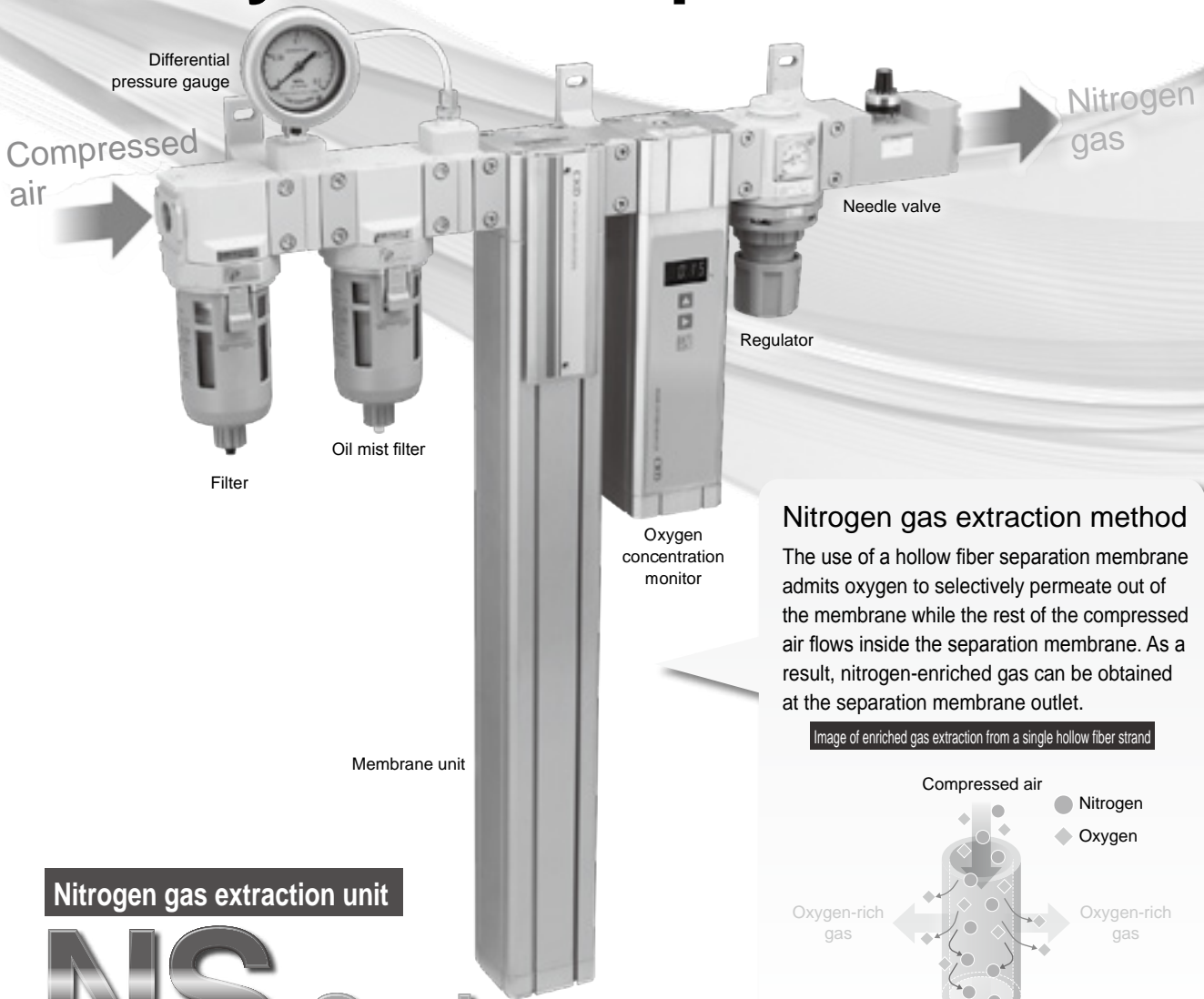


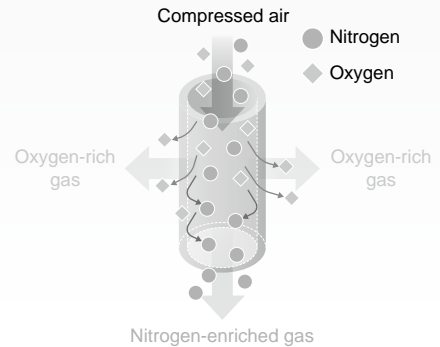
Nitrogen gas can be extracted easily from compressed air.



