

Lufkin Well Manager - Progressing Cavity Pump Controller Optimize Fluid Production to Prevent Pump Damage



The LUFKIN WELL MANAGER (LWM) Progressing Cavity Pump (PCP) controller works in conjunction with a variable speed drive (VSD) to optimize fluid production while protecting the pump. The patented control algorithm varies the speed of the pump while measuring the amount of fluid produced from the pump. The controller ramps up the pump speed in user-defined steps. Production rates are measured at each step to establish a speed to production rate relationship. When an increase in speed does not produce a proportional increase in fluid production, the controller slows the speed by steps until optimum fluid production is achieved. The control algorithm continues testing the production rate by repeating the speed increase/decrease sequence.

Algorithm Control Method

