

65. A Study on the Development of Exclusive Sensor for Detecting the Hydraulic Cylinder Stroke

제어계측공학과 이 한
지도교수 김 종 화

It is possible to comprise the closed loop control system for accurate control by way of sensing the stroke of the hydraulic cylinder used for an actuator on the heavy equipment, hydraulic pressure and so on. But, the accompanying equipment as the impact vibration relief housing, the protect housing and the likes are necessary for using the existent magnetic sensor or LVDT when the using environment is too bad as impact, vibration, high temperature or low temperature, and thereby, it is induced that the use limitation and the high cost. So, It is definitely requested that the sensing mechanism and methods of measuring the direct hydraulic cylinder's stroke and overcoming the use environment.

This paper was to get the remote detecting method of hydraulic cylinder stroke and intended to confirm the possibility of direct remote detection with experimentation by researching the mechanism of direct detection and developing the prototype.

Throughout this paper, we want to make the new technology of hydraulic cylinder stroke sensing that is used in the bad environment.

