

## Decanter Centrifuges

### Application Overview

Emerson Control Techniques offers a wide range of Variable Frequency Drives (VFDs) and options to meet the diverse power and performance requirements of decanter centrifuges used in Water, Waste Water, Oil & Gas, Food Processing and other industries. Our energy efficient range of VFDs have the power, specifications, features and performance characteristics to cater to the control needs of main bowl, scroll and infeed motor applications.

### Application Requirements

#### Control & Connectivity

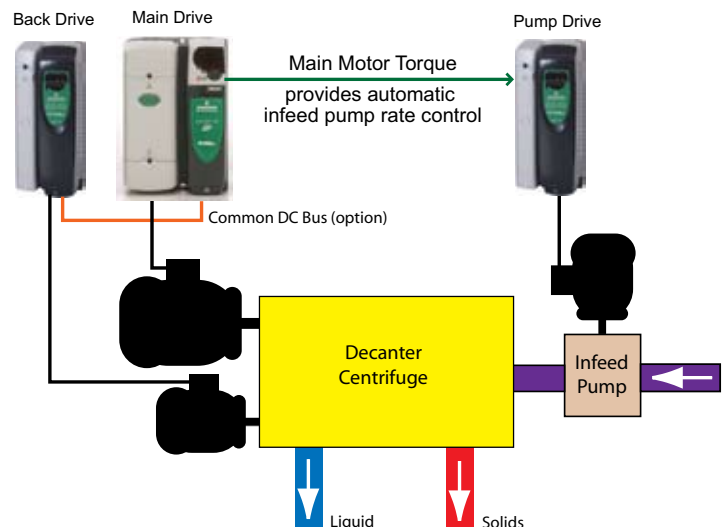
- Wide constant torque speed range
- Rapid accel / decel rates
- Precise speed and torque controls
- Regenerative and common DC bus options
- Dynamic/DC injection braking
- Fieldbus connectivity for PLC and/or HMI
- On-board intelligence for distributed control

#### Protection

- Motor, machine and system safety
- Intuitive Diagnostics

#### Minimize operating costs

- Energy conservation
- Maximize uptime
- Ease of Setup
- Flexible Control



*Example configuration: The drive's easily configured PID loop assures efficient operation and control for maximum throughput.*

### Control Techniques' Solutions

#### Wall Mount and Free Standing VFDs

- Multiple operating modes (V/Hz, Flux Vector, RFC\*, Closed Loop Vector)
- Compatible with standard NEMA B motors
- On-board PLC functionality
- Wide range of I/O option modules
- All Major Fieldbus connectivity options
- RS-485 Modbus RTU port standard
- Free commissioning software
- Several built-in cost- and space-saving features
- Industry-leading warranties

*\*Rotor Flux Control - advanced control mode for tighter torque control*



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# Decanter Centrifuge Solutions

## Control Techniques' Performance Advantages

### Control

- 60:1 constant torque speed range
- Output frequencies to 3000Hz
- Built-in PID Loop
- 8 Preset speeds
- 8 sets of adjustable accel / decel rates
- Static and rotational auto-tune
- Voltage/Current/Pulse speed reference options
- Energy savings mode (ideal for varying load conditions)

### Total System Protection

- Built-in diagnostics
- Intelligent thermal motor protection
- S-ramp soft start for reduced mechanical stress
- Safe torque off user interlock option

### Maximum Uptime

- Very high quality and reliability
- Supply loss ride through
- Automatic reset
- On-the-fly restart
- Last 10 trips logged
- Powerful diagnostic tools, including *CTScope*, a free software oscilloscope



## World Class Products & Support

- Worldwide Application & Field Service Network
- 24/7 support line 1-800-893-2321



Simple AC Drives



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