

# Variable Frequency Drive and Motor Upgrade

**Variable Frequency Drive and Motor Upgrades** are designed specifically for 48"x30", 48"x36" and 54"x40" batch centrifugals. The VFD Upgrade eliminates original 2-speed motor, across-the-line contactors and high-maintenance TurnTork reversing drive. These VFD's utilize advanced **Direct Torque Control (DTC)** which makes 40,000 speed control corrections per second. These drives use low-speed torque control and generate significantly lower noise than other VFD's. These drives do not require an encoder to control motor speed, which eliminates the problematic signal cable between each motor and VFD.



- ▶ **Low Price** - WESTERN STATES high-volume buying power provides our customers with prices lower than most local distributors.
- ▶ **Guaranteed** proper sizing of drives and motors.
- ▶ **2-year warranty in the USA.** 1-year warranty internationally.



## VFD ADVANTAGES:

- ▶ The same VFD drive package used on new TITAN Centrifugals.
- ▶ Eliminate High Energy Contactors.
- ▶ Eliminate Mechanical TurnTork Low-Speed Reversing Drive.
- ▶ Reduced Coupling Wear - VFD provides smooth acceleration.
- ▶ Eliminate power "spikes" on transformers.
- ▶ Programmable RPM and acceleration control in place of old timers.
- ▶ Compact cabinet takes less space than original 2-speed cabinet.
- ▶ Regenerative Braking reduces or eliminates use of friction brakes.

## UPGRADE INCLUDES:

- ▶ Regenerative ABB VFD Drive
- ▶ VFD Rated Motor with Independent Cooling Fan
- ▶ Encoderless Speed Control
- ▶ Voltage Surge Protection
- ▶ Compact Floor Mounted Cabinet

*Optional* PLC with fully programmable Touch Screen Operator Interface housed in NEMA-4 washdown panel.



*Bank of four (4) compact, regenerative VFD's*

## Economic Return:

- \$ Eliminate Frequent Contactor Replacement
- \$ Eliminate TurnTork Parts & Maintenance
- \$ Saving from Improved Power Regeneration
- \$ Reduced Coupling Wear
- + \$ Increased Up Time

**\$4,000-\$16,000 annual savings\***

\*Saving will vary depending on cycle time, equipment age and level of maintenance.



**WESTERN STATES**



where *innovation* happens everyday™

625 Commerce Center Drive  
Fairfield, OH 45011 U.S.A.  
P: 513.863.4758 ~ F: 513.863.3946  
[www.westernstates.com](http://www.westernstates.com)  
[innovation@westernstates.com](mailto:innovation@westernstates.com)