темир йўл транспортда юкларни етказиб бериш жараёнидаги вагонлардан самарали фойдаланишни таҳлил қилиш”// Бобоев Д.Ш., Шихназаров Ж.А.// Academic Research in Educational Sciences. 210-216 бет. 2021 йил май.

[2] Шихназаров Ж.А., Бобоев Д.Ш., Дехқонов М.М. Юкларни маҳкамлашда кўп марталик фойдаланиладиган занжирли тросларнинг самарали айланмасини ташкил қилиш технологияси, научные труды республиканской научно-технической конференции с участием зарубежных ученых // Ресурсосберегающие технологии на транспорте, Ташкент-2021, 61-63 б.

[3] Рузметов Я., Молчанова О., Шихназаров Ж., Calculation of solid-state cargo fastener under the influence of longitudinal forces, E3S Web of Conferences, 2020, 10-16 б.

[4] Y. Ruzmetov, J. Shihnazarov., About fastening cargo on the wagon under the influence of transverse forces // Journal of Tashkent Institute of Railway Engineers, 2020, 16 (2), 28-38.

[5] K.Turanov, Y.Ruzmetov, J.Shihnazarov., To the calculation of solid-state cargo attachment under the influence of longitudinal forces // Journal of Tashkent Institute of Railway Engineers 2019, 15 (4), 24-35

[6] Коровяковский Е.К., Илесалиев Д.И., Анализ существующих методов перегрузки тарно-штучных грузов на железнодорожном транспорте // Современные проблемы транспортного комплекса России. 2015. №1(6)

[7] Кобулов Ж. Р., Баротов Ж. С., Ташматова М. С. К вопросу о комплексном решении задачи совершенствования срока доставки грузов на

железнодорожном транспорте //Universum: технические науки. – 2021. – №. 5-3 (86). – С. 13-19.

[8] Арипов Н.М., Ибрагимова Г.Р., Илесалиев Д.И., Светашева Н.Ф., Шихназаров Ж.А. Особенности функционирования зерноэлеваторов в цепях поставок //Логистические системы в глобальной экономике. – 2021. – №. 11. – С. 52-56.

[9] Turanov, K., Ruzmetov, Y., & Shihnazarov, J. (2019). To the calculation of solid-state cargo attachment under the influence of longitudinal forces. Journal of Tashkent Institute of Railway Engineers, 15(4), 24-35.

[10] Dehkonov, M. M., Abdurakhimov, O. U., Nasullayev, A. X., & Sadirov, I. R. (2024). Loads container-platform at a transport technical and technological recommendations on. scholar, 2(1), 20-24.

[11] Илесалиев, Д.И. (2015). Определение оптимальных параметров погрузочно-разгрузочного участка с помощью математических методов. In Транспорт: проблемы, идеи, перспективы (pp. 227-233).

[12] Shihnazarov, J., Boboev, D., Dehkonov, M., & Ikramova, D. (2023). Choice of an efficient mode of transport on the basis of comparison of technical and economic indicators of types of transport. In E3S Web of Conferences (Vol. 389, p. 05032). EDP Sciences.

[13] Илесалиев, Д. (2018). Рекомендации по организации и управлению складом от А до Z. Логистика, (1), 18-20.

[14] Светашев, А. А., Шихназаров, Ж. А., & Светашева, Н. Ф. (2021). О возможности развития железнодорожного направления китай-кыргызстан-узбекистан on the possibility of developing the railway direction China-Kyrgyzstan-Uzbekistan Транспорт, 30.

Mualliflar bo'yicha ma'lumot/ Information about the authors

Ilesaliyev Daurenbek
Ixtiyarovich

Toshkent davlat transport universiteti, yuk transport tizimlari kafedrası professori, texnika fanlari doktori, professor,
ilesaliev@mail.ru,
+998998064199,
<https://orcid.org/0000-0002-1664-2003>

Shixnazarov Jamol
Alisherovich

Toshkent davlat transport universiteti, yuk transport tizimlari kafedrası dotsenti v.b., texnika fanlari nomzodi,
jamol.alisherovich@mail.ru,
+998977806133
<https://orcid.org/0000-0001-7701-4492>

Azimov Farrux
Kaxramonovich

Toshkent davlat transport universiteti, yuk transport tizimlari kafedrası mustaqil tadqiqotchisi
+998909789295
farruxa@mail.ru,
<https://orcid.org/0000-0002-4519-3382>

