

CLEAN AIR & RELIABLE GAS























About Us

itroxTec Industrial Machinery Compressed Air and Gas Solutions Industry Trade Ltd.

NitroxTec; is a technical company in compressed air/gas industry, manufacturing the highest quality and most efficient machines and system solutions and introducing them to the various industries all around the World relying on the high expertise, practices and knowledge in the sector.

The company serves its customers the products with the lowest costs, highest performance and the highest efficiency without compromising on quality. It ensures customer satisfaction at the highest level thanks to the solutions it offers in its production facilities.

The source of successes and the solutions it offers to the industry is hidden in the value we give to our colleagues and business partners. Nitroxtec aims to produce sustainable solutions with the vision of quality efficiency in industrial air and gas systems.



Quality Unique

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NitroxTec

Our Vision

Necessary for sustainable growth for its stakeholders in the global market. To provide industrial air and gas solutions with quality and high efficiency. Competitive, trusted quality, friendly to the environment and people. To be a sensitive technology company

Our Mission

We provide high value-added, innovative and reliable products and solutions to our customers and business partners.

By reducing the 3rd party dependency of production facilities and developing technology to our stakeholders by producing products that comply with the principle of innovation and efficiency.

To be a company that increases the competitiveness of our customers by contributing to the use of quality products

Our Understanding of Quality

The first thing our customers and business partners will always remember is quality and efficiency.

Our Advantages

Innovative and reliable technology

Sustainable efficiency

High performance

Affordable price thanks to low costs.

We provide installation and production at the place needed

Design

We do the best engineering optimization for the industrial compressed air and gas solutions with the expert technical team

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

We Are One Step Ahead in Production

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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.



Industrial Air with Industry **4.0** & The Future of Gas Solutions is Here

Products

Nitrogen Generators

Oxygen Generators

Activated Carbon Tower Filters





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Desiccant **Air Dryers**





Nitrogen Generators

Product Catalogue









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 efficiently 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 efficient 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 Nm³/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 | AIR INTAKE CONNECTIONS | | | |
|-------|--------|-----------------|--------|--------|------------------------|-------------------------|--|--|
| MODEL | LENGTH | WIDTH | HEIGHT | kg | SIZE BSP FEMALE | | | |
| NT-01 | 610 | 540 | 1170 | 95 | 1/2" | 230 V AC 50-60 Hz 150 W | | |
| NT-02 | 610 | 650 | 1310 | 165 | 1/2" | 230 V AC 50-60 Hz 150 W | | |
| NT-03 | 610 | 650 | 1720 | 235 | 1/2" | 230 V AC 50-60 Hz 150 W | | |
| NT-04 | 910 | 680 | 1640 | 266 | 1/2" | 230 V AC 50-60 Hz 150 W | | |
| NT-05 | 910 | 680 | 1760 | 300 | 3/4" | 230 V AC 50-60 Hz 150 W | | |
| NT-06 | 1100 | 600 | 1800 | 400 | 1" | 230 V AC 50-60 Hz 150 W | | |
| NT-07 | 1200 | 650 | 2000 | 500 | 1" | 230 V AC 50-60 Hz 150 W | | |
| NT-08 | 1300 | 700 | 1960 | 609 | 1" | 230 V AC 50-60 Hz 150 W | | |
| NT-09 | 1300 | 700 | 2150 | 700 | 1 1/2" | 230 V AC 50-60 Hz 150 W | | |
| NT-10 | 1350 | 700 | 2100 | 800 | 1 1/2" | 230 V AC 50-60 Hz 150 W | | |
| NT-11 | 1450 | 750 | 2000 | 900 | 1 1/2" | 230 V AC 50-60 Hz 150 W | | |
| NT-12 | 1450 | 750 | 2200 | 1100 | 1 1/2" | 230 V AC 50-60 Hz 150 W | | |
| NT-13 | 1580 | 880 | 2100 | 1350 | 1 1/2" | 230 V AC 50-60 Hz 150 W | | |
| NT-14 | 1450 | 830 | 2250 | 1600 | 1 1/2" | 230 V AC 50-60 Hz 150 W | | |
| NT-15 | 1600 | 1230 | 2360 | 2000 | 2" | 230 V AC 50-60 Hz 150 W | | |
| NT-16 | 2000 | 1100 | 2400 | 2300 | 2" | 230 V AC 50-60 Hz 150 W | | |
| NT-17 | 2000 | 1420 | 2440 | 2800 | 2" | 230 V AC 50-60 Hz 150 W | | |
| NT-18 | 2200 | 1500 | 2500 | 3400 | 2 1/2" | 230 V AC 50-60 Hz 150 W | | |
| NT-19 | 1600 | 2000 | 2360 | 4200 | 2 1/2" | 230 V AC 50-60 Hz 150 W | | |
| NT-20 | 2000 | 2100 | 2270 | 4800 | 3" | 230 V AC 50-60 Hz 150 W | | |
| NT-21 | 2000 | 2400 | 2310 | 5500 | 3" | 230 V AC 50-60 Hz 150 W | | |
| NT-22 | 2000 | 2400 | 2440 | 6000 | 3" | 230 V AC 50-60 Hz 150 W | | |
| NT-23 | 2230 | 2450 | 2520 | 7000 | 3" | 230 V AC 50-60 Hz 150 W | | |



