

***CHAMPION***

3-10 HP | OIL-LESS | ROTARY SCROLL COMPRESSOR

# CA-Series

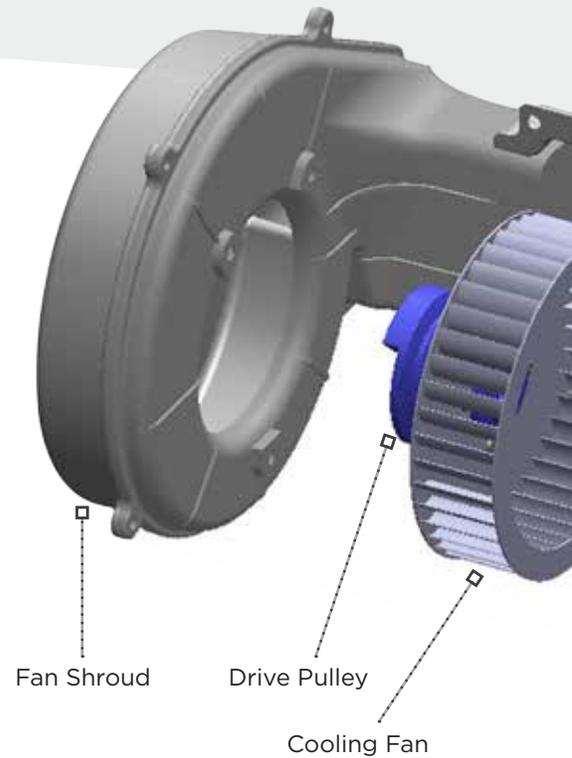


# Legendary Experience

## Innovative Design

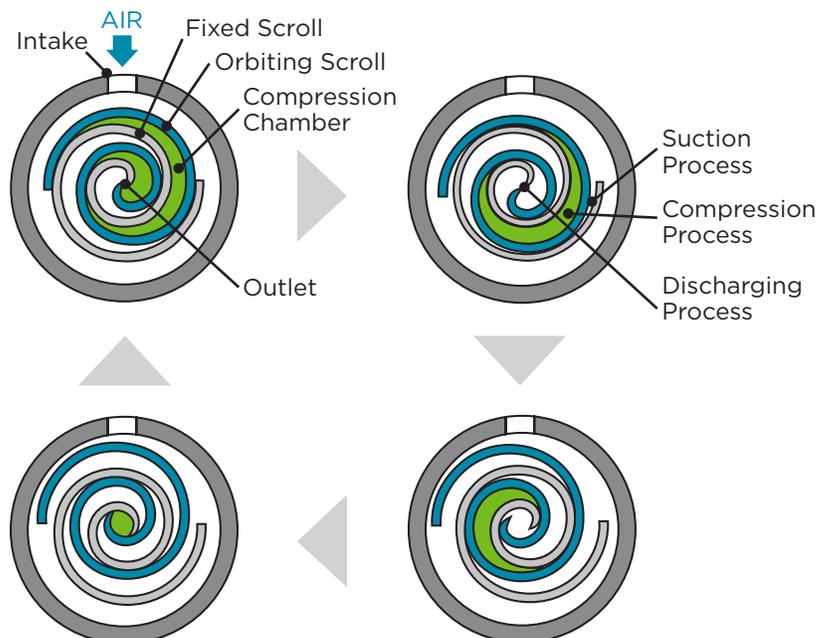
Champion has over 95 years of experience in design and manufacturing of the highest quality compressors. The CA-Series rotary scroll system is the perfect example of our progressive innovation.

