

## IMPROVING SUPPORT FOR THE PROCESS OF THE THERMAL CONVECTION PROCESS BY INSTALLING REFLECTIVE PANELS IN EXISTING RADIATORS IN PLACES

*Abdurazakov Axmadullo Muxammadovich, Musajonov Muhammadrasul Alisher ugli*  
*Ferghana Polytechnic Institute, Ferghana, 86 Ferghana str., 150107, Uzbekistan*  
*Ahmed10866088@gmail.com*

### Abstract

*In this article, we will have the installation of light reflections used to increase the efficiency of radiators, and thus, the problems of increasing heat to heat, the heat exchange is analyzed through the walls.*

### ARTICLE INFO

#### Article history:

Received 19 Oct 2022

Revised form 18 Nov 2022

Accepted 21 Dec 2022

**Key words:** Radiators, Installing Reflective.

© 2019 Hosting by Central Asian Studies. All rights reserved.

\*\*\*

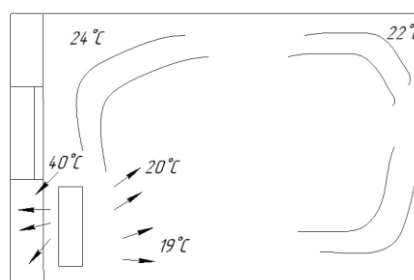
### Introduction

In this article, the installation of the radiator and the outer wall in the reverse side of the chain increases. X-ray radiographs do not work correctly only in the source only for thermal coolant to increase the efficiency of thermal thermal carrier to increase the efficiency of radiators, convection heat in the radiator. The flow is an amplitude and a decrease in losing warm stream from the radiator.

According to the laws of energy conservation, the heat of hot water to the radiator must be transferred to a complete connection, which is clearly targeted equipment requires more energy to transmit heat level. It is advisable to reduce and develop the wall area of the wall area, which prevents most of the energy issued, the search and development of optimal radiators. Despite the change in the shape of the radiators, the main heat exchange is convection.

### Main Body

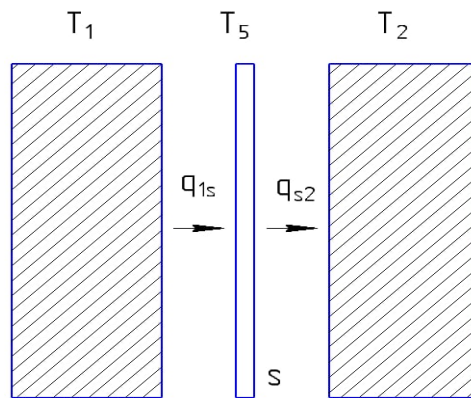
An increase in the radiator to an increase in heat capacity, as well as a decrease in the distance to the radiator, as well as the growing distance from the wall to the radiator can also increase thermal power by reducing. [1] Radiators can several times the ability to give convection heat through the setting of the number of edges. The most common methods, leaving the bottom of the air, moving heat from the bottom of the cold air through convection or air holes through convection or air holes through convection or air holes.



**Fig 1. Conversion of convection, which is formed as a result of the installation of heating radiators**

Normal water type is widely used in public buildings, industrial enterprises. With this, we also observe convection of various metal panels, as well as windows, convection in the room. Creates an action and increases the ability of heat dissipation. [2]

By increasing the convection thermal transmission process, the radiator is returned by installing metal light, persists through the installation of metal light, and the permeability of the outer wall will have a bilateral effect in increasing heat resistance. So, therefore, the overall interaction is intensified.



**Fig 2. The heat exchange process between parallel surfaces and light plates**

In a stable state, if two surface surfaces can be expressed by the power of the radiator (for a square meter) as follows: [3.4]

$$q_{12} = \sigma_0 \frac{1}{\frac{1}{a_1} + \frac{1}{a_2} - 1} (T_1^4 - T_2^4) \tag{1}$$

Here:

$\sigma_0$  = Stephan-boltsman pormanced. The radiating wall wall and heat dissipation shows that the set of a reflective layer.

$$q_{1s} = \frac{\sigma_0 (T_1^4 - T_s^4)}{\frac{1}{a_1} + \frac{1}{a_s} - 1} \tag{2}$$

$$q_{s2} = \sigma_0 \frac{(T_s^4 - T_2^4)}{\frac{1}{a_s} + \frac{1}{a_2} - 1} \tag{3}$$

$Q_{1s}$  = Primary radiation power [WT • M<sup>2</sup>] RADIA DOWN (1) on the screen surface (s).

$Q_{s2}$  = Primary radiation power [WT • M<sup>2</sup>] from the screen surface to the wall surface (2).

$T_s$  = Temperature [K] Surface S (Wall).

The overall light swallowing as = s (screen) swallows the overall light.

