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SUSTAINABLE
SOLUTIONS
in Air & Gas







HIGH PRESSURE DESICCANT DRYERS

**DESICCANT DRYERS** 

ACTIVATED CARBON TOWER FILTERS









MODULAR TYPE
NITROGEN GENERATORS

MODULAR TYPE
OXYGEN GENERATORS

MODULAR TYPE
OIL-LESS DESICCANT DRYERS







MODULAR TYPE DESICCANT DRYERS

MODULAR TYPE ACTIVE CARBON TOWERS

NITROXTEC
Gas Cooled Air Dryers







NITROXTEC Air Filters

NITROXTEC
Air Filter Elements

NITROXTEC Auto Drains









# MODULAR TYPE NITROGEN GENERATORS









## **Nitroxtec Modular Nitrogen Generators:**

#### Efficient, Compact, and Reliable On-Site Nitrogen Production

Nitroxtec Modular Nitrogen Generators provide a cutting-edge solution for on-site nitrogen generation, offering a cost-effective and sustainable alternative to traditional gas cylinders or liquid nitrogen deliveries. Leveraging advanced **Pressure Swing Adsorption (PSA) technology**, these generators deliver high-purity nitrogen in a compact, modular design, ensuring a continuous and reliable nitrogen supply for a wide range of industrial applications.

## **Key Features**

#### 1. Compact & Modular Design:

Space-efficient footprint with a scalable modular architecture, allowing for easy expansion to meet growing production demands.

#### 2. High-Purity Nitrogen Output:

Delivers nitrogen with purity levels up to **99.999%**, tailored to meet the specific requirements of your application.

#### 3. Energy-Efficient Operation:

Optimized for minimal air consumption, reducing energy usage and lowering operational costs.

## 4. Reliable & Continuous Supply:

Eliminates the risks and inefficiencies associated with external nitrogen sources, ensuring uninterrupted production.

## 5. **User-Friendly Installation & Maintenance**:

Designed for quick installation and hassle-free operation, with minimal maintenance requirements for long-term reliability.

## 6. Versatile Applications:

Ideal for industries such as food packaging, electronics manufacturing, pharmaceuticals, laser cutting, and industrial processes.



## Why Choose Nitroxtec Modular Nitrogen Generators?

Nitroxtec Modular Nitrogen Generators are designed to meet the diverse needs of modern industries, offering a reliable, efficient, and sustainable solution for on-site nitrogen production. Here's why our generators stand out:

- Customized Solutions: Tailored to meet the unique demands of your industry, ensuring optimal performance and efficiency.
- Sustainability: Reduce your carbon footprint by eliminating the need for frequent gas deliveries and cylinder handling.
- Cost Savings: Lower operational costs through energy-efficient design and reduced dependency on external nitrogen suppliers.
- Scalability: Modular design allows for seamless expansion as your nitrogen requirements grow.

## **Applications:**

- Food & Beverage: Modified Atmosphere Packaging (MAP) to extend shelf life and preserve product quality.
- Electronics: High-purity nitrogen for soldering, reflow ovens, and component manufacturing.
- Pharmaceuticals: Inerting and purging to ensure product integrity and safety.
- Laser Cutting: Enhanced cutting precision with high-purity nitrogen.
- Industrial Processes: Blanketing, purging, and inerting for improved safety and efficiency.

## **Customizable Solutions for Your Industry**

Nitroxtec specializes in designing and delivering modular nitrogen generation systems that align with your specific operational needs. Our team of experts works closely with you to ensure the system integrates seamlessly into your workflow, providing a reliable and efficient nitrogen supply.



## Nitrogen Generator Capacity (Nm³/hour) at Different Purity Levels

Model	%95	%96	%97	%98	%99	%99,5	%99,9	%99,95	%99,99	%99,995	%99,999	%99,9995	%99,9999
MNT-01	10,00	8,90	7,90	6,90	5,25	4,25	2,95	2,50	2,00	1,45	1,05	0,95	0,65
MNT-02	19,75	17,75	15,75	13,75	10,50	8,50	5,90	5,00	4,00	2,90	2,15	1,90	1,25
MNT-03	39,50	35,50	32,00	27,50	21,00	17,00	11,75	10,00	8,00	5,75	4,40	3,75	2,65
MNT-04	59,25	53,25	47,25	41,25	31,50	25,50	17,65	15,00	12,00	8,65	6,40	5,65	4,00
MNT-05	79,00	71,00	63,00	55,00	42,00	34,00	23,50	20,00	16,00	11,50	8,50	7,50	5,65
MNT-06	98,75	88,75	78,75	68,75	52,50	42,50	29,40	25,00	20,00	14,40	10,65	9,40	7,50
MNT-07	138,25	124,25	110,75	96,25	73,50	59,50	41,15	35,00	28,00	20,25	15,00	13,15	10,15
MNT-08	177,65	159,75	142,75	123,75	94,50	76,50	52,90	45,00	36,00	25,90	20,00	16,90	13,75
MNT-09	217,15	195,25	174,75	151,25	115,50	93,50	64,65	55,00	44,00	31,65	25,00	20,65	16,25
MNT-10	256,50	230,75	206,75	178,75	136,75	110,50	76,40	65,00	52,00	37,40	30,00	24,40	18,75
MNT-11	295,90	266,25	238,75	206,25	157,75	127,50	88,00	75,00	60,00	43,15	35,00	28,15	22,50

