

1,7-1741,4
cfm

NITROGEN GENERATORS

Nitrogen is separated from oxygen and enriched with the Carbon Molecular Sieve (CMS) adsorbent used in Hertz Pressure Swing Adsorption (PSA) type Nitrogen generators. Carbon Molecular Sieve (CMS) allows nitrogen to pass through the line by adsorbing oxygen and water vapor molecules under a certain pressure.

Nitrogen Generator produces nitrogen gas through two adsorption tanks filled with Carbon Molecular Sieve (CMS).

Clean and dry air is directed to one of the tanks in a sequential manner for the adsorption process. The Carbon Molecular Sieve (CMS) in the tank adsorbs oxygen and water vapor molecules and keeps them in its pores, allowing nitrogen molecules to pass through. Thus, nitrogen gas is produced (Purity levels can be between 95-99.999% depending on the areas of use and customer expectations).

Advantages

- Compact design, full automated operations
- Replaces manifold usage
- Touch Screen PLC for controlling the complete system
- New design silencer that operates at lower noise levels during pressurization and purge
- Durable piston valves for long-life operation
- The purity and capacity of nitrogen gas is designed to meet customer requirements (Nitrogen Purity 95%~99.999% is available)
- Minimum maintenance cost
- Lower air-to-nitrogen (A/N) ratios and energy consumption

Standard

- Nitrogen Tanks
- Silencer
- Mini PLC
- Tank Manometers
- Pressure Transmitter
- T Filter
- Piston Valves
- Valve Control Regulator

Optional

- Dew Point Sensor Kit
- Flowmeter Kit
- Oxygen Analyzer Kit
- 3-Way By-Pass Valve Kit
- HMI Color Touch Screen PLC
- Buffer Tank
- Oil Indicator

Model	Free Nitrogen Delivery @ following purity level (cfm)									
	95%	97%	98%	99%	99,5%	99,90%	99,95%	99,99%	99,995%	99,999%
HNG 140	16,2	13,8	13,5	9,0	7,1	5,8	4,9	2,8	2,2	1,7
HNG 185	21,6	18,4	18,1	12,0	9,5	7,7	6,5	3,6	2,9	2,3
HNG 225	26,5	22,5	22,2	14,7	11,6	9,5	8,0	4,5	3,5	2,8
HNG 360	42,1	35,8	35,3	23,4	18,4	15,1	12,7	7,1	5,6	4,5
HNG 475	55,7	47,4	46,7	30,9	24,4	19,9	16,9	9,4	7,4	5,9
HNG 640	75,3	64,1	63,1	41,8	32,9	26,9	22,8	12,8	10,0	7,9
HNG 700	86,2	73,4	72,3	47,9	37,7	30,8	26,1	14,6	11,5	9,1
HNG 810	95,8	81,5	80,3	53,2	41,9	34,3	29,0	16,2	12,7	10,1
HNG 1065	125,4	106,7	105,1	69,6	54,8	44,9	38,0	21,2	16,7	13,2
HNG 1300	153,4	130,6	128,5	85,1	67,0	54,9	46,4	26,0	20,4	16,2
HNG 1580	186,5	158,7	156,2	103,4	81,5	66,7	56,4	31,6	24,8	19,7
HNG 1750	205,7	175,0	172,3	114,1	89,9	73,5	62,3	34,8	27,4	21,8
HNG 1940	227,9	193,9	191,0	126,4	99,6	81,5	69,0	38,6	30,3	24,1
HNG 2610	308,2	262,3	258,2	170,9	134,7	110,2	93,3	52,2	41,0	32,6
HNG 3050	359,4	305,8	301,1	199,4	157,1	128,5	108,8	60,9	47,8	38,0
HNG 3660	253,4	366,6	361,0	239,0	188,4	154,0	130,4	73,0	57,3	45,6
HNG 4500	531,4	452,2	445,3	294,8	232,3	190,0	160,9	90,1	70,6	56,2
HNG 5290	622,7	530,0	521,8	345,5	272,3	222,7	188,5	105,5	82,8	65,9
HNG 6100	718,2	611,1	601,7	398,4	314,0	256,7	217,4	121,7	95,5	76,0
HNG 7340	864,5	735,7	724,4	479,6	378,0	309,1	261,7	146,4	115,0	91,5
HNG 9060	1067,1	908,1	894,1	592,0	466,6	381,5	323,0	180,8	141,9	112,9
HNG 10780	1269,4	1080,4	1063,7	704,3	555,0	453,9	384,2	215,1	168,8	134,3
HNG 12100	1425,9	1213,4	1194,7	791,0	623,4	509,7	431,6	241,6	189,5	150,8
HNG 14780	1741,4	1482,0	1459,4	966,1	761,4	622,6	527,1	295,1	231,5	184,2

Ambient Temperature (°F)	Correction Factor (Kt)
41	0,85
50	1
59	1
68	1
77	1
86	0,91
95	0,82
104	0,74
113	0,60

Inlet Pressure (psi)	Correction Factor (Kp)
72,5	0,68
79,8	0,73
87	0,79
94,3	0,88
101,5	0,90
108,8	1
116	1,04
123,3	1,08
130,5	1,15

Purity [%]	Air / Nitrogen Ratio
95	1,4
97	1,6
98	1,6
99	2,1
99,5	2,4
99,9	2,8
99,95	2,9
99,99	4,6
99,995	5,8
99,999	7,2

Correction Formula: Nitrogen Delivery = Air Delivery Capacity of the Compressors / Air-Nitrogen Ratio / Kt / Kp

