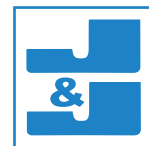


# ***J&J Air Systems***



## V-Major, V-Compact Reciprocating Compressors

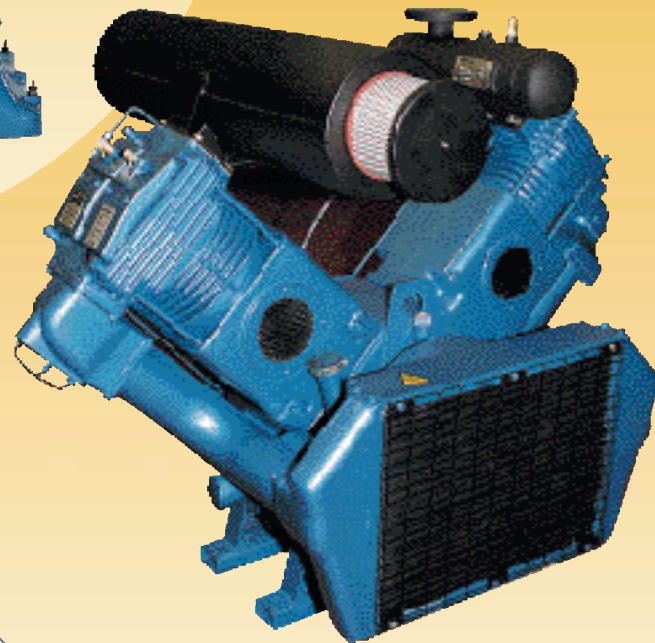
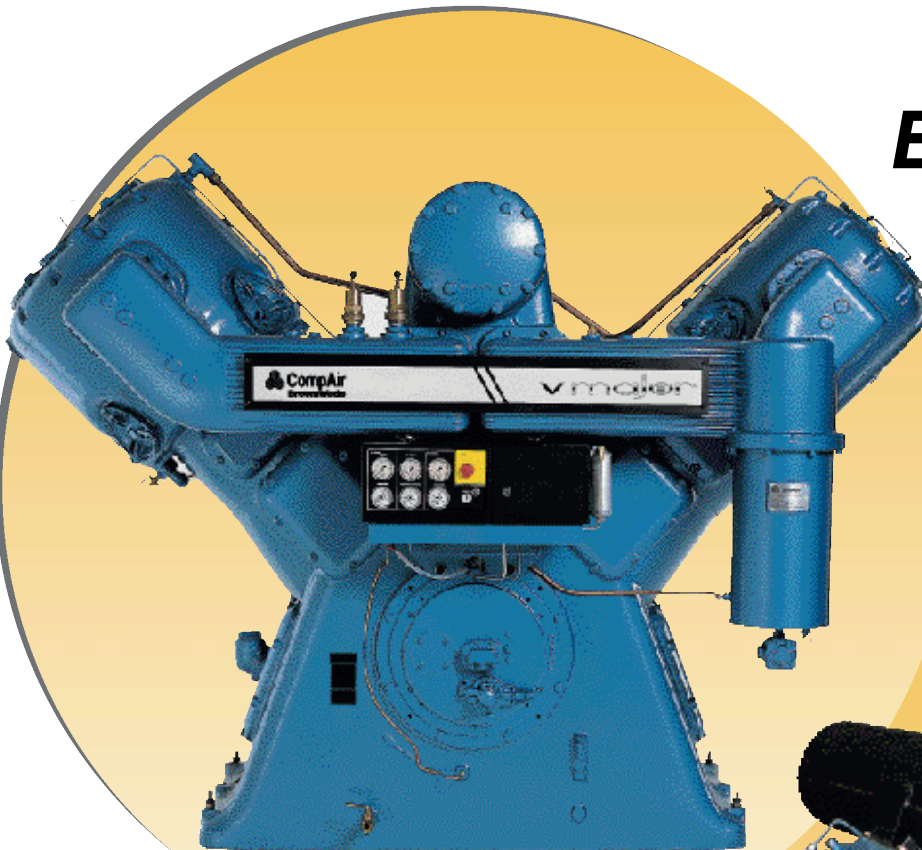


