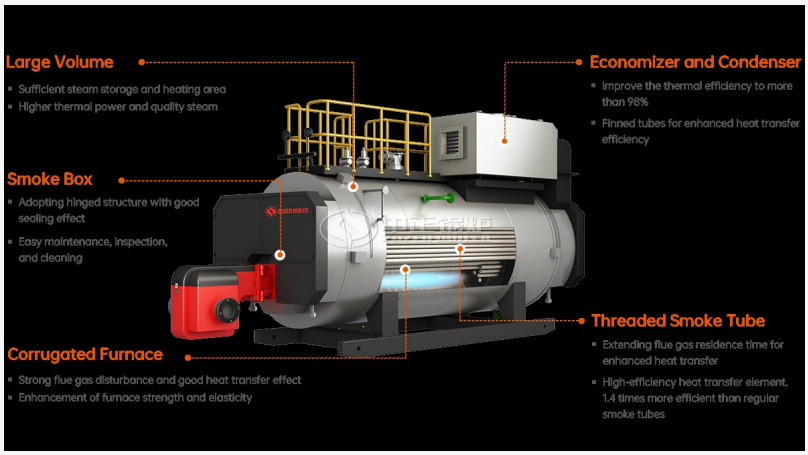
ZOZEN: The Global Leading Gas Boiler Supplier with Low Emission for Sustainable Energy

WUXI, JIANGSU, CHINA, December 24, 2025 /EINPresswire.com/ -- As industrial sectors worldwide intensify their transition toward environmentally responsible operations, the demand for clean-burning heating solutions has never been more critical. ZOZEN Boiler has emerged as a Global Leading Gas Boiler Supplier, pioneering low-emission technologies that align industrial efficiency with sustainability goals. With operations spanning multiple continents and a production facility covering 150,000 square meters in Wuxi, China, ZOZEN demonstrates how advanced engineering can deliver both environmental performance and operational excellence.

ZOZEN SZS gas boiler

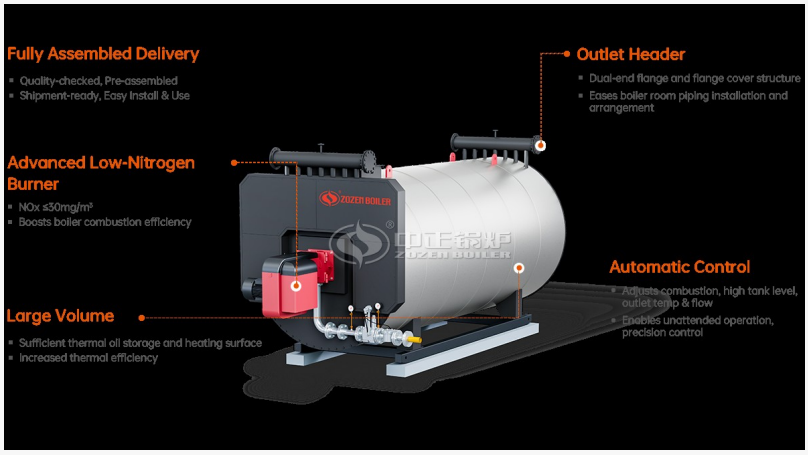


ZOZEN WNS gas boiler

Environmental Innovation in Gas Boiler Technology

The shift toward gaseous fuels as industrial energy sources represents a fundamental change in how manufacturers approach energy consumption. ZOZEN's gas-fired boilers accommodate diverse gaseous fuels including natural gas, liquefied petroleum gas (LPG), coke oven gas, biogas, and blast furnace gas, providing flexibility based on regional fuel availability. Gas-fired boilers produce significantly fewer particulate emissions and greenhouse gases compared to traditional solid fuel systems, making them essential tools for companies committed to reducing their carbon footprint.

