

Generating volume increase achieved with
space-saving + electricity-saving!!

Nitrogen Gas Generator

Energy-efficient nitrogen gas generator (20Nm³/h - 180Nm³/h)

NE II Series

The NE-II series makes compact cabinet design with a generating volume of 20-180 Nm³/h possible. Process improvements have also increased nitrogen generating volume by approximately 36.5% compared to the previous series.



TYPE 37K

TYPE 11K

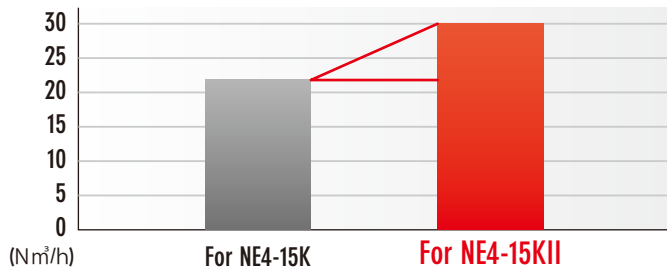
Features



N₂ generating volume increased by up to 36.5%

Improvement of the N₂ generating process has meant that while the same motor output compressor used for the previous system is used, N₂ gas generating volume has been increased by up to 36.5%

e.g.) Generating volume when using a 15 kW compressor



Space-saving design

The adoption of a panel door means that excess installation space can be eliminated as the maintenance space in all directions is just 600 mm. Furthermore, the maintenance area has been concentrated on the device's right side.



panel door



Electricity consumption for generating 1m³ cut by up to 26.4%

With increased N₂ gas generating volume, the electricity required to generate 1m³ has been reduced by up to 26.4%.

e.g.) Comparison if a 15kW compressor is used

NE4-15K

1 m³
of gas

0.68kw

\$0.085

NE4-15KII

1 m³
of gas

0.5kw

\$0.0625

*Electricity consumption is based on nominal compressor motor output and comprises levels when maximum flow is used. For the price of 1m³ of gas, the cost of electricity is considered to be \$0.125/kW, which does not include maintenance costs.(\$=USD)

Applications

For electronic parts

N₂ supply source for reflow ovens and solder tanks (for soldering apparatus with low oxygen concentration).
N₂ supply source for desiccators etc. (humidity control).

For N₂ packaging of food products

For N₂ permutation into packaging for ham, sausages, dried bonito, cheese, beverages and dressing etc. (to prevent oxidation).

For resin molds

For resin pellet drying, preventing product burning and preventing burning onto screws.

Chemical products

For substitution while preventing explosions, transferring and filling in the manufacturing process of ignitable chemicals.

Heat treatment/laser processing

Atmospheric gas substitution, nitriding, assist gas during laser processing.

Specifications

TYPE	11K			15K		
Model	NE2-11K II	NE3-11K II	NE4-11K II	NE2-15K II	NE3-15K II	NE4-15K II
Purity(%) ^{※1}	99	99.9	99.99	99	99.9	99.99
Pressure(MPa)	0.4	0.5	0.5	0.4	0.5	0.5
Generating volume(Nm ³ /h) ^{※2}	40	30	20	55	40	30
Dew point(°C)	Below -55°C					
Surrounding temperature/humidity	10 ~ 35°C / 10 ~ 80% RH					
Device dimensions W×D×H(mm)	693×1,160×1,700			907×1,160×1,700		
Device weight(Kg)	Approx. 650			Approx. 980		
Electricity consumption (kW)	0.3					
Power supply voltage(V) ^{※5}	100V 50/60Hz			100V 50/60Hz		
Compressor output (kW) ^{※3}	11			15		

TYPE	22K			37K		
Model	NE2-22K II	NE3-22K II	NE4-22K II	NE2-37K II	NE3-37K II	NE4-37K II
Purity(%) ^{※1}	99	99.9	99.99	99	99.9	99.99
Pressure(MPa)	0.4	0.5	0.5	0.4	0.5	0.5
Generating volume(Nm ³ /h) ^{※2}	75	55	40	100	85	60
Dew point(°C)	Below -55°C					
Surrounding temperature/humidity	10 ~ 35°C / 10 ~ 80% RH					
Device dimensions W×D×H(mm)	1,151×1,160×1,762			2,133×1,130×1,950		
Device weight(Kg)	Approx. 1,500			Approx. 2,850		
Electricity consumption (kW)	0.3					
Power supply voltage(V) ^{※5}	100V 50/60Hz			100V 50/60Hz		
Compressor output (kW) ^{※3}	22			30		

TYPE	55K		
Model	NE2-55K II	NE3-55K II	NE4-55K II
Purity(%) ^{※1}	99	99.9	99.99
Pressure(MPa)	0.4	0.5	0.5
Generating volume(Nm ³ /h) ^{※2}	180	140	100
Dew point(°C)	Below -55°C		
Surrounding temperature/humidity	10 ~ 35°C / 10 ~ 80% RH		
Device dimensions W×D×H(mm)	3,113×1,130×1,950 ^{※4}		
Device weight(Kg)	Approx. 4,500 ^{※4}		
Electricity consumption (kW)	0.3		
Power supply voltage(V) ^{※5}	100V 50/60Hz		
Compressor output (kW) ^{※3}	55		

*1 N₂+Ar levels.

*2 Values converted to atmospheric pressure of 0°C under environment conditions of 20°C surrounding temperature and 60% relative humidity (RH).

The amount of N₂ gas that can be produced may decrease due to surrounding temperature and humidity.

*3 The above compressor output is a representative value from our recommended compressors. For details, please contact relevant staff at our company.

*4 The TYPE55K case is bisected. The two parts must be connected at the installation site.

*5 Different voltages are also available, by the options.

*TYPE11/15/22 come with caster wheels. TYPE37/55 do not have caster wheels attached.

*Product improvements may lead to specifications changing without notice.

Filter unit

Model	Device dimensions W×D×H(mm)	Device weight(Kg)
AF-11K	600×300×600	Approx. 30
AF-15/22K	600×300×600	Approx. 45
AF-37/55K	1,290×450×1,450	Approx. 210



AF-11/15/22K



AF-37/55K