



CPE/F Rotary Screw
75 - 200 hp
Product Presentation

High-performance tools and compressors.
Designed for you !

 Chicago
Pneumatic



High Per

ou!

CPE & CPF

The **CPE & CPF** are the result of more than 30 years of continuous product development.

Our design and manufacturing policy is to produce a **quality product** combining **reliability**, **low maintenance** and **energy efficiency** at a **market-leading price**.

Our goal is to produce a compressor that **sets the standard for the compressed air industry**.

MENU



Features



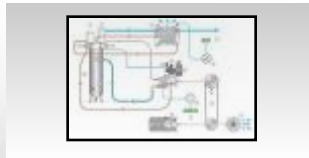
Performance



Controls and Monitoring



Maintenance and Installation



Summary

FEATURES



Standard Features

- Low Sound Enclosure
- 100 -175 psig
- Wye-Delta, Reduced Voltage Start
- AIRLOGIC Microprocessor Controller
- Continuous Operating Capability
- TEFC Motor
- Space Saving Design
- Load/No Load With Intelligent Shutdown
- 5 Year CP SECURE Warranty
- NEMA 1 Electrical Protection
- Vibration Isolated Assembly

IDEAL DESIGN



IDEAL DESIGN

High Efficiency
Air / Oil Coolers

Side Discharge
for Easy Service

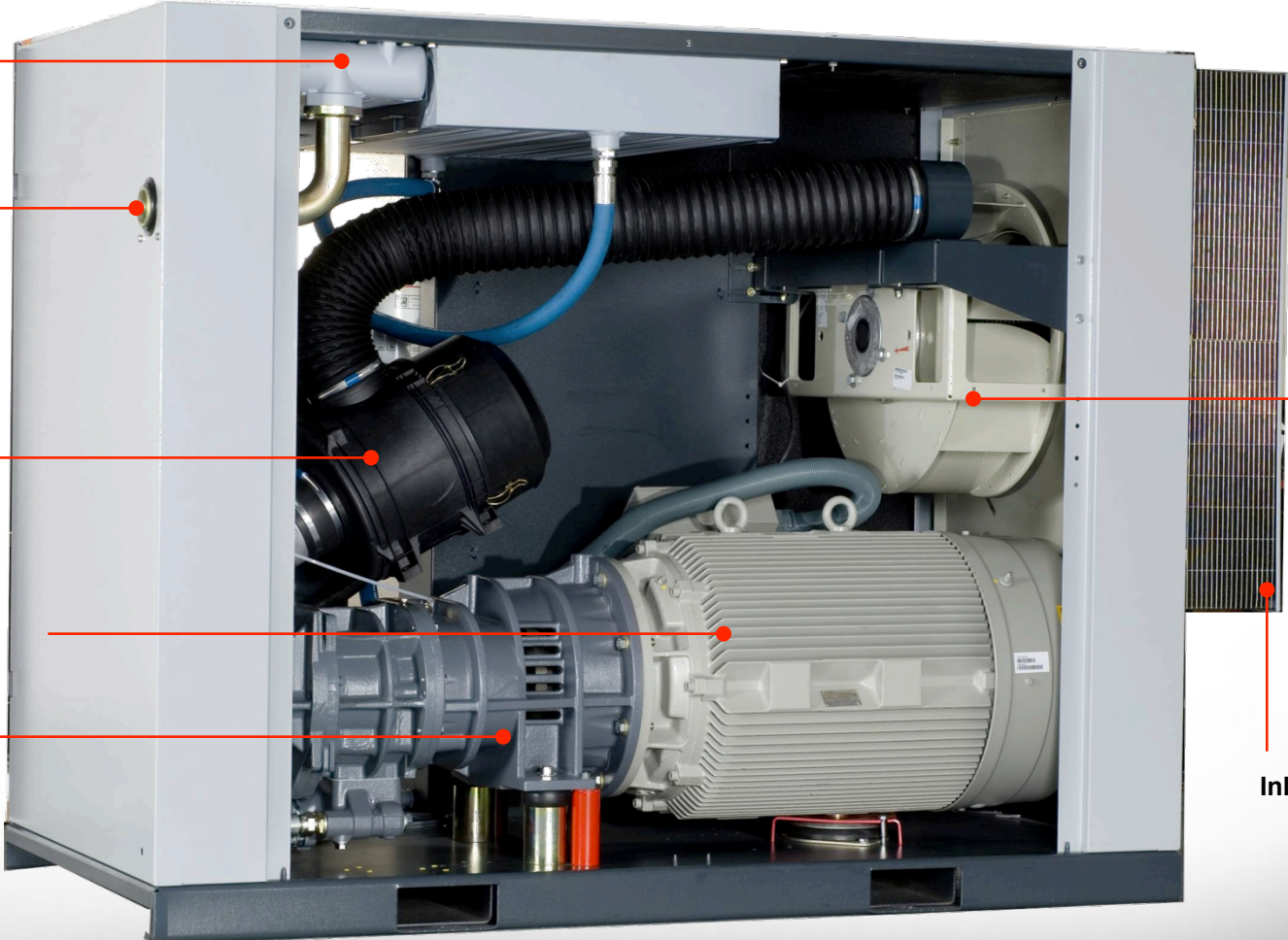
Heavy Duty Inlet
Air Filter

Industrial Wye-Delta,
TEFC Motor

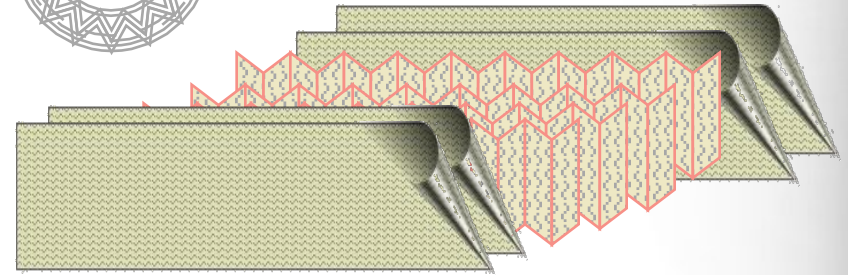
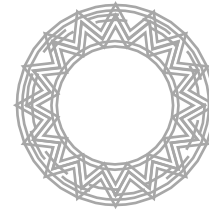
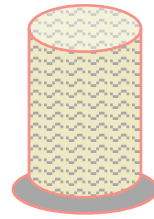
Time-Proven Airend
with Guaranteed
Alignment and
Power Transmission

Quiet
Centrifugal Fan

Inlet Baffle



HIGH EFFICIENCY AIR FILTER



Pleated cartridge

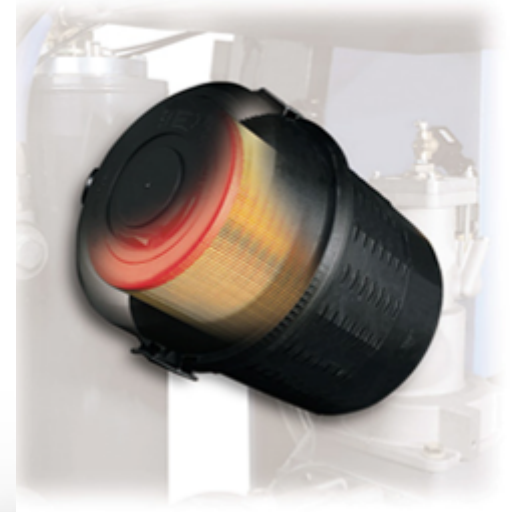
Filtration level : 2 Micron

Encapsulated filter with two stages of filtration

- Pre-cyclonic separation
- Impact filtration

High Efficiency Filtration

- = Ensures oil quality
- = Reduced operating costs
- = Improves compressor life
- = Reduced pressure drop



DRIVE MOTOR

No compromise for the power source

High Qualifications

The drive motors are designed for application and toughest conditions. The drive motor is wye-delta, TEFC, class F insulation

Reputable brand

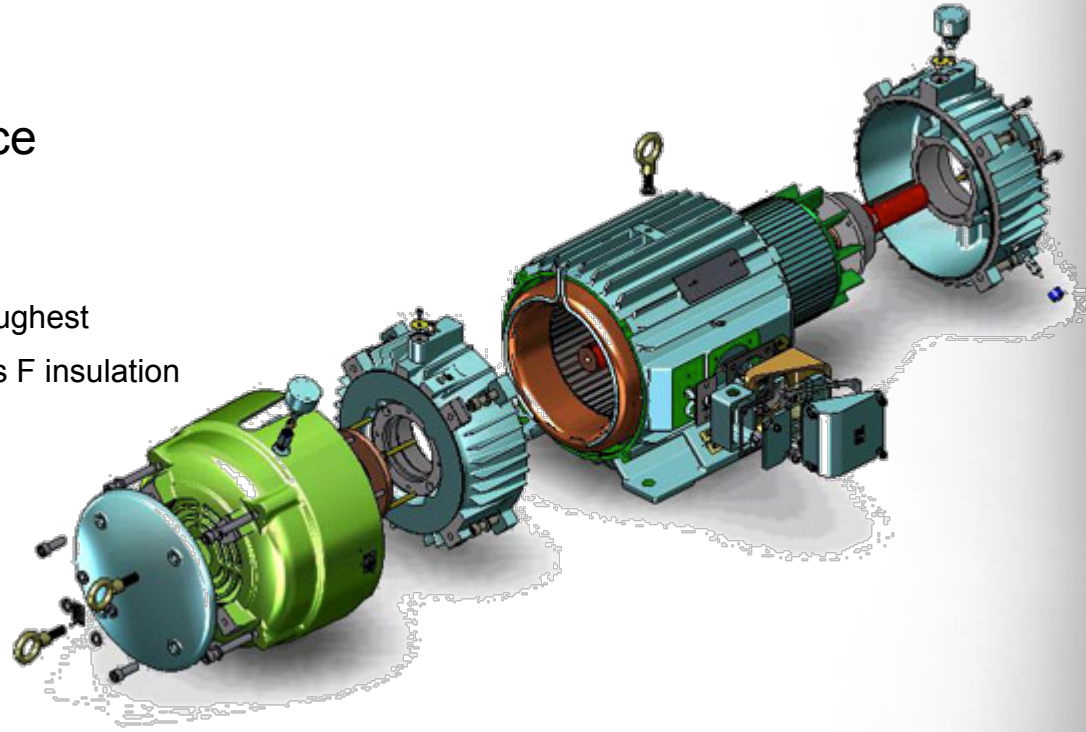
Chicago Pneumatic doesn't compromise on quality. Therefore, the QRS are equipped with drive motors from **WEG** and **Siemens**

