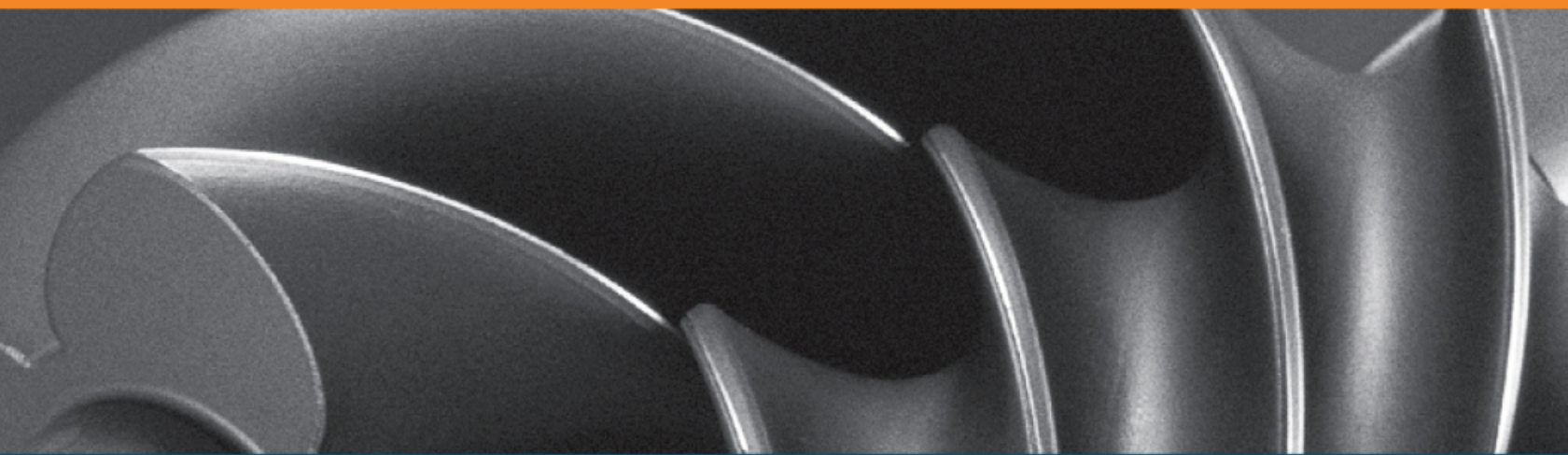




Oil-Free, Rotary Screw Air Compressors



KNW Series

Premium Efficient OIL-FREE Compressors

Single or Two-Stage ■ Air-Cooled ■ Water-Cooled
Fixed Speed or VFD ■ 20 - 500 HP ■ 72 - 2400 ACFM ■ 25 - 150 PSIG



Rogers Machinery Company
rogers-machinery.com/oil-free-air-compressor

Longest Lasting and Energy Efficient

ROGERS KNW Series are designed, manufactured, assembled and tested to be the longest lasting and most energy efficient oil-free compressors in the world



KOBELCO and Rogers Machinery Company, Inc. deliver an ecologically friendly and energy efficient compressor design.



"Class Zero Oil-Free Air"

All models meet ISO 8573-1 Class 0 for oil aerosol, liquid, vapor and silicone.

Proven History

Since the first compressor manufactured in 1955, ROGERS has stayed ahead of the competition with constant innovation and attention to quality, reliability and serviceability. Regardless of your industry, you can count on ROGERS KNW Series oil-free compressors to protect your products and process from contamination. The largest oil-free rotary screw compressor brand based in North America. Discover the difference!

Oil-Free = Risk Free



Heavy Duty, Two-Stage Air End Design

40-500 Horsepower / 172 - 2400 ACFM

Heavy duty oil-free compression module, the heart of the compressor's reliability and performance



Proven Technology

Over 65 years of field experience in all industries has proven that ROGERS KNW Series rotary screw design is the preferred choice for reliability, energy efficiency and serviceability.

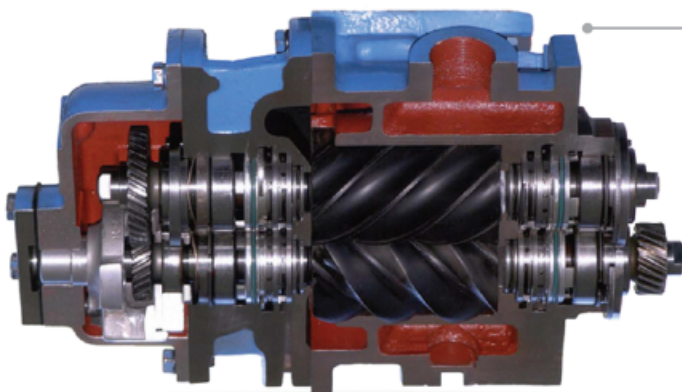
Two-Stage Design - Powered by Kobelco Oil-Free Screw Technology

Heavy duty, two-stage compression module with thrust balancing for long bearing life in each stage. Designed, tested and manufactured in the USA. No other oil-free compressor manufacturer has made that commitment to the North American market. Also available as single stage design for low pressure applications.