Intelligent Air Technology



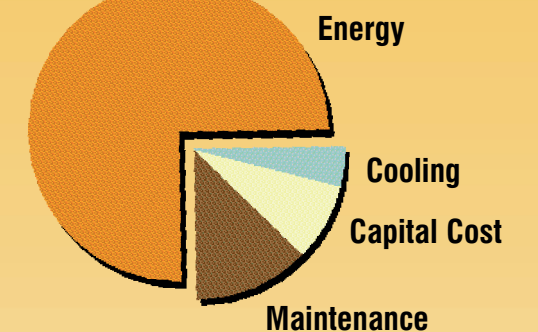
# v-major & v-compact

## Significant Energy Savings with Lower Running Costs

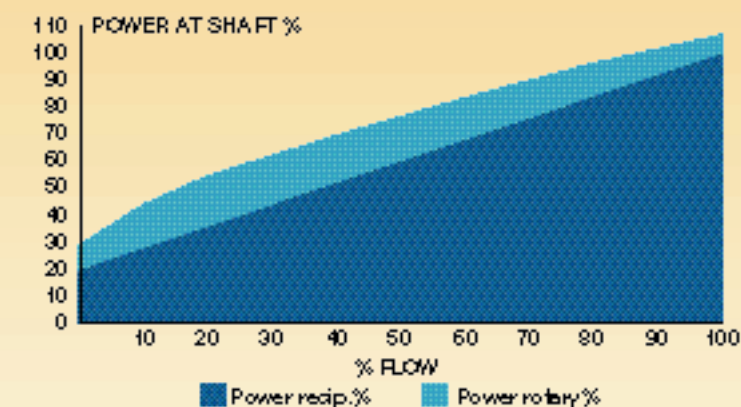


- **LOW POWER CONSUMPTION**  
75% of the running cost of an air compressor is energy cost. V-Major and V-Compact use less energy than rotary types, giving substantial cost savings every year.
- **LONG TERM RELIABILITY**  
Hardwearing reliability under all conditions has been designed into CompAir reciprocating compressors.
- **OIL FREE OPTION**  
For applications requiring reliable, clean, 100% oil free air.
- **LOW COST MAINTENANCE**  
Robust design with low running speeds, large bearing surfaces and frictionless valves ensure low maintenance.
- **SIMPLE SERVICING**  
Routine maintenance does not require special tools or specialist personnel, reducing downtime and costs.

### COMPRESSOR RUNNING COSTS



### SHAFT POWER COMPARISON – V-MAJOR



*Efficient. Reliable. Built to last.*



# V-major

**The V-Major compressor is a slow speed, double acting, water cooled design – lubricated or oil free, and available for pressures from 1.5 to 20.5 bar g, and power from 55 to 280 kW.**

## OIL FREE OPTION

Available with oil free cylinders for applications where oil cannot be tolerated in the gas or air being compressed. Extended piston rods have non-lubricated packings and self-lubricating PTFE piston rings run in corrosion resisting, replaceable, austenitic iron cylinder liners.

