



Heat of Compression Dryers

420 - 3,680 m³/hr (250 - 2,165 scfm)



Clean, Dry Oil-Free Air

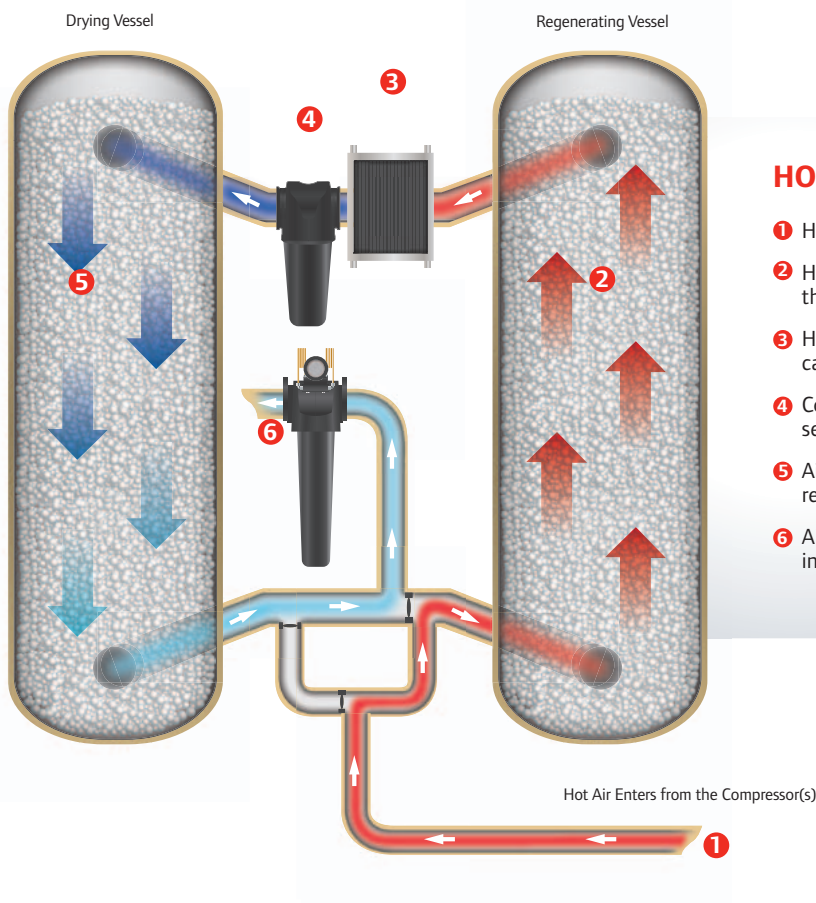
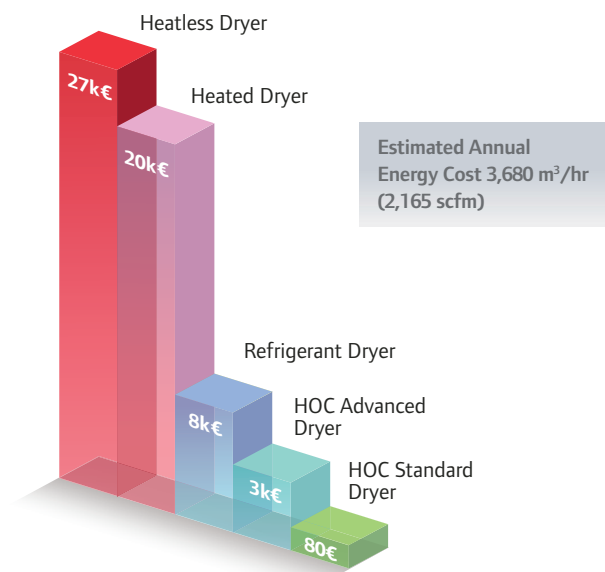
Ingersoll Rand heat of compression (HOC) dryers provide energy efficiency, flexibility and reliability.

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.



