

ABSTRACT

In this final project will be analyzed an incinerator for power plant. The heat energy from the incinerator will be used and converted into electrical energy for battery charging 6v 4,5Ah battery. This tool uses the principle of effect on the thermoelectric plate layer which will be converted into a unidirectional voltage commonly called thermoelectric generator.

The thermoelectric generator used in this final project is TEC1-12706 arranged in 7 chips to produce a potential difference from the temperature difference that emerges from both sides of the thermoelectric generator. 7 pieces of thermoelectric generator arranged at the mini incinerator level produce a maximum voltage of 18.10 volts under conditions at 157 °C.

The test results and analysis on battery charging 6v 4,5Ah indicate the charging process at a temperature difference of 130 °C where the voltage obtained 6,5 Vdc and current 256 mA.

Keywords: Incinerator, Seebeck Effect, Charging accumulator, Thermoelectric generator.