Heatless, Heated and Heated Blower Desiccant Air Dryers

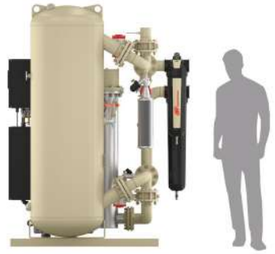
90-8,000 scfm

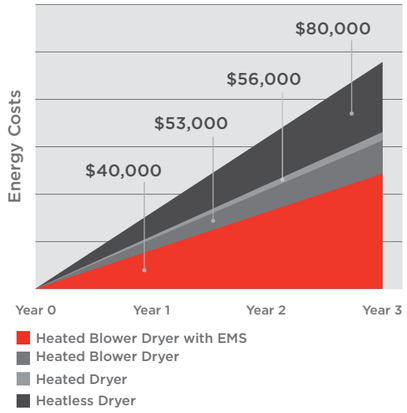
Innovative Design is Now Within Reach

Ingersoll Rand® heatless, heated and heated blower desiccant dryers are engineered for easy access, maximum efficiency and long life. Their state-of-the-art, low-profile design makes installation and operation a snap.

Low Profile for Easy Maintenance

Our low-profile design provides easy access to key maintenance points. Dryer manifolds are ergonomically designed to be serviced at operator level without the use of ladders, enhancing overall safety. Valves are easily accessible for routine maintenance and inspection. The lower silhouette also allows upright shipment and facilitates simpler installation.





Designed for Lower Energy Costs

- State-of-the-art Energy Management System (EMS) maximizes energy efficiency while maintaining a constant dew point (standard on HBA models 3,000 scfm and larger, otherwise optional)
- Heater and blower shut off to save energy once desiccant regeneration is completed
- Solid state relays provide precise heater control, reduced heating times and extended heater life

New Premium Heated Blower Design

Our updated premium heated blower desiccant dryer provides features that drive lower operating costs, reliability and serviceability:

- New intuitive color touchscreen controller with Modbus RS-485 and Ethernet communications protocols for remote monitoring
- Updated heater control circuit improves reliability
- Blower easily serviceable from front of unit

Find the Right Dryer for Your Application

COMPRESSED AIR DESICCANT DRYERS

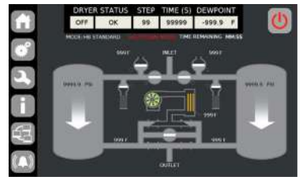
Built-in Reliability

Each desiccant dryer model combines innovative engineering and technically advanced, highly durable components both internally and externally. These desiccant dryers are easy to install, operate and maintain.

Long Life Desiccant

Our high strength, non-acidic desiccant provides maximum performance and is easily stored and handled. It is environmentally friendly, eliminating worries associated with other types of dryers, like refrigerant leaks, spills and disposal.

HLA controller



HBA touchscreen controller

Advanced Controllers Maximize Uptime

- Intuitive backlit LCD display (EH, HLA) and new touchscreen (HBA) simplify operation
- Constant function monitoring minimizes downtime
- Matches dryer control to load/unload state of compressor

Robust Packaging and Components

- Rear-mounted inlet and outlet manifolds provide convenient access to critical valves and components for easier and safer service and maintenance as compared to other competitive designs
- Standard NEMA 4 enclosures suitable for indoor and outdoor applications, protect against dirt, dust, moisture and ice
- Long life switching and purge valves with extended service intervals
- Heatless back-up mode for heated and heated blower models in the event of a malfunction
- Innovative solid-state relay heater control to extend valve and heater life

Find the Right Dryer for Your Application

Selecting the Right Desiccant Dryer

Choose desiccant dryers when very low dew points are necessary for high-quality air and to prevent potential freeze-up. Depending on whether you require lower initial capital costs, or lower energy use, Ingersoll Rand has a desiccant dryer that fits your needs.

