GENERAL CATALOG

NITROXTEC®

INDUSTRIAL AIR & GAS SOLUTIONS

NITROXTEC®
INDUSTRIAL AIR & GAS SOLUTIONS

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NITROXTEC®
INDUSTRIAL AIR & GAS SOLUTIONS

About us

NITROXTEC Industrial Machinery, Compressed Air and Gas Solutions Ltd.

Nitroxtec, with over 14 years of experience, expertise, knowledge, and training, was established with the goal of producing the highest quality and most efficient machinery and system solutions for the world.

Our company provides services to its customers by manufacturing the most cost-effective, highest-performing, and most efficient products in its production facilities without compromising quality. Through the solutions offered at our production facilities, we ensure the highest level of customer satisfaction.

The source of our success and the solutions we offer to the industry lies in the value we place on our colleagues and business partners.

Nitroxtec aims to produce sustainable solutions in industrial air and gas systems with a vision of quality and efficiency.

Our Vision

To provide high-quality and efficient industrial air and gas solutions necessary for sustainable growth for our stakeholders in the global market. Additionally, to become a trusted technology company that is preferred for its competitiveness, reliability in quality, and sensitivity to the environment and humanity.

Our Mission

To offer our customers high value-added, innovative, and reliable products and solutions. By reducing production facilities' dependence on external sources and producing efficiency-driven products with advanced technology and innovation, we aim to contribute to the use of quality products by our stakeholders and enhance our customers' competitive edge.

Our Quality Approach

We believe that the first things our customers and business partners remember about us are quality and efficiency.
Not Just Local and National!
Producing high-quality local and national products is our primary goal.

Our Advantages

- **Innovative and reliable technology**
- **Sustainable efficiency**
- **High performance**
- **Affordable prices thanks to low costs**
- **Installation and production at the location you need**

Design

We optimize and design the industrial compressed air and gas solutions you need with our engineering team in the most suitable way.

Nitroxtec provides sustainable compressed air and gas solutions for industrial and medical applications.

WORKAROUND

WE PROVIDE SOLUTIONS BY FOCUSING ON PROBLEMS IMMEDIATELY WITH OUR EXPERT AND PROFESSIONAL TEAM AND EQUIPMENT.

24/7 Service Support

- Expert technical service
- Online technical service
- Assembly and supervision service
- Fast and effective response
- 10 years spare parts availability

ADVANTAGES

- Production suitable for 24/7 operation.
- Ease of Use.
- Automatic operation without the need for an operator.
- It has an automatic and reliable operating system.
- Control via touch screen.
- Access from anywhere (PC, Smartphone, Tablet).
- Site-specific production according to customer needs.
- It is fully automatic.

Heated Type Desiccant Dryers

Oxygen Generators

Nitrogen Generators

High Pressure Desiccant Dryers

Desiccant Dryers

Oil-less Desiccant Dryers

Activated Carbon Tower Filters

Modular Type Nitrogen Generators

Modular Type Oxygen Generators

Modular Type Oilless Desiccant Dryers

Modular Type Desiccant Dryers

Modular Type Activated Carbon Tower Filters

NITROXTEC Gas Cooled Air Dryers

NITROXTEC Compressed air filters Filter internal elements and accessories

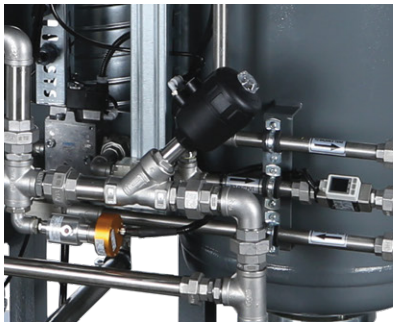
OUR HIGH-QUALITY PRODUCTS, PROUDLY MANUFACTURED IN TÜRKIYE, ARE TRUSTED BY CLIENTS IN OVER 33 COUNTRIES WORLDWIDE.

DISCOVER THIS EXCELLENCE!

NITROXTEC®

INDUSTRIAL AIR & GAS SOLUTIONS

NITROGEN GENERATORS



It is designed to provide maximum performance and uninterrupted nitrogen gas production with its superior technology. It works with the PSA (Pressure Swing Adsorption) process where with this so-called type production, the nitrogen generator produces nitrogen from compressed air. Nitrogen molecules, which make up 78% of the air, are separated from oxygen and argon by a substance called carbon molecular sieve (CMS) to obtain pure nitrogen.
It is produced with 100% Purity control technology.
Our Nitrogen Generators; With its unique design and superior technology, it produces more nitrogen effi ciently and with maximum purity, using less compressed air compared to other nitrogen generators on the market. Operation and maintenance costs are very low.
The PSA type nitrogen gas production method is the most effi cient and sustainable method. The superior quality CMS (Carbon molecular sieve) we use in our nitrogen generators is guaranteed to operate for 10 years when regular maintenance service is provided.

Low Operation and Maintenance Costs

- Long maintenance period
- High quality equipment
- Economical spare parts and service costs
- Exhaust and valve systems that do not require maintenance or replacement

Our Advantages:

- Manufacturing sustainable nitrogen gas yourself on site.
- We produce nitrogen generators with a capacity range of 0,5 – 2.100 Nm^3/hour, up to 95% – 99,9999% (1 ppm) purity.
- Our nitrogen generators allow you to produce high efficiency nitrogen gas with the purity level you need.
- PSA technology guarantees you the best return on your investment.
- High purity rate is achieved with carbon molecular technology.
- Nitrogen Generator is produced according to 24/7 operating system.
- Get rid of external dependency with minimum maintenance costs.
- Save money by getting rid of extra expenses.
- You can produce your own nitrogen gas to eliminate filling and transfer costs.
- Our nitrogen generator is designed according to the automatic start and stop system.
- In the facilities when nitrogen gas is needed with the feature of automatic activation mode the system goes to standby or runs automatically.
- Allows it to start and stop automatically according to nitrogen gas consumption.
- Our nitrogen generators are equipped with a long-lasting, high-quality zirconium dioxide sensor that constantly measures nitrogen gas purity.

It works according to the principle of automatic purity control.

- Nitrogen gas is not released to the facilities before reaching the desired target purity value in the nitrogen generator.
- Nitrogen Generator is designed to be ready for use.
- Capturing purity in the fastest way thanks to its special design (within 10 minutes after operation)
- Industry 4.0 compatible

How Do Nitrogen Generators Work?

Nitroxtec Industrial nitrogen PSA (Pressure Swing Adsorption) generator is a system that produces nitrogen on site. Integrated with the air compressor, it processes atmospheric air under pressure and separates nitrogen from other gases. Separation is carried out with a molecular sieve (CMS-Carbon Molecular Sieve) that does not require frequent changes. The nitrogen generator uses two CMS beds (tanks) for this. It is used before particle and active carbon filters to remove impurities in the supply air.

The main operation in the PSA system is based entirely on physical separation, and the carbon material retains oxygen molecules that are larger than nitrogen molecules and permeates nitrogen molecules. In this way, nitrogen gas is obtained. The reason for having two tanks in the system is based on the method of releasing oxygen molecules accumulated in the carbon material over time back into the air by the reverse blowing method, that is, cleaning. In short, the tanks alternately produce nitrogen gas or clean oxygen at certain time intervals.

Each nitrogen generator is manufactured pre-tested and adjusted to meet the customer's desired pressure value and purity. The process is completely regenerative as described above, making it reliable and virtually maintenance-free. Distribution pressure can be adjusted from 4 to 8,0 bar(g) to meet the needs of your operation.

At the end of the set, after an adjusted automatic timer, tank A, filled with oxygen molecules, is discharged into the atmosphere. In the second stage, air is passed through tank B. Then the same process is repeated. During the adsorption period, tank B is in cleaning mode while tank A is running, and tank A is in cleaning mode while tank B is running. A small amount of nitrogen gas is given to the cleaned and emptied tank through the other operating tank with an adjustable nozzle. This transmitted gas (regeneration cleaning) serves to sweep the oxygen trapped in the screens after evacuation into the atmosphere. In this way, the system is designed to be operate for millions of cycles. It is the most economical nitrogen gas production system.

8 Bar Nitrogen Generator Installation Diagram

40 Bar Nitrogen Generator Installation Diagram

230 Bar Nitrogen Generator Installation Diagram

TECHNICAL SPECIFICATIONS OF NITROGEN GENERATORS

Model	Dimensions "mm"			Weight Kg	Air Inlet Connections (BSP Thread Size)	Electrical Power
	Length	Width	Height			
NT-01	610	540	1170	95	1/2"	110-230 V AC 50-60 Hz 150 W
NT-02	610	650	1310	165	1/2"	110-230 V AC 50-60 Hz 150 W
NT-03	610	650	1720	235	1/2"	110-230 V AC 50-60 Hz 150 W
NT-04	910	680	1640	266	1/2"	110-230 V AC 50-60 Hz 150 W
NT-05	910	680	1760	300	3/4"	110-230 V AC 50-60 Hz 150 W
NT-06	1100	600	1800	400	1"	110-230 V AC 50-60 Hz 150 W
NT-07	1200	650	2000	500	1"	110-230 V AC 50-60 Hz 150 W
NT-08	1300	700	1960	609	1"	110-230 V AC 50-60 Hz 150 W
NT-09	1300	700	2150	700	1 1/2"	110-230 V AC 50-60 Hz 150 W
NT-10	1350	700	2100	800	1 1/2"	110-230 V AC 50-60 Hz 150 W
NT-11	1450	750	2000	900	1 1/2"	110-230 V AC 50-60 Hz 150 W
NT-12	1450	750	2200	1100	1 1/2"	110-230 V AC 50-60 Hz 150 W
NT-13	1580	880	2100	1350	1 1/2"	110-230 V AC 50-60 Hz 150 W
NT-14	1450	830	2250	1600	1 1/2"	110-230 V AC 50-60 Hz 150 W
NT-15	1600	1230	2360	2000	2"	110-230 V AC 50-60 Hz 150 W
NT-16	2000	1100	2400	2300	2"	110-230 V AC 50-60 Hz 150 W
NT-17	2000	1420	2440	2800	2"	110-230 V AC 50-60 Hz 150 W
NT-18	2200	1500	2500	3400	2 1/2"	110-230 V AC 50-60 Hz 150 W
NT-19	1600	2000	2360	4200	2 1/2"	110-230 V AC 50-60 Hz 150 W
NT-20	2000	2100	2270	4800	3"	110-230 V AC 50-60 Hz 150 W
NT-21	2000	2400	2310	5500	3"	110-230 V AC 50-60 Hz 150 W
NT-22	2000	2400	2440	6000	3"	110-230 V AC 50-60 Hz 150 W
NT-23	2230	2450	2520	7000	3"	110-230 V AC 50-60 Hz 150 W

