

Figure 15. The relation between power generation and temperature difference.

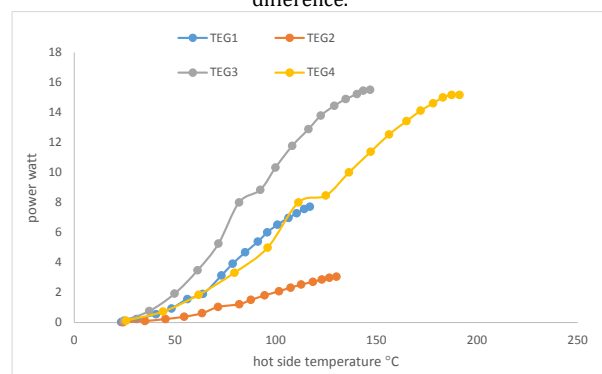


Figure 16. The relation between hot side temperature and power generation in each thermoelectric generator.

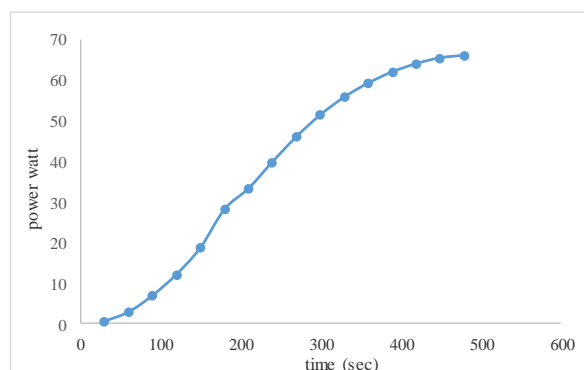


Figure 17. The relation between the total power generation and time on the heat recovery system.

7. CONCLUSIONS

The electrical power generation by using waste heat recovery system which included the thermoelectric generator with its composition with a natural convection effect in cold side cooling process. The experimental results which were gotten from the practical part of the research can be concluded as below:

1. The cold and hot side temperature increased concerning time. The maximum hot side temperature is 191.3°C reached in thermoelectric generator number 4.

2. The voltage, current, and power generation raised with increasing the hot side temperature, the maximum voltage and current generation are (17.01volt), (15.49) respectively.

3. The voltage, current, and power generation are increasing with the temperature difference and the time. The maximum power generation is 65.99 watt.

8. REFERENCES

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