

Design and Engineering of Nitrogen Receiver

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Abstract: *Within numerous industrial applications, pressurized nitrogen gas plays a critical role. Nitrogen receiver pressure vessels function as the secure storage tanks for this gas, guaranteeing its safe and on-demand availability. These vessels are constructed from high-strength steel in accordance with ASME Boiler and Pressure Vessel Code (BPVC) standards. This ensures they can withstand the internal pressure of the contained nitrogen. ASME BPVC, a comprehensive set of rules, dictates the design, fabrication, inspection, and testing of pressure vessels. By adhering to these stringent standards, manufacturers guarantee the safety and reliability of these vessels. In conclusion, nitrogen receiver pressure vessels, designed and built following ASME standards, are an integral part of industrial gas storage and distribution. Their ability to safely store pressurized nitrogen in compliance with strict safety regulations makes them essential for various processes across numerous industries.*

Keywords: Pressure Vessel Design, Cryogenic Systems, ASME safety standard, Pressure vessel code