

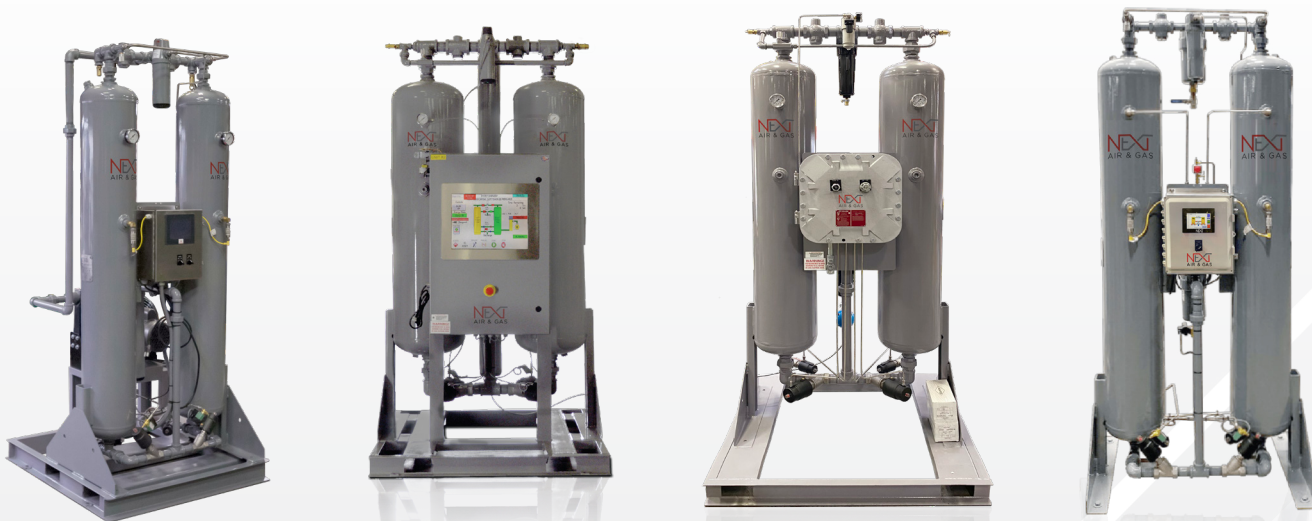
HEATLESS REGENERATIVE DESICCANT DRYERS

HDD Series (45-5,000 CFM)



NEXT
AIR & GAS

nxtdry.com



HDD Series Optional Features

Alternate Voltages:

- + ALT-V-1 208-230 Volts / 1 Phase / 50-60 Hz
- + ALT-V-2 24 Volt DC
- + ALT-V-3 12 Volt DC
- + PC Pneumatic Control

Electrical Enclosure:

- + N4 NEMA 4 Electrical Enclosure
- + N4X-P NEAMA 4X Polycarbonate Electrical Enclosure
- + N4X NEMA 4X Stainless Steel Electrical Enclosure
- + N7 NEMA 7 Explosion Proof Electrical Enclosure

Controller:

- + ALT-C-1 NHDC-2201 (Digital Controller) — Standard on NHL Series Dryers
- + ALT-C-2 NHDC-2300 (Touch Screen Controller) — Standard on all HDD Series Dryers
- + ALT-C-3 NHABC (Allen Bradley Interface)

Condensate Drain:

- + FD Condensate Float Drain
- + EZLD Electronic Zero Loss Drain
- + MZLD Mechanical Zero Loss Drain
- + HPTD High Pressure Timer Drain

Dew Point & Digital Monitoring:

- + DCC+DDP Demand Cycle Control
- + DDPM-40 Digital Dew Point Monitor (-40° F)
- + DDPM Digital Dew Point Monitor (-100° F)
- + FTS Failure to Switch Alarm
- + DCA Dry Contact Alarm
- + ESS Emergency Stop Switch
- + RSS Remote Start / Stop

Bypass:

- + 3VBP Three Valve Bypass
- + 9VBP Nine Valve Bypass

Filtration:

- + DPF Dual Pre Filter (1 μ m , .01 μ m)
- + SP-F Special Filter Configuraton
- + FS Filter Skid

Packages:

- + LAP Low Ambient Package
- + SZ Subzero Package
- + RS Rental Skid
- + ZP Zero Purge

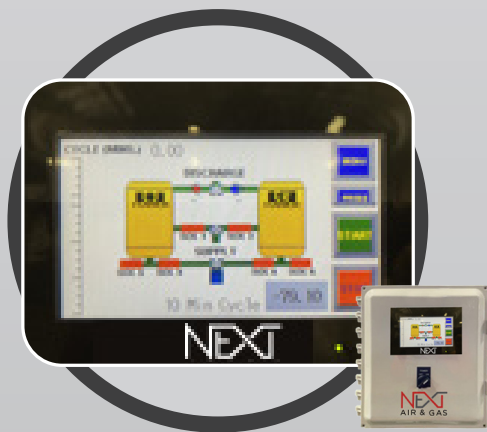
Construction:

