

COMPACT AND VERSATILE COMPRESSED AIR AND GAS PURIFICATION

HEATLESS REGENERATED ADSORPTION DRYERS





Your organization depends on clean, dry compressed air. Any moisture can jeopardize that cleanliness leading to downstream corrosion, process downtime, and compromised production quality.

In operations that demand highly purified compressed air, heatless regenerated adsorption dryers are often the most effective means of generating very dry air that is also free of particulates and oil.

THE BENEFITS OF COMPRESSED AIR PURIFICATION



Enhance Product
Quality & Integrity



Maximize Efficiency
& Performance



Extend Equipment Life &
Minimize Operating Costs



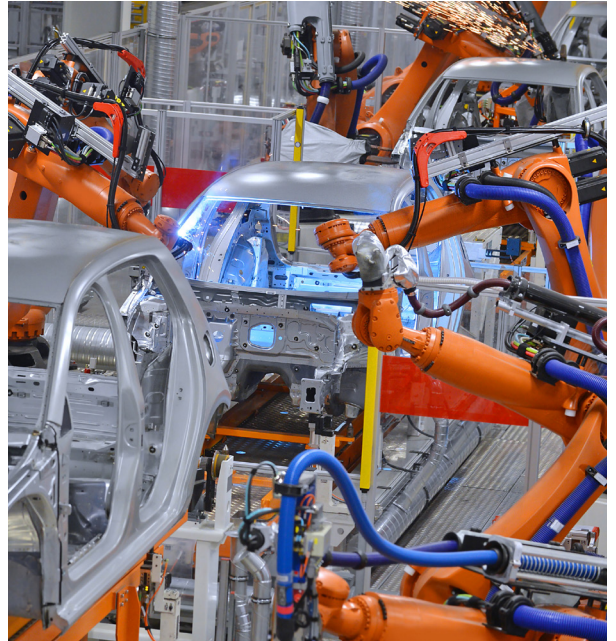
Increase Operational
Reliability



Advance Safety
& Compliance

Donaldson heatless regenerated adsorption dryers can be used in industries and applications wherever high purity and dry compressed air is essential to equipment performance and productivity.

- + Automotive
- + Bottling
- + Chemical
- + Energy
- + Food & Beverage Processing
- + Industrial Machinery
- + Laboratories
- + Laser Cutting
- + Marine
- + Medical
- + Optical Measuring Machines
- + Packaging
- + Painting
- + Pharmaceutical



ENGINEERED FOR YOUR OPERATION

Donaldson heatless adsorption dryers come with pre-filters, after-filters, and condensate drains, providing you with a complete system.

Choose the state-of-the-art, high-efficiency Donaldson adsorption dryer best suited to your needs.



Ultrapac™ Smart Heatless Adsorption Compressed Air Dryers

Modular Design, Intelligent Communication & Quiet Operation

The Ultrapac™ Smart dryer, with a flow range from **5 to 100 m³/h / 3 to 60 scfm at 7 bar g / 100 psig.**

FEATURES

- + Ultraeconomy dewpoint control (Superplus) supports better utilization of desiccant capacity by adjusting cycle times.
- + All silicone-free materials for silicone-free compressed air.
- + High efficiency with low consumption of regeneration air.
- + Modular design for flexible configurations.
- + Connected and Industry-4.0 ready.
- + UltraSilencer reduces noise and helps support your safety compliance program.
- + Easy maintenance and service.
- + Stable pressure dewpoint: -70°C / -95°F at 70% load, -40°C / -40°F at 100% load.
- + Compact stand-alone version can be used to reduce installation and maintenance costs.



Ultrapac™ HL Heatless Adsorption Compressed Air Dryers

Compact Unit with Pre- and After-Filters Installed

Ultrapac™ HL dryers are designed to consistently provide highly purified quality air in a flow range from **100 to 1,000 m³/h / 60 to 600 scfm** at **7 bar g / 100 psig**. The system's electronic, level-controlled drain located in the pre-filter means zero compressed air losses under normal operating conditions due to condensate removal, supporting reduced operating costs.

FEATURES

- + Ultraeconomy dewpoint control (Superplus) supports better utilization of desiccant capacity by adjusting cycle times.
- + All silicone-free materials for silicone-free compressed air.
- + Open frame design allows easy access to all components.
- + Stable pressure dewpoint: -70°C / -95°F at 70% load, -40°C / -40°F at 100% load.
- + Intermittent operation standard helps provide compressed air savings.

We also offer Ultrapac™ dryers with flow ranges up to **8,750 m³/h / 5,150 scfm**.



