

GENERON®

Twin Tower PSA Nitrogen Generator

GENERON® Twin Tower PSA Nitrogen Generators separate nitrogen from compressed air utilizing Pressure Swing Adsorption (PSA) technology. This product line is designed for medium to large flow rates and have a reduced footprint. It consists of single pairs of our Twin Tower Adsorber Vessels and air and nitrogen buffer vessels (installed on a common skid or supplied separately).

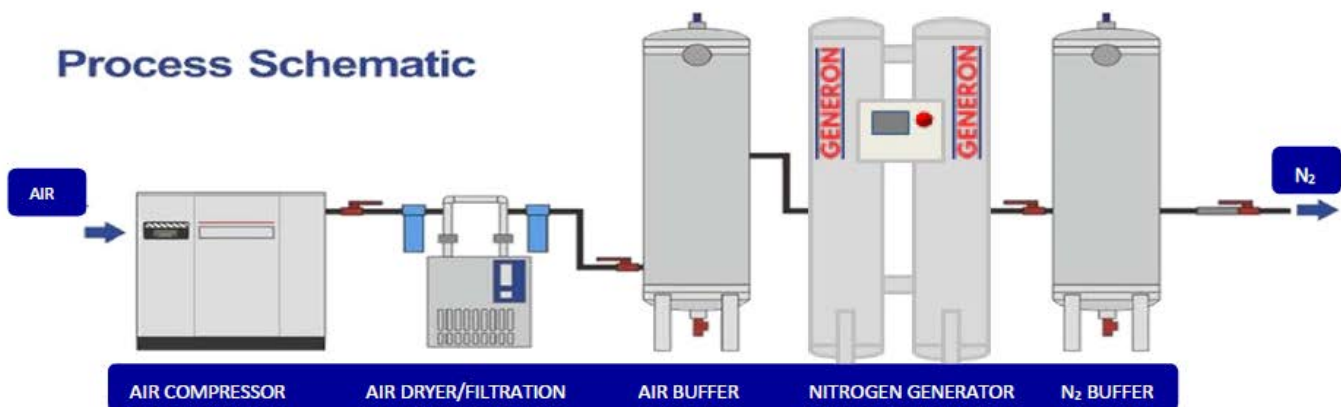
Standard Features:

- ASME Adsorber Vessels
- High Cycle Life Pneumatic / Electric Valves
- Oxygen Analyzer with calibration kit
- Pressure Safety Valve
- Nitrogen Pressure Regulator
- PLC Control System
- Carbon Steel Skid
- Exhaust Silencing Muffler
- Highest Performance Adsorbent Media

Options/Upgrades:

- Inlet Filtration Package
- Post Filtration Package
- Product Flow Meter
- Auto Shut Down/Startup/Standby Mode
- Off Specification Circuit
- HMI Display Screen
- Compressed Air Buffer Tank
- Nitrogen Buffer Tank
- Master Controller driven for multiple unit operation
- Enhanced PLC with Telemetry
- Dew Point Analyzer
- Energy Saving Part-Load Control

Process Schematic



GENERON® Twin Tower PSA Nitrogen Generator

Advantages:

- Low Gas Generating Cost
- Low Energy Consumption
- Fully Automatic Unattended Operation
- Highly Reliable
- Easy Installation
- Low Maintenance
- Heavy Duty Construction
- No Hazardous Storage



