



DDX SERIES NITROGEN PURIFIER SYSTEMS





Founded in 1983 in Liege, Belgium, Drytec provides compressed air products worldwide and sales & after-sales service to channel partners throughout Europe. Drytec is keeping a high level of stock in Belgium with over 1000 dryers on shelves and thousands of consumables to serve customers in the best and fastest way. With nearly 45 years of experience in compressed air systems, Drytec is now one of the leading companies in the field of compressed air filters and automatic drainage systems for various industries.

Note: The product images/visuals may include optional components. Images represent the appearance of the product. Please check the standard and optional lists of the relevant product for the most accurate cautiously.

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DDX SERIES NITROGEN PURIFIER SYSTEMS

Most PSA Nitrogen Generator users require the highest levels of Nitrogen purity by the most cost-effective means possible.

DDX Nitrogen Purifier System offers an extremely economic way to increase Nitrogen purity levels beyond 99.5% or 99.9% all the way up to 99.999% purity.

The DDX range increases Nitrogen purities by utilizing a specially designed catalyst with a large surface area. As a result of the reaction on the catalyst surface, the residual oxygen content is reduced to maximum 10 ppm level.

Drytec's DDX Nitrogen Purifiers, combined with Drytec's MNG Nitrogen Generators, utilise a small amount of Hydrogen gas during the reaction process to achieve high levels of Nitrogen purity by avoiding compressed air loss.

The DDX System, in conjunction with MNG Nitrogen Generators, will significantly reduce power consumption and still achieve the highest possible levels of Nitrogen purity.

Working Principle

In comparison to the current applications, Nitrogen produced from a nitrogen generator at 99.5% or 99.9% purity level can be converted to 99.999% by Drytec's compact design Nitrogen Purifier System which also provides high savings in nitrogen production costs.

The system uses a catalytic reaction, whereby residual Oxygen from the DNG-PRO generator is removed from the PSA Nitrogen Generator output by utilising a reaction between the remaining Oxygen and Hydrogen gas to produce a purity of 99.999% Nitrogen. The only by-product of this catalytic reaction is water.

The total cost of hydrogen required for the reaction is very low and provides significant long-term savings.

High purity nitrogen can in fact be produced by utilizing lower capacity air compressors and downstream equipments throughout this newly developed nitrogen purification process.

The reaction increases the Nitrogen temperature. That is why Drytec's DDX Nitrogen Purifier System has been integrated into a High Temperature Air Dryer combining two products into a single unit to give a complete solution.



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Inlet Nitrogen Purity (99.5% or 99.9%)

Model	DDX - 10	DDX - 20	DDX - 35	DDX - 60	DDX - 95	DDX - 120	DDX - 150	DDX - 250	DDX - 330
N ₂ Flow at 99.999% Purity (m ³ /h)	1	2	3.5	6	10.4	13.9	17	27.1	35.8
Model	DDX - 450	DDX - 510	DDX - 570	DDX - 730	DDX - 910	DDX - 1110	DDX - 1230	DDX - 1370	DDX - 1820
N ₂ Flow at 99.999% Purity (m ³ /h)	48.4	55.5	61.6	80.6	98.6	119.9	132.3	146.6	198.2

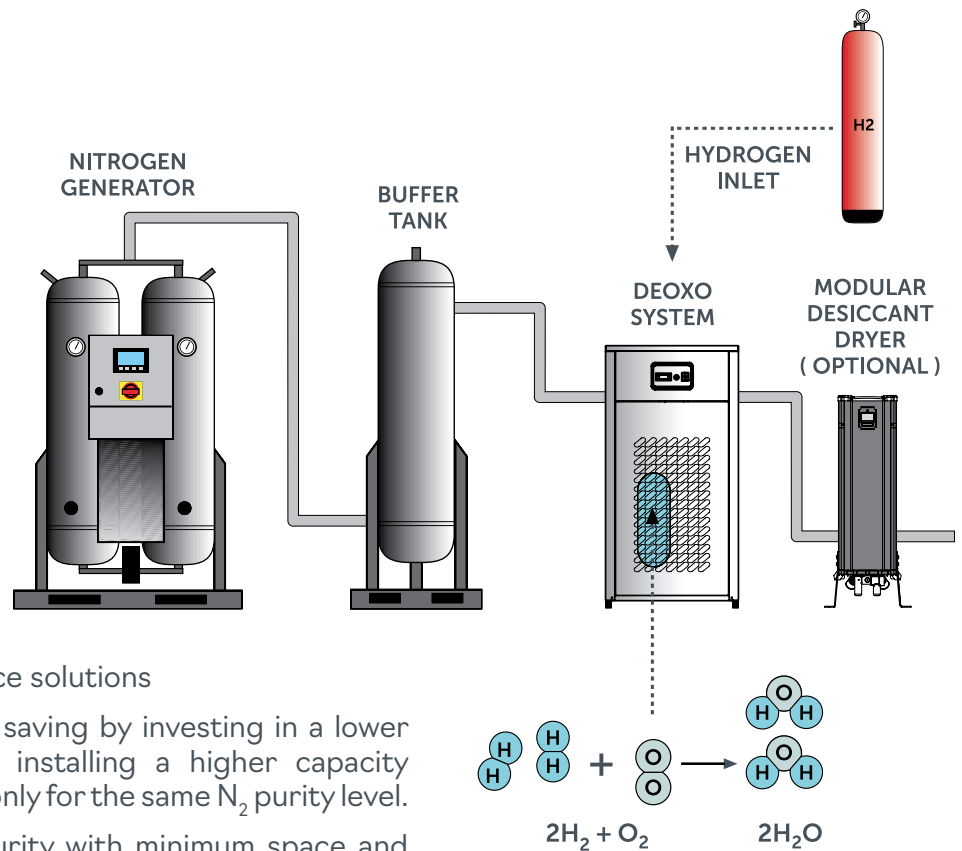
Given flows are at 7 barg pressure with reference to 20°C and 1 bar atmospheric air suction as per ISO 7183 standard

