

Atlas Copco

Portable nitrogen generation systems

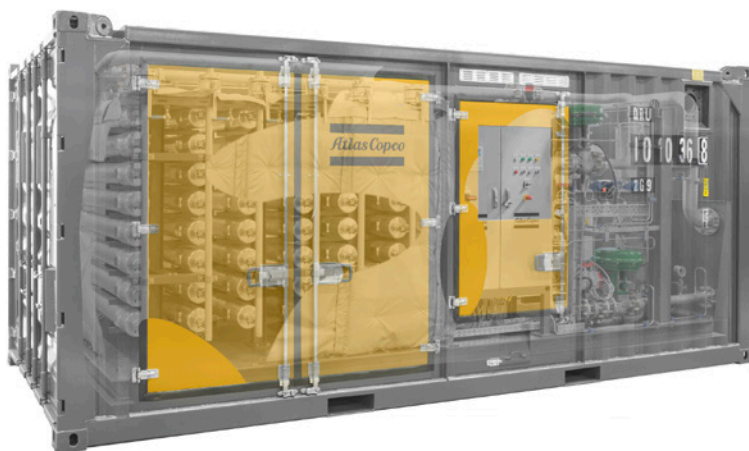


Nitrogen @ 95%-99,5% purity

In the oil & gas industry nitrogen is used extensively for the drilling, completion, and work-over of oil and gas wells. It is also used for pipeline services both onshore and offshore.

Nitrogen is a dry and inert gas; it can be generated on-site at high pressures and low oxygen levels to safely prevent ignition of flammable gases or to protect oil field equipment from corrosion.

We offer a total solution to match your needs, including feed-air compressors, nitrogen membrane systems and high pressure boosters.



Portable nitrogen generation systems Technical Data

STANDARD EFFICIENCY RANGE (**)					
Model (*)		NGM B- 8S-A/HP	NGM C-16S-B/HP	NGM D-24S-C/HP	NGM D-32S-C/HP
Dimension		10 ft Container	20 ft Container	20 ft Container	20 ft Container
Required feed air					
Air flow	Nm ³ /h	2037	4074	6110	8147
	Scfm	1267	2534	3801	5068
Max air pressure	bar / psi	24/348	24/348	24/348	24/348
Max air temperature	°C / °F	50/122	50/122	50/122	50/122
Discharge N₂					
N ₂ flow @ 95% purity	Nm ³ /h	942	1885	2827	3770
	Scfm	586	1173	1759	2345
Recovery rate	%	46%	46%	46%	46%
Nitrogen discharge pressure	bar(g)	22.0	22.0	22.0	22.0
Nitrogen discharge temperature	°C / °F	50 / 122	50 / 122	50 / 122	50 / 122
Nitrogen atmospheric dewpoint	°C	<-45	<-45	<-45	<-45

HIGH EFFICIENCY RANGE (**)							
Model (*)		NGM A-8H-A/HP	NGM B-16H-A/HP	NGM C-24H-B/HP	NGM C-32H-B/HP	NGM D-40H-C/HP	NGM D-48H-C/HP
Dimension		10 ft Container	10 ft Container	20 ft Container	20 ft Container	20 ft Container	20 ft Container
Required feed air							
Air flow	Nm ³ /h	926	1853	2779	3706	4632	5558
	Scfm	576	1153	1729	2305	2882	3458
Max air pressure	bar / psi	24/348	24/348	24/348	24/348	24/348	24/348
Max air temperature	°C / °F	50/122	50/122	50/122	50/122	50/122	50/122
Discharge N₂							
N ₂ flow @ 95% purity	Nm ³ /h	522	1044	1566	2088	2610	3132
	Scfm	325	650	974	1299	1624	1949
Recovery rate	%	56%	56%	56%	56%	56%	56%
Nitrogen discharge pressure	bar(g)	22.0	22.0	22.0	22.0	22.0	22.0
Nitrogen discharge temperature	°C / °F	50 / 122	50 / 122	50 / 122	50 / 122	50 / 122	50 / 122
Nitrogen atmospheric dewpoint	°C	<-45	<-45	<-45	<-45	<-45	<-45

(*) Models with other capacities can be offered upon request

(**) Flow rates at following reference conditions: Nm³/h at 1,01325 bara 0°C 0% rel. humidity – Scfm at 14,69 psia 60°F 0% rel. Humidity

Flange Size : A = 1.1/2", B = 2", C = 3, D = 4", E = 6"

Features	
Skid mounted	Incl forklift pockets
Air pre-treatment	Water separator + coalescing filters + air reheater + active carbon bed tower + particulate filter High differential pressure alarm on filters Electronic water drains + alarm
Purity control system	Zirconium type O ₂ analyser + N ₂ purity control valve + blow off valve Adjustable N ₂ purity between 95-99,5%
Nitrogen flow meter	Measurement on discharge output
PLC control system	With interface alarms, shutdowns & status conditions for start-up
Stainless Steel AISI304L	Piping & Vessels
CE compliant	

Options

- Protection frame
- DNV2.7-1 crash frame
- CSC closed 10ft / 20ft container
- DNV2.7-1 closed 10ft / 20ft container
- 15 ft container possible for units with inlet flange size C (= 3"), no CSC
- Pressure vessel with ASME U-stamp
- Cold weather version -20°C / -4°F
- Cold weather version -40°C / -40°F, only in closed container (on request)
- O₂ analyser calibration system (incl. bottle)
- Stainless Steel AISI316L Piping and Vessels (on request)
- ATEX Zone2 certified (on request)

Customer responsibilities

- Electrical power required for air reheater
- Feed air compressors should have aftercoolers installed