

FINAL PROJECT

**Comparison of Performance Flate-Plate Solar Collector Absorber
Made From Used Bottle Cans With Size 320 ml and 330 ml**

*Submitted as One of The Requirements to Accomplish
Bachelor Degree Study*



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ABSTRACT

Metal waste is one of the biggest contributors to the accumulation of waste in various regions. One type of metal waste is used bottle cans. To reuse metal waste, especially used bottle cans, a study was carried out on the performance of a flat plate type solar collector using a can absorber.

This research was conducted by experiment with testing in the time interval from 11.00 WIB to 15.00 WIB. At that time, data were collected in the form of input temperature, output temperature, absorber temperature, and the intensity of solar radiation every 30 minutes.

The results of the experiment show that the performance of the solar collector with a 330 ml can absorber is superior. The average difference between absorber temperature, output temperature, and efficiency of these two collectors is 4.3°C, 6.47°C, and 2.61%

Keywords: flat plate collector, the absorber can bottle 320 ml, the absorber can bottle 330 ml