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% |
|-------|---------|---------|---------|---------|---------|---------|--------|--------|--------|---------|---------|----------|----------|
| NT-01 | 10,00 | 8,88 | 7,88 | 6,88 | 5,25 | 4,25 | 2,94 | 2,50 | 2,00 | 1,44 | 1,06 | 0,94 | 0,63 |
| NT-02 | 19,75 | 17,75 | 15,75 | 13,75 | 10,50 | 8,50 | 5,88 | 5,00 | 4,00 | 2,88 | 2,13 | 1,88 | 1,25 |
| NT-03 | 39,50 | 35,50 | 32,00 | 27,50 | 21,00 | 17,00 | 11,75 | 10,00 | 8,00 | 5,75 | 4,38 | 3,75 | 2,63 |
| NT-04 | 59,25 | 53,25 | 47,25 | 41,25 | 31,50 | 25,50 | 17,63 | 15,00 | 12,00 | 8,63 | 6,38 | 5,63 | 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 | 5,63 |
| NT-06 | 98,75 | 88,75 | 78,75 | 68,75 | 52,50 | 42,50 | 29,38 | 25,00 | 20,00 | 14,38 | 10,63 | 9,38 | 7,50 |
| NT-07 | 138,25 | 124,25 | 110,75 | 96,25 | 73,50 | 59,50 | 41,13 | 35,00 | 28,00 | 20,28 | 15,00 | 13,13 | 10,13 |
| NT-08 | 177,63 | 159,75 | 142,75 | 123,75 | 94,50 | 76,50 | 52,88 | 45,00 | 36,00 | 25,88 | 20,00 | 16,88 | 13,75 |
| NT-09 | 217,13 | 195,25 | 174,75 | 151,25 | 115,50 | 93,50 | 64,63 | 55,00 | 44,00 | 31,63 | 25,00 | 20,63 | 16,25 |
| NT-10 | 256,50 | 230,75 | 206,75 | 178,75 | 136,75 | 110,50 | 76,38 | 65,00 | 52,00 | 37,38 | 30,00 | 24,38 | 18,75 |
| NT-11 | 295,88 | 266,25 | 238,75 | 206,25 | 157,75 | 127,50 | 88,00 | 75,00 | 60,00 | 43,13 | 35,00 | 28,13 | 22,50 |
| NT-12 | 335,25 | 176,75 | 270,75 | 233,75 | 178,75 | 144,50 | 99,25 | 85,00 | 68,00 | 48,88 | 40,00 | 31,88 | 26,25 |
| NT-13 | 434,00 | 390,50 | 349,50 | 302,50 | 231,25 | 187,00 | 128,63 | 110,00 | 88,00 | 63,25 | 50,63 | 41,25 | 33,75 |
| NT-14 | 572,25 | 514,75 | 460,25 | 398,75 | 304,75 | 246,50 | 169,75 | 145,00 | 116,00 | 77,63 | 65,63 | 54,38 | 43,75 |
| NT-15 | 749,88 | 674,50 | 603,00 | 522,50 | 399,25 | 323,00 | 222,63 | 190,00 | 152,00 | 103,50 | 85,63 | 71,25 | 56,25 |
| NT-16 | 927,63 | 834,25 | 745,75 | 646,25 | 493,75 | 399,50 | 275,50 | 235,00 | 188,00 | 129,38 | 105,63 | 88,13 | 68,75 |
| NT-17 | 1105,13 | 994,00 | 888,50 | 770,00 | 588,25 | 476,00 | 328,38 | 280,00 | 224,00 | 155,25 | 125,63 | 105,00 | 80,00 |
| NT-18 | 1282,75 | 1153,75 | 1031,25 | 893,75 | 682,75 | 552,50 | 381,25 | 325,00 | 260,00 | 181,13 | 145,63 | 121,88 | 92,50 |
| NT-19 | 1460,38 | 1313,50 | 1174,00 | 1017,50 | 777,25 | 628,75 | 434,13 | 370,00 | 296,00 | 207,00 | 165,63 | 138,75 | 105,00 |
| NT-20 | 1677,50 | 1508,75 | 1348,75 | 1168,75 | 892,75 | 722,50 | 498,75 | 425,00 | 340,00 | 238,38 | 190,63 | 159,38 | 120,00 |
| NT-21 | 1934,00 | 1739,50 | 1555,50 | 1375,00 | 1029,50 | 830,50 | 586,75 | 490,00 | 392,00 | 281,75 | 225,63 | 187,50 | 141,25 |
| NT-22 | 2250,00 | 2000,00 | 1762,25 | 1581,25 | 1166,25 | 943,50 | 674,75 | 555,00 | 444,00 | 324,88 | 260,63 | 215,63 | 161,25 |
| NT-23 | 2625,00 | 2250,00 | 1969,00 | 1787,50 | 1303,00 | 1054,00 | 762,75 | 620,00 | 496,00 | 368,00 | 295,63 | 243,13 | 181,25 |

