ABSTRACT

In the present era technology is getting more advanced and growing rapidly. Almost every technology created requires electrical energy. Along with the current technological development of power delivery or electrical energy can be through the air without using a cable as in general. But for the technology on AGV (Automatic Guided Vehicle) charging power transfer is still conventionally by using cable. The purpose of this final task is to overcome the transfer process so that power becomes more efficient.

By applying wireless charging technology the charging process at AGV can be more efficient. A 220 V power source with 50 Hz frequency will be forwarded to a power supply that changes the AC voltage to DC and will be converted again to the inverter from DC to AC voltage forwarded directly to the primary coil for air delivery.

The results that have been achieved in this final project is the amount of power delivered more than 6.75 watts with a frequency of 9 KHz. The optimal distance for sending power is 0 - 5 cm. So the distance on wireless charging greatly affects the quality of the power delivery process performed.

***Keywords**: wireless power charging, power transfer, inverter, inductance.*