Coated Rotors

ASTM 1144 steel rotors with exclusive PTFE coating on rotors and shafts for maximum efficiency and corrosion protection. Gears and bearings are lubricated by a unique motor driven oil pump that provides positive lubrication prior to start-up, through operation and after shutdown. This is an especially important feature for VFD models and not available on competitive offerings.



Unique Design Features*

Key design features ensure long air end life. All features may not be available on competitive models.

Features Include:

- Non contact maintenance free air and oil seals
- Thrust balance compensation
- Cooling jackets
- Dual vents to atmosphere ensure oil-free air
- Vacuum degassed thrust and radial bearings
- Premium AGMA rated gears
- All models meet the requirements of NFPA 99 for use as a medical air compressor

Superior Monitoring Systems

The most advanced control and monitoring systems available

Control Panel and HMI Display

The HMI display indicates real time operating conditions, pressures and temperatures. The color LCD graphic display and state-of-the-art touchscreen provides information directly to the operator including service indicators, alerts and shutdown alarms. Push buttons are provided for specific key control functions. Also, it features an external USB port for easy data extraction or program updates.



Allen Bradley Programmable Logic Controller (PLC)

CompactLogix Series is used to control and monitor compressor operations and will maximize uptime. This includes controlled sequential starting and stopping, pressure control and protection from systems that could damage the compressor. Allen Bradley Ethernet – IP remote communication is standard. Other protocols including Modbus and BACNet are also available using our optional universal communication module.



Allen Bradley PowerFlex Series VFD

The PowerFlex Series provides precise capacity and pressure control. The VFD can be compressor mounted or shipped separately for remote mounting. VFD brand of customer preference can also be provided.



I/O – Link Sensor Network

Compressor pressure and temperatures are monitored using smart sensor technology and I/O link communication. Real time pressure and temperature values are displayed on the HMI. Pressure and temperature trends are also on the HMI. All values are also available for remote monitoring. I/O link is specifically designed for communication with smart sensors and allows detailed diagnostics of sensor health.



Intelligent Flow and Pressure Control

Maximum efficiency = Minimum energy costs

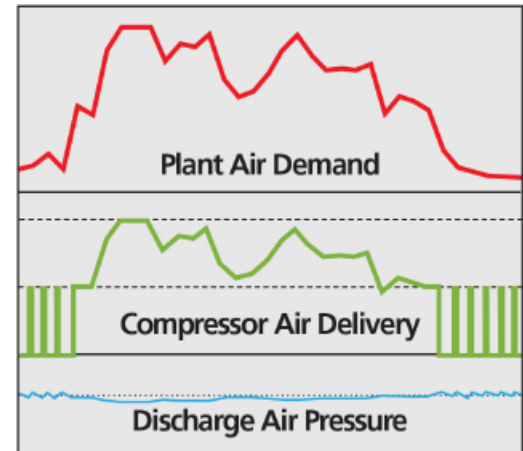


You have choices

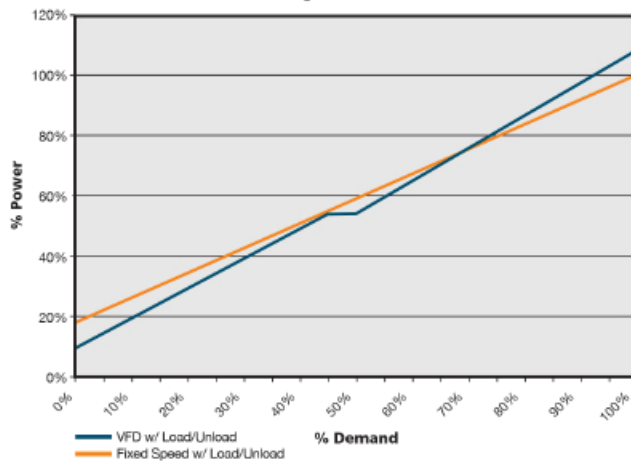
Choose the control type which best matches your system demand profile. Fixed speed or VFD both offer advantages and energy savings.

Automatic pressure setback feature saves considerable energy during reduced production periods by automatically lowering the discharge pressure.