COMPRESSED AIR INLET 8 BAR G

| PURITY | 95% | 96% | 97% | 98% | 99% | 99,5% | 99,9% | 99,95% | 99,99% | 99,995% | 99,999% | 99,9995% | 99,9999% |
|---------------------------|-----|-----|-----|-----|-----|-------|----------|--------------|-----------|---------|---------|----------|----------|
| 02 | 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 | | | | | | | 1 | NI FT AIR DF | W-POINT + | 3°C | | | |

| AIR INTAKE HEAT 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 | 1,05 | 1,13 | 1,19 | 1,22 | |



Onsite Nitrogen Production With NitroxTec

Product Catalogue

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 Nm³/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

o nave no on-site fitting 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.













Product Catalogue

SIEMENS

Online Access

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.

Product Catalogue

Sectors

-CHEMICAL INDUSTRY -FOOD INDUSTRY -LASER CUTTING INDUSTRY -ADDITIONAL MANUFACTURING 3D LASER METAL PRINTER 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 COATING 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























STOP PAYING FOR READY NITROGEN GAS!

230 BAR NITROPLACE NITROGEN PRODUCTION SYSTEMS



8 BAR NITROPLACE NITROGEN PRODUCTION SYSTEMS



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



Product Catalogue









Mini Nitrogen Generators

Product Catalogue







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) N₂ (1 ppm O²) 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.

| | Introduction Purity %99,5 | Introduction Purity %99,9 | | | | |
|----------|---------------------------|--|--|--|--|--|
| Nm³/hour | %99,999(5,0) (10ppm 0₂) | %99,9995-%99,9999 (5,5-6,0) 5,1ppm 0₂ | | | | |
| 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 | | | | |

Deoxy Nitrogen Purification Unit Models

Standart PSA Nitrogen Generator



Deoxy PSA Nitrogen Generator



Deoxy Nitrogen Generators Installation Diagram







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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.

DISCOVER SUSTAINABLE AIR & GAS SOLUTIONS

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Oxygen 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 Nm³/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 | | | | | | | | |

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

| | AIR INTAKE HEAT CORRECTION FACTORS | | | | | | | | | | | |
|-------|--|------|---|---|------|------|------|--|--|--|--|--|
| 5 ° C | 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 | 0,70 | | | | | |





OXYGEN PRODUCTIONS (Nm³/hour)

| | | | | DII | MENSIONS "I | nm" | WEIGHT | CONNECTION | |