Benefits of Standardization

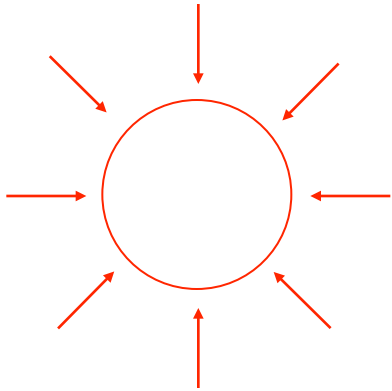
Using industry standard drive motors, Chicago Pneumatic ensures fast and efficient service support on a global scale. Unlike the competition, our motors are not proprietary and can be serviced at any local motor shop.

Intelligent packaging

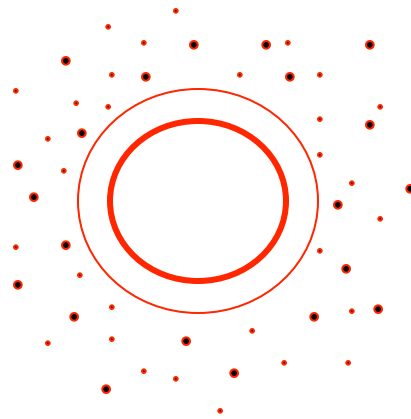
The motor is placed at the cooling air inlet ensuring optimum cooling for perfect running conditions



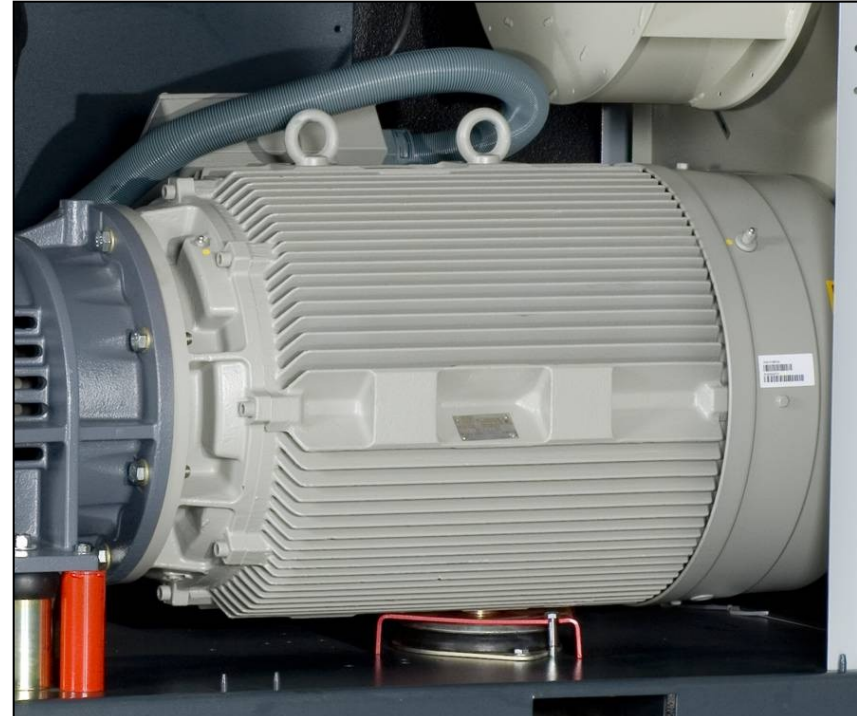
TEFC MOTOR



Protected against water splashes from any direction.



Protected against dust and debris



Protection for the Motor

- = Lower Power Consumption**
- = Lower Operating Costs**
- = Longer Motor Lifespan**

AIREND

For the heart, “Nothing but the best”

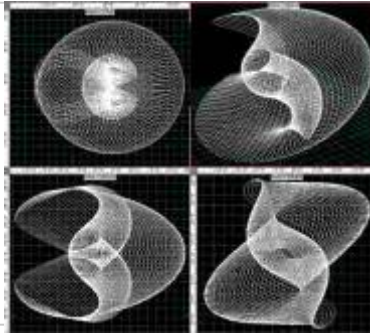


Chicago Pneumatic air ends incorporate a vast experience and competence as they are being designed, manufactured and tested in a state of the art production facility that is reputed for its quality and consistency.

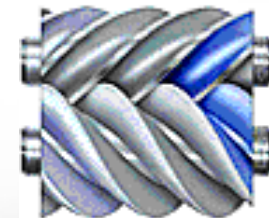
Chicago Pneumatic air ends have proven their reliability in over more than 100,000 compressors for more than 40 years.

RELIABILITY

The oil flooded rotary screw airend used in Chicago Pneumatic compressors has proven its reliability in thousands of installations throughout the world.



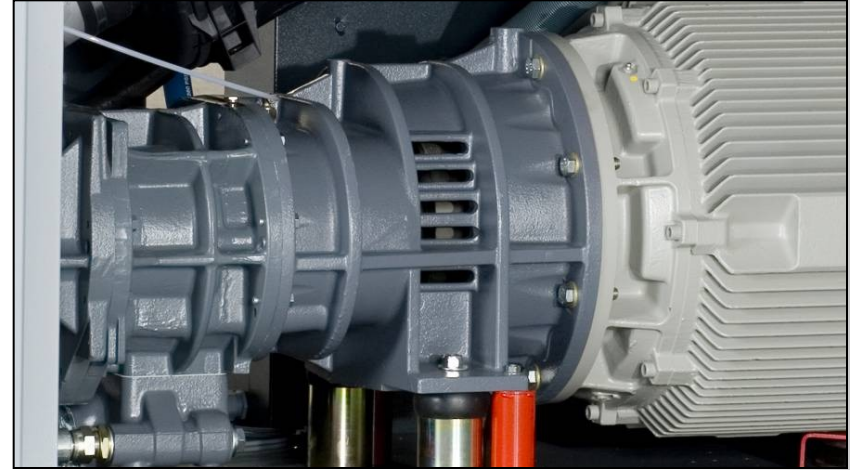
The simple design allows smooth pulse free air to be produced with minimum moving parts



RELIABLE TRANSMISSION

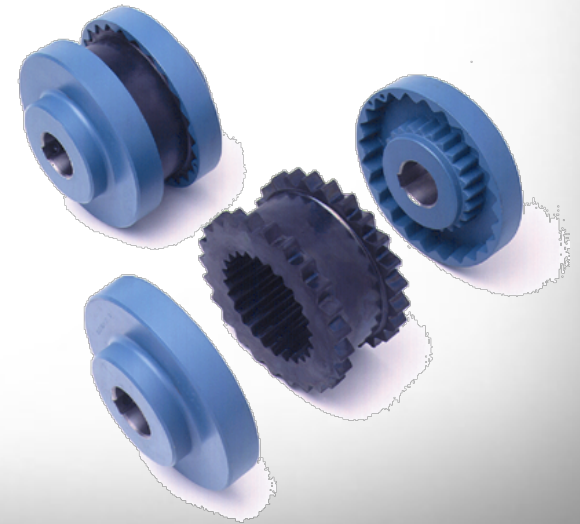
Guaranteed Alignment

- Mounted on isolation blocks
- Reliable transmission of power from motor through flexible coupling to the airend
- Avoids energy losses and prevents stress on the shafts



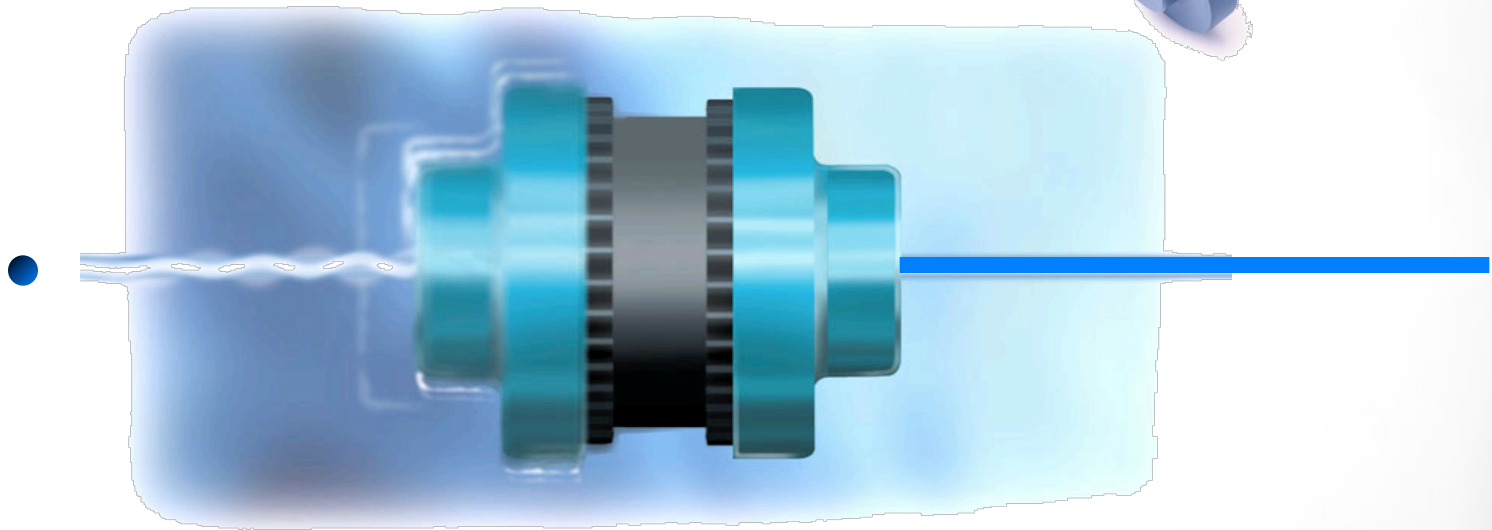
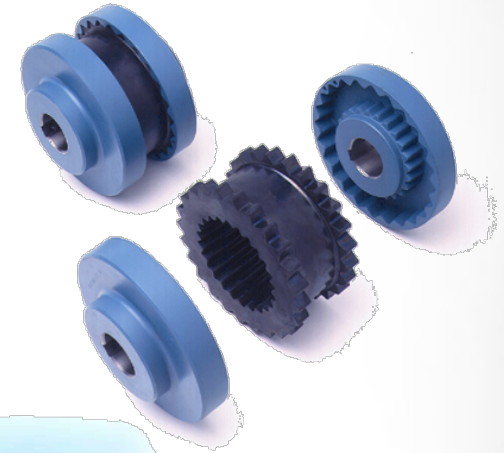
Reliable Transmission