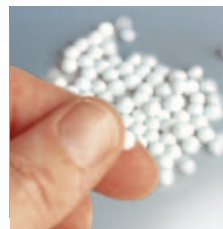
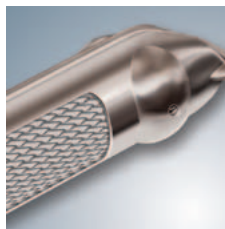
Flexibility to Accommodate Your Application

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

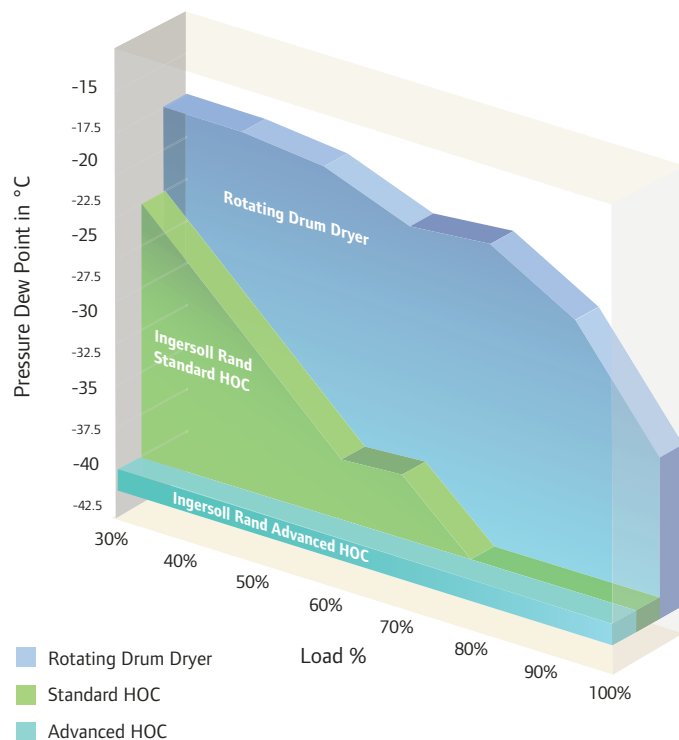
The Ingersoll Rand family of HOC dryers offers reliable performance and easy to use, intuitive controls.

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

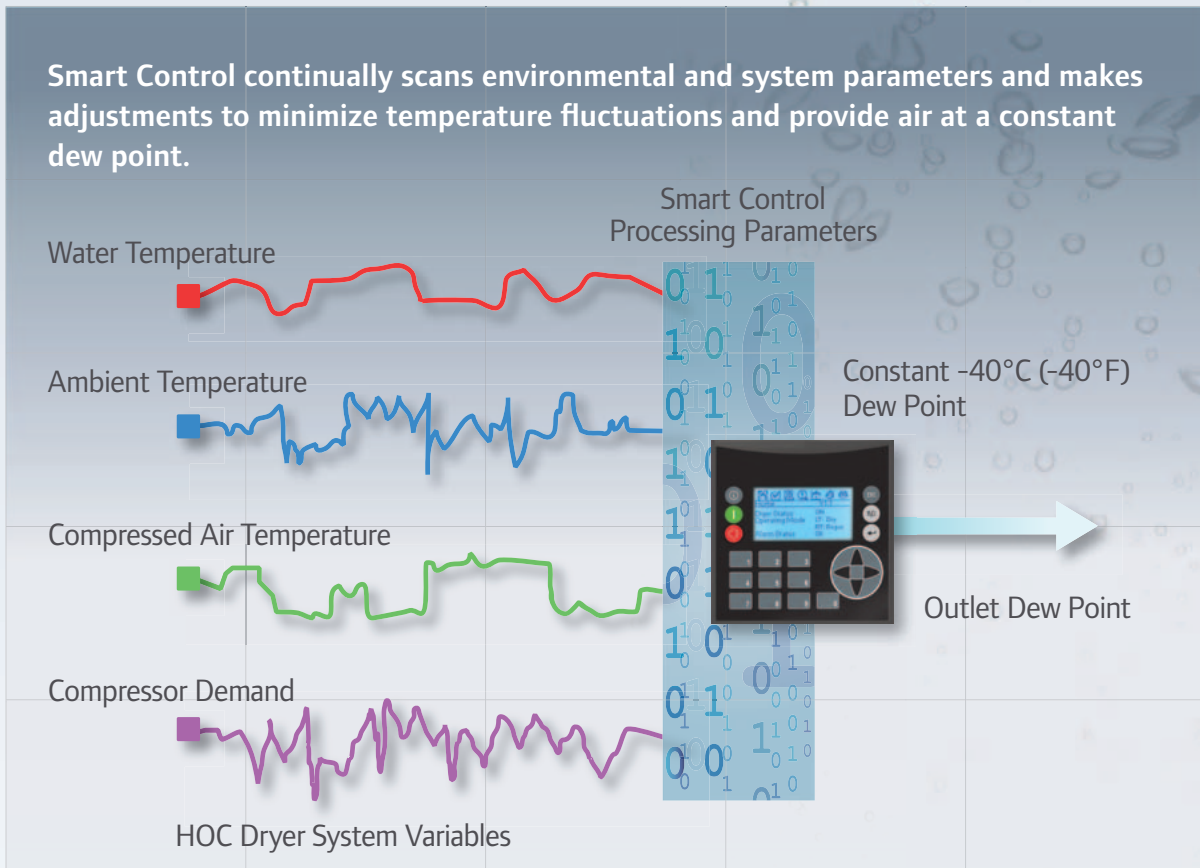
The new full-featured controller on Ingersoll Rand HOC dryers is user-friendly to set up and intuitive to operate.