NITROGEN PRODUCTION (Nm^3/hour)

Model	%95	%96	%97	%98	%99	%99.5	%99.9	%99.95	%99.99	%99.995	%99.999	%99.9995	%99.9999
NT-01	10.00	8.90	7.90	6.90	5.25	4.25	2.95	2.50	2.00	1.45	01.05	0.95	0.65
NT-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
NT-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
NT-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
NT-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
NT-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
NT-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
NT-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
NT-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
NT-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
NT-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
NT-12	335.25	303.00	270.75	233.75	178.75	144.50	99.25	85.00	68.00	48.90	40.00	31.90	26.25
NT-13	434.00	390.50	349.50	302.50	231.25	187.00	128.65	110.00	88.00	63.25	50.65	41.25	33.75
NT-14	572.25	514.75	460.25	398.75	304.75	246.50	169.75	145.00	116.00	77.65	65.65	54.40	43.75
NT-15	749.90	674.50	603.00	522.50	399.25	323.00	222.65	190.00	152.00	103.50	85.65	71.25	56.25
NT-16	927.65	834.25	745.75	646.25	493.75	399.50	275.50	235.00	188.00	129.40	105.65	88.15	68.75
NT-17	1105.15	994.00	888.50	770.00	588.25	476.00	328.40	280.00	224.00	155.25	125.65	105.00	80.00
NT-18	1282.75	1153.75	1031.25	893.75	682.75	552.50	381.25	325.00	260.00	181.15	145.65	121.90	92.50
NT-19	1460.40	1313.50	1174.00	1017.50	777.25	628.75	434.15	370.00	296.00	207.00	165.65	138.75	105.00
NT-20	1677.50	1508.75	1348.75	1168.75	892.75	722.50	498.75	425.00	340.00	238.40	190.65	159.40	120.00
NT-21	1934.00	1739.50	1555.50	1375.00	1029.50	830.50	586.75	490.00	392.00	281.75	225.65	187.50	141.25
NT-22	2250.00	2000.00	1762.25	1581.25	1166.25	943.50	674.75	555.00	444.00	324.90	260.65	215.65	161.25
NT-23	2625.00	2250.00	1969.00	1787.50	1303.00	1054.00	762.75	620.00	496.00	368.00	295.65	243.15	181.25

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_2	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 AIR DEW POINT +3°C						

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	1	01.05	1.13	1.19	1.22

Making a Difference

Our Features

Our Features That Make a Difference

Superior Siemens PLC touch control panel

Simens PLC and 4-7 inch touch color screen

Exhaust and silencer system that does not clog and does not require replacement

+14 sensor inputs

Long-lasting Zirconium dioxide structured oxygen sensor

Modbus/Profibus/RMB

Hubbox remote access, monitoring and data collection

IP55 protection standard

Long life pneumatic control valves

Dew-point measurement at air inlet automatic protection mode

TANK CAPACITY DESIGN MADE ACCORDING TO THE "CYCLE LOAD CALCULATION" METHOD IN THE SECTOR

Low Air Coefficient

Premium quality CMS

Lowest air/gas factor

Air consumption as required

High flow rate nitrogen production with smaller capacity compressors

Low energy consumption, economical nitrogen gas production

Nitrogen gas can be used with the help of energy-saving hydrogen gas as needed for highest purification solutions.

To keep Nitrogen generator to run during the service and maintenance with the help of "Redundant Valve System".

Spare valve set
Uninterrupted production guarantee
Ease of maintenance
Easy control
Valve connection with leak-proof guarantee
Trouble-free and uninterrupted production with long-lasting and robust piston valves
Stainless steel fittings and pipes
Thanks to stainless steel superior filter system no problems occur such as clogging and explosions.

Features of Nitrogen

Sustainable nitrogen gas
Produce It Yourself!
0,5 – 2.100 Nm^3/hour capacity
range 95% – 99,9999% (1 ppm)
nitrogen generators up to purity
We produce.
Our nitrogen generators allow to produce high efficiency nitrogen gas with the purity level needed.
PSA technology ensures to get the best return on investment.
High gas purity rate with carbon molecular technology.
Nitrogen generator is designed according to 24/7 operating system.
To avoid external dependency with minimal maintenance costs.
Saving extra money by getting rid of expenses.
To have no on-site filling and transfer costs by producing on-site nitrogen.
Our nitrogen generator has an automatic start - stop system where it is designed to produce gas according to demand / consumption.
The nitrogen generator is delivered as ready for use.

Siemens PLC HMI 7”

Online Mobile Access Possibility

WE PROVIDE PROMPT SOLUTIONS TO PROBLEMS BY ESTABLISHING RAPID CONNECTIONS TO ANYWHERE IN THE WORLD WITH REMOTE CONNECTION. SIMPLE AND EASY ADMINISTRATION PANEL SAVES TIME BY OVERCOMING PROBLEMS.

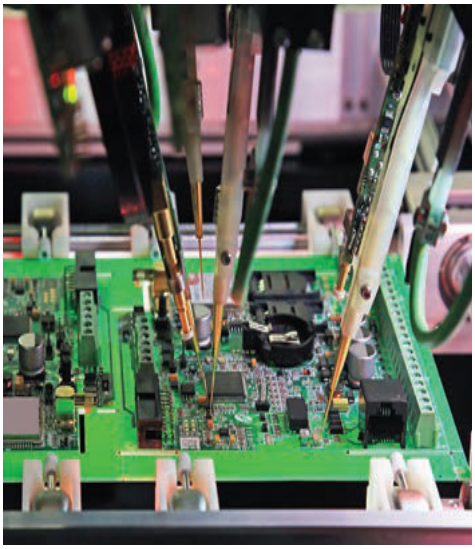
Sectors

-CHEMICAL INDUSTRY
-FOOD INDUSTRY
-LASER CUTTING INDUSTRY
-ADDITIONAL MANUFACTURING
3D LASER METALPRINTER
-DMLS APPLICATIONS
-HEAT TREATMENT INDUSTRY
-WIRE AND CABLE INDUSTRY
-ELECTRONICS INDUSTRY
-VEGETABLE OIL INDUSTRY
-AVIATION INDUSTRY
-MARITIME INDUSTRY
-MINING INDUSTRY
-ENERGY INDUSTRY
-PLASTIC INJECTION INDUSTRY
-PHARMACEUTICAL INDUSTRY
-ELECTROSTATIC POWDER COAT
ING FACILITIES
-MAP FOOD PACKAGING
APPLICATIONS
-LASER WELDING MACHINES
-ALUMINUM CASTING AND
EXTRUSION INDUSTRY
-JEWELERY CASTING INDUSTRY
-AROMATIC OILS AND ESSENCE
INDUSTRY
-WINE INDUSTRY
-COMPOSITE IN AVIATION INDUSTRY
-VARIOUS MANUFACTURING
INDUSTRIES
-AUTOCLAVE SYSTEMS







