

Customer Requirements: Customer requested equipment to allow them to safely perform pressure proof testing of their aerospace products at pressures up to 5,000 psig with Nitrogen gas. Customer wanted the equipment to provide a degree of safety to the operator and wanted the controls to be simple to use.

Solution: Stanley M. Proctor Co. designed and built equipment consisting of a pressure control panel and a test chamber. The equipment was framed with structural anodized aluminum. Controls were mounted on an anodized aluminum panel. The side walls and top of the test chamber were constructed of 3/8" thick impact resistant polycarbonate. The test chamber was also fitted with a pneumatic lift door. Electronic pressure gauges were mounted to the control panel to monitor supply pressure to the equipment and pressure to the unit under test (UUT). A pressure reducing regulator was installed on the control panel to regulate pressure to the UUT. Air switches were provided to control air actuated supply and vent valves and to control operation of the test chamber door. A limit switch was installed to monitor chamber door position and ensure that the UUT could not be pressurized unless the door was completely closed. Conveyance of high pressure gas was handled with bent 1/4" Stainless Steel tubing with flared ends.