- **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

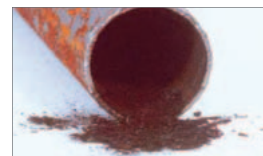
Reliable, high quality air—Ingersoll Rand Advanced HOC dryers use Smart Control to adapt dryer operation to system and environmental changes, ensuring a constant -40°C (-40°F).



Why Smart Control

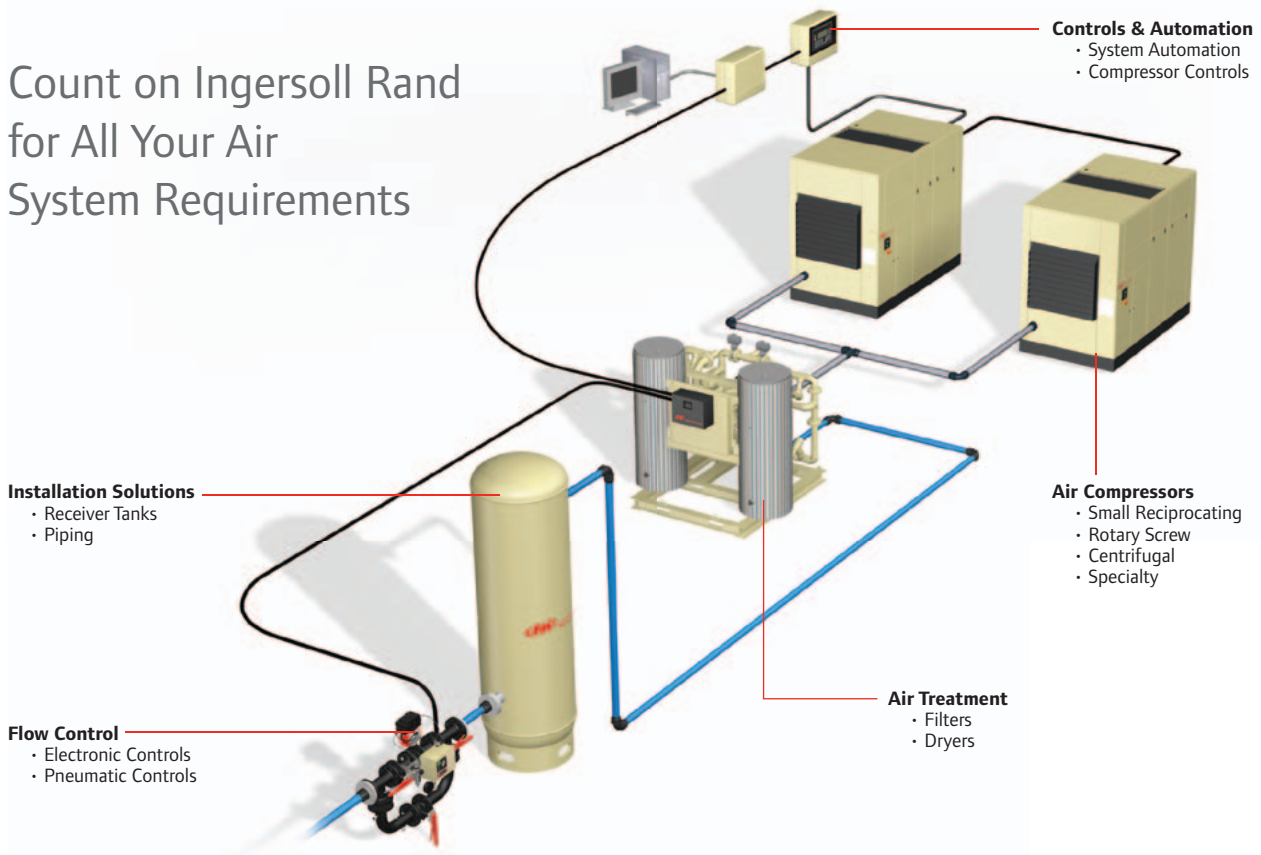
The problems created by having moisture in your compressed air system can range from an annoyance to wreaking havoc on your equipment and end products.

