

CHAPTER V

CONCLUSIONS

The effect of rice husk ash (RHA) on the physical properties was studied and conclusions drawn from the study are as the following:

1. Progressive incorporation of RHA to the terra cotta mixed clay body resulted in the reduction of plasticity index (Ip). RHA improved the consistency and workability of the clay and satisfactory forming properties over the relatively wide range of water content could be developed.
2. The drying rate increased and the drying and firing shrinkage decreased with the increase in RHA content. The reduction of drying and firing shrinkage would prevent cracking and improve the quality of green body and fired body too.
3. The complete replacement of silica sand by RHA in the mixed clay bodies increased the modulus of rupture, especially when the firing temperature was over 950 °C.
4. Although the density of fired body decreased and the water absorption increased with the increase in RHA content, the terra cotta products could be produced without any deterioration in the quality of products.