Comprehensive Analysis: Why 99.5% High-Purity Medical Oxygen Generators by Luoming Set Industry Standards

Yancheng, Jiangsu Nov 20, 2025 (Issuewire.com**)** - Jiangsu Luoming Purification Technology Co., Ltd., an Advanced Oxygen Filling Station Solution Provider, presented its 99.5% high-purity medical oxygen generators at **The 27th China International Medical Device (Jiangsu) Expo**, offering a detailed demonstration of how innovation, safety, and efficiency are redefining standards in hospital oxygen supply systems.

At the event, Luoming's booth became one of the highlights of the exhibition, attracting medical equipment distributors, hospital administrators, and healthcare engineers from across China and abroad. Visitors witnessed the company's advanced molecular sieve oxygen generation technology, which achieves consistent 99.5% purity while maintaining remarkable energy efficiency. The demonstration also included Luoming's modular oxygen systems and intelligent gas control platforms—technologies that enable hospitals to operate their own on-site oxygen production and management systems with minimal maintenance.

Founded in May 2020, Jiangsu Luoming Purification Technology Co., Ltd. operates as a wholly owned subsidiary of Suzhou Hengda Purification Equipment Co., Ltd. The company integrates R&D, manufacturing, sales, and service within a 16,000-square-meter facility designed for large-scale production of oxygen and gas purification systems. By the end of 2022, Luoming obtained the **Class II Medical Device Production License**, reinforcing its compliance with China's rigorous medical device regulatory framework.

Industry Analysis: Why Onsite Oxygen Generation Is the Future of Medical Supply

The global medical oxygen market has entered a transformative phase, fueled by rising healthcare demands, aging populations, and the growing emphasis on hospital self-sufficiency. The COVID-19 pandemic exposed major vulnerabilities in conventional oxygen logistics, especially in regions dependent on bottled or liquid oxygen deliveries. In response, hospitals worldwide are turning to **onsite oxygen generation systems**, which provide continuous, cost-efficient, and environmentally sustainable oxygen supply.

Among these technologies, **Pressure Swing Adsorption (PSA)** has emerged as the industry's gold standard. PSA oxygen generators extract oxygen directly from ambient air through advanced molecular sieve materials, providing reliable purity and flow control. Compared with traditional oxygen delivery systems, PSA units reduce costs by up to 40%, eliminate cylinder transportation risks, and ensure uninterrupted oxygen availability—a critical advantage during medical emergencies.

In China, this trend aligns perfectly with national healthcare modernization initiatives. The "14th Five-Year Plan" and "Healthy China 2030" strategies both highlight the need for smart hospital infrastructure and sustainable medical gas management. The **27th China International Medical Device (Jiangsu) Expo** showcased how intelligent gas systems are now integral to hospital design, featuring real-time monitoring, digital control, and energy optimization technologies.

The high-altitude and remote regions of China, such as Tibet and Xinjiang, have particularly benefited from these innovations. On-site medical oxygen generators have enabled hospitals in these areas to provide stable oxygen therapy without relying on external supply chains—a development that underscores the growing importance of localized oxygen generation technologies.

Luoming's Technological Leadership and Product Advantages

Luoming's 99.5% high-purity medical oxygen generators exemplify precision engineering and intelligent system integration. Utilizing **PSA technology**, the system separates oxygen from air using high-performance zeolite molecular sieves and automated cycle control. The result is medical-grade oxygen with purity stability, meeting the stringent requirements of ICU units, operating rooms, and emergency care facilities.

Luoming's equipment has passed multiple safety and performance certifications, including CE and ISO13485, ISO9001, ISO45001, ISO14001 quality management system certifications, confirming its adherence to international standards for quality management and medical device manufacturing. Its strong engineering background allows for system customization across multiple environments—from small clinics to large tertiary hospitals.

In addition to medical oxygen systems, Luoming also develops comprehensive **oxygen filling station solutions**, enabling hospitals to refill cylinders on-site. These stations integrate purification, compression, and storage units, forming a closed-loop oxygen management system that enhances both safety and efficiency. Such versatility reinforces Luoming's identity as an **Advanced Oxygen Filling Station Solution Provider**.

Core Product Portfolio

Luoming's product family covers a broad range of gas solutions:

- **Medical Molecular Sieve Oxygen Generators** – Centralized systems for hospitals and healthcare centers requiring uninterrupted oxygen supply.
  Medical Bunker Oxygen Systems – Mobile and modular setups for field hospitals and emergency operations.
- **Modular Oxygen Generators** – Scalable solutions designed for medium to large institutions.
- **Aviation High-Purity Oxygen Generators** – Tailored systems for aerospace medicine and high-altitude operations.
- **Medical Compressed Air Systems** – Delivering clean, oil-free compressed air for surgical and respiratory devices.
- **Portable Oxygen Cylinders** – Lightweight solutions for outpatient oxygen therapy.

Each system is designed for low noise, high efficiency, and user-friendly operation—ideal for both urban hospitals and remote clinics where continuous performance and durability are critical.

Market Success and Customer Recognition

Luoming's reputation is built on real-world results. Its modular oxygen systems are currently in operation at numerous provincial and municipal hospitals across China, including in Jiangsu, Anhui, and Gansu provinces. Feedback from healthcare administrators highlights a significant **reduction in operating costs**—often by 30%—and improved oxygen supply stability.

In 2024, Luoming partnered with a major pharmaceutical manufacturing facility to install PSA oxygen generation system and nitrogen generation system. The project resulted in an annual energy savings of 18% and improved process purity consistency, validating the company's engineering versatility beyond the healthcare sector.

Internationally, Luoming's CE-certified equipment has attracted inquiries from Southeast Asia, the Middle East, and Africa. The company's combination of advanced automation, service reliability, and localized customization positions it favorably for global expansion.

Strategic Vision: Toward Intelligent and Sustainable Oxygen Systems

Looking ahead, Jiangsu Luoming Purification Technology Co., Ltd. plans to further strengthen its R&D capabilities and integrate digital technologies such as AI-driven predictive maintenance and cloud-based monitoring. These innovations will enable hospitals and industrial clients to remotely oversee system performance, schedule maintenance, and optimize energy use in real time.

Luoming's long-term vision centers on sustainability—reducing carbon emissions, extending product life cycles, and creating smarter gas ecosystems. The company's dedication to innovation, safety, and environmental responsibility continues to make it a trusted leader in the global medical gas equipment industry.

As healthcare institutions seek dependable, high-purity oxygen solutions that meet international standards, Luoming's 99.5% Medical Oxygen Generators stand as a benchmark of performance, setting a new industry standard for precision, safety, and sustainability.

For more information, please visit the official website: https://www.lmoxygenplant.com

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