- = Improved Overall Performance
- = Reduces Maintenance Time
- = Increases Compressor Life
- = Quiet Operation



SUREFLEX COUPLING

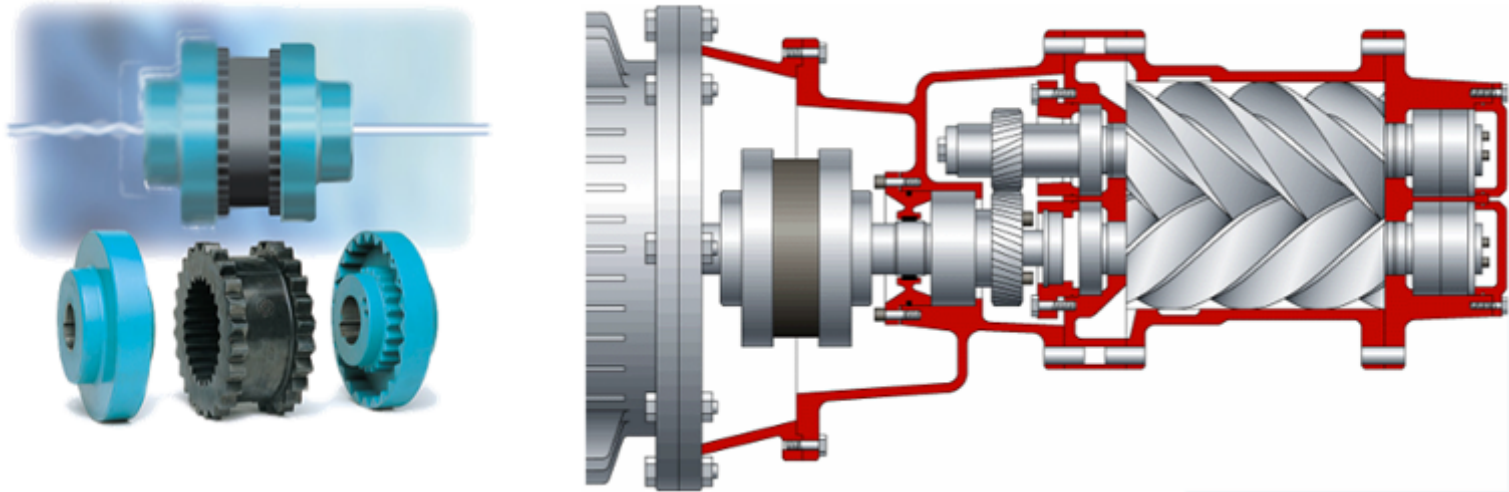
- = Improves efficiency
- = Reduced torque, especially on start up
- = Protects airend from motor failure & vice versa
- = Reduces vibration
- = Increased bearing life



Reduces Energy Costs
Increases Reliability
Extends Component Life
Runs Quiet

EFFICIENTLY DRIVEN

Gear drive combined with SUREFLEX coupling

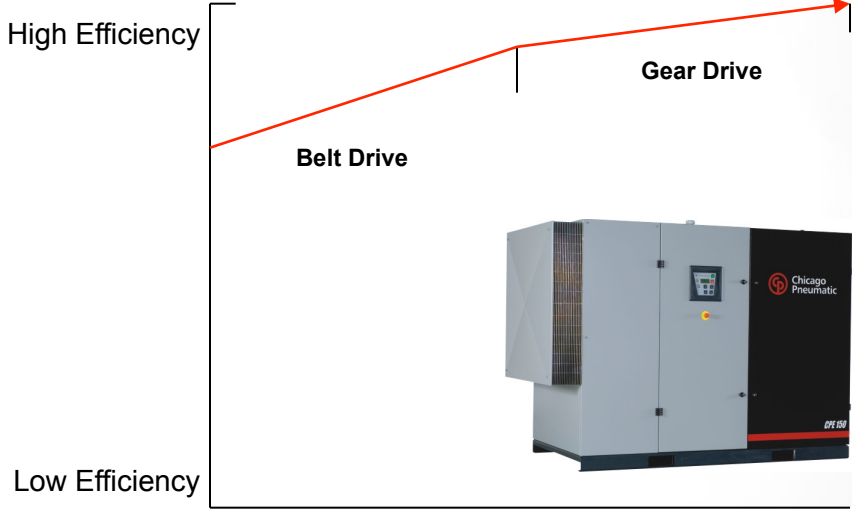
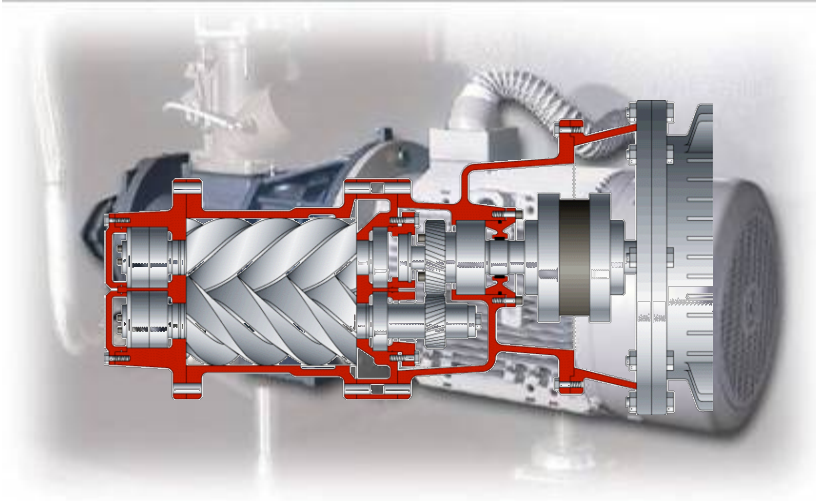


- = Reduces vibration and shock on start-up**
- = No maintenance or changing**
- = No pulsation into downstream application**

RELIABLE AND EFFICIENT

DRIVE ARRANGEMENT

High efficient gearbox drive minimizes losses



The drive arrangement is for maximum Reliability and Efficiency

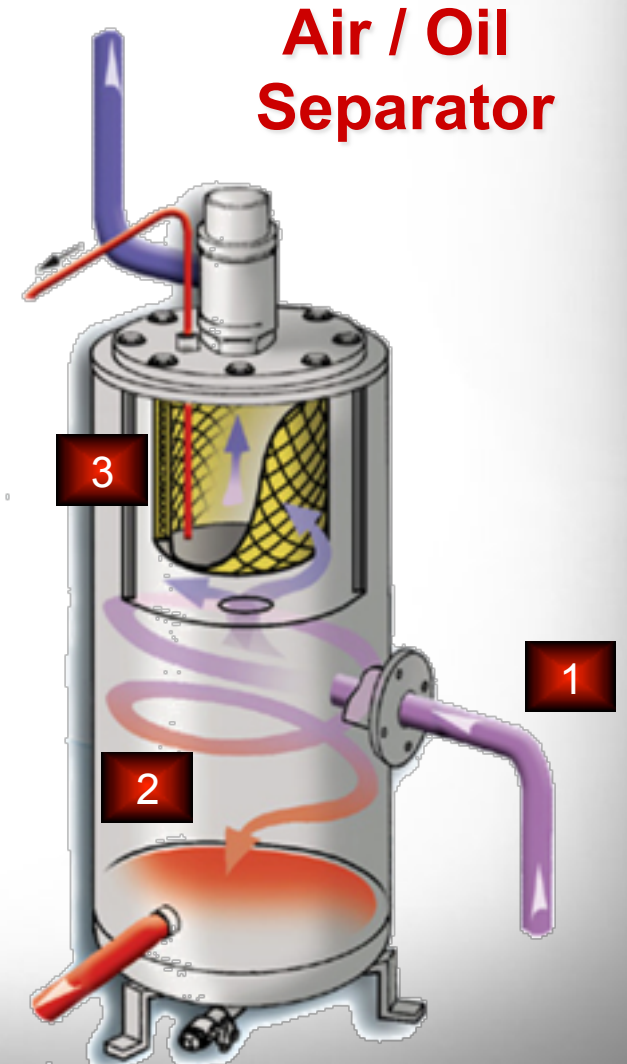


OIL SEPARATION SYSTEM

- 3 Stage air / oil separation
 - Provides low carryover
 - Protects application
1. Cyclonic action when air/oil enters
 2. Weight separation in liquid phase
 3. Surface area filtration