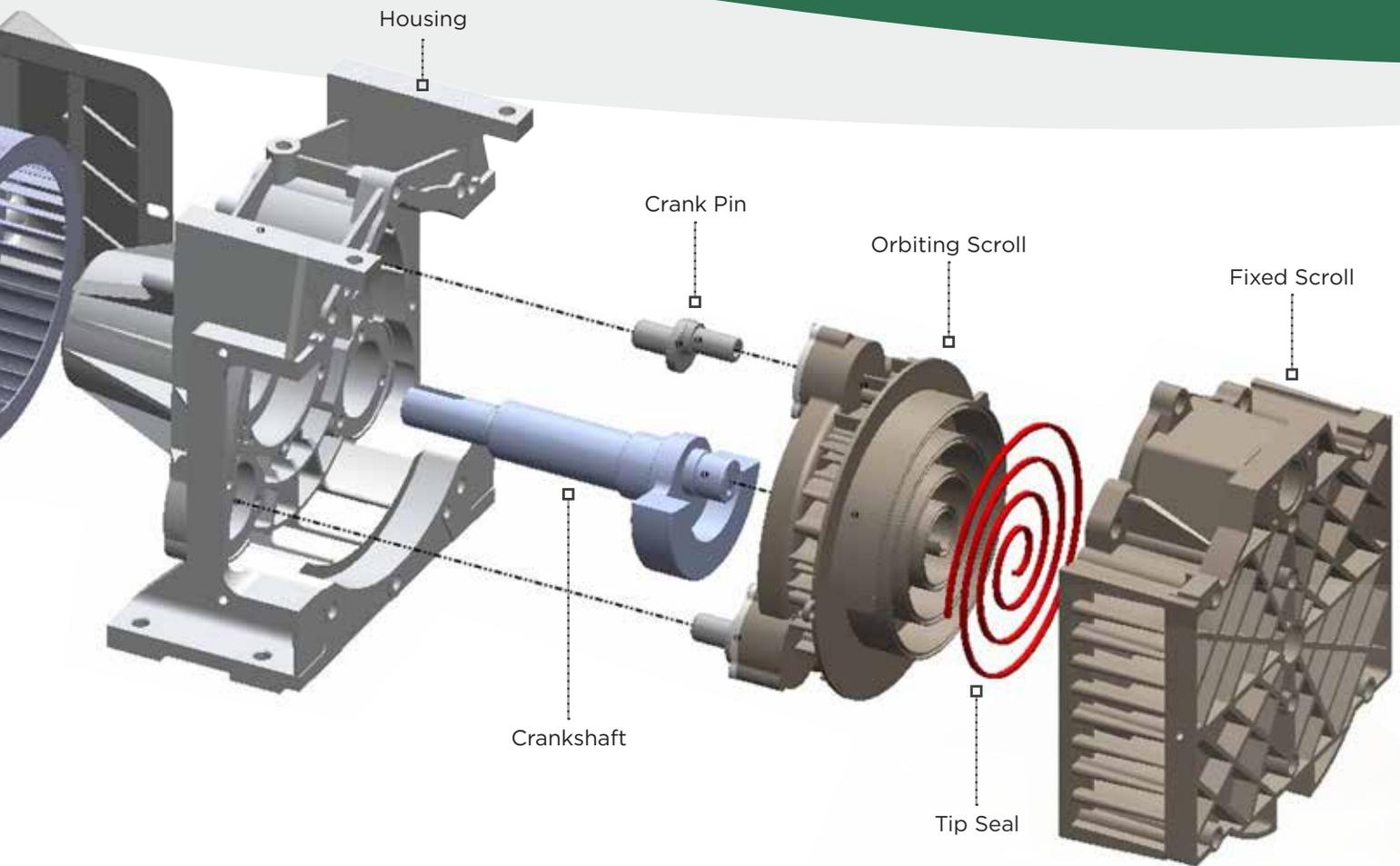
Oil-less compressors have become a standard in industries such as medical, lab/research, biotechnology, pharmaceutical, food and beverage, and semi-conductor. Oil contamination is extremely detrimental to these processes. Pure air quality demands are rapidly growing with new regulations and laws regarding oil contamination throughout multiple industries and applications. Champion has designed the CA-Series scroll compressor specifically for these applications that require **100% OIL-FREE AIR**, including NFPA & CSA code compliant multiplex systems



