Hardware Processing facts

The White Sands Test Facility (WSTF) Hardware Processing Office provides the expertise and infrastructure to design, fabricate, and test flight hardware and ground support equipment with the highest regard for safety and customer satisfaction.

Hardware Refurbishment

WSTF provides a variety of repair, refurbishment, and decontamination processes capable of handling flight and ground components. Typical flight components include the hypergol-wetted Space Shuttle OMS/RCS engines, thrusters, and valves and ISS oxygen recharger and life support system components. Ground components include fluid and mechanical components such as regulators, relief valves, and pumps.

Testing

Functional, qualification, and acceptance testing is performed at WSTF, which includes oxygen compatibility, vibration, leakage, proof, and thermal testing. WSTF has existing facilities, procedures, and expertise adaptable to NASA, DoD, and private industry requirements.

Fabrication

A fully integrated ASME code equivalent fabrication facility is maintained to meet flight hardware and infrastructure requirements. A staff of experienced machinists and welders are complemented by computer-assisted design services. Equipment includes conventional shop equipment and CNC machines with PRO CAD/CAM interface. Certified in-shop welding processes cover most ferrous and nonferrous applications.

Cleaning

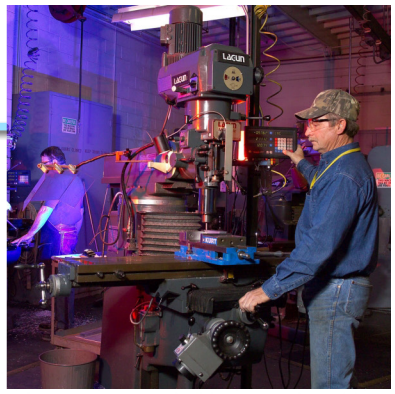
A full-service facility for disassembly, reassembly, and chemical, mechanical, and ultrasonic precision cleaning is available to clean hardware up to 50A. A range of processes exist to clean hardware from oxygen system components that are part of life support systems, to components that have been exposed to hazardous propellants.

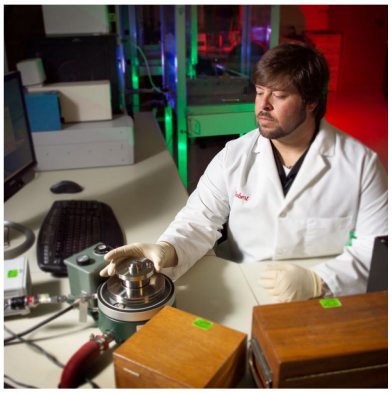
Calibration

WSTF performs calibration of test instrumentation including temperature, pressure, load, acceleration, and many other measurements using processes traceable to NIST and other nationally recognized standards.

Publications/Photo/Video

Writing, editing, formatting, and desktop publishing support is provided to ensure documents meet NASA guidelines and specific publication standards and are cleared through Export Control. WSTF also has still photo, motion picture, and video instrumentation support - capabilities include 33-mm ultra high-speed infrared shadowgraph photography, high-speed video, and rapid-shutter video.





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