## **Technical Specification**

	DIMEN	ICIONE	Harrie II	WEIGHT	AID INLET CONNECTIONS		
MODEL		ISIONS		WEIGHT	AIR INLET CONNECTIONS	ELECTRICAL PO	WER
	LENGTH	WIDTH	HEIGHT	[Kg]	(BSP THREAD SIZE)		
MNT-01	450	405	1120	110	1/2"	230 V AC 50-60 Hz	150 W
MNT-02	450	560	1520	200	1/2"	230 V AC 50-60 Hz	150 W
MNT-03	450	715	1520	208	1/2"	230 V AC 50-60 Hz	150 W
MNT-04	450	870	1520	259	3/4"	230 V AC 50-60 Hz	150 W
MNT-05	670	790	1750	289	1"	230 V AC 50-60 Hz	150 W
MNT-06	670	1010	1750	330	1"	230 V AC 50-60 Hz	150 W
MNT-07	670	1230	1750	400	1"	230 V AC 50-60 Hz	150 W
<b>MNT-08</b>	670	1450	1750	470	1"	230 V AC 50-60 Hz	150 W
MNT-09	670	1670	1750	540	1 1/2"	230 V AC 50-60 Hz	150 W
MNT-10	670	1890	1750	620	1 1/2"	230 V AC 50-60 Hz	150 W
MNT-11	670	2110	1750	700	1 1/2"	230 V AC 50-60 Hz	150 W

	PRESSURIZED AIR INLET 7 BAR G												
PURITY	95%	96%	97%	98%	99%	99,5%	99,9%	99,95%	99,99%	99,995%	99,999%	99,9995%	99,9999%
O <sub>2</sub>	5%	4%	3%	2%	1%	0,5%	1000 ppm	500 ppm	100 ppm	50 ppm	10 ppm	5 ppm	1 ppm
AIR / GAS RATIO	1,8	2	2,1	2,3	2,5	2,6	3,2	3,5	3,9	4,5	5,2	7,5	8,5
	AMBIENT TEMPERATURE +25°C								INLET A	AIR DEW F	POINT +3°(		

AIR INLET TEMPERATURE CORRECTION FACTORS											
5°C	10 °C	15 °C	20 °C	25 °C	30 °C	35 °C	40 °C	45 °C	50 °C		
0,85	1,03	1,02	1	1	0,93	0,87	0,72	0,6	0,52		

INLET PRESSURE AIR CORRECTION FACTORS										
5 BAR	6 BAR	7 BAR	8 BAR	9 BAR	10 BAR	11 BAR				
0,78	0,91	<b>1</b>	1,05	1,13	1,19	1,22				



# MODULAR TYPE OXYGEN GENERATORS









## **Nitroxtec Modular Oxygen Generators:**

#### Efficient, Scalable, and Reliable On-Site Oxygen Production

Nitroxtec Modular Oxygen Generators provide a state-of-the-art solution for on-site oxygen generation, offering a sustainable and cost-effective alternative to traditional oxygen cylinders or liquid oxygen deliveries. Utilizing advanced **Pressure Swing Adsorption (PSA) technology**, these generators deliver high-purity oxygen in a compact, modular design, ensuring a continuous and reliable oxygen supply for a wide range of industrial, medical, and environmental applications.

## **Key Features**

#### 1. Compact & Modular Design:

Space-efficient footprint with a scalable modular architecture, allowing for easy expansion to meet growing production demands.

#### 2. High-Purity Oxygen Output

Delivers oxygen with purity levels up to **95%**, customizable to meet specific application requirements.

#### 3. Energy-Efficient Operation

Optimized for low air consumption, reducing energy usage and operational costs.

#### 4. Reliable & Continuous Supply

Eliminates dependency on external oxygen sources, ensuring uninterrupted production and operational efficiency.

#### 5. User-Friendly Installation & Maintenance

Designed for quick setup and minimal maintenance, ensuring long-term reliability and ease of operation.

#### 6. Versatile Applications

Ideal for industries such as medical and healthcare, wastewater treatment, metal cutting, aquaculture, and chemical processing.

## Why Choose Nitroxtec Modular Oxygen Generators?

- Customized Solutions: Tailored to meet the unique demands of your industry, ensuring optimal performance and efficiency.
- Sustainability: Reduce your carbon footprint by eliminating the need for frequent oxygen deliveries and cylinder handling.
- Cost Savings: Lower operational costs through energy-efficient design and reduced dependency on external oxygen suppliers.
- Scalability: Modular design allows for seamless expansion as your oxygen requirements grow.



## **Applications**

- Medical & Healthcare: Reliable oxygen supply for hospitals, clinics, and home healthcare.
- Wastewater Treatment: Enhanced aeration processes for efficient wastewater management.
- Metal Cutting & Welding: Improved combustion and cutting precision with high-purity oxygen.
- Aquaculture: Oxygenation of water to support healthy fish farming and aquatic life.
- Chemical Processing: Oxygen for oxidation reactions and chemical synthesis.

## **Customizable Solutions for Your Industry**

Nitroxtec specializes in designing and delivering modular oxygen generation systems that align with your specific operational needs. Our team of experts works closely with you to ensure the system integrates seamlessly into your workflow, providing a reliable and efficient oxygen supply.

