



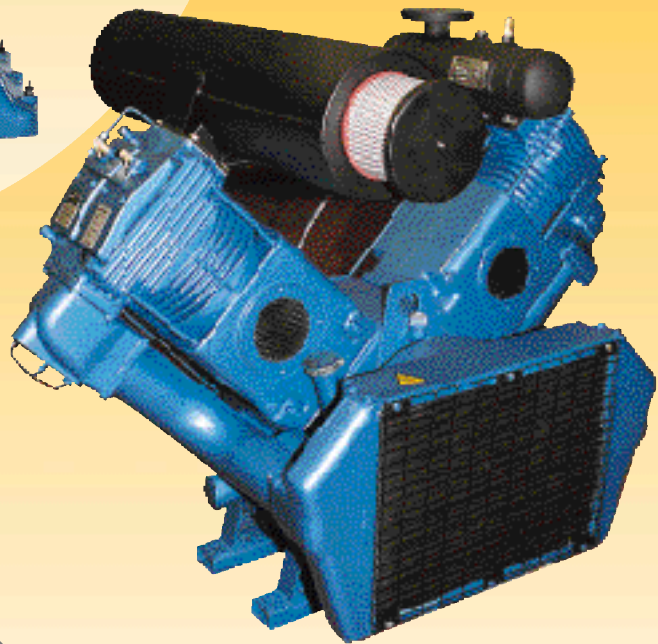
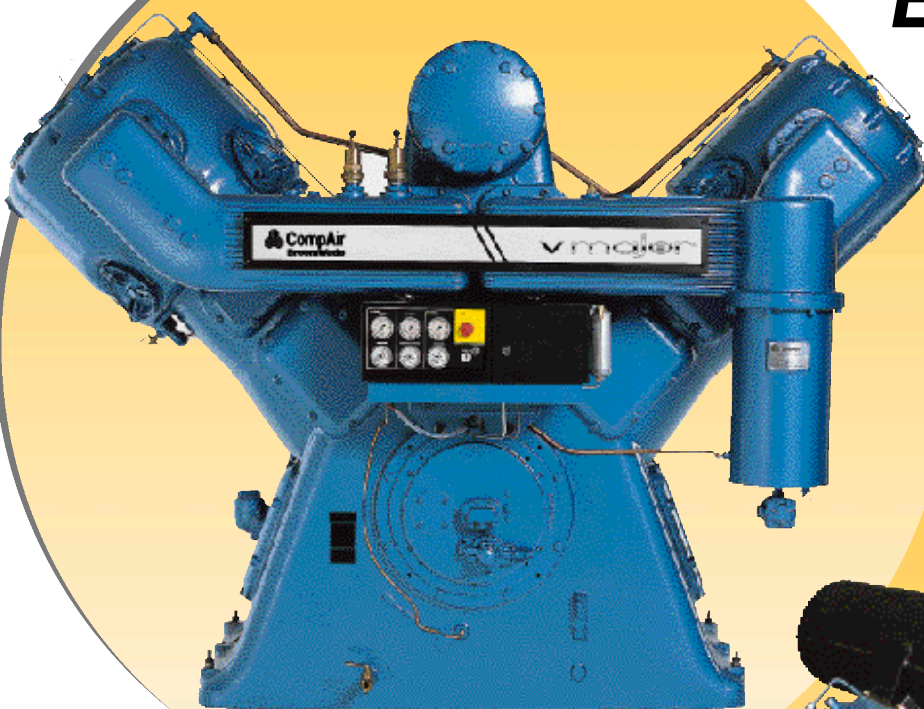
## V-Major, V-Compact Reciprocating Compressors



