



## Desiccant Air Dryers (Non-Heated Type Air Dryers)

Compressed air is dried to prevent condensation and corrosion that can disrupt production processes and contaminate products. Production is carried out with modern technology using synthetic adsorbents, active alumina, silica gel and molecular sieves to dry and purify the air for industrial solutions.

Our standard products are produced in the capacity range of 18 m<sup>3</sup>/hour to 10,800 m<sup>3</sup>/hour. Special products can be produced according to your production capacity and needs. Discover industrial drying technology and systems.

Production was made according to Dew-point (-)20°C, (-)40°C and (-)70°C.

The panel is positioned for electronic control and humidity display.

NitroxTec Desiccant air dryers offer superior performance and quality.

Automatic adjustment can be made to changing input and environmental conditions.

Our dryers are manufactured according to 4 - 16 bar and 40 bar working pressure.

It provides cost savings with low energy consumption.

### NITROXTEC NDD DESICCANT AIR DRYERS

Model	CAPACITY (m³/minute)	CAPACITY (m³/hour)	DIAMETER CONNECTION SIZE BSP FEMALE	DIMENSIONS "mm"			WEIGHT kg	DEW-POINT	ELEKTRIC POWER
				LENGTH	WIDHT	HEIGHT			
NDD-0,3	0,30	18	¼"	390	435	840	15	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD-0,5	0,52	31	½"	390	440	1020	20	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD -0.8	0,80	48	½"	450	460	1075	30	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD-1	1,00	60	½"	410	460	1240	40	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD -1.2	1,20	72	½"	410	460	1340	50	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD- 1.6	1,60	100	¾"	440	530	1310	60	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD-2	2,17	130	1"	440	530	1400	70	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD-2.6	2,67	160	1"	700	550	1400	100	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD -3.2	3,20	200	1"	550	550	1525	125	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD -4	4,17	250	1"	550	550	1780	155	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD -5	5,00	300	1 ½"	800	575	1530	185	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD -6	6,00	360	1 ½"	800	575	1750	230	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD-7.3	7,33	440	1 ½"	900	710	1710	285	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD- 9	9,58	575	1 ½"	900	710	1900	335	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD- 11	11,33	680	1 ½"	1100	830	1820	485	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD -14	14,17	850	2"	1100	800	1900	520	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD -16	16,67	1000	2"	1100	800	2130	620	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD-21	20,83	1250	2 ½"	1200	700	2230	780	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD -25	25,00	1500	2 ½"	1250	900	2180	930	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD -30	30,00	1800	3"	1500	1045	2350	1160	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD-36	36,67	2200	3"	1800	1110	2100	1400	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD -45	45,00	2700	3"	1800	1060	2400	1700	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD-53	53,33	3200	DN100	1820	1260	2500	2000	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD -60	60,00	3600	DN100	1750	1120	2300	2300	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD-73	73,33	4400	DN100	1750	1310	2340	2800	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD-83	83,33	5000	DN150	2600	1290	2470	3150	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD-105	105,00	6300	DN150	2600	1570	2000	4060	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD -120	120,00	7200	DN150	2600	1560	2170	4600	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD-146	146,67	8800	DN150	2600	1500	2450	5650	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD-180	180,00	10800	DN200	2600	1650	2500	6900	-20/-40/-70 Cdt	230V AC 50-60 Hz 50W