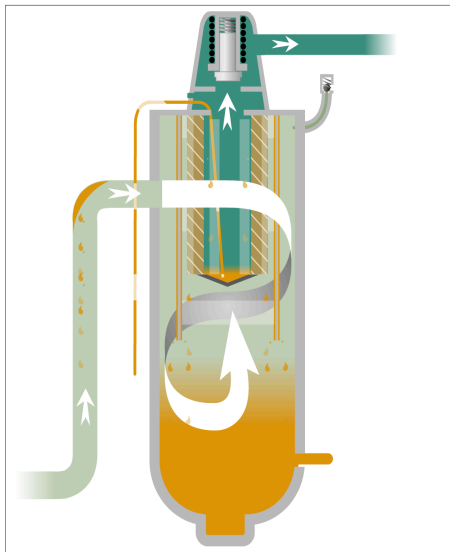
Increased Surface Area

- = Lower Pressure Drop
- = Increased Energy Efficiency
- = Reduced Oil Carryover



OIL SEPARATION SYSTEM

Advanced separator design minimizes losses

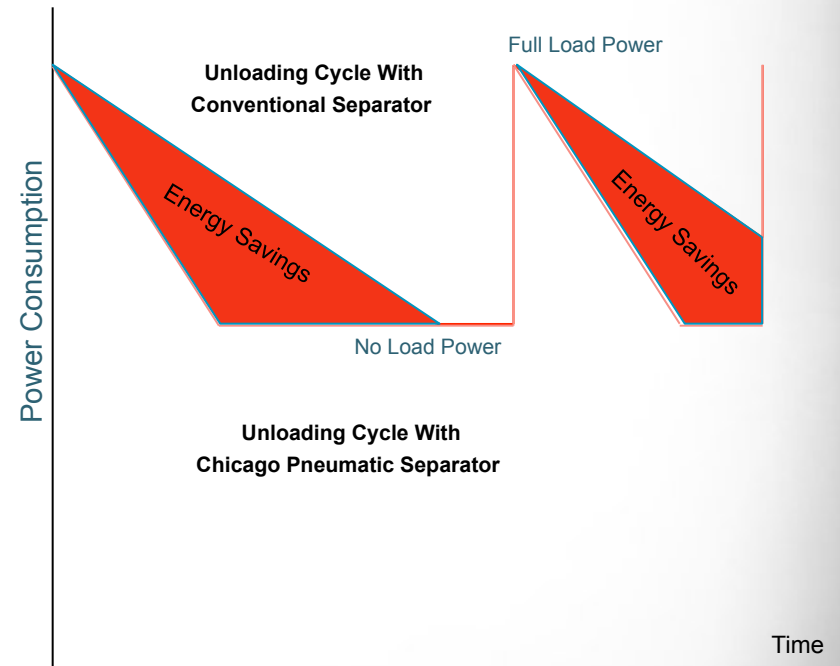


Reducing load power consumption

By intelligent design the separator has not only a very low initial pressure drop but also during 90% of its service life time.

Reducing unload power consumption

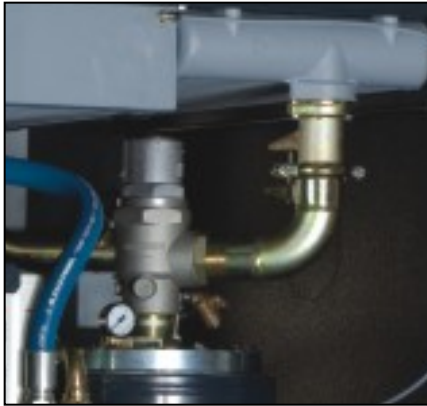
Compact pressure vessel reduces internal air volume, which reduces the blow down time during off load cycles, substantially.



Advanced separator for very low oil carry over

OIL SEPARATION SYSTEM

The Air / Oil separation system is designed to provide low residual oil content (3 ppm) for the air entering the compressed air network



By using rigid pipes, replacing flexible hoses and leakage risks are avoided

Quality = Reliability



INLET BAFFLE

Chicago Pneumatic knows that a cool compressor will run longer, be more efficient and cost less!

- = Maximize compressed air quality**
- = Protect compressor components from debris**
- = Reduce inlet air velocity**
- = Reduce maintenance costs**
- = Maximize cooler efficiency**
- = Maximize compressor life**



LARGE CENTRIFUGAL FAN

- Mounted immediately behind the large inlet baffle
- Blows fresh air into the package
- Metal housing serves two functions
 - Conveys air directly to motor
 - Distributes motor heat evenly
- Increases cooler efficiency

= Reduce operating temperature

= Low noise levels

= Reduce maintenance time & costs

= Reliable compressed air flow



HIGH EFFICIENCY COOLERS



Especially sized to the maximum temperatures of both air and oil fluids for higher performance and to increase compressor longevity

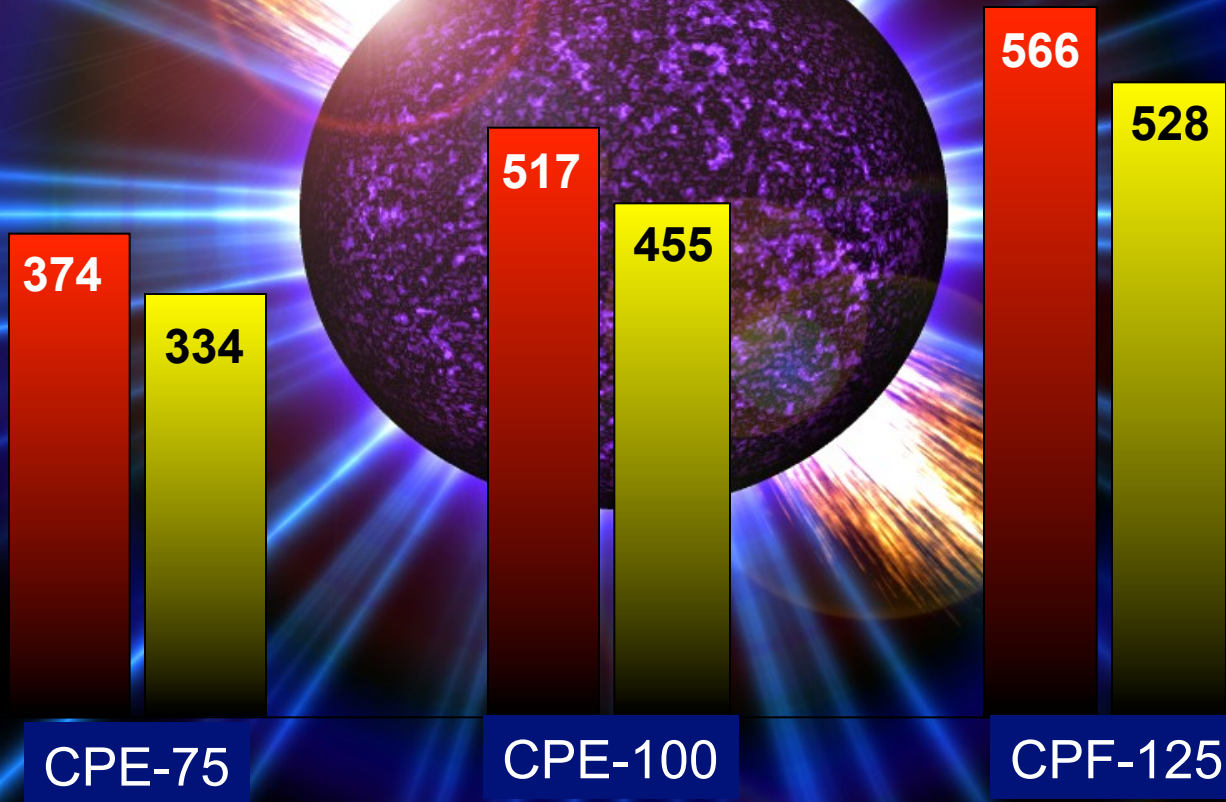


Air and oil coolers are independent to avoid thermal shocks during regulation periods. Easy access for regular dust blowing, they are mounted on rails for simple disassembly even when ducted.

- = Helps removal of condensate**
- = Less thermal stress on components**
- = Improved efficiency**
- = Lowers operating costs**

