

## FLOXAL<sup>TM</sup> N2

On-site nitrogen production



## FLOXAL Solutions

FLOXAL solutions cover the supply of gas generated at your site – using plants invested, operated and maintained by Airgas – meeting your demand specifications of purity, pressure and flow rate, with full back-up and guaranteed performance.

Three molecules are available under the FLOXAL offer: nitrogen, oxygen and hydrogen. For each molecule, various generation technologies are used to ensure satisfaction of your gas needs at the required specifications and at a competitive price.

## Your requirements are unique

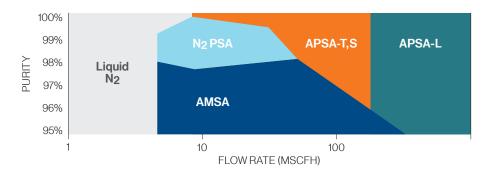
Airgas, an Air Liquide company, offers a full range of state-of-the-art plants built to a standard design, ensuring safety, reliability, and cost efficiency. We guarantee continuous supply of gas, so you can focus on your business. Full gas availability is ensured through telemonitored performance tracking supported by a network of alarm response centers and qualified service technicians, as well as auxiliary bulk back-up storage at your facility.

## Markets & applications

- Metals
- Glass
- Electronics
- Chemical and refineries
- Food
- Pharmaceuticals

- Heat treatment
- Metal refining
- Inerting
- Purging
- Blanketing
- Packaging

## On-site nitrogen portfolio



#### Perimeters are indicative

Airgas will select the most appropriate solution for your flow and purity requirements.

Product Line	N <sub>2</sub> PSA	AMSA	APSA-T	APSA-S	APSA-L
Technology	Pressure swing adsorption	Membrane Separation	LIN-assisted cryogenic distillation	LIN-assisted cryogenic distillation	Turbine-cooled cryogenic distillation
Residual oxygen	0.5% – 2%	2%-5%	1-3 ppm	1-3 ppm	<1 ppm
Generator flow range (scfh)	8,000 – 60,000	8,000 – 60,000	8,000 – 65,000	40,000 – 114,000	50,000 – 200,000
Pressure (psig)	80 – 130	80 – 130	80 – 120	30 – 120	70 – 130
Key feature	Adapted purity	Modular	Extensive turndown	Low energy	Self-sufficient with back-up
Main application	Inerting	Purging	High-purity atmospheres	High-purity atmospheres	High-purity atmospheres
Primary markets	Pharma, food, packaging	Chemical storage	Material processing	Material processing	Electronics, remote locations

LIN = Liquid nitrogen

# APSA product line delivers the FLOXAL™ promise: peace of mind at best-in-class Total Cost of Ownership

#### APSA-T

Power-efficient cryogenic-purity gas N2 generator

#### **Benefits**

- Wide product range to meet various needs
- Flexible modular system design
- Energy efficient operation
- Guaranteed plant up-time
- Automated operation and uninterrupted gas supply

#### **APSA-S**

Multi-cycle cryogenic-purity gas N<sub>2</sub> generator

Benefits (includes all benefits of APSA-T)

- Wide operating range to adapt to changing demands
- Flexible optimized balance of energy and efficiency
- Higher productivity
- Extended pressure range
- Increased plant up-time
- Improved transportability

