



Heat of Compression Dryers

420-3,680 m³/hr (250-2,165 scfm)



Clean, Dry Oil-Free Air

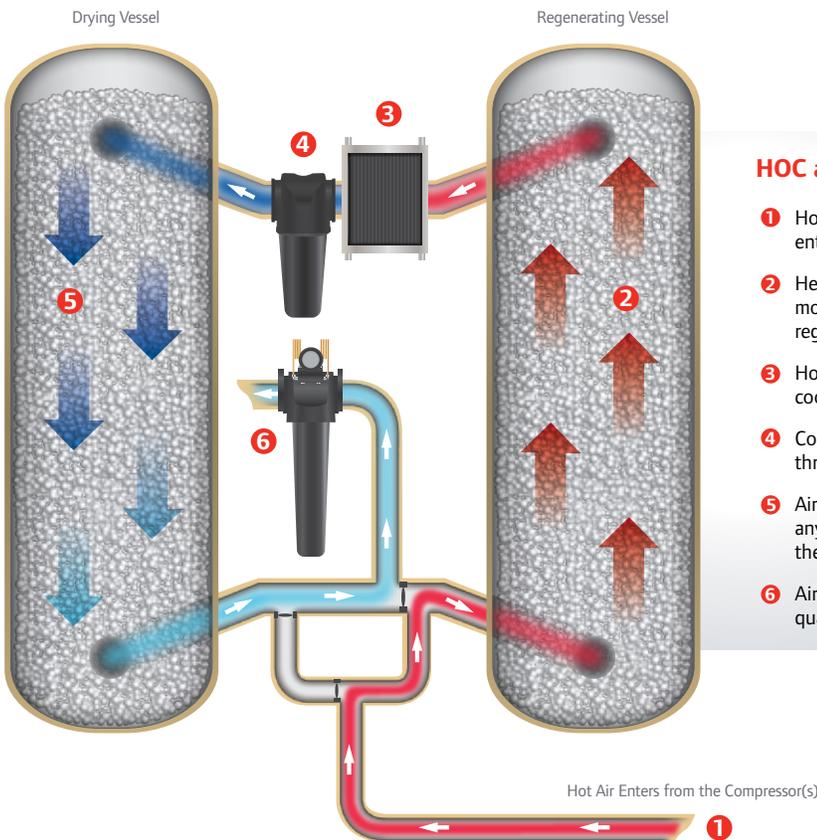
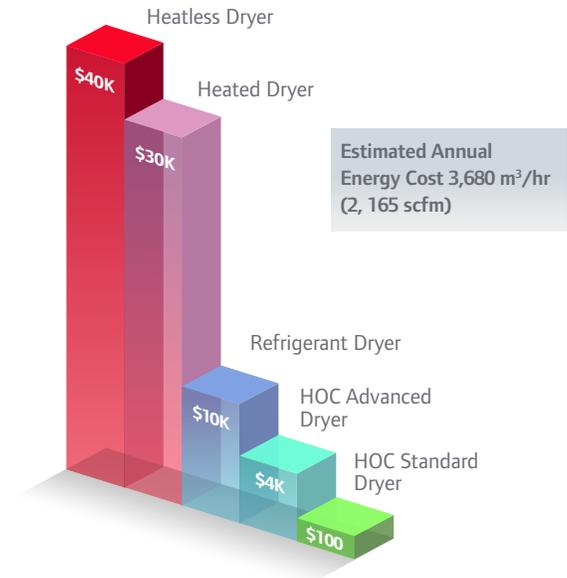
Ingersoll Rand heat of compression (HOC) dryers provide energy efficiency, flexibility and reliability.

Energy Efficiency

Ingersoll Rand HOC dryers provide instrument quality air at operating costs well below those of typical desiccant dryer designs.

