

# Centrifugal Air Compressors

Centac® C-Series 350-1,300 kW (500-1,750 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

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

ZUIS
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

## **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

## **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





# The Centrifugal Technology Your Industry Demands



#### Oil-Free, Risk 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.





#### **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 assesment capabilities to ensure years of reliable operation and maximum return on your investment.



#### Capital & Traditional Maintenance

- Lower maintenance costs
- Fixed cost of ownership

#### Power

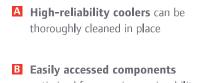
• Reduced energy consumption

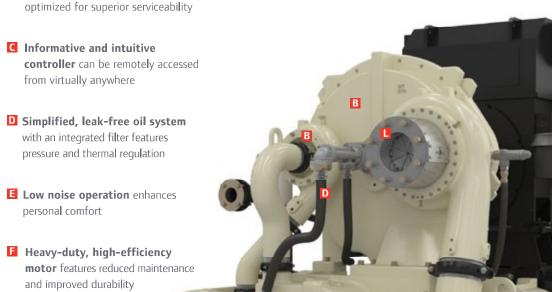
#### Lost Production

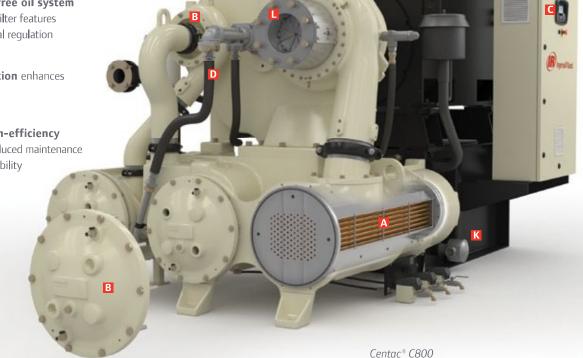
- No contamination, oil-free operation
- No unscheduled plant interruptions due to air compressors

# Innovative Design...Maximum Flexibility

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



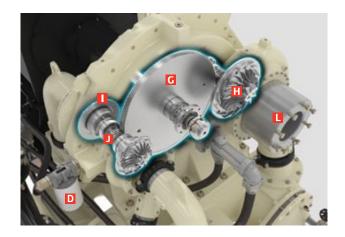




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## **C-Series Rotating Assembly**

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



- **G** Long-life gears AGMA rated with low loading profile
- High-efficiency impellers and diffusers designed with leading edge software maximize peak performance and extend turndown ■ High-capacity bearings offer high load capability and low vibration E 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 ■ Inlet guide vanes decrease energy consumption up to 10% 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
- Sequences up to four additional controlled compressors with no additional hardware

#### **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

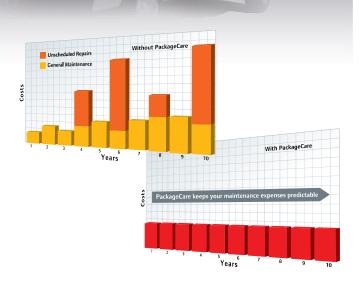
## Ingersoll Rand...At Your Service

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 owning 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.

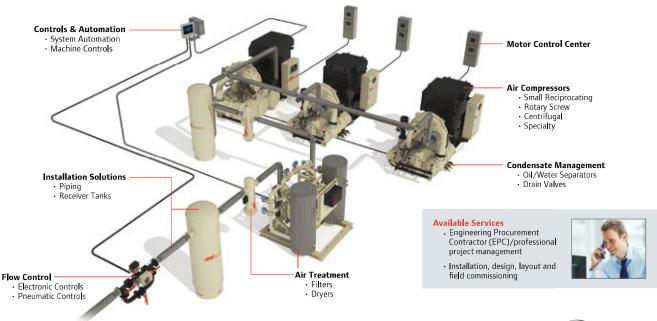


Package Care

Standard Pressure 3.1-12.7 bar g (45-185 psig)				
	Flow		Power	
Model	m³/min	cfm	kW	hp
C800	65 - 147	2,300 - 5,200	430 - 900	500 - 1,100
C1000	127 - 212	4,500 - 7,500	700 - 1,300	900 - 1,750

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

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





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