## Oxygen Generator Capacity (Nm³/hour) at Different Purity Levels

Model	%90	%93	%95
MNOX -01	0,6	0,6	0,5
MNOX -02	1,2	1,1	1,0
MNOX -03	2,4	2,3	2,0
MNOX -04	3,6	3,4	3,0
MNOX -05	7,0	6,0	5,0
MNOX -06	8,9	8,1	7,1
MNOX -07	10,0	9,0	8,0
80- XOMM	12,0	11,0	10,0
MNOX -09	14,5	13,2	12,0
MNOX -10	16,0	14,0	13,0
MNOX -11	18,8	16,8	15,5

## **Technical Specification**

MODEL	DIMEN	SIONS	"mm"	WEIGHT	AIR INLET CONNECTIONS	ELECTRICAL POWER
MODEL	LENGTH	<b>WIDTH</b>	<b>HEIGHT</b>	[Kg]	(BSP THREAD SIZE)	ELECTRICAL FOWER
MNOX -01	450	405	1120	110	1/2"	110-230 V AC 50-60 Hz 150 W
MNOX -02	450	560	1520	200	1/2"	110-230 V AC 50-60 Hz 150 W
MNOX -03	450	715	1520	208	1/2"	110-230 V AC 50-60 Hz 150 W
MNOX -04	450	870	1520	259	3/4"	110-230 V AC 50-60 Hz 150 W
MNOX -05	670	790	1750	289	1"	110-230 V AC 50-60 Hz 150 W
MNOX -06	670	1010	1750	330	1"	110-230 V AC 50-60 Hz 150 W
MNOX -07	670	1230	1750	400	1"	110-230 V AC 50-60 Hz 150 W
80- XOMM	670	1450	1750	470	1"	110-230 V AC 50-60 Hz 150 W
MNOX -09	670	1670	1750	540	1 1/2"	110-230 V AC 50-60 Hz 150 W
MNOX -10	670	1890	1750	620	1 1/2"	110-230 V AC 50-60 Hz 150 W
MNOX -11	670	2110	1750	700	1 1/2"	110-230 V AC 50-60 Hz 150 W

PRESSURIZED AIR INLET 7 BAR G										
PURITY	90%	93%	95%							
AIR / GAS RATIO	9	10	11							

	AIR INLE	ET TEMP	ERATURE	CORRE	CTION FA	ACTORS	
5 °C	10 °C	15 °C	20 °C	25 °C	30 °C	35 °C	40 °C
0,95	1,03	1,02	1	1	0,92	0,81	0,7

INLET PRESSURE AIR CORRECTION FACTORS									
4 BAR	5 BAR	6 BAR	7 BAR						
0,75	0,9	1 (	1						



# MODULAR TYPE OIL-LESS DESICCANT DRYERS





## **Technical Specification**

MODEL	CAPACITY	CAPACITY	DIMEN	ISIONS	"mm"	WEIGHT	AIR INLET CONNECTIONS	ELECTRICAL POWER
MODEL	(m3/minute)	(m3/hour)	LENGTH	WIDTH	<b>HEIGHT</b>	[Kg]	(BSP THREAD SIZE)	ELECTRICAL FOWER
MNDD+CT-0.8	0,80	48	500	300	360	34	1/2"	110-230V AC 50-60 HZ 50W
MNDD+CT-1	1,00	60	500	300	520	41	1/2"	110-230V AC 50-60 HZ 50W
MNDD+CT-1.2	1,20	72	500	300	940	51	1/2"	110-230V AC 50-60 HZ 50W
MNDD+CT-1.6	1,60	96	500	300	1100	58	3/4"	110-230V AC 50-60 HZ 50W
MNDD+CT-2	2,17	130	500	300	1300	65	1"	110-230V AC 50-60 HZ 50W
MNDD+CT-2.6	2,67	160	500	300	1620	76	1"	110-230V AC 50-60 HZ 50W
MNDD+CT-3.2	3,20	192	500	450	1100	93	1"	110-230V AC 50-60 HZ 50W
MNDD+CT-4	4,17	250	500	450	1340	113	1"	110-230V AC 50-60 HZ 50W
MNDD+CT-5	5,00	300	500	450	1620	142	1"	110-230V AC 50-60 HZ 50W
MNDD+CT-6	6,00	360	500	600	1340	169	1 1/2"	110-230V AC 50-60 HZ 50W
MNDD+CT-7.3	7,33	440	500	600	1620	198	1 1/2"	110-230V AC 50-60 HZ 50W
MNDD+CT-9	9,58	575	500	750	1500	240	1 1/2"	110-230V AC 50-60 HZ 50W
MNDD+CT-11	11,33	680	500	900	1470	284	1 1/2"	110-230V AC 50-60 HZ 50W
MNDD+CT-14	14,17	850	500	1050	1500	335	1 1/2"	110-230V AC 50-60 HZ 50W
MNDD+CT-16	16,67	1000	500	1200	1550	404	2*	110-230V AC 50-60 HZ 50W



## **Nitroxtec Modular Oilless Desiccant Dryers:** Clean, Oil-Free Compressed Drying Solutions

Nitroxtec Modular Oilless Desiccant Dryers are designed to deliver clean, oil-free, and moisture-free compressed air for industries requiring the highest air quality standards. Utilizing advanced **desiccant adsorption technology**, these dryers achieve dew points as low as **-40°C to -70°C**, ensuring optimal performance in sensitive applications.

