

Design and Fabrication of Robotic Storage and Retrieval System for Footwears

Ritik Diwane¹, Sahil Darlawar², Ishika Isolikar³, Ajay Solanke⁴,
Shrikant Pathak⁵, Dr. Nilesh H. Khandare⁶

Students, Department of Mechanical Engineering^{1,2,3,4,5}

Assistant Professor, Department of Mechanical Engineering⁶

Shri Sant Gajanan Maharaj College of Engineering, Shegaon, Maharashtra, India

Abstract: *This paper aims to design and fabricate of robotic storage and retrieval system for footwear. This is a new concept of designing an ASRS system with the integration of Radio Frequency Identification (RFID). This review paper contains the system that has introduced many advantages in the paction storage, distribution, and customer services. The project has two different directions based on X-axis and Y-axis. ASRS proved its efficient work in world organizations and In this project, we have designed and built ted a prototype. In pilgrim places and in other places where people need to Store their footwear from place another project could have helped them without effort.*

Keywords: Robotic Storage, retrieval system, RFID; Footwear storage

REFERENCES

- [1] Jainil Prajapati et al. "Automated Storage And Retrieval System For Educational Purpose"- A REVIEW. Vol.-4, pp. 63-67, Issue-3, Mar – 2017, International Journal of Advances in Electronics and Computer Science
- [2] T Ajay et al. "Design optimization and development of an Automated Storage and Retrieval System" 2020 IOP Conf. Ser.: Mater. Sci. Eng. 912 032031
- [3] Farah Hanani Mohammad Khasasi et al "Development of an Automated Storage and Retrieval System in Dynamic Industrial Environment" Universiti Kuala Lumpur British Malaysian Institute, Electrical and Electronic, pp 57-60,2015, ICBAPS
- [4] ManabendraSaha et al "Automated Storage and Retrieval System" Volume 3, Issue 5, pp 513-515, May – 2018, International Journal of Innovative Science and Research Technology.
- [5] Ray Kulwicz et.al. "Reliability of Automated Storage and Retrieval System" pp 343-362, 2009
- [6] B.K. Patel et. Al. " Mobile Robot for Automated Storage & Retrieval System SuyashZagade" Volume-11 Issue-2, July 2022, pp 165-171, International Journal of Recent Technology and Engineering.
- [7] J. Zhang, et.al "BFVP: A probabilistic UHF RFID tag localization algorithm using Bayesian filter and a variable power RFID model", IEEE Trans. Ind. Electron., vol. 65, no. 10, pp. 8250-8259, October 2018.