IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 12, May 2023

360 Degree Rotating Fire Protection System

Prof. V. D. Yadav¹, Muskan A Mulani², Sanket D Deshmane³, Shivam B Kalburgi⁴ Azaruddin S Attar⁵, Akash A Dhumal⁶

Guide, Department of Mechanical Engineering¹ Students, Department of Mechanical Engineering^{2,3,4,5,6} Dr. Daulatrao Aher Collage of Engineering, Karad, India

Abstract: Large factories, warehouses, and industrial production facilities always run the risk of fires breaking out. Lack of appropriate firefighting measures could result in disastrous consequences and along with financial losses and might even lead to massive loss of human life. Usual fire protection systems installed in buildings have the following disadvantage. They spray small amounts of water from each sprinkler which may not be enough to put out the fire. The sprinklers are not targeted and spray an entire floor or building ruining computers, furniture and paperwork. While this sprayer gun can spray water in desired quantity only at fire outbreak point to stop fire without ruining complete office furniture and electronics. This demo version is made to be remote controlled from few meters but future version will operate remotely from fire department.

Keywords: Motor, Pipe, Bearings, Nozzle, Remote, Control System

REFERENCES

[1]. Szpakowski, D.M.; Jensen, J.L. A review of the applications of remote sensing in fire ecology. Remote Sens. 2019, 11, 2638. [CrossRef]

[2]. Veraverbeke, S.; Dennison, P.; Gitas, I.; Hulley, G.; Kalashnikova, O.; Katagis, T.; Kuai, L.; Meng, R.; Roberts, D.; Stavros, N. Hyperspectral remote sensing of fire: State- of-the-art and future perspectives. Remote Sens. Environ. 2018, 216, 1053121. [CrossRef]

[3]. Yuan, C.; Liu, Z.; Zhang, Y. Aerial images-based forest fire detection for firefighting using optical remote sensing techniques and unmanned aerial vehicles. J. Intell. Robot. Syst. 2017, 88, 6353654. [CrossRef]

[4]. Hendel, I.G.; Ross, G.M. Efficacy of Remote Sensing in Early Forest Fire Detection: A Thermal Sensor Comparison. Can. J. Remote Sens. 2020, 1315. [CrossRef]

[5]. Töreyin, B.U.; Dedeo `glu, Y.; Güdükbay, U.; Cetin, A.E. Computer vision based method for real-time fire and flame detection. Pattern Recognit. Lett. 2006, 27, 49358. [CrossRef]