## **Key Features**

#### 1. Compact & Modular Design:

Space-saving footprint with a scalable modular architecture, allowing for easy expansion.

#### 2. Oil-Free Operation:

Ensures 100% oil-free air, meeting stringent air quality standards.

#### 3. High-Efficiency Drying:

Achieves dew points as low as **-40°C to -70°C**, ensuring moisture-free compressed air.

#### 4. Energy-Efficient Operation:

Optimized for low energy consumption, reducing operational costs.

#### 5. Reliable & Continuous Performance:

Ensures uninterrupted dry air supply, eliminating downtime and production interruptions.

## Why Choose Nitroxtec Modular Oilless Desiccant Dryers?

Nitroxtec Modular Oilless Desiccant Dryers are designed to meet the diverse needs of modern industries, offering a reliable, efficient, and sustainable solution for oil-free compressed air drying. Here's why our dryers stand out:

- Customized Solutions: Tailored to meet the unique demands of your industry, ensuring optimal performance and efficiency.
- Sustainability: Reduces energy consumption and waste, contributing to a greener environment.
- Cost Savings: Lower operational costs through energy-efficient design and reduced maintenance requirements.
- Scalability: Modular design allows for seamless expansion as your air drying needs grow.

## **Applications:**

- Medical & Healthcare: Provides clean, oil-free air for medical devices and respiratory equipment.
- Food & Beverage: Ensures oil-free air for packaging and processing.
- Electronics: Protects sensitive equipment from oil and moisture contamination.
- Industrial Processes: Provides oil-free air for painting, instrumentation, and pneumatic tools.



## MODULAR TYPE DESICCANT DRYERS







## **Technical Specification**

MODEL	CAPACITY	CAPACITY	DIME	SIONS	"mm"	WEIGHT	AIR INLET	ELECTRICAL POWER
MODEL	(m3/minute)	(m3/hour)	LENGTH	WIDTH	HEIGHT	[Kg]	CONNECTIONS	ELLO INIOAL I OTTER
MNDD-0.3	0,30	18	500	300	360	23	1/2"	110-230V AC 50-60 HZ 50W
MNDD-0.5	0,52	31	500	300	520	28	1/2"	110-230V AC 50-60 HZ 50W
MNDD-0.8	0,80	48	500	300	940	34	1/2"	110-230V AC 50-60 HZ 50W
MNDD-1	1,00	60	500	300	1100	39	3/4"	110-230V AC 50-60 HZ 50W
MNDD-1.2	1,20	72	500	300	1300	43	1"	110-230V AC 50-60 HZ 50W
MNDD-1.6	1,60	96	500	300	1620	51	1"	110-230V AC 50-60 HZ 50W
MNDD-2	2,17	130	500	450	1100	62	1"	110-230V AC 50-60 HZ 50W
MNDD-2.6	2,67	160	500	450	1340	75	1"	110-230V AC 50-60 HZ 50W
MNDD-3.2	3,20	192	500	450	1620	94	1"	110-230V AC 50-60 HZ 50W
MNDD-4	4,17	250	500	600	1340	113	1 1/2"	110-230V AC 50-60 HZ 50W
MNDD-5	5,00	300	500	600	1620	132	1 1/2"	110-230V AC 50-60 HZ 50W
MNDD-6	6,00	360	500	750	1500	160	1 1/2"	110-230V AC 50-60 HZ 50W
MNDD-7.3	7,33	440	500	900	1470	189	1 1/2"	110-230V AC 50-60 HZ 50W
MNDD-9	9,58	575	500	1050	1500	223	1 1/2"	110-230V AC 50-60 HZ 50W
MNDD-11	11,33	680	500	1200	1550	269	2"	110-230V AC 50-60 HZ 50W



## **Nitroxtec Modular Desiccant Dryers:**

Reliable, Energy-Efficient Compressed Drying Solutions

Nitroxtec Modular Desiccant Dryers provide a robust and efficient solution for removing moisture from compressed air, ensuring clean, dry air for critical industrial applications. Utilizing advanced **desiccant adsorption technology**, these dryers deliver dew points as low as **-40°C to -70°C**, making them ideal for industries requiring ultra-dry air.

## **Key Features**

#### 1. Compact & Modular Design:

Space-efficient footprint with a scalable modular architecture, allowing for easy expansion to meet growing demands.

#### 2. High-Efficiency Drying

Achieves dew points as low as **-40°C to -70°C**, ensuring moisture-free compressed air.

#### 3. Energy-Efficient Operation

Optimized for low energy consumption, reducing operational costs and environmental impact.

#### 4. Reliable & Continuous Performance

Ensures uninterrupted dry air supply, eliminating downtime and production interruptions.

#### 5. User-Friendly Installation & Maintenance

Designed for quick setup and minimal maintenance, ensuring long-term reliability and ease of use.

#### **Why Choose Nitroxtec Modular Desiccant Dryers?**

Nitroxtec Modular Desiccant Dryers are designed to meet the diverse needs of modern industries, offering a reliable, efficient, and sustainable solution for compressed air drying. Here's why our dryers stand out:

- Customized Solutions: Tailored to meet the unique demands of your industry, ensuring optimal performance and efficiency.
- Sustainability: Reduces energy consumption and waste, contributing to a greener environment.
- Cost Savings: Lower operational costs through energy-efficient design and reduced maintenance requirements.
- Scalability: Modular design allows for seamless expansion as your air drying needs grow.