HLP High-Pressure Heatless Adsorption Dryers

Full Purification Package for High-Pressure Applications

The HLP series is a complete purification system for flow ranges of **40 to 1,200 m³/h / 24 to 705 scfm** at **25 to 400 bar g / 360 to 5,800 psig**.

FEATURES

- + Ultraeconomy dewpoint control (Superplus) supports better utilization of desiccant capacity by adjusting cycle times.
- + Stable pressure dewpoint: -40°C / -40°F at 100% load.
- + Intermittent operation standard supports compressed air savings.



DONALDSON DRYERS ARE DIFFERENT

UltraPleat™ Media Technology for Enhanced Efficiency

The innovative UltraPleat filtration technology used in our filters allows high separation efficiency of liquid particles and a high retention capacity for solid particles at low differential pressures, improving the efficiency of your dryer.

1. High-tech fiber filter media
2. Pleated form and structure
3. Special filter media coating
4. Outer stainless steel support sleeve



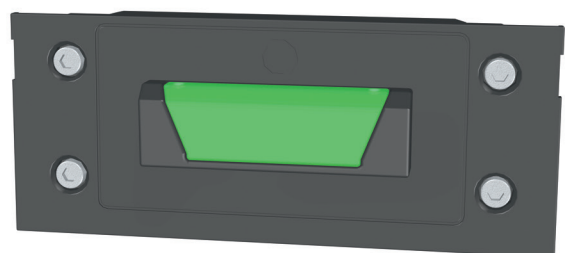
SMART CONTROLLER VARIANTS

Superplus



- + Touch Display
- + Alarm Contact
- + Smart Connectivity
- + Ultraeconomy (dewpoint control)
- + Intermittent Operation
(compressor coupling / remote on/off switch)

Standard



- + LED Signal
- + Alarm Contact
- + Intermittent Operation
(compressor coupling / remote on/off switch)



Silencer for Quiet Working Environment

All our heatless dryers come with silencers to reduce noise emissions in the workplace. The powerful UltraSilencer allows our Ultrapac™ Smart dryers to operate in the range of just 60 dB, which matches the volume of a normal conversation.



Service-Friendly Cartridge Exchange for Short Downtimes

Designed for simple maintenance and service, our dryers are equipped with accessible components that can be quickly and easily exchanged.



Oil-Free & Breathing Air Packages

The Oilfreepac™ HL-OFP and Oilfreepac™ Smart OFP dryer packages include integral activated carbon adsorbers for removing oil vapors and hydrocarbons for critical applications where the demand is oil-free and odor-free air.

We also offer the stand alone Ultrasorp HL-AKC and Ultrasorp AKC Smart carbon adsorber to remove oil vapors and hydrocarbons.

The Ultrapure HL-ALG and Ultrapure Smart ALG breathing air systems supply breathing air for most relevant international standards and medical prescriptions.

COMPLETE, COMPACT & VERSATILE

With their space-saving design, Donaldson's range of heatless regenerated adsorption dryers allows you to select the ideal drying solution for processes and applications that use small to medium volumes of compressed air. The dryers provide a complete and compact purification package in which:

1. An integrated pre-filter retains solid particulates and liquid aerosols (oil/water).
2. The adsorption dryer captures the moisture in the compressed air.
3. Lastly, the remaining solid particulates are retained in the integrated after-filter.

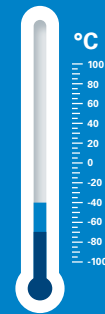
Depending on operating conditions, the three-stage purification system can be used to comply with purity class 1-2:1-2:1-2 according to ISO 8573-1:2010.

Compressed Air Quality Class	Dirt (solid particles) Maximum particle number per m³ particle size, d in µm			Water Pressure Dewpoint °C	Oil Concentration mg/m³
	0.10 < d ≤ 0.5	0.5 < d ≤ 1.0	1.0 < d ≤ 5.0		
0	Specified acc. to application and better than Class 1				
1	20,000	400	10	≤ -70	≤ 0.01
2	400,000	6,000	100	≤ -40	≤ 0.1
3	n.s.	90,000	1,000	≤ -20	≤ 1
4	n.s.	n.s.	10,000	≤ +3	≤ 5
5	n.s.	n.s.	100,000	≤ +7	> 5

Compressed air quality acc. to ISO 8573-1:2010

n.s. = not specified

Depending on the model, sizing, and operating conditions, **our dryers can achieve pressure dewpoints of -40°C/F to -70°C/-95°F with very low residual moisture.**



For more information on our heatless regenerated adsorption dryers, or for help identifying the right dryer for your application, contact your local Donaldson representative.



donaldson.com

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