

PNEUMATECH INC.

DESIGNED

for economical, trouble-free
performance and long-life reliability

MANUFACTURED

with high-quality components
and innovative techniques



SUPPORTED

by a world-wide distribution network of
compressed air management consultants

NON-CYCLING REFRIGERATED AIR/GAS DRYERS

10 to 4000 SCFM

WORLD LEADERS IN COMPRESSED AIR & GAS SYSTEM ENGINEERING

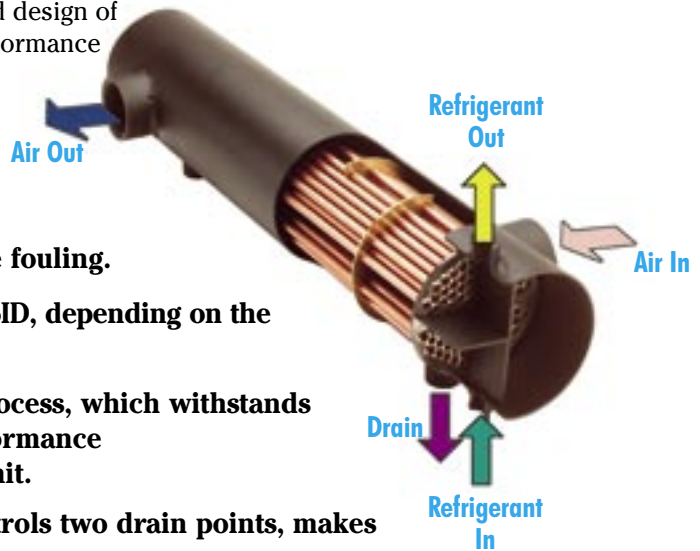
Pneumatech's

Exclusive Silver Bullet DX™ Design Heat Exchanger

The Pneumatech Difference

The critical difference across competitive lines of dryers is found in the heat exchanger. The quality and design of the heat exchanger largely determines the performance of the dryer. Pneumatech's Silver Bullet DX™ is the most efficient heat exchanger in the industry. Look to Pneumatech for:

- 39°F ± 2°F pressure dew point.
- Smooth-wall copper tubing to minimize fouling.
- Minimal pressure drop, from 2.0 - 4.5 PSID, depending on the model you choose.
- Pneumatech's unique silver brazing process, which withstands thermal shock, provides superior performance reliability and adds to the life of the unit.
- Panel-mounted timer drain, which controls two drain points, makes condensate removal adjustment easy.
- Digital Dry Guard (DDG) Control for ease of operation and dryer monitoring.



Advanced Heat Exchanger Technology

Pneumatech's proprietary design reduces maintenance, delivers high compressor reliability and increases the life of the compressor.

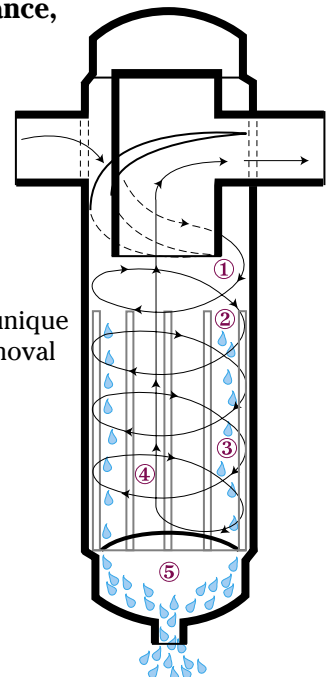
- Modular design and individually assembled and insulated heat exchangers allow easy access to components, making troubleshooting and maintenance, if required, effortless.
- All smooth-copper construction of heat transfer surface areas deliver higher thermal conductivity for efficient operation, less fouling and low maintained pressure drop throughout the dryer life.

Five-Step Centrifugal Separator

Pneumatech's outstanding Silver Bullet DX™ heat exchanger is paired up with our unique Five-Step Centrifugal Separator, which minimizes pressure drop and ensures the removal of all condensed water.

Here's how the Five-Step Centrifugal Separator works:

- ① Oversized separator chamber reduces velocity.
- ② Centrifugal action drives liquid toward chamber walls.
- ③ Liquid strikes impingement rods on chamber wall.
- ④ Air must change direction after striking curved impingement plate to exit.
- ⑤ Separated liquid enters the silent zone where it is collected for draining.



