Why Leading Chemical Companies Choose ZOZEN as a Reliable Steam Boiler Exporter With CE and EAC Certifications

Wuxi, Jiangsu Jan 18, 2026 (Issuewire.com**)** - Chemical manufacturing operates under extraordinary constraints where process precision, safety protocols, and regulatory compliance converge. Steam boilers provide the temperature control essential for polymerization, condensation, drying, melting, and molding processes that define chemical production. When leading chemical enterprises select thermal equipment suppliers, they prioritize manufacturers demonstrating proven international standards through rigorous certification. ZOZEN Boiler has earned recognition as a **Reliable Steam Boiler Exporter With CE and EAC Certifications**, positioning itself among the **Top 10 Steam Boiler Manufacturers In The World** through comprehensive international qualification and documented chemical industry expertise.

Chemical Industry's Exacting Requirements

Chemical production follows a three-stage workflow: raw material processing, chemical reaction, and

product refining. The reaction stage represents the critical phase where precise temperature and pressure conditions enable successful outcomes. Heat sources of varying qualities supply energy for sectional processes including polymerization reactions requiring consistent thermal input, condensation processes demanding controlled cooling cycles, drying operations eliminating moisture from intermediate products, and melting/molding stages shaping final chemical formulations.

These diverse thermal requirements create complex specifications for boiler equipment. Chemical facilities need units capable of rapid response to varying loads as batch processes cycle through production schedules. Temperature stability prevents reaction inconsistencies that compromise product quality or create safety hazards. Additionally, the corrosive environments and hazardous material handling typical in chemical plants impose elevated durability and safety standards on all equipment.

ZOZEN addresses these sector-specific demands through engineering that accounts for fuel cost considerations, operating expense optimization, and process integration requirements unique to chemical manufacturing. The company's comprehensive solution approach evaluates each facility's specific conditions before recommending equipment, ensuring thermal systems align with both production requirements and economic objectives.

International Certifications: Foundation of Global Trust

ASME Certification: American Engineering Standards

ZOZEN holds both the "S" and "U" steel stamps from the American Society of Mechanical Engineers (ASME), certifications that validate the company's capability to design and manufacture pressure vessels and boilers meeting American standards. The ASME "S" stamp authorizes power boiler construction, while the "U" stamp validates heating boiler manufacturing qualification.

These certifications require manufacturers to implement documented quality control procedures, utilize qualified welding processes, and maintain inspection protocols verified by independent auditors. For chemical companies exporting products to North American, South American, Middle Eastern markets, and the Philippines, ASME certification ensures boiler equipment meets acceptance criteria in these jurisdictions. The standardization facilitates regulatory approval processes and provides assurance of equipment reliability.

CE Marking: European Market Access

CE certification validates conformity with European safety, health, and environmental protection standards across member states. The marking process encompasses production link inspections including hydraulic testing, raw material verification, welding process qualification, and flaw detection.

For chemical manufacturers operating in European markets or serving European customers, CE-marked boilers simplify procurement by eliminating market-specific certification barriers. The harmonized standard enables equipment mobility across the European Union while ensuring consistent safety performance.

EAC Certification: Eurasian Economic Union

The Eurasian Conformity (EAC) mark validates compliance with technical regulations across Russia, Belarus, Kazakhstan, Armenia, and Kyrgyzstan. This certification proves particularly relevant for chemical enterprises with operations in these territories where industrial development continues

expanding.

ISO 9001:2015: Quality Management Systems

ZOZEN passed the ISO9001:2015 international quality system certification, validating systematic quality management encompassing design, procurement, manufacturing, and testing processes. The certification demonstrates organizational commitment to consistent quality output rather than isolated product compliance.

Steam Boiler Portfolio for Chemical Applications

ZOZEN's product range addresses diverse chemical industry requirements through multiple series optimized for specific operational profiles.

WNS Series: Compact Gas/Oil-Fired Solutions

The WNS series gas/oil-fired steam boilers span 1 to 20 tons per hour with working pressures from 0.7 to 2 MPa. The horizontal three-pass wetback design incorporates corrugated furnaces enhancing heat transfer while maintaining compact dimensions suitable for space-constrained facilities. Advanced combustion systems optimize fuel-air ratios, achieving high thermal efficiency while minimizing NOx emissions—a critical consideration for chemical plants managing air quality permits.

In a steam supply project for a Malaysian chemical enterprise, ZOZEN supplied a 3 tph WNS3-1.25-Y.Q diesel-fired steam boiler to Hua Su Plastic Industry Sdn. Bhd. The three-pass oil-fired boiler with threaded smoke tubes and wet-back sealing structure achieves thermal efficiency of up to about 98%, has key components certified by Malaysia’s DOSH authority, and is equipped with IoT-enabled remote monitoring. Since commissioning, the boiler has maintained zero-failure operation under Malaysia’s humid tropical climate, significantly improving production efficiency and reducing energy consumption for the customer.

SZS Series: High-Capacity Water-Tube Design

For larger chemical complexes, the SZS series provides 2 to 110 tons per hour capacity with pressures reaching 5.3 MPa. The double-drum D-type arrangement with membrane water-wall construction creates gas-tight furnaces with superior thermal efficiency. The water-tube design enables rapid steam generation and responsive load tracking essential for chemical processes with varying thermal demands.