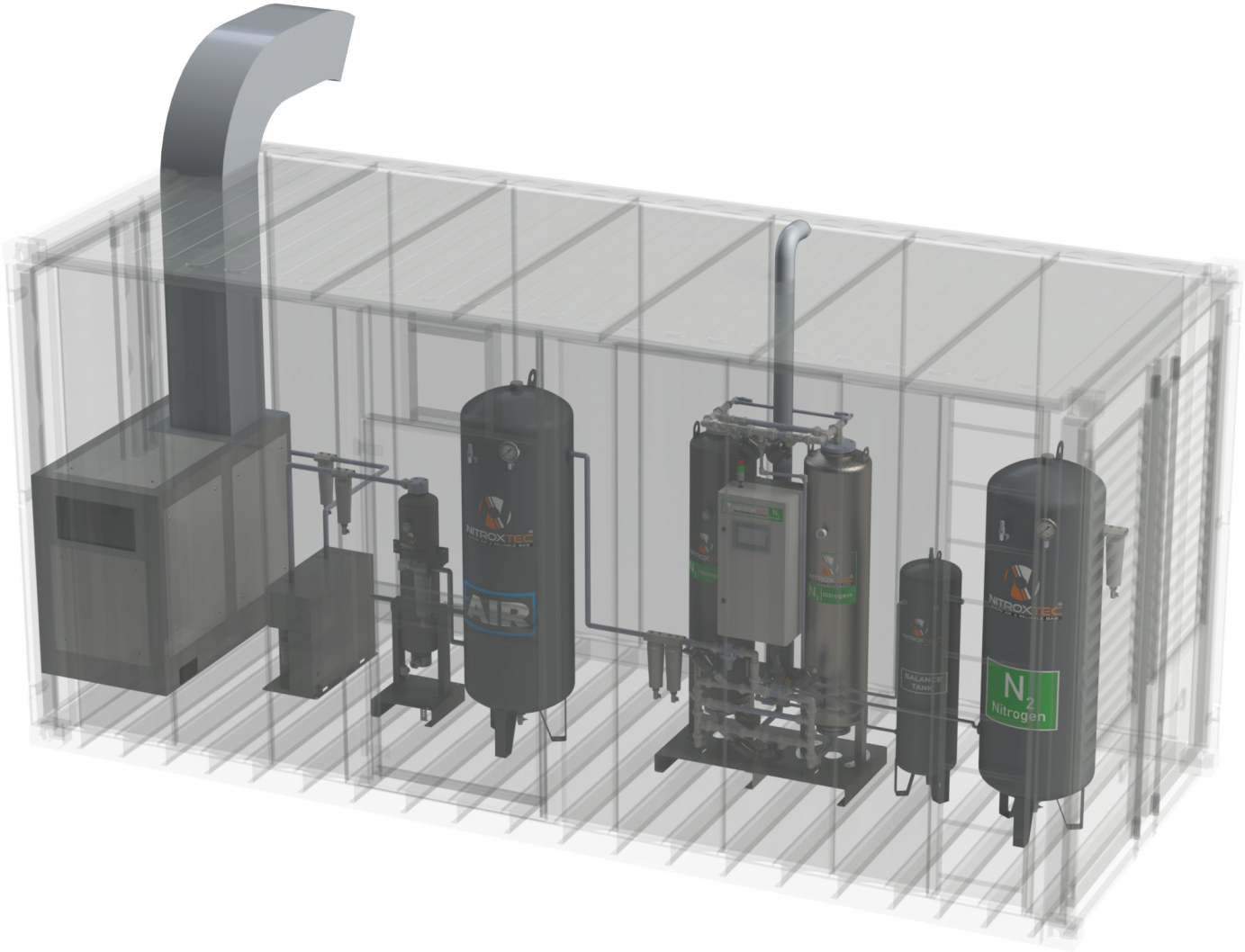

230 BAR NITROPLACE NITROGEN PRODUCTION SYSTEMS
All in one

8 BAR NITROPLACE NITROGEN PRODUCTION SYSTEMS
PLUG & START

CONTAINER TYPE NITROGEN PRODUCTION SOLUTIONS

Container type nitrogen production systems are one of the most preferred nitrogen production systems with their fl exibility and simple installation that meets the needs. Container type nitrogen production systems are a perfect solution for businesses, thanks to their portable and ready-to-use features.

8 BAR CONTAINER NITROGEN SYSTEM



DEOXY NITROGEN PURIFICATION UNITS

Nitroxtec Deoxy Nitrogen Purification Units

The Nitroxtec Deoxy (Nitrogen Purification) unit provides exact solution to the need for high nitrogen purity. Thanks to this system, nitrogen gas with a much higher purity such as 99,9999% (6.0) N_2 (1 ppm O^2) can be obtained and more economical nitrogen gas can be produced compared to standard PSA nitrogen production. Deoxy device is produced from a nitrogen generator with a certain ratio of hydrogen gas. It increases the purity of the existing nitrogen gas by mixing incoming nitrogen gas of 99,9% purity

Deoxy Nitrogen purification units are devices used to separate nitrogen in the air from oxygen, carbon dioxide and other gases. The purification process is done by taking advantage of the differences between the molecular sizes and physical properties of the gases in the air.

With Deoxy Nitrogen Purification Unit Less Energy, More Efficiency

HOW DOES DEOXY NITROGEN PURIFICATION UNIT WORK?

In the catalyst unit, palladium-coated alumina binds to the externally introduced hydrogen gas atoms. The remaining (1.000 ppm) oxygen gas molecules in the 99,9% purity nitrogen gas pro-duced in the PSA generator combine with hydrogen gas on palladium alumina and turn into water, thus raising the nitrogen gas to an ultra-pure level.

The water in ultra-pure nitrogen gas is dried with the help of a special desiccant dryer, and ultra-high purity 99,9999% (1 ppm O2) nitrogen gas, purified from oxygen and moisture, is transferred to the systems.

A special automation system is used to ensure the most efficient and minimal consumption of hydrogen gas used in the catalyst.

Deoxy Nitrogen Purification Unit Models

Model	Inlet Purity %99,5	InletPurity %99,9
	%99,999 (5,0) (10 ppm O_2)	%99,9995 - %99,9999 (5,5 - 6,0) (5-1 ppm O_2)
Deoxy 01	3.4	2.35
Deoxy 02	6.8	4.7
Deoxy 03	13.6	9.4
Deoxy 04	20.4	14.1
Deoxy 05	27.2	18.8
Deoxy 06	34	23.5
Deoxy 07	47.6	32.9
Deoxy 08	61.2	42.3
Deoxy 09	74.8	51.7
Deoxy 10	88.4	61.1
Deoxy 11	102	70.4
Deoxy 12	115.6	79.4
Deoxy 13	149.6	102.9
Deoxy 14	197.2	135.8
Deoxy 15	258.4	178.1
Deoxy 16	319.6	220.4
Deoxy 17	380.8	262.7
Deoxy 18	442	305
Deoxy 19	503	347.3
Deoxy 20	578	399
Deoxy 21	664.4	469.4
Deoxy 22	754.8	539.8
Deoxy 23	843.2	610.2

Standart PSA Nitrogen Generator

Deoxy PSA Nitrogen Generator

Deoxy Nitrogen Generators Installation Diagram

NITROXTEC FOR EFFICIENT AND SUSTAINABLE PRODUCTION

THE MAIN ADVANTAGES OF DEOXY NITROGEN PURIFICATION UNITS ARE:

- **High purity nitrogen production**
- **Low operating cost**
- **Flexibility in nitrogen supply**

Deoxy nitrogen purification units are the perfect solution for businesses that need high purity nitrogen. These units increase operational efficiency by providing significant cost savings to businesses.

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 asfood 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 PRODUCTION (Nm³/hour)

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	01.05	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 SPECIFICATIONS

Model	Dimensions "mm"			Weight Kg	Air Inlet Ccnnectioms (BSP Thread Size)	Electrical Power
	Length	Width	Height			
MNT-01	450	405	1120	110	1/2"	110-230 V AC 50-60 Hz 150 W
MNT-02	450	560	1520	200	1/2"	110-230 V AC 50-60 Hz 150 W
MNT-03	450	715	1520	208	1/2"	110-230 V AC 50-60 Hz 150 W
MNT-04	450	870	1520	259	3/4"	110-230 V AC 50-60 Hz 150 W
MNT-05	670	790	1750	289	1"	110-230 V AC 50-60 Hz 150 W
MNT-06	670	1010	1750	330	1"	110-230 V AC 50-60 Hz 150 W
MNT-07	670	1230	1750	400	1"	110-230 V AC 50-60 Hz 150 W
MNT-08	670	1450	1750	470	1"	110-230 V AC 50-60 Hz 150 W
MNT-09	670	1670	1750	540	1 1/2"	110-230 V AC 50-60 Hz 150 W
MNT-10	670	1890	1750	620	1 1/2"	110-230 V AC 50-60 Hz 150 W
MNT-11	670	2110	1750	700	1 1/2"	110-230 V AC 50-60 Hz 150 W

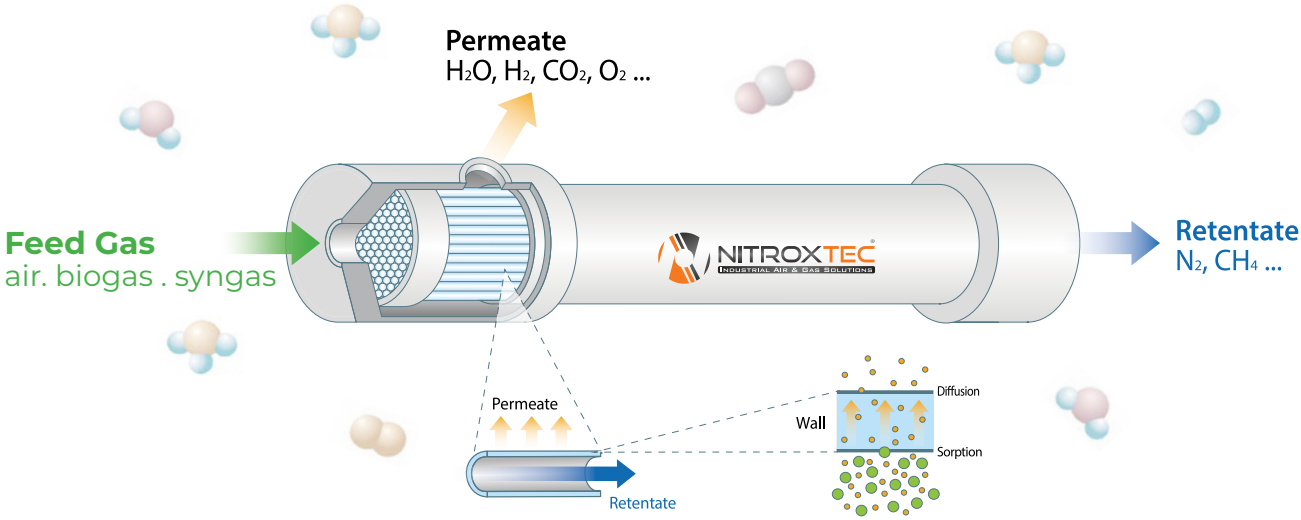
Pressurized Air Inlet 7 Bar G													
PURITY	95%	96%	97%	98%	99%	99.5%	99.9%	99.95%	99.99%	99.995%	99.999%	99.9995%	99.9999%
O_2	5%	4%	3%	2%	1%	0.5%	1000 ppm	500 ppm	100 ppm	50 ppm	10 ppm	5 ppm	1 ppm
AIR / GAS Ratio	1.8	2	2.1	2.3	2.5	2.6	3.2	3.5	3.9	4.5	5.2	7.5	8.5
AMBIENT TEMPERATURE +25°C							INLET AIR DEW POINT +3°C						

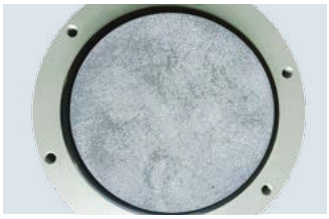
Air Inlet Temperature Correction Factors									
5 °C	10 °C	15 °C	20 °C	25 °C	30 °C	35 °C	40 °C	45 °C	50 °C
0.85	1.03	1.02	1	1	0.93	0.87	0.72	0.6	0.52

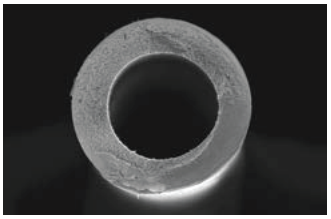
Inlet Pressure Air Correction Factors						
5 BAR	6 BAR	7 BAR	8 BAR	9 BAR	10 BAR	11 BAR
0.78	0.91	1	01.05	1.13	1.19	1.22

