

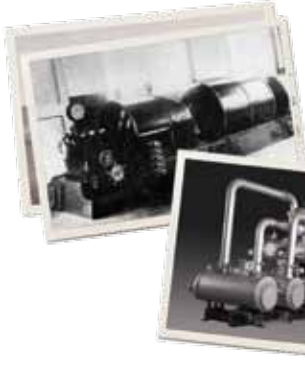


# Centrifugal Air Compressors

Centac® C-Series 350 - 1300 kW (500 - 1750 hp)



# A Tradition of Proven Reliability, Efficiency and Productivity



## Over 100 years of Oil-Free System Innovation

With our new line of system optimized centrifugal compressors, Ingersoll Rand continues the tradition of Simplicity by Design. Fewer parts and integrated components take compressed air reliability, efficiency and asset availability to even higher levels.

1871

Ingersoll Rock Drill Company was formed, later to become Ingersoll-Rand in 1905

1912

Our first oil-free centrifugal compressor introduced

1968

First packaged Centac® centrifugal compressor is introduced

2005

Ingersoll Rand offers the first centrifugal compressor for standard industry capable of achieving 600 psig (40 bar g)

2007

Ingersoll Rand is first to be Class 0 certified for centrifugal compressor technology

2013

Building on the industry-leading C1000 introduced in 2010, Ingersoll Rand expands its centrifugal compressor line with the new C800

## RELIABILITY

### Superior Design, Superior Life

- Long-life gears, bearings and components
- Leak-free seals and connections
- Simplified piping, integrated components, fewer connections
- Advanced service diagnostics

**Minimizes downtime**

## EFFICIENCY

### Optimized Components and System

- Industry-leading performance
- High-performance cooling system improves efficiency
- 100% oil-free air under all operating conditions

**Reduces energy use and operating costs**

## PRODUCTIVITY

### User-Friendly Operation and Accessibility

- Easy access to all critical components
- Plug and play compressor packages for efficient system installation
- Informative and intuitive web-enabled controller

**Lower total cost of ownership**



Centac® C800

# The Centrifugal Technology To Fulfill Your Needs



## Oil-Free

The first to be certified ISO 8573-1 Class 0, our oil-free centrifugal compressors offer efficient, economical and reliable solutions for delivering compressed air. These high-performing, versatile compressors provide 100% oil-free air in all operating conditions.