## Desiccant Air Dryers (Non-Heated Type Air Dryers)



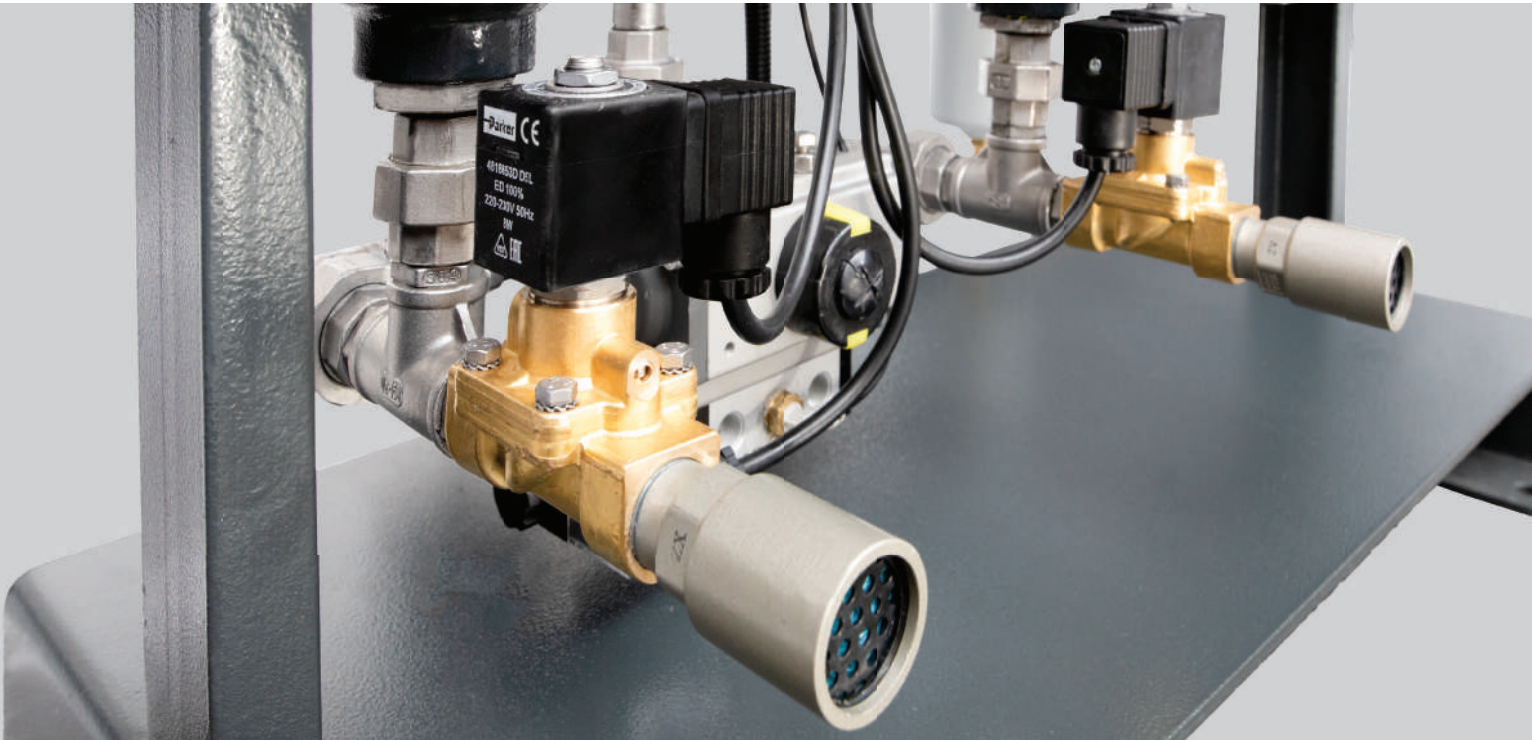
- **Standard Accessories:** Color Screen Electronic controller
- **Long-life pneumatic valves of European origin**
- **Superior performance active alumina**
- **American and Japanese made exhaust air silencers**
- **Air inlet and outlet air filters. Zero air loss water discharge system at the entrance**
- **Optional accessories:** Dew-point sensor and energy saving mode
- **Maximum Working Pressure:** 20 bar.
- **Regeneration air loss rates:**
  - 20 Dew-point: 5%
  - 40 Dew-point: 12%
  - 70 Dew-point: 20%

### Usage areas:

- Facilities that need quality dry air
- Hospitals
- Laser cutting machines
- Feed mills
- Cement factories
- Sugar factories
- Electrostatic powder paint units
- Natural gas pipelines



# Oil-Free Desiccant Air Dryers



# Oil-Free Desiccant Air Dryers

NitroxTec oil-free desiccant air dryers are manufactured for applications requiring extremely dry compressed air and oil-free air. The desiccant dryer and activated carbon tower complement each other. In this way, high quality oil-free dry air is obtained. NitroxTec Active carbon integrated desiccant air dryers are equipped with special valves and high-quality moisture and grease traps.

## Advantages:

- It is produced according to a 24/7 operating system.
- Ease of use
- Auto start stop option
- It offers superior performance and quality.
- It has an automatic and reliable operating system.
- Site-specific production can be made according to customer needs.