- + NYM No Yellow Metal
- + SP-DIM Special - Dimension
- + SP-FLTR Special Filter Configuration
- + CSA Canadian Standards Association
- + CRN Canadian Registration Number (3000+ cfm)
- + BTS Built to Suit
- + IOPG Inlet-Outlet Pressure Guage
- + IOTG Inlet-Outlet Temperature Guage
- + TTG Tank Mounted Temperature Guage
- + VMI Visual Moisture Indicator
- + SST Stainless Steel Control Air Tubing
- + CR Control Line Pressure Regulator
- + EPH Electrical Panel Heater
- + AC Aftercooler
- + TAG Standard Stainless Steel ID Tags

AIR STREAM HDD SERIES HEATLESS DRYER



Premium Parts



State-of-the-Art PLC with Touchscreen Interface

Standard Features:

- 4.6 Color Touchscreen HMI Interface
- Energy Management System
- Filter Maintenance Indicator
- Modbus TCP Communication
- Remote Start Stop
- Outputs 10+
- Digital Dew Point Control Dew Point Trend
- Main Display Provides Multiple "at a glance" Data Points:
 - Dew Point
 - Drying, Regenerating, and Repressurizing Side
 - Time Remaining for Each State
 - Alarm Status
 - Process History
 - % Energy Savings

NEXT
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Premium Parts



Digital Dew Point Transmitter

The FA-500 & 510 are the ideal dew point sensors with integrated display and alarm relay for our desiccant dryers. dew point range: (-40° F to -100° F)

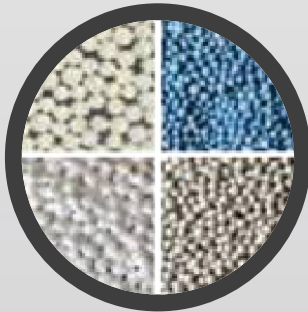
Standard Features:

- Modbus-RTU Interface
- Higher Resolution of Sensor Signal Through Improved Evaluation Electronics
- Sensor Diagnosis on Site with a Portable Device or Service Software
- Integrated Display
- Threshold Value Adjustable via Keypad Alarm Relay (max. 60 VDC, 0,5 A)
- Pressure-tight up to 350 Bar (special version)
- Extreme Long-Term Stability
- Quick Response Time
- 4.20 mA Analogue Output and After Control



Butterfly Valve (800 cfm and up)

These versatile, high-performance butterfly valves are used by Next Air & Gas to provide you with precision control and complete bubble-tight shut off. The digitally controlled actuators provide easy PLC interface and feature fast response time. The tongue-and-groove seat design feature ensures complete isolation of flowing media from the body and stem. Rugged and reliable, these valves are designed to provide years of trouble-free service.



Quality Desiccant Media

Next Air & Gas uses a mixture of absorption media in its heatless range of desiccant dryers to achieve consistent dew point. Activated Alumina, Molecular Sieve and Silica Gel are used in varying ratios depending on the application. The long lasting, high crush strength media has a very high surface to volume ratio.



State-of-the-Art Check Valve

High-temperature, wafer combination swing check valves are flow activated. The elliptical shape of the inlet port accelerates the inlet media through the valve. The disc's angle and shape allows the air to travel faster around the disc, thus creating lift like an aircraft wing, and opens the valve in full position even at low flow rate.



Angle Body Piston Valve (80 - 600 S.C.F.M)

These high-performance, 2-way direct acting valves are designed for reliability and durability. It uses a profiled disc in conjunction with a high-resolution compact positioner and linear feedback Potentiometer to provide precise proportional flow. The stainless steel internals and a tough fiber composite actuator body, along with the use of oversized bearing and Viton® seals, make it possible to consistently provide smooth piston movement for years of trouble-free service.

Premium Pleated Compressed Air Filtration

All HDD Dryers come standard with Pre & After Mounted Filtration (3/4" NPT to 8" FLG)



MADE IN THE USA

	HDD SERIES SPECIFICATIONS					
MODEL	FLOW RATE	PORT SIZE	WEIGHT (LBS)	DEPTH (IN)	WIDTH (IN)	HEIGHT (IN)
HDD-45	45 CFM	1/2" NPT	350 LBS	26"	30"	84"
HDD-60	60 CFM	3/4" NPT	410 LBS	26"	30"	84"
HDD-80	80 CFM	3/4" NPT	500 LBS	26"	30"	84"
HDD-100	100 CFM	1" NPT	550 LBS	26"	30"	84"
HDD-125	125 CFM	1" NPT	580 LBS	26"	30"	84"
HDD-150	150 CFM	1" NPT	610 LBS	26"	34"	85"
HDD-200	200 CFM	1" NPT	670 LBS	26"	34"	85"
HDD-250	250 CFM	1 1/2" NPT	800 LBS	26"	39"	86"
HDD-300	300 CFM	1 1/2" NPT	900 LBS	26"	39"	86"
HDD-400	400 CFM	2" NPT	960 LBS	26"	44"	87"
HDD-500	500 CFM	2" NPT	1150 LBS	26"	47"	88"
HDD-600	600 CFM	2" NPT	1195 LBS	26"	47"	88"
HDD-800	800 CFM	3" FLG	2150 LBS	40"	66"	97"
HDD-1000	1000 CFM	3" FLG	2550 LBS	40"	66"	97"
HDD-1250	1250 CFM	3" FLG	3050 LBS	40"	66"	97"
HDD-1500	1500 CFM	3" FLG	3300 LBS	40"	66"	97"
HDD-2000	2000 CFM	4" FLG	4950 LBS	59"	84"	115"
HDD-2500	2500 CFM	4" FLG	5950 LBS	60"	84"	115"
HDD-3000	3000 CFM	6" FLG	6050 LBS	CF	CF	CF
HDD-3500	3500 CFM	6" FLG	7050 LBS	CF	CF	CF
HDD-4000	4000 CFM	6" FLG	9550 LBS	CF	CF	CF
HDD-4500	4500 CFM	6" FLG	11050 Lbs	CF	CF	CF
HDD-5000	5000 CFM	6" FLG	13550 Lbs	CF	CF	CF

