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Design Modification of Tray Dryer to Increase Efficiency

Sohan N. Dute[1], Manish P. Bijwe[2], Dushyant B. Pawar[3]
PG Student, Department of Mechanical Engineering[1]
Assistant Professor, Department of Mechanical Engineering[2,3]
Takshashila Institute of Engineering and Technology, Darapur, Amravati, India

Abstract: *The primary objective of this paper to design a high-efficiency tray dryer capable of drying 480 kg of powder in just half an hour. This objective requires the development of an optimized system with carefully controlled parameters, including temperature, air velocity, and radiation heat transfer. The goal is to create a drying system that not only meets industrial standards but also maximizes energy efficiency and ensures uniform drying across all 96 trays. This focus on energy-efficient and consistent drying reflects the growing industrial demand for cost-effective and reliable drying solutions.*

Keywords: Heat Transfer, radiation, air velocity, drying solution

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