

ABOUT PANTEX



MISSIONS

As the cornerstone of the nation's Nuclear Security Enterprise, Pantex applies unique capabilities to ensure the effectiveness of the U.S. nuclear stockpile in support of the nation's nuclear deterrent. We accomplish this through executing nuclear explosive assembly and disassembly, special nuclear material testing and evaluations, and manufacturing and assessing high explosives at our historic site.

Providing the nuclear deterrent for our nation and allies

Pantex is the nation's primary site for assembly and disassembly of nuclear weapons. Our production technicians have the training and skills to support requirements for inspection, retrofit, and surveillance of our stockpile.

Ensuring our stockpile is strong and viable

Pantex builds and delivers nuclear weapons for the nation's stockpile, replacing parts and components to extend the lives of these weapons. Since the country no longer tests nuclear weapons, Pantex plays an important role in confirming the effectiveness of the weapons in the stockpile, through Joint Test Assembly (JTA) builds and quality evaluation/surveillance work. JTAs test the weapon's delivery system and mechanics, while Quality Evaluation and Surveillance test components to determine the effects of aging, environmental conditions, and material incompatibilities. These vital programs enable the U.S. national weapons laboratories to annually validate the effectiveness of the nuclear stockpile to the president of the United States.

Reducing the total nuclear weapons in the stockpile

Pantex also completely dismantles retired weapons and disposes of the various components and materials. This work reduces the number of nuclear weapons in the world and ensures the nuclear material is in safe and secure storage.

Supporting the stockpile as the High Explosives Center of Excellence

NNSA selected Pantex as the High Explosive Center of Excellence for manufacturing high explosives. Pantex develops, tests, and fabricates high explosives components.

The Pantex Plant, located northeast of Amarillo, Texas, is the nation's primary facility for the final assembly, dismantlement and maintenance of nuclear weapons. Pantex is one of six production facilities in the National Nuclear Security Administration's (NNSA) Nuclear Security Enterprise.

Consolidated Nuclear Security, LLC (CNS) manages and operates the facility along with the Y-12 National Security Complex in Tennessee under a single contract from the U.S. Department of Energy/NNSA.





HISTORY

In 1942, the U.S. Army constructed the original Pantex Ordnance Plant on 18,000 acres. The mission of the Plant was to load and pack conventional artillery shells and bombs in support of the World War II effort. The Plant produced nearly 4 million conventional bombs and artillery shells during three whirlwind years of heavy production. The end of the war brought the end of production at Pantex, with the plant closing the day after the war ended. The land acquired to build Pantex was leased to Texas Technological College (now Texas Tech University) for \$1. The federal government reacquired the land and facilities that made up the Pantex Plant in 1951 and undertook a building campaign to create a key element of the nuclear weapons complex. The development of nuclear weapons that led to the end of World War II also ushered in a new type of war – the Cold War. It was characterized by an arms race with nuclear weapons at the heart of the competition. The Pantex Plant played a key role in the Cold War, assembling thousands of nuclear warheads that helped maintain the détente between the Soviets and the West.

KEY CAPABILITIES

The Pantex mission has grown over the decades as other facilities closed and responsibilities for life-extension, surveillance, assembly and high explosives operations were moved to the site.

Since 1975, Pantex has been the nation's primary assembly, disassembly, retrofit, and life-extension center for nuclear weapons. The last new nuclear weapon was completed in 1991. Since then, Pantex has safely dismantled thousands of weapons retired from the stockpile by the military and placed the resulting plutonium pits in interim storage.

All work at Pantex is carried out under three overarching priorities: the safety and health of workers and the public, the security of weapons and information, and the protection of the environment.

FACILITY SIZE

Operations at Pantex are primarily conducted on 2,000 acres of the 18,000-acre site. Pantex has approximately 580 buildings, including specialized facilities in which maintenance, modification, disassembly, and assembly operations are conducted. The Pantex Plant maintains its own water-treatment, sewage, and steam-generating plants. Five wind turbines, each over 400 feet tall, generate enough power to support more than 60% of the Pantex Plant's annual energy.

WORKFORCE

The strength of Pantex lies in the dedication and patriotic commitment of its more than 4,500 full-time personnel.

MORE INFORMATION

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