

## CHAPTER 5

### CONCLUSSIONS AND SUGGESTIONS

In Chapter 5, the conclusions from the research and suggestions for further research will be discussed.

#### 5.1 Conclussions

From the research that has been carried out, it can be concluded:

- 1) At the Roller Tyre measurement point it was found that at the measurement point of 0 mm - 700 mm, the highest roller tyre wear occurred at the point of 300 mm - 680 mm with the greatest wear occurring at the point of 500 mm with a wear depth of 17 mm.
- 2) From the calculation of roller tire running hours, roller tyre 2 has the shortest running hours compared to the other four roller tyres, which is 585.21 hours.

From the calculation of the wear rate data, roller tyre 2 has the higher wear among the four roller tyres with an average wear rate of 70,329.7 mm<sup>3</sup>/hour.

- 3) Based on the Kruskal-Wallis test conducted, it was found that the four roller tyres had a significant value greater than 0.076, the value was greater than 0.05, so it could be concluded that there was no difference wear in the average of the four roller tires.

#### 5.2 Suggestions

- 1) Do regular inspections to avoid serious wear on roller tyre.
- 2) Create a new design so that the grinding of material is evenly distributed and does not rely on roller tyre 2, which is causes roller tyre 2 to share the highest wear among the other four roller tyre