### Scroll Compression Explained

- An orbiting (rotating) scroll and fixed scroll housing are mated to create the compression chambers
- The continual movement of the orbiting scroll moves atmospheric air from the intake toward the center, compressing the air into progressively smaller areas
- The compressed air is directed to the center discharge port of the compressor
- Discharge pressure is accomplished during multiple stages of compression, resulting in a continuous intake suction and discharge





## Scroll Compressor Features & Benefits

- 100% Oil-Less Design
- Oil-Free/Contaminant Free Air
- Continuous Operation, 100% Duty Cycle
- Integral Cooling Fan
- Special Tip Seal Design
- 116 or 140 PSI Options
- Low Sound Levels
- Low Vibration
- Compact Footprint
- 3, 5, 7.5 and 10 HP Options
- Flow from 9.2-126.4 CFM @ 116 PSI
- Less Moving Parts, Low Maintenance and High Reliability



# Industrial & Laboratory Applications

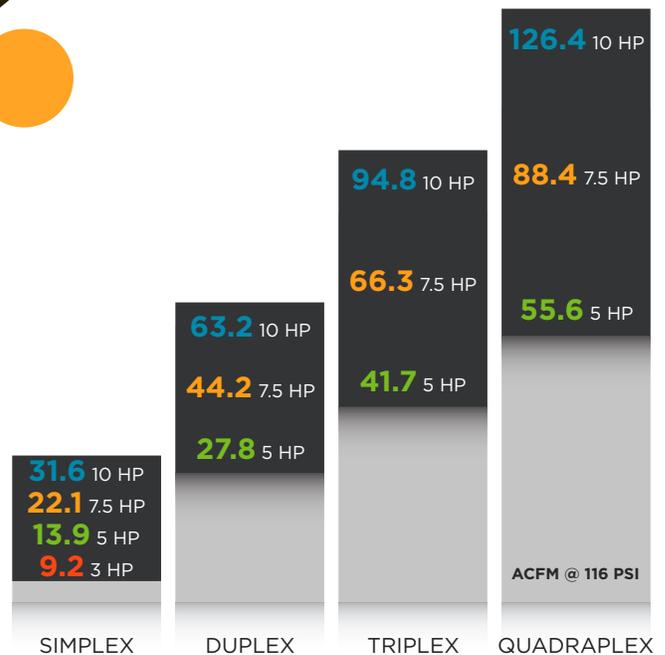
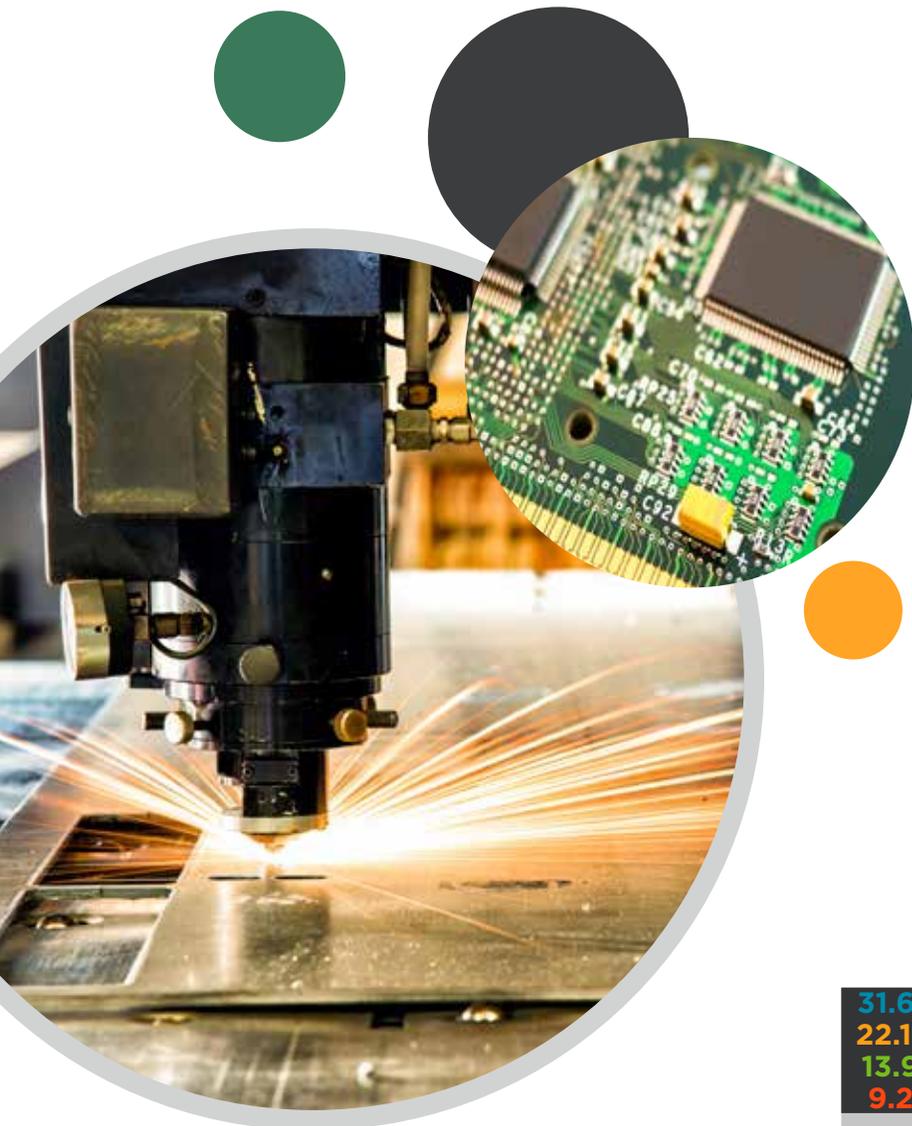
Champion designed the CA-Series Scroll compressor system to meet industrial and laboratory requirements for contaminant free, oil-free, clean air applications. Compressors range from 3-10 HP in simplex through quadraplex designs with optional remote receiver, or available as tank mounted with optional integrated dryer. The CA-Series modular system creates a clean, simple and serviceable layout, maximizing our ability to meet specific application requirements.