**Conclusions**

When installing the effect on heat in heat transfer between radiators and outer walls, radiation between thermal and air between the inner surface, the outer wall and air, the same together with the same equations

that characterize the heat exchange. It can be said that the conclusions improve the thermal convection process by establishing the outer wall.

## Referance

1. Abobakirovich, Abdukarimov Bekzod, Abbosov Yorqin Sodikovich, and Mullayev Ikromjon Isroiljon Ogli. "Optimization of operating parameters of flat solar air heaters." *Вестник науки и образования* 19-2 (73) (2019): 6-9.
2. Mullaev I.I. (2022). Heat - technical calculation of the solar collector. *CENTRAL ASIAN JOURNAL OF THEORETICAL & APPLIED SCIENCES*, 2(12), 244-248.
3. Абдуразаков, А. М. (2022). Моделирование Отрывных Течении В Каналах Или Русле. *CENTRAL ASIAN JOURNAL OF THEORETICAL & APPLIED SCIENCES*, 3(5), 395-404.
4. Abdulkhaev, Z., Madraximov, M., Abdurazaqov, A., & Shoyev, M. (2021). Heat Calculations of Water Cooling Tower. *Uzbekistan Journal of Engineering and Technology*.
5. Abdullayev, B. X., & Rahmankulov, S. A. (2021). Modeling Aeration in High Pressure Hydraulic Circulation. *CENTRAL ASIAN JOURNAL OF THEORETICAL & APPLIED SCIENCES*, 2(12), 127-136.
6. Abdullayev, B. (2022). MODELING OF COLLECTOR WATER DISCHARGE INTO THE WATER COURSE IN THE FERGANA VALLEY MODELING OF COLLECTOR WATER DISCHARGE INTO THE WATER COURSE IN THE FERGANA VALLEY. *Science and innovation*, 1(A7), 827-834.
7. Abdullayev, B. X., & Rahmankulov, S. A. (2021). Movement of Variable Flow Flux Along the Path in a Closed Inclined Pipeline. *CENTRAL ASIAN JOURNAL OF THEORETICAL & APPLIED SCIENCES*, 2(12), 120-126.
8. Abdullayev, B. X., Xudayqulov, S. I., & Sattorov, S. M. (2020). Simulation Of Collector Water Discharges Into The Watercourse Of The Ferghana Valley. *Scientific-technical journal*, 3(3), 36-41.
9. Abdullayev, B. X., Xudayqulov, S. I., & Sattorov, S. M. (2020). Variable Flow Rate Flow Along A Path In A Closed Inclined Pipeline. *Scientific-technical journal*, 24(4), 23-28.
10. Tursunaliev M.M. (2021). Application of Thermal Insulation Materials in the Heat Supply System. *CENTRAL ASIAN JOURNAL OF THEORETICAL & APPLIED SCIENCES*, 2(12), 244-248.
11. Mamatisaev, G., & Muulayev, I. (2022). ECOLOGICAL AND TECHNOLOGICAL PROBLEMS IN WATER COLLECTION FACILITIES. *Science and innovation*, 1(A7), 767-772.
12. Mullaev, I. (2022). ҚУЁШ-ҲАВО ИСИТИШ ҚУРИЛМАСИНИНГ САМАРАДОРЛИГИНИ ОШИРИШ. *Science and innovation*, 1(A7), 756-761.
13. Ismailov, M., & Xolmatov, I. (2022). OPTIMAL METHODS FOR DESIGNING SEWER NETWORKS. *Science and Innovation*, 1(7), 744-749.
14. Рашидов, Ю. К., Орзиматов, Ж. Т., & Исмоилов, М. М. (2019). Воздушные солнечные коллекторы: перспективы применения в условиях Узбекистана. *ББК 20.1 я43 Э 40*.
15. Ismailov, M., & Xolmatov, I. (2022). КАНАЛИЗАЦИЯ ТАРМОҚЛАРИНИ ЛОЙИХАЛАШНИНГ АПТИМАЛ УСУЛЛАРИ. *Science and innovation*, 1(A7), 744-749.
16. Karshiev SH.SH. & Ismailov M.M. (2022). Calculation of geometric dimensions and hydrodynamic characteristics of venturi pipes of a self-draining solar circuit. *International Journal of Computer Science Engineering and Information Technology Research (IJCSEITR)*, 2(12), 120-126.
17. Madraximov, M. M., Nurmuxammad, X., & Abdulkhaev, Z. E. (2021, November). Hydraulic Calculation Of Jet Pump Performance Improvement. In *International Conference On Multidisciplinary Research And Innovative Technologies* (Vol. 2, pp. 20-24).

