

Design Fabrication and Performance Evaluation of Solar Dryer

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Abstract: Utilizing the most abundant and free of cost energy of the sun to heat up the air and to use that heated air to dry foods is the main goal of this thesis. In order to do this an indirect type forced convection solar dryer is fabricated with components like screen absorber solar collector, drying chamber, fan, etc. The performance of the designed solar dryer is evaluated by carrying drying experiments with potatoes. The temperature inside the drying chamber ranges from 490C to 580C while the ambient temperature ranges from 330C to 350C.

Keywords: Copper Plate, Solar Plate, Exhaust Fan, Aluminium Sheet