- HOC dryers utilize the heat already generated by the air compression process, which is normally considered waste
- Low pressure drop design conserves energy by permitting the air compressor to run at lower pressures
- Highly efficient, patented stainless steel heat exchangers provide optimal performance
- The Standard HOC model consumes less than 150 watts, which is equivalent to the energy consumed by one light bulb

HOC Energy Consumption Comparison



HOC at Work, Saving You Energy

- 1 Hot air from one or more compressors enters the dryer.
- 2 Heat energy from the hot air removes moisture from the desiccant being regenerated.
- 3 Hot air enters the heat exchanger and is cooled causing moisture to condense.
- 4 Condensate is removed from the air through a moisture separator.
- 5 Air flows through the drying vessel, where any remaining moisture is adsorbed by the desiccant.
- 6 Air exits through a filter providing high quality, instrument grade compressed air.



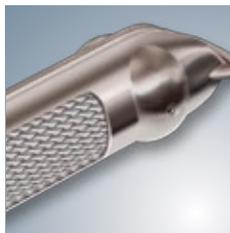
Flexibility to Accommodate Your Application

Ingersoll Rand recognizes that each customer's application is unique. That is why we designed our HOC dryers with flexibility to accommodate:

- Air-cooled or water-cooled applications
- Ingersoll Rand or other oil-free compressors
- Existing compressors through field upgradable/retrofit options

The HOC dryer was also specifically designed with a low profile to facilitate ease of installation and maintenance as well as promote safety.

- Critical components are within easy reach for safe and simple maintenance
- Low overall height fits areas with low overhead clearance



Reliability You Can Count On

Tried-and-true components, combined with innovative technology, yield reliable HOC dryers.

- High performance switching valves are designed for high temperature compressed air service
- Highly efficient, patented stainless steel heat exchangers provide optimal performance under the harshest conditions
- Particulate after-filter delivers clean air to processes
- Long lasting, high quality desiccant ensures reliable dew point performance
- No-loss drains with auto-bypass ensure condensate removal

Superior Features, Solid Dependability

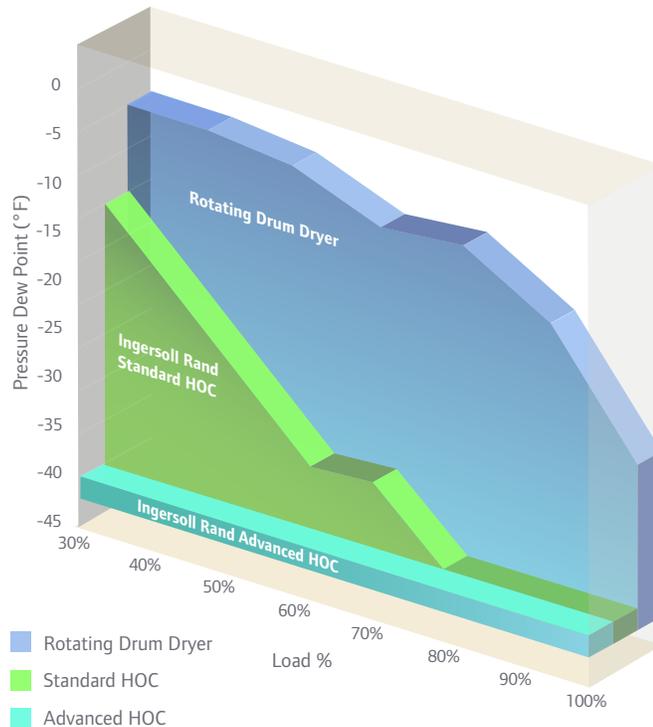
The Ingersoll Rand family of HOC dryers offers reliable performance and easy to use, intuitive controls.

Performance

Ingersoll Rand HOC dryers deliver consistently clean, dry air for critical processes.

