

CHAMPION

RECIPROCATING | ROTARY | AIR TREATMENT

Compressed Air Solutions



Decades of Proven Excellence

Champion has a long, rich history in the compressed air market. For nearly a century, Champion has supplied high quality, reliable compressed air products that keep industries such as automotive, industrial, woodworking and agriculture up and running.

CHAMPION

OE-41, two stage, automatic, ball bearing, 2 cylinder, vertical compressor, 60 gal. tank, 200 lbs. working pressure, 3 H.P.

In this type of compressor, vertical—2 cylinder, Champion main is the pioneer in offering a two stage automatic equipment especially adapted for the larger service stations, repair shops, garages, etc. where high pressure, large capacity air tools, etc. are used. In addition to the usual installation of a reducing valve in the line to the equipment, it includes—ball bearing compressor, wire, clear vision oil gauge, electric control, automatic wire winding, ball, motor, electric control, etc. no permit any high adjustment of pressure, and the valve will run when the motor is started with 2 or 3 phase motors have automatic acceleration.

Champion also builds Car Washes and Paint Spray Units.

If you will analyze and compare Champion compressors with other makes, you will readily see their greater value, better material, careful construction and interchangeable parts along lines of correct engineering.

No matter what your air requirements, you will find you have seen the Champion.

Champion Pneumatic Machinery Co., Inc.
8168 So. Chicago Ave., Chicago, Ill.

May 9, 1928

THE HOME OF THE CHAMPION PRODUCTS

PMC

FACTORY

HOT AIR AND NEWS FROM CHAMPION

THE NEW CHAMPION LINE

All New Unimated Aluminum Cylinders

THE GREATEST ADVANCE IN COMPRESSOR DESIGN IN OVER TWENTY YEARS!

Champion's creative engineering and product research have produced a new cylinder design that utilizes the highly desirable, inherent quality features of aluminum by combination with a special cast iron liner.

The Champion Line for 1966 is something to be excited about! The Commander series and the Champion "domed" cylinder two changes never before available . . . and promise to be the talk of the industry for years to come.

IT'S COOLER RUNNING!

The new Champion compressors are cooler running for improved operating efficiency and longer service life. The 375% by design over the older cast iron models, and aluminum provides to rapidly disperse the heat from the head to the body of the cylinder. The bladed flywheel helps to keep the cooling air stream provided by the fan-structure for years to come.

OTHER IMPORTANT FEATURES

The new Champion line uses an improved oiling system to lubricate all moving parts by means of forced feeding into connecting rod and by high velocity splash feeding with centrifugal force to other areas . . . the most efficient for an air compressor. New, counter-balanced crankshaft parts rhythm in the crankcase for years to come.

Vol. 7 No. 1 Champion Pneumatic Machinery Co., Inc., Princeton, Ill., Bob Conway—Editor March 1966

Experience

With over **95 YEARS OF EXPERIENCE**, Champion compressors are the product of decades of design and development.

Quality

Our goal is to provide you with compressors that fulfill and **EXCEED YOUR EXPECTATIONS** and requirements.

Knowledge

Champion knows and **UNDERSTANDS THE APPLICATION** of our products in many different operating environments.

Reputation

Since 1919, Champion has been **SETTING NEW STANDARDS** in reciprocating and rotary air compressor systems, parts and service.

Dependability

Known for their **RELIABILITY FROM DECADES** of use, Champion compressors are a proven product.

The Right Product for Your Application

With the compressed air market's widest breadth of compressed air products—reciprocating, rotary vane and rotary screw—choosing the right product for the application is key to continuing the success that was started in 1919.

Reciprocating

Lubricated and oil-less reciprocating compressors from Champion are known world-wide for trouble-free operation, long life and built-in efficiencies you can count on. An ideal solution in intermittent duty applications, the reciprocating product lines offered through Champion are a great solution to your compressed air needs.