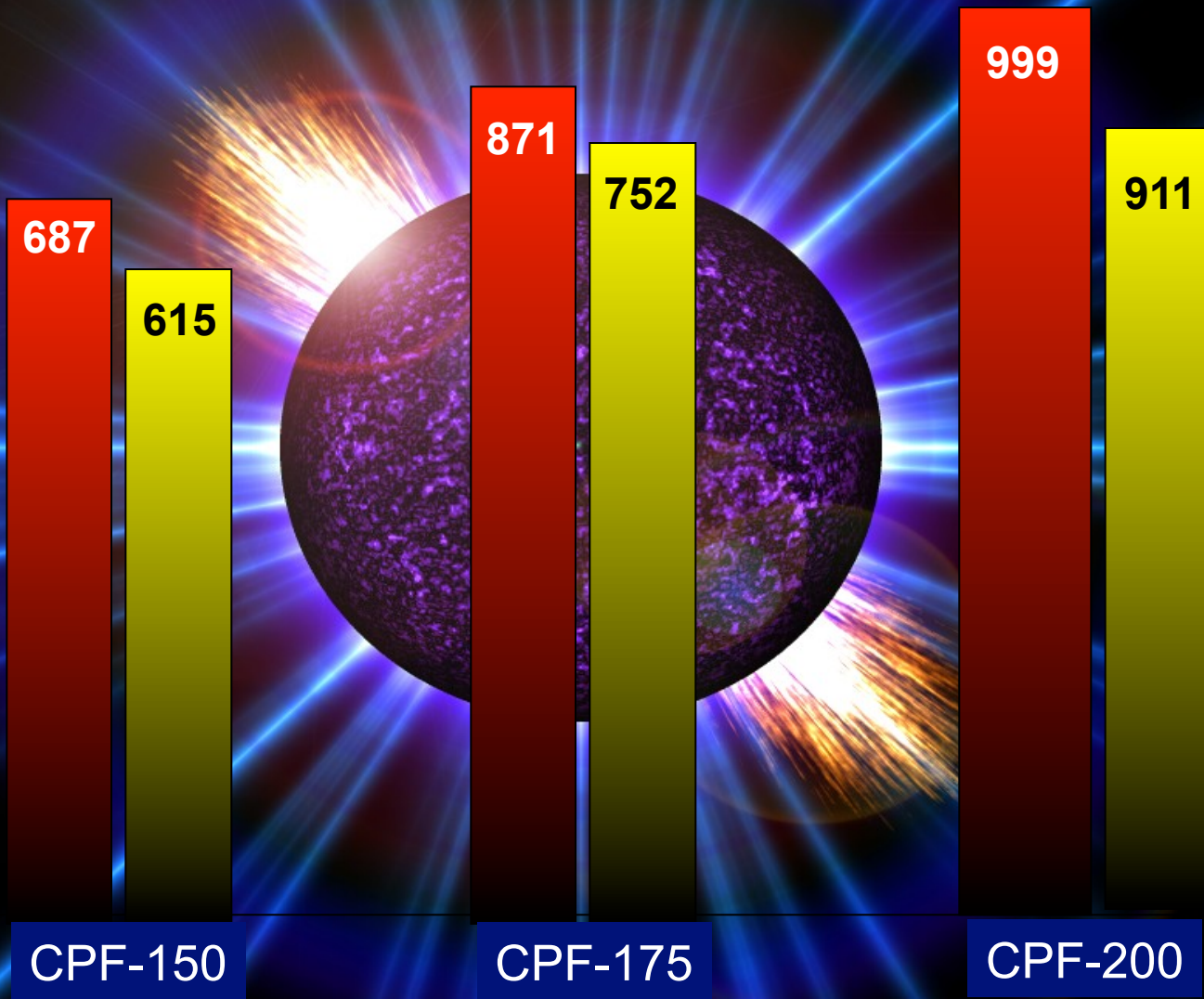
100 psi

125 psi



100 psi

125 psi



SUPERIOR SILENCE



WHISPER QUIET

CPE-75 → 65

CPE-100 → 66

CPE-125 → 71

CPE-150 → 75

CPF-175 → 72

CPF-200 → 73

= Reduce worker fatigue

= Increase installation possibilities

- Install at point of use
- Reduce pressure drop
- Save on installation costs

0	Hearing Threshold
10	Rustling Leaf
20	Quiet Recording Studio
30	Quiet Bedroom
40	Quiet Library
50	Ambient Home Noise
60	Conversational Speech, 1m
70	Vacuum Cleaner, 1m
80	Heavy Traffic, 5m
90	Diesel Truck, 10m
100	Lawn Mower, 1m
110	Chainsaw, 1m
120	Discomfort Threshold
130	Pain Threshold
140	Jet Aircraft, 50m

5 YEAR WARRANTY

THE COMMITMENT...

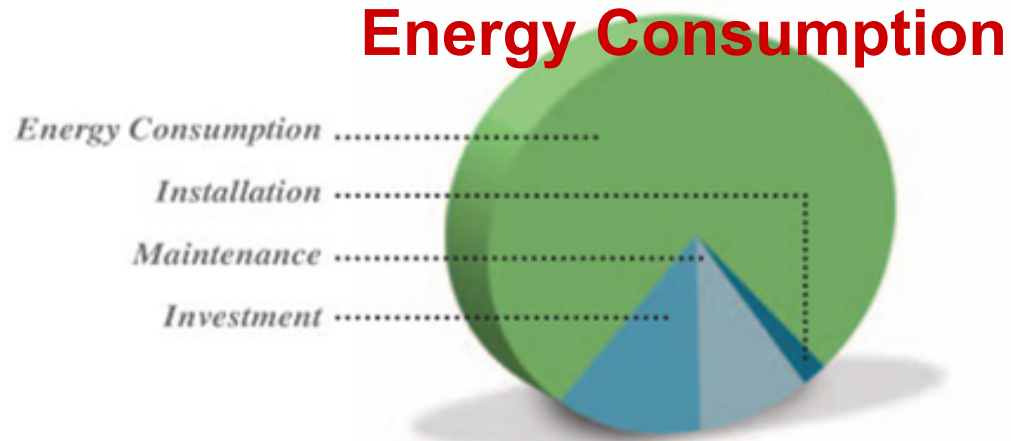
- High E
- Time-p
- Comp
- Preci
- Intellig



Global Leaders

The CP SECURE Warranty covers the air end and major components for 5 years. Our warranty is a promise to the customer and demonstrates our commitment to outstanding quality and reliability

WHY CONTROLS?



**Accounts for 75% of the Annual
Total Cost of Ownership**

A properly controlled compressor can result in more energy savings than the cost of the compressor

AIRLOGIC

Efficiency by Advanced Energy Saving Features

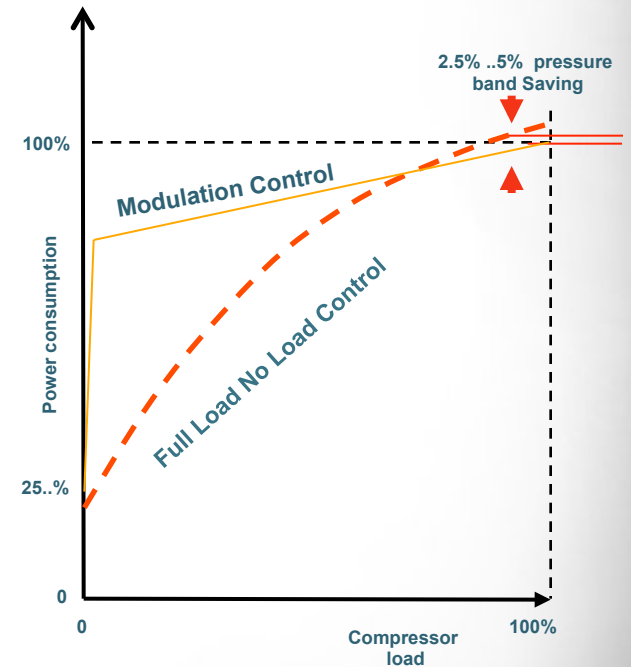
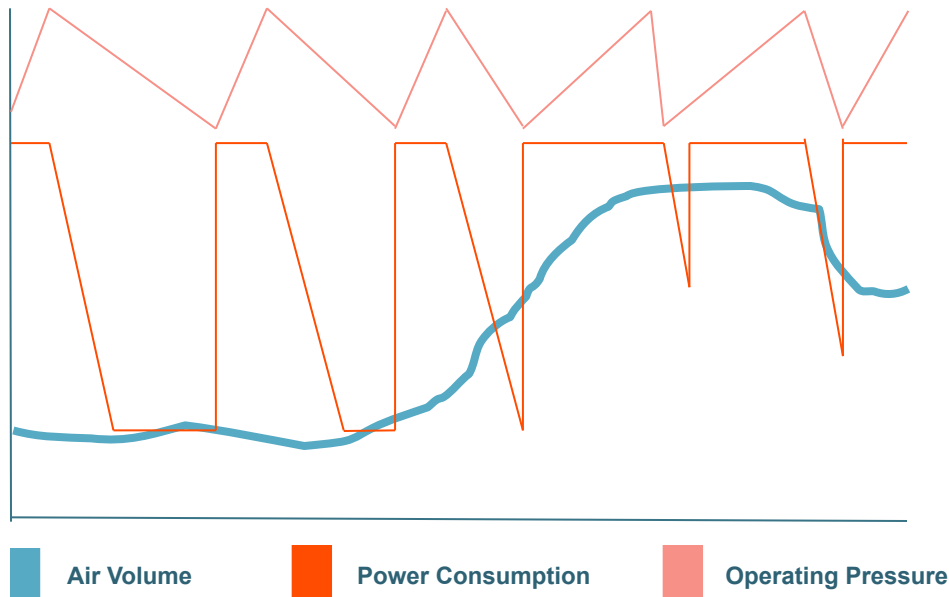
- Load-Unload Control
- Accurate Pressure Control
- Programmable Start-Stop
- Delayed Second Stop
- Dual Pressure Setting



Airlogic offers flexibility to meet your individual conditions

LOAD-UNLOAD CONTROL

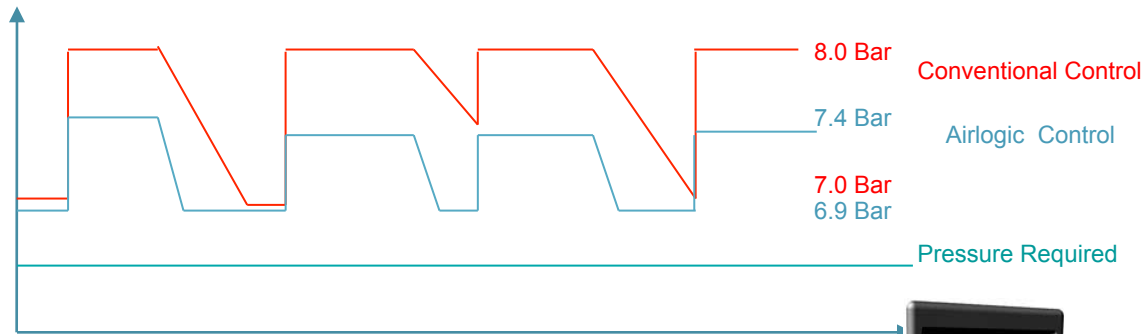
Airlogic Load-Unload Control reduces electrical cost



