Turbo Dryer

AIRTEK

PREMIUM PRODUCTS FOR INDUSTRY

Blower Purge Desiccant Air Dryer

Turbo Dryer

The Airtek Turbo is a blower purge, single tower desiccant air dryer that affords the benefits of a twin tower heatless dryer, but with a much lower first cost and much lower operating cost. The Turbo is an industrial duty machine that will significantly outperform a refrigerated air dryer and cost far less to operate.

The Airtek Turbo will deliver pressure dew points as low as -40°F. and requires no purge.

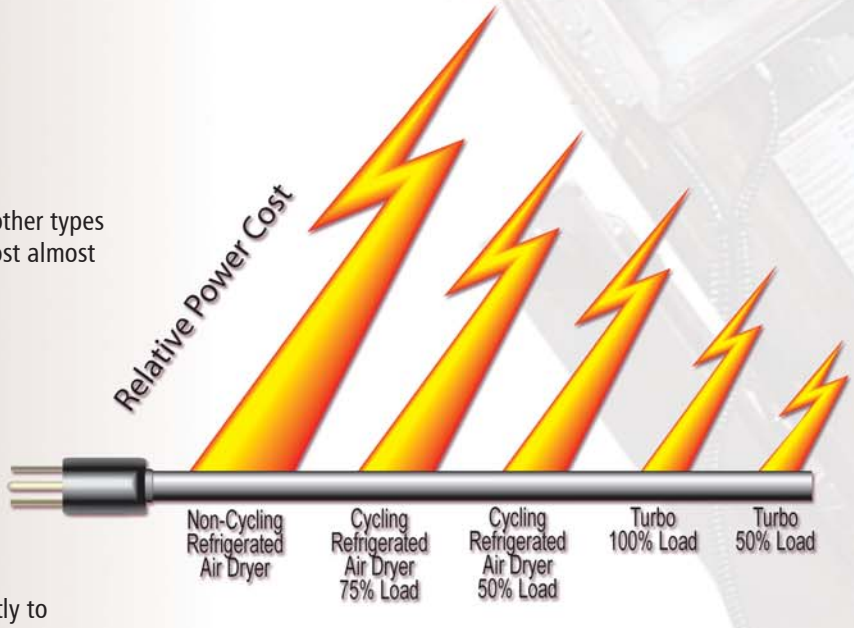
The Turbo is environmentally friendly. Because it is a desiccant dryer, it uses a chemically inert activated alumina to strip moisture from compressed air. There is NO FREON to deal with or worry about.

Available only as a pre-piped factory assembled package, the Turbo comes complete with programmable automatic controls, installed filters, electronic drains, element condition indicators, air operated automatic switching valves, and a full charge of Airtek's F-240 activated alumina.

Designed specifically for one or two shift industrial operations, the Airtek Turbo represents a truly outstanding compressed air treatment value.

Power Cost Comparison

(2 Shift Operation)



Energy Costs

Airtek Turbo Dryers use far less energy than other types of air dryers. In fact, refrigerated air dryers cost almost twice as much to operate as a Turbo.

Maintenance

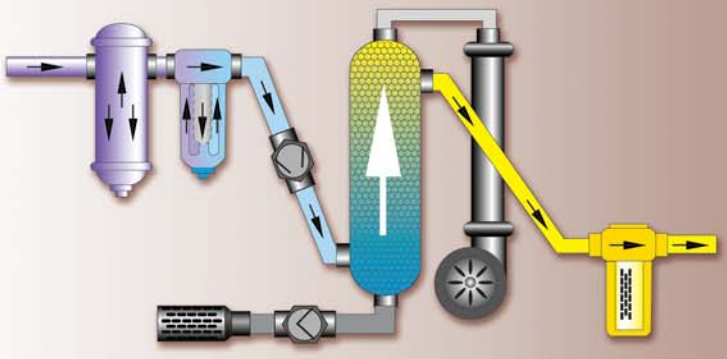
Airtek Turbo Dryers are considerably less costly to maintain than any other air dryer. The Turbo's simple design uses an industrial duty blower and a few valves. Refrigerated air dryers rely on the synergy of a complex assembly of moving parts, refrigeration compressors, mechanical balancing valves and enviromentally suspect refrigerant gasses (i.e. Freon) for proper operation, not withstanding the expense of the specilized equipment, personnel and licensing required for proper maintenance.