|-------------|--------|------------|--------------|--------|-------------|--------|--------|--------------------|-------------------------|
| MODEL | %90 | %93 | % 9 5 | LENGHT | WIDTH | HEIGHT | kg | SIZE BSP FEMALE | ELECTRIC POWER |
| Oxytech -01 | 0,60 | 0,6 | 0,50 | 520 | 440 | 1150 | 45 | 1/2" | 230 V AC 50-60 Hz 150 W |
| Oxytech -02 | 1,20 | 1,1 | 1,00 | 680 | 480 | 1400 | 85 | 1/2" | 230 V AC 50-60 Hz 150 W |
| Oxytech- 03 | 2,40 | 2,3 | 2,00 | 680 | 500 | 1530 | 120 | 1/2" | 230 V AC 50-60 Hz 150 W |
| Oxytech- 04 | 3,60 | 3,4 | 3,00 | 800 | 515 | 1500 | 165 | 1/2" | 230 V AC 50-60 Hz 150 W |
| Oxytech -05 | 7,00 | 6 | 5,00 | 1120 | 560 | 1800 | 290 | 3/4" | 230 V AC 50-60 Hz 150 W |
| Oxytech- 06 | 8,90 | 8,1 | 7,10 | 1120 | 570 | 1950 | 390 | 1" | 230 V AC 50-60 Hz 150 W |
| Oxytech- 07 | 10,00 | 9 | 8,00 | 1200 | 650 | 1800 | 390 | 1" | 230 V AC 50-60 Hz 150 W |
| Oxytech- 08 | 12,00 | 11 | 10,00 | 1260 | 650 | 2050 | 570 | 1" | 230 V AC 50-60 Hz 150 W |
| Oxytech -09 | 14,50 | 13,2 | 12,00 | 1250 | 735 | 2050 | 660 | 1" | 230 V AC 50-60 Hz 150 W |
| Oxytech -10 | 16,00 | 14 | 13,00 | 1400 | 725 | 1900 | 740 | 1" | 230 V AC 50-60 Hz 150 W |
| Oxytech- 11 | 18,80 | 16,8 | 15,50 | 1400 | 725 | 2150 | 850 | 1 1/2" | 230 V AC 50-60 Hz 150 W |
| Oxytech -12 | 25,00 | 23 | 21,00 | 1600 | 820 | 2100 | 1100 | 1 1⁄2"' | 230 V AC 50-60 Hz 150 W |
| Oxytech -13 | 29,00 | 26 | 24,00 | 1650 | 1040 | 2150 | 1400 | 1 1/2" | 230 V AC 50-60 Hz 150 W |
| Oxytech -14 | 39,00 | 34 | 30,00 | 1750 | 1090 | 2200 | 1700 | 1 1/2" | 230 V AC 50-60 Hz 150 W |
| Oxytech -15 | 46,00 | 41 | 35,00 | 1820 | 1060 | 2100 | 1950 | 1 1/2" | 230 V AC 50-60 Hz 150 W |
| Oxytech -16 | 52,00 | 47 | 42,00 | 1820 | 1060 | 2375 | 2300 | 2" | 230 V AC 50-60 Hz 150 W |
| Oxytech -17 | 63,00 | 57 | 50,00 | 1750 | 1135 | 2450 | 2700 | 2" | 230 V AC 50-60 Hz 150 W |
| Oxytech -18 | 80,00 | 72 | 65,00 | 1500 | 1845 | 2410 | 3680 | 2" | 230 V AC 50-60 Hz 150 W |
| Oxytech -19 | 90,00 | 88 | 72,00 | 2080 | 1970 | 2200 | 4000 | 2 1/2" | 230 V AC 50-60 Hz 150 W |
| Oxytech -20 | 104,00 | 95 | 87,00 | 2180 | 1780 | 2300 | 5000 | 3" | 230 V AC 50-60 Hz 150 W |
| Oxytech -21 | 137,00 | 125 | 107,00 | 2000 | 2250 | 2450 | 6000 | 3" | 230 V AC 50-60 Hz 150 W |
| Oxytech -22 | 153,00 | 139 | 127,00 | 2200 | 2425 | 2325 | 7000 | 3" | 230 V AC 50-60 Hz 150 W |
| Oxytech -23 | 192,00 | 175 | 160,00 | 1950 | 3280 | 2150 | 8000 | 3" | 230 V AC 50-60 Hz 150 W |
| Oxytech -24 | 241,00 | 220 | 200,00 | 2200 | 3480 | 2350 | 9000 | DN 100 | 230 V AC 50-60 Hz 150 W |
| Oxytech- 25 | 290,00 | 264 | 240,00 | 2325 | 2200 | 3425 | 10.000 | DN 100 | 230 V AC 50-60 Hz 150 W |
| Oxytech- 26 | 385,00 | 350 | 320,00 | 2500 | 2200 | 3425 | 12.000 | DN 150 | 230 V AC 50-60 Hz 150 W |