Intelligent Air Technology

# v-major &

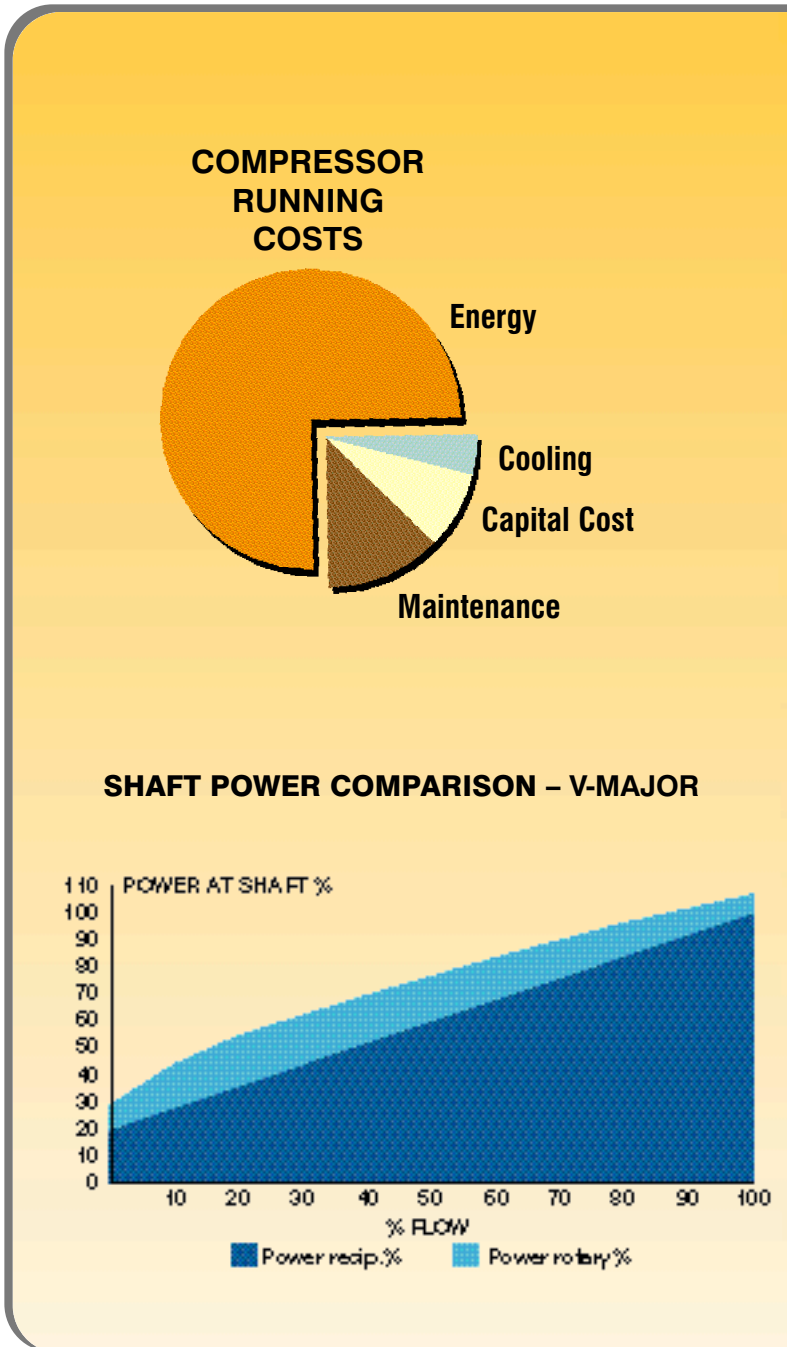
**Significant  
Energy Savings  
with Lower  
Running  
Costs**



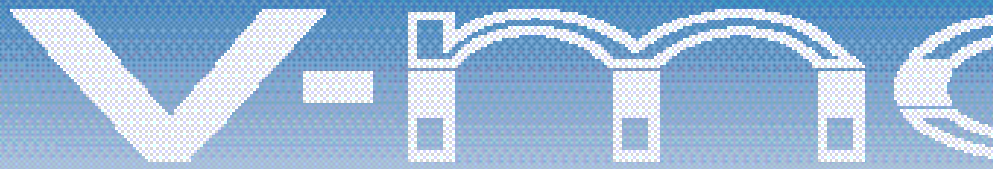
*Efficient.*

# V-compact

- 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.



