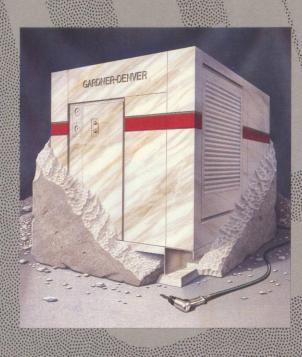


40 10 500 HP - 60 Hz 30 10 375 KW - 50 Hz



Vertical Industrial Gas Compressors

Features & Benefits

Compressors matched to your needs...

Corken offers many types of compressors to meet the stringent requirements of today's markets. Corken provides oil-free, non-lubricated and lubricated versions of its vertical compressor. Depending on the application, single- and two-stage, air-cooled or water-cooled compressors are available in single- and double-acting designs.

No contamination of process gas stream...

Corken gas compressors are equipped with a single- or double-distance piece which effectively controls oil carryover and product leakage by eliminating rod over travel and providing two or more sets of packing on each piston rod. Corken offers a double-distance-piece (T-style) option which consists of two distinct isolation chambers to provide maximum leakage control. These chambers can be pressurized, purged or vented to control gas leakage. This feature allows the compressor to supply oil-free gas whether it's being used as a simple gas booster or for vacuum service. The single-and two-stage compressors are both capable of developing up to 23 in. Hg (157 mm Hg) vacuum.

More than just a compressor...

Corken supplies custom engineered packages to meet the most demanding customer specifications. Skid mounted units can be supplied with control panels, safety controls, pulsation dampeners, receiver tanks, valving and other special accessories as required. Corken also offers standard mountings designed specifically for liquified gas transfer, vapor recovery and gas booster applications.

Serviceability...

Corken compressors are designed to minimize the required maintenance and make such maintenance extremely simple. Maintenance operations such as valve replacement may be accomplished without disturbing the piping, while ring replacement may be accomplished simply by removing the head. High efficiency valves: Corken valves offer quiet operation and high durability in oil-free gas applications. Valve plates are available in numerous metallic and non-metallic materials including stainless steel and PEEK material.

Self-Lubricating piston rings:

Corken provides a variety of state-ofthe-art piston ring designs to provide the most cost effective operation of compressors for non-lube service. Material options include ALLOY 50 (a proprietary composition) and different thermoplastic materials as required for the particular application.

Nitride-coated piston rods: Impregnated / nitride coating provides superior corrosion resistance.

Cast iron crosshead: Durable cast iron crossheads provide superior resistance to corrosion and galling.

Corken can handle process gases such as...

CFC-13 HFC-134A nitric oxide isobutylene carbonyl sulfide air CFC-113 HFC-152A nitrous oxide ethylene oxide krypton ammonia chlorine CFC-114 sulfur dioxide n-octaine chlorodifluoromethane helium methane argon sulfur hexafluoride CFC-115 methyl acetylene oxygen hexafluoroethane cyanogen benzene CFC500 tetrafluoroethylene methyl bromide ozone cyclohexane n-heptane biogas methyl chloride n-pentane CFC502 trichloroethane n-hexane butadiene cyclopropane CFC503 trimethylamine phosgene hydrocarbon gas methyl fluoride n-butane deuterium HCFC-22 vinyl bromide methyl mercaptan propane dimethylamine hydrogen 1-butene HCFC-141B vinyl fluoride hydrogen chloride monoethylamine propylene bromotrifluoromethane dimethyl ether vinyl chloride monomethylamine refrigerants: HCFC-142B 2,2-dimethylpropane hydrogen fluoride carbon dioxide HFC-14 xenon natural gas CFC-11 carbon monoxide ethane isobutane HFC-23 CFC-12 neon ethyl chloride isobutene carbon tetrachloride

Single- and Two-Stage

Single-stage oil-free compressors...

Corken single-stage compressors are typically used in applications where the gas compression ratio is less than 5:1. Applications such as liquified gas transfer are generally better suited for a single-stage compressor, (which can take advantage of the relatively low differential pressures and offer extremely efficient gas compression). Transport, rail car and marine unloading by vapor differential are examples of such an operation.



lasting bearing life.

Two-stage oil-free compressors...

Corken two-stage compressors are typically used in applications where the gas compression ratio is greater than 5:1. The two-stage compressors divide the compression process into two separate steps and allow the gas to be cooled after the first stage of compression, which results in a lower final discharge temperature. These compressors are commonly used in booster and vapor recovery applications. Due to the need for higher differential pressures which result in higher operating temperatures, Corken also offers the two-stage compressor in a water-cooled design. where both the cylinder and the head are cooled.

Sized for your capacity needs...

Corken offers six different sizes of vertical, oil-free, single-stage compressors (Models D91-D691) and three different two-stage compressors (Models D191-D591). These compressors cover the full range of capacities from 4 to 60 cfm (6.8-102 m³/hr).

For even greater capacity...

Corken model D891 is a double-acting single-stage gas compressor which is capable of supplying between 50 and 100 cfm (171 m³/ hr), while the D791 is a double-acting two-stage compressor. The D791 also offers the advantage of an adjustable clearance head which may be used to balance the pressure load between stages. Both of these units are offered in either lubricated or nonlubricated versions. Although these compressors are not classified as oil free, the potential for oil carry-over is minimized.

lubrication regardless of direction of rotation. Standard 10-micron filter ensures long-

Solutions beyond products...

CORKEN