## **Applications:**

- Pharmaceuticals: Ensures moisture-free air for drug manufacturing and packaging.
- Food & Beverage: Prevents contamination and extends product shelf life.
- Electronics: Protects sensitive equipment from moisture damage.
- Industrial Processes: Provides dry air for pneumatic tools, painting, and instrumentation.



# MODULAR TYPE ACTIVE CARBON TOWERS



## **Technical Specification**

MODEL	CAPACITY	CAPACITY	DIMEN	SIONS	"mm"	WEIGHT	AIR INLET
MODEL	(m3/minute)	(m3/hour)	LENGTH	<b>WIDTH</b>	HEIGHT	[Kg]	CONNECTIONS
MNCT-0.3	0,30	24	370	300	360	17	1/2"
MNCT-0.5	0,50	30	370	300	520	21	1/2"
MNCT-0.8	0,80	48	370	300	940	26	1/2"
MNCT-1	1,00	60	370	300	1100	30	3/4"
MNCT-1.2	1,20	72	370	300	1300	34	1"
MNCT-1.6	1,50	90	370	300	1620	40	1"
MNCT-2.1	2,17	130	370	450	1100	49	1"
MNCT-2.6	2,67	160	370	450	1340	60	1"
MNCT-3.2	3,08	185	370	450	1620	76	1"
MNCT-4.1	4,17	250	370	600	1340	91	1 1/2"
MNCT-5	5,00	300	370	600	1620	107	1 1/2"
MNCT-6	6,00	360	370	750	1500	130	1 1/2"
MNCT-7.30	7,33	440	370	900	1470	154	1 1/2"
MNCT-9.50	9,58	575	370	1050	1500	182	1 1/2"
MNCT-11	11,33	680	370	1200	1550	220	2"



## Nitroxtec Modular Activated Carbon Tower Filters: Advanced Solutions for Air and Gas Purification

Nitroxtec Modular Activated Carbon Tower Filters provide a highly effective solution for removing contaminants, odors, and hydrocarbons from compressed air and gases. Utilizing **activated carbon adsorption technology**, these filters ensure clean, purified air for critical industrial applications.

## **Key Features**

1. Compact & Modular Design:

Space-efficient footprint with a scalable modular architecture, allowing for easy expansion.

2. High-Efficiency Filtration:

Removes contaminants, odors, and hydrocarbons with exceptional efficiency.

3. Energy-Efficient Operation:

Optimized for low pressure drop, reducing energy consumption and operational costs.

4. Reliable & Continuous Performance:

Ensures uninterrupted clean air supply, eliminating downtime and production interruptions.

5. **User-Friendly Installation & Maintenance**:

Designed for quick setup and minimal maintenance, ensuring long-term reliability.

## Why Choose Nitroxtec Modular Activated Carbon Tower Filters?

Nitroxtec Modular Activated Carbon Tower Filters are designed to meet the diverse needs of modern industries, offering a reliable, efficient, and sustainable solution for air oil removing. Here is why our filters stand out:

- Customized Solutions: Tailored to meet the unique demands of your industry, ensuring optimal performance and efficiency.
- Sustainability: Reduces energy consumption and waste, contributing to a greener environment.
- Cost Savings: Lower operational costs through energy-efficient design and reduced maintenance requirements.
- Scalability: Modular design allows for seamless expansion as your filtration needs grow.

## **Applications:**

- Food & Beverage: Removes odors and contaminants from compressed air used in packaging and processing.
- Pharmaceuticals: Ensures clean, purified air for drug manufacturing and packaging.
- Chemical Processing: Removes hydrocarbons and contaminants from process gases.
- Industrial Processes: Provides clean air for painting, instrumentation, and pneumatic tools.



## NITROXTEC Gas Cooled Air Dryers





## **Nitroxtec ND Series Air Dryers**

#### Advanced Refrigeration Dryers for Clean, Dry Compressed Air

Nitroxtec ND Series Air Dryers are designed to deliver **clean**, **dry**, **and moisture-free compressed air**, ensuring optimal performance and longevity of your pneumatic systems. Compressed air often contains moisture, which can condense and cause damage to sensitive equipment and processes. The ND Series Air Dryers eliminate this moisture, providing reliable and efficient air drying solutions for a wide range of industrial applications.

## **Key Features**

- High-Efficiency Drying: Achieves dew points as low as 3°C, ensuring moisture-free compressed air.
- Energy-Efficient Operation: Designed for minimal pressure drop, reducing energy consumption and operational costs.
- Durable Construction: Built with high-quality materials, including stainless steel and corrosion-resistant coatings, for long-lasting performance.
- Automatic Drainage: Equipped with zero-loss valves for efficient and reliable condensate removal.
- Easy Maintenance: User-friendly design with low maintenance requirements and easy access to components.
- Compatibility: Seamlessly integrates with Nitroxtec's FF Series line filters for additional particle removal.



## Why Choose Nitroxtec ND Series Air Dryers?

Nitroxtec ND Series Air Dryers are designed to meet the diverse needs of modern industries, offering a reliable, efficient, and sustainable solution for compressed air drying. Here's why our dryers stand out:

- Customized Solutions: Tailored to meet the unique demands of your industry, ensuring optimal performance and efficiency.
- Sustainability: Reduces energy consumption and waste, contributing to a greener environment.
- Cost Savings: Lower operational costs through energy-efficient design and reduced maintenance requirements.
- Scalability: Modular design allows for seamless expansion as your air drying needs grow.
- High Reliability: Ensures uninterrupted dry air supply, protecting your equipment and processes.

## **Applications**

Nitroxtec ND Series Air Dryers are ideal for a wide range of industries and applications, including:

- Food & Beverage: Ensures dry air for packaging and processing, preventing contamination and extending product shelf life.
- Pharmaceuticals: Provides moisture-free air for drug manufacturing and cleanroom environments.
- Electronics: Protects sensitive equipment from moisture damage during manufacturing and assembly.
- Automotive: Delivers dry air for painting, coating, and pneumatic tools, ensuring high-quality finishes.
- Industrial Processes: Supports pneumatic systems, instrumentation, and machinery with reliable dry air.

#### **Customizable Solutions**

Nitroxtec specializes in designing and delivering air drying systems that align with your specific operational needs. Our team of experts works closely with you to ensure the system integrates seamlessly into your workflow, providing a reliable and efficient air drying solution.



## **Technical Specifications**

Model	Capacity	Air Connection	Voltage	<b>Working Pressure</b>	<b>Dew Point</b>	<b>Cooling Gas</b>	Max Air Flow
ND 1200	1.2 m³/min	1/2"	220V/50Hz	5-16 bar	3°C	R 404a	72 m³/hr
ND 1600	1.6 m³/min	3/4"	220V/50Hz	5-16 bar	3°C	R 404a	96 m³/hr
ND 2200	2.2 m³/min	3/4"	220V/50Hz	5-16 bar	3°C	R 404a	132 m³/hr
ND 3000	3.0 m³/min	1"	220V/50Hz	5-16 bar	3°C	R 404a	180 m³/hr
ND 3600	3.6 m³/min	1"	220V/50Hz	5-16 bar	3°C	R 404a	216 m³/hr
ND 4500	4.5 m³/min	1 1/2"	220V/50Hz	5-16 bar	3°C	R 404a	270 m³/hr
ND 6000	6.0 m³/min	1 1/2"	220V/50Hz	5-16 bar	3°C	R 404a	360 m³/hr
ND 8500	8.5 m³/min	2"	380V/50Hz	5-16 bar	3°C	R 404a	510 m³/hr
ND 10500	10.5 m³/min	2"	380V/50Hz	5-16 bar	3°C	R 404a	630 m³/hr
ND 12000	12.0 m³/min	2"	380V/50Hz	5-16 bar	3°C	R 404a	720 m³/hr
ND 16500	16.5 m³/min	3"	380V/50Hz	5-16 bar	3°C	R 407c	990 m³/hr
ND 20000	20.0 m <sup>3</sup> /min	3"	380V/50Hz	5-16 bar	3°C	R 407c	1200 m³/hr
ND 25000	25.0 m³/min	3"	380V/50Hz	5-16 bar	3°C	R 407c	1500 m³/hr
ND 30000	30.0 m³/min	3"	380V/50Hz	5-16 bar	3°C	R 407c	1800 m³/hr
ND 40000	40.0 m³/min	DN 100	380V/50Hz	5-16 bar	3°C	R 407c	2400 m³/hr
ND 50000	50.0 m <sup>3</sup> /min	DN 100	380V/50Hz	5-16 bar	3°C	R 407c	3000 m³/hr
ND 60000	60.0 m³/min	DN 100	380V/50Hz	5-16 bar	3°C	R 407c	3600 m³/hr
ND 80000	80.0 m <sup>3</sup> /min	DN 100	380V/50Hz	5-16 bar	3°C	R 407c	4800 m³/hr
ND 100000	100.0 m³/min	DN 150	380V/50Hz	5-16 bar	3°C	R 407c	6000 m³/hr

### **Advantages of Nitroxtec ND Series Air Dryers**

- 100% Heat Transfer: High-quality stainless aluminum heat exchanger ensures maximum efficiency and energy savings.
- Zero Loss in Water Discharge: Zero-loss valves prevent condensate loss, ensuring efficient operation.
- Low Maintenance Costs: Designed for easy maintenance and long service life.
- High Condensation Efficiency: State-of-the-art engineering ensures optimal moisture removal.
- Compatibility: Works seamlessly with Nitroxtec's screw compressors and filtration systems.



# NITROXTEC Air Filters







## NITROXTEC Air Filter Elements

# NITROXTEC Auto Drains





## **Filter Types and Specifications**

Type	Capacity* (m³/h)	Capacity* (cfm)	Dimensions (mm)	Connection	Element	Prod. Grp.
APF23⊠	35	21	234 x 18 x 80 x 75	1/4"	APE26⊠	110
APF53⊠	60	35	234 x 18 x 80 x 75	3/8"	APE26⊠	110
APF63⊠	60	35	234 x 18 x 80 x 75	1/2"	APE26⊠	110
APF73⊠	90	53	234 x 18 x 80 x 75	1/2"	APE70⊠	110
APF79⊠	120	71	328 x 23 x 104 x 98	1/2"	APE78⊠	110
APF83⊠	120	71	328 x 23 x 104 x 98	3/4"	APE78⊠	110
APF93⊠	250	147	328 x 23 x 104 x 98	3/4"	APE91⊠	110
APF103⊠	250	147	328 x 23 x 104 x 98	1"	APE91⊠	110
APF113⊠	360	212	612 x 34 x 154 x 150	1"	APE110⊠	110
APF129⊠	540	318	612 x 34 x 154 x 150	1 1/4"	APE123⊠	110
APF133⊠	700	412	612 x 34 x 154 x 150	1 1/2"	APE123⊠	110
APF143⊠	800	471	744 x 45 x 196 x 195	2"	APE140⊠	110
APF163⊠	1300	765	744 x 45 x 196 x 195	2"	APE160⊠	110
APF173⊠	1500	883	732 x 56 x 215 x 210	2 1/2"	APE170⊠	110
APF193⊠	2200	1295	899 x 56 x 215 x 210	3"	APE190⊠	110

#### **Example Order Codes**

• APF73 with 1 micron efficiency: APF73MFO

• APFF150-04 with 0.01 micron efficiency: APFF150-04SMA

#### **Correction Factors for Capacity**

Working Pressure (bar g)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Factor	0.38	0.50	0.63	0.75	0.88	1.00	1.12	1.25	1.37	1.49	1.62	1.74	1.86	1.98	2.10

#### Example:

Capacity of Type APF79 at 10 bar g:

120 m³/h (nominal) × 1.37 (factor) = 164.4 m³/h (corrected capacity).



### **Nitroxtec Air Treatment & Filtration Systems**

## Advanced Solutions for Clean, Dry, and Contaminant-Free Compressed Air and Gases

Nitroxtec Air Treatment & Filtration Systems are designed to deliver high-performance filtration and separation solutions for compressed air and gases. These systems ensure clean, dry, and contaminant-free air, protecting your equipment and processes while enhancing operational efficiency and sustainability. Whether you need to remove particulates, oil aerosols, moisture, or other contaminants, Nitroxtec provides reliable and energy-efficient solutions that meet the highest industry standards.

#### **Key Features**

- **High-Efficiency Filtration**: Removes particles, oil aerosols, moisture, and other contaminants with precision, ensuring clean air for critical applications.
- Low Differential Pressure: Engineered for minimal pressure drop, reducing energy consumption and operational costs.
- **Durable Construction**: Built with high-quality materials, including die-cast aluminum, stainless steel, and corrosion-resistant coatings (KTL) for long-lasting performance.
- Easy Maintenance: User-friendly design with replaceable filter elements and automatic condensate drainage.
- Versatile Compatibility: Suitable for a wide range of compressed air systems and industrial applications.
- Seamless Integration: Designed for easy integration into existing systems, with options for threaded or flanged connections.

#### Why Choose Nitroxtec Air Treatment & Filtration Systems?

Nitroxtec Air Treatment & Filtration Systems are designed to meet the diverse needs of modern industries, offering a reliable, efficient, and sustainable solution for air and gas purification. Here's why our systems stand out:

- Customized Solutions: Tailored to meet the unique demands of your industry, ensuring optimal performance and efficiency.
- **Sustainability**: Reduces energy consumption and waste, contributing to a greener environment.



- Cost Savings: Lower operational costs through energy-efficient design and reduced maintenance requirements.
- Scalability: Modular design allows for seamless expansion as your filtration needs grow.
- High Purity Output: Delivers air and gas purity levels that exceed industry standards, including ISO 8573-1.

## **Product Range**

- Air Treatment Filters: Multi-stage filtration for removing particulates, oil aerosols, and moisture.
- Air Filtration & Separation Systems: High-efficiency systems for air and gas purification, including activated carbon filters and molecular sieve cartridges.

## **Technical Specifications**

- Filtration Efficiency: Removes particles as small as **0.01 microns** and oil aerosols down to **0.01 mg/m³**.
- Dew Point: Achieves dew points as low as -40°C to -70°C for moisture-free air.
- Operating Pressure: Compatible with systems operating at pressures up to 16 bar.
- Temperature Range: Suitable for temperatures up to 120°C.

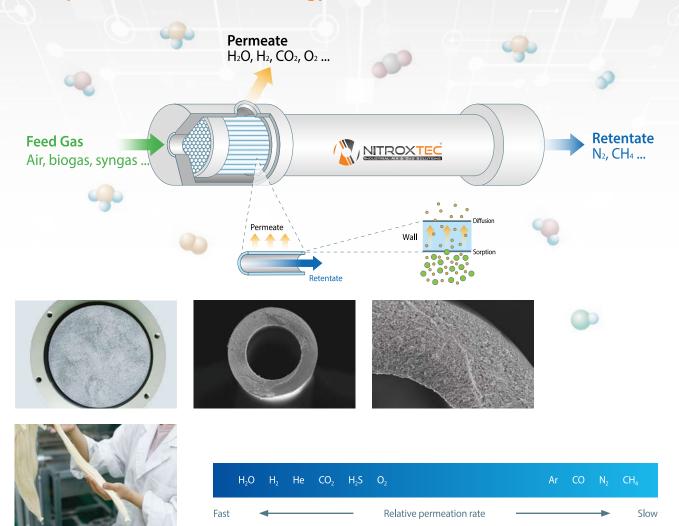
#### **Benefits at a Glance**

- Improved Equipment Lifespan: Protects machinery and tools from contamination and corrosion.
- Energy Efficiency: Reduces energy consumption with low differential pressure designs.
- Cost-Effective: Lowers operational and maintenance costs.
- Environmentally Friendly: Minimizes waste and supports sustainable operations.



## NITROXTEC MEMBRANCE NITROGEN GENERATORS

## **Principle of Membrane Technology**





- 1. Compressor
- 2. Liquid Separator
- 3. Dryer
- 4. Coalescing Filter
- 5. Activated Carbon Bed/Filter
- 6. Membrane Module





## **Nitroxtec Membrane Nitrogen Generators**

#### On-Demand, High-Purity Nitrogen for Industrial Applications

Nitroxtec Membrane Nitrogen Generators provide a **cost-effective**, **energy-efficient**, **and maintenance-free** solution for on-site nitrogen production. Utilizing advanced hollow-fiber membrane technology, our systems separate nitrogen from compressed air with unmatched reliability, delivering purities up to **99.5%** for diverse industrial needs.

#### **Key Features**

- **High-Efficiency Separation**: Patented membrane technology ensures consistent nitrogen purity (90–99.5%) with minimal energy consumption.
- Compact & Modular Design: Space-saving footprint with horizontal/vertical installation flexibility.
- Zero Chemicals or Adsorbents: Eco-friendly process with no consumables or hazardous waste.
- Low Operating Costs: Up to 50% savings vs. liquid nitrogen or PSA systems.
- Instant Start-Up: Delivers nitrogen on demand without preheating or cycle delays.
- Silent Operation: Ideal for noise-sensitive environments (e.g., laboratories, hospitals).

#### Why Choose Nitroxtec Membrane Nitrogen Generators?

Nitroxtec combines **proven membrane expertise** with **custom engineering** to meet your specific flow, purity, and pressure requirements:

- Custom Solutions: Tailored systems for small-scale labs to large industrial plants.
- Energy Savings: Optimized membranes reduce compressed air usage by 30% vs. competitors.
- Durability: Corrosion-resistant materials (stainless steel/aluminum) for harsh environments.
- Global Support: 24/7 technical assistance and maintenance programs.



## **Applications**

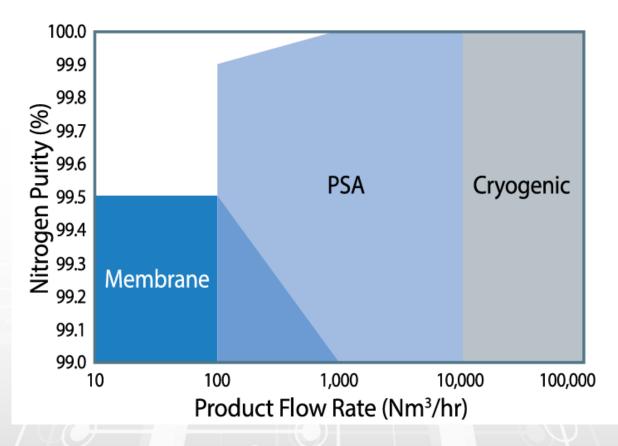
- Food & Beverage: Modified Atmosphere Packaging (MAP), blanketing, and preservation.
- Electronics: Soldering, 3D printing, and semiconductor manufacturing.
- Pharmaceuticals: Blanketing, purging, and inerting for drug safety.
- Oil & Gas: Pipeline purging, LNG storage, and explosion prevention.
- Laser Cutting: Enhanced precision with oxygen-free environments.

#### **Technical Specifications**

Model	Flow Rate (Nm³/h)	Purity (%)	Max Pressure (bar)	Connections	Dimensions (L×W×H, mm)
Nbrane-50	50	95–99.5	10	1/2" FNPT	600×400×500
Nbrane-200	200	95–99.5	10	1" FNPT	800×500×600
Nbrane-1000	1000	95–99.5	16	2" Flange	1200×800×1000
Custom	Up to 5000	Custom	Up to 25	Per request	Tailored

#### **Technology Comparison**

Method	Membrane (Nitroxtec)	PSA (Nitroxtec)	Cryogenic
Purity	90-99.5%	95-99.9999%	99.999%+
<b>Energy Use</b>	Low	Moderate	High
Footprint	Compact	Medium	Large
Maintenance	Minimal	Moderate	High
Best For	Mid-purity, mobile needs	High-purity	Ultra-high-purity





**Case Study: Food Packaging** 

**Challenge**: A dairy producer needed **99% nitrogen** for MAP to extend yogurt shelf life.

Solution: Nitroxtec Nbrane-200 system (50 Nm³/h, 99% purity) replaced liquid nitrogen deliveries.

#### Results:

- 30% cost reduction vs. third-party gas.
- Zero downtime with automated operation.
- ROI in <18 months.</li>











- +90 212 544 42 61 in Nitroxtec Endüstriyel Makina finitroxtec.tr
- (S) +90 536 348 04 69 ( ) info@nitroxtec.com ( ) nitroxtec\_industrial
- ikitelliOSB Trios 2023 B Blok No:73 Başakşehir İstanbul TÜRKİYE