18. Madaliev, M. E. U., Abdulkhaev, Z. E., Toshpulatov, N. E., & Sattorov, A. A. (2022, October). Comparison of finite-difference schemes for the first order wave equation problem. In *AIP Conference Proceedings* (Vol. 2637, No. 1, p. 040022). AIP Publishing LLC.
19. Madaliev, M. E. U., Rakhmankulov, S. A., & Tursunaliev, M. M. U. (2021). Comparison of Finite-Difference Schemes for the Burgers Problem. *Middle European Scientific Bulletin*, 18, 76-83.
20. Абдулхаев, З. Э., Мадрахимов, М. М., & Иброхимов, А. Р. (2021). Сув узатиш тармоқларида хосил буладиган гидравлик зарб ходисасини математик моделлаштиришни тадқиқ этиш. *Ўзбекгидроэнергетика" илмий-техник журнали*, 2(10), 33-35.
21. АБДУЛҲАЕВ, З., & МАДРАХИМОВ, М. (2020). Гидротурбиналар ва Насосларда Кавитация Ҳодисаси, Оқибатлари ва Уларни Баргараф Этиш Усуллари. *Ўзбекгидроэнергетика" илмий-техник журнали*, 4(8), 19-20.
22. Tursunaliev, M. (2022). RUBBER COMPOUND FOR RUBBER-METAL PRODUCTS, PRESSURED. *Science and innovation*, 1(A7), 808-813.
23. Madaliev, M. E. U., Maksudov, R. I., Mullaev, I. I., Abdullaev, B. K., & Haidarov, A. R. (2021). Investigation of the Influence of the Computational Grid for Turbulent Flow. *Middle European Scientific Bulletin*, 18, 111-118.
24. Abdukarimov, B. A. (2021). Improve Performance Efficiency As A Result Of Heat Loss Reduction In Solar Air Heater. *International Journal of Progressive Sciences and Technologies*, 29(1), 505-511.
25. Abdukarimov, B., Abbosov, Y. S., & O'tbosarov, S. R. (2020). Hydrodynamic Analysis of Air Solar Collectors. *Int. J. Adv. Res. Sci. Eng. Technol.*, 7(5), 13545-13549.
26. Abdulkhaev, Z. E., Abdurazaqov, A. M., & Sattorov, A. M. (2021). Calculation of the Transition Processes in the Pressurized Water Pipes at the Start of the Pump Unit. *JournalNX*, 7(05), 285-291.
27. Акрамов, А. А. У., & Абдуразақов, А. М. (2019). Исследование обтекания автомобилей Chevrolet. *Достижения науки и образования*, (13 (54)), 17-20.
28. Abbasov, E. S., Abdukarimov, B. A., & Abdurazaqov, A. M. (2020). Use of passive solar heaters in combination with local small boilers in building heating systems. *Scientific-technical journal*, 3(3), 32-35.
29. Abdukarimov, B., O'tbosarov, S., & Abdurazakov, A. (2021). Investigation of the use of new solar air heaters for drying agricultural products. In *E3S Web of Conferences* (Vol. 264, p. 01031). EDP Sciences.
30. Abdukarimov, B. A. (2019). Research of convective heat transfer in solar air heaters. *Наука, техника и образование*, (9), 16-18.
31. Xolmatov, I. R. (2022). The Effect of Multiplicity of Carrier Circulation on the Efficiency of Single-Contour Thermo-siphon Systems of Soller Hot-Water Supply. *CENTRAL ASIAN JOURNAL OF THEORETICAL & APPLIED SCIENCES*, 3(5), 334-340.
32. Rashidov, Y. K., & Ramankulov, S. A. (2021). Improving the Efficiency of Flat Solar Collectors in Heat Supply Systems. *CENTRAL ASIAN JOURNAL OF THEORETICAL & APPLIED SCIENCES*, 2(12), 152-159.
33. Рашидов, Ю. К., Исмоилов, М. М., Орзиматов, Ж. Т., Рашидов, К. Ю., & Каршиев, Ш. Ш. (2019). Повышение эффективности плоских солнечных коллекторов в системах теплоснабжения путём оптимизации их режимных параметров. In *Экологическая, промышленная и энергетическая безопасность-2019* (pp. 1366-1371).
34. Abdukarimov, B. A., O'tbosarov, S. R., & Tursunaliyev, M. M. (2014). Increasing Performance Efficiency by Investigating the Surface of the Solar Air Heater Collector. *NM Safarov and A. Alinazarov. Use of environmentally friendly energy sources.*

35. Madraximov, M. M., Abdulkhaev, Z. E., & Ilhomjon, I. (2022). Factors Influencing Changes In The Groundwater Level In Fergana.
36. Abbasov, Y. S., Abdukarimov, B. A., & ugli Usmonov, M. A. (2022). Optimization of Working Parameters of Colorifiers used in Heat Supply Systems. *Central Asian Journal of Theoretical and Applied Science*, 3(6), 399-406.