- Instrument quality air for a variety of applications
- Optional Advanced HOC model with Smart Control provides -40°C (-40°F) pressure dew point from 0% to 100% load
- Unique twin-cooler design minimizes dew point and temperature fluctuations
- Advanced HOC model can be used with multiple compressors, resulting in a reduced footprint and lower installation costs

Better Performance - Higher Quality Air



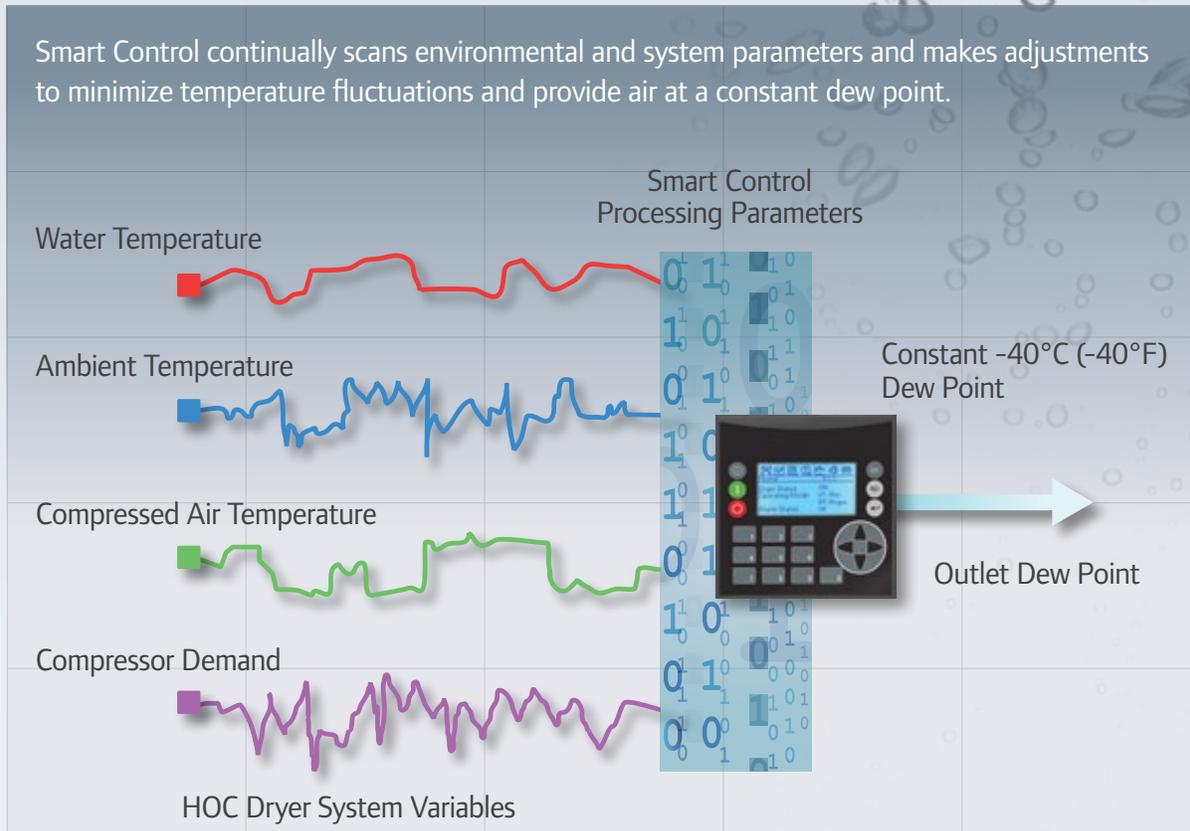
Full-Featured Controller Comes Standard

The new full-featured controller on Ingersoll Rand HOC dryers is user-friendly to set up and intuitive to operate.

- **Interface:** Simple navigation, icon-based interface with backlit LCD display, integrated touchpad and multiple languages
- **Operation:** Precise control of valve positioning, real-time dryer function monitoring and alarm logging
- **Indicators:** Multi-point critical temperature tracking, maintenance alerts and key alarms
- **Communications:** Modbus via RS-485 interface and compatibility with Ingersoll Rand system automation

How Smart Control Works

Reliable, high quality air—Ingersoll Rand Advanced HOC dryers use Smart Control to adapt dryer operation to system and environmental changes, ensuring a constant -40°C (-40°F).



Why Smart Control

The problems created by having moisture in your compressed air system can range from an annoyance to wreaking havoc on your equipment and end products.