Ambient temperature 20 °C

20 °C Inlet Air Dew-point + 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



C

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











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DISCOVER UNINTERRUPTED OXYGEN ENERGY!





THE OXYGEN OF THE WORLD IS HERE





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.



40-300 Bar Desiccant Air Dryers



THE FIRST AND ONLY 40-300 Bar Operating Pressure in TÜRKİYE





| | N | ITROXT | EC NDD/! | 50 BAI | R DESI | CCANT | AIR D | RYERS | |
|-------------|-----------|-------------|---------------------|--------|-------------|--------|--------|-----------------|----------------------|
| | CAPACITY | CAPACITY | AIR INLET SIZE | DI | MENSIONS "I | nm" | WEIGHT | DEW-POINT | |
| MODEL | (m³/hour) | (m³/minute) | LINKS BSP FEMALE | LENGTH | WIDTH | HEIGHT | kg | OPTIONEL | ELECTRIC POWER |
| NDD -0.8/50 | 48 | 0,80 | 1/2" | 400 | 400 | 1100 | 60 | -20/-40/-70 DWP | 230V AC 50-60 Hz 50W |
| NDD -1.2/50 | 72 | 1,20 | 1/2" | 450 | 450 | 1200 | 100 | -20/-40/-70 DWP | 230V AC 50-60 Hz 50W |
| NDD- 1.6/50 | 100 | 1,60 | 1/2" | 500 | 500 | 1250 | 120 | -20/-40/-70 DWP | 230V AC 50-60 Hz 50W |
| NDD-2 /50 | 120 | 2,00 | 1/2" | 600 | 650 | 1300 | 140 | -20/-40/-70 DWP | 230V AC 50-60 Hz 50W |
| NDD-2.6/50 | 160 | 2,67 | 1/2" | 750 | 800 | 1400 | 200 | -20/-40/-70 DWP | 230V AC 50-60 Hz 50W |
| NDD -3.2/50 | 200 | 3,20 | 3/4" | 750 | 800 | 1600 | 250 | -20/-40/-70 DWP | 230V AC 50-60 Hz 50W |
| NDD -4/50 | 250 | 4,17 | 3/4" | 750 | 800 | 1750 | 310 | -20/-40/-70 DWP | 230V AC 50-60 Hz 50W |
| NDD -5/50 | 300 | 5,00 | 3/4" | 800 | 850 | 1850 | 370 | -20/-40/-70 DWP | 230V AC 50-60 Hz 50W |
| NDD -6/50 | 360 | 6,00 | 1" | 800 | 850 | 1900 | 460 | -20/-40/-70 DWP | 230V AC 50-60 Hz 50W |
| NDD-7.3/50 | 440 | 7,33 | 1" | 900 | 960 | 2000 | 570 | -20/-40/-70 DWP | 230V AC 50-60 Hz 50W |
| NDD- 9 /50 | 575 | 9,58 | 1" | 950 | 1000 | 2000 | 670 | -20/-40/-70 DWP | 230V AC 50-60 Hz 50W |
| NDD- 11/50 | 680 | 11,33 | 1" | 950 | 1000 | 2100 | 970 | -20/-40/-70 DWP | 230V AC 50-60 Hz 50W |