Centac® C1000

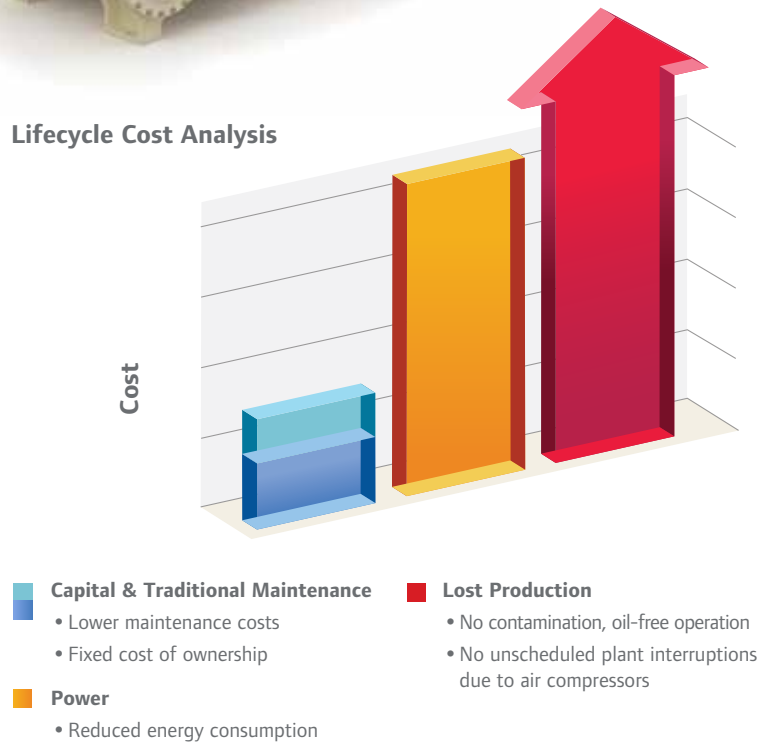


ISO 8573  
**Class 0**  
**Oil-Free Air**

## Reliability Saves You Money

Capital and maintenance costs account for only a small portion of a compressor's lifecycle cost. While energy also represents a significant cost component, the single largest contributor to lifecycle cost is loss of production. Unplanned downtime is best prevented by using reliable equipment within an optimized system. Our team of experts offer comprehensive services, system design and assessment capabilities to ensure years of reliable operation and maximum return on your investment.

Lifecycle Cost Analysis



# Innovative Design... Maximum Flexibility

Ingersoll Rand's expertise and innovation, together with a design that has the total system in mind, deliver durable compressed air solutions that are easily customized to meet your specific system needs and lower your total cost of ownership.

**A** High-reliability coolers can be thoroughly cleaned in place

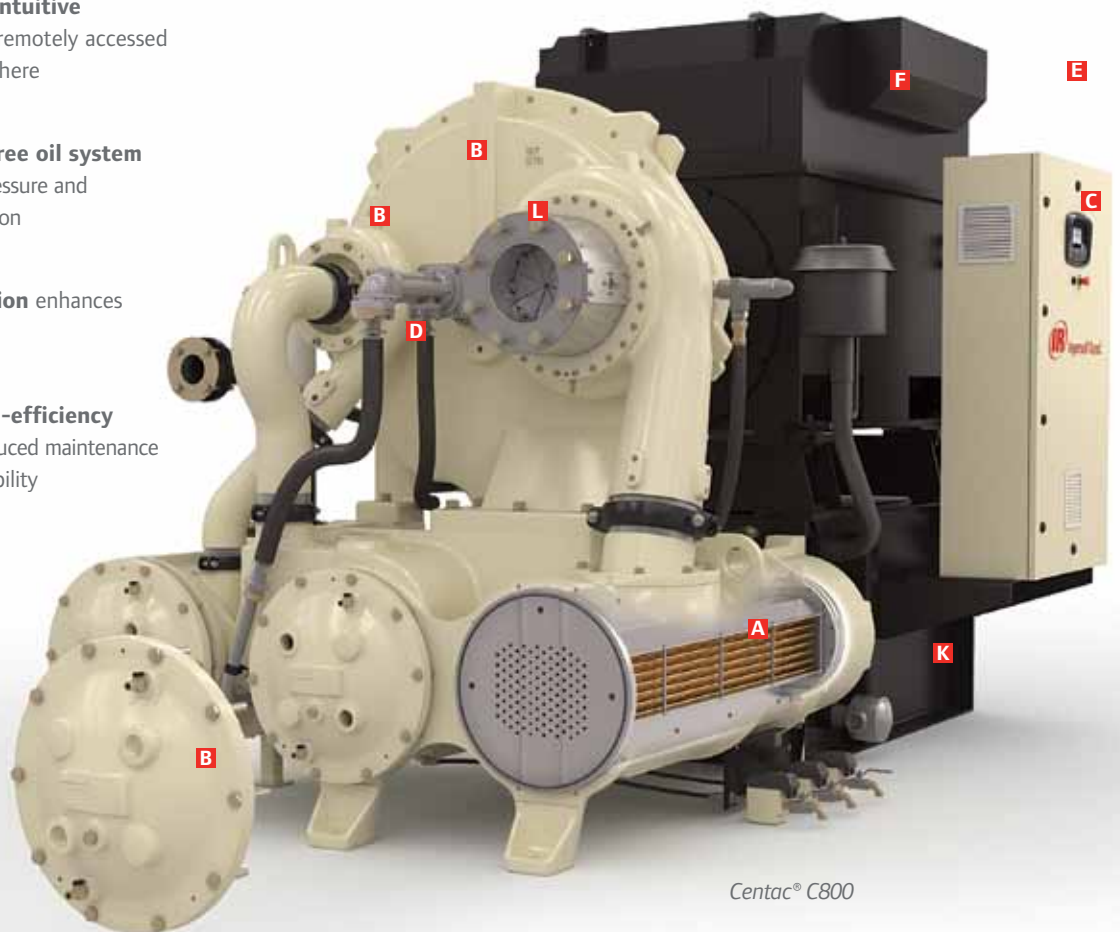
**B** Easily accessed components optimized for superior serviceability

