Project Report Title	The control of electrical energy saving for a hydraulic pump
Name	Mr.Pruchya Wongthaworn
	Mr.Weerapas Channamsai
Project Report Advisor	Mr.Pornjit Pratumsuwan
Department of	Teacher Training in Mechanical Engineering
Academic Year	2011

Abstract

This dissertation is the development of energy-saving control system for hydraulic pump. In normal operation of the hydraulic system, which a hydraulic pump runs all the time and there are loss of electrical power while a hydraulic pump both load and on load. If you can control the operation of a hydraulic pump when no load by working less . Will help to reduce the work load in the hand. Thus creating energy-saving controller for a hydraulic pump. The circuit is designed to control the hydraulic pump to operate effectively. The use of closed-loop control with the use of the Inverter to control the speed of the motor driving the hydraulic pump to work properly. Work is that while no-load hydraulic pump will work less, but while there are loads of hydraulic pumps will drive the hydraulic pump immediately; this will allow the hydraulic pump to operate effectively.

As a result of a kit of energy for a hydraulic pump compared to the old system does not use automation, PID control (Proportional Integral Derivative Control: PID Control) system to control the speed of the automat hydraulic pump reduce the power up to 66.252%. Fuzzy control system can control the speed of the automat hydraulic pump reduce the power up to 66.314%. And Fuzzy with PID control systems is the best system to control the speed of the automat hydraulic pump reduced the power up to 70.426%.