## EFFICIENT REGULATION

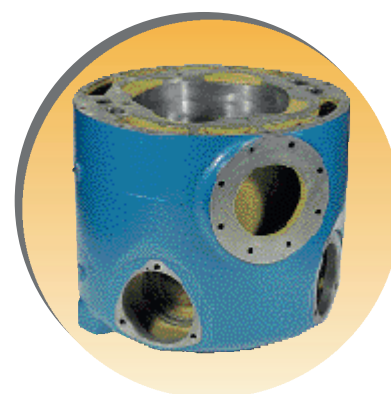
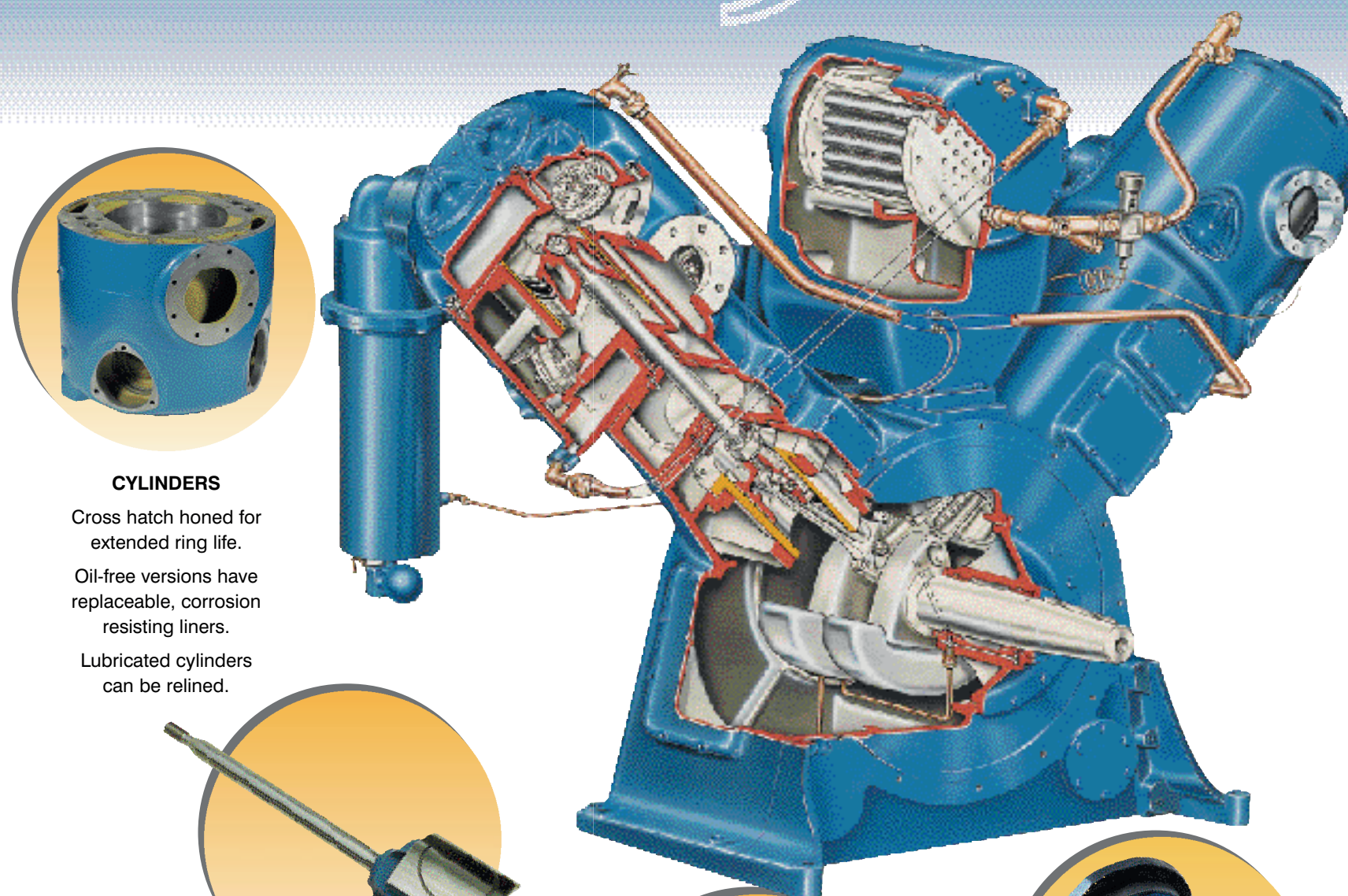
The V-Major has three step regulation for full, part, or no load operation to reduce part load power consumption.

## SUITABLE FOR HIGH AMBIENTS

These robust compressors work equally well in ambients of up to 55°C. The V-Major is equipped with water jackets and intercoolers to maintain correct running temperatures. Closed circuit cooling systems can be provided for locations where cooling water is not available.

## AVAILABLE OPTIONS

- Vee belt driven
- Direct coupled motor
- Suitable for gases other than air
- Custom built packages / specifications

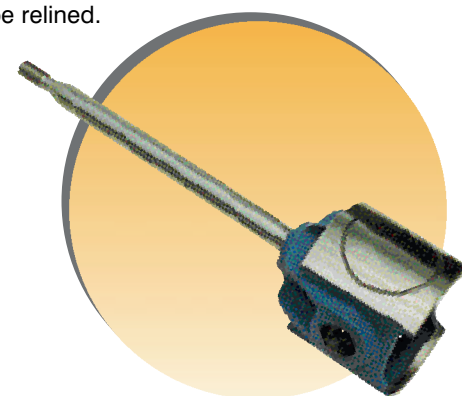


### CYLINDERS

Cross hatch honed for extended ring life.

Oil-free versions have replaceable, corrosion resisting liners.

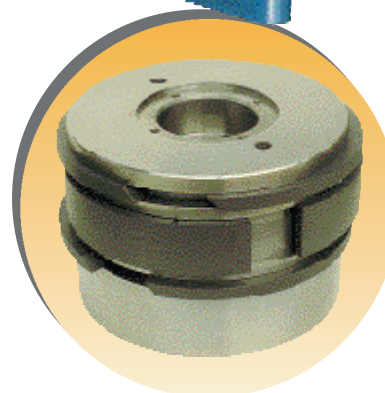
Lubricated cylinders can be relined.



### PISTON RODS

Hard chromed to extend the service life of rod packings

Extend the service life of rod packings.



