

THE ELABORATION OF THE MODEL ABOUT THE GENERATION OF THE VAPOURS DURING THE BOILING OF AMMONIA SOLUTION IN A NON - STATIONARY STATE

Luminita CUJBA, Sava PORNEALA
University "Dunarea de Jos" of Galati, ROMANIA
Domneasca Str, Nr.111.tel.0236414871, fax0236461353
e-mail: lcujba@ugal.ro, sava.porneala@ugal.ro

ABSTRACT

The paper presents a mathematical model elaborated for the study of the vapours generator in a solar absorption refrigeration system in a non- stationary state. By means of this it can obtain the variation of the quantities of solution in the boiler, of ammonia vapours resulted from the deflegmator, of the pressure and of the concentration of the solution. The model was elaborated considering the boiler in a horizontal plan, of cylindrical type.

By means of the enthalpy-concentration diagram for ammonia solution were established relations among the parameters in liquid and vapours states at saturation.

REFERENCES

- [1] V. RADCENCO, S. PORNEALK, A. DOBROVICESCU, „Procese în instalatii frigorifice”, E.D.P., 1983
- [2] S.PORNEALA, D.PORNEALA, P.DINACHE, „Tehnica frigului si climatizarii în industria alimentară – teorie si aplicatii numerice”, Editura FundaMiei Universitare „Dunarea de Jos” Galati, 2000
- [3] AI. DANESCU, S. BUCURENCIU, ST. PETRESCU, „Utilizarea energiei solare”, Editura tehnica, Bucuresti, 1980
- [4] ASOCIPIA INGINERILOR DE INSTALAPII DIN ROMÂNIA, „Manualul de Instalatii, Ventilare Climatizare”, Editura Artecno, Bucuresti, 2002
- [5] PORNEALA SAVA, *Contributii la studiul proceselor de transfer de caldura si masa în absorbitoarele ma, inilor frigorifice cu absorbtie* – teza de doctorat, Institutul Politehnic Bucuresti, 1981