GENERON[®]

High-Pressure Nitrogen Series TRITON NITRO EDGE **UT AB** AC

Generon's Triton Nitro Edge Product Line has three distinct systems to meet your every need...







Take Control of Gas Assist Costs

Triton Nitro Edge technology offers multiple options for the generation of Assist and Purge Gas to meet the exact needs of your cutting requirements.

Flexibility:

Cost of generating the Assist and Purge Gas can be greatly influenced by the materials being cut. A high alloy like stainless steel will require different gas parameters than cutting a low-alloy carbon steel product. Not having the ability to adjust your gas parameters can greatly increase your gas usage and cost. The Triton Nitro Edge technology offers unmatched flexibility to optimize your gas parameters to meet your exact requirements. Applications currently using high-pressure cylinders or liquid Nitrogen supplied from one of the major gas companies; will be supplied with one purity – 99.999%. This is because that is the output of their large cryogenic plants. When you purchase your Assist and Purge Gases from the large gas companies you may be paying a very high premium for gas purities you do not need.

Three Technologies are offered:

Triton Clean Cut – This product is designed for mediumsized shops that utilize 49 high pressure cylinders per day at a purity of 99.5% (67 Ft3/hr).

Triton Clean Cut Max – This product is designed for large capacity shops that utilize 349 high pressure cylinders per day at a purity 99.99% (459 Ft/hr).

Triton Clean Cut On-Demand – This product is uniquely designed as on-demand system. No high-pressure storage cylinders are required. The Nitrogen is supplied directly from Generon's high-pressure nitrogen generating equipment, with capacities of 241 Ft3/hr and purities of 99.9% are available at the flip of a switch.

Benefits of a Triton Nitro Edge Assist / Purge Gas System

- Ease of Installation all that is required by the customer is utility hook-ups
- Nitrogen Purities, adjustable to meet your exact cutting needs. Do not pay for Nitrogen Purities you do not need
- Supply Pressures to your cutting equipment is easily adjustable
- PLC Control systems with intuitive operator interface
- All units are manufactured in the USA and supported by Generon's 24/7 Service Team
- Start Saving Money on day one of operation

The ability to make your own Assist and Purge gas will save you thousands of dollars in gas cost, bottle rental costs, delivery fees, environmental fees, unused gas, etc...that the traditional gas companies charge for their bottle gas.

Reliability:

The ability to manufacture your own Assist and Purge Gas on site will free you from any disruptions in bottle gas or liquid nitrogen deliveries. With the Triton Nitro Edge automated high-pressure storage capabilities, our customers are able to optimize how much storage they would like to keep on hand. For example, Generon's systems can fill any number of high-pressure bottles during off hours to ensure that a safety stock of nitrogen is always available.



Triton Clean Cut

This product is designed for medium-sized applications with a purity range of 99 to 99.999%. The Nitrogen Gas is produced either by Generon's proprietary membrane technology or Generon's Bank PSA Technology. Product Nitrogen Gas is produced at low pressure and compressed to high-pressure to be stored in high pressure cylinders. This feature gives the customer the ability to produce and store Nitrogen at highpressure for later use. A letdown regulator is supplied to allow the customer to adjust the supply pressure to the laser equipment requirement.



Triton High Pressure Nitrogen Package							
Model#	N2 Flow (SCFH)	N2 Purity (%)	N2 Final Discharge Pressure (psig)	Nitrogen Storage** Volume (CCF)	No. of Cylinders*** per day	System Dimensions (ft) L x W x H	N2 System Weight (lbs)
6151CP	1020	97%	4350 psig	105	52	6 x 3 x 6	2600
6151CP	780	98%	4350 psig	105	42	6 x 3 x 6	2600
6151CP	540	99%	4350 psig	105	29	6 x 3 x 6	2600
6151CP	420	99.5%	4350 psig	105	22	6 x 3 x 6	2600
6152CP	2040	97%	4350 psig	105	104	6 x 3 x 6	2600
6152CP	1620	98%	4350 psig	105	85	6 x 3 x 6	2600
6152CP	1140	99%	4350 psig	105	62	6 x 3 x 6	2600
6152CP	900	99.5%	4350 psig	105	49	6 x 3 x 6	2600



Triton Clean Cut Max

This product is designed for larger capacity laser shops. It is designed to produce Nitrogen gas at purities of 99.9 to 99.999%. These systems utilize customer-supplied compressed air. The clean-cut system takes the customer supplied compressed air and conditions it for use in its Bank PSA Nitrogen Process. After the Nitrogen gas is produced, the nitrogen gas is compressed and stored in high-pressure cylinders for later use. A letdown regulator is supplied to allow the customer to adjust the supply pressure to the laser equipment.



Triton Clean Cut Max								
Package #	N2 Flow (SCFH)	N2 Purity	N2 Final Discharge	Nitrogen Storage** Volume (CCF)	No. of Cylinders*** per day	System Dimensions (ft) L x W x H	N2 System Weight (lbs.)	
	Air Flow (SCFM)	(%)	Pressure (psig)					
1	1261	99.99%	4350 psig	105	68	8 × 8 × 8	7100	
	92	99.9970						
2	2521	99.99%	4350 psig	105	137	11 x 8 x8	11500	
	183	99.9970						
3	3782	99.99%	4350 psig	210	206	14 x 8 x8	17500	
	275	99.9970						
4	5042	99.99%	4350 psig	315	275	17 x 8 x8	20200	
	367	99.9970						
5	6303	99.99%	4350 psig	315	343	20 x 8 x 8	27500	
	459	99.99%						

Flow and pressure values are averages with tolerances of +/-4%.

Nitrogen flow rates determined at 99.99% purity with 100psig (6.9 barg) inlet pressure @ 68°F (20°C) adsorption temperature. Purities to 99.999 available upon request

** Cylinder rack will be provided separately as required. Storage capacity can be increased if necessary

*** 24 hours operation is considered



Triton Nitro Edge On-Demand

This product is designed for applications with purities of 98-99.9%. The Nitrogen Gas is produced utilizing Generon's proprietary high-pressure membrane technology. The unit is designed for large capacity requirements and requires no high-pressure storage bottles.

Triton Nitrogen On-Demand							
Model#	N2 Flow (SCFH)	N2 Purity (%)	N2 Final Discharge Pressure (psig)	System Dimensions (ft) L x W x H	N2 System Weight (lbs)		
6155HHP	5760	99%	490 psig	8 x 8 x 9	7500		
6156HHP	4974	99.5%	490 psig	8 × 8 × 9	7500		
6157HHP	3306	99.9%	490 psig	8 x 8 x 9	7500		



For over 50 years, **GENERON®** has offered a full complement of products designed for Petrochemical, Environmental, Commercial, Industrial, Marine, Aircraft and Oil & Gas, with thousands of systems in operation worldwide.

GENERON is a fully vertically integrated company offering turnkey systems to our customers. All of the GENERON® products listed here are fully supported by internal manufacturing groups. The breath of internal services was a result of the company's drive to provide our customers with products with the highest quality and on time performance. Purchasing these services from outside sources at times compromises the company's ability to offer the highest product quality on a time schedule acceptable to our customers.



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PSA and Generon's patented Membrane Technology each produced in the United States: Houston Texas and Pittsburg California.











Texas Compression Services