



IS 7285 Part 1 : Built for Pressure, Trusted for Safety – The Standard in Seamless Steel Gas Cylinders

Safety, Durability and Performance, are essential for Gas Cylinder Consumers seek cylinders capable of handling high pressures reliably, with rigorous testing to resist leaks, corrosion, and deformation, ensuring safe gas storage and transportation.

Gas cylinders are vital in industrial, medical, and commercial applications. The Indian Standard IS 7285 (Part 1), established by the Bureau of Indian Standards (BIS), specifies requirements for refillable seamless steel gas cylinders. This standard includes guidelines for **materials, design, construction, and testing** to confirm the cylinders meet essential safety and performance criteria under high-pressure conditions.

As per IS 7285 (Part 1), gas cylinders must undergo stringent endurance tests under **extreme pressures, temperatures, and environmental stresses**. The **Hydrostatic Stretch Test**, for example, checks the cylinder's resilience under specified pressure without permanent deformation, while the burst test ensures it won't rupture unexpectedly. Tests, such as hardness and leak resistance, further verify the cylinder's ability to safely handle its intended gas and withstand environmental challenges.

Consumers expect cylinders that are not only durable and safe but also consistently meet quality parameters, including precise wall thickness and defect-free surfaces. Regular inspections help maintain the structural integrity of cylinders, especially for high-stakes uses like medical oxygen storage or industrial gas handling, where safety is paramount.

Cylinders conforming to IS 7285 (Part 1) carry essential markings, such as pressure capacity, water volume, and gas compatibility, enabling users to verify suitability for their specific applications. These markings offer consumers an additional layer of confidence in the cylinder's reliability and safety.

The **DPIIT through Explosive Act, 1884 Gas Cylinder Rules, 2016** mandates that all Refillable Seamless steel gas cylinders sold, manufactured in India comply with IS 7285 (Part 1) and display the **BIS Standard Mark**, ensuring high-quality, safe Gas Cylinder

In summary, compliance with IS 7285 (Part 1) provides assurance of a gas cylinder's quality, safety, and durability. By choosing cylinders certified under this standard, consumers ensure safe and efficient performance across various environments and applications.