# Oil-Free Desiccant Air Dryers



- **Standard Accessories:**
- Color Electronic controller
- Long-lasting pneumatics of European origin valves
- Superior performance active alumina
- American and Japanese made discharge air silencers
- **Air inlet and outlet air filters:** At the entrance
- zero air loss water drainage system
- Optional accessories: Dew-point sensor and energy saving mode
- **Maximum Working Pressure:** 20 bar.
- **Regeneration air loss rates:**
- -20 Dew-point: 5%
- -40 Dew-point: 12%
- -70 Dew-point: 20%
- **Amount of oil remaining at the outlet:**  
0.003 mg/m<sup>3</sup> 0.003 ppm

## Usage Areas:

- Facilities that need quality dry air
- Hospitals
- Laser cutting machines
- Feed mills
- Cement factories
- Sugar factories
- Electrostatic powder paint units
- Natural gas pipelines



**NITROXTEC**  
INDUSTRIAL AIR & GAS SOLUTIONS

**REDUCE YOUR CARBON FOOTPOINT WITH EFFICIENT SOLUTIONS**



**NITROXTEC NDD+CT OIL-FREE DESICCANT AIR DRYERS**

MODEL	CAPACITY (m <sup>3</sup> /minute)	CAPACITY (m <sup>3</sup> /hour)	DIAMETER CONNECTION SIZE BSP FEMALE	DIMENSIONS "mm"			WEIGHT kg	DEW-POINT	AMOUNT OF OIL REMAINING AT THE OUTLET
				LENGHT	WIDTH	HEIGHT			
NDD+CT-0.8	0,80	48	½"	645	485	1160	55	-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD+CT-1	1,00	60	½"	645	485	1340	60	-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD+CT -1.2	1,20	72	½"	645	485	1440	70	-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD+CT- 1.6	1,60	100	¾"	720	480	1415	90	-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD+CT-2	2,17	130	1"	725	505	1590	105	-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD+CT-2.6	2,67	160	1"	850	550	1350	135	-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD+CT -3.2	3,20	200	1"	850	550	1570	170	-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD+CT -4	4,17	250	1"	850	550	1850	200	-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD+CT -5	5,00	300	1 ¼"	1140	605	1550	245	-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD+CT -6	6,00	360	1 ½"	1140	590	1760	300	-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD+CT-7.3	7,33	440	1 ½"	1150	625	1640	365	-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD+CT- 9	9,58	575	1 ½"	1150	630	1790	440	-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD+CT- 11	11,33	680	2"	1230	760	1950	620	-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD+CT -14	14,17	850	2"	1500	810	1875	700	-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD +CT-16	16,67	1000	2"	1500	810	2100	830	-40/-70 Cdt	230V AC 50-60 Hz 50W
NDD+CT-21	20,83	1250	2 ½"	1620	950	2180	1040	-40/-70 Cdt	230V AC 50-60 Hz 50W





## HIGH PRESSURE OIL-FREE DESICCANT DRYER

### HIGH PRESSURE OIL-FREE AND QUALITY DRY AIR

#### APPLICATION:

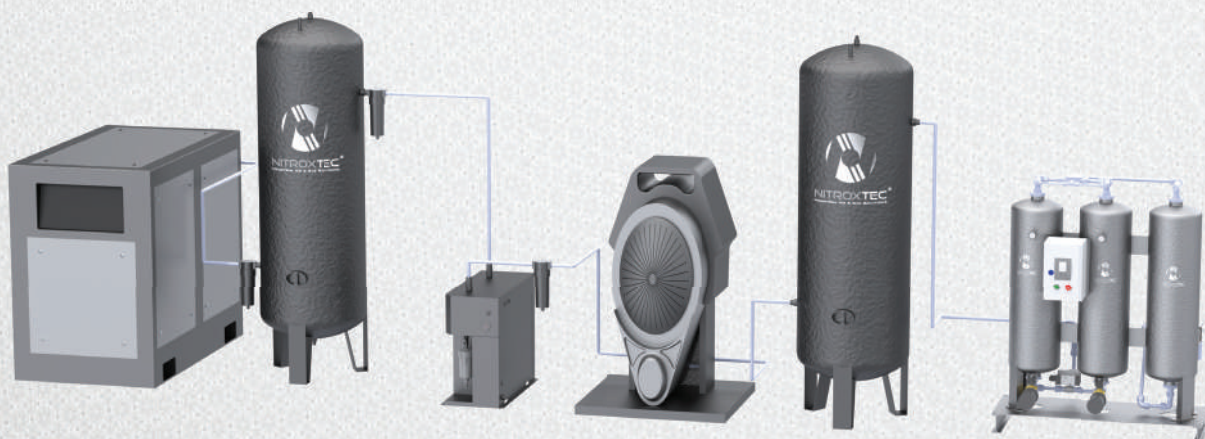
PET BOTTLE APPLICATIONS  
LASER CUTTING MACHINES



## Oil-Free Desiccant Air Dryer Installation Diagram



## 40 BAR Oil-Free Chemical Air Dryer Installation Diagram





## Desiccant Air Dryers with Heated Type Blower

## Desiccant Air Dryers with Heated Type Blower

Heated type blower desiccant air dryers are devices used to remove moisture from compressed air. These devices are pressurized where it dries the air in two stages. In the first stage, compressed air passes through a column filled with silicagel, a desiccant substance. Silicagel dries the air by absorbing moisture in the air. In the second stage, a heated blower dries the silica gel, making it ready to absorb moisture again.

