



3770B Unit 2, Laird Road. Mississauga Ontario, Canada L5L 0A7
 Tel: 905-820-3348 1 800-951-0777 Fax: 905-820-3490

Typical Nitrogen Purity Levels by Industry

The following is a list of common applications and typical purities based on over 4,000 NOXERIOR/NOVAIR references deployed in over 150 countries across the globe. Contact sales@cagtech.com for more info.

Electronic Assembly

<u>Application</u>	<u>Purity (N2)</u>
Lead free solder processes	(99.999 to 99.99% N2)
Wave, reflow or selective soldering	(99.999 to 99.99% N2)
Dry box storage	(95-99%)
De-ionized water storage	(98-99%)
Burn-in ovens	(97-99.99%)
Parts cleaning	(95-98%)
Adhesive blanketing	(99.5%)

Food & Beverage

On average, this application uses a nitrogen purity of 98-99.5%

- Snack food packaging
- Salad and fruit packaging
- Coffee packaging
- Edible oil blanketing
- Flavorings blanketing
- Dairy packaging
- Wine blanketing, transfer, and bottling
- Modified atmosphere packaging

Metal Industry

<u>Application</u>	<u>Purity (N2)</u>	<u>Use</u>
Aluminum degassing	97-99%	Remove H ₂
Aluminum extrusion	99-99.5%	Prevent carburization
Laser cutting	99-99.999%	Blow off dross and minimize at the cut
Laser bellows purge	97-99%	Purge bellows so the dust stays off mirrors
Heat treating	95-99%	Inert atmosphere
Additive manufacturing	97-98%	Inert atmosphere

Oil, Gas and Petrochemical

<u>Application</u>	<u>Purity (N2)</u>
Fire/explosion prevention	95-99%
Inert blanketing	95-99%
Paint blanketing	98%
Inert transfer in enhanced oil recovery	98%
Pressurizing Riser Tensioners	98%
Gas Seals	95-97%

Pharmaceutical Industry

<u>Application</u>	<u>Purity (N2)</u>
Chemical product transfer	97-99.99%
Chemical and DI water blanketing	97-99.99%
Product packaging	97-99.99%

Plastics

<u>Application</u>	<u>Purity (N2)</u>	<u>Use</u>
Injection molding	95-99%	Prevent carburization, purge pellet hopper
Gas assist injection molding	99.5%	Pack out parts and eliminate shrinkage
Blown film extrusion	98-99.5%	Purging, spray dry products

Power Generation

<u>Application</u>	<u>Purity (N2)</u>
Purging mechanical gas seals	95-98%
Boiler layup	99.6%
Purging natural gas lines	95-98%
Demineralized water blanketing	95-98%

Others

<u>Application</u>	<u>Purity (N2)</u>
Mine inerting	95-99%
Automotive paint blanketing/spray	95-98%
Gold refining	99.99%
Museum/artifact preservation	95%