CAPACITY CORRECTION FACTORS FOR DIFFERING OPERATING PRESSURE															
Operating Pressure (PSIG)	50	60	70	80	90	100	110	120	130	140	150	175	200	225	250
Operating Pressure (BAR)	3.4	4.1	4.8	5.5	6.2	6.8	7.5	8.2	8.9	9.6	10.3	12	13.7	15.5	17.2
Correction Factor (F1)	0.56	0.65	0.74	0.83	0.91	1.00	1.04	1.08	1.12	1.16	1.20	1.29	1.37	1.45	1.52

CAPACITY CORRECTION FACTOR FOR DIFFERENT INLET AIR TEMPERATURES										
Inlet Air Temperature °F	70	80	90	100	105	110	115	120	130	
Inlet Air Temperature °C	21	26	32	37	40	43.3	46.1	48	54	
Correction Factor (F2)	1.12	1.01	1.06	1	0.93	0.86	0.80	0.75	0.62	

Air Flow Capacity - (F1) Operating Pressure X (F2) Inlet Air Temperature

Standard Features:

- Mounted Filtration
- NHDC-2300, 4.6 HMI Touch Screen Controller
- UL, CUL, Electrical Certifications
- ASME, CRN Code Welded Pressure Vessel Certification
- Stainless Steel Angle Body Valves/Butterfly Valves
- Tower Pressure Relief Valves
- Purge Adjustment Valve
- Purge Flow Indicator
- Horizontal Purge Exhaust Mufflers
- Tower Pressure Gauges
- Stainless Steel Desiccant Strainers
- Counter-Current Re-Pressurization
- Nema 12 Electrical Enclosure
- Field Adjustable Drying Cycle Time (6,10,15 min)
- Separate Drain and Fill Port
- Fail-Safe Design
- Common Alarm Output



A STANDING LEGACY

For over 40 years, The Zarif Air Treatment legacy companies have set the foundation for design, engineering, and mass manufacturing in the air treatment industry. Focusing on a new generation of air treatment products, Next Air & Gas is the next chapter of that legacy.

With a true passion for our brand, we settle for nothing less than the most innovative solutions available. We have over 10,000 dryers currently operating in the field across the globe, so you can rest assured you're working with an experienced engineering team offering truly trusted designs.

Next Air & Gas delivers a complete range of compressed air purification solutions that improve air quality throughout your facility—from the compressor room and beyond.

With decades of expertise in our specialized field, Next Air & Gas manufactures a complete product portfolio of compressed air treatment, filtration, process cooling, condensate management, gas dehydration, and gas generation products. We specialize in desiccant regenerative and refrigeration drying, and with our innovative, energy-efficient operation, offering reliable performance that will help increase productivity and lower operating costs for the air volume that fits your specific needs.

Next Air & Gas is proud to offer a broad spectrum of solutions to reduce energy costs, improve productivity, guarantee production quality, and help preserve the environment.



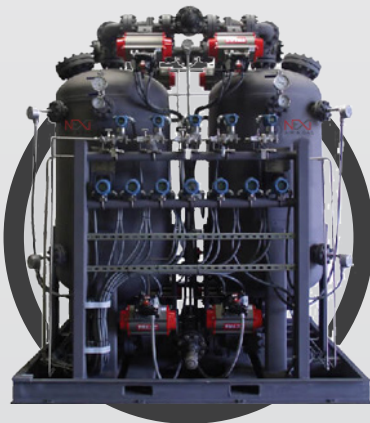
Externally Heated & Blower Purge Desiccant Dryers



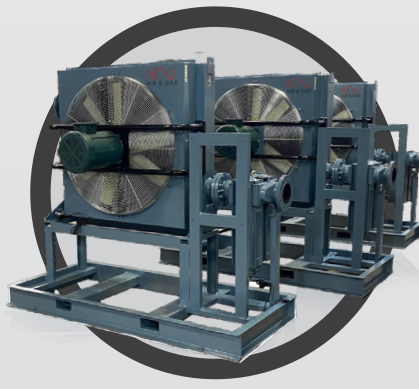
Cycling & Non-Cycling Refrigerated Dryers



Industrial Process Cooling



Gas Generation & Drying



Aftercoolers



Industrial Pumping Stations



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