



MOTOR CONTROLS

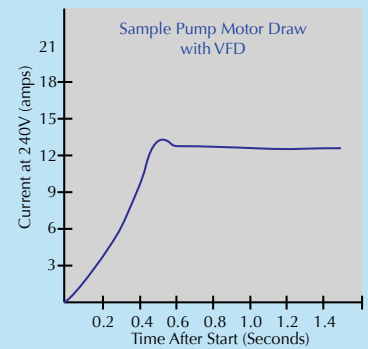
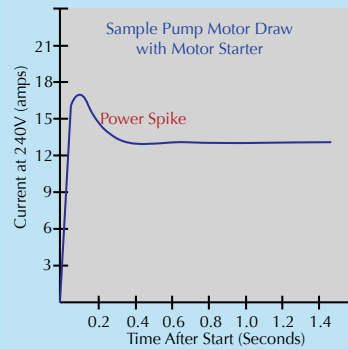
In September's newsletter tag out procedure for motor starters and variable frequency drives was illustrated. HPWS' staff are often asked if a site should consider upgrading from motor starters to VFD's.

Think of the motor as the light bulb in your living room lamp and the light switch as the motor control. The three most common ways to turn the light on are; a standard switch (on/off), a 3-way switch (on/low/high) or a dimmer switch (variable levels). A standard switch is equivalent to a motor starter where the motor is either on or off, the 3-way switch relates to the soft start and dimmer switch equates to a VFD.

The initial purchase has motor starters as the simplest and most cost effective while the VFD is the most expensive option. The additional mechanical and electrical components required to stage the voltage received by the motor are what drive the price. In the long term the opposite may be true based on the motor work load and number of starts per period.

Motor starters allow the full voltage to immediately pass through to the motor which causes strain on the internal components, drive shaft, wiring, drive belts, and items that are connected to the motor. This reduces the life span of each of these components. The life span reduction is relative to the number of times the motor starts and stops in a given period of time. If the motor is turned on one time during the day, as in a central vacuum system, the change in life span will be less than for a high pressure pump that fires several times each wash cycle.

Although VFD's can lower the utility bills for large tunnel facilities they have not proved valuable in self-serve and automatics. In tunnel operations there are some owners that have had many years of success with VFD controls and others who find them not worth the complication or investment. For those in the second category that would like to increase efficiency they should look to high efficiency motors and LED lighting for immediate rebates and long term savings. XCEL energy lists the available rebates on their website or you can ask us for help sorting through the details. Call us for more information on decreasing costs while upgrading your facility in a manner that fits your business.



NEW EMPLOYEES



Brandon Paup

Brandon Paup has a military background with almost 15 years of service as well as experience in transportation and logistics. He has joined HPWS as a driver, although you may not see him for a couple of weeks because he has been called up by the National Guard to help with the flood clean-up.



Andy Loveland

Andy Loveland's background is in building maintenance. He joins HPWS as an Install Technician. He enjoys jeeping and Harley rides.

FOR SALE



20 Dilling/Harris vacuums for sale, priced at \$300 each. Call 719.465.9040 for more information.