What Differentiates Ingersoll Rand Desiccant Dryers

Ingersoll Rand desiccant dryers are designed to reduce costly production interruptions due to moisture. All of our dryers use twin desiccant towers and strategically positioned valves for drying compressed air.

To allow air to flow through the dryer in case of power loss, switching valves are normally open, while purge valves are normally closed. There are strategically placed filters that remove oil and contaminants to ensure only clean, dry air exits the dryer. Every dryer has a NEMA 4 rating that ensures increased protection of electrical components, controls and displays. Heatless, heated and heated blower dryers have several standard features that ensure high quality operation. Custom dryer options are available to fit the needs of your air system.

How Desiccant Dryers Work

Highly adsorbent desiccant removes moisture from compressed air as it passes through the online dryer tower. The difference between our three technologies is how moisture is desorbed from the desiccant (regeneration) as shown on page 5, and the tradeoff between a lower capital investment and lower operating operating costs.

Find the Right Dryer for Your Application

Heatless Dryers
Lowest initial investment, highest energy use

Heated Dryers
Compromise between capital investment and operating costs

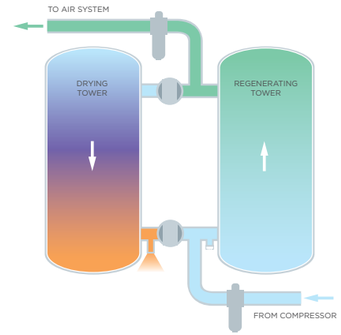
Heated Blower Dryers
Highest capital investment, lowest cost of ownership

Features and Options	Heatless Desiccant Dryer	Heated Desiccant Dryer	Heated Blower Desiccant Dryer
Energy Management System (EMS)	Option	Option	> 3,000 cfm Standard, < 3,000 cfm Optional
Compressed Air Used for Regeneration	15%	7.5%	0%
Controller	Digital Microprocessor	Digital Microprocessor	7" High-Performance PLC
Environmental Protection	NEMA 4	NEMA 4	NEMA 4
Flow Rating	90 scfm to 5,000 scfm	150 scfm to 8,000 scfm	150 scfm to 8,000 scfm
Average Pressure Dew Point	-40°F (Standard), -100°F (Optional)	-40°F (Standard), -100°F (Optional)	-40°F

COMPRESSED AIR DESICCANT DRYERS
OPERATE

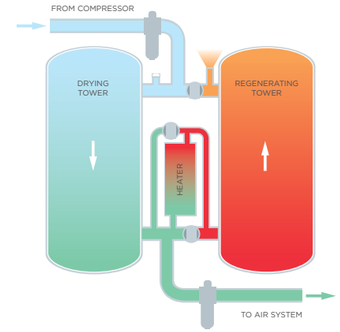
Heatless Dryers

The simplest of the three technologies, heatless dryers divert a portion of the dried compressed air to an off-line tower. This dry air then flows through and regenerates the desiccant. The purge air, now moisture laden, is harmlessly purged to the atmosphere. Lowest in capital investment, this technology may be more expensive to operate because it requires a portion of the dried compressed air to be diverted from the air system for desiccant regeneration.



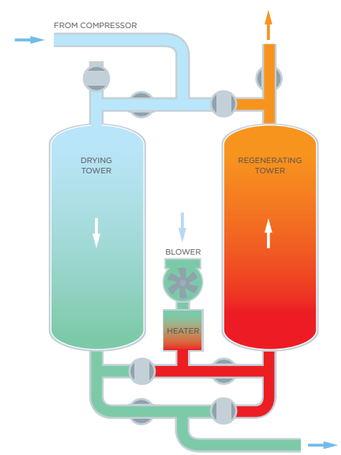
Heated Dryers

These dryers operate similarly to heatless dryers, except that dried air diverted from the air system first passes through a high-efficiency external heater before entering the off-line tower to regenerate the desiccant. Since this heated air can hold considerably more moisture than unheated air, only about half the amount of dried compressed air is needed for regeneration. Although the addition of the heater and associated components raises the initial capital investment for a heated dryer, less diverted compressed air means lower operating costs.



