

JOURNEY
OF
AIR

0,017-18,667
m³/min



NITROGEN PURIFIER SYSTEMS

Dalgakiran's brand new DDX Nitrogen Treatment System offers an extremely economic means of increasing the required nitrogen purity beyond 99.9% to 99.999%.

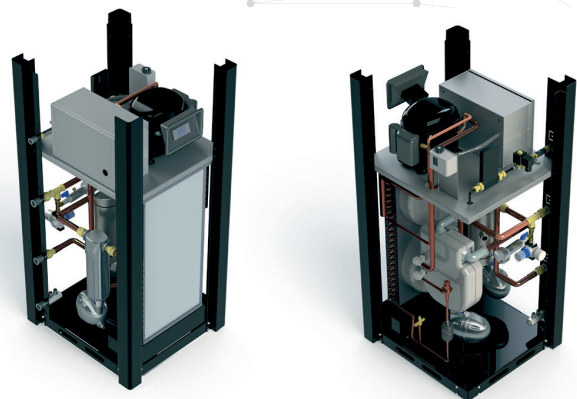
The DDX Series uses a specially designed catalyst with a large surface area to increase nitrogen purity. The oxygen left on the catalyst surface after the reaction is reduced to no more than 10 ppm.

DDX Nitrogen Treatment Devices when used in conjunction with Nitrogen Generator System use small amounts of hydrogen to prevent compressed air loss and deliver very pure nitrogen. This system delivers very pure nitrogen while keeping power consumption to a minimum.



Advantages

- Short payback period
- Small footprint
- Long-lasting efficiency (> 10 years)
- Best quality high-performance solutions
- Investing in a lower capacity DDX system instead of a higher capacity DNG system for the same purity of nitrogen reduces costs and saves on energy
- Up to 99.999% nitrogen purity with minimum space and energy requirements
- Low energy consumption
- Low CO₂ emissions
- Heavy-duty build designed for hard conditions and industrial use
- High-quality and durable components
- System produces minimum 99.999% pure nitrogen with a very low air/nitrogen ratio (3.0 instead of 8.4).
- Compact design, fully automated system
- 24/7 nitrogen production at the desired purity
- High energy savings
- Low-cost and special production
- Minimum maintenance costs





Working Principle

Compared with existing applications, Dalgakiran's compact designed Nitrogen Treatment System can take nitrogen produced at 99.9% purity and convert it to 99.999% pure nitrogen while delivering considerable energy savings in nitrogen production costs.

The system uses a catalytic reaction to remove the oxygen left over from the DNG generator from the PSA Nitrogen Generator outlet by utilizing the reaction between the residual oxygen and hydrogen to produce 99.999% pure nitrogen. The only by-product of this catalytic reaction is water.

The low cost of the hydrogen needed for the reaction results in considerable long-term savings. In fact, this newly developed nitrogen purifier lets you produce extremely pure nitrogen using lower capacity air compressors and equipment.

As the reaction increases the temperature of the nitrogen, the DDX Nitrogen Purifying System is integrated into a High-Temperature Air Dryer, combining two products in a single unit for a complete solution.

| Model | N ₂ 99.999% Purity (m ³ /min) |
|-----------|---|
| DDX 10 | 0,017 |
| DDX 20 | 0,033 |
| DDX 35 | 0,058 |
| DDX 60 | 0,100 |
| DDX 95 | 0,173 |
| DDX 120 | 0,232 |
| DDX 150 | 0,283 |
| DDX 250 | 0,452 |
| DDX 330 | 0,597 |
| DDX 450 | 0,807 |
| DDX 510 | 0,925 |
| DDX 570 | 1,027 |
| DDX 730 | 1,343 |
| DDX 910 | 1,643 |
| DDX 1110 | 1,998 |
| DDX 1230 | 2,205 |
| DDX 1370 | 2,443 |
| DDX 1820 | 3,303 |
| DDX 2050 | 3,852 |
| DDX 2550 | 4,618 |
| DDX 2950 | 5,697 |
| DDX 3540 | 6,675 |
| DDX 4160 | 7,698 |
| DDX 5560 | 9,267 |
| DDX 6050 | 11,438 |
| DDX 7500 | 13,607 |
| DDX 9170 | 15,283 |
| DDX 11200 | 18,667 |

