



Reciprocating Compressor Monitoring

Early Detection. Real-time Operating Information.

Veros ForeSight™

See the future in plenty of time to change it

Veros ForeSight™ offers a new alternative to traditional online monitoring options. By continuously monitoring the voltage and current that is supplied to an induction motor, ForeSight uses advanced software algorithms to create a profile of normal equipment operating behavior. ForeSight then continuously inspects for subtle fluctuations in the electrical signals to provide advance warning of both mechanical and electrical failures of the motor and the compressor.

Installation does not require any sensors to be installed on the motor or compressor. Shutdown times are minimal. ForeSight installs easily with clamp-on sensors at the motor control center or variable frequency drive enclosure.

ForeSight provides the optimum solution to continuously monitor your compressors. Its software filters out common noise and vibrations to provide equipment health and operating performance measurements such as motor output torque, loading, rpm and efficiency. All of this is in a system that is accurate, affordable and easy to install.

Veros ForeSight provides a simple, cost-effective solution to continuously monitor compressors, alarming well in advance of potential failures.

Why Monitor Reciprocating Compressors?

- Expensive assets to purchase and maintain
- Prone to frequent failures that are difficult to anticipate
- Often critical to operations
- Frequently process costly or dangerous gases

Traditional Monitoring Options

- “Earthquake” type shut down sensor
- Intermittent (Monthly/Quarterly) vibration monitoring that can fail to detect issues in time
- Permanent sensor (accelerometer, etc.) systems that are expensive to install and maintain

Veros ForeSight™

Applies Smart Technology

- Utilizes extremely high frequency measurements of currents and voltages to continually monitor the health of an induction motor and its driven compressor.
- Proprietary software learns what is normal for the motor and compressor and evaluates slight variations in the equipment's operating performance.

Easy to Install & Cost Effective

- Installs easily with clamp-on sensors at the motor control center or variable frequency drive enclosure.
- Does not require sensors to be installed on the motor or compressor.

Provides meaningful results

- Gives real-time information of a motor's output efficiency, torque, loading, power factor, speed, and power quality.
- Continuously monitors over 300 metrics (OPC compliant).
- Provides mobile, email, and SMS notification when alarm is generated.



“If one of our compressors were to fail unexpectedly, our production output materially drops and we work in reactive mode. We needed a predictive maintenance system so that we could be proactive and to give us the time to plan our repairs.”

Gerald Herl, Plant Supervisor
Chaparral Energy



Sample of Faults Detected by ForeSight:

Motor

- Stator shorts
- Over/under loading
- Bearing degradation
- Rotor bar/end ring cracks
- Misalignment and imbalance
- Stator eccentricity

Reciprocating Compressor

- Bearing damage
- Valve wear
- Packing issues
- Piston ring failures
- Lubrication problems
- Piston rider band wear
- Piston rod failure
- Cylinder liner damage

Veros Systems, Inc.
5910 Courtyard Drive
Suite 150
Austin, TX 78731

512.686.2400

www.verosystems.com

Subject to change without prior notice
Order No.: VRS-AV1
All rights reserved
Printed in USA
© 2015 Veros Systems, Inc.

This brochure contains only general descriptions or performance features, which do not always apply in the manner described in concrete application situations or may change as the products undergo further development. Performance features are valid only if they are formally agreed upon when the contract is closed.