Refrigerated Dryer Options

Digital Dry Guard™ (DDG) Control

Introducing the Digital Dry Guard (DDG), a microprocessor based control now standard on models AD(W)-250 to AD(W)-4000. The most advanced operator control panel for refrigerated dryers on the market.

The Digital Dry Guard displays:

- Air in temperature
- Refrigerant suction temperature
- Ambient temperature
- Fahrenheit and Centigrade selection
- Alarm indicator
- Compressor running indicator
- Service due indicator
- Programmable auto-drain

Options: • Dew point temperature • Air-free auto drain • New mini air-free auto drain



• **Electrical Enclosures**

NEMA options available include NEMA 3R, 4, 4X, 7, 9, and 12 (NEMA 1 is standard on all dryers). Panel program UL 508 is an available option on all models.

• **Filters and Filter Mounting**

Particulate, Coalescing and Adsorber type filters are available from Pneumatech to protect the dryer and to provide clean, dry air to your plant (See Bulletin A-8). Pre- and after-filters, sized for your Pneumatech refrigerated dryer, can be factory mounted to simplify field installation, saving you time and money.

• **Gauges**

Analog gauges can be added in any combination to monitor inlet and outlet pressure and/or temperature, providing you with information critical to the success of your operation. NOTE: On/Off switch, Power On light, Hi Temp light and Refrigerant Suction (analyzer) gauge are standard on all Pneumatech Refrigerated Air Dryers.

• **Ambient Filter**

This option includes an ambient filter mounted on the condenser to protect the condenser in a harsh environment. The filter is easily accessible and removable for cleaning.