Rotary Vane

Lubricated rotary vane compressors from Champion feature an integrated sliding vane aircend that is directly driven at a slow, 1800 RPM speed. Found in applications such as carwashes, autobody shops, trains, distilleries, breweries, and industrial manufacturing facilities, these robust compressors are an excellent low noise alternative to a reciprocating compressor or in areas that require an extremely small footprint.

Rotary Screw

Champion offers two highly competitive, expertly-designed lubricated rotary screw compressor lines. Using the latest design techniques, these compressors give you industry-leading reliability, performance and value. When used in 100% duty cycle applications, rotary screw compressors from Champion are a great, quiet alternative to a reciprocating compressor.



CENTURION II

- Reciprocating
- Intermittent Duty
- Cost Effective
- Low Maintenance Costs



R-SERIES

- Reciprocating
- Unenclosed/Quiet
- Enclosed
- Intermittent Duty
- Cost Effective
- Configuration Flexibility
- Low Maintenance Costs



LV-SERIES

Unenclosed/Enclosed

Continuous Duty

1800 RPM Direct Drive

Quiet

Small Footprint

Ideal for Harsh
Environments



L-SERIES

Rotary Screw

Quiet Enclosed

Continuous Duty

3600 RPM Belt and
Direct Drive

Fixed/Variable Speed

Integrated Airends
Ensure Superior
Serviceability



VISION

Rotary Screw

Quiet Enclosed

Continuous Duty

3600 RPM Belt Drive

Single & Three Phase

NEMA 4 Electrical
Enclosure

Advanced
Microprocessor
Controller Capabilities



Evaluating Your Operation

Duty Cycle

Duty cycle can be defined as, “How much will the compressor be on/off in a given time period?” For instance, if a compressor would be turned on/off multiple times in an hour, the application would be considered an intermittent duty cycle application. Whereas, if a compressor were to be running the entire hour, it would be considered a continuous duty cycle (or 100% duty cycle) application.

Depending on your application, there could be a mix of continuous and intermittent duty cycle. Take a carwash for example. Throughout the work week, the duty cycle may be quite intermittent because of slower, sporadic traffic, but on the weekend, when the carwash is very busy, the duty cycle could change to continuous. Fully evaluating the duty cycle is key to selecting the product technology and machine configuration that best meets your needs.

With the amount of products offered by Champion, it's important to narrow your selection to the product that best fits the application where it will be used. By selecting the right product, you can be confident that you'll experience trouble-free operation and a continuous supply of clean, dry air.

Demand Profile & Flow Requirements

Understanding your demand profile (duty cycle and fluctuations in plant demand) and flow requirements will enable you to select the compressor product that is the best fit to meet their compressed air needs.



INTERMITTENT

RECIPROCATING

TYPICAL APPLICATIONS

- Small Body Shops
- Tire Shops
- Carwash Facilities

RECIPROCATING

Simplex or Duplex

ROTARY VANE

Simplex or Duplex

ROTARY SCREW

TYPICAL APPLICATION

- Carwash
(Weekday vs Weekend)