**C** Informative and intuitive controller can be remotely accessed from virtually anywhere

**D** Simplified, leak-free oil system with oil filter and pressure and temperature regulation

**E** Low noise operation enhances personal comfort

**F** Heavy-duty, high-efficiency motor features reduced maintenance and improved durability

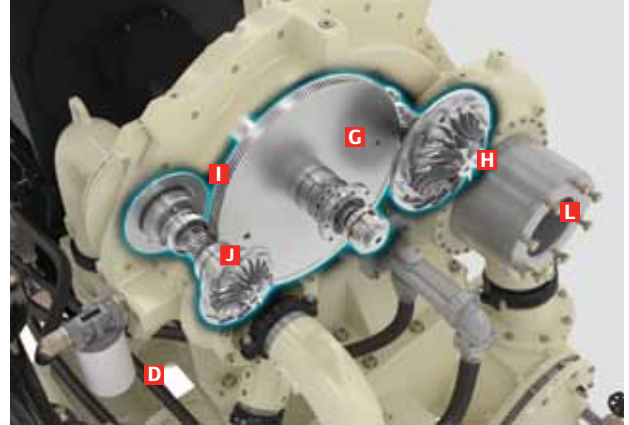


Centac® C800



## C-Series Rotating Assembly

At the heart of each C800 and C1000 C-Series centrifugal compressor is Ingersoll Rand rotating assembly that maximizes efficiency, while being accessible for quick and easy maintenance.



**G Long-life gears** AGMA rated with low loading profile

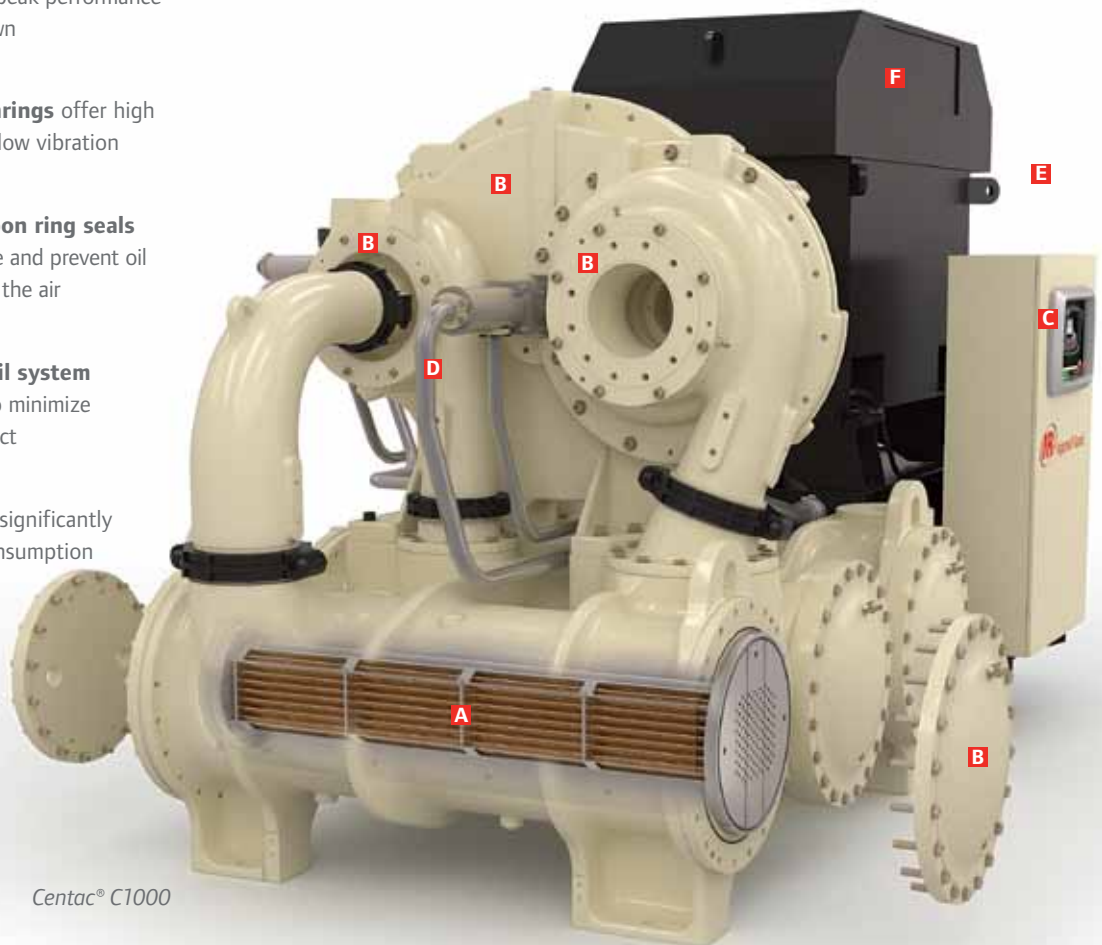
**H High-efficiency impellers and diffusers** designed with leading edge software maximize peak performance and extend turndown