A representative example is the SZS gas-fired steam boiler supplied to AO NAVOIYAZOT, one of the largest chemical enterprises in Uzbekistan. The D-type SZS unit with full-membrane water walls and anti-vibration convection tube bundle design has been running smoothly for fertilizer production, providing a stable heat source for constant-temperature reaction, granulation and drying processes and helping the plant maintain safe, efficient operation.

SZL Series: Biomass-Fired Steam Solutions

To help chemical enterprises utilize renewable fuels, ZOZEN also offers the SZL series biomass-fired steam boilers. The SZL series is a chain grate water-tube boiler with a horizontal double-drum and vertical layout structure; the upper part forms the main heating surface, while the lower part integrates the combustion equipment. Depending on model, SZL series biomass-fired boilers typically cover

capacities from about 6 to 35 t/h with working pressures from 1.0 to 2.5 MPa, featuring wide fuel adaptability for biomass molding pellets, wood chips, corn cobs, sawdust and other agricultural residues, and achieving design thermal efficiency levels of roughly 83–86% or higher.

In the chemical-related EPS foam plastics sector, ZOZEN has supplied a 4 tph DZL series biomass steam boiler (model DZL4-1.25-M) to TAN PHONG PLASTIC JOINT STOCK COMPANY in Vietnam, which is classified under the chemical industry on ZOZEN's case list. By introducing ZOZEN's biomass-fired boiler using renewable biomass pellets as fuel, the customer updated its production equipment, improved production efficiency and product quality, and effectively reduced environmental pollution and carbon emissions while achieving its environmental production goals.

Specialized Thermal Oil Heaters for Chemical Processing

Chemical manufacturing often requires precise temperature control beyond what steam boilers provide. Singapore Highpolymer Chemical Products Pte. Ltd. selected ZOZEN's 1.4 MW thermal oil heater for their resin production processes. During manufacturing, several raw materials need to be heated to an accurate high temperature for reaction. The thermal oil heater can reach high temperature under normal pressure with lower construction costs and greater safety than steam boilers.

The customer feedback confirmed: "ZOZEN thermal fluid heater is very suitable for our product, it adopts coil for heating instead of electrical heating, temperature rising speed is faster, production cycle is shorter. Temperature is accurately reached and quality is guaranteed. This heater has good cost performance. ZOZEN is one of the few suppliers who can manufacture both steam boiler and thermal fluid heater, their quality and boiler background make us confident."

Hydrogen-Ready Technology: Converting Waste to Energy

Chemical manufacturing increasingly generates hydrogen as a process byproduct. Weifang Yaxing Chemical Co., Ltd., a large-scale state-holding company focusing on chlorinated polyethylene (CPE), ion exchange caustic soda, hydrazine hydrate, and ADC blowing agent, faced hydrogen venting issues that polluted the environment with potential safety hazards.

ZOZEN provided a 35 TPH hydrogen and natural gas steam boiler (SZS35-1.6-Q) that solves the problem of incomplete hydrogen utilization. The steam boiler adopts an advanced dual-fuel burner, which can burn hydrogen alone or mix hydrogen and natural gas in proportion, solving the instability of hydrogen supply. After being put into use, the hydrogen-ready boiler can consume vented hydrogen and output high-quality steam, converting waste into productive thermal energy.

Proven Chemical Industry Track Record

ZOZEN has served chemical enterprises across multiple continents, demonstrating practical application expertise. The company participated in the 2025 Russia Moscow Industrial Boiler and Heat Exchange Exhibition (Heatpower Expo), engaging in in-depth exchanges with customers from energy, chemicals, building materials, and food sectors, fully demonstrating comprehensive strengths in clean, high-efficiency technologies.

The chemical industry applications span from fine chemical production requiring precise temperature control to pharmaceutical manufacturing demanding steam purity for sterilization processes. Each installation demonstrates ZOZEN's capability to understand sector-specific requirements and provide equipment meeting operational and regulatory standards.

Comprehensive Service Supporting Chemical Operations

Equipment performance depends on proper system design, correct installation, and ongoing operational support. ZOZEN builds its own engineering team providing customized solutions based on actual customer needs rather than offering standardized packages.

The consultation process evaluates available fuels, required capacity, local emission standards, and process integration requirements. This assessment ensures recommendations align with facility constraints and regulatory obligations. Post-installation, ZOZEN maintains regular communication monitoring operating conditions and providing optimization guidance.

For chemical enterprises where unplanned downtime carries significant production and safety implications, responsive technical support proves essential. ZOZEN's service commitment ensures timely assistance when operational issues arise, minimizing disruption to critical manufacturing processes.

Economic Advantages: Balancing Quality and Value

Chemical manufacturers evaluating boiler suppliers consider both initial investment and lifecycle economics. ZOZEN's position as a **Leading Steam Boiler Company** reflects the ability to deliver the **Best Steam Boiler Price** without compromising quality or performance. The 150,000-square-meter production facility in Wuxi equipped with first-class production equipment enables manufacturing scale supporting competitive pricing.

The company's multiple international certifications eliminate risks associated with uncertified equipment, preventing regulatory delays, compliance penalties, and potential equipment replacement costs. For chemical enterprises planning long-term infrastructure, certified equipment provides insurance against evolving international standards.

ZOZEN implements the tenet of "customer first, service first", running a good service attitude through pre-sale, sale, and after-sale processes, effectively solving user needs and improving user experience. The combination of certified quality, competitive pricing, and comprehensive service creates value propositions that leading chemical companies recognize.

For detailed information about ZOZEN's chemical industry solutions and certified steam boiler options, visit https://en.zozen.com/

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