*Reliable. Built to last.*



**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**

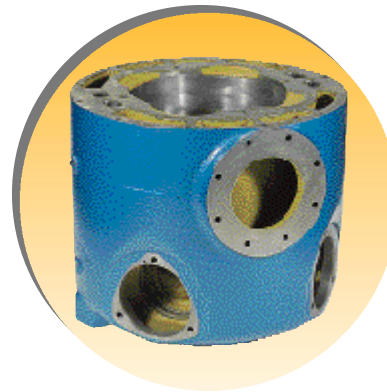
The V-Major has three step regulation for full, part, or no load operation to reduce part load power consumption.

#### **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

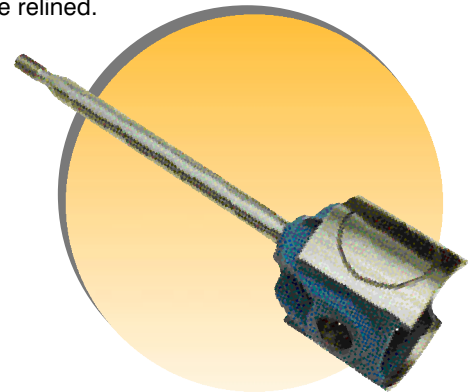
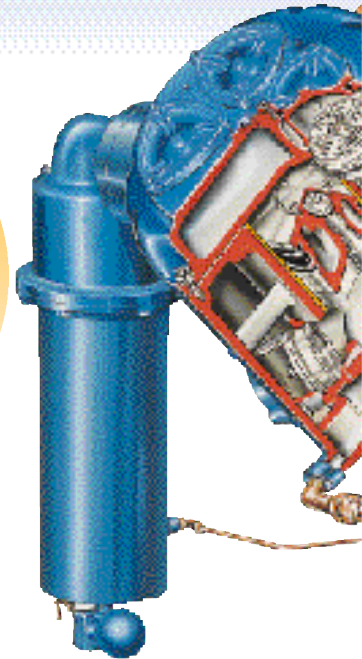


#### **CYLINDERS**

Cross hatch honed for extended ring life.

Oil-free versions have replaceable, corrosion resisting liners.

Lubricated cylinders can be relined.



