

Design and Fabrication of Automatic Weight Sorting Machine

Prof V. R. Kagade¹, Mr. Alpesh Patil², Mr. Pranav Koditkar³, Mr. Sarthak Kulkarni⁴,
Mr. Huvishk Mankar⁵

Assistant Professor, Mechanical Engineering, NBNSSOE, Pune, India¹

UG Student, Mechanical Engineering, NBNSSOE, Pune, India^{2,3,4,5}

Abstract: Sorting of items is an important action that is employed in many aspects of daily life for the benefit of convenience. Sorting was mostly done manually and reliant on human judgments until a few years ago. Sorting systems are a more practical and cost-effective way to automate. The main goal of the sorting system is to reduce manpower while improving product quality and efficiency. In the current context, most sorting systems use criteria such as colour, size, and material type, but they come with drawbacks such as environmental sensitivity, high cost, and complexity. Weight is used as a sorting criterion in this paper's proposed sorting system. The constructed machine tries to use mechanical and electronic components in conjunction with one another.

Keywords: Automatic sorting, Weighing mechanism, Load cells, Controller, etc.

REFERENCES

- [1] "Automatic Object Sorting Machine" BY Prof. S. K. Latad, Pallavi Dhole, Rupali Sonare, Akshay Kukadkar, Pawan Mankar
- [2] "Design and Fabrication of Automatic Weight Sorting Machine" by Yuvraj S. Kumbhar, Chaitrali M. Shete, Omkar M. Kulkarni, Ghansham B. Firame.
- [3] "Automatic Sorting Machine" by Aashika Prasad, M. Gowtham, S. Mohanraman, M. Suresh
- [4] "AUTOMATIC SORTING MACHINE" by Prof. V.W. Patil, Gaikwad Sachin, Babar Nikhil, Shevante Pramod, Gaikwad Ganesh.
- [5] "Internet of Things (IOT): Research Challenges and Future Applications" by AbdelRahman H. Hussein Department of Networks and Information Security Faculty of Information Technology / Al-Ahliyya Amman University.
- [6] Design and Fabrication of Automatic Weight Sorting Machine Yuvraj S. Kumbhar, Chaitrali M. Shete, Omkar M. Kulkarni, Ghansham B. Firame.
- [7] Bankole I. Oladapo, V.A. Balogun, A.O.M. Adeoye, C.O. Ijagbemi, Afolabi S. Oluwole, I.A. Daniyan, A. Esoso Aghor, Asanta P. Simeon, "Model design and simulation of automatic sorting machine using proximity sensor", Engineering Science and Technology, an International Journal, 2016.