- Premature wearing and scoring of surfaces
- Rust and corrosion in tools, piping and equipment
- Damaged instruments
- Spoiled paint surfaces
- Increased scrap rate
- Unsafe or unpleasant work environment



Ingersoll Rand...At Your Service

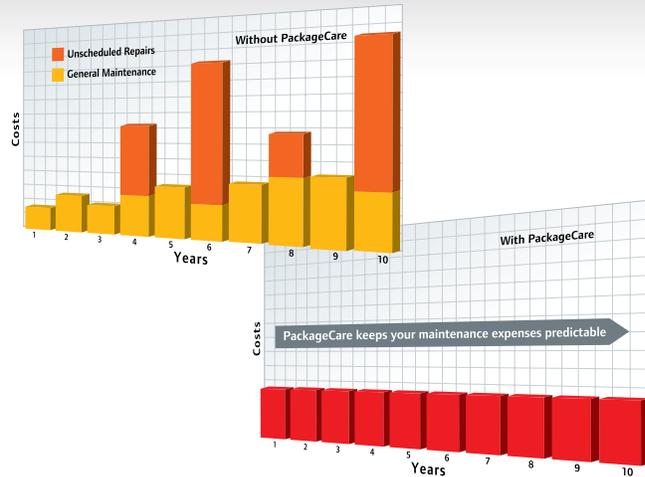
No matter where your facility is located, Ingersoll Rand is committed to serving you 24 hours a day, seven days a week, available to support you with innovative and cost-effective service solutions that will keep you running at peak performance.



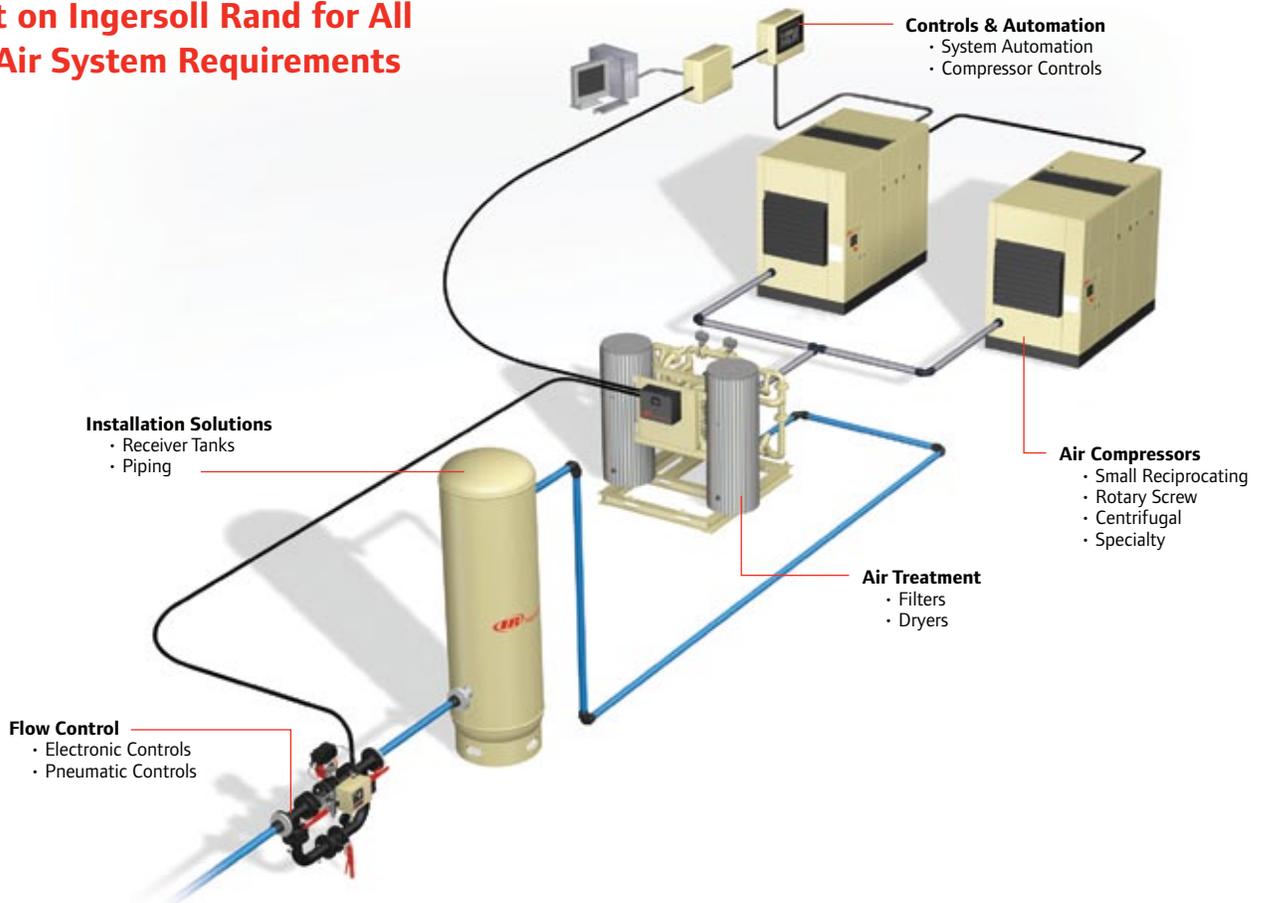
Let Ingersoll Rand handle the pressures and responsibilities of owning a compressed air system with our signature service contract.