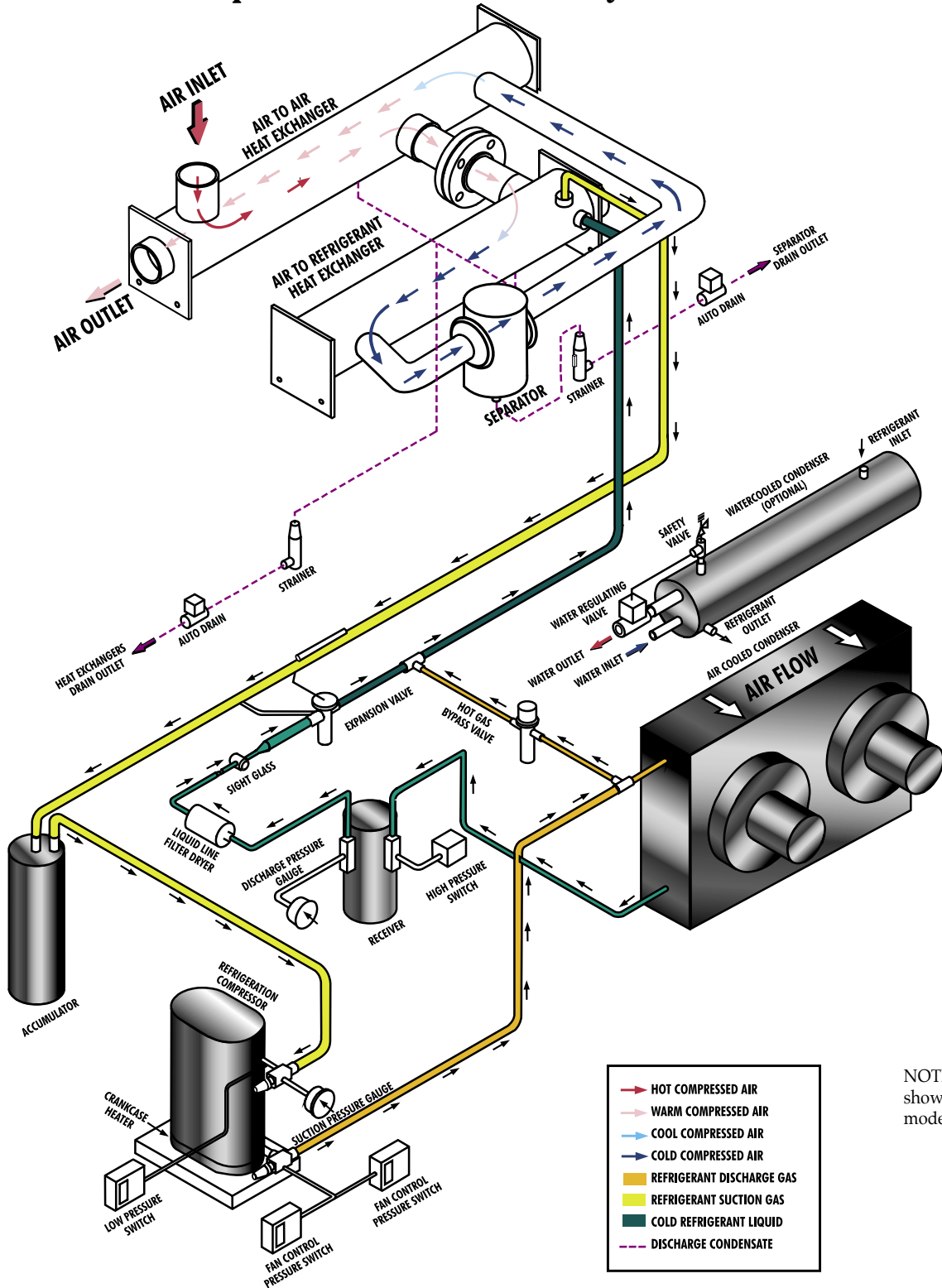
• **Cold Coalescing**

Pneumatech will install a matching coalescing filter at the coldest point in the compressed air system, just after the separator but before the air is re-heated in the air-to-air heat exchanger. The filter will be mounted exterior to the cabinet for ease of service and will be fully insulated to prevent sweating.

Non-Cycling Refrigerated Dryer Flow Diagram

Here's how it works...

- Cools
- Condenses
- Separates
- Drains Away



NOTE: Not all components shown are available on every model.

SPECIFICATIONS

Water:

MODEL SIZES	CAP.* SCFM (NM ³ /HR) PRES. DEW PT.		REFRIGERATION H.P.	DIMENSIONS INCHES (MILLIMETERS) L x W x H
	39 2°F	50 2°F		
AD-10	10 (17)	12 (20)	1/6	19 x 17½ x 17 (483 x 445 x 432)
AD-15	15 (25)	18 (31)	1/6	19 x 17½ x 17 (483 x 445 x 432)
AD-25	25 (42)	30 (51)	1/4	19 x 17½ x 17 (483 x 445 x 432)
AD-35	35 (59)	42 (71)	1/3	19 x 17½ x 17 (483 x 445 x 432)
AD-50	50 (85)	60 (102)	1/2	19 x 17½ x 17 (483 x 445 x 432)
AD-75	75 (127)	90 (153)	1/2	18 x 28 x 40 (457 x 711 x 1016)
AD-100	100 (170)	120 (204)	3/4	18 x 28 x 40 (457 x 711 x 1016)
AD-125	125 (212)	150 (255)	3/4	18 x 28 x 40 (457 x 711 x 1016)
AD-150	150 (255)	180 (306)	3/4	32 x 23 x 32 (813 x 584 x 813)
AD-175	175 (297)	210 (357)	1	32 x 23 x 32 (813 x 584 x 813)
AD-250	250 (425)	325 (552)	1½	32 x 23 x 32 (813 x 584 x 813)
AD-325	325 (552)	390 (663)	1½	39 x 31 x 44 (991 x 787 x 1118)
AD-400	400 (680)	480 (816)	2	39 x 31 x 44 (991 x 787 x 1118)
AD-500	500 (850)	600 (1020)	3	39 x 31 x 44 (991 x 787 x 1118)
AD-600	600 (1020)	720 (1223)	3	53 x 33 x 45 (1346 x 838 x 1143)
AD-750	750 (1274)	900 (1529)	4	53 x 33 x 45 (1346 x 838 x 1143)
AD-1000	1000 (1699)	1200 (2039)	5	53 x 33 x 45 (1346 x 838 x 1143)
AD-1200	1200 (2039)	1440 (2447)	5	56 x 34 x 48 (1422 x 864 x 1219)
‡AD-1500	1500 (2549)	1800 (3059)	7½	72 x 43 x 61 (1829 x 1092 x 1549)
‡AD-1700	1700 (2889)	2040 (3466)	7½	72 x 43 x 61 (1829 x 1092 x 1549)
‡AD-2000	2000 (3398)	2440 (4146)	10	72 x 43 x 61 (1829 x 1092 x 1549)
‡AD-2500	2500 (4248)	3000 (5098)	14	98 x 53 x 99½ (2489 x 1346 x 2527)
‡AD-3200	3200 (5437)	3840 (6525)	15	113 x 60 x 99 (2870 x 1524 x 2515)
‡AD-4000	4000 (6797)	4800 (8156)	20	150 x 80 x 116½ (3810 x 2032 x 2959)

* Capacity ratings, in accordance with recommended NFPA standards and Compressed Air & Gas Institute (CAGI) Standard No. ADF 100. Capacity ratings based on 100 °F (38 °C) inlet temp. and 100 PSIG (7.03 Kg/cm²) inlet pressure and 100 °F (38 °C) maximum ambient temp. Maximum pressure 150 PSIG (10.55 Kg/cm²).

