Servo control system for various test machines and production site

In order to cope with tensile and compressive strength test, vibration and fatigue test, anti-seismic structure test, etc., various test machines are manufactured. This system is designed and manufactured as the control system of the said test machines or the processing control device for load, pressure, displacement, etc. at production site.

Servo control realizes hydraulic system control by using electronic processing and is widely used due to its high output and high accuracy delivered by controlling electro-hydraulic servo system of mechanical position, force, etc. This system is capable of comparison and calculus of deviation between the target signal (voltage) of signal generator and the feedback signal (voltage) of detector, and can drive servo valve after amplifying the deviation. In addition, it can convert electrical signal (current) to oil supply flow of hydraulic generating device through servo valve and can drive the operating system.

This system detects a motion of an actuator of load, and it performs feedback control so that it may synchronize with a target signal, and so load control, displacement control, acceleration control, pressure control, etc. can be performed through various sensors. Moreover, a change of a control loop, range setup of a feedback amplifier, oscillating start control, etc. can be performed by computer control. In addition to these basic elements, the system is equipped with anomaly detection unit detecting abnormality and protecting the test object, monitor device capable of monitoring control status, and the system controller controlling the whole system. In case of power failure, emergency power supply (UPS) can be started avoid test object damage.