ZOZEN's gas boiler engineering reflects this environmental imperative through designs that maximize combustion efficiency while minimizing pollutant formation. The company's approach combines precision burner technology with optimized heat transfer surfaces, ensuring that fuel combustion reaches completion with minimal excess air. This technical refinement translates directly into nitrogen oxide (NOx) emissions ≤30 mg/Nm³ and reduced fuel consumption per unit of steam or heat produced.



ZOZEN YQW gas thermal oil boiler

WNS Series: Compact Efficiency for Diverse Applications

The WNS series gas-fired steam boilers exemplify ZOZEN's commitment to practical, high-performance design. These horizontal units operate across a capacity range of 1 to 20 tons per hour with working pressures between 0.7 and 2 MPa, serving industries from food processing to pharmaceutical manufacturing.

The three-pass wetback structure represents a key innovation in this series. Combustion gases travel through the furnace and then reverse direction twice through smoke tubes, maximizing heat transfer to the water before exhaust. The corrugated furnace design enhances this process by creating turbulence that improves thermal efficiency while strengthening the structure against thermal expansion stress.

ZOZEN also offers skid-mounted versions in the WNS line for applications requiring mobility or rapid deployment. These pre-assembled systems arrive at installation sites ready for quick connection, reducing commissioning time from weeks to days. For operations seeking the Best Steam Boiler Price without extended downtime during installation, this approach delivers significant project value.

SZS Series: Industrial-Scale Performance

When applications demand higher capacities and pressures, ZOZEN's SZS series provides solutions ranging from 2 to 110 tons per hour with pressure capabilities up to 5.3 MPa. This double-drum water-tube configuration serves power generation facilities, large chemical plants, and manufacturing complexes requiring substantial steam volumes.

The membrane water-wall construction in SZS boilers creates a continuous heating surface that eliminates cold spots and ensures uniform steam generation. This design choice improves

thermal efficiency while reducing maintenance requirements, as the integrated structure experiences less thermal stress than older riveted or welded tube arrangements. The result is extended service life and lower total ownership costs.

For power generation applications specifically, ZOZEN produces the ZZ series gas-fired boilers with capacities from 20 to 130 tons per hour and pressures reaching 5.4 MPa. These units meet the demanding requirements of combined heat and power systems where steam quality and consistency directly impact electrical generation efficiency.

Gas-Fired Thermal Oil Heaters: High-Temperature Solutions

Beyond steam generation, ZOZEN's gas-fired thermal oil heater portfolio addresses applications requiring precise high-temperature control at low pressure.

YQW Series: Horizontal Configuration

The YQW series gas-fired/oil-fired horizontal thermal oil heaters provide thermal capacity from 1,400 to 14,000 kW with working pressure of 0.8 to 1.0 MPa and outlet temperatures reaching 320°C. The two or three-pass round coil structure with tapered tube ends effectively protects furnace walls while ensuring efficient heat transfer. These units achieve thermal efficiency up to 92%, with advanced combustion devices enabling low NOx emissions.

The horizontal design arrives as a complete package, requiring only gas/oil and electrical connections for commissioning. This configuration proves particularly suitable for textile printing and dyeing, wood processing, vegetable oil refining, and chemical industries where high-temperature heating under atmospheric pressure provides operational advantages over steam systems.

YQL Series: Vertical High-Capacity Design

The YQ(Y)L series offers thermal capacity from 7,000 to 29,200 kW in a vertical arrangement that minimizes floor space requirements. The two-pass round coil structure incorporates inner coil tubes allowing greater heat absorption and flow, ensuring safe and reliable high-temperature operation. These larger units serve major chemical facilities, large-scale food processing operations, and industrial complexes with substantial thermal oil requirements.

Fuel Adaptability: Comprehensive Heating Solutions

While ZOZEN's gas boiler portfolio positions the company as a Global Leading Gas Boiler Supplier, the manufacturer's comprehensive approach to industrial heating extends across multiple fuel types through specialized equipment designs.

Liquid Fuel Capability

ZOZEN provides dedicated boiler solutions for liquid fuels including diesel, heavy oil, light oil, and residual oil. The WNS and SZS series accommodate these fuels through appropriate burner selection and fuel handling systems, while thermal oil heaters in the YQ(Y)W and YQ(Y)L series offer similar multi-fuel flexibility with optimized combustion equipment for each fuel type.