| | AIR INTAKE HEAT CORRECTION FACTORS | | | | | | | | | | | |
|---------------------------------------|------------------------------------|--------|-------|-------|-------|-------|--|--|--|--|--|--|
| COMPRESSOR AIR INTAKE AIR TEMPERATURE | | | | | | | | | | | | |
| TEMPERATURE | 25 °C | 30 ° C | 35 °C | 40 °C | 45 °C | 50 °C | | | | | | |
| Ki | 1 | 1 | 1 | 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.

• Optional Accessories: Dew-point Sensor and Energy Saving Mode

• 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)



Desiccant Air Dryers

















Desiccant Air Dryers

(Non-Heated Type Air Dryers)

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

Our standard products are produced in the capacity range of 18 m³/hour to 10.800 m³/hour. Special products can be produced according to your production capacity and needs. Discover industrial drying technology and systems. Production was made according to Dew-point (-)20°C, (-)40°C and (-)70°C. The panel is positioned for electronic control and humidity display.

NitroxTec Desiccant air dryers offer superior performance and quality.

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

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

It provides cost savings with low energy consumption.

NITROXTEC NDD DESICCANT AIR DRYERS

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

Desiccant Air Dryers (Non-Heated Type Air Dryers)



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

Usage areas:

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

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 |
| Kp | 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:

| Erample. | | | | |
|-----------------------------------|-------|----|--------|------|
| Operating Pressure: | 8 bar | -> | Factor | 1,06 |
| Compressed Air Inlet Temperature: | 40 °C | -> | Factor | 0,96 |

| Compressed air inlet temperature T | | | | | | | | | | |
|------------------------------------|--|------|------|------|------|------|--|--|--|--|
| Temperature (°C) | Temperature (°C) 25 30 35 40 45 50 | | | | | | | | | |
| Ki | 1,00 | 1,00 | 1,00 | 0,96 | 0,90 | 0,83 | | | | |

EXPERT PERSONNEL IN COMPRESSED AIR AND GAS SOLUTIONS

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Desiccant Air Dryers with Heated Type Blower

Desiccant Air Dryers with Heated Type Blower

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

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

Protect Your System and Products from the Damage of Moisture!



High Performance with Zero Air Loss



Features of Heated Type Blower Desiccant Air Dryers

• **Reduces air loss.** Conventional desiccant dryers use dried air during regeneration and this results in the loss of compressed air. Heated type blower desiccant air dryers use atmospheric air during regeneration. Therefore, compressed air loss can be reduced to zero.

