# CHP gas boosting packages

### Featuring the Vilter VSG single screw compressor.



#### Condition. Compress. Boost.

#### Key items

- Standard sizes & foot prints
- Compact
- Easy to maintain
- Low CAPEX
- Low OPEX
- Indoor or outdoor setting
- Down to minus -40 Deg or celcius outdoor setting without enclosure

- 85 dba at 1 meter or lower without enclosure
- Class 1 Div 2 or Div 1 options
- High efficiency
- Suction pressures up to 350 psi
- Discharge pressurses up to 900 psi
- Air cooled or water cooled options
- Enclosure options
- Low oil loss down to .01 ppm of mass flow
- 100 to 2000 HP units
- PM programs offered



#### Standard component

- Compressor unit with main motor
- Reheat heat exchanger
- After cooler
- High efficient suction scrubber
- High efficient discharge scrubber
- AB control panel Class 1 Div 2 without purging
- Monitoring devices of temperature, pressure and pressure drop
- Fisher suction and discharge auto stop (option)
- Fisher recycle valve (electric or pnuematic)
- Rosemont instruments (option)
- Winterization (option)

## Why choose a Vilter single screw compressor?

Vilter's VSSG/VSG single screw gas compressors deliver longer life, higher reliability and better energy efficiency than twin screw compressors and have fewer moving parts than reciprocating compressors. The key to the single screw compressor's reliability is in its balanced design. At the core of the positive displacement rotary compressor is a single main rotor intermeshed with two opposing gaterotors. The balanced design results in ultra-low bearing loads with significantly decreased vibration and sound levels. The key to the single screw compressor's high energy efficiency is Vilter's exclusive Parallex slide system allowing the compressor to run at optimum efficiency through its full range of capacity.

#### Applications

- Gas liquification
- Vapor recovery
- Flare gas recovery
- Coal bed methane recovery
- Field and fuel gas boosting
- Wellhead recovery
- Enhanced oil recovery
- Landfill gas recovery
- LNG boil off
- Gas gathering
- BIO gas
- Digester
- CO2
- Nitrogen
- Hydrogen
- Refrigerant

#### Features and benefits

- Displacements from 310 to 2,048 CFM
- Variable capacity control 10-100%
- · Variable volume ratios 1.2 7.0
- Compression ratios 2 20
- Electronic actuators are weatherproof and conform to Class 1, Group C&D, Division 2 Classification
- · Balanced main rotor with no axial or radial loads
- Parallex slide system for maximum operating efficiency
- · Low bearing loads no hydrodynamic bearings
- High suction pressure capability is standard
- Clockwise rotation models available
- Low noise levels
- Low maintenance costs



#### Isentropic efficiency comparison between variable and fixed volume







#### Parallex slide system

It's the key to part load efficiencies far superior to twin screw compressors. Capacity and volume slides move independently of each other based on load, eliminating over or under compression and saving motor horsepower.

#### Allen-Bradley programmable controller

The CompactLogix programmable controller with an A-B PanelView 1000 graphic display provides high performance in a small footprint for stand alone operation or for integrated system control.

#### Large capacity oil filter

Filters will remove all particles, 25 microns or larger, from the oil before the compressor. Filter assemblies are equipped with transducers to measure pressure drop and shut-off valves for isolation and servicing.

#### Oil cooling options

- Water cooled
- Air cooled