Biomass and Coal Solutions

ZOZEN's fuel adaptability reflects engineering capability rather than arbitrary fuel switching. During the equipment selection phase, ZOZEN's comprehensive product portfolio enables customers to choose optimal solutions based on specific fuel infrastructure and regional availability.

For facilities where agricultural residues or forestry waste are available, ZOZEN offers specialized biomass boiler series designed with dedicated feeding systems, grate configurations, and fuel handling accessories optimized for solid biomass combustion. These renewable energy solutions provide sustainable alternatives where biomass resources are abundant.

Similarly, for regions where coal remains economically viable, ZOZEN provides coal-fired boiler series with specialized combustion chambers, emission control systems, and fuel preparation equipment. Advanced circulating fluidized bed (CFB) technology achieves cleaner coal combustion while accommodating variable fuel quality.

This wide-ranging fuel capability allows facilities to select equipment matching their current fuel infrastructure from project inception. ZOZEN's engineering team evaluates each customer's fuel conditions, capacity requirements, site constraints, and emission standards to recommend the appropriate boiler series, combustion configuration, and auxiliary systems—delivering reliable performance and operational efficiency throughout the equipment's service life.

Sector-Specific Solutions and Global Reach

ZOZEN's engineering approach prioritizes understanding industry-specific requirements before recommending equipment. The textile industry, with its numerous steam-consuming processes, requires different operational characteristics than a dairy plant or pharmaceutical facility. ZOZEN's experience serving over 500 food factories worldwide has refined its ability to design systems addressing sanitation standards, rapid heat-up capabilities, and the precise temperature control these sectors demand.

Representative Global Installations

Textile Industry - Pakistan: Kohinoor Mills, a renowned textile enterprise in Pakistan, recently deployed a ZOZEN DZW series 20-ton reciprocating grate biomass steam boiler to support its transition to green and sustainable production. This collaboration exemplifies ZOZEN's growing

influence in South Asian markets and demonstrates the company's technological innovation in the biomass boiler field. Under the Belt and Road Initiative, ZOZEN has established strong partnerships with Pakistan's textile sector, providing customized biomass energy solutions and reciprocating grate technology with comprehensive localized service support.

Textile Industry - Eswatini: A garment factory in Eswatini, Africa, partnered with ZOZEN to replace its old coal furnace with environmentally friendly equipment. ZOZEN customized a 3-ton body WNS series oil steam boiler capable of stably delivering 2 tons of steam in high-altitude conditions. Fueled by diesel and kerosene, the boiler not only matches local energy supply but also effectively reduces emissions, meeting environmental standards. Customer feedback confirmed: "We are extremely satisfied with the customized boiler and professional service provided by ZOZEN Boiler. The boiler has performed exceptionally well in terms of stability and efficiency."

Chemical Industry - Ghana: Sunda International Group, a multinational comprehensive industry group operating across Africa and South America, selected ZOZEN's SZL series 10-ton biomass steam boiler (SZL10-1.25-SCIII) for its laundry powder factory in Ghana. The versatile boiler accommodates both biomass pellets and wood chips as fuel, with ZOZEN providing a customized chain grate to optimize overall combustion efficiency. Representatives noted: "We are immensely grateful to ZOZEN Boiler for providing a 10-ton biomass steam boiler...This high-efficiency boiler has played a crucial role in ensuring the smooth operation of our production line."

Food Processing - Cambodia: A pet food company in Cambodia invested in a project to produce 7,500 tons of pet food annually in the Zhejiang Economic Zone, Sihanouk Province. ZOZEN provided an advanced 4-ton DZL series coal-fired steam boiler featuring horizontal three-pass water-fire tube chain grate structure with modern combustion equipment and electrical control system. The boiler's design focuses on efficient heat exchange and energy savings, meeting daily production needs while enhancing energy efficiency and supporting sustainable production.