- **Provides higher performance.** The heated blower dries the silica gel faster. Therefore, heated type blower desiccant air dryers provide higher performance than traditional desiccant dryers.
- **Modern inlet and outlet filter:** Thanks to its filter in accordance with Worldwide standards, all kinds of pollutants are prevented. The desiccant substance is protected and air quality is kept at an optimum level.

Advantages:

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

Installation Diagram of Desiccant Air Dryer with Heated Type Blower





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

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





Oil-Free Desiccant Air Dryers



Oil-Free Desiccant Air Dryers

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

Advantages:

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









Oil-Free Desiccant Air Dryers



- Standard Accessories:
- Color Electronic controller
- Long-lasting pneumatics of European origin valves
- Superior performance active alumina
- American and Japanese made discharge air silencers
- **Air inlet and outlet air filters**: At the entrance
- zero air loss water drainage system
- Optional accessories: Dew-point
- sensor and energy saving mode
- Maximum Working Pressure: 20 bar.
- Regeneration air loss rates:
- -20 Dew-point: 5%
- -40 Dew-point: 12%
- -70 Dew-point: 20%
- Amount of oil remaining at the outlet:
 0,003 mg/m³
 0.003 ppm

Usage Areas:

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



REDUCE YOUR CARBON FOOTPOINT WITH EFFICIENT SOLUTIONS



NITROXTEC NDD+CT OIL-FREE DESICCANT AIR DRYERS

| MODEL | CAPACITY (m³/minute) | CAPACITY (m³/hour) | DIAMETER CONNECTION SIZE BSP FEMALE | DIMENSIONS "mm" | | | WEIGHT | | |
|-------------|-------------------------|-----------------------|---|-----------------|-------|--------|--------|-------------|----------------------|
| | | | | LENGHT | WIDTH | HEIGHT | kg | DEW-POINT | ELECTRIC POWER |
| NDD+CT-0.8 | 0,80 | 48 | 1/2" | 645 | 485 | 1160 | 55 | -40/-70 Cdt | 230V AC 50-60 Hz 50W |
| NDD+CT-1 | 1,00 | 60 | 1/2" | 645 | 485 | 1340 | 60 | -40/-70 Cdt | 230V AC 50-60 Hz 50W |
| NDD+CT -1.2 | 1,20 | 72 | 1/2" | 645 | 485 | 1440 | 70 | -40/-70 Cdt | 230V AC 50-60 Hz 50W |
| NDD+CT- 1.6 | 1,60 | 100 | 3/4" | 720 | 480 | 1415 | 90 | -40/-70 Cdt | 230V AC 50-60 Hz 50W |
| NDD+CT-2 | 2,17 | 130 | 1" | 725 | 505 | 1590 | 105 | -40/-70 Cdt | 230V AC 50-60 Hz 50W |
| NDD+CT-2.6 | 2,67 | 160 | 1" | 850 | 550 | 1350 | 135 | -40/-70 Cdt | 230V AC 50-60 Hz 50W |
| NDD+CT -3.2 | 3,20 | 200 | 1" | 850 | 550 | 1570 | 170 | -40/-70 Cdt | 230V AC 50-60 Hz 50W |
| NDD+CT -4 | 4,17 | 250 | 1" | 850 | 550 | 1850 | 200 | -40/-70 Cdt | 230V AC 50-60 Hz 50W |
| NDD+CT -5 | 5,00 | 300 | 1 1⁄4″ | 1140 | 605 | 1550 | 245 | -40/-70 Cdt | 230V AC 50-60 Hz 50W |
| NDD+CT -6 | 6,00 | 360 | 1 1⁄2" | 1140 | 590 | 1760 | 300 | -40/-70 Cdt | 230V AC 50-60 Hz 50W |
| NDD+CT-7.3 | 7,33 | 440 | 1 1/2" | 1150 | 625 | 1640 | 365 | -40/-70 Cdt | 230V AC 50-60 Hz 50W |
| NDD+CT- 9 | 9,58 | 575 | 1 1/2" | 1150 | 630 | 1790 | 440 | -40/-70 Cdt | 230V AC 50-60 Hz 50W |
| NDD+CT- 11 | 11,33 | 680 | 2" | 1230 | 760 | 1950 | 620 | -40/-70 Cdt | 230V AC 50-60 Hz 50W |
| NDD+CT -14 | 14,17 | 850 | 2" | 1500 | 810 | 1875 | 700 | -40/-70 Cdt | 230V AC 50-60 Hz 50W |
| NDD +CT-16 | 16,67 | 1000 | 2" | 1500 | 810 | 2100 | 830 | -40/-70 Cdt | 230V AC 50-60 Hz 50W |
| NDD+CT-21 | 20,83 | 1250 | 2 1/2" | 1620 | 950 | 2180 | 1040 | -40/-70 Cdt | 230V AC 50-60 Hz 50W |