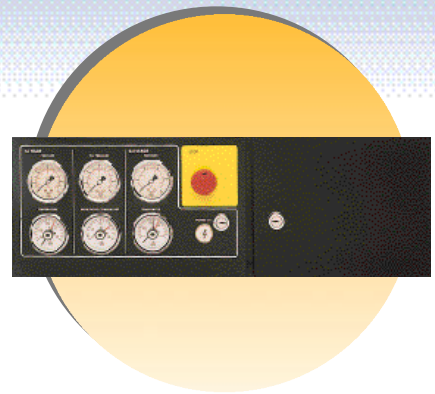
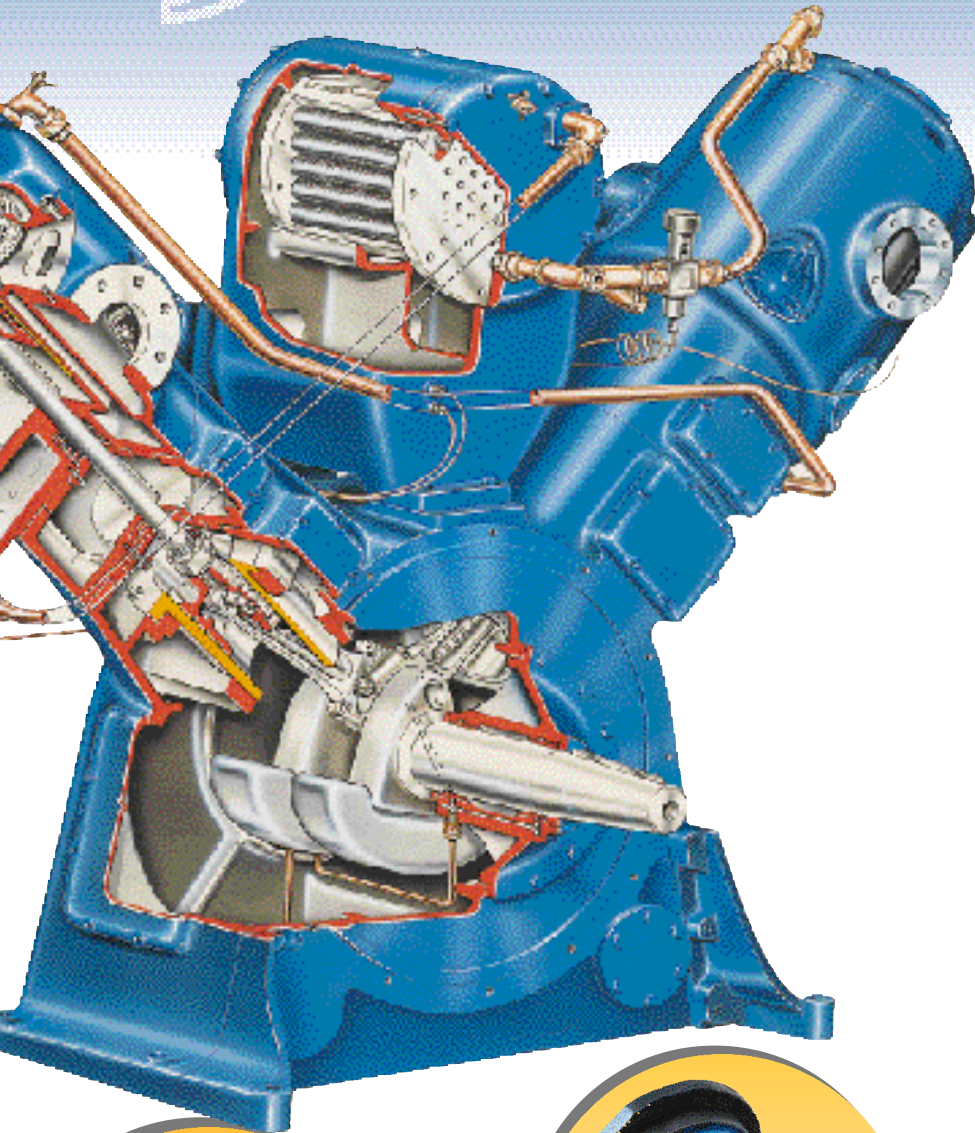
#### **PISTON RODS**

Hard chromed to extend the service life of rod packings

Extend the service life of rod packings.

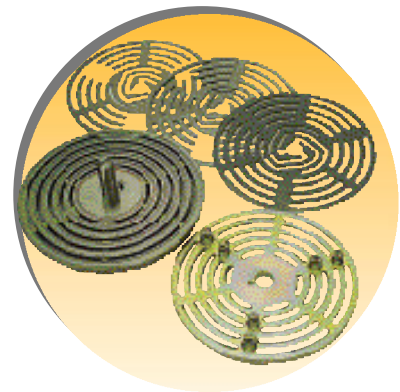
*Versatile.*

# Major



### 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

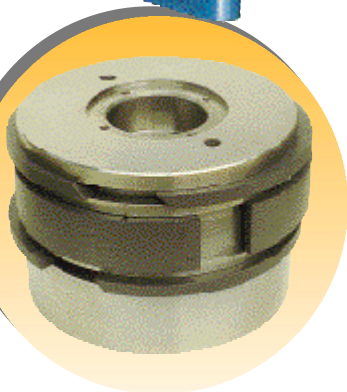
All models have high efficiency, multi-port, frictionless, plate valves.

Valve seats can be machined to increase service life.



### CROSSHEAD GUIDES

Replaceable cast iron guides maintain perfect piston rod alignment.



### PISTONS

Mass balanced pistons to ensure low vibration levels.