Nitrogen gas extraction method

The use of a hollow fiber separation membrane admits oxygen to selectively permeate out of the membrane while the rest of the compressed air flows inside the separation membrane. As a result, nitrogen-enriched gas can be obtained at the separation membrane outlet.

Image of enriched gas extraction from a single hollow fiber strand



Nitrogen gas extraction unit

NS Series

(Received the 2019 Good Design Award)

NS Series configuration

System	Unit	
	Single cylinder	Double acting
NSU	NS	

New

- F.R.L.
- F.R.
- F (Filtr)
- R (Reg)
- L (Lub)
- Drain Separ
- Mech Press SW
- Res press exh valve
- SlowStart
- Anti-bac/Bac-remove Filtr
- Film Resist FR
- Oil-Prohr
- Med Press FR
- No Cu/PTFE FRL
- Outdrs FRL
- Adapter Joiner Press Gauge
- CompFRL
- LgFRL
- PrecsR
- VacF/R
- Clean FR
- ElecPneur
- AirBoost
- Speed Ctrl
- Silncr
- CheckV/other
- Fit/Tube
- Nozzle
- Air Unit
- PrecsCompn
- Electro Press SW
- ContactSW
- AirSens
- PresSW Cool
- Air Flo Sens/Ctrl
- WaterRiSens
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Gas generator
- RefrDry
- DesicDry
- HiPolymDry
- MainFiltr
- Dischrg etc
- Ending

Install anywhere

Reduces processes, piping, and space

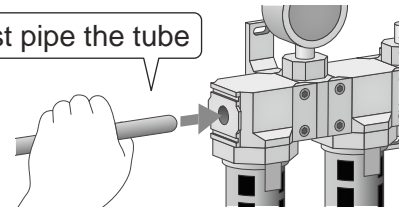
- › Design and piping are done easily by providing system components.
- › The ideal system can be selected according to the required flow rate.
- › Long piping work dedicated for nitrogen is unnecessary since it can be installed near equipment.

Power supply not required

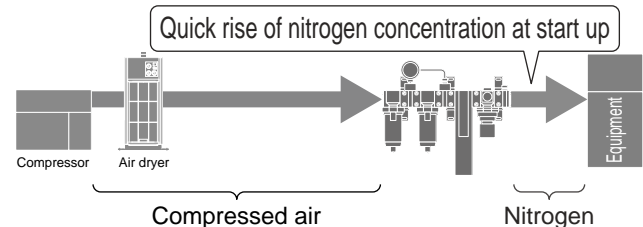
- › Usable even in explosion-proof atmospheres, different voltage areas, etc.
- › No malfunctions due to electrical noise.
- › Quiet, with no heat generation as there is no drive system.

*When selecting the oxygen concentration monitor (option), a power supply is required.

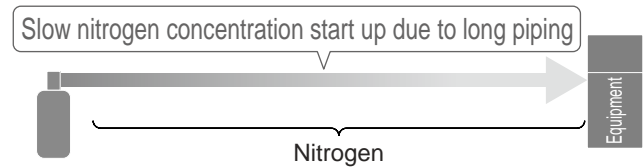
Just pipe the tube



With NS Series



Conventional methods



Low cost

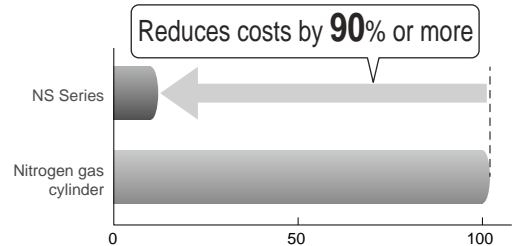
Running cost reduction

- › The only running costs are the electricity costs for the compressor.
- › No continuous running costs such as cylinder refilling costs.

Expense reduction

- › Troublesome cylinder management of remaining gases or replacement work is not required.

Nitrogen gas cylinder and gas unit price comparison



* Comparison assuming that the nitrogen gas concentration is 99% and the gas unit price is 100.

Easy maintenance

Sustainable reliability

- › Since there are no movable parts, stable performance can be maintained.
- › Parts replacement is possible without disassembling the piping.

Not subject to High Pressure Gas Safety Act

- › There is no need for notification or assignment of qualified personnel.



Compatible with FP Series for secure food manufacturing processes

Safe and secure for food manufacturing processes.

NSF H1
grease for
foodstuffs
used

Material compatible
with the Food
Sanitation Act
Fluid passage section
resin/rubber



This logo represents CKD's stance to provide you with safe components for supporting your food manufacturing processes.

- F.R.L.
- F.R.
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