**L High-capacity bearings** offer high load capability and low vibration

**J Non-contact carbon ring seals** minimize air leakage and prevent oil from migrating into the air

**K Optimized lube oil system** reduces oil usage to minimize environmental impact

**L Inlet guide vanes** significantly decrease energy consumption at partial loads



Centac® C1000

# Advanced Centrifugal Control

## Optimize Your Compressed Air System with Xe-Series Controls

The Ingersoll Rand Xe-Series controller uses the latest control algorithms to help lower energy consumption. Built-in control logic ensures system reliability by precisely managing discharge pressure and maximizing throttle range. The controller's intuitive, high-resolution color display makes critical information quick and easy to find. And with web-enabled alerts, the Xe-Series controller helps you maintain optimal operation automatically.



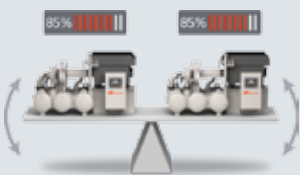
### Web-Enabled Communication

- Start/stop/load/unload and checks parameters remotely
- Email notification of alarms and trips
- Built-in performance reporting and visual trending with automated inspection logs



### More Connectivity Choices

- Communicates directly with your DCS system through Modbus
- Ethernet connection enables communication and control through tablets, computers or mobile devices
- Connects seamlessly with Ingersoll Rand system controls



### Intelligent Compressor Control

- **Constant Pressure Control** - Continually maintains precise discharge pressure to adjust for sudden demand variations
- **Auto Dual Control** - Provides enhanced energy savings during partial load conditions
- **Energy Smart Set Point (ESS)** - Adjusts settings to balance and share loads between multiple compressors in the same system, reducing bypassed air and saving energy



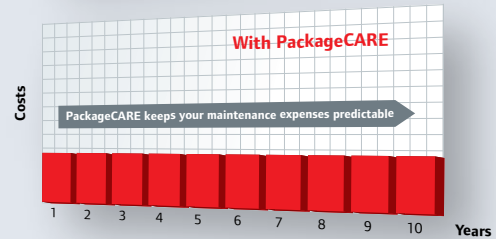
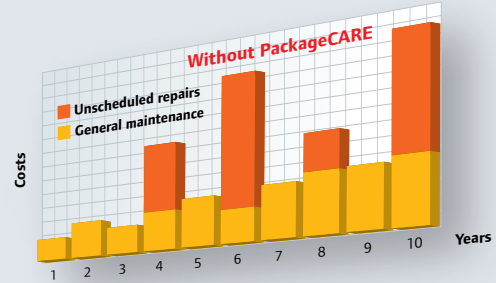
**PackageCARE**

No matter where your facility is located, Ingersoll Rand is committed to serving you 24 hours a day, seven days a week, available to support you with innovative and cost-effective service solutions that will keep you running at peak performance.