Food Processing - Mongolia: Vitsamo Fruit Juice LLC, a large-scale juice producer in Mongolia, selected ZOZEN's 2-ton DZL series coal-fired chain grate steam boiler for juice concentration and canning sterilization processes. After in-depth communication via the internet, the customer noted: "We knew that ZOZEN Boiler was a strong industrial boiler manufacturer and supplier which had a good reputation on the international market...ZOZEN's DZL series coal-fired steam boiler solved the heat supply problem of our juice production line."

Manufacturing - Vietnam: Bestway Group, operating across over 200 countries and regions with a product portfolio covering 800 items across leisure, sports, and camping categories, selected ZOZEN boiler equipment for its plant in Tien Giang Province, Vietnam. The installation provides reliable and efficient heat energy supply supporting the company's expanding industrial footprint in Southeast Asia.

In the chemical industry, where process heating involves complex integration with production

equipment, ZOZEN provides comprehensive system design that accounts for multiple heat loads, safety protocols, and fuel cost optimization. The brewing and fermentation sectors benefit from ZOZEN's understanding of temperature-sensitive biological processes, while paper mills require the high-volume, consistent steam delivery that ZOZEN's larger units provide.

This application expertise, combined with ASME "S" and "U" stamp authorization and CE certification, enables ZOZEN to serve markets across Asia, Europe, Africa, and the Americas. The international certifications validate that ZOZEN's manufacturing processes meet the stringent standards required for pressure vessel construction, providing customers assurance that equipment complies with their local regulations.

Service Infrastructure and Customer Support

ZOZEN's commitment to customer success extends throughout the equipment lifecycle. The company's consultation process begins with understanding available fuels, required capacity, and local emission regulations. This needs assessment ensures that recommended solutions deliver optimal performance within applicable environmental limits.

To better serve global customers, ZOZEN has built a reliable network of authorized agents across key regions. Currently, agents are located in Pakistan, the Philippines, Turkey, Mongolia, Kazakhstan, Singapore, Taiwan (China), Spain, Colombia, Australia, Tunisia, South Africa, Algeria, and more. These trusted partners offer professional consultation, localized support, and reliable after-sales service, ensuring customers worldwide receive expert care regardless of location.

After installation, ZOZEN maintains regular communication to monitor operating conditions and provide operational guidance. This proactive service model helps customers achieve fuel efficiency targets, maintain emission compliance, and address performance concerns before they escalate into costly downtime. The combination of quality equipment and responsive technical support differentiates ZOZEN in markets where after-sales service often receives insufficient attention.

Economic and Environmental Value

The Best Steam Boiler Price consideration encompasses more than initial purchase cost. ZOZEN's low-emission gas boilers deliver ongoing value through reduced fuel consumption, lower emission treatment costs, and extended maintenance intervals. As carbon pricing and emission regulations become more widespread, equipment that exceeds current standards provides protection against future compliance costs.

The company's ISO9001:2015 certification demonstrates systematic quality management that ensures consistent production standards. This quality assurance, combined with first-class manufacturing equipment at the Wuxi facility, enables ZOZEN to maintain competitive pricing while meeting international performance benchmarks.

For detailed information about ZOZEN's complete product range, technical specifications, and industry solutions, visit https://en.zozen.com/

ZOZEN's position as a Global Leading Gas Boiler Supplier stems from technical innovation that addresses the dual mandate of industrial efficiency and environmental responsibility. Through advanced combustion design achieving NOx emissions ≤30 mg/Nm³, comprehensive certification portfolio (ASME, CE, ISO9001:2015), and global service infrastructure supported by proven installations across textile, food, chemical, and agricultural sectors, ZOZEN delivers heating solutions that support sustainable industrial operations. As regulatory pressures and corporate sustainability commitments intensify, ZOZEN's low-emission technology portfolio—spanning steam boilers and thermal oil heaters with capacity to serve facilities from 1 to 130 tons per hour—positions the company to serve the evolving needs of industries worldwide.

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