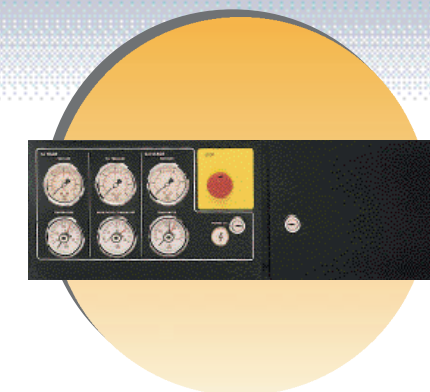
### PISTONS

Mass balanced pistons to ensure low vibration levels.



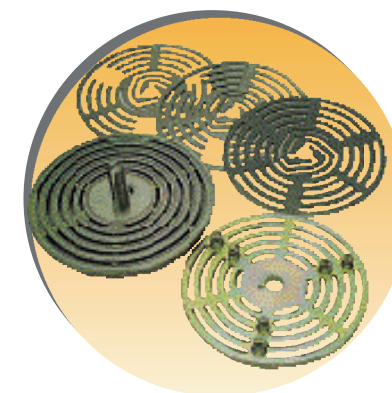
### CROSSHEAD GUIDES

Replaceable cast iron guides maintain perfect piston rod alignment.



### 3-STEP CONTROL PANEL

Provides comprehensive monitoring, control and protection of air pressure and temperature and lubricating oil pressure to ensure elimination of unnecessary downtime.



### VALVES

All models have high efficiency, multi-port, frictionless, plate valves.

Valve seats can be machined to increase service life.

*Versatile. Dependable.*



# V-compact



***The V-Compact is a free standing, single acting, lubricated or oil free unit set on anti-vibration mounts and is suitable for air or water cooling. Pressures range from 1.5 to 10.5 bar g, and power from 18 to 63 kW.***

## **OIL FREE OPTION**

Available with oil free cylinders, for applications where oil cannot be tolerated in the gas or air being compressed.

## **IN-BUILT RELIABILITY**

Submerged Gear Type Oil Pump gives positive, force fed lubrication to main bearing and crossheads.

Discharge Pulsation Damper extends valve life.

Intercooler ensures cool delivery air to the second stage.

An Automatic Drain Valve opens when the compressor unloads.

Comprehensive, clear instrumentation provides monitoring of machine condition to plan maintenance.

Air Intake Filter has low resistance to intake air flow and is combined with a silencer to reduce noise.

## **SIMPLE INSTALLATION**

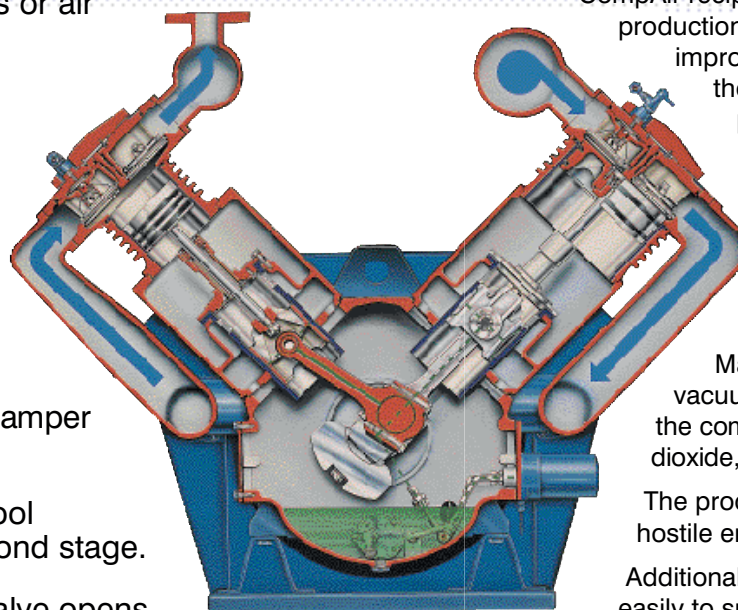
Compact direct coupled design incorporating integral, anti-vibration mounts, requires no special foundations.

## **EFFICIENT REGULATION**

Automatic Valve Unloading matches output to system requirements to reduce power consumption costs.

## **AVAILABLE OPTIONS**

- Air or Water Cooled Intercooler
- Direct coupled motor or Vee belt driven
- Custom built packages / specifications



## **V-Major and V-Compact – a range to suit all needs**

CompAir reciprocating compressors have been in production since the 1920's with a policy of constant improvements in design and materials. Many thousands are in service around the world, providing long term, reliable, energy efficient compressed air in every industry and environment.

