

# **AGRICULTURE COPY LIBRARY**

## Variable Frequency Drives (VFDs)

**DEFINITION**

Variable Frequency Drives are designed to adjust turbine irrigation pump motor speeds to match changing irrigation needs and reduce the amount of energy required to start and slow down the motor. This is done by adjusting the rotational speed of the electric motor by controlling the frequency of electrical power supplied to the motor.

Variable Frequency Drives reduce stress on motors which can also lead to reductions in maintenance and repair costs.

**VFD VALUE PROPOSITION**

VFDs adjust turbine irrigation pump motor speeds to accommodate changes in irrigation needs. Without a VFD, many pumps only have one speed, generally what is needed to operate at peak load. If less irrigation is needed, the system still requires additional sprinklers to run to relieve system pressure.

Even small adjustments using a VFD can create significant energy savings, often as much as 20% for turbine pumps. At the same time the VFD also provides greater control over water distribution, aeration, and chemical feed.

**VFD - MESSAGING**

Variable Frequency Drives are effective tools to help save significantly on the energy required to operate your water pump while also extending the overall lifetime of your irrigation equipment.

**CONSIDERATIONS FOR PRODUCERS****1. VFD PROVIDES MAJOR ENERGY SAVINGS**

A new VFD provides significant energy savings from Day One, often by as much as 20% annually. This means big savings on your annual operating costs.

**2. GETTING STARTED IS FAST AND EASY**

Installing a new VFD is a low-risk way to earn straightforward energy efficiency incentives from your utility. Start recouping the costs of a new VFD installation from Day One.

While there are costs associated with the initial installment of a VFD, you won't find a significant wait to get started. A new VFD can be installed within four weeks of the initial request to your utility.

**3. GREATER PRECISION AND CONTROL ARE YOURS**

A more modern and efficient method of controlling your irrigation system means greater precision and control over your entire operation. One switch can provide you with the precise water application you need to meet any of your changing irrigation needs.

**4. YOUR LOCAL UTILITY IS HERE TO HELP**

Your local utility is here to assist you as you get started. Your utility representative can help you calculate your estimated savings and help you prepare for a VFD installation. Contact your local utility today to learn more.

## VARIABLE FREQUENCY DRIVE - LONG COPY

### HEADLINE

Get control where you need it most.

### LONG DESCRIPTION

Discover HUGE potential savings in energy, maintenance and repair costs when you install a VFD for your turbine irrigation pump motor.

Variable Frequency Drives are designed to adjust water pump motor speed to match your changing irrigation needs by controlling the frequency of the electrical power that's supplied to your motor. One VFD is often all you will need to control your varying irrigation needs.

Even small speed adjustments using a Variable Frequency Drive can create big energy savings, often as much as 20%! At the same time you'll get greater precision and tighter control over water distribution and pressure, and help the pump match flow requirements.

Get control where you need it most, with the Variable Frequency Drive program now available in partnership with your local utility.

A Variable Frequency Drive provides:

- Greater irrigation control
- Reduced energy consumption
- Longer equipment life
- Reduced maintenance and repair costs

### CTA

Contact your local utility to get started.

**SUBHEADING**

Your water and energy savings are just beginning.

**COPY**

When you install a Variable Frequency Drive for your irrigation pump motor, you will often see benefits that start the first day and can provide as much as 20% savings on annual energy costs.

That means big savings today, and even bigger savings on your overall operation costs every year after installation!

**SUBHEADING**

A low-risk alternative to traditional motor control.

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Many utilities now offer financial incentives to help with the cost of installing a new Variable Frequency Drive, making it a cost effective way to start saving energy right away.

Your utility can help answer all of your questions about how a Variable Frequency Drive can improve your production, reduce water and energy waste, and can help you prepare for installation.

**SUBHEADING**

Where precision and control meet, good things happen.

**COPY**

A more modern and precise method for controlling your irrigation means you get greater control and precision over your entire operation, making it simple and stress-free to meet all of your changing irrigation needs.

A Variable Frequency Drive provides you with greater precision and control while extending the lifetime of your irrigation equipment.

**CTA**

Your utility is here to help.

**COPY**

Your utility is here to assist you and make it easy to start saving right away. Call today to learn more about the Variable Frequency Drive Program and find out how greater precision and control can improve your production.

## VARIABLE FREQUENCY DRIVE - SHORT COPY

### HEADLINE

Get control where you need it most.

### COPY

Save energy and extend the life of your equipment when you install a new Variable Frequency Drive. Designed to match all of your changing irrigation needs, a Variable Frequency Drive can help you save up to 20% off your annual energy costs.

Financial incentives may be available from your utility. Call today to learn more.

### CTA

Contact your local utility to get started.

Your utility is here to assist you and make it easy to start saving. Call today to learn more about the Variable Frequency Drive Program.