Load-Unload Control is more efficient than Modulating Control

ACCURATE PRESSURE CONTROL

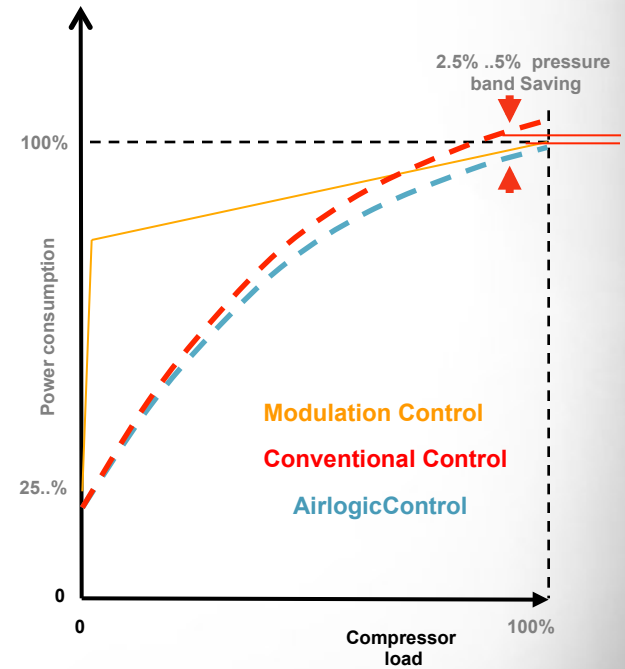
Airlogic's Accurate Pressure Control reduces energy cost



Pressure reduction = saving energy

Pressure reduction by 1 bar reduces power consumption by 7%

Reducing system pressure also reduces air leakage, further reducing power consumption.



Saving you money.

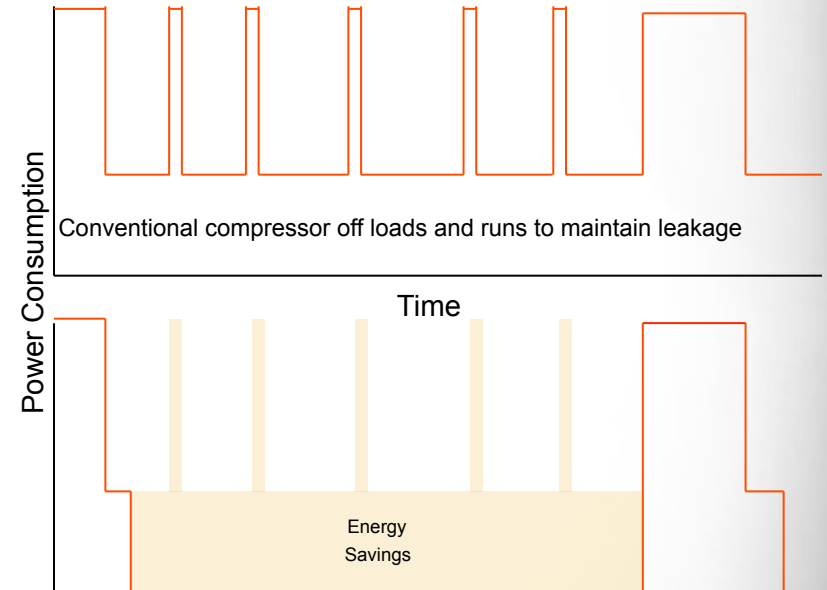
PROGRAMMABLE START-STOP

With Airlogic you only generate air when required



Efficiency is in the details

The Airlogic can be programmed to switch on and off at the start and finish of different production shifts or during breaks, eliminating the need for an operator to monitor the compressor and saving energy by stopping the compressor when not required. Compressors not equipped with auto timers keep running when not required and operate to maintain air leaks, wasting energy.



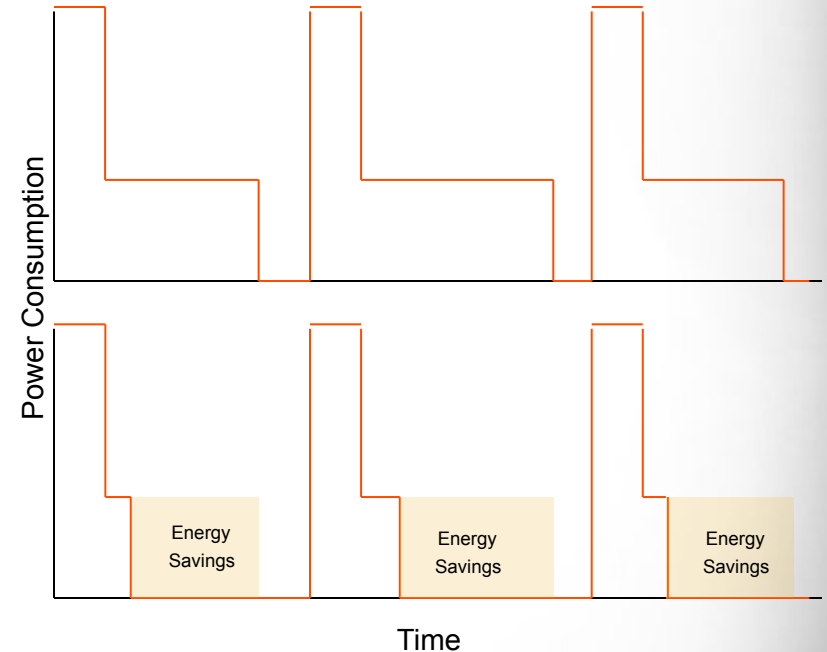
Saving you money.

DELAYED STOP

With Airlogic you only generate air when required



Conventional compressors have long off load running cycles during periods of low air demand, this is to prevent the motor damage by frequent stopping and starting. The Airlogic analyzes the load pattern and switches off the motor during periods of light air demands and avoid the long off load cycles when not required.



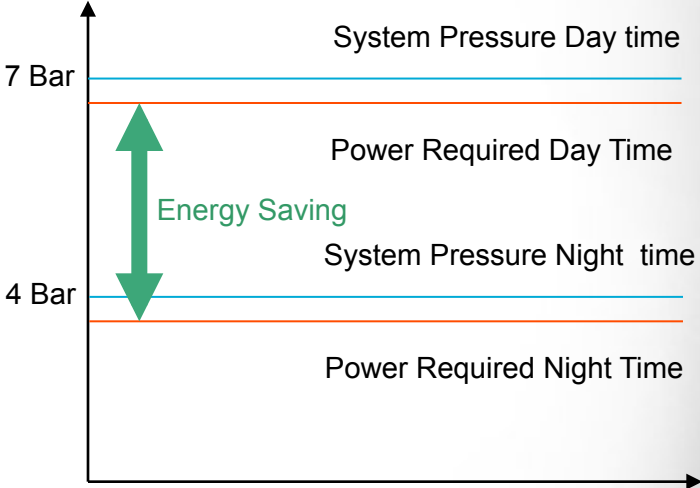
Saving you money.



DUAL PRESSURE SETTING

Airlogic's advanced Dual Pressure Control

loaded: 0000
0000 total: 301 kb

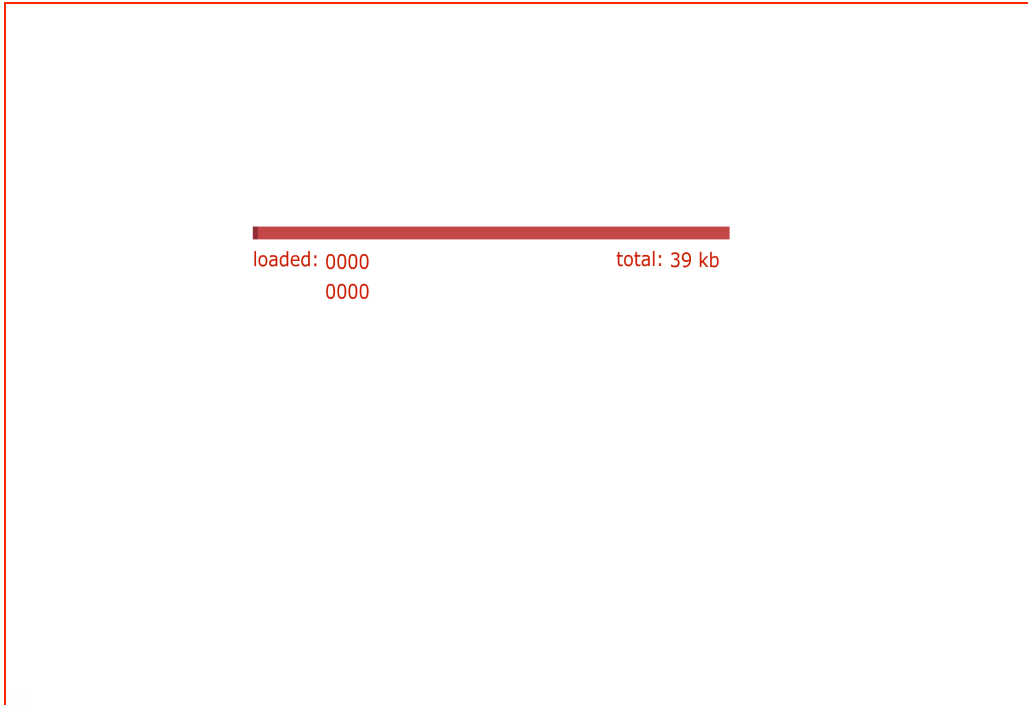


Saving you money.



MULTILOGIC

Airlogic's Integrated Multiple Compressor Control



No separate multiple controller required

- = Reduced investment costs
- = Reduced installation costs

Lower operating pressure

- = Reduced power consumption
- = Reduced electrical costs
- = Reduced air leaks

Flexibility and Compatibility

Multilogic controls up to 4 compressors, also compressors of other brands whether provided with an electronic or solid state control system

One bar pressure reduction = 7% power reduction

Saving you money.