The most important feature of heated type blower desiccant air dryers is that they do not use compressor air, with the support of the high efficiency heater and the blower, waste air is sucked and heated automatically. Thanks to the high-tech PLC (electronic control), dew point and heating/regeneration are adjusted and moisture is removed in the most efficient way.

### Protect Your System and Products from the Damage of Moisture!



## High Performance with Zero Air Loss



### Features of Heated Type Blower Desiccant Air Dryers

- **Reduces air loss.** Conventional desiccant dryers use dried air during regeneration and this results in the loss of compressed air. Heated type blower desiccant air dryers use atmospheric air during regeneration. Therefore, compressed air loss can be reduced to zero.
- **Provides higher performance.** The heated blower dries the silica gel faster. Therefore, heated type blower desiccant air dryers provide higher performance than traditional desiccant dryers.
- **Modern inlet and outlet filter:** Thanks to its filter in accordance with Worldwide standards, all kinds of pollutants are prevented. The desiccant substance is protected and air quality is kept at an optimum level.

### Advantages:

- Minimum energy consumption
- Zero air loss
- Secure system
- Long lasting
- Maximum performance
- Low noise level
- Ease of service
- Thanks to its special design and sub-equipments, it is an efficient and resistant system to all kinds of pressure changes.

## Installation Diagram of Desiccant Air Dryer with Heated Type Blower



Model	CAPACITY (m³/dakika)	CAPACITY (m³/hour)	DIAMETER CONNECTION SIZE BSP	MAXIMUM PRESSURE	VOLTAGE	AVERAGE POWER (kW)	DEW-POINT	WEIGHT kg	DIMENSIONS "mm"		
									LENGTH	WIDTH	HEIGHT
NDD-B-14	14,17	850	2"	11	400-440V/3/50-60 Hz	8,9	-40 °C	885	800	1200	1935
NDD-B-16	16,67	1000	2"	11	400-440V/3/50-60 Hz	9	-40 °C	1055	846	1200	2149
NDD-B-21	20,83	1250	DN80	11	400-440V/3/50-60 Hz	11,6	-40 °C	1325	844	1250	2110
NDD-B-25	25,00	1500	DN80	11	400-440V/3/50-60 Hz	11,8	-40 °C	1580	866	1400	2189
NDD-B-30	30,00	1800	DN80	11	400-440V/3/50-60 Hz	14,3	-40 °C	1970	874	1500	2164
NDD-B-36	36,67	2200	DN80	11	400-440V/3/50-60 Hz	17	-40 °C	2380	934	1600	2252
NDD-B-45	45,00	2700	DN80	11	400-440V/3/50-60 Hz	21,5	-40 °C	2890	1040	1750	2104
NDD-B-53	53,33	3200	DN100	11	400-440V/3/50-60 Hz	21,6	-40 °C	3400	1045	1750	2354
NDD-B-60	60,00	3600	DN100	11	400-440V/3/50-60 Hz	32	-40 °C	3910	1074	1820	2194
NDD-B-73	73,33	4400	DN100	11	400-440V/3/50-60 Hz	34,9	-40 °C	4760	1380	2050	2316
NDD-B-83	83,33	5000	DN125	11	400-440V/3/50-60 Hz	37,7	-40 °C	5355	1380	2050	2456
NDD-B-105	105,00	6300	DN150	11	400-440V/3/50-60 Hz	49,5	-40 °C	6900	1720	2600	2035
NDD-B-120	120,00	7200	DN150	11	400-440V/3/50-60 Hz	49,7	-40 °C	7820	1736	2600	2136
NDD-B-146	146,67	8800	DN150	11	400-440V/3/50-60 Hz	69,9	-40 °C	9605	1736	2600	2598
NDD-B-180	180,00	10800	DN200	11	400-440V/3/50-60 Hz	78	-40 °C	11730	1741	2600	2592

CORRECTION FACTOR						
PRESSURE (BAR g)	5	6	7	8	9	10
FACTOR	0,75	0,88	1	1,12	1,25	1,37
TEMPERATURE	20	25	30	35	40	45
FACTOR	1	1	1	1	0,8	0,73