Let Ingersoll Rand handle the pressures and responsibilities of managing a compressed air system with our signature service contract.

**With PackageCARE, you can...**

- Control costs and keep your equipment running at peak efficiency
- Protect yourself from all repair and replacement expenses over the life of the agreement
- Maintain or improve the operational efficiency of any compressor, regardless of age, make or model

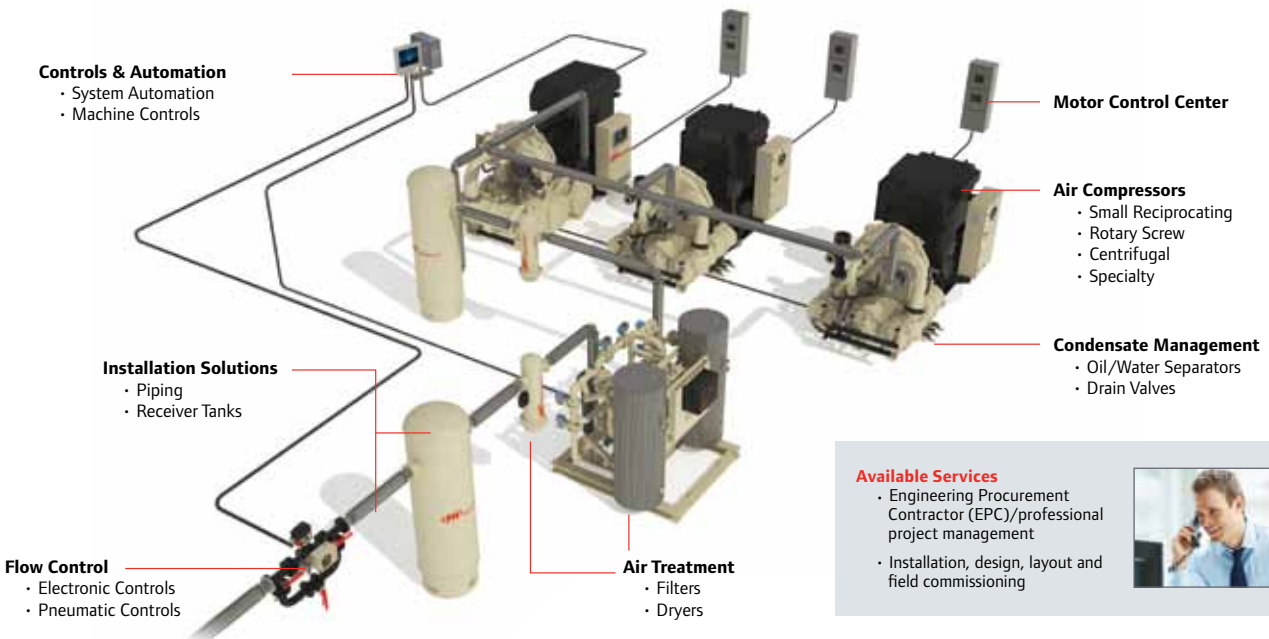


**Standard Pressure 3.1-12.7 bar g (45-185 psig)**

Model	Flow		Power	
	(m <sup>3</sup> /min)	(cfm)	(kW)	(hp)
C800	65 - 150	2300 - 5300	350 - 900	500 - 1100
C1000	127 - 212	4500 - 7500	700 - 1300	900 - 1750

Performance is nominal. Please contact Ingersoll Rand for specific data.

**Count on Ingersoll Rand for All Your Air System Requirements**





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