ENERGY SAVINGS CALCULATOR

Airlogic's built-in Energy Savings Calculator

Prove energy saving and payback

With Airlogic you can monitor your compressed air costs and see your savings compared to a conventional control system.

Display

The Airlogic's displays energy saved in kWh or in money at customer's electricity rate and currency rate.

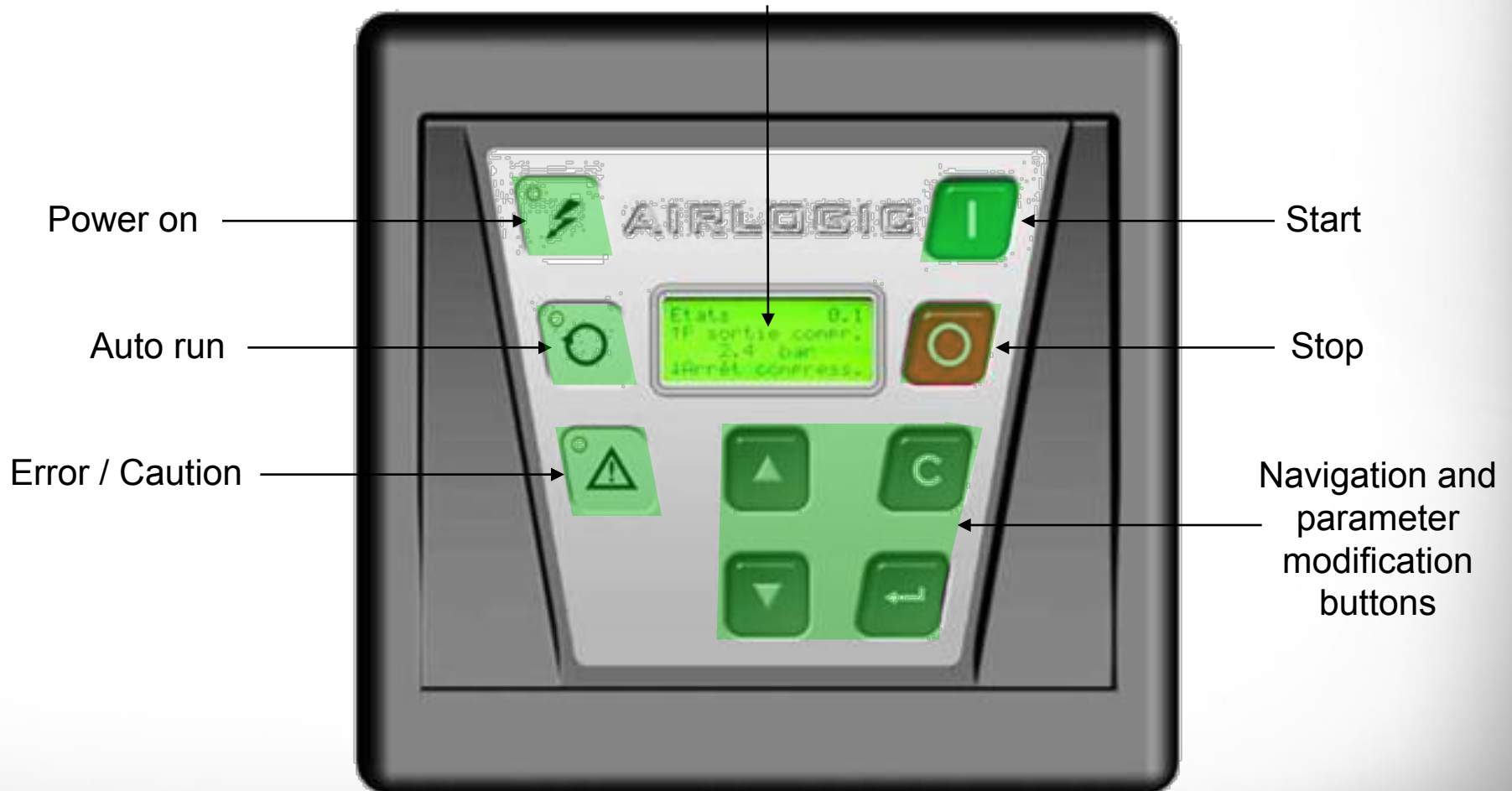
Prove energy savings and payback.



Dramatically demonstrate savings using customer's own data and input

COMPRESSOR INTELLIGENCE

Digital, multilingual display with 4 lines, 16 characters (choice of 3 languages)



With a modern design, the AIRLOGIC is the pinnacle in user friendliness. ISO symbol buttons provide simple navigation and comfort to the user.

COMPRESSOR INTELLIGENCE



AIRLOGIC CONTROL

- Selection of two operation bands
 - Provides energy savings based on production needs
 - Every 2 psi = 1% power savings
 - Standard CANBUS protocol
 - Choice of 3 languages among 25
-
- Every running parameter can be manually modified and protected by a password
 - Auto restart (cascade control with multi-control option)
 - Remote control and default report through a standard terminal
 - Calculation of the running time percentage at different load level
 - Allows customer to optimize compressed air operation
 - Permits energy savings during peak demand

COMPRESSOR INTELLIGENCE



INTELLIGENT PROTECTION

Rotation control

Pressure drop detection through oil separator

Limit on the number of motor starts

Protection against start up under pressure (minimum pressure setting)

Protection against over pressure in the oil receiver (safety before PRV blows)

High oil temperature limit

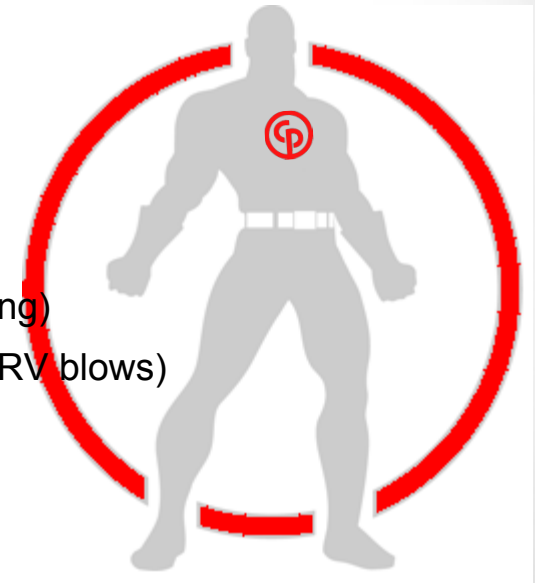
Protection against start-up at low temperatures

Test of input / output

History of five (5) faults

- Records running parameters
- Helps technical diagnosis

Prevent an auto restart after a long stop period



AIRLOGIC

Reliability by Intelligent Monitoring and Controlling

Warning Indication

Ensures early detection and rectification of potential problems. Prevents unnecessary loss of production.

Shutdown Protection

Stops the compressor before serious damage could occur. Prevents unnecessary loss of production.

Maintenance Countdown Function

Allows planning for maintenance without interfering with production.

Service Plan Function

Allows planning of service only when required. Ensures correct service is performed at the time when it is needed.



RAPID MAINTENANCE

Top-side discharge for
easy ducting and heat
recovery systems

Easy to Read
Maintenance Indicators
Help You Schedule
Downtime

Easy Access Maintenance
Items from a Single Panel



Easy Access to
Coolers for Cleaning

Air / Oil Separator
& Oil Filter

Oil Fill Port

Separator with Oil
Sight Glass

Rapid Maintenance = Reduced Downtime

RAPID MAINTENANCE

No Leaks



FLEXMASTER pipes are specially designed to combine all the benefits of both rigid and flexible pipes.

SOLID METAL PIPES increase durability for reduced maintenance costs.

FLEXMASTER EXPANSION JOINTS allow expansion and contraction resulting in fewer air and oil leaks for increased reliability.

