

ICR0064

**AN INDUSTRIAL APPLICATION OF GAS DRIVEN HEAT PUMP
(GHP) BY USING WASTE WATER HEAT SOURCE**

Seong-ryong Park, Jun-Tack Park, Hyung-kee Yoon

Korea Institute of Energy Research
71-2 Jang-dong Yousong-ku, Taejeon, 305-343, Korea

ABSTRACT

In order to utilize the industrial waste water in the range of the relatively low temperature such as 40 ~ 50 °C as heat source, the heat pump system using R134a was considered. In this study, the performance of heat pump system was investigated by computer simulation and experiment, respectively. The COPs were compared and the system characteristics were analyzed. With combining the heat pump system with the exhausted gas recovery system of engine, the final temperature around 70 °C was obtained.