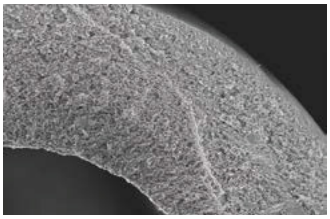
NITROXTEC MEMBRANCE NITROGEN GENERATORS

Principle of membrance Technology

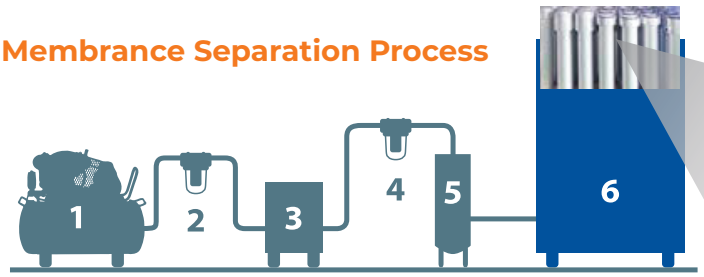








Membrance Separation Process



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

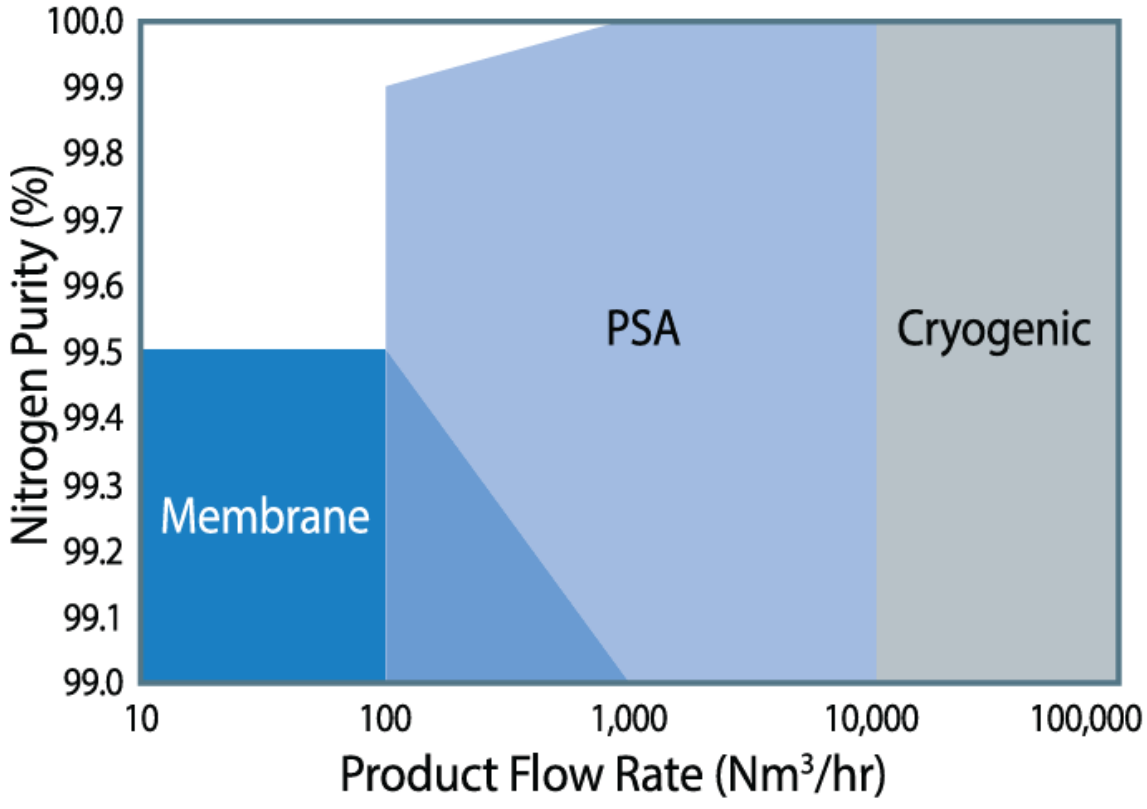
- Food & Beverage: Modified Atmosphere Packaging (MAP), blanketing, and preservation.
- Electronics: Soldering, 3D printing, and semiconductor manufacturing.
- Pharmaceuticals: Blanketing, purging, and inerting for drug safety.
- Oil & Gas: Pipeline purging, LNG storage, and explosion prevention.
- Laser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

Tecnical Specification

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%+
Energy Use	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 Nm%/h, 99% purity) replaced liquid nitrogen deliveries.

Results:

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

OXEGEN GENERATORS

Oxygen Generators

Discover oxygen gas production with NitroxTec's superior quality and modern technology. PSA technology is applied to separate oxygen gas from compressed air. Thanks to the PSA technology that enables to produce oxygen gas with a purity range of 90% - 95% at a capacity of 0,5 - 385 Nm^3/hour. Instead of purchasing an oxygen cylinder, why doesn't anyone produce oxygen gas on-site at low costs? NitroxTec; Oxygen generators have the modern technology required to produce oxygen gas. Our NitroxTec oxygen generators; Thanks to modern PSA technology which is the reliable, sustainable and cost-effective source of oxygen gas.

Oxygen Generators are used in various sectors where oxygen gas is needed. It's a very important option for companies that value sustainability and profitability. NitroxTec allows you to become a professional oxygen gas producer with an on-site oxygen generator by producing the oxygen gas yourself. Buy uninterrupted ENERGY at low costs having the option of professionally and sustainably pure oxygen gas anytime, anywhere with a purity suitable for your production;
-You can produce the amount of oxygen gas you need.
-You can get rid of operating expenses with low air consumption and minimum cost.
-Achieve energy efficiency by using the advantage provided by the 'ON-SITE PRODUCTION and PLUG & START' system.
Please contact us for our less costly, safe and alternative products that suit your needs.

Low Operation and Maintenance Expenses

Long maintenance period

High quality equipment

Economical spare parts and service costs

Exhaust and valve systems that do not require maintenance or replacement

Our Advantages:

Nitroxtec Oxygen Generator; which is fully tested and safe.

It has been proven in hundreds of applications in the fields around the World.

It provides excellent cost savings by producing sustainable oxygen gas with the desired purity.

Control with touch screen.

Oxygen gas parameters produced with superior modern technology can be instantly monitored and recorded on the screen.

It is designed with an automatic start and stop system according to your oxygen gas consumption.

Site-specific production can be made according to customer needs.

It is fully automatic and operates on a 24/7 basis.

It can be controlled online remotely.

It is produced according to the **'ON-SITE PRODUCTION and PLUG & START ON-SITE'** system.

Control valves are of European origin, have long-lasting, robust exhaust and valve technology that does not require maintenance or replacement.

You can adjust the purity level in NitroxTec oxygen generators.

You can encounter our NitroxTec oxygen generators all over the world.

In addition to our PSA principle oxygen generators, we also have VPSA and Cryogenic oxygen production systems.

Inlet Pressure Air Correction Factors			
4 BAR	**5 BAR**	**6 BAR**	**7 BAR**
0.75	0.9	1	1

Pressurized Air Inlet 7 Bar G			
Purity	**90%**	**93%**	**95%**
AIR / GAS Ratio	9	10	11

Air Inlet Temperature Correction Factors							
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

OXYGEN PRODUCTIONS (Nm³/hour)

Model	90%	93%	95%	Dimensions "mm"			Weight Kg	Air Inlet Ccnnectioms (BSP Thread Size)	Electrical Power
				Length	Width	Height			
Oxytech - 01	0.70	0.60	0.50	610	540	1170	85	1/2"	110-230 V AC 50-60 Hz 150 W
Oxytech - 02	1.20	1.10	1.00	610	540	1310	140	1/2"	110-230 V AC 50-60 Hz 150 W
Oxytech - 03	2.40	2.30	2.00	610	540	1720	200	1/2"	110-230 V AC 50-60 Hz 150 W
Oxytech - 04	3.60	3.40	3.00	780	550	1640	220	1/2"	110-230 V AC 50-60 Hz 150 W
Oxytech - 05	7.00	6.00	5.00	830	550	1770	300	1/2"	110-230 V AC 50-60 Hz 150 W
Oxytech - 06	8.90	8.10	7.10	1100	600	1800	400	1/2"	110-230 V AC 50-60 Hz 150 W
Oxytech - 07	10.00	9.00	8.00	1200	650	2000	500	3/4"	110-230 V AC 50-60 Hz 150 W
Oxytech - 08	12.00	11.00	10.00	1300	700	1960	609	1"	110-230 V AC 50-60 Hz 150 W
Oxytech - 09	14.50	13.20	12.00	1300	700	2150	700	1"	110-230 V AC 50-60 Hz 150 W
Oxytech - 10	16.00	14.00	13.00	1350	700	2100	800	1"	110-230 V AC 50-60 Hz 150 W
Oxytech - 11	18.80	16.80	15.50	1450	750	2000	900	1"	110-230 V AC 50-60 Hz 150 W
Oxytech - 12	25.00	23.00	21.00	1450	750	2200	1100	1"	110-230 V AC 50-60 Hz 150 W
Oxytech - 13	29.00	26.00	24.00	1580	880	2100	1350	1"	110-230 V AC 50-60 Hz 150 W
Oxytech - 14	39.00	34.00	30.00	1450	830	2250	1600	1 1/2"	110-230 V AC 50-60 Hz 150 W
Oxytech - 15	46.00	41.00	35.00	1600	1230	2360	2000	1 1/2"	110-230 V AC 50-60 Hz 150 W
Oxytech - 16	52.00	47.00	42.00	2000	1100	2400	2300	1 1/2"	110-230 V AC 50-60 Hz 150 W
Oxytech - 17	63.00	57.00	50.00	2000	1420	2440	2400	2"	110-230 V AC 50-60 Hz 150 W
Oxytech - 18	80.00	72.00	65.00	2200	1500	2500	3400	2"	110-230 V AC 50-60 Hz 150 W
Oxytech - 19	90.00	88.00	72.00	1600	2000	2360	4200	2"	110-230 V AC 50-60 Hz 150 W
Oxytech - 20	104.00	95.00	87.00	2000	2100	2270	4800	3"	110-230 V AC 50-60 Hz 150 W
Oxytech - 21	137.00	125.00	107.00	2000	2400	2310	5500	3"	110-230 V AC 50-60 Hz 150 W
Oxytech - 22	153.00	139.00	127.00	2000	2400	2440	6000	3"	110-230 V AC 50-60 Hz 150 W
Oxytech - 23	192.00	175.00	160.00	2230	2450	2520	7000	3"	110-230 V AC 50-60 Hz 150 W
Oxytech - 24	241.00	220.00	200.00	2200	3300	2400	10000	DN 100	110-230 V AC 50-60 Hz 150 W
Oxytech - 25	290.00	264.00	240.00	2200	4500	2500	12000	DN 100	110-230 V AC 50-60 Hz 150 W
Oxytech - 26	385.00	350.00	320.00	2200	7000	2500	20000	DN 150	110-230 V AC 50-60 Hz 150 W
Ambient Temp. 20 °C				20 °C Inlet Air Dewpoint +3°C					