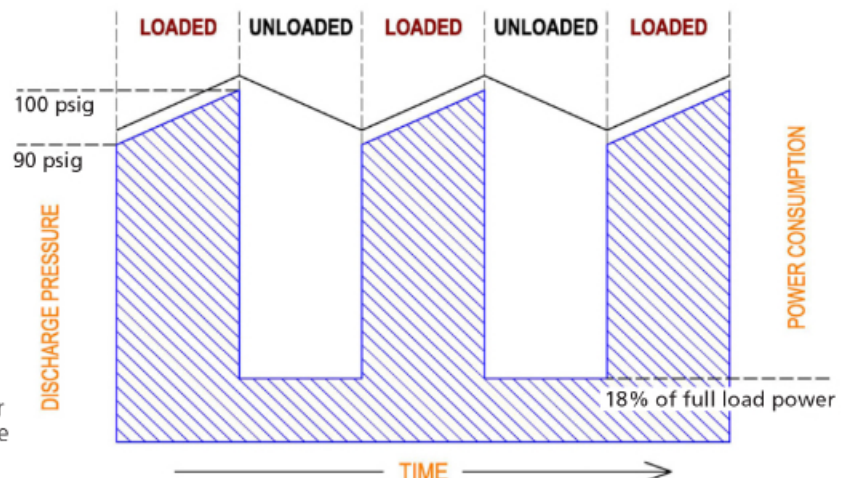
VFD Flow and Pressure Profile



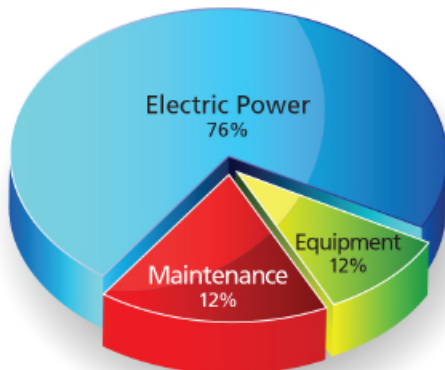
Cost of operation Fixed Speed vs. VFD



Fixed Speed Power and Pressure Profile



Typical Lifetime Air Compressor Cost*



* Assumptions in this example include a 100 HP compressor operated two shifts a day, five days a week at an electric rate of \$.05/kWh over 10 years of equipment life.

Good Things Come in Small Packages

Simplicity leads to a good design

20 to 50 HP / 72 - 165 ACFM

Proven and reliable rotary screw design with the same advanced control and monitoring systems as our larger models. Ideal for labs, universities, hospitals, pilot plants and R&D facilities.

- Air and water-cooled designs
- 72 to 165 ACFM
- Load/unload or VFD capacity control
- Designed for 24/7 operation
- The only two-stage oil-free rotary screw available in small horsepower



Healthcare Facility Package

The ROGERS KNW Series compressor meets the requirements of NFPA99 for use as a medical air compressor. Healthcare facility option package includes the following:

- Inlet air adapter
- Auto restart after power failure
- Lag compressor in use alarm
- Non-fused disconnect switch
- Automatic lead / lag control
- Preferred by hospitals worldwide for reliability and reduced maintenance costs

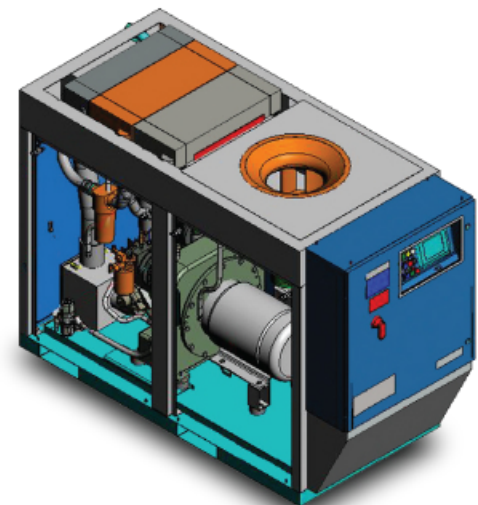


Heavy Duty Rotary Screw Design

The proven design in small horsepower models. Competitors offer non-rotary screw designs that may not match the reliability of the rotary screw. Rotors are stainless steel with MoS₂ coating. Air ends feature dual vents to atmosphere that ensure oil-free air delivery. No other oil-free compressor in this horsepower range offers this kind of value and service life.

Maintenance Friendly Package Layout

All major components including heat exchangers, motors, air ends and control panel offer ease of access for maintenance. All access doors are easily removed. Air and water cooled models have the same narrow footprint.



One Model Does Not Fit All

We design our compressors to meet your unique specifications



Customer Preferred Options

Custom paint materials or special color finishes. We can meet any requirements. Select your brand of PLC, HMI, VFD, motors and instruments for your unique package.



Skid Mounted Clean Dry Air Systems

All CDA components on a common skid is ideal for offshore platforms and classified areas. Modified API 619 packages also available. Skid mounted systems save considerable time, labor and materials cost at job site.



Application Driven Designs

Complete clean dry air system in portable enclosure. Containers can be lighted, insulated, cooled, heated and ventilated. Containers offer a convenient solution and rugged design.



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Rogers Machinery Company, Inc. Corporate Office - Portland, Oregon
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Specifications Subject To Change Without Notice

Compressed air discharged from this compressor should not be used for breathing air unless properly purified and monitored. KOBELCO, and Rogers Machinery Company, Inc. assume no responsibility or liability for the purchaser's breathing equipment.



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ROGERS KNW Series compressors are designed, manufactured, assembled and tested by Rogers Machinery Company, Inc. and KOBELCO. Compressor Manufacturing Indiana.

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