Capsule Assembly Laboratory

Description

The Capsule Assembly Laboratory (CAL) is a 1900 ft^2 laboratory designed to support fabrication and assembly of materials irradiation experiments for the High Flux Isotope Reactor and other materials test reactors.

Personnel with extensive experience in all aspects of fuels and materials irradiation experiment design, assembly, and disassembly support the CAL and assure that experiments meet customer and reactor operation requirements.

Specifications	
Floor space	1900 ft^2
Equipment/ Capabilities	Welding Machining Leak testing Dimensional inspection

Experiment Support Activities

- Preparation of specialized fixtures to assemble experiment parts and to remove samples from the experiments in hot cells after irradiation.
- Basic machining equipment to develop jigs and test pieces needed during assembly and testing.
- Helium leak check and hydrostatic test equipment to perform pre-irradiation testing of experiments and to assure compliance with quality requirements.
- Dimensional inspection to ensure conformance with thermal/structural design requirements.
- Destructive and nondestructive testing to validate conceptual experiment designs.
- Development of unique welding and joining techniques to support irradiation experiment design.

Research and development in fabrication and welding techniques to make state-of-the-art irradiation vehicles

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Contact

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