

271. DESIGN OF OPTIMISED INSTRUMENTATION SYSTEM FOR FURNACE TEMPERATURE CONTROL.

Sundaramoorthy¹, M. Manoj Kumar², R. Rajasekar³, R. Jai Sangeeth Raj⁴.

¹Assistant Professor, Department of EIE, Panimalar Engineering College, Chennai – 123.

^{2,3,4}Final Year students, Department of EIE, Panimalar Engineering College, Chennai – 123.

⁴ajaisangeeth110693@gmail.com^{1,2} manoj.m.maran.com@gmail.com²

In a petro Chemical Industry furnace is the basic part for all heating operations. Hence we are also trying to make these processes in an efficient manner. Nowadays petrochemical Industries are doing their furnace operation using fuel gas for combustion. But it is costlier and also temperature is not maintained in a particular constant value. So, we would like to propose the new model with all controlling operation for temperature. With the usage of fuel oil, we are also eliminating some of the problem like O₂ control based on natural draft and ID fan speed control based on fluid coupling.

Keywords - APH, VFD, O₂ Trim, feed forward control.

Journal of Science and Innovative Engineering & Technology