




STRATEGIC
NUCLEAR MATERIALS

BWXT
BWX Technologies, Inc.



BWXT IS A PROVEN LEADER IN THE HANDLING AND PROCESSING OF URANIUM-BEARING MATERIAL FOR ADVANCED NUCLEAR POWER APPLICATIONS.

Capable. Experienced. Licensed.

BWX Technologies, Inc. (BWXT) possesses decades of experience downblending high-enriched uranium (HEU) for both government and commercial use. For nearly forty years, BWXT has furnished nuclear fuel for national laboratories, universities and international customers, delivering thousands of fuel elements.

Our experience in processing advanced fuel materials, and fabricating and assembling nuclear components provides customers with a turnkey design-develop-deploy option that is unmatched in the U.S. nuclear industry. Comprehensive licensing capabilities from the U.S. Nuclear Regulatory Commission (NRC) authorize BWXT to manufacture a variety of specialized fuel forms.

Uranium oxides | Uranium oxycarbides | Uranium carbides | Uranium nitride | Uranium alloy

BWXT owns and operates the only two NRC Category 1 licensed commercial nuclear facilities authorized to handle and process HEU. This key distinction is unmatched by other aspiring fuel developers. In addition to required licensing, the nature of our fabrication processes allows us to produce fuel at any enrichment level, providing the utmost flexibility for locating and procuring uranium feedstock. Limited availability of high assay low-enriched uranium (HALEU) is not an obstacle for BWXT. Our downblending experience has given us the capability to fabricate HALEU product from HEU feedstocks.

From general concept layouts to detailed engineered drawings, we also support the design and development of advanced power systems for space applications. BWXT is drawing upon previous experience with space nuclear reactors to explore the utilization of low-enriched uranium-based fuel (LEU) in current projects. We are capable, experienced and licensed to handle all uranium enrichments – from depleted to fully enriched.

**WE ARE THE ONLY
U.S. COMPANY TO
MANUFACTURE
IRRADIATION-TESTED
URANIUM-OXYCARBIDE
TRISO FUEL.**



15+ years

working with the U.S. DOE
on TRISO fuel development



100s of Kgs

per year of TRISO
production capability



2 facilities

already licensed at
U.S. NRC Category 1 level

TRISO Production Experts

Located in Lynchburg, Virginia, the Specialty Fuel Facility at BWXT perfects fuel fabrication techniques required to support the vision of developing passively safe, compact nuclear reactors capable of economically generating electricity and hydrogen. As a participant in the U.S. Office of Nuclear Energy's Next Generation Nuclear Plant (NGNP) program for more than 15 years, BWXT has developed the expertise to manufacture TRi-structural ISOtropic (TRISO) coated kernels for this unique application. And, under DOE's Advanced Gas Reactor (AGR) Fuel Development Program, BWXT has manufactured and certified TRISO coated kernels and fuel compacts in production-scale quantities.



Our TRISO production facilities are currently licensed and have the capability for expanding existing infrastructure.





**BWXT'S EXISTING DOWNBLENDING
AND HIGH-ASSAY ENRICHMENT
INFRASTRUCTURE MEANS
LOWER INITIAL COSTS.**

People Strong

INNOVATION DRIVEN >

At BWX Technologies, Inc. (NYSE: BWXT), we are People Strong, *Innovation Driven*. Headquartered in Lynchburg, Va., BWXT provides safe and effective nuclear solutions for national security, clean energy, environmental remediation, nuclear medicine and space exploration. With approximately 6,600 employees, BWXT has 12 major operating sites in the U.S. and Canada. In addition, BWXT joint ventures provide management and operations at more than a dozen U.S. Department of Energy and NASA facilities. Follow us on Twitter at @BWXTech and learn more at www.bwxt.com.

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