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.



Count on Ingersoll Rand for All Your Air System Requirements



HOC Dryers Combined Specifications

Model*	Capacity		Inlet/Outlet Connection	Dimensions† Length x Width x Height cm (in)	Weight		Compatible Compressors		
	m³/hr	scfm			Approximate kg	lb	Nirvana hp	Sierra hp	Centac hp
D420EHS/A	420	250	1-1/2" FPT	143 (58) x 152 (60) x 193 (76)	920	2,020	50-60	50	-
D680EHS/A	680	400	2" FPT	221 (87) x 193 (76) x 236 (93)	1,300	2,870	75	60-75	-
D850EHS/A	850	500	2" FPT	221 (87) x 193 (76) x 236 (93)	1,640	3,610	100	100	-
D1020EHS/A	1,020	600	3" FPT	221 (87) x 193 (76) x 236 (93)	1,970	4,350	125	125	-
D1360EHS/A	1,360	800	3" FPT	224 (88) x 213 (84) x 221 (87)	2,180	4,800	150	150	-
D2040EHS/A	2,040	1,200	4" FLG	259 (102) x 224 (88) x 221 (87)	3,050	6,730	200	200-250	-
D2720EHS/A	2,720	1,600	4" FLG	264 (104) x 229 (90) x 252 (99)	3,400	7,490	-	300-400	400
D3680EHS/A	3,680	2,165	6" FLG	328 (129) x 244 (96) x 252 (99)	4,670	10,290	-	-	450-500

*"S" for Standard model and "A" for Advanced model

†Dimensions for water-cooled models

Dryers rated at 7 bar g (100 psig), 35°C (95°F) ambient air temperature and 29°C (85°F) water temperature for water-cooled dryers.

Standard Features	Standard	Advanced
UL-listed, NEMA 4 electrical enclosures	●	●
Tower insulation	●	●
High-performance switching valves	●	●
No-loss drain system	●	●
High condensate alarm with back-up drain	●	●
High-efficiency separator	●	●
Tower pressure gauges	●	●
Tower temperature gauges	●	●
Stainless steel heat exchangers	●	●
1 micron after-filter	●	●
ASME vessels	●	●
Modbus connectivity	●	●
Remote alarm contact	●	●
Remote start/stop	●	●
Full-featured controller	●	●
Smart Control with constant -40°C (-40°F) dew point	N/A	●
Optional Features	Standard	Advanced
Air-cooled	○	○
Dew point transmitter	○	○
Three-valve dryer bypass	○	○
Stainless steel control air tubing	○	○
NEMA 4X stainless steel enclosures	○	○
Class I Div 2	○	N/A

● Standard Feature ○ Optional Feature



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