



CHAPTER 5

EXPERIMENTS ON REFRIGERATION PLANT WITH MIXED "FREON-12" AND "FREON-22" REFRIGERANT CHARGED

5.1 DESCRIPTION OF APPARATUS

The refrigeration plant and other apparatus are the same as used for the experiments in Chapter 3 and Chapter 4, only one more "Freon-12" refrigerant container included.

5.2 TEST PROCEDURE

This test is to determine the properties of "Freon-12" and "Freon-22" mixture at various proportions, then refrigerant charged of the plant must be changed at each proportion of mixed refrigerant. The operation to change the refrigerant of the plant already mentioned in Art. 4.2, Chapter 4.

The test was carried out at the proportions of mixed refrigerant from 0 - 100 % by weight of "Freon-12" and "Freon-22". At each charged, the test was carried out under the condition of constant expansion gas temperature at 15 F, suction temperature at 85 F, and liquid temperature of condenser outlet at 95.4 F.

Test data of the experiment was shown in Table 5.1 in Appendix I.

5.3 TEST RESULTS

Results of the experiment at various proportions

of mixed "Freon-12" and "Freon-22" refrigerant, are shown in Table 5.2, Table 5.3, Graph 9, Graph 10, and Graph 11 in Appendix III.