

Studsvik - the go to resource

Studsvik has been playing a vital role on Westinghouse's advanced zirconium alloy development.

From ZIRLO and Optimized ZIRLO alloy to the latest AXIOM alloy, Studsvik has conducted comprehensive hotcell exams. The commercial application and licensing support of ZIRLO and Optimized ZIRLO cladding have greatly benefited from the Studsvik hotcell data. The comprehensive hotcell data from Studsvik will be even more critical to the licensing and commercial introduction of AXIOM alloy as a new cladding material. Studsvik's hotcell evaluation has also been valuable to the zirconium in the nuclear industry in identifying and understanding the mechanisms and behaviors of zirconium-based materials.

With the most complete irradiated rods inventory for Westinghouse's advanced zirconium alloys, Studsvik is also the "go to" resource for zirconium researchers to tackle special topics, from US NRC's fuel fragmentation study, to EPRI's F-SECT evaluations and many, many others.

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Facts about Post Irradiation Examination

The non-destructive tests include fission gas release, rod internal pressure, length measurement, visual inspections, Eddy Current (EC) oxide thickness measurement, profilometry as well as gamma scanning and burnup determination.

The destructive tests include Light Optical Microscopy (LOM), Scanning Electron Microscopy (SEM), Transmission Electron Microscopy (TEM), Ring Tensile Testing (RTT), Axial Tensile Testing (ATT) and Hot Vacuum Extraction (HVE) hydrogen measurements.

