



 Energy-conserving operation,  
patent acquired for separation method [Patent No.: 5559755]

Medium-size nitrogen gas generator

# NTE Series

## Nitrogen Gas Generator

(2.7-17.2Nm<sup>3</sup>/h)




2.2K/3.7K

### Features

The NTE series continues on from the NT series. It has greatly improved equipment performance such as generating volume and pressure, and it has enhanced functions through the standard equipment of a touch panel.

A patent has also been acquired for the Eco mode technology that is used in this model.

 **Eco mode fitted**  
-Electricity consumption has been decreased by a maximum of 49% in accordance with the amount of nitrogen gas used -

Energy-saving functions developed by our company have made it possible to greatly reduce the amount of operating electricity consumption of the attached compressor. With this mode, the amount of N<sub>2</sub> gas used and control processes are automatically calculated in a non-step manner so that energy-saving operation can be selected in accordance with the flow volume used.

\*This mode cannot be selected in some cases due to secondary N<sub>2</sub> gas usage conditions.

 **N<sub>2</sub> generating volume increased by maximum of 26%**

Improvement of the N<sub>2</sub> generation process has resulted in a maximum increase in N<sub>2</sub> gas of 26% while using the compressor with the same motor output as the previous model.

 **Space-saving design**

A maximum of 18% of space has been saved compared to the previous model. \*Volume comparison Caster wheels can be fitted optionally and layout changes can be easily performed.

 **Quiet model**  
Sound level of 60dB achieved in front of the device

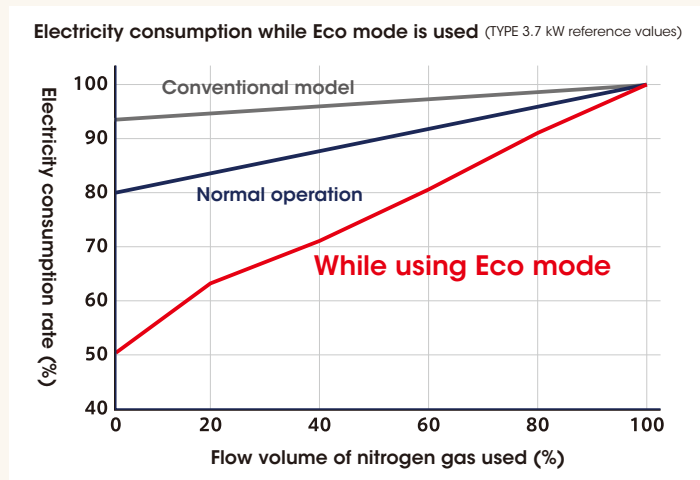
Greater quietness achieved with the use of a new silencer.

 **Maintenance ease improved**

An air cylinder valve has been used for the main bulb, doubling the maintenance cycle (compared to previous model). Warning, error and maintenance history can be recorded and displayed on the touch panel, making it easy to manage the device.

 **Free power supply**

Compatible with a wide power supply range from single phase AC 100-240 V.



 **Increasingly advanced functions**

An 8.2 inch touch panel has been used to improve operability and functionality. Icons have been used on the screen to achieve simple operation with multiple functions.

#### Main screen



Equipment operation status is confirmed and each screen is selected from the main screen. Many icons have been used for this stylish format which pursues operability.

#### Flow sheet screen



The motion status of each device is displayed and the nitrogen gas generation process can be confirmed. Moreover, pressure in each site within the equipment, product gas flow volume and concentration can all be confirmed at a glance.

#### Graph monitor screen



Four points for pressure and one point for gas concentration can be displayed as a graph and problems in the device can be analyzed.

