JIEZOU POWER Outlines Technical Advancements and Selection Standards for Dry-Type Transformers

SUZHOU, JIANGSU, CHINA, December 25, 2025 /EINPresswire.com/ -- SUZHOU, CHINA — As the global power industry shifts toward safer and more sustainable infrastructure, the demand for dry-type transformers has increased significantly. Selecting appropriate electrical equipment is a critical factor for infrastructure projects, particularly where safety and environmental impact are primary concerns. To address these evolving industry requirements, JIEZOU POWER, a manufacturer based in China, has released a comprehensive overview regarding the application and technical specifications of advanced dry-type transformer solutions.

The Evolution of Transformer Technology in Modern Infrastructure

The power sector is currently undergoing a transition driven by heightened safety standards and operational efficiency. While traditional oil-filled transformers remain functional, they present inherent risks regarding fire hazards and potential environmental contamination. Dry-type transformers utilize air or solid insulating materials instead of oil, effectively mitigating these risks.

These units have become a standard solution for indoor installations and environments where fire safety is a priority. The compact design and low maintenance requirements of these systems make them suitable for a variety of sectors, including commercial developments, healthcare facilities, data centers, and industrial plants. The global trend toward electrification and the expansion of smart city infrastructure continue to drive the adoption of these reliable power solutions.

Technical Considerations for Dry-Type Transformer Procurement Navigating the technical requirements for electrical equipment involves the evaluation of several critical performance factors:

1. Safety and Environmental Specifications The primary benefit of dry-type technology is inherent operational safety. Without flammable liquids, these units pose minimal fire risk, allowing for installation in densely populated areas. Furthermore, the absence of oil eliminates the risk of leaks that could impact soil or groundwater. Industry standards suggest prioritizing high-quality insulation materials, such as cast resin or Vacuum Pressure Impregnated (VPI) systems, to ensure thermal and mechanical stability.

2. Efficiency and Regulatory Compliance Transformer efficiency is defined by the minimization of energy losses during operation. The performance of a dry-type unit is determined by its engineering design and the quality of raw materials. Procurement processes should verify that equipment adheres to international standards, including ANSI/IEEE, IEC 60076, and DOE 2016, to ensure consistent quality and global compatibility.

3. Maintenance and Service Life Dry-type transformers are characterized by reduced maintenance needs. Unlike oil-filled units, they do not require routine sampling, filtering, or fluid replacement. Robust construction and sealed enclosures protect the core and coils from environmental factors such as dust and moisture, which contributes to an extended operational lifespan.

4. Customization for Specific Applications Technical requirements vary across different projects. Specialized manufacturers provide customizable solutions involving variations in voltage, capacity, and cooling methods. This flexibility allows for the deployment of units ranging from small distribution transformers for commercial use to high-capacity units for heavy industrial facilities.

Manufacturing Capabilities at JIEZOU POWER Established in 1989, JIEZOU POWER operates a 200,000-square-meter facility dedicated to the design and production of power system solutions. The company’s technical expertise is informed by its involvement in large-scale international projects, including 500KV EPC (Engineering, Procurement, and Construction) initiatives, 230KV hydroelectric plants, and 115KV substations.

The facility produces both oil-immersed and dry-type distribution transformers, with capabilities extending to power transformers up to 500KV 480MVA. This range ensures that power solutions are available for both secure indoor environments and expansive outdoor substations. All equipment, including GIS, switchgear, and substations, is manufactured under strict global quality control protocols.

Sector Applications and Infrastructure Integration JIEZOU POWER’s solutions are utilized across

several high-stakes environments where reliability is essential:

Commercial and Residential: Implementation in high-rise buildings and shopping centers where fire safety and noise reduction are required.

Healthcare and Data Centers: These facilities rely on secure power supplies where the fire-safe properties of dry-type units are advantageous.

Industrial Operations: Provision of robust power for heavy machinery in manufacturing environments.

Renewable Energy: Integration of solar and wind farms into the existing power grid.

The company's experience in managing complex 500KV EPC projects demonstrates its capacity to meet rigorous technical demands. As the industry prioritizes safety and efficiency, the role of advanced dry-type transformers remains central to modern power management.

Detailed technical specifications and product ranges are available via the official JIEZOU POWER website: https://www.jiezoupower.com/.

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