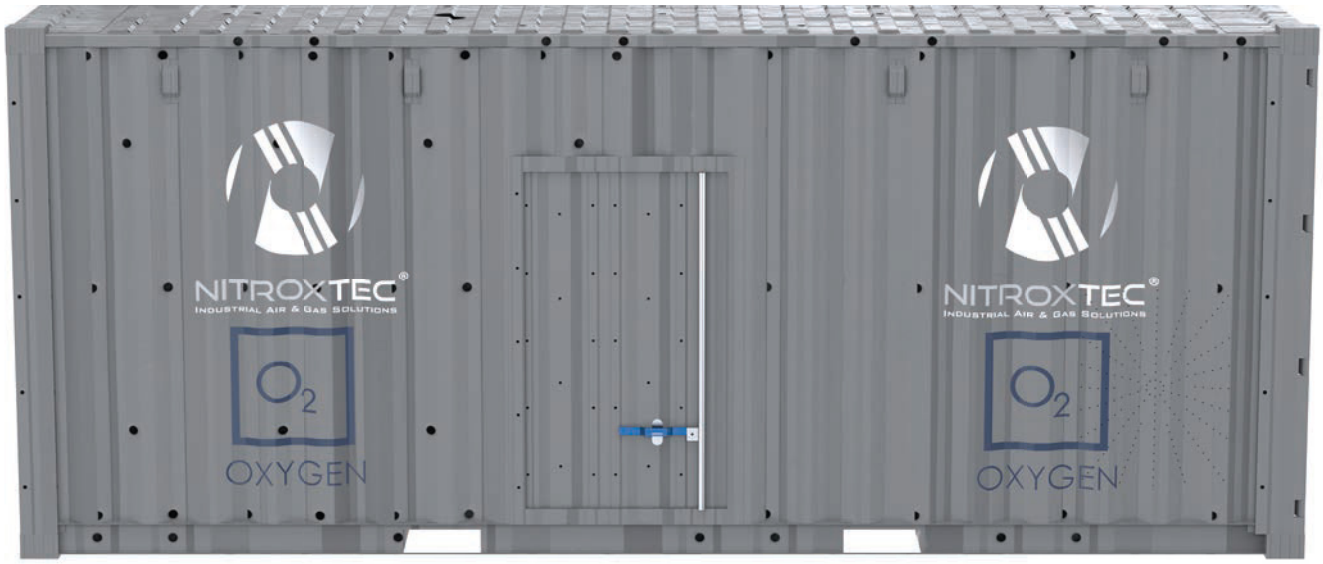
6 Bar Oxygen Generator Installation Diagram

150 Bar Oxygen Generator Installation Diagram

CONTAINER TYPE OXYGEN PRODUCTION SOLUTIONS

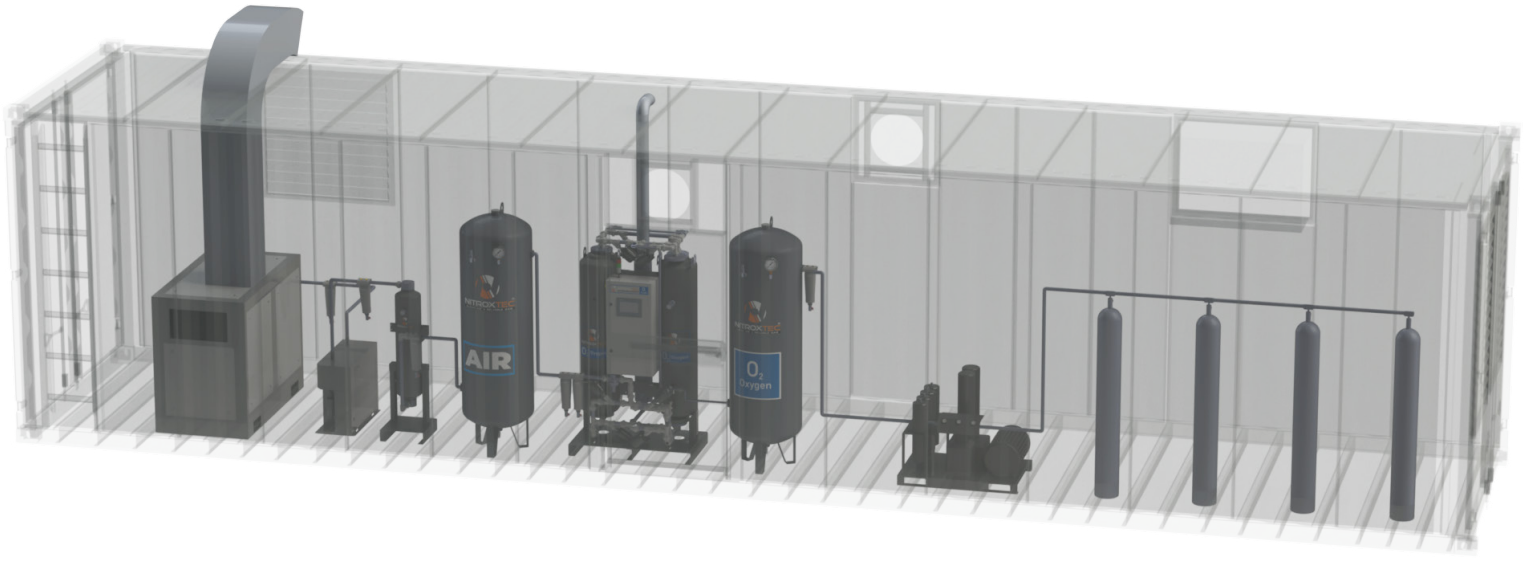
Container type oxygen production systems are one of the most preferred oxygen production systems with their flexibility and simple installation that meets the needs. Container type oxygen production systems are a perfect solution for businesses, thanks to their portable and ready-to-use features.

6 BAR CONTAINER OXYGEN SYSTEM



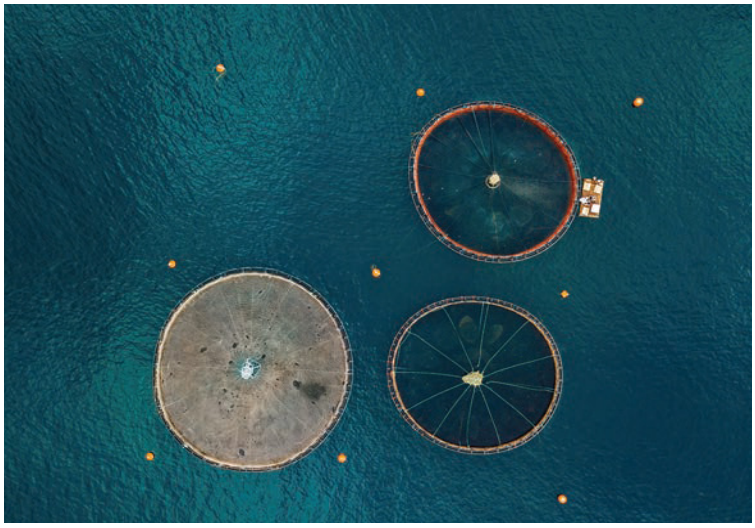
6 BAR CONTAINER OXYGEN SYSTEM

150 BAR CONTAINER OXYGEN SYSTEM



Sectors

-MEDICAL APPLICATIONS
-GLASS MANUFACTURING
-COAL
- METAL
-OZONE INDUSTRY
-PURIFICATION OF WASTEWATER
-FISH FARM
-STONE WOOL
-GLASS WOOL INDUSTRY



Industrial Remote Access and Data Collection Device

You can directly access, monitor and control our nitrogen and oxygen gas generators from your PC and smartphone anytime, anywhere with HUBBOX. You can collect your production data from nitrogen and oxygen generator systems offline and online, and our technical team can remotely access and control nitrogen and oxygen generators wherever they are in the world.

Offering easy and perfect access with WAN, LAN and WIFI inputs, our products provide data communication with high security SSL certificates and the most up-to-date encryption methods (ECDHE-RSA-AES256-GCM-SHA384). It uses Google Authenticator infrastructure for two-step security 2FA when accessing your systems.

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 aeration processesfor 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 (Nm?/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
MNOX - 08	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	Dimensions "mm"			Weight Kg	Air Inlet Ccnnectioms (BSP Thread Size)	Electrical Power
	Length	Width	Height			
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
MNOX - 08	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 Inlet Temperature Correction Factors							
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

Heatless Desiccant Dryers

Heatless Desiccant 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^3/hour to 10.800 m^3/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.

