



DV SYSTEMS BUILT BETTER

Variable Speed Drive Technology

Increase Energy-Savings by Aligning Energy-Use with Air Demand.

DV Systems' Variable Speed Drive technology maximizes energy efficiency by constantly aligning energy use with air demand, adjusting motor speed to provide optimum performance and reliability.

Delivering maximum operating flexibility with efficient full and part load performance, VSD units are ideal for applications with varying air demand.

Eliminating In-Rush Current Spikes

The VSD starts the motor with a gradual speed increase, eliminating amperage surges and in-rush current spikes on start-up, preventing damage to the power system & further contributing to the overall energy-efficiency of operation.

Eliminating Artificial Demand

The VSD's Pressure Tracking controls ensure that energy-use is optimized by producing only as much air as is needed at set pressure, avoiding artificial demand.

The cost of over-pressurization is eliminated by tracking pressure multiple times each second. Each 2 PSI of increased pressure results in a 1% increase in power consumption.

Safety

The VSD integrates numerous power monitoring and fault protection technologies, such as: Integrated EMC filter, line reactor, phase loss and overload protection.

Advanced Control Solution

The VSD functions with the CSC300, which effectively manages, monitors & maintains optimal system pressure & reliable operation. The CSC300 features the option of sequencing up to 8 air compressors, optimizing system performance & efficiency.

FEATURES & BENEFITS

REDUCES ENERGY CONSUMPTION

ALIGNS ENERGY USE WITH AIR DEMAND, ADJUSTING MOTOR SPEED FOR OPTIMUM PERFORMANCE & RELIABILITY

REDUCES SYSTEM PRESSURE BY 20%

ALLOWS PRESSURE TO BE SET 20% LOWER VERSUS LOAD / NO-LOAD SYSTEMS BY MAINTAINING OPERATING PRESSURE WITHIN 1 PSI

IDEAL FOR VARYING AIR DEMAND

DELIVERS MAXIMUM OPERATING FLEXIBILITY WITH EFFICIENT FULL & PART LOAD PERFORMANCE

ADVANCED CONTROL SOLUTION

EQUIPPED WITH THE CSC300 MICROPROCESSOR CONTROLLER

Air Compressor LifeCycle Costs

The initial fixed cost of an air compressor is only a fraction of its total lifecycle / operating cost. The greatest proportion of costs incurred in the operation of a compressed air system are its energy costs. This presents a considerable opportunity to reduce cumulative energy costs with a VSD by reducing energy consumption through:

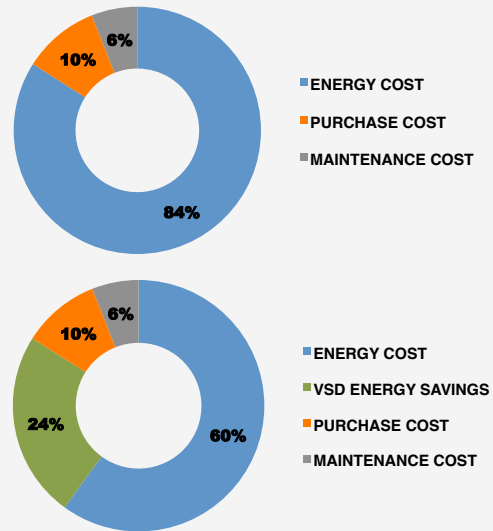
- **Reducing System Pressure** Each 2 psi reduction in system pressure results in a 1% reduction in energy consumption.
- **Eliminating In-Rush Current & Amperage Surges on Start-Up** A VSD's motor start speed is gradual, contributing to the overall energy-efficiency of operation.
- **Aligning Energy Use with Air Demand** VSD's draw power in direct proportion to the load with energy consumption approximating zero at no-load, compared to full-voltage drives consuming between 13% to 85% of their full-load consumption.