Benefits:

- No Process Air Used For Regeneration
- Dew Point Range From 0 to -40°F
- Lowest Operating Costs
- Minimal Maintenance
- 5 Year Heater Warranty
- Solid State Reliablity (PLC)

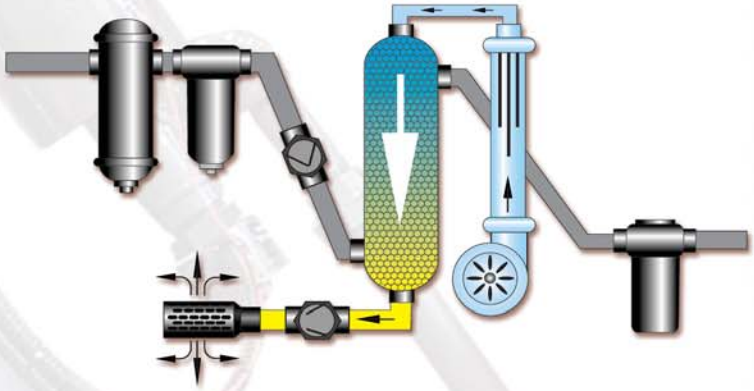
Turbo Dryer Flow Schematics

Drying (Up to 16 Hrs)



The Turbo Dryer uses real desiccant (F-240 Activated Alumina, NOT SALT) to dry the flow of compressed air.

Airtek Turbo Dryers purify compressed air by adsorbing water vapor. Pressure dew points as low as -40°F are attained by directing the flow of wet compressed air through a bed of activated alumina. As the compressed air passes through the drying chamber, its entrained moisture adheres to the surface of desiccant material. The compressed air then exits the chamber dry.



Regenerating (6 Hrs)

The Turbo's electronic master controller will automatically initate the regeneration cycle at the time selected by the operator. Typically the regeneration cycle is set for the off shift. Regeneration is the process by which moisture accumulated on the surface of the desiccant during the"on line" cycle is desorbed by low pressure heated atmospheric purge during the "off line" cycle. The Turbo requires only 6 hours total time for complete regeneration. When the regeneration process is complete, the Turbo automatically resets and is ready to go back "on line".

An industrial duty blower provides ambient air for purge; a low watt density heater provides the heat; and a moisture indicator provides for a visual performance check. The heater is protected by a high temperature shutdown system with a mercury contactor.

Turbo Master Control

The Turbo Master control is a solid state panel that allows the operator to select one or two shift operation. An override function digital readout displays inlet temperature and setpoints.

The panel includes an electronic drain controller with indicator lights and push to test button. A panel mounted indicator light is activated during regeneration.

TD Two Shift Turbo Series Air Dryer

MODEL	Flow Rate @ 100 PSIG SCFM* (Nm³/min@8.6 Bar)	Standard Electrical	Blower HP	Heater KW	Dimensions Length (mm)	Width (mm)	Height (mm)	Weight Lbs (Kg)	Air In/Out
TD30	30 (.84)	120/1/60	1/2	1.3	42" (1067)	30" (762)	68" (1727)	280 (104)	1/2" NPT
TD40	40 (1.13)	120/1/60	1/2	1.3	42" (1067)	30" (762)	68" (1727)	280 (104)	1/2" NPT
TD80	80 (2.3)	120/1/60	1/2	1.3	42" (1067)	30" (762)	72" (1829)	300 (112)	3/4" NPT
TD110	110 (3.11)	230/1/60	3/4	3	42" (1067)	30" (762)	88" (2235)	314 (117)	1" NPT
TD160	160 (4.53)	230/1/60	3/4	6	42" (1067)	30" (762)	89" (2261)	520 (194)	1" NPT
TD220	220 (6.22)	230/1/60	1 1/2	6	42" (1499)	30" (762)	89" (2261)	745 (278)	1 1/2" NPT
TD270	270 (7.64)	230/1/60	1 1/2	7.5	59" (1880)	29" (737)	94" (2388)	930 (347)	1 1/2" NPT
TD420	420 (11.9)	460/3/60	2	12	74" (1880)	41" (1041)	94" (2388)	945 (353)	2" NPT
TD625	625 (17.7)	460/3/60	5	18	74" (1880)	41" (1041)	94" (2388)	1570 (712)	2" NPT
TD740	740 (21)	460/3/60	5 1/2	25	74" (1880)	41" (1041)	94" (2388)	1640 (744)	2" NPT
TD1250	1250 (35.4)	460/3/60	7 1/2	38	CF CF	CF CF	CF CF	CF CF	3" FLG
TD1500	1500 (42.5)	460/3/60	10	38	CF CF	CF CF	CF CF	CF CF	3" FLG
TD2000	2000 (56.63)	460/3/60	10	50	CF CF	CF CF	CF CF	CF CF	4" FLG
TD2500	2500 (70.8)	460/3/60	15	70	CF CF	CF CF	CF CF	CF CF	4" FLG
TD3500	3500 (99.1)	460/3/60	CF	CF	CF CF	CF CF	CF CF	CF CF	6" FLG
TD5000	5000 (146.6)	460/3/60	CF	CF	CF CF	CF CF	CF CF	CF CF	6" FLG
TD6000	6000 (170)	460/3/60	CF	CF	CF CF	CF CF	CF CF	CF CF	6" FLG
TD8000	8000 (226.53)	460/3/60	CF	CF	CF CF	CF CF	CF CF	CF CF	8" FLG

