Indian Standard IS 17153:2019 - Ensuring Quality and Safety in Domestic Gas Stoves for PNG

When choosing a **gas stove** for **Piped Natural Gas (PNG),** it's essential to consider **safety, durability, efficiency, and flame stability.** Consumers expect a stove that meets daily cooking needs while ensuring long-lasting performance and safety.

Domestic gas stoves for PNG operate at an **inlet pressure of 21 mbar,** optimized for households using PNG. **IS 17153:2019,** developed by the **Bureau of Indian Standards (BIS),** specifies the **safety, construction, and performance requirements** for these stoves to guarantee safe and efficient cooking.

Key quality aspects covered by **IS 17153** include tests for **ensuring durability, gas consumption efficiency, flame stability, and leak prevention through gas soundness test**. The standard mandates the use of robust materials with high **temperature resistance**—for instance, **burner parts** must have a **melting point above 510°C** to withstand high heat without damage. Rigorous testing also ensures the materials resist corrosion, ensuring the stove endures regular use safely.

Performance tests, as defined in **IS 17153,** validate essential features like **gas soundness** (preventing leaks), **thermal efficiency, and flame stability**. Stoves must maintain a stable flame across pressures and perform without flame blowouts or backflash. Thermal efficiency tests confirm that each burner uses at least 50% of supplied energy, optimizing gas usage and helping consumers save energy.

For added assurance, IS 17153-compliant stoves meet specific **labeling requirements for** gas consumption and operation. The **BIS certification mark** on the stove assures consumers that the product meets the highest standards of **quality and safety,** providing peace of mind for a safe, reliable, and efficient cooking experience.