

Modern Technology PSA Nitrogen 99.999% Pure Nitrogen Generator 80 Nm³/H for Laser Cutting

Our Product Introduction

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Basic Information

- Place of Origin: Jiangsu, China
- Brand Name: FLY SPEED
- Certification: CE, ISO 9001:2015
- Model Number: FS-N2-80LC
- Minimum Order Quantity: 1 Set
- Price: USD 16,000-50,000 / Set
- Packaging Details: Export wooden case with PE film protection, sea-worthy packing
- Delivery Time: 35-45 working days
- Payment Terms: T/T, L/C
- Supply Ability: 10 Sets per Month



Product Specification

- Nitrogen Purity: 99.999% (O₂ ≤ 5 Ppm)
- Capacity: 80 Nm³/H
- Pressure Dew Point: ≤ -60 Deg C
- Air Source Pressure: 0.75 - 1.0 MPa
- Nitrogen Outlet Pressure: 0.8 - 2.5 MPa (with Booster)
- Voltage: 220V/380V/440V 50/60Hz
- Adsorbent: Carbon Molecular Sieve (CMS)
- Control System: PLC + Touch Screen HMI
- Recommended Laser Power: 6 KW - 20 KW Fiber Laser
- Warranty: 1 Year
- HS CODE: 8419609090
- Highlight: **80 Nm³/H Laser Cutting N₂,
99.999% Ultra Pure Nitrogen,
Modern PSA Technology System**

Product Description

Modern Technology PSA Nitrogen 99.999% Pure Nitrogen Generator for Laser Cutting

Upgrade your laser cutting line with the **Modern Technology PSA Nitrogen 99.999% Pure Nitrogen Generator**. Purpose-engineered for laser cutting applications, this 80 Nm³/H on-site N₂ system produces ultra-pure nitrogen at **99.999%** purity, preventing edge oxidation and delivering clean, burr-free cuts on stainless steel, aluminum and carbon steel.

Product Attributes

Attribute	Value
Brand Name	Fly Speed
Model Number	FS-N2-80LC
Capacity	80 Nm ³ /H
Nitrogen Purity	99.999% (O ₂ ≤ 5 ppm)
Condition	New
HS CODE	8419609090

Core Features & Advantages

Laser-Grade 99.999% Purity: Ultra-pure nitrogen with O₂ ≤ 5 ppm delivers bright, oxidation-free cut edges on stainless steel and aluminum.

Modern PSA Technology: Latest-generation twin-tower CMS adsorption with pressure equalization ensures stable flow matching laser duty cycles.

Fast Purity Ramp-Up: Reaches target purity in minutes, minimizing idle time between cutting jobs.

Intelligent PLC Control: Touch-screen HMI with real-time purity and flow monitoring, remote alarm for unattended operation.

Compact Footprint: Skid-mounted design fits easily beside laser cutting machines, saving valuable workshop space.

Lower Gas Cost: On-site generation cuts nitrogen expense by 30-50% versus liquid nitrogen or cylinder supply.

Technical Specifications

Parameter	Value
Nitrogen Capacity	80 Nm ³ /H
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Nitrogen Outlet Pressure	0.8 - 2.5 MPa (with booster, adjustable)
Voltage	220V / 380V / 440V, 50/60Hz
Adsorbent	Carbon Molecular Sieve (CMS)
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Applications

Specifically optimized for fiber laser cutting of stainless steel, aluminum, galvanized sheet and carbon steel; also suitable for laser welding shielding and plasma cutting backup.

FAQ

Q: Why is 99.999% purity important for laser cutting?

A: Residual oxygen above 5 ppm causes edge oxidation and discoloration on stainless steel. 99.999% purity ensures bright, clean edges without secondary processing.

Q: Does the system include a nitrogen booster?

A: An integrated booster option raises outlet pressure to 2.5 MPa, matching the high-pressure requirements of modern fiber laser cutting heads.

Contact us today! Fly Speed provides laser cutting nitrogen solutions with fast delivery, installation guidance and remote technical support.



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