TDS Single Shift Turbo Series Air Dryer

MODEL	Flow Rate @ 100 PSIG SCFM* (Nm³/min@8.6 Bar)	Standard Electrical	Blower HP	Heater KW	Dimensions Length (mm)	Width (mm)	Height (mm)	Weight Lbs (Kg)	Air In/Out
TDS60	60 (1.7)	120/1/60	1/2	1.3	42" (1067)	30" (762)	68" (1727)	280 (127)	3/4" NPT
TDS80	80 (2.3)	120/1/60	1/2	1.3	42" (1067)	30" (762)	68" (1727)	280 (127)	3/4" NPT
TDS160	160 (4.5)	230/1/60	1/2	1.3	42" (1067)	30" (762)	72" (1829)	314 (142.4)	1" NPT
TDS220	220 (6.2)	230/1/60	3/4	3	42" (1067)	30" (762)	88" (2235)	810 (367.4)	1 1/2" NPT
TDS320	320 (9.1)	230/1/60	3/4	6	42" (1067)	30" (762)	89" (2261)	900 (408.2)	1 1/2" NPT
TDS420	420 (11.9)	230/1/60	1 1/2	6	74" (1880)	41" (1041)	94" (2388)	1456 (660.4)	2" NPT
TDS540	540 (15.3)	230/1/60	1 1/2	7.5	74" (1880)	41" (1041)	94" (2388)	1506 (683.1)	2" NPT
TDS820	820 (23.2)	460/3/60	2	17	74" (1880)	41" (1041)	94" (2388)	2160 (979.8)	2" NPT
TDS1250	1250 (35.4)	460/3/60	5	18	78" (1981)	48" (1219)	96" (2438)	2510 (1138.5)	3" FLG
TDS1450	1450 (41.1)	460/3/60	5.5	25	78" (1981)	48" (1219)	113" (2870)	CF CF	3" FLG
TDS2300	2300 (65.1)	460/3/60	7.5	38	CF CF	CF CF	CF CF	CF CF	4" FLG
TDS3300	3300 (93.4)	460/3/60	CF	CF	CF CF	CF CF	CF CF	CF CF	6" FLG
TDS4500	4500 (127.4)	460/3/60	CF	CF	CF CF	CF CF	CF CF	CF CF	6" FLG
TDS5800	5800 (164.2)	460/3/60	CF	CF	CF CF	CF CF	CF CF	CF CF	6" FLG
TDS7500	7500 (212.4)	460/3/60	CF	CF	CF CF	CF CF	CF CF	CF CF	8" FLG
TDS9000	9000 (254.9)	460/3/60	CF	CF	CF CF	CF CF	CF CF	CF CF	8" FLG

Note: TD, TDS 3-valve bypass is available

Standard Equipment

- Automatic Solid State Controller
- Programmable Regeneration Cycle
- Coalescing Pre-Filter
- Particulate After Filter
- Element Condition Indicators
- Moisture Indicator
- Digital Analyzer Temperature Display
- Electronic Drains
- Factory Packaging
- ASME Coded Pressure Vessels
- Low Watt Density Heater
- Industrial Duty "Turbo" Blower
- Industrial Duty, Non-Lubricated Switching Valves
- Pressure Indicator
- Full Charge Of F-240 Desiccant

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www.airtek.com

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4087 Walden Avenue
Lancaster, New York 14086
Ph. 716.685.4040 Fx.716.685.1010

Email: airtek@airtek.com