Heated Blower Dryers

This type of dryer does not divert dried compressed air from the air system to remove moisture from the desiccant in the off-line tower. Rather, it employs its own high-performance blower to direct ambient air through a heater and then through the off-line tower. There, the stream of heated air regenerates the desiccant. Heated blower technology requires the highest initial capital investment, but with little to no diversion of compressed air from the system for regeneration. It offers significantly lower operating costs than the other two desiccant dryer technologies.



Ensure reliability for the life of your compressed air equipment with our comprehensive maintenance programs. At Ingersoll Rand, we have one goal—to earn the right to be your trusted partner.

PlannedCARE™
We Help You

Maintenance Program Advantages

Compressed air is critical to your operation. A proper maintenance strategy is crucial to avoiding unplanned, unbudgeted downtime and production interruptions. By choosing an Ingersoll Rand maintenance agreement, you are investing in your future with a trusted partner.

Depending on your compressed air system we can customize a service program that best fits your needs. Our suite of CARE compressor maintenance programs range from total risk transfer of your equipment to Ingersoll Rand to more basic programs for parts and services only, providing flexible solutions for the life of your compressed air system.

Each of our maintenance programs offer significant benefits, including:

- Genuine OEM parts eliminate exposure to unnecessary equipment wear and tear, reducing downtime
- Rapid response, because as a CARE service program customer, you are our top priority
- Optimized services for your specific operation that are structured to lower electricity consumption
- Early detection and predictability that eliminates surprises and unwanted costs
- Automated shipment or scheduling reminders prevent overlooking or under-maintaining equipment
- Equipment that lasts longer and runs better by replacing the right parts at the right time
- 5-year extended warranty for all major components with PartsCARE™ or PlannedCARE™ agreement

Choose the Right Maintenance Program for You

IT ALL ADDS UP TO PEACE OF MIND

Lower Cost of Ownership

Our service programs provide the most cost-effective solutions based on your customized maintenance strategy.

Quality Results

Ingersoll Rand factory-trained service technicians are backed by more than 145 years of industry experience.

Increased Uptime

Service programs help decrease unplanned downtime and costly production interruptions.

Efficient Energy Use

Peak system efficiency is achieved through properly performed maintenance and inspection.

Peace of Mind

Our world-class services will help you achieve the results you need, while you focus on what's important to your business.

Desiccant Dryer Specifications

Model[1]	Flow -40°F PDP[2] scfm	In/Out Connections inches	Heater Rating kW	Average Heater kW	Blower hp
Heatless Desiccant Dryer					
HLA90-5000	90-5,000	1-3" NPT, 4-6" FLG	N/A	N/A	N/A
Heated Desiccant Dryer					
EH150-8000	150-8,000	1-3" NPT, 4-8" FLG	2-75	0.8-46.3	N/A
Heated Blower Desiccant Dryer					
HBA150-8000	150-8,000	1.5-3" NPT, 4-8" FLG	3-175	2.2-115.4	1.5-40.0

1 Pressure vessels are designed and constructed in accordance with ASME requirements, maximum working pressure 150 psig
2 Average Pressure Dew Point (PDP) at 100 psig, 100°F inlet air, 100°F ambient air

Reliable Compressed Air from Start to Finish

Maximize your total cost of ownership with Ingersoll Rand's extensive knowledge of compressor technologies, services, parts and accessories—**we are your trusted partner in compressed air systems.**

About Ingersoll Rand Inc.
Ingersoll Rand Inc. (NYSE:IR), driven by an entrepreneurial spirit and ownership mindset, is dedicated to helping make life better for our employees, customers and communities. Customers lean on us for our technology-driven excellence in mission-critical flow creation and industrial solutions across 40+ respected brands where our products and services excel in the most complex and harsh conditions. Our employees develop customers for life through their daily commitment to expertise, productivity and efficiency. For more information, visit www.IRCO.com.

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