## Industrial

- Breathing Air (Paint & Cleaning Booths)
- Pharmaceutical
- Food Processing
- Semi-Conductor Industry
- Laser Cutting
- Printing
- Air Bearings
- Instrument Air (Controlled Atmosphere)

## Laboratory

- Biotech
- Photo Laboratories
- Lens Grinding
- Dental (Denture Manufacturing)
- Quality Control/Testing





### Base Mount



Simplex

### Stacked Multiplex



Duplex



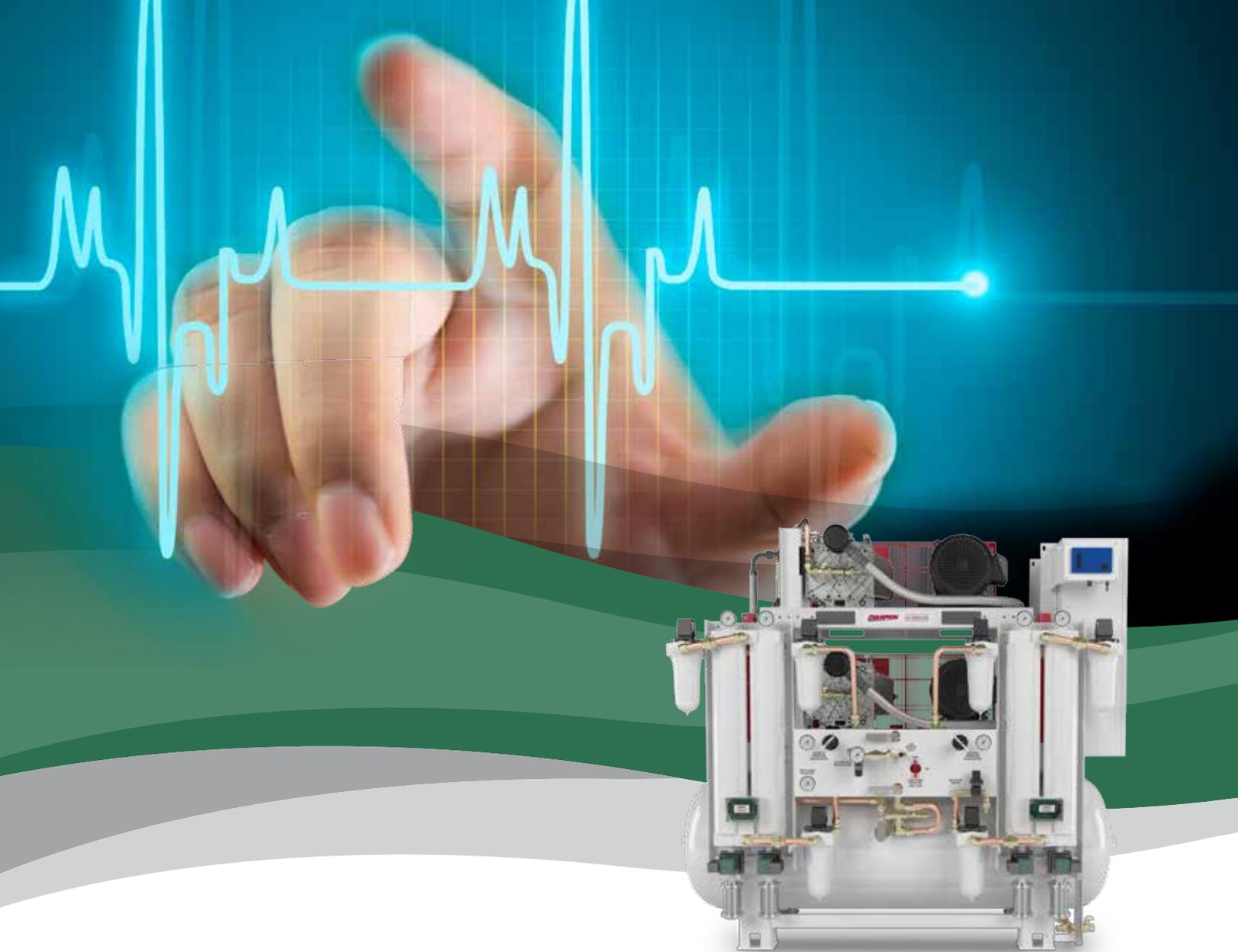
Triplex



Quadraplex

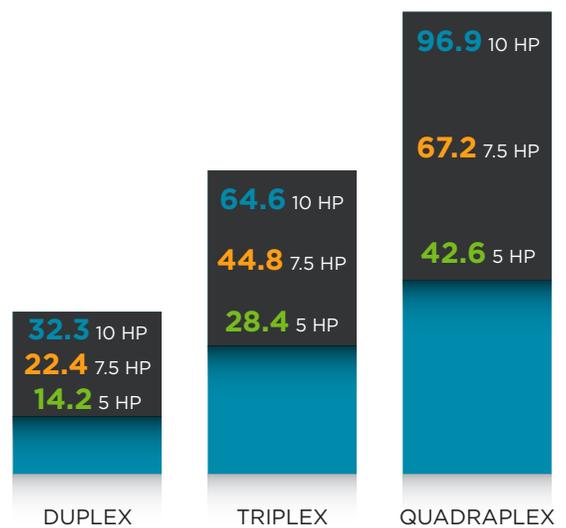


Tank Mounted  
Simplex & Duplex  
Available



## Medical Applications

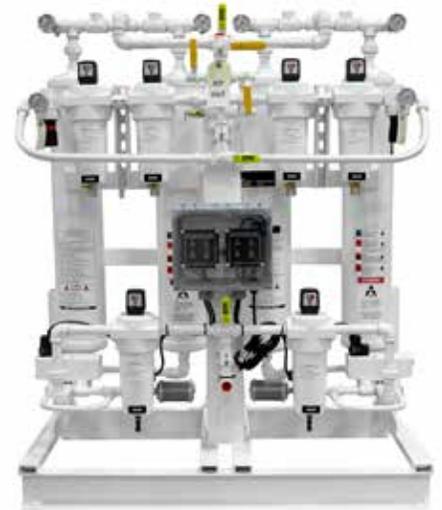
The CA-Series medical compressed air systems provide Category 1, NFPA 99 compliant medical breathing air to healthcare facilities and medical institutions. The oil-less scroll design is a proven technology utilized for the most critical of applications. When dependability and longevity are determining factors for your medical application, the CA-Series scroll system is the perfect choice.



**ICFM @ 116 PSI**  
 Capacities shown are NFPA compliant  
 (Reserved Compressor on Standby)

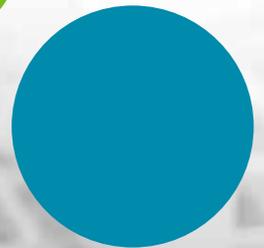
Champion medical desiccant dryer systems are NFPA 99 and CSA code compliant for medical air applications. The redundant dryer system removes contaminants and moisture delivering dry, clean medical air.

