

Technical Services facts

Hardware Design and Analysis Group

Hardware Design

The Hardware Design Group at **White Sands Test Facility (WSTF)** offers mechanical design for test fixtures, test articles and chambers, ground support equipment, flight hardware, special tools and fixtures, and prototype hardware. Hardware design is also provided for pressure fittings and systems.

The Analytical and Finite Element Group supports stress, thermal, and flow analysis for hardware design, pressure components, mounting hardware, and test enclosures.

Prototypes are quickly developed by the Design Group using a 3D printer. The group has familiarity with machine processes and integrates very well with WSTF's Fabrication Services, which is capable of easily making complex parts on site.

Hardware Analysis (Pressure Systems)

The Hardware Analysis Group (Pressure Systems) at WSTF offers design, certification, repair, alteration, and decertification of pressure vessels and pressurized systems in accordance with our site-wide procedural documentation (WSI 09-SW-0024).

The group strictly adheres to NASA Policy Document (NPD) 8710.5, which requires that NASA design, acquire, fabricate, inspect, test, install, repair, alter, operate, and maintain all pressure vessel systems in accordance with applicable codes.

The Hardware Analysis Group (Pressure Systems) ensures that requirements are met and that pressure systems are certified accordingly. The group uses a core team approach with an objective of transitioning pressure systems to reduce risk efficiently, with consistency and technical accuracy.