# *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**

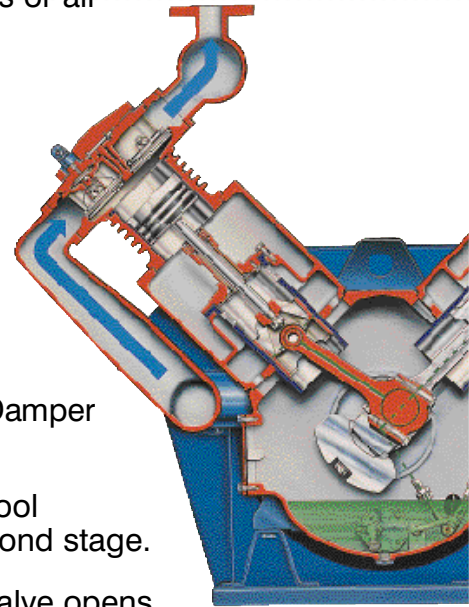
Compact direct coupled design incorporating integral, anti-vibration mounts, requires no special foundations.

## **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



*Virtuoso*

## 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.

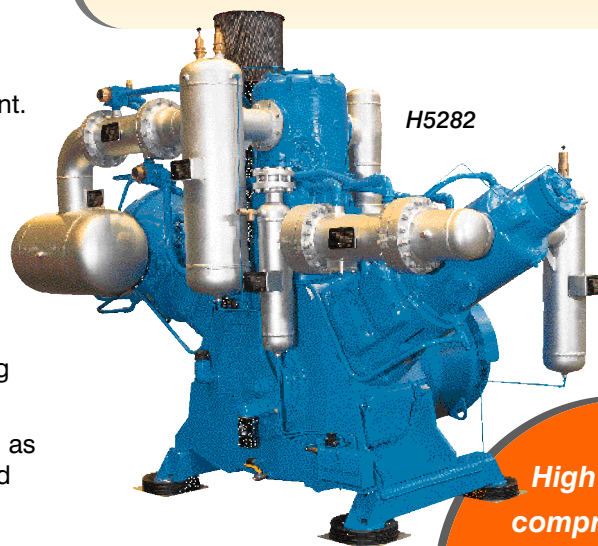
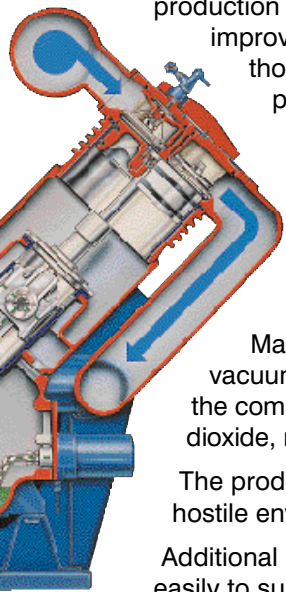
### FLEXIBLE INSTALLATION AND ACCESSORIES

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<sup>2</sup> 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

# Performance

# Intelligent Air Technology

Compressed air solutions for every application

## Compressors

0.1 - 43 m<sup>3</sup>/min  
0.75 - 450 kW  
up to 414 bar g

## Lubricated

Rotary Vane  
Single Stage Screw  
Speed Regulated Screw

Piston  
Portable

## Oil-Free

Two Stage Screw  
Water-Sealed Screw  
Piston  
Portable

## Complete Accessories Programme

Filters and Dryers  
Cooling Systems  
Heat Recovery  
Condensate Management  
Air Receivers  
Multi-Set Controllers  
Lubricants

## Value Added Services

Air Audit  
Performance Reporting  
Utility Air  
Performance Contracting

## Complete Service for Compressed Air Technology

Engineering of Complete Compressor Stations  
Local Service Centres  
Guaranteed Parts Availability



www.CompAir.com  
Email sales@compair.com



CompAir policy is one of continuous improvement and we therefore reserve the right to alter specifications and prices without prior notice. All products are sold subject to the Company's conditions of sale.

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