With over twenty models available, the V-Major and V-Compact have the versatility to meet a wide range of applications.

Machines can be supplied for use as vacuum pumps, booster compressors, and for the compression of gases, including, carbon dioxide, nitrogen, methane and biogas.

The product can be suitably adapted to perform in hostile environments.

Additional instrumentation can be fitted quickly and easily to suit particular requirements.

Compressors can use a variety of power sources, including high or low voltage motors, steam turbines or diesel engines via a variety of drives. Speeds can be adjusted to match compressor outputs for any requirements.

## **LONG TERM RELIABILITY AND ENERGY EFFICIENCY**

Hard wearing reliability under all conditions has been designed into CompAir reciprocating compressors.

Accurate manufacturing tolerances and advanced running systems make the range exceptionally efficient. Energy consumption is minimised, using automatic valve unloading to match variable air demand.

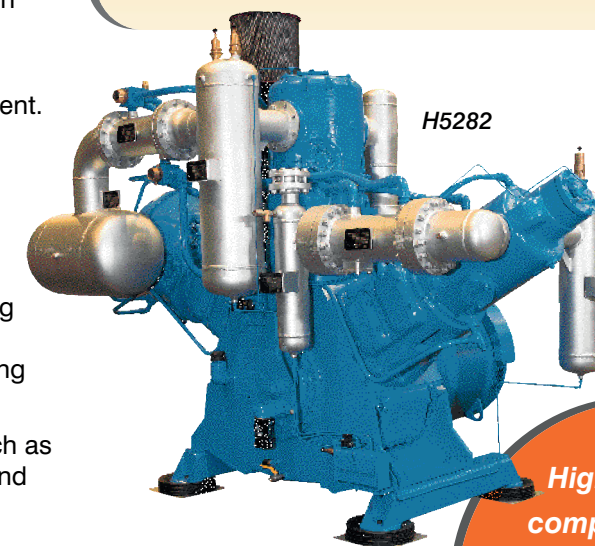
## **FLEXIBLE INSTALLATION AND ACCESSORIES**

The whole range is available with vibration absorbing mounts, and baseplate mounted units or comprehensive packages, including piping and wiring to minimise installation costs.

A complete range of complementary equipment such as intake filters, silencers, aftercoolers, check valves, and drive systems are available.

## **TYPICAL APPLICATIONS FOR V-MAJORS AND V-COMPACTS:**

- Power Stations
- Petrochemical Plants
- Bulk Powder and Fluid Handling
- Steel Works and Foundries
- Biogas Recovery at Landfill Sites
- Desalination Plants
- Cement Manufacturing
- CO<sub>2</sub> Recovery in Breweries
- Air Boosting
- Nitrogen and Natural Gas Compression
- Instrument Air
- Service/Utility Air
- Process Air:-
  - Nitrogen Generation
  - Fermentation
  - Air Lifting
  - Spray Painting
- PET and PEN Bottle Blowing (H5281-H5283)



**High pressure compressors are available for pressures up to 414 bar g, and power up to 450 kW**

# *Virtuoso Performance*



# Global experience – truly local service



Our Sales and Service trade counter in High Wycombe. With over 200 years of engineering excellence, the CompAir brand offers an extensive range of highly reliable, energy efficient compressors and accessories to suit all applications.

An extensive network of dedicated CompAir Sales companies and distributors across all continents provide global expertise with a truly local service, ensuring our advanced technology is backed up with the right support.

As part of the worldwide Gardner Denver operation, CompAir has consistently been at the forefront of compressed air systems development, culminating in some of the most energy efficient and low environment impact compressor on the market today, helping customers achieve or surpass their sustainability targets.

## CompAir compressed air product range

### Advanced Compressor Technology

#### Lubricated

- Rotary Screw
  - > Fixed and Regulated Speed
- Piston
- Portable

#### Oil-Free

- Water Injected Screw
  - > Fixed and Regulated Speed
- Two Stage Screw
  - > Fixed and Regulated Speed
- Piston
- High Speed Centrifugal - Quantima®
- Rotary Scroll

### Complete Air Treatment Range

- Filtration
- Refrigerant and Desiccant Dryer
- Condensate Management
- Heat of Compression Dryer
- Nitrogen Generator

### Modern Control Systems

- CompAir DELCOS Controllers
- SmartAir Master Sequencer

### Value Added Services

- Professional Air Audit
- Performance Reporting
- Leak Detection

### Leading Customer Support

- Custom Engineered Solutions
- Genuine CompAir Parts and Lubricants



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