- Duplex Filter and Regulator Bank with By-Pass
- Purge Control with Mufflers
- Tower Gauges
- Pressure Regulators with Gauges
- Isolation Valves
- Differential Gauges on Filters
- Carbon Monoxide and Dew Point Monitoring



## Medical

- Medical Equipment  
(Sterilizers, Orbital Arms, Radiation - TomoTherapy)
- Laboratory  
(Medical Research, College & High School)
- Medical Air
- Dental Facilities (Procedure)
- HVAC Climate Control  
(Healthcare Facilities & College Buildings)





**Diagnostics** **CHAMPION**

	PUMP 1	PUMP 2	PUMP 3	PUMP 4
STATUS	RUNNING	RUNNING	RUNNING	RUNNING
RUN HRS	0.4	0.3	0.3	0.3
DIS TEMP	430.0 °F	449.0 °F	430.0 °F	412.0 °F

SYSTEM DISC PRES: 90.7 psi  
SYSTEM RUN HRS: 0.4

**OK**

Tue Feb 09 2016 11:37:07

**CHAMPION**

**90.7 psi**  
**430.0 °F**

**RUNNING**

PUMP 1 RUN HRS: 1

**SYS PRESSURE**  
**111.9 psi**

## System Controls

The optional Deluxe HMI control and the MediTrol-Plus HMI control from Champion have easy to use navigation and friendly graphics that deliver interactive and intuitive information at your fingertips. With a built-in integral webserver, BACnet IP protocol via Ethernet connection, these controllers provide visibility to the CA-Series Scroll compressor system from any computer or mobile device with an internet connection.

