



SMC membrane nitrogen generators are used in a wide range of applications like these.

Advantages of nitrogen purge

Eliminates issues with oxygen inhibition

- Prevents workpiece oxidation and deterioration
- Improved gap-filling properties and sealing performance
- Improved airtightness
- Extending food shelf life

■ Packaging Machine Applications

Nitrogen purge inside the former

Stick packaging machine

Bacteria Removal Filter
HF2B-SFDA

Packaging machines

■ Workpiece Examples

● Stick packaging/Vacuum packaging/Vertical pillow packaging

Snack packaging



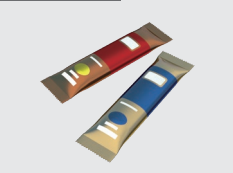
Food packaging



Fresh food packaging



Stick coffee



Liquid stick



■ Advantages of Membrane Nitrogen Generators

● Comparison with the nitrogen cylinder gas unit price

Nitrogen enriched air unit price

Nitrogen cylinder gas unit price



17 JPY
/m³ (ANR)

Approx. 94%
cost reduction

300 JPY
/m³ (ANR)



*When the nitrogen concentration is 99.9% and the compressed air unit price is 2.4 JPY/m³

Reduced labor time

- No need for cylinder replacement or gas level checks
- No need to refill nitrogen cylinders

● Comparison with the PSA method

Comparing with the PSA method, which uses pressure fluctuations to separate and purify gas

- Space saving
- Not subject to pressure vessel regulations
- No regular maintenance required since chemical adsorbents are not used
- Compared to the PSA method, which requires solenoid valves and control devices, it can be used with just a supply of compressed air without the need for a power source

Series Variations

	Model	Outlet nitrogen-enriched air flow rate ^{*1}
Single membrane specifications	400 type NMG50A-04N1	6.0 L/min (ANR)
	800 type NMG50A-08N1	20 L/min (ANR)
	1300 type NMG50A-13N1	36 L/min (ANR)
Double membrane specifications	1300 + 800 type NMG50A-1308	44 L/min (ANR)
	1300 + 1300 type NMG50A-13N2	56 L/min (ANR)
Manifold specifications	800 type x 2 NMG50B-08N2	40 L/min (ANR)
	1300 type x 2 NMG50B-13N2	72 L/min (ANR)
	1300 type x 3 NMG50B-13N3	108 L/min (ANR)

Membrane Nitrogen Generator
NMG Series



Find details here

*1 At a nitrogen concentration of 99.9%, an inlet air temperature of 25°C, and an inlet air pressure of 0.7 MPa

Related Products

Compressed Air Preparation Filters (Modular Connection Type)

Compressed Air Purity Class **ISO8573**

Line Filter
AFF20/30/40-D



1
μm
Filtration efficiency
99%
Water droplet removal

Mist Separator
AM20/30/40-D



0.1
μm
Filtration efficiency
99%
Oil mist separation and removal

Micro Mist Separator
AMD20/30/40-D



0.01
μm
Filtration efficiency
99.9%
Oil mist separation and removal

Micro Mist Separator with Pre-filter
AMH30/40-D



0.01
μm
Filtration efficiency
99.99%
Oil mist separation and removal

Activated Carbon Filter
AMK20/30/40-D



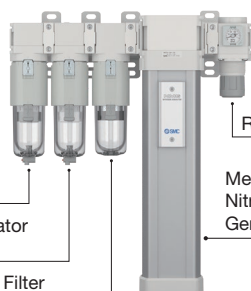
Oil concentration
0.003
mg/m³
Oil vapor and odor removal



Find details here

Modular Connection Example

- Space saving, reduced piping labor
- A variety of compatible devices



Line Filter

Micro Mist Separator with Pre-filter

Activated Carbon Filter

Regulator

Membrane Nitrogen Generator

Bacteria Removal Filter **HF2B-SFDA**



Find details here

Antibacterial Filter/Odor Removal Filter/Bacteria Removal Filter (Modular connection type) **HF2-BF□**



Find details here

⚠ Safety Instructions Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and "Operation Manual" before use.