

# Inside China's PSA Nitrogen Generator for Laser Cutting Machine: Luoming's Role in Innovation and Sustainability

YANCHENG, JIANGSU, CHINA, December 6, 2025 /EINPresswire.com/ -- Jiangsu Luoming Purification Technology Co., Ltd., recognized for its [PSA Nitrogen Generator for Laser Cutting Machine](#) solutions and holding the prestigious High-Tech Enterprise Certificate continues to set new benchmarks in industrial gas innovation and sustainability. By combining cutting-edge technology, energy efficiency, and robust quality management, Luoming delivers nitrogen generation systems that empower laser cutting industries and industrial manufacturing across China and abroad.

Founded in May 2020 as a wholly-owned subsidiary of Suzhou Hengda Purification Equipment Co., Ltd.,

Luoming operates a 16,000-square-meter facility that integrates research and development, production, sales, and service operations. By the end of 2022, the company obtained the CE certificate, demonstrating its ability to manufacture highly regulated and precise gas equipment.



PSA Nitrogen Generator for Laser Cutting Machine

## Industry Overview: Rising Demand for PSA Nitrogen in Laser Cutting and Industrial Applications

The industrial gas market in China is witnessing rapid growth, driven by advances in manufacturing automation, high-precision processes, and sustainable production requirements. Among these, nitrogen plays a critical role in laser cutting applications, providing an inert environment that enhances cut quality, and extends equipment lifespan.

### Laser Cutting Applications:

High-purity nitrogen supplied by PSA generators ensures clean cuts on stainless steel, aluminum, and other metals. Nitrogen reduces oxidation on metal surfaces, improving edge smoothness, minimizing post-processing, and enabling higher production efficiency. As the laser cutting market in China continues to expand, industrial facilities increasingly invest in on-site nitrogen generation to reduce cylinder dependency and maintain uninterrupted operations.

### Industrial Growth Trends:

From electronics and automotive manufacturing to aerospace and food packaging, nitrogen demand is rising steadily. On-site PSA nitrogen generators provide a cost-effective solution, producing high-purity nitrogen (95%–99.9995%) continuously while reducing logistics costs associated with cylinder or liquid nitrogen deliveries.

### Sustainability and Energy Efficiency:

Modern industrial operations emphasize energy savings and reduced carbon footprints. PSA nitrogen generators by Luoming use optimized compressor cycles and adsorption processes, achieving high output with lower energy consumption. By generating nitrogen on-site, companies minimize transportation emissions and ensure a greener, more sustainable production process.

### Automation and Smart Monitoring:

Digital and PLC-based control systems allow operators to monitor nitrogen purity, pressure, and flow rates in real-time. Automated alarms and predictive maintenance features ensure reliability, prevent downtime, and allow industrial operators to focus on core manufacturing activities while maintaining strict quality control.

These industry dynamics illustrate the growing importance of reliable, high-performance PSA nitrogen solutions in China's laser cutting and broader industrial sectors.

### Luoming's Technological Edge and Product Advantages

Luoming's PSA nitrogen generators are engineered to deliver consistent, high-purity nitrogen for industrial applications. The company leverages High-Performance Molecular Sieves technology, ensuring efficient separation of nitrogen from ambient air with minimal fluctuations.

### Key advantages of Luoming's systems include:

**High Purity and Stability:** Nitrogen purity is maintained between 95% and 99.9995%, meeting the stringent requirements of laser cutting machines and other precision industrial applications.

**Energy Efficiency:** Optimized adsorption and compressor cycles reduce power consumption, lowering operational costs and supporting sustainable production.

**Intelligent Control Systems:** PLC-based automation provides real-time monitoring, remote

control, and predictive maintenance capabilities, ensuring uninterrupted nitrogen supply. **Modular and Scalable Design:** Configurable systems accommodate small workshops, mid-sized factories, or large industrial complexes, with easy expansion options as demand grows. **Safety and Reliability:** Integrated alarms, automatic shutdown mechanisms, and contamination protection prevent operational failures and ensure workplace safety.

Luoming's commitment to quality is backed by High-Tech Enterprise Certification, ISO standards, and strict internal quality control procedures, guaranteeing reliable performance and compliance with national and international standards.

Luoming's PSA nitrogen generators provide high-purity nitrogen specifically engineered for laser cutting applications. By delivering nitrogen with purity levels often exceeding 99.9%, these systems create an environment that prevents discoloration and surface defects on stainless steel, aluminum, and other metals. The high-purity nitrogen not only improves the smoothness and quality of edges but also enhances cutting speed and efficiency, reducing material waste and post-processing requirements. With modular designs and scalable output, these generators can serve small workshops, medium-sized factories, or large industrial complexes, ensuring uninterrupted nitrogen supply for continuous production.

This comprehensive product line allows Luoming to deliver turnkey solutions, integrating generation, purification, monitoring, and distribution for industrial applications.

### Applications and Customer Success Stories

Luoming's PSA nitrogen systems have been successfully implemented across diverse industries:

**Laser Cutting Factories:** A metal fabrication company in Jiangsu adopted Luoming's nitrogen generator for laser cutting, achieving cleaner cuts, and faster processing. The system's stability allowed uninterrupted 24/7 operations.

**Pharmaceutical Manufacturing:** PSA nitrogen generators are used to create inert atmospheres during sensitive drug production, and improve product shelf life.

**Electronics Manufacturing:** Semiconductor assembly lines rely on Luoming's high-purity nitrogen for soldering and testing, maintaining product quality and operational consistency.

These cases highlight Luoming's ability to provide customized solutions, improving operational efficiency, safety, and sustainability across multiple sectors.

### Why Choose Luoming

Selecting a PSA nitrogen generator supplier requires careful evaluation of technical expertise, certifications, product quality, and after-sales service. Luoming excels in all these areas. Its combination of High-Tech Enterprise Certification, ISO standards, and modern production

capabilities ensures high-quality, compliant solutions for industrial clients.

With modular, scalable designs, energy-efficient operation, intelligent monitoring systems, and proven performance in industrial sectors, Luoming is the preferred partner for clients seeking reliable, sustainable, and high-performance nitrogen generation solutions.

For more information, please visit: <https://www.lmoxygenplant.com/>

Jiangsu Luoming Purification Technology Co., Ltd.

Jiangsu Luoming Purification Technology Co., Ltd.

+86 158 5025 4955

sales005@szhdjh.com.cn

---

This press release can be viewed online at: <https://www.einpresswire.com/article/873050812>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.