HIGH PRESSURE OIL-FREE DESICCANT DRYER HIGH PRESSURE OIL-FREE AND QUALITY DRY AIR

APPLICATION: PET BOTTLE APPLICATIONS LASER CUTTING MACHINES


Oil-Free Desiccant Air Dryer Installation Diagram



40 BAR Oil-Free Chemical Air Dryer Installation Diagram





Activated Carbon Towers

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

- -**OPmax :** 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

| | | | DIAMETER | DIMENSIONS "mm" | | WEIGTH kg | WEIGTH kg |
|----------|------------|----------|-------------------------------|-----------------|--------|-----------|-----------|
| MODEL NO | m³/ minute | m³/ hour | CONNECTION SIZE BSP FEMALE | WIDTH | HEIGHT | 16 BAR | 40 BAR |
| NCT-0.3 | 0,30 | 24 | 1/4" | 270 | 690 | 10 | 15 |
| NCT-0.5 | 0,50 | 30 | 1/4" | 300 | 950 | 20 | 30 |
| NCT-0.8 | 1,00 | 48 | 1/2" | 380 | 1110 | 25 | 40 |
| NCT-1 | 1,20 | 60 | 1/2" | 385 | 1240 | 30 | 50 |
| NCT-1.2 | 1,50 | 72 | 1/2" | 400 | 1280 | 35 | 55 |
| NCT-1.6 | 2,17 | 90 | 3/4" | 440 | 1310 | 40 | 65 |
| NCT-2.1 | 2,67 | 130 | 3/4" | 430 | 1640 | 45 | 70 |
| NCT-2.6 | 3,20 | 160 | 1" | 460 | 1380 | 50 | 80 |
| NCT-3.2 | 4,17 | 185 | 1" | 480 | 1590 | 60 | 95 |
| NCT-4.1 | 5,00 | 250 | 1" | 480 | 1860 | 70 | 110 |
| NCT-5 | 6,00 | 300 | 1 1/2" | 530 | 1550 | 85 | 135 |
| NCT-6 | 7,33 | 360 | 1 1/2" | 530 | 1780 | 100 | 160 |
| NCT-7.30 | 7,33 | 440 | 1 1/2" | 610 | 1720 | 120 | 190 |
| NCT-9.50 | 9,58 | 575 | 1 1/2" | 610 | 1840 | 150 | 240 |
| NCT-11 | 11,33 | 680 | 2" | 610 | 1960 | 200 | 320 |
| NCT-14 | 14,17 | 850 | 2" | 590 | 2210 | 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 | 1800 | 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 |

25-30 BAR LASER CUTTING OIL-FREE DRY AIR SYSTEMS



The Power of Production

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The Munit



INDUSTRIAL AIR & GAS SOLUTIONS

Nitroxtec Endüstriyel Makina Basınçlı Hava ve Gaz Çözümleri San.Tic.Ltd.Şti

> İKİTELLİ O.S.B TRIOS 2023 B BLOK NO:73 BAŞAKŞEHİR / İSTANBUL +90 212 544 42 61

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