## Specifications

TYPE	2.2K			3.7K		
	Model	2NTE-2.2	3NTE-2.2	4NTE-2.2	2NTE-3.7	3NTE-3.7
Purity(%) <sup>*1</sup>	99	99.9	99.99	99	99.9	99.99
Generating volume(Nm <sup>3</sup> /h) <sup>*2</sup>	5.2	3.7	2.7	8.5	6.1	4.5
Pressure (MPa)	0.5	0.55	0.55	0.5	0.55	0.55
Dew point(°C)	Below -55°C					
Surrounding temperature/humidity	5~35°C/10~80%RH					
Device dimensions WxDxH(mm)	390x840x1,590 (optional caster wheels: + 60 mm (H))					
Device weight(kg)	Approx. 230			Approx. 240		
Sound level	58					
Electricity consumption (kW) <sup>*3</sup>	0.1					
Power supply voltage	AC100-240V 1φ 50/60Hz					

TYPE	5.5K			7.5K		
	型式	2NTE-5.5	3NTE-5.5	4NTE-5.5	2NTE-7.5	3NTE-7.5
Purity(%) <sup>*1</sup>	99	99.9	99.99	99	99.9	99.99
Generating volume(Nm <sup>3</sup> /h) <sup>*2</sup>	13.2	9.4	6.3	17.2	13	9.5
Pressure (MPa)	0.5	0.55	0.55	0.5	0.55	0.55
Dew point(°C)	Below -55°C					
Surrounding temperature/humidity	5~35°C/10~80%RH					
Device dimensions WxDxH(mm)	680x1,000x1,675 (optional caster wheels: + 60 mm (H))					
Device weight(kg)	Approx. 390			Approx. 410		
Sound level	60					
Electricity consumption (kW) <sup>*3</sup>	0.15					
Power supply voltage	AC100-240V 1φ 50/60Hz					

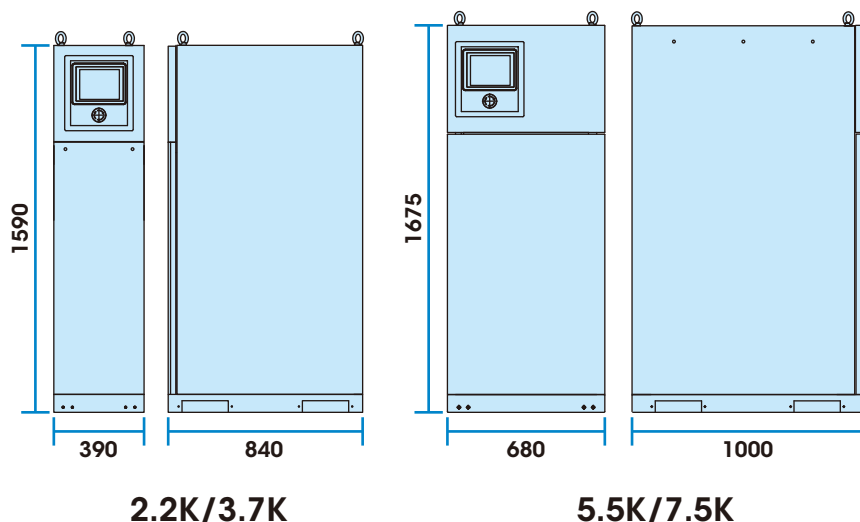
\*1 N<sub>2</sub>+Ar levels.

\*2 Values obtained under environment conditions of 20°C surrounding temperature and 60% relative humidity (RH) are converted for atmospheric pressure of 0°C. The amount of N<sub>2</sub> gas that can be produced may decrease due to surrounding temperature and humidity.

\*3 Actual measurement values at 1 m in front of the device and at 1 m above the ground in a semi-anechoic chamber.

\* Product improvements may lead to specifications changing without notice.

## Exterior view



## Applications

### For N<sub>2</sub> packaging of food products

Optimal for horizontal and vertical pillow packaging machines and rotary packaging machines. Many results have been achieved for products such as ham, sausages, tea, coffee, dried bonito, soy sauce, cheese and Western confectionary.

### For resin molds

Optimal for N<sub>2</sub> supply to extruding machines requiring a relatively large flow volume such as multilayer laminating.

### For electronic parts

Optimal for N<sub>2</sub> supply to cell production and point soldering equipment.

### As a plant and laboratory cylinder alternative

For LC/MS, FTIR, ICP/MS, column drying, purging, storage oxygen concentration and moisture management etc.

### For heat treatment

For clean heating furnaces and to prevent explosions during heat treatment

### For various processors

As assist gas for laser processors, non-oxidation inactive gas, for 3D shaping machines, etc.