Heatless Desiccant Dryers

Nitroxtec Ndd Heatless Adsorption Desiccant Dryer									
Model	Capacity (m^3/minute)	Capacity (m^3/hour)	Air inlet Connection	Dimensions "mm"			Weight Kg	Dewpoint	Electrical Power
				Length	Width	Height			
NDD - 0.3	0.30	18	1/4"	390	435	840	15	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 0.5	0.52	31	1/2"	390	440	1020	20	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 0.8	0.80	48	1/2"	450	460	1075	30	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 1	1.00	60	1/2"	410	460	1240	40	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 1.2	1.20	72	1/2"	410	460	1340	50	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 1.6	1.60	96	3/4"	440	530	1310	60	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 2	2.17	130	1"	440	530	1400	70	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 2.6	2.67	160	1"	700	550	1400	100	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 3.2	3.20	192	1"	550	550	1525	125	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 4	4.17	250	1"	550	550	1780	155	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 5	5.00	300	1 1/4”	800	575	1530	185	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 6	6.00	360	1 1/2”	800	575	1750	230	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 7.3	7.33	440	1 1/2”	900	710	1710	285	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 9	9.58	575	1 1/2”	900	710	1900	335	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 11	11.33	680	2”	1100	830	1820	485	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 14	14.17	850	2”	1100	800	1900	520	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 16	16.67	1000	2”	1100	800	2130	620	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 21	20.83	1250	2 1/2"	1200	700	2230	780	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 25	25.00	1500	2 1/2"	1250	900	2180	930	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 30	30.00	1800	DN80	1500	1045	2350	1160	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 36	36.67	2200	DN80	1800	1110	2100	1400	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 45	45.00	2700	DN80	1800	1060	2400	170	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 53	53.33	3200	DN100	1820	1260	2500	2000	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 60	60.00	3600	DN100	1750	1120	2300	2300	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 73	73.33	4400	DN100	1750	1310	2340	2800	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 83	83.33	5000	DN150	2600	1290	2470	3150	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 105	105.00	6300	DN150	2600	1570	2000	4060	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 120	120.00	7200	DN150	2600	1560	2170	4600	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 146	146.67	8800	DN150	2600	1500	2450	5650	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W
NDD - 180	180.00	10800	DN200	2600	1650	2500	6900	-20/-40/-70 Cdt	110-230V AC 50-60 Hz 50 W

Heatless Desiccant 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%

Desiccant Air Dryer Installation Diagram

DESICCANT AIR DRYER FLOW RATE CALCULATION

Correction factors for different operating conditions (Flow rates m³/min x k...)

Deviating working pressure P at the dryer inlet												
P bar(g)	5	6	7	8	9	10	11	12	13	14	15	16
K_p	0.75	0.88	1.00	1.06	1.12	1.17	1.22	1.27	1.32	1.37	1.41	1.46

Example:				
Operating Pressure:	8 bar	-->	Factor	1.06
Compressed Air Inlet Temprature:	40 ℃	-->	Factor	0.96

Compressed air ilet temperature Ti						
Temperature (℃)	25	30	35	40	45	50
K_i	1.00	1.00	1.00	0.96	0.90	0.83

EXPERT PERSONNEL IN COMPRESSED AIR AND GAS SOLUTIONS

HEATED DESICCANT DRYERS

Heated Desiccant Dryers

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 effi cient way.

Protect Your System and Products from the Damage of Moisture!

High Performance with zero Purge

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 fi lter 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 effi cient and resistant system to all kinds of pressure changes.

Installation Diagram of Desiccant Air Dryer with Heated Type Blower

MODEL	Capacity (m³/minute)	Capacity (m³/hour)	Air inlet Connection	Dimensions "mm"			Weight Kg	Dewpoint	Maximum Pressure	Average Power (kW)	Electrical Power
				Length	Width	Height					
NDD/B14	14.17	850	2"	800	1200	1935	885	-40℃	11	8.90	400-440V/3/50-60Hz
NDD/B16	16.67	1000	2"	846	1200	2149	1055	-40℃	11	9.00	400-440V/3/50-60Hz
NDD/B21	20.83	1250	DN65	844	1250	2110	1325	-40℃	11	11.60	400-440V/3/50-60Hz
NDD/B25	25.00	1500	DN80	866	1400	2189	1580	-40℃	11	11.80	400-440V/3/50-60Hz
NDD/B30	30.00	1800	DN80	874	1500	2164	1970	-40℃	11	14.30	400-440V/3/50-60Hz
NDD/B36	36.67	2200	DN80	934	1600	2252	2380	-40℃	11	17.00	400-440V/3/50-60Hz
NDD/B45	45.00	2700	DN80	1040	1750	2104	2890	-40℃	11	21.50	400-440V/3/50-60Hz
NDD/B53	53.33	3200	DN100	1045	1750	2354	3400	-40℃	11	21.60	400-440V/3/50-60Hz
NDD/B60	60.00	3600	DN100	1074	1820	2194	3910	-40℃	11	32.00	400-440V/3/50-60Hz
NDD/B73	73.33	4400	DN100	1380	2050	2316	4760	-40℃	11	34.90	400-440V/3/50-60Hz
NDD/B83	83.33	5000	DN125	1380	2050	2456	5355	-40℃	11	37.70	400-440V/3/50-60Hz
NDD/B105	105.00	6300	DN150	1720	2600	2035	6900	-40℃	11	49.50	400-440V/3/50-60Hz
NDD/B120	120.00	7200	DN150	1736	2600	2136	7820	-40℃	11	49.70	400-440V/3/50-60Hz
NDD/B146	146.67	8800	DN150	1736	2600	2598	9605	-40℃	11	69.90	400-440V/3/50-60Hz
NDD/B180	180.00	10800	DN200	1741	2600	2592	11730	-40℃	11	78.00	400-440V/3/50-60Hz

Correction Factors						
Pressure (bar g)	5	6	7	8	9	10
Factor	0.75	0.88	1	1.12	1.25	1.37
Temrerature(℃)	20	25	30	35	40	45
Factor	1	1	1	1	0.8	0.73

HIGH PRESSURE DESICCANT DRYER
40-300 Bar

NITROXTEC NDD/50 Bar Desiccant Air Dryers									
Model	Capacity (m^3/minute)	Capacity (m^3/hour)	Air inlet Connection	Dimensions "mm"			Weight Kg	Dewpoint	Electrical Power
				Length	Width	Height			
NDD - 0.8 /50	0.80	48	1/2"	450	460	1075	36	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 1 /50	1.00	60	1/2"	410	460	1240	48	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 1.2 /50	1.20	72	1/2"	410	460	1340	60	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 1.6 /50	1.60	96	3/4"	440	530	1310	72	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 2 /50	2.17	130	1"	440	530	1400	84	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 2.6 /50	2.67	160	1"	700	550	1400	120	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 3.2 /50	3.20	192	1"	550	550	1525	150	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 4 /50	4.17	250	1"	550	550	1780	186	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 5 /50	5.00	300	1 1/4”	800	575	1530	222	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 6 /50	6.00	360	1 1/2”	800	575	1750	276	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 7.3 /50	7.33	440	1 1/2”	900	710	1710	342	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 9 /50	9.58	575	1 1/2”	900	710	1900	402	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 11 /50	11.33	680	2”	1100	830	1820	582	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 14 /50	14.17	850	2”	1100	800	1900	624	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 16 /50	16.67	1000	2”	1100	800	2130	744	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 21 /50	20.83	1250	2 1/2"	1200	700	2230	936	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 25 /50	25.00	1500	2 1/2"	1250	900	2180	1116	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 30 /50	30.00	1800	DN80	1500	1045	2350	1392	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W
NDD - 36 /50	36.67	2200	DN80	1800	1110	2100	1680	-20/-40/-70 Cdt	110-230 V AC 50-60 Hz 50 W

Compressed Air Inlet Temperature Factors						
Temperature (℃)	25	30	35	40	45	50
K_i	1.00	1.00	1.00	0.96	0.90	0.83

Standard Accessories: PLC Electronic Controller
All models have a zero-loss air or time-release water separator. 0,1 entry micron dust, 0,5 mg/m3 oil filter and 0,1 micron dust filters at the outlet are included.
All models have a zero-loss air or time-release water separator. 0,1 entry micron dust, 0,5 mg/m3 oil filter and 0,1 micron dust filters at the outlet are included.
Calculated Air Temperature: 35 °C (Correction factor)
Maximum Working Pressure: 50 bar.
Maximum Discharge Air Flow Rate: 2,7% 40 bar -40 Dew-point
Maximum Discharge Air Flow: 5% 40 bar -70 Dew-point
Compressed Air Flow: 20 °C (1 bar free normal air) **(ISO 1217)**

HIGH PRESSURE OIL-LESS DESICCANT DRYER

APPLICATION:

PET BOTTLE APPLICATIONS
LASER CUTTING MACHINES

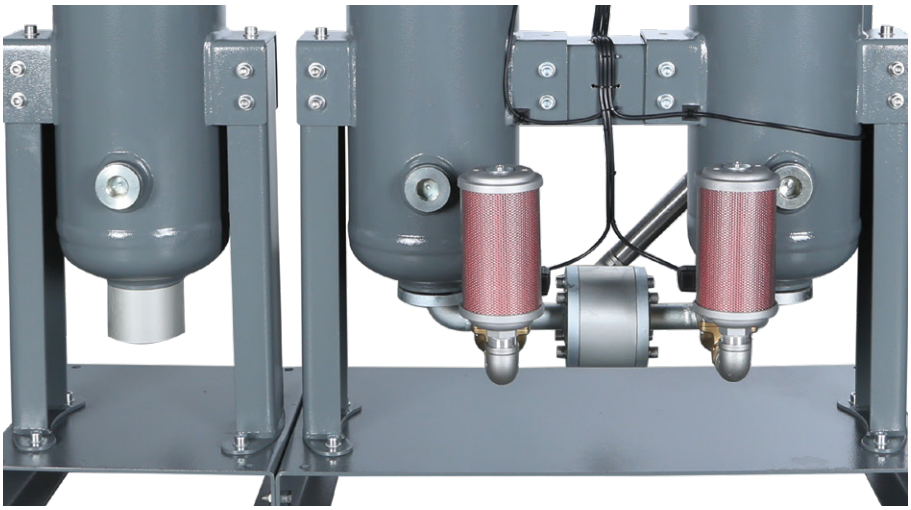
OIL-LESS DESICCANT DRYERS

OIL-LESS Desiccant Dryers

NitroxTec oil-less desiccant 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.