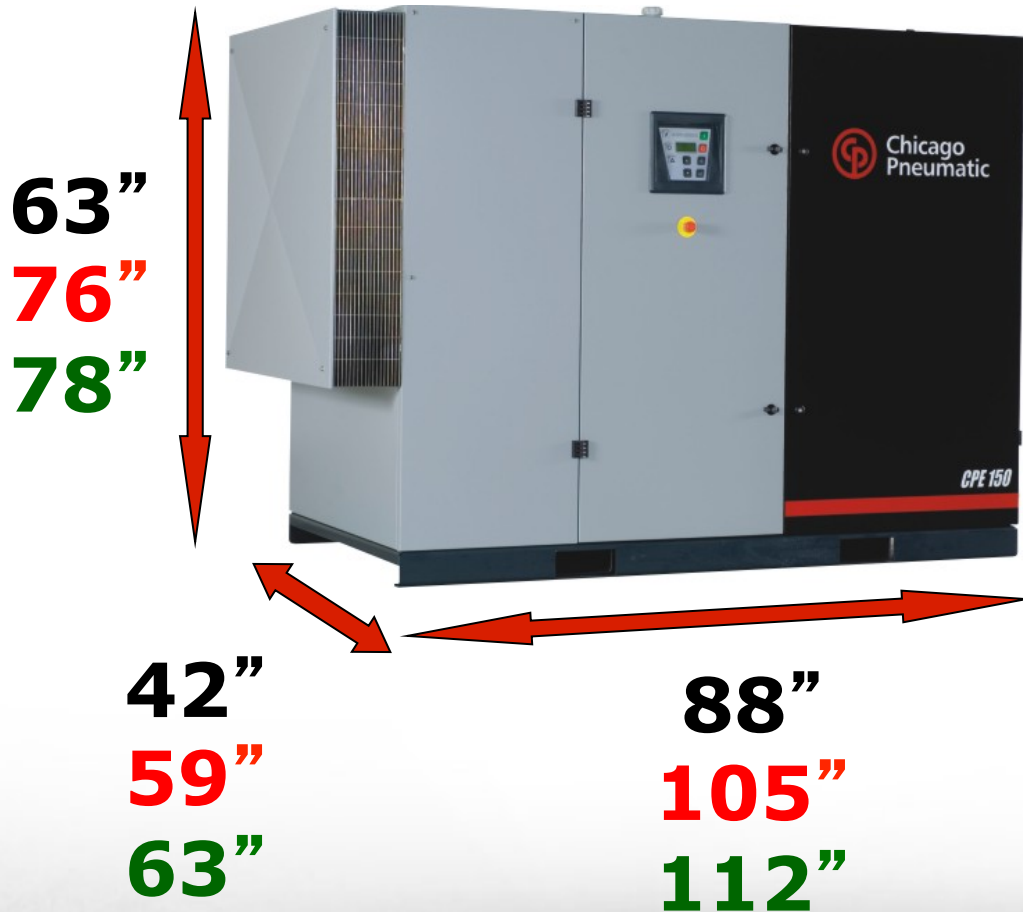
One connection to the separator vessel

Few connections = Reduced possibility of leaks

Designed for Minimum Service Time

INSTALLATION

DIMENSIONS



CPE = 26 sq. ft

CPF-175 = 43 sq. ft

CPF-200 = 49 sq. ft

Save vital production space

Increases installation possibilities

Easier to identify maintenance issues
with stand-alone unit

INSTALLATION

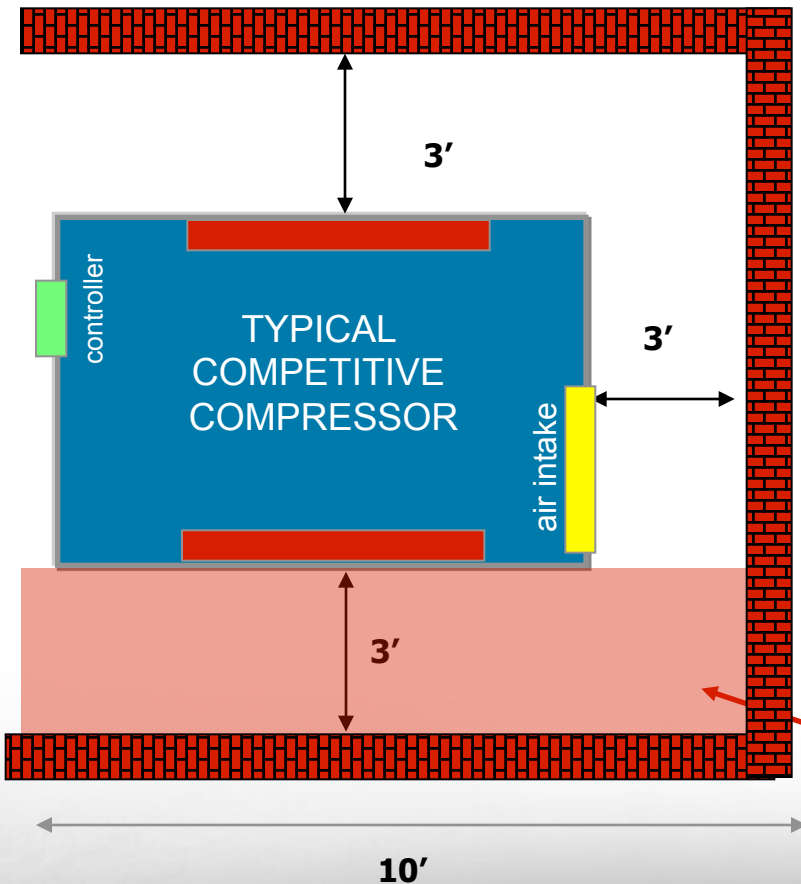


**Designed for Minimum
Installation Time**

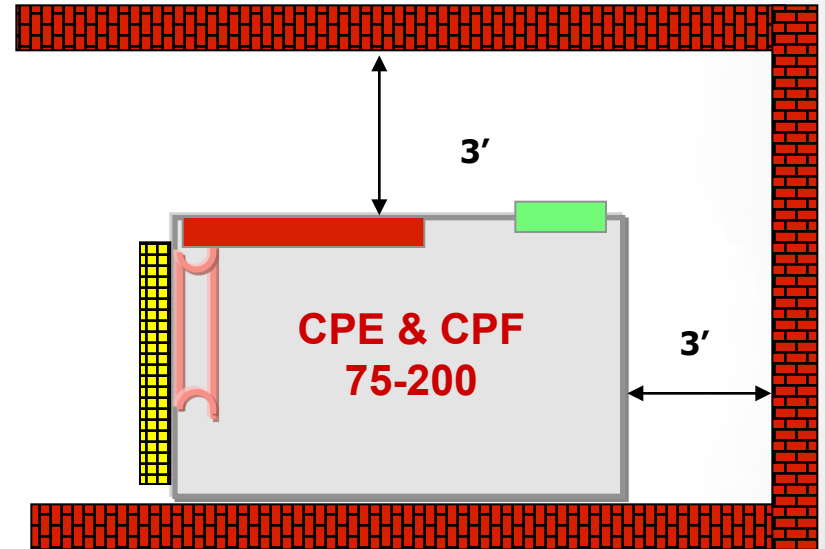
- Accessible from three sides for easy handling
- Distribution of the lifting points in line with the centre of gravity
- Increased installation possibilities

INSTALLATION

Maintenance access required on 2 sides, fresh air intake on one side and controller on the fourth side



The CPE & CPF can be installed against a wall with all routine maintenance being carried out from one side.



Excellent maintenance access and space saving design.

Customer saves 30 sq. ft. and installation costs!

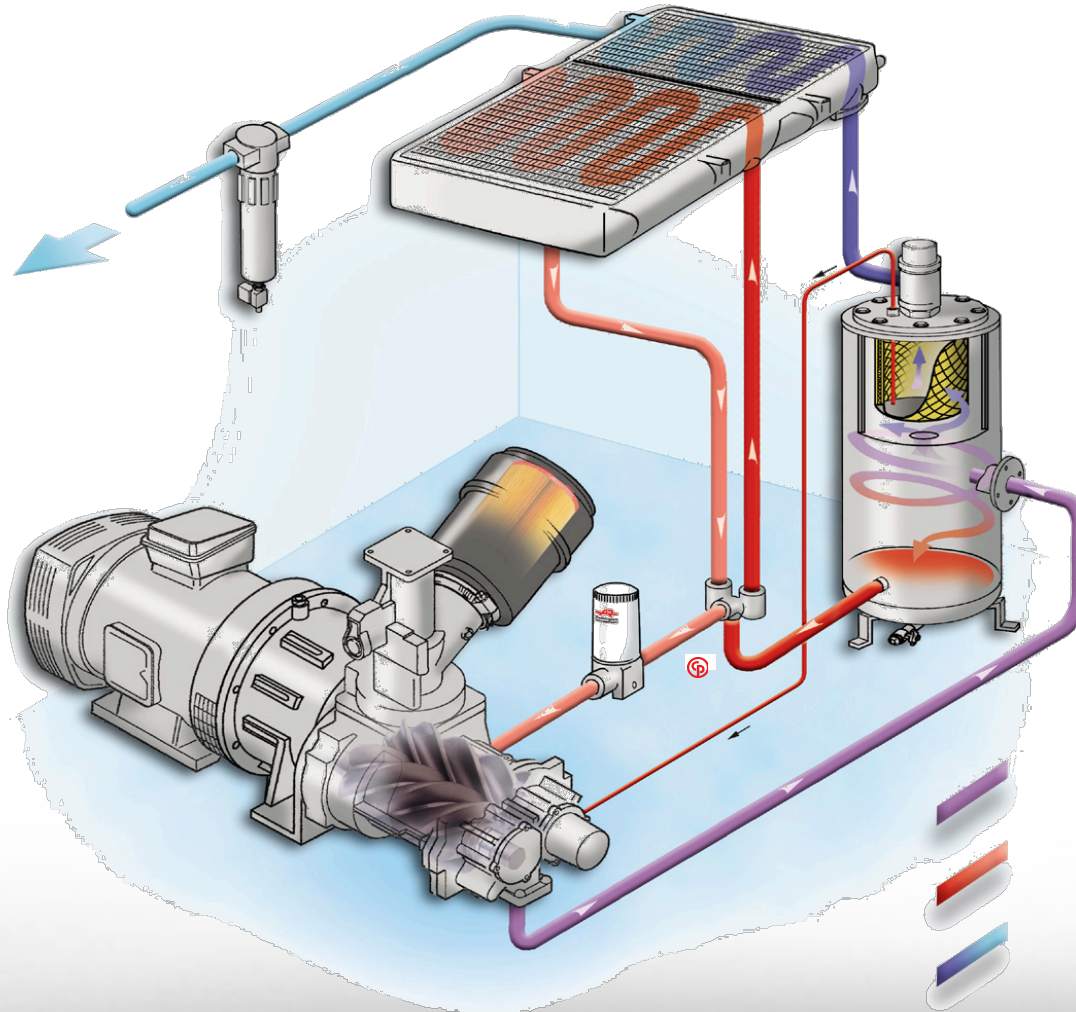
SUMMARY

- **High Efficiency Cooling**
- **Whisper Quiet Operation**
- **Easy Installation**
- **AIRLOGIC Control**
- **Superior Price-Performance**
- **Superior Air / Oil Separation**
- **Superior Inlet Filtration**
- **Low Maintenance Costs**
- **Low Power Consumption**



Simple and Reliable

FLOW DIAGRAM



Simplicity
=
Reliability

Air / Oil Mixture

Oil

Air



**Chicago
Pneumatic**