ROTARY SCREW AIR COMPRESSOR LIFECYCLE COSTS

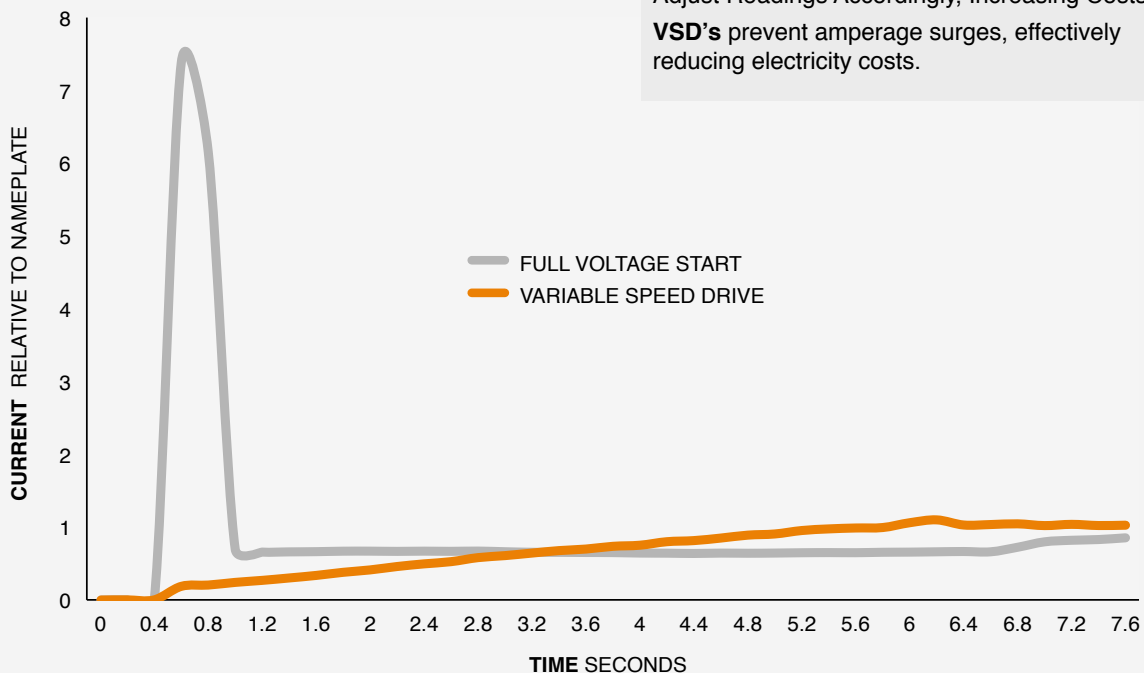
ENERGY 84% (VSD SAVINGS 24%)

PURCHASE COST 10%

MAINTENANCE COST 6%



VARIABLE SPEED DRIVE VS FULL-VOLTAGE START STARTING CURRENT



Electrical Smart Meters Record Peak Amps & Adjust Readings Accordingly, Increasing Costs.

VSD's prevent amperage surges, effectively reducing electricity costs.

ROTARY SCREW AIR COMPRESSORS
VARIABLE SPEED DRIVE MODELS



B SERIES
B10 HURON > 10 HP 37 SCFM
VARIABLE SPEED, DIRECT DRIVE
TANK-MOUNTED & AIRSYSTEM®



D SERIES
D20 DENE > 20 HP 82 SCFM
VARIABLE SPEED, BELT DRIVE
BASE-MOUNTED, TANK-MOUNTED & AIRSYSTEM®



G SERIES
G25/G30 > 25/30 HP 100/116 SCFM
VARIABLE SPEED, BELT DRIVE
BASE-MOUNTED, TANK-MOUNTED & AIRSYSTEM®



H SERIES
H50 ALGONQUIN > 50 HP 200 SCFM
VARIABLE SPEED, DIRECT DRIVE
BASE-MOUNTED



J SERIES
J75 MOHAWK > 75 HP 341 SCFM
VARIABLE SPEED, DIRECT DRIVE
BASE-MOUNTED



K SERIES
K100 IROQUOIS > 100 HP 463 SCFM
VARIABLE SPEED, DIRECT DRIVE
BASE-MOUNTED