### Deluxe HMI

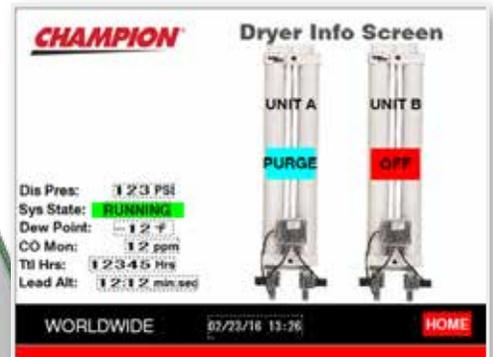
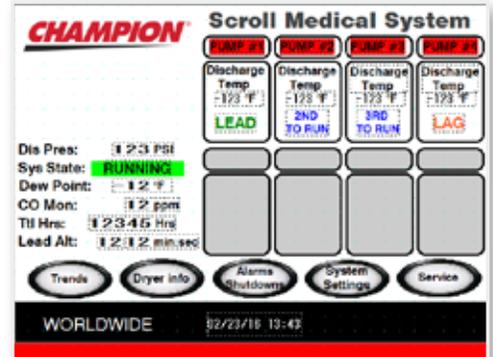
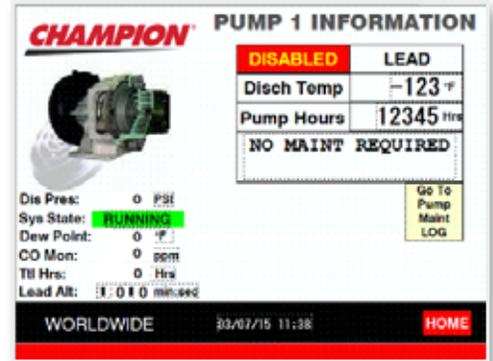
- 3.5" Full Color Touch Screen
- PLC Controlled
- Lead/Lag Control with Forced Alternation
- System Capacity and Operation Trending
- 26 Language Options



## MediTrol-Plus HMI

- NFPA-99 Category 1 Medical, UL-508a, cULus
- 5.7" Full Color Touch Screen
- PLC Controlled
- Redundant Transformers for Dryer Control
- Analog Inputs for Pressure, RTD's, Dewpoint and Carbon Monoxide
- Lead/Lag Control with Forced Alternation
- System Capacity and Operation Trending
- Maintenance and Service Monitoring

**EASY** to use Navigation  
& Friendly Graphics



**BUILT-IN WEBSERVER**

Connectivity to Building Automation System

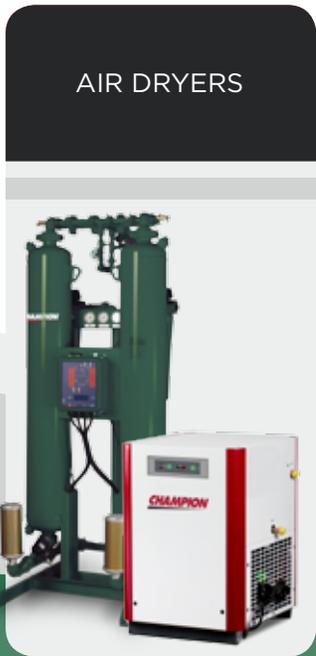
Remote Monitoring

# Champion—the **Total Package**

Since 1919, Champion has been selling more than just great products. We've been selling solutions to the compressed air industry through a complete offering of different compressor technologies, air dryers, lubricants, piping, downstream accessories, and genuine Champion parts. Our focus on providing total system solutions ensures your focus remains on running your business.

## Refrigerated Air Dryers, Desiccant Air Dryers, and Medical Desiccant Air Dryer Systems

Compressed air systems require clean dry air with environmentally sound disposal of by-products. That is why Champion support does not stop at the compressor. Proper removal of contaminants is essential in preventing costly damage to equipment. Champion provides a broad range of dryers, filters, separators, drains, and other downstream products to ensure total system reliability.



# Sales & Service **Distributors** Across America

## **An Extensive Network**

Your sales, service and technical support needs will be handled quickly and easily by our extensive network of Champion factory-trained, authorized local distributors. Maintaining and adequately servicing your compressor has never been easier.

To find a distributor visit:

[www.championpneumatic.com](http://www.championpneumatic.com)



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

**CHAMPION**<sup>®</sup>

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