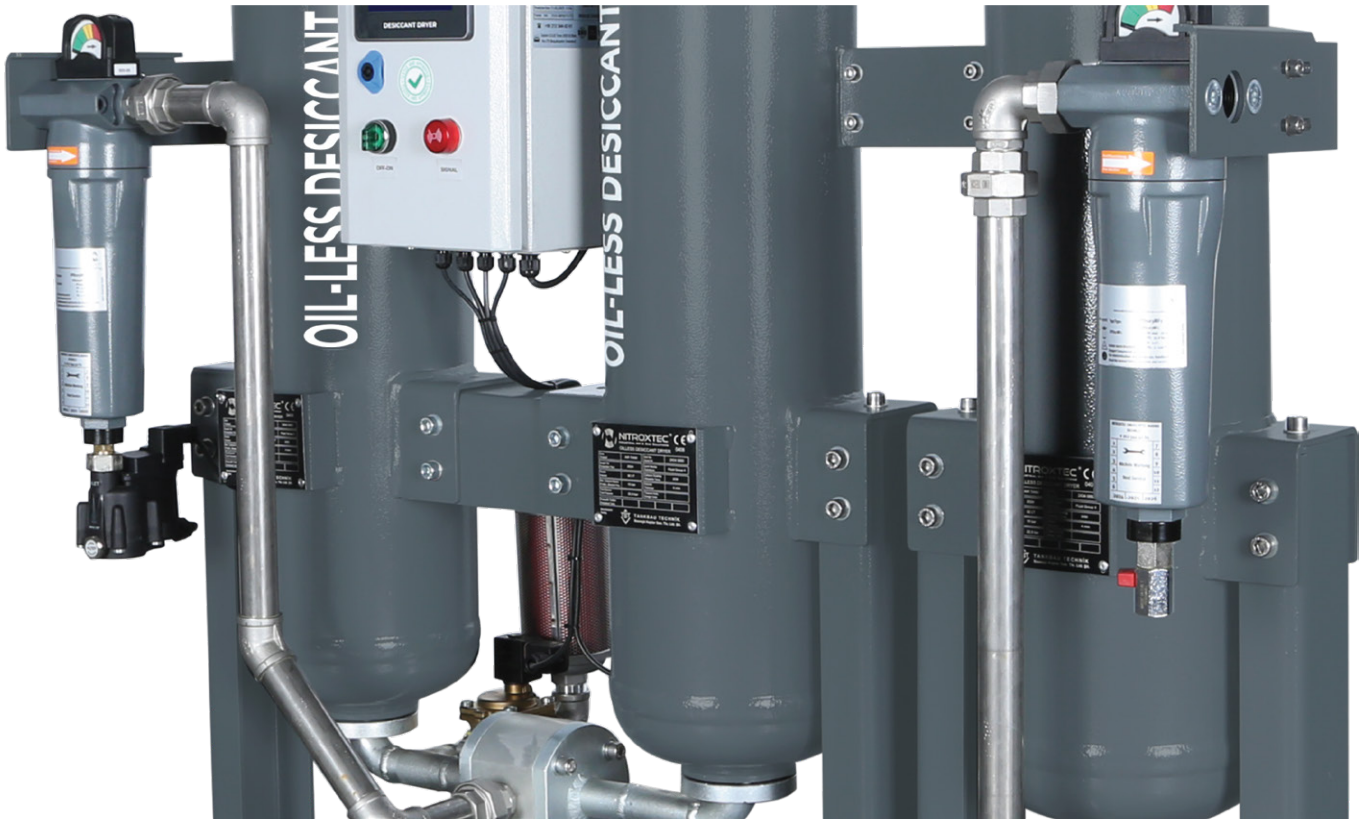


OIL-LESS Desiccant Dryers

- **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/m³ 0.003 ppm

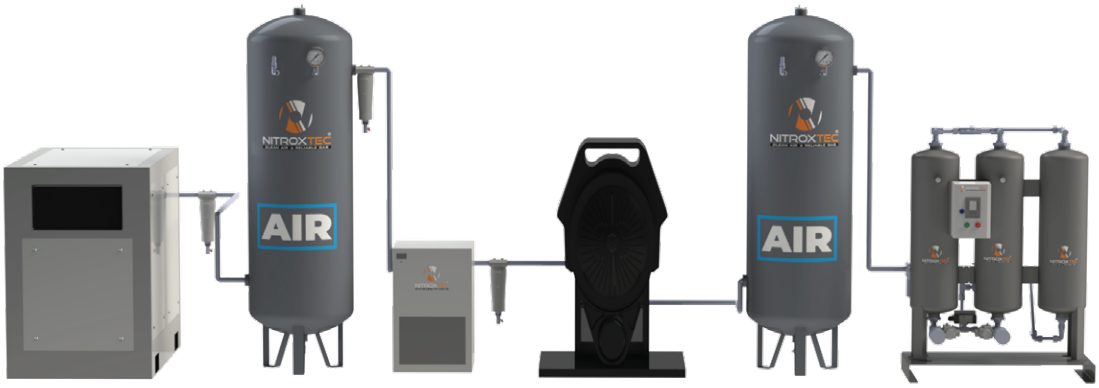
OIL-LESS Desiccant Dryers

NITROXTEC NDD+CT oil less desiccant dryer									
Model	Capacity (m^3/minute)	Capacity (m^3/hour)	Air inlet Connection	Dimensions "mm"			Weight Kg	Dewpoint	Electrical Power
				Length	Width	Height			
NDD+CT - 0.8	0.80	48	1/2"	645	485	1160	55	-40/-70 Cdt	230 V AC 50-60 Hz 50 W
NDD+CT - 1	1.00	60	1/2"	645	485	1340	60	-40/-70 Cdt	230 V AC 50-60 Hz 50 W
NDD+CT - 1.2	1.20	72	1/2"	645	485	1440	70	-40/-70 Cdt	230 V AC 50-60 Hz 50 W
NDD+CT - 1.6	1.60	96	3/4"	720	480	1415	90	-40/-70 Cdt	230 V AC 50-60 Hz 50 W
NDD+CT - 2	2.17	130	1"	725	505	1590	105	-40/-70 Cdt	230 V AC 50-60 Hz 50 W
NDD+CT - 2.6	2.67	160	1"	850	550	1350	135	-40/-70 Cdt	230 V AC 50-60 Hz 50 W
NDD+CT - 3.2	3.20	192	1"	850	550	1570	170	-40/-70 Cdt	230 V AC 50-60 Hz 50 W
NDD+CT - 4	4.17	250	1"	850	550	1850	200	-40/-70 Cdt	230 V AC 50-60 Hz 50 W
NDD+CT - 5	5.00	300	1 1/4"	1140	605	1550	245	-40/-70 Cdt	230 V AC 50-60 Hz 50 W
NDD+CT - 6	6.00	360	1 1/2"	1140	590	1760	300	-40/-70 Cdt	230 V AC 50-60 Hz 50 W
NDD+CT - 7.3	7.33	440	1 1/2"	1150	625	1640	365	-40/-70 Cdt	230 V AC 50-60 Hz 50 W
NDD+CT - 9	9.58	575	1 1/2"	1150	630	1790	440	-40/-70 Cdt	230 V AC 50-60 Hz 50 W
NDD+CT - 11	11.33	680	2"	1230	760	1950	620	-40/-70 Cdt	230 V AC 50-60 Hz 50 W
NDD+CT - 14	14.17	850	2"	1500	510	1875	700	-40/-70 Cdt	230 V AC 50-60 Hz 50 W
NDD+CT - 16	16.67	1000	2"	1500	810	2100	830	-40/-70 Cdt	230 V AC 50-60 Hz 50 W
NDD+CT - 21	20.83	1250	2 1/2"	1620	950	2180	1040	-40/-70 Cdt	230 V AC 50-60 Hz 50 W



Oil-less Desiccant Dryer Installation Diagram

40 BAR Oil-less Desiccant Dryer Installation Diagram



MODULAR TYPE
OIL-LESS DESICCANT DRYERS

Technical Specification

MODEL	Capacity (m3/minute)	Capacity (m3/hour)	Dimensions "mm"			Weight Kg	Air Inlet Connections (BSP Thread Size)	Electrical Power
			Length	Width	Height			
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.

MODUALR TYPE
OIL-LESS DESICCANT DRYER INSTALLATION DIAGRAM

MODUALR TYPE
OIL-LESS DESICCANT DRYER INSTALLATION DIAGRAM WITH GAS COOLED AIR DRYER

MODULAR TYPE DESICCANT DRYERS

Technical Specification

Model	Capacity (m3/minute)	Capacity (m3/hour)	Air Inlet Connections (BSP Thread Size)	Dimensions "mm"			Weight Kg	Electrical Power
				Length	Width	Height		
MNDD-0.3	0.30	18	1/2"	500	300	360	23	110-230V AC 50-60 Hz 50W
MNDD-0.5	0.52	31	1/2"	500	300	520	28	110-230V AC 50-60 Hz 50W
MNDD-0.8	0.80	48	1/2"	500	300	940	34	110-230V AC 50-60 Hz 50W
MNDD-1	1.00	60	3/4"	500	300	1100	39	110-230V AC 50-60 Hz 50W
MNDD-1.2	1.20	72	1"	500	300	1300	43	110-230V AC 50-60 Hz 50W
MNDD-1.6	1.60	96	1"	500	300	1620	51	110-230V AC 50-60 Hz 50W
MNDD-2	2.17	130	1"	500	450	1100	62	110-230V AC 50-60 Hz 50W
MNDD-2.6	2.67	160	1"	500	450	1340	75	110-230V AC 50-60 Hz 50W
MNDD-3.2	3.20	192	1"	500	450	1620	94	110-230V AC 50-60 Hz 50W
MNDD-4	4.17	250	1 1/2"	500	600	1340	113	110-230V AC 50-60 Hz 50W
MNDD-5	5.00	300	1 1/2"	500	600	1620	132	110-230V AC 50-60 Hz 50W
MNDD-6	6.00	360	1 1/2"	500	750	1500	160	110-230V AC 50-60 Hz 50W
MNDD-7.3	7.33	440	1 1/2"	500	900	1470	189	110-230V AC 50-60 Hz 50W
MNDD-9	9.58	575	1 1/2"	500	1050	1500	223	110-230V AC 50-60 Hz 50W
MNDD-11	11.33	680	2"	500	1200	1550	269	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.