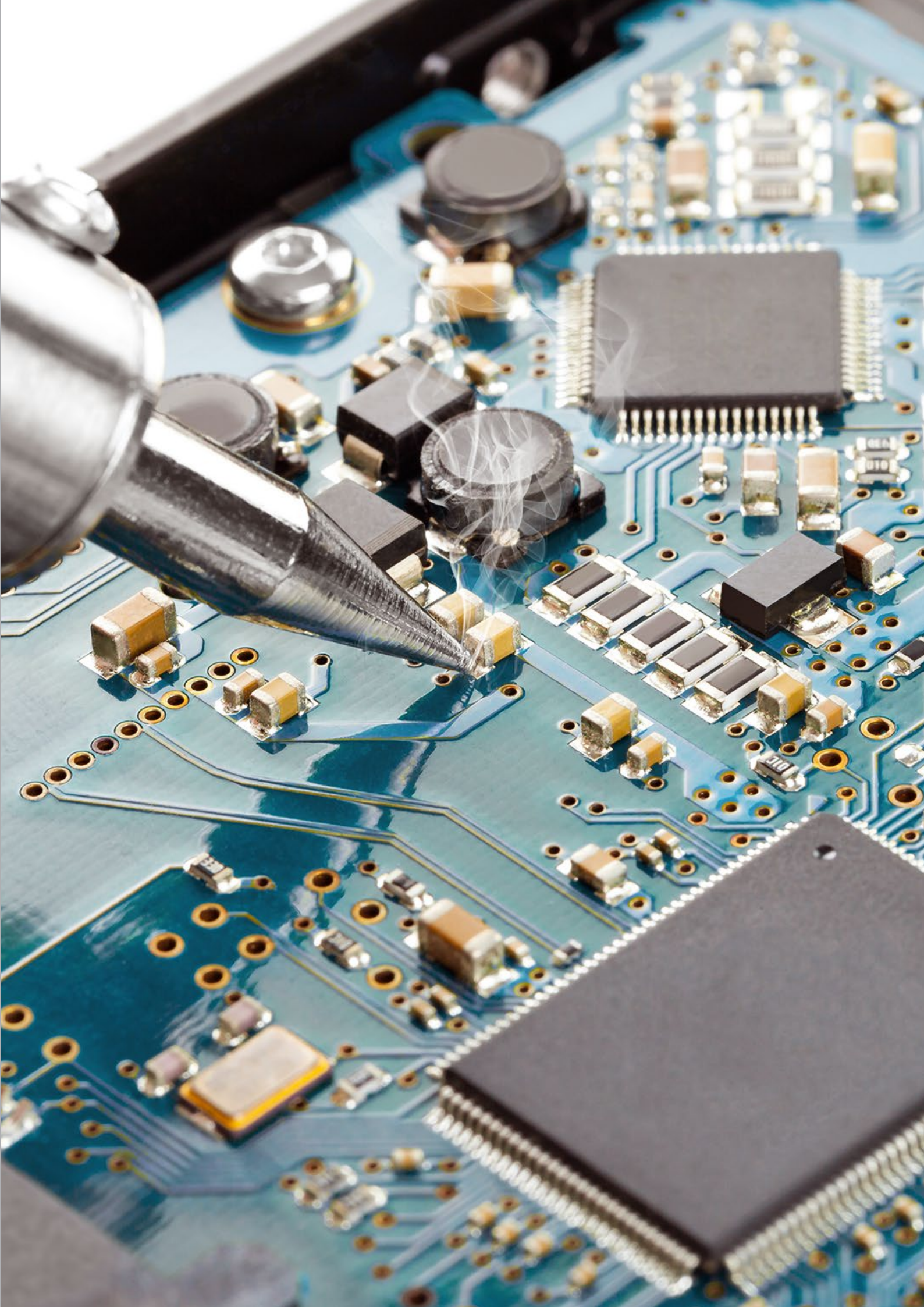
For higher capacities, please contact with your regional Area Manager

Nitrogen	99.999%
Oxygen	<10 ppm
Dew Point*	<3°C

Advantages

- Effective payback period
- Minimized installation area
- Long service life (>10 years)
- Top quality high-performance solutions
- Cost reduction and energy saving by investing in a lower capacity DDX rather than installing a higher capacity nitrogen generator system only for the same N₂ purity level.
- Up to 99.999% nitrogen purity with minimum space and energy requirement
- Low energy consumption
- Low CO₂ emission
- Heavy-duty construction designed for rough conditions and industrial use
- High quality & durable components
- System that delivers min. 99.999% purity with a very low A/N (air : nitrogen) ratio (2.5 instead of 8.4)
- Compact design, fully automated system
- 24/7 Nitrogen gas production in requested purity levels
- High level energy saving
- Cost effective and customized production
- Low maintenance cost





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