‡ Open frame construction.

- Digital Dry Guard™ control standard on AD(W)-250 to AD(W)-4000.
- Float type auto drains installed on dryers AD-10 to AD-50. Electronic timer drain standard on AD(W)-75 to AD(W)-175, Digital Dry Guard™ drain control AD(W)-250 to AD(W)-4000.
- Water-cooled model prefix ADW (e.g. ADW-1000)
- Some standard model dryers AD-10 to AD(W)-2000 are UL and/or cUL listed. Some models CSA certified.
- All fractional HP dryers use R-134A refrigerant. All 1 hp and larger models use R-22.
- Standard voltage is 115-1-60 up to AD(W)-150, 208/230-1-60 for AD(W)-175 and 208/230/460-3-60 for models AD(W)-250 and larger. For other voltage options contact factory.
- Canadian standard voltage is 575-3-60 for models AD(W)-250 and larger.
- Silver Bullet DX on models AD(W)-150 to AD(W)-4000.

- Enters every air compressor. Once compressed, the air is cooled to 100°F and is 100% saturated with water vapor, regardless of the relative humidity of the ambient air, as long as any moisture is present at the after-cooler.
- Causes rust and scale, which clogs orifices, resulting in malfunctions of tools, controls, cylinders and instruments.
- Corrodes air and gas instruments, causing false readings, loss of product quality and manufacturing downtime.
- Contaminates products when compressed air is used in mixing and processing.
- Damages pneumatically spray-painted end products, resulting in fish-eyes, rejects and downtime.
- Washes away lubrication, causing undue wear, shortened life of tools, cylinders, motors, valves and moving parts.
- Wastes labor hours and compressed air when lines need purging before start-up.
- Drives up maintenance and repair costs caused by damage and disruptions throughout pneumatically operated systems.

For additional specification information, see Bulletin A-7-A.

PNEUMATECH[®] INC.



World Leader in Compressed Air Technology

For the most energy efficient compressed air products available in the market today, choose Pneumatech, Inc. and ConservAIR Technologies Company, LLP[®]

Pneumatech, Inc., manufacturer of air and gas dryers and component parts, has been a leader in the compressed air treatment industry since 1966. Pneumatech offers the broadest line of air drying equipment available.

The company's corporate offices and manufacturing operations are based in Kenosha, Wisconsin, U.S.A. Pneumatech also has production facilities in Shanghai, China, warehouses in Canada and Mexico, and a world-wide distribution and service network.

Pneumatech's dedicated and highly-trained team of compressed air management consultants includes nine product and design engineers, available to assist customers.

Pneumatech products achieve the highest levels of certification:

- Authorized for ASME welding and fabrication.
- Refrigerated dryers are UL and cUL listed, and rated to CAGI standard ADF-100.
- Electrical panels can be manufactured to UL 508 and/or CSA panel standards.
- Regenerative dryer tanks and air receivers are ASME certified and CRN registered in Canada.

In 1991, Pneumatech acquired a controlling interest in ConservAIR Technologies Company, LLP, which developed and patented its proprietary line of compressed air management systems. ConservAIR products eliminate fluctuations in air pressure at points of use. In addition to improving production, ConservAIR products save operating expenses and reduce energy consumption.

Pneumatech and ConservAIR products are unparalleled in performance, operational efficiency and durability.

A Pneumatech/ConservAIR consultant is standing by to help you evaluate your current and future compressed air system needs.

Compressed Air and Gas Institute (CAGI) member. CAGI is a sponsor of the Compressed Air Challenge[™] Pneumatech/ConservAIR, an Allied Partner in the U.S. Department of Energy's Motor Challenge Program

Distributed By:

PNEUMATECH[®] INC.

and ConservAIR[®] Technologies Co. LLP

4909 70th Avenue • Kenosha, Wisconsin U.S.A. 53144
(262) 658-4300 Fax: (262) 658-1945 • www.pneumatech.com