- 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

Count on Ingersoll Rand for All Your Air System Requirements

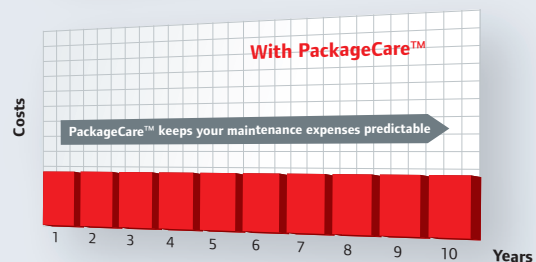


No matter where your facility is located, Ingersoll Rand is committed to serving you 24 hours a day, seven days a week, available to support you with innovative and cost-effective service solutions that will keep you running at peak performance.

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.





HOC Dryers Combined Specifications								
Model ⁽¹⁾	Capacity		Inlet / outlet connection	Dimensions ⁽²⁾ Length x Width x Height cm	Weight kg	Compatible compressors		
	m ³ /hr	scfm				Nirvana [®] kW	Sierra [®] kW	Centac [®] kW
D420EHS/A	420	250	1 1/2" BSP	143 x 152 x 193	920	37-45	37	-
D680EHS/A	680	400	2" BSP	221 x 193 x 236	1300	55	45-55	-
D850EHS/A	850	500	2" BSP	221 x 193 x 236	1640	75	75	-
D1020EHS/A	1020	600	3" BSP	221 x 193 x 236	1970	95	95	-
D1360EHS/A	1360	800	3" BSP	224 x 213 x 221	2180	110	110	-
D2040EHS/A	2040	1200	DN 100	259 x 224 x 221	3050	150	150-190	-
D2720EHS/A	2720	1600	DN 100	264 x 229 x 252	3400	-	225-300	300
D3680EHS/A	3680	2165	DN 150	328 x 244 x 252	4670	-	-	335-375

(1) "S" for Standard model and "A" for Advanced model.

(2) 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 model	Advanced model
IP54 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	●	●
PED 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		
Air-cooled	○	○
Dew point transmitter	○	○
Three-valve dryer bypass	○	○
Stainless steel control air tubing	○	○
IP65 stainless steel enclosures	○	○
Vessels hydrostatic test	○	○
Galvanized vessels	○	○
Galvanized manifolds	○	○
Marine painting	○	○
Stainless steel electrical cabinet	○	○
Dryer skid	○	○
Filters skid	○	○
Dual filter package at dryer outlet	○	○
60 Hz version	○	N/A
ANSI connections battery limits	○	○
Liquid filled gauges	○	○
ASME design (no U-Stamp)	○	○
Quality control documents	○	○
3.1 material certs	○	○
Factory acceptance test	○	○
Export boxing	○	○
Seaworthy packaging	○	○

● Standard Feature ○ Optional Feature



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