

Deliquescent Air Dryers

*What are you doing
about removing the
condensate from your
compressed air system?*

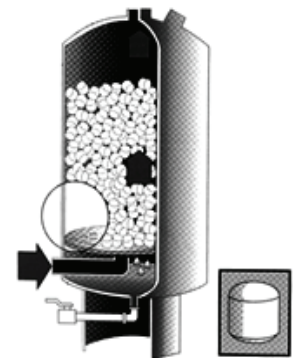
The AIR/TAK Deliquescent Air Dryers remove water from compressed air on demand. Whether it's summer or winter, day or night, full flow or reduced flow, the flexible AIR/TAK dryer responds automatically to system requirements. It can be easily installed wherever dry air is needed—indoors, outdoors, remote locations, mobile equipment or offshore.

Features:

- Energy-Free Dryer Eliminates Water in Indoor Air Lines
- Protects Outdoor Air Lines Against Freeze-Up
- No Electricity Required, No Moving Parts
- Low Pressure Drop Conserves Air Power
- Custom Sizes and Vessels For Higher Pressure also Available

Specifications:

- Maximum Working Pressure: 150 PSIG
- Maximum Inlet temperature: 115°F
- Dryer Vessel: ASME Code, Section VIII and latest addenda
- Support Grid: Stainless Steel
- Interior Finish: Corrosion-resistant polyurethane and epoxy paint
- Exterior Finish: Industrial enamel
- Standard Equipment: Sight glass, manual drain valve and pressure relief connection
- Optional Equipment: Motorized drain valve, zero loss drain valve, pressure/temperature gauge, pressure relief valve



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Deliquescent Dryers

The Simple Dryer

The drying process is completed in one pressure vessel that does not consume any energy and does not have any moving parts. It is economical to operate and maintain. Pressure drop through the single vessel is less than 1% of the operating pressure.

How Much Water?

During the continuous process the relative humidity of the compressed air reduced from saturation (100% RH) to almost half (55% RH) regardless of air pressure or temperature. The result is a 20°F dew point suppression. Dew point, the temperature at which moisture begins to condense, is 20°F lower than the inlet temperature to the dryer. For example, if the inlet air temperature is 80°F, the outlet dew point is 60°F; and no water will condense as long as the air lines are located in areas with temperatures above 60°F. Or, if the inlet air temperature to the dryer is 30°F, the outlet dew point is 10°F; and no water will form in the air lines above this temperature.

How It Removes Damaging Water

Wet inlet air flows into the bottom chamber and then flows through the bed support grid which evenly distributes air across the dryer. The air then flows upward through the bed of high powered Deli-Dry deliquescent tablets which absorb moisture vapor from the air. As the tablets slowly dissolve, the condensate drops into the claim area, and dry air flows through the outlet into the system piping.

Model Selection

To insure adequate drying capacity; use the lowest expected operating pressure at the location where the dryer will be installed in the system. On the Maximum Capacity chart, locate the column for the correct operating pressure, then read down to the flow rate (SCFM) which is equal to or greater than the required flow. Then read over to the left and find the model number.

Maximum Capacities (SCFM)

Dimensions (Inches) & Weights

MODEL NO.	70 psig	80 psig	90 psig	100 psig	125 psig	150 psig	A Overall Height	B Vessel Diam.	C In/Out Conn (NPT)	D Hgt. to Inlet	E Fill Port (Diam)	Deli-Dry Init. Fill (lbs.)	Vessel Wgt. (lbs.)
DD-48	35	39	43	48	58	68	37	8	1	5	2	40	85
DD-72	53	59	65	72	87	103	53	14	2	18-1/2	2	160	210
DD-150	110	123	135	150	182	215	57	14	2	18-1/2	2	190	230
DD-370	270	303	333	370	450	531	57	20	2	19-1/2	3 x 4	370	440
DD-520	380	426	468	520	633	746	67	30	3	22	3 x 4	975	655
DD-740	540	607	666	740	901	1062	72	30	3	22	3 x 4	1120	780
DD-970	708	795	873	970	1181	1392	72	36	4 Flg.	26	4 x 6	1350	985
DD-1250	923	1032	1141	1250	1522	1794	90	42	4 Flg.	15	11x 15	1500	1425
DD-1500	1107	1238	1369	1500	1826	2153	102	45	4 Flg.	15	11x 15	2000	1650
DD-1750	1292	1444	1597	1750	2131	2512	105	45	4 Flg.	15	11x 15	2450	1800
DD-2000	1477	1651	1825	2000	2435	2871	108	54	6 Flg.	18	11x 15	2900	2450
DD-2500	1846	2064	2282	2500	3044	3589	110	60	6 Flg.	18	11x 15	3650	2850

- Models for larger flow capacities or vessels for higher pressure also available. Contact factory for information.
- Certified drawings available upon request. Specifications subject to change without notice.

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