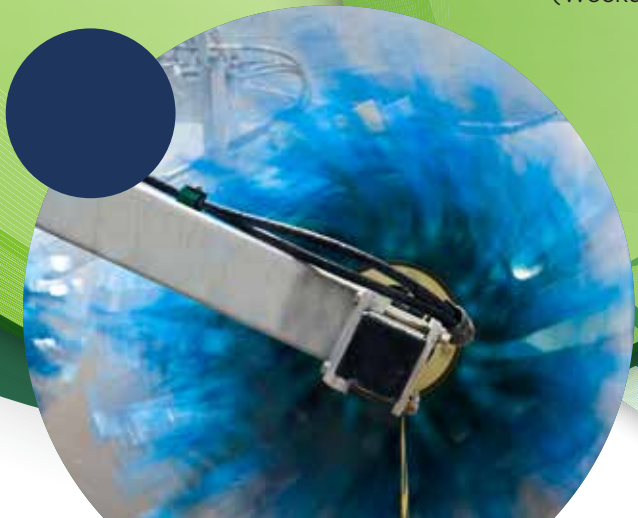
CONTINUOUS

ROTARY VANE

ROTARY SCREW

TYPICAL APPLICATIONS

- Industrial Manufacturing
(Light to Heavy)
- Large Body Shops





Accommodating Applications

The environment that the compressor will be installed should be a key area of review when evaluating the Champion compressor offerings. An application that is in a very dirty, rugged environment would lean itself towards our robust, rotary vane compressors or our rugged A, PL, or R-Series reciprocating machines.

If low dBA is required because the compressor will sit close to a work area or in a residential area, our rotary vane, rotary screw or quiet enclosed reciprocating compressors would be the products of choice.

Understanding the application's environment will also allow you to choose the right configuration and series of machine. Regardless of technology, Champion has a compressor to accommodate all application requirements.

Types of Environments

- Low dBA:
Evolution reciprocating compressor, LV-Series, hydrovane, L-Series & Vision
- Rugged, dirty environments:
A-Series, hydrovane, LV-Series, R-Series & PL-Series
- Exposure to outside elements (NEMA 4 requirement): Vision
- Environments where NFPA requirements must be met:
MTO II, V & W Series

Understanding the Environment



At Champion,
we have a product to fit
all types of **environments**



Considering the Overall Picture

Customer Objectives

In today's competitive market, it is crucial that we not only look at the environment and duty cycles when selecting a Champion compressor, but also look at our customer's profile.



RUGGED PERFORMANCE

A-Series
R-Series
PL-Series

ENERGY EFFICIENCY

LRS-Series
HVRS-Series
HRRS-Series

SPECIFIC APPLICATION NEEDS

Climate Control
V & W Series
MTO II

COST EFFICIENCY

Commandair
Value Plus
Centurion II

SOLUTIONS FOR EVERY APPLICATION

QUICK DELIVERY

Advantage

QUIET

Evolution
L-Series
HR, HRRS-Series
HV, HVRS-Series,
Vision

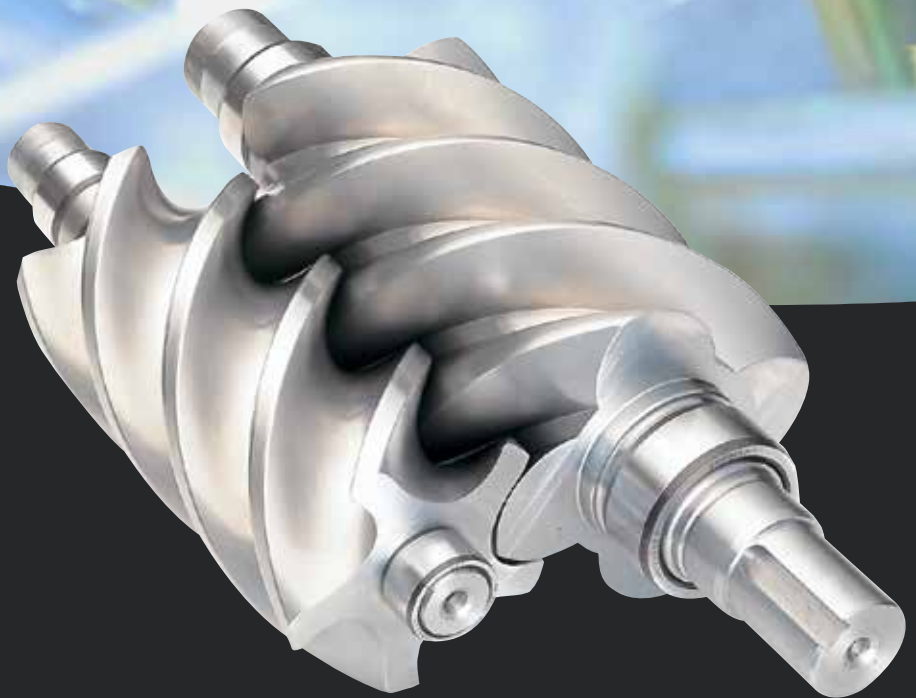
OPTIONS

R-Series
PL-Series

CONTINUOUS DUTY

L-Series, Vision,
LV-Series, LVR-Series,
V & W Series, MTO II










Comprehensive Product Portfolio

Whether a reciprocating, rotary vane or rotary screw compressor is the right choice for your application, you can feel confident that Champion has a product to meet your needs. With industry-leading extended warranty programs, quick delivery on all products, and over 1,100 authorized distributors, Champion can get and keep you up and running.













TECHNOLOGY OVERVIEW

Technology	Specifications		
Reciprocating Unenclosed		UP TO 30 HP 204 CFM 250 PSIG	
Reciprocating Quiet Enclosed		UP TO 15 HP 46.6 CFM 175 PSIG	
Rotary Vane Unenclosed Direct Drive 1800 RPM		UP TO 10 HP 72.8 CFM 150 PSIG	
Rotary Vane Quiet Enclosed Direct Drive 1800 RPM		UP TO 60 HP 264 CFM 150 PSIG	
Rotary Screw Quiet Enclosed Belt/Direct Drive 3600 RPM		UP TO 40 HP 193 CFM 190 PSIG	













Reciprocating













Model	Specifications		
<p>R-Series</p> 	<p>UP TO 30 HP 204 CFM 175 PSIG</p>		
<p>PL-Series</p> 	<p>UP TO 30 HP 204 CFM 250 PSIG</p>		
<p>Engine Driven</p> 	<p>UP TO 22.5 HP 59 CFM 250 PSIG</p>		
<p>Evolution</p> 	<p>UP TO 15 HP 46.6 CFM 175 PSIG</p>		
<p>A-Series</p> 	<p>UP TO 40 HP 350 PSIG</p>		









Reciprocating

Model	Specifications		
 <p>Air-On-Line</p>	<p>UP TO</p> <p>8 HP</p> <p>15.7 CFM</p> <p>175 PSIG</p>		
 <p>Value Plus</p>	<p>UP TO</p> <p>15 HP</p> <p>44.4 CFM</p> <p>175 PSIG</p>		
 <p>Commandair</p>	<p>UP TO</p> <p>3 HP</p> <p>10.2 CFM</p> <p>90 PSIG</p>		
 <p>Centurion II</p>	<p>UP TO</p> <p>15 HP</p> <p>50.2 CFM</p> <p>175 PSIG</p>		
 <p>Climate Control</p>	<p>UP TO</p> <p>25 HP</p> <p>205 CFM</p> <p>80 PSIG</p>		

Rotary—Fixed Speed

Model	Specifications		
 <p data-bbox="175 436 240 464">Vision</p>	<p data-bbox="605 373 670 401">UP TO</p> <p data-bbox="605 415 654 443">15 HP</p> <p data-bbox="605 457 654 485">59 CFM</p> <p data-bbox="605 499 654 527">175 PSIG</p>		
 <p data-bbox="164 663 251 690">L-Series</p>	<p data-bbox="605 600 670 627">UP TO</p> <p data-bbox="605 642 654 669">40 HP</p> <p data-bbox="605 684 654 711">193 CFM</p> <p data-bbox="605 726 654 753">190 PSIG</p>		
 <p data-bbox="159 890 256 917">LV-Series</p>	<p data-bbox="605 827 670 854">UP TO</p> <p data-bbox="605 869 621 896">5 HP</p> <p data-bbox="605 911 654 938">39 CFM</p> <p data-bbox="605 953 654 980">150 PSIG</p>		
 <p data-bbox="151 1117 264 1144">LVR-Series</p>	<p data-bbox="605 1054 670 1081">UP TO</p> <p data-bbox="605 1096 638 1123">10 HP</p> <p data-bbox="605 1138 654 1165">72.8 CFM</p> <p data-bbox="605 1180 654 1207">150 PSIG</p>		
 <p data-bbox="155 1344 259 1371">HR-Series</p>	<p data-bbox="605 1281 670 1308">UP TO</p> <p data-bbox="605 1323 654 1350">10 HP</p> <p data-bbox="605 1365 654 1392">39 CFM</p> <p data-bbox="605 1407 654 1434">150 PSIG</p>		
 <p data-bbox="155 1570 259 1598">HV-Series</p>	<p data-bbox="605 1507 670 1535">UP TO</p> <p data-bbox="605 1549 654 1577">60 HP</p> <p data-bbox="605 1591 654 1619">227 CFM</p> <p data-bbox="605 1633 654 1661">150 PSIG</p>		



