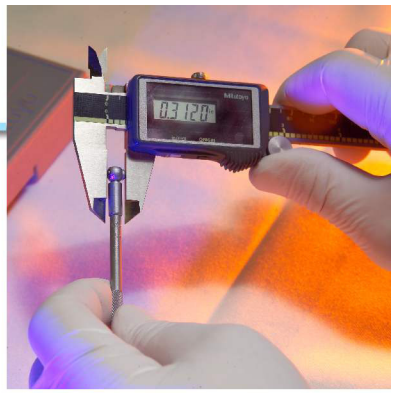
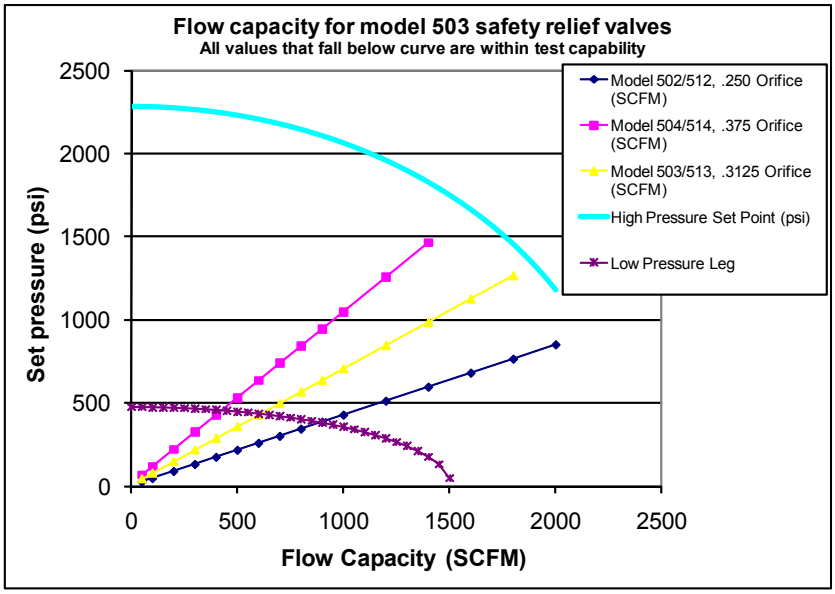
Hardware Processing facts



Valve Repair Facility

At NASA White Sands Test Facility (WSTF), the Hardware Processing Component Services Section (CSS) is responsible for the disassembly, cleaning, maintenance, reassembly, and testing of pressure relief and pressure safety valves in compliance with American National Standards Institute (ANSI) National Board Inspection Code (NBIC)/NB-23. The cleaning process is approved for oxygen service, International Space Station (ISS), and space shuttle support. The system performs functional tests on all rebuilt components and allows technicians to do the set point verification on pressure relief and pressure safety valves to pressures over 10,000 psig. After meeting the NBIC Part 3, Section 1 requirements, the WSTF Hardware Processing CSS is an approved "VR" certified facility holding the NBIC Certificate of Authorization and "VR" Symbol Stamp for the repair of pressure relief valves.

The Valve Repair (VR) Facility ensures relief valves are operating within the manufacturer's specifications and to the customer's expectations. WSTF's VR facility is capable of verifying flow capacities of pressure relief valves up to 1000 scfm, and pressures not to exceed 2800 psig, using clean gaseous nitrogen. Assembly and testing of the relief valves are performed in a Class 100 clean room. This clean environment makes WSTF the only known clean flow test facility in North America.



The Valve Repair Facility also provides replacement parts control. This ensures parts being used for relief valve repair are replacement parts from the original manufacturer, or a vendor approved by the National Board to make replacement parts that meet the original manufacturer's specifications. WSTF maintains traceability for parts and testing on code and non-code applications. All Inspection Measurement and Test Equipment (IMTE) used to support the VR facility is calibrated at WSTF and is traceable to NIST or other internationally agreeable intrinsic standards.

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