















Bringing Innovative Technologies and Solutions to U.S. Government Agencies

Overview

Holtec Government Services is an innovative Company, with technical, manufacturing, and site services capabilities available to meet our Client's challenges in the areas of defense, energy, high-level waste and spent nuclear fuel. Our expertise ranges from state-of-the-art, multi-discipline analytical services, to field engineering and highly specialized manufacturing. Our solutions meet the most stringent Client specification design criteria, fabrication codes and standards. Our Team is comprised of experts in nuclear analyses, heat transfer and fluid flow, stress analyses, spent nuclear fuel management, and environmental technology and the computational tools to support them.

Our business systems and conduct of operations programs are structured to seamlessly meet the broad range of requirements and expectations of Government Clients. These programs include quality assurance and control, nuclear safety, discipline engineering, environmental health and safety, and physical and information security. Our governance programs provide robust planning and scheduling, cost control, accounting and earned value management, and human resource management functions.

Holtec Government Services can provide specialized reachback services and equipment through its affiliation with Holtec International. With three manufacturing facilities totaling over 1 million ft2, our Team has the in-house capability to design, engineer and manufacture larger, complex components.

Our QA program is guided by DOE Order 414.1D, which establishes the overarching requirements for a government-compliant QA system. This QA program is also in full accordance with Holtec International's QA Program, which complies with the provisions of 10CFR 50 Appendix B, 10CFR72 Subpart G, 10CFR71 Subpart H, NQA-1, ISO 3834, and ISO 9001, and is docketed with the USNRC under docket No. 71-0784.

Manufacturing





At Holtec Government Services, our dedication to innovation and manufacturing excellence is at the heart of our operation. The Company's vertically integrated structure allows our designers and fabricators to work closely during project development and manufacturing phases to incorporate lessons learned and implement design-to-fabrication best practices with the primary goals of safety, quality and cost effectiveness. Through our corporate commitment to continuous improvement, significant milestones have been achieved in all three areas.

Holtec Government Services is leading the way with a new generation of technology and state-of-the-art manufacturing equipment, helping our Clients meet the growing need for hazardous waste processing, nuclear fuel management, thermal hydraulic vessels, and innovative technological ventures. Holtec Government Services is able to provide for our Client's needs through our core competencies in design, analysis, fabrication, and supply of engineered equipment and services. Prominent among such capital equipment includes a spectrum of ASME heat exchangers, pressure vessels, waste handling tanks, spent nuclear fuel casks, and ancillaries for storage, outages and transport.

Through our affiliation with Holtec International, we hold ASME code stamps and ISO certifications, giving us the capability to custom-manufacture heat transfer equipment and components. We also specialize in custom-built products for the nuclear, solar, geothermal, and fossil powered generation sectors of the energy industry, as well as the chemical and petrochemical industries.

Holtec's manufacturing facilities, based in the USA and utilized by Holtec Government Services include: Advanced Manufacturing Division (Camden, NJ), Holtec Manufacturing Division (Pittsburgh, PA), and Orrvilon, Inc. (Orville, OH).

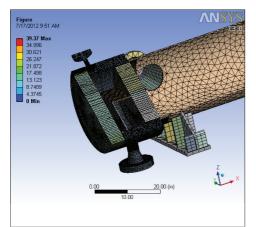
Spent Nuclear Fuel, Waste Management and Decommissioning

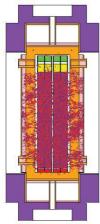
Holtec Government Services is positioned to provide services and equipment for federal decommissioning, spent fuel, and waste management projects. No company is more focused on assisting government agencies with storing spent nuclear fuel safely, securely, and with as low dose as possible. From concept to detailed design and engineering, an entire fleet of storage and transport casks has been developed for decommissioning nuclear power plants. Our underground spent fuel storage system, numerous Multi-Purpose Canisters, and Non-Fuel Waste Canisters are licensed for storage and transport in purpose-specific overpacks. Design and fabrication of storage equipment for spent nuclear fuel and high-level waste in pools is at the core of our expertise.

Our Site Services Team is unmatched in the industry, with turnkey solutions including civil/architectural design, site construction, supply of ancillary equipment, spent fuel loading services and rack installation. Through our affiliation with Holtec International, we have access to licensed dry storage and transport systems via numerous regulatory authorities, in countries such as the U.S., Korea, Spain and Ukraine. We are currently undergoing licensing approval in Belgium, China and Switzerland. Holtec International has the requisite experience to perform licensing in any country.



Engineering, Design and Analytical Capabilities





Through our advanced engineering, design and analytical expertise, Holtec Government Services can execute a wide range of projects to support federal agencies. When faced with unique and unprecedented challenges, our skilled staff of engineers and designers devise safe, effective, feasible and cost-efficient solutions that work within the constraints of each project. Our team of nuclear, thermal, structural, mechanical and chemical engineering experts supply the highest quality, and most reliable products and services.

We continuously strive to improve everything we supply. We are committed to offering the most advanced, innovative and reliable spent fuel storage and transport technologies, and heat transfer equipment and services.

Holtec's Small Modular Reactor, SMR-160

SMR-160 is a 160 MW(e) modular single loop reactor designed to provide safe, secure, dependable, affordable and carbon-free power. Offering unique and innovative solutions for achieving real enhancements in safety, security, operations and performance, SMR-160 is a walk-away-safe nuclear power plant, with extremely robust and passive reactor primary loop and safety systems, made possible via natural circulation, and patented and proven Holtec International heat exchanger designs. Its underground containment structure, low-corrosion design, and simplified refueling and maintenance features provide safe and efficient operation. The reactor will be manufactured in the U.S. at the Holtec Government Services Headquarters and Advanced Manufacturing Division, in Camden, NJ, and ready for deployment in the mid-2020s.



Holtec Government Services Core Competencies

For the execution of work, Holtec Government Services will utilize high quality technical state-of-the-art manufacturing and government compliant business management capabilities from the affiliated Holtec International Companies.

Management of Government-Owned Used Nuclear Fuel (UNF)

- Dry cask storage system products and services
- Transportation cask system products and services
- Ancillary equipment and services associated with UNF and Non-UNF nuclear materials

Specialized Manufactured Equipment

- Radioactive waste process vessels and tanks
- Heat exchangers and thermal equipment for DOE, NNSA and DOD assets

Design Engineering

- Environmental Management, Nuclear Energy and Office of Science Capital Asset Projects
- Conceptual and Detailed Design of Equipment and Structures

Field Engineering

- Construction
- UNF Operations
- Field Design Support
- Material sciences
- Environmental sciences

Analytical Services

- Nuclear analyses
 - Criticality, Radiation and Dose Analysis
 - Atmospheric Dispersion
 - Shielding Design
 - Equipment Qualification
 - Habitability
- Fluid Mechanics and Heat Transfer
 - Accident and Safety Analysis
 - Thermal and Fluid Transient Analysis
 - System Performance Evaluation
 - Component Performance Evaluation
 - Field Testing
 - Computational Fluid Dynamics
 - Flow Induced Vibration Analysis
 - Structural and Seismic Analysis
 - Structural Design
 - Site Design/Layout
 - Civil Site Plans and Specifications
 - Geotechnical Engineering



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