Rotary—Variable Speed

Model	Specifications		
 <p>LRS-Series</p>	<p>UP TO</p> <p>40 HP</p> <p>192 CFM</p> <p>190 PSIG</p>		
 <p>HRRS-Series</p>	<p>UP TO</p> <p>10 HP</p> <p>47 CFM</p> <p>150 PSIG</p>		
 <p>HVRs-Series</p>	<p>UP TO</p> <p>60 HP</p> <p>264 CFM</p> <p>150 PSIG</p>		





Oil-Less

Model	Specifications		
MTO II 	UP TO 5 34.8 100	HP CFM PSIG	
V & W Series 	UP TO 15 207 175	HP CFM PSIG	

Compressed Air Solutions to Fit Any Industry



Air Treatment & Aftermarket

Product	Model
Air Dryers	<p>CRE - Cycling Refrigerated Dryer CRN - Non-Cycling Refrigerated CHT - High Inlet Temperature CDT - Heatless Desiccant CDS - Single Tower CDHM - Dual Tower</p> 
Compressor Filters	<p>CFF - Air Filters CFE - Mist Eliminators CFG - Spin-On Air Filter FRL - Filter-Regulator Lubricator</p> 
Condensate Management	<p>CSP - EnviroChamp2 Oil & Water Separator CWSA - Liquid Separator CDV1 & 2 - Electronic & Pneumatic Drains</p> 
Controllers	<p>Guardian CHX - Flow Controller</p> 
Tubing	<p>QUICK-LOCK & BIG-LOCK TUBING Solid Metal Tubing and Fittings Easy Installation Lightweight Design</p> 
Lubricants & Maintenance Kits	<p>RECIPROCATING - ChampLub, ChampLub Synthetic, ChampLub Food Grade ROTARY - RotorLub, RotorLub Synthetic, RotorLub Food Grade MAINTENANCE KITS for Routine Maintenance</p> 

Features & Specifications

UP TO

180 INLET TEMP (°F)

5400 SCFM

250 PSI



- Packaged Filtration (optional)
- Automatic Zero-Loss Drain

UP TO

150 INLET TEMP (°F)

21250 SCFM

300 PSI



- Removal of solid contaminants down to 5 micron
- Separate bulk liquids
- Prevent oil and water aerosol from damaging components



Sales & Service **Distributors** Across America

An Extensive Network

By leveraging the extensive network of Champion factory-trained authorized local distributors, your sales, service and technical support needs can be handled quickly and easily. Keeping your compressors maintained and adequately serviced has never been simpler.



Over **1,100** Champion distributors ready to provide all your compressed air needs

To find a distributor visit:
www.championpneumatic.com



The Champion philosophy ensures long-lasting, reliable equipment. Our warranties and programs demonstrate our belief in the quality found in Champion products.



We're Where You Need Us

Champion is committed to
delivering **superior products** built with
the **exceptional standards** you expect.



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Please recycle after use.