NITROGEN PURITY/FOW RATE																										
PSA	97%				99%				99.9%				99.99%				99.999%				Nominal Weight & Dimensions					
	SCFH		NM ³ /H		SCFH		NM ³ /H		SCFH		NM ³ /H		SCFH		NM ³ /H		SCFH		NM ³ /H		L	W	H	Weight		
Inlet P (psig)	90	145	90	145	90	145	90	145	90	145	90	145	90	145	90	145	90	145	90	145	90	145	inch	inch	inch	lbs.
Inlet P (barg)	6.2	10	6.2	10	6.2	10	6.2	10	6.2	10	6.2	10	6.2	10	6.2	10	6.2	10	6.2	10	6.2	10				
NS-20-78	6188	10548	163.3	278.3	4552	789	120.1	197.6	2616	3903	69.0	103.0	103.0	1770	46.7	56.0	933	766	24.6	20.2	58	52	110	3851		
NS-20-93	7378	12574	194.7	331.8	5441	8928	143.6	235.6	3128	4653	82.5	122.8	2115	2530	55.8	66.8	1115	913	29.4	24.1	54	60	110	4228		
NS-24-75	8685	14799	229.2	390.5	6372	10507	168.1	277.2	3662	5476	96.6	144.5	2477	2977	65.4	78.5	1306	1075	34.5	28.4	60	54	97	4592		
NS-24-85	9832	16755	259.4	442.1	7255	11896	191.4	313.9	4170	6200	110.0	163.6	2920	3371	74.4	88.9	1487	1217	39.2	32.1	60	54	118	5378		
NS-30-68	12446	21209	328.4	559.6	9103	15058	240.2	397.3	5232	7848	138.0	207.1	3538	4267	93.4	112.6	1865	1541	49.2	40.7	72	72	103	6909		
NS-30-81	14839	21209	391.5	559.6	10924	15058	288.2	397.3	6279	7848	165.7	207.1	4246	4267	112.0	112.6	2238	1541	59.1	40.7	72	72	121	7576		
NS-36-74	19693	33557	519.6	885.4	14524	23826	383.2	628.7	8348	12417	220.3	327.6	5645	6751	148.9	178.1	2976	2438	78.5	64.3	88	74	116	9370		
NS-36-95	25286	43053	666.6	1136.0	18570	30568	490.0	806.5	10674	15931	281.6	420.3	7218	8662	190.4	228.5	3805	3127	100.4	82.5	88	74	137	10882		
NS-42-83	30216	51490	797.3	1358.6	22211	36558	586.0	964.6	12766	19053	336.8	502.7	8634	10359	227.8	273.3	4551	3740	120.1	98.7	112	84	135	15238		
NS-48-74	34987	59667	923.1	1574.3	25805	42364	680.9	1117.8	14832	22079	391.3	582.6	10030	12004	264.6	316.7	5288	4334	139.5	114.4	112	90	127	15602		
NS-48-85	34987	68457	1060.0	1803.6	29494	48605	778.2	1282.5	16952	25331	447.3	668.4	11464	13772	302.5	363.4	6044	4973	159.5	131.2	112	90	138	16360		
NS-48-94	44433	75715	1172.4	1997.8	32771	53758	864.7	1418.4	18836	31958	197.0	739.2	12738	15233	336.1	401.9	6715	5500	177.2	145.1	112	90	147	16699		
NS-60-68	50683	86366	1337.3	2278.8	37140	61320	979.9	1617.9	21347	31958	563.2	843.2	14436	17375	380.9	458.4	7611	6274	200.8	165.5	156	120	121	19988		
NS-60-74	50683	86366	1337.3	2278.8	37140	61320	979.9	1617.9	21347	31958	563.2	843.2	14436	17375	380.9	458.4	7611	6274	200.8	165.5	156	120	127	20791		
NS-60-81	55178	94025	1455.9	2480.9	40782	66759	1076.0	1761.5	23440	34792	618.5	918.0	15852	18916	418.3	499.1	8357	6830	220.5	180.2	156	120	184	21774		
NS-60-88	60334	102862	1592.7	2714.0	44432	72872	1172.1	1922.7	25333	37979	673.7	1002.1	17267	20649	455.6	544.8	9103	7456	240.2	196.7	156	120	184	25515		
NS-60-94	65550	111699	1729.6	2947.2	48064	79307	1268.2	2092.5	27626	41332	728.9	1090.6	18682	22472	492.9	592.9	9849	8114	259.9	214.1	156	120	184	28016		

Flow and pressure are averages throughout a cycle with tolerances of +/- 3%. Performance data based on 68°F (20°C) PSA Inlet temperature. Standard Conditions: 68°F (20°C) and 14.7 psi (atm). Custom sizes available upon request.

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