MODUALR TYPE
DESICCANT DRYER INSTALLATION DIAGRAM

MODUALR TYPE
DESICCANT DRYER INSTALLATION DIAGRAM
WITH GAS COOLED AIR DRYER

ACTIVATED CARBON TOWER FILTERS

Activated Carbon Towers

NitroxTec Activated Carbon Towers are designed to separate oil vapor from the compressed air. There are flow distribution diffusers at the entrance and exits of the tower. It is designed by paying attention to the equal and homogeneous distribution of the air flow of activated carbon in the system. There is condensed or damaged oil in the form of vapor or steam leaking from the compressors therefore activated carbon is one of the best materials used to purify air, water and oil all over the World.

NitroxTec activated carbon towers have been developed to separate oil vapors from compressed air. To ensure perfect operation of the system, a special oil trap filter manufactured to Worldwide standards is mounted at the tower inlet. Special products can be achieved according to any production needs.

Since high levels of air quality are needed in sectors using superior technology such as hospital, food and beverage, aluminum and metal sectors that require air quality, it is necessary to use activated carbon towers. Activated Carbon Towers contain oil and gas in compressed air. By removing the odor from the system, oil-free and odor-free compressed air is obtained. Designed and manufactured for reliability and sustainable effi ciency. Solutions suitable for all needs with our activated carbon towers.

AdvantageS:

An air filter complying with European standards has been applied.
It has an automatic and reliable operating system.
Maximum performance is provided with low power consumption.
With silencer at the discharge air outlet to reduce the noise level
is equipped.
With the help of electronically operated discharge valves and special filters are integrated into the system to remove water, oil mist and dust particles .

Activated Carbon Towers Features

- Removes oily odor and oil mist from compressed air.
- At the outlet of the activated carbon tower Provides oil vapor amount less than 0,003 ppm.
- Thanks to its special design, it prevents the movement of the bed and carbon degradation/ pollution.
- Thanks to an optional oil gauge which checks the oil level to indicate the air being clean by measuring its flow.
- Thanks to self-supporting floor mounting it is easy to install and assemble.
- With the high quality activated carbon made in Germany the efficient and sustainable pure air is achieved which guarantees its purity.
- Inlet air temperature range: 1,5 °C to 50 °C
- High pressure models can be designed according to your needs.

Activated Carbon Towers

- **-0Pmax :** 200 mbar.

- **Working Pressure:** Max. for 16 bar models. Max.40 bar for 16-bar 40 bar pressure models
- **Compressed Air Flow Rate:** 20 °C (1 bar free normal air) (ISO1217)
- **Output Oil Concentration:** 0,003 mg/m³
- **Service Life Max..** ~ 8.000 hours at 30 °C 4,000 hours at 45 °C
- **Standard accessories:**
- **At the inlet:** 1 micron oil filter
- **Output:** 1 micron dust filter

ACTIVE CARBON TOWER FILTERS

Model	Capacity (m3/minute)	Capacity (m3/hour)	Air inlet Connections	Dimensions "mm"		Weight Kg 16 Bar	Weight Kg 40 Bar
				Width	Height		
NCT-0.3	0.30	18	1/4"	270	690	10	15
NCT-0.5	0.50	30	1/4"	300	950	20	30
NCT-0.8	0.80	48	1/2"	380	1110	25	40
NCT-1	1.00	60	1/2"	385	1240	30	50
NCT-1.2	1.20	72	1/2"	400	1280	35	55
NCT-1.6	1.60	96	3/4"	440	1310	40	65
NCT-2.1	2.10	126	3/4"	430	1640	45	70
NCT-2.6	2.60	156	1”	460	1380	50	80
NCT-3.2	3.20	192	1”	480	1590	60	95
NCT-4.1	4.10	246	1”	480	1860	70	110
NCT-5	5.00	300	1 1/2"	530	1550	85	135
NCT-6	6.00	360	1 1/2”	530	1780	100	160
NCT-7.30	7.33	439	1 1/2"	610	1720	120	190
NCT-9.50	9.58	574	1 1/2”	610	1840	150	240
NCT-11	11.33	680	2”	610	1960	200	320
NCT-14	14.17	850	2”	590	220	250	400
NCT-16	16.67	1000	2”	700	1910	300	480
NCT-20	20.83	1250	2”	700	2110	370	600
NCT-25	25.00	1500	2 1/2”	740	2360	450	720
NCT-30	30.00	180	3”	740	2375	520	830
NCT-36	36.67	2200	DN80	920	2125	600	960
NCT-45	45.00	2700	DN80	740	2255	650	1040
NCT-53	53.33	3200	DN100	740	2250	750	1200
NCT-60	60.00	3600	DN100	750	2010	800	1280
NCT-73	73.33	4400	DN100	1100	1950	900	1440
NCT-83	83.33	5000	DN150	750	2090	1000	1600
NCT-105	105.00	6300	DN150	750	2090	1100	1760
NCT-120	120.00	7200	DN150	900	2000	1250	2000
NCT-146	146.67	8800	DN150	900	2080	1500	2400
NCT-180	180.00	10800	DN200	900	2250	1750	2800

MODULAR TYPE ACTIVATED CARBON TOWER

Technical Specification

MODEL	Capacity (m3/minute)	Capacity (m3/hour)	Air Inlet Connections (BSP Thread Size)	Dimensions "mm"			Weight Kg
				Length	Width	Height	
MNCT-0.3	0.30	24	1/2"	370	300	360	17
MNCT-0.5	0.50	30	1/2"	370	300	520	21
MNCT-0.8	0.80	48	1/2"	370	300	940	26
MNCT-1	1.00	60	3/4"	370	300	1100	30
MNCT-1.2	1.20	72	1"	370	300	1300	34
MNCT-1.6	1.50	90	1"	370	300	1620	40
MNCT-2.1	2.17	130	1"	370	450	1100	49
MNCT-2.6	2.67	160	1"	370	450	1340	60
MNCT-3.2	03.08	185	1"	370	450	1620	76
MNCT-4.1	4.17	250	1 1/2"	370	600	1340	91
MNCT-5	5.00	300	1 1/2"	370	600	1620	107
MNCT-6	6.00	360	1 1/2"	370	750	1500	130
MNCT-7.30	7.33	440	1 1/2"	370	900	1470	154
MNCT-9.50	9.58	575	1 1/2"	370	1050	1500	182
MNCT-11	11.33	680	2"	370	1200	1550	220

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:
3. Energy-scotent Operatiors, and hydrocarbons with exceptional efciency.
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 Specification

Model	Capacity (m³/minute)	Max Air Flow (m³/hour)	Air Inlet Connections (BSP Thread Size)	Working Pressure	Dewpoint	Cooling Gas	Electrical Power
ND 1200	1.2 m³/min	72 m³/hr	1/2"	5-16 bar	3°C	R 404a	220V AC 50-60 Hz
ND 1600	1.6 m³/min	96 m³/hr	3/4"	5-16 bar	3°C	R 404a	220V AC 50-60 Hz
ND 2200	2.2 m³/min	132 m³/hr	3/4"	5-16 bar	3°C	R 404a	220V AC 50-60 Hz
ND 3000	3.0 m³/min	180 m³/hr	1"	5-16 bar	3°C	R 404a	220V AC 50-60 Hz
ND 3600	3.6 m³/min	216 m³/hr	1"	5-16 bar	3°C	R 404a	220V AC 50-60 Hz
ND 4500	4.5 m³/min	270 m³/hr	1 1/2"	5-16 bar	3°C	R 404a	220V AC 50-60 Hz
ND 6000	6.0 m³/min	360 m³/hr	1 1/2"	5-16 bar	3°C	R 404a	220V AC 50-60 Hz
ND 8500	8.5 m³/min	510 m³/hr	2"	5-16 bar	3°C	R 404a	380V AC 50-60 Hz
ND 10500	10.5 m³/min	630 m³/hr	2"	5-16 bar	3°C	R 404a	380V AC 50-60 Hz
ND 12000	12.0 m³/min	720 m³/hr	2"	5-16 bar	3°C	R 404a	380V AC 50-60 Hz
ND 16500	16.5 m³/min	990 m³/hr	3"	5-16 bar	3°C	R 407c	380V AC 50-60 Hz
ND 20000	20.0 m³/min	1200 m³/hr	3"	5-16 bar	3°C	R 407c	380V AC 50-60 Hz
ND 25000	25.0 m³/min	1500 m³/hr	3"	5-16 bar	3°C	R 407c	380V AC 50-60 Hz
ND 30000	30.0 m³/min	1800 m³/hr	3"	5-16 bar	3°C	R 407c	380V AC 50-60 Hz
ND 40000	40.0 m³/min	2400 m³/hr	DN 100	5-16 bar	3°C	R 407c	380V AC 50-60 Hz
ND 50000	50.0 m³/min	3000 m³/hr	DN 100	5-16 bar	3°C	R 407c	380V AC 50-60 Hz
ND 60000	60.0 m³/min	3600 m³/hr	DN 100	5-16 bar	3°C	R 407c	380V AC 50-60 Hz
ND 80000	80.0 m³/min	4800 m³/hr	DN 100	5-16 bar	3°C	R 407c	380V AC 50-60 Hz
ND 100000	100.0 m³/min	6000 m³/hr	DN 150	5-16 bar	3°C	R 407c	380V AC 50-60 Hz

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 Compressed air filters
Filter internal elements and accessories

NITROXTEC AIR FILTER ELEMENTS

NITROXTEC AUTO DRAIN

Filter Types and Specifications

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

Example Order Codes
APF73 with 1 micron efficiency: APF73MFO
APFF150-04 with 0.01 micron efficiency: APFF150-04SMA

Correction Facators 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/m?.
• 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®

INDUSTRIAL AIR & GAS SOLUTIONS

Revision Date: 05.01.